HERSCHEL / PLANCK

HERSCHEL SYSTEM Electrical Interface Control Document EICD

Product Code : 100000

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1 SCOPE

This document describes all of the interfaces as seen and required for test and integration at system level. Hence all SVM and PLM level interfaces are described along with all internal SVM interfaces. Instrument interfaces upto their connections with the system are described. Internal instrument interfaces are not detailed in this document.

1.1 Input Documents

ALENIA SVM EICD H-P-IC-AL-0003 issue 4
SPIRE IID-B SCI-PT-IIDB/SPIRE-02124 issue 3.2
PACS IID-B SCI-PT-IIDB/PACS-02126 issue 3.2
HIFI IID-B SCI-PT-IIDB/HIFI-02125 issue 3.2
HERSCHEL PLM Electrical Interface Control Document EICD H-P-2-ASPI-ID-0621 issue 2

2 DOCUMENT DESCRIPTION

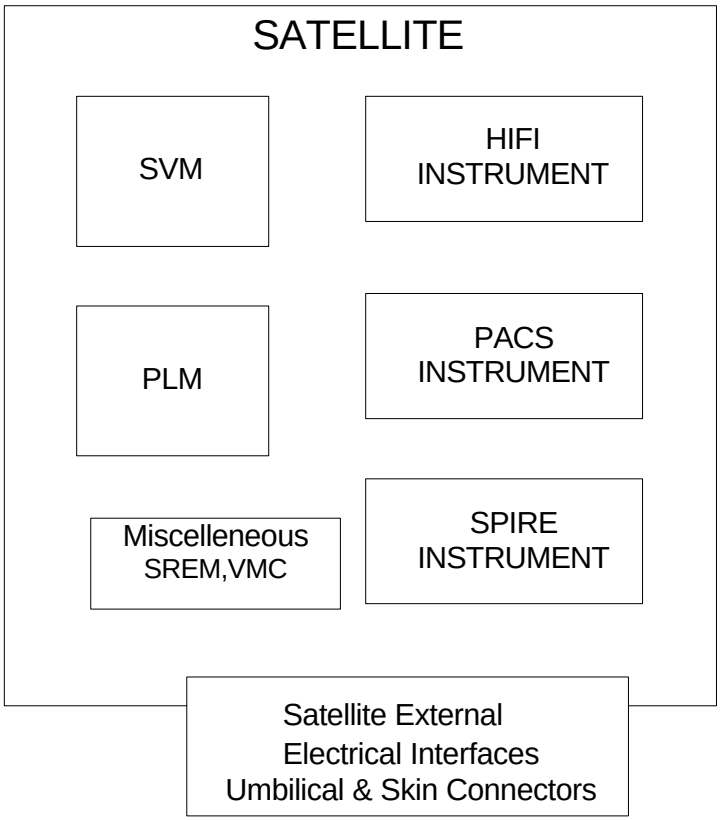
This chapter describes how this document is organised and how the reader may navigate this EICD.
This document considers the satellite as several blocks, the interface of each block at the block boundary is fully described.
For the SVM, PLM and Miscellaneous blocks, the elements constituting that block are also described in terms of electrical interfaces. It should be highlighted that this document considers each instrument as a "black box", only electrical interfaces at instrument level are detailed, internal interfaces are described in the appropriate instrument EICD.
This document describes the electrical interfaces in terms of

- Electrical Block Diagrams (interconnection drawings) – these show the elements of the block, the connectors and harness
- List of Connections – a table providing information for each pin of each connector of the block boundary. For each signal a reference is provided for the associated circuit diagram and signal characteristic.
- Interface Signal Characteristics – a table of electrical parameters for each specific interface as referenced in the List of Connections. The values for each parameter should be those as actually implemented in the interface, not as specified, e.g. the specification may call for an input impedance of 1MΩ, the actual interface may satisfy this requirement with an input impedance of 10MΩ, in which case 10MΩ should be reported in the Interface Signal Characteristic table. Note that each interface shall provide specific interface characteristics even if the interface is "generic" and used elsewhere.
- Interface Circuit Diagrams – an electrical schematic representation for each specific interface as referenced in the List of Connections. The values for each component should be given and shall be the same as those as actually implemented in the interface. Note that each interface shall provide specific interface circuit diagram even if the interface is "generic" and used elsewhere.

For each of the above topics the satellite is divided as:
Satellite level – all electrical interfaces which are at the boundary of the satellite, e.g. Umbilical connectors and skin connectors.

SVM – all electrical interfaces at the boundary and between the SVM units, this will include the power outputs, the TM/TC interfaces both to the instruments, PLM and miscellaneous units.

Instruments – all electrical interfaces at the boundary of the instrument as described in the relevant IID. Interfaces which are totally within the instrument i.e. those between instrument units, will not be detailed within this EICD.
Miscellaneous – all electrical interfaces which are not covered by one of the above, these include the SREM and the VMC.



3 INTERCONNECTION DRAWINGS

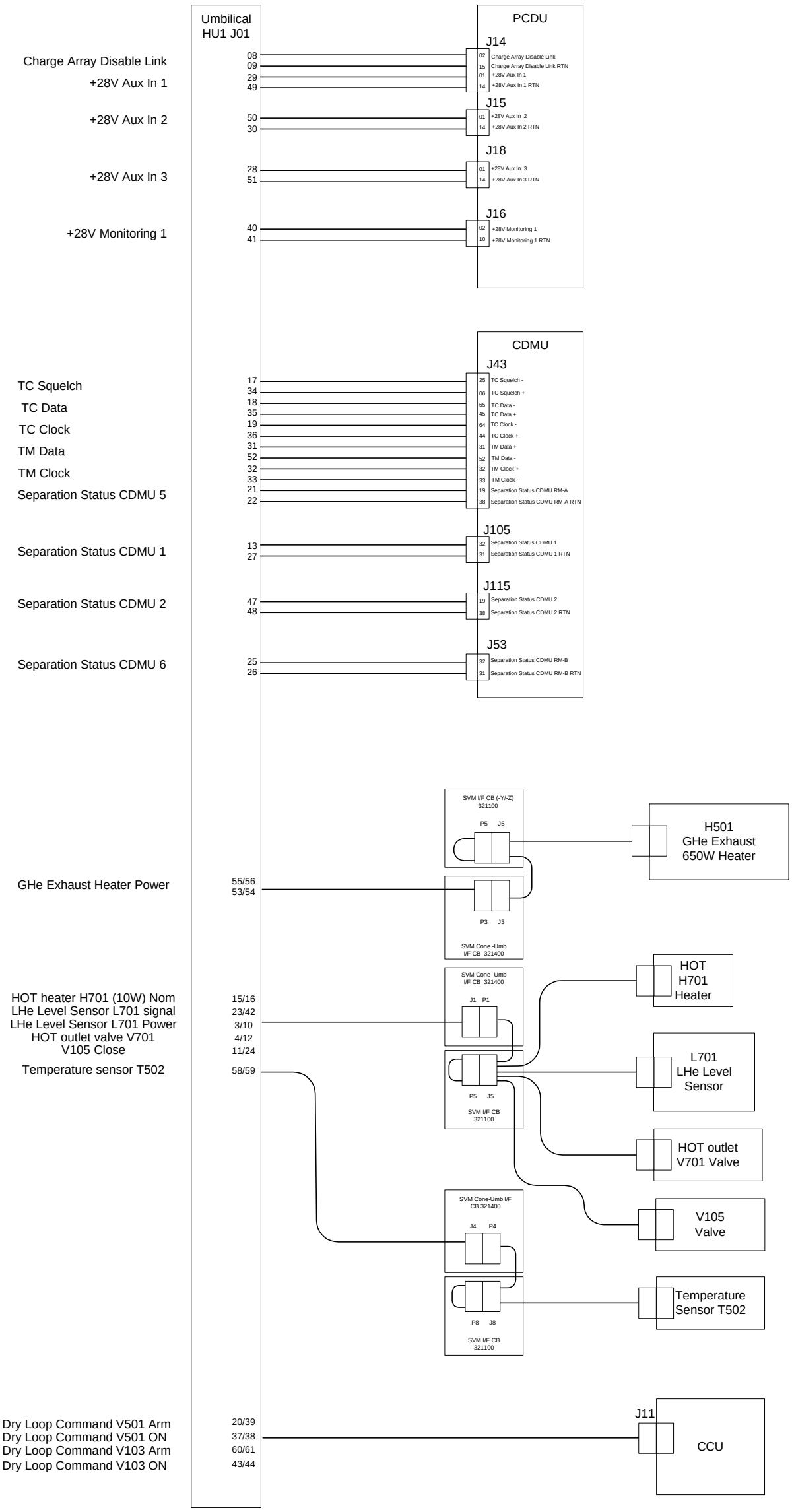
The following drawings show how the external interfaces, the PLM interfaces and the Instrument interfaces are connected to the SVM units.

For the sake of clarity any intermediate connectors (dismountability connectors) have not been shown.

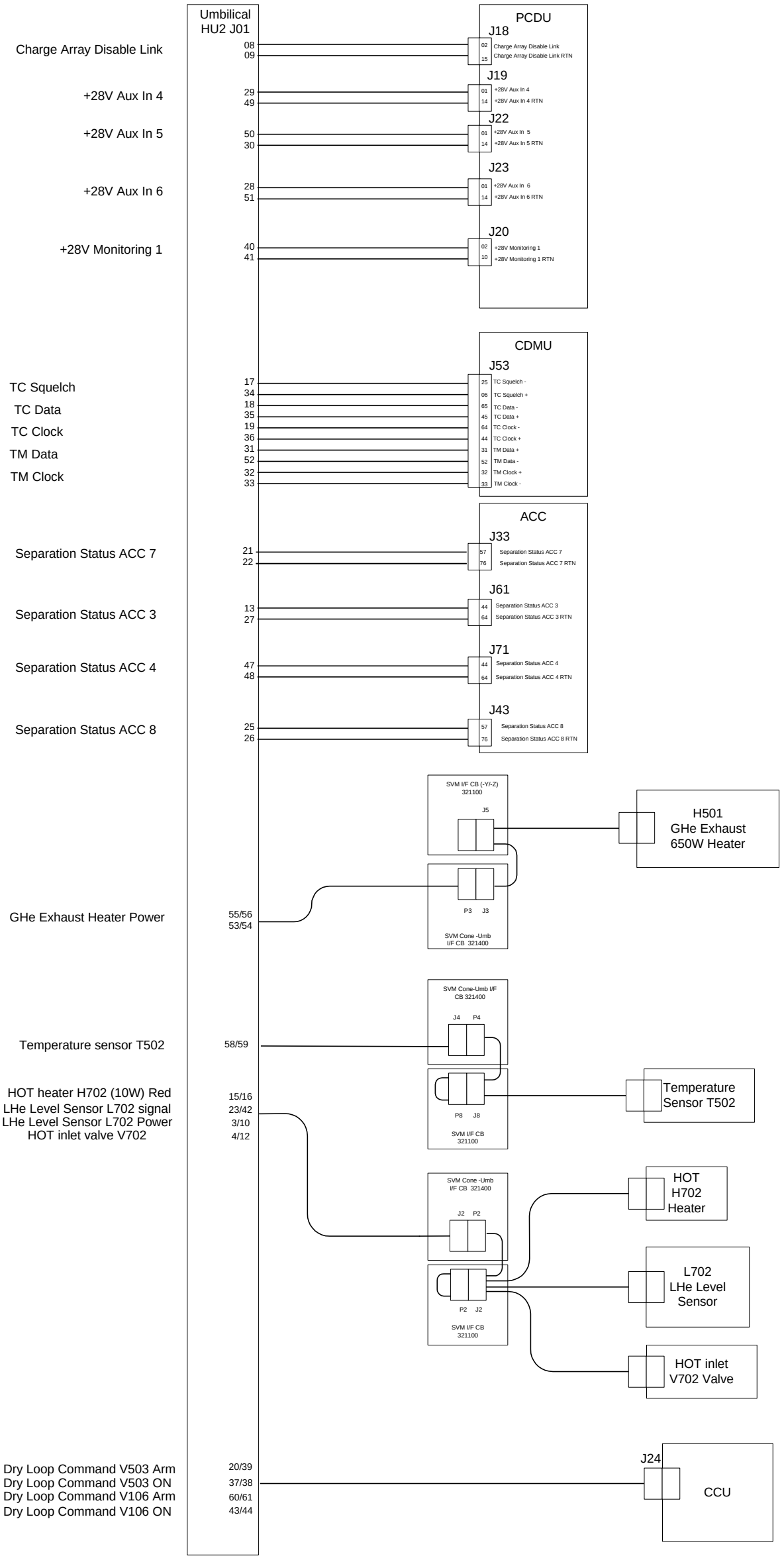
Full information regarding types of connectors are listed in chapter 7.

3.1 Satellite Level Umbilical Connectors

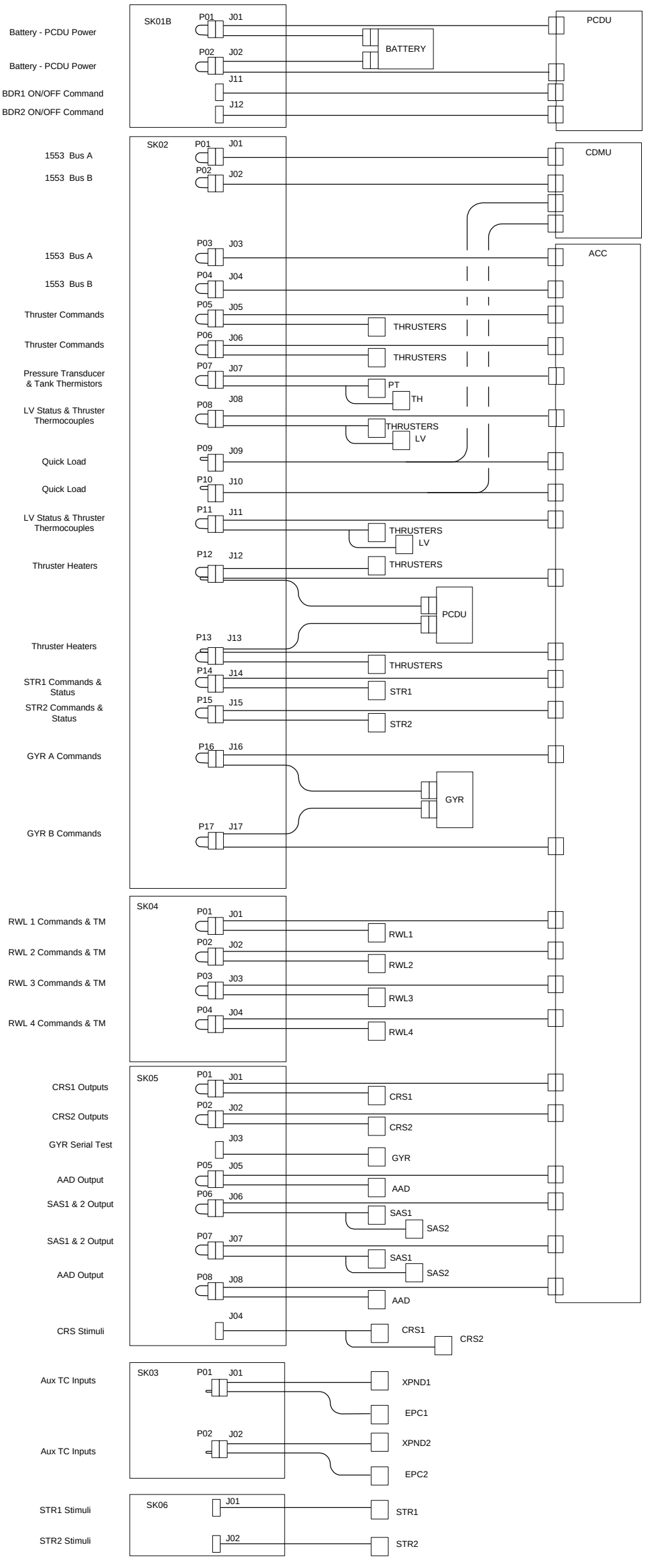
3.1.1 Satellite Level Umbilical Connectors HU1 J01



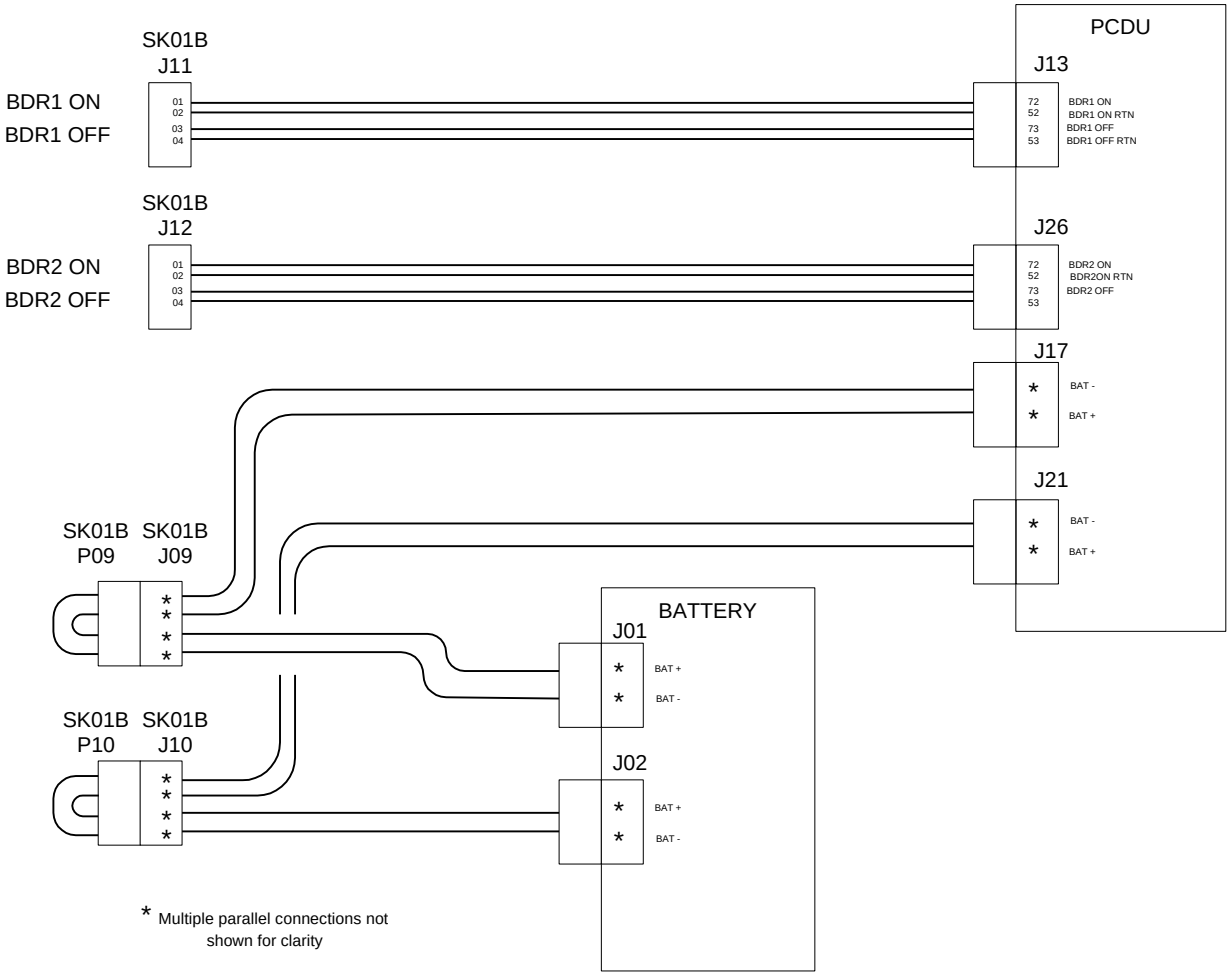
3.1.2 Satellite Level Umbilical Connectors HU2 J01



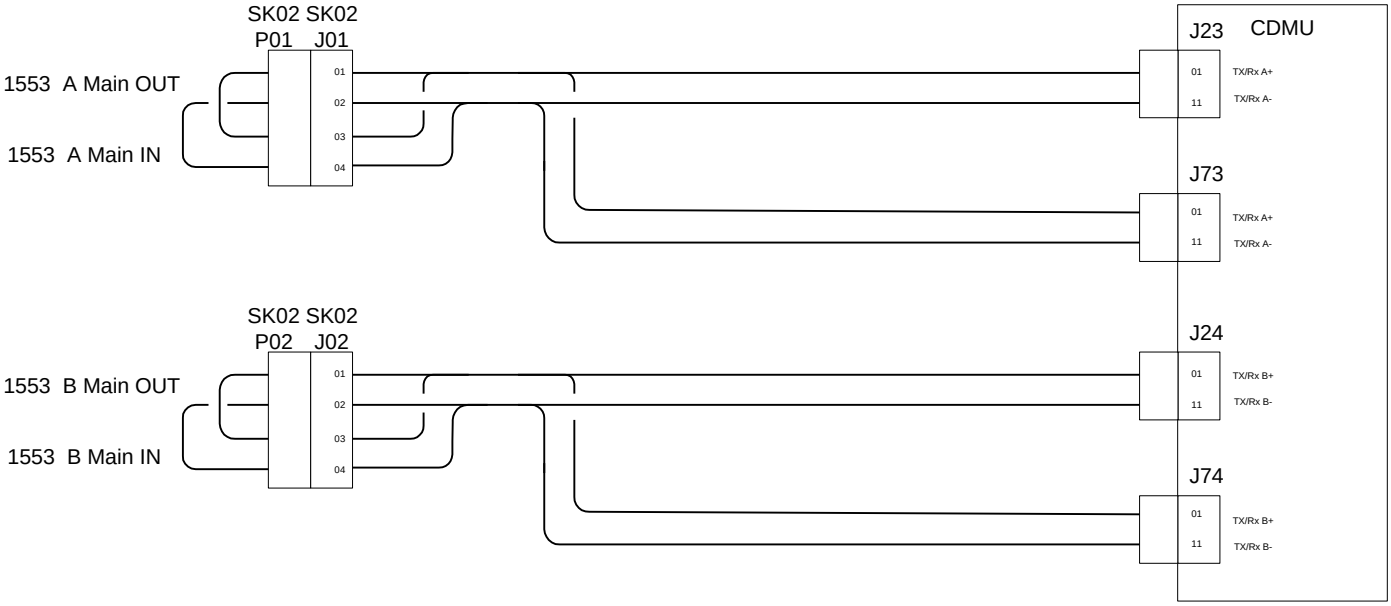
3.1.3 Satellite Level Skin Connectors Overview



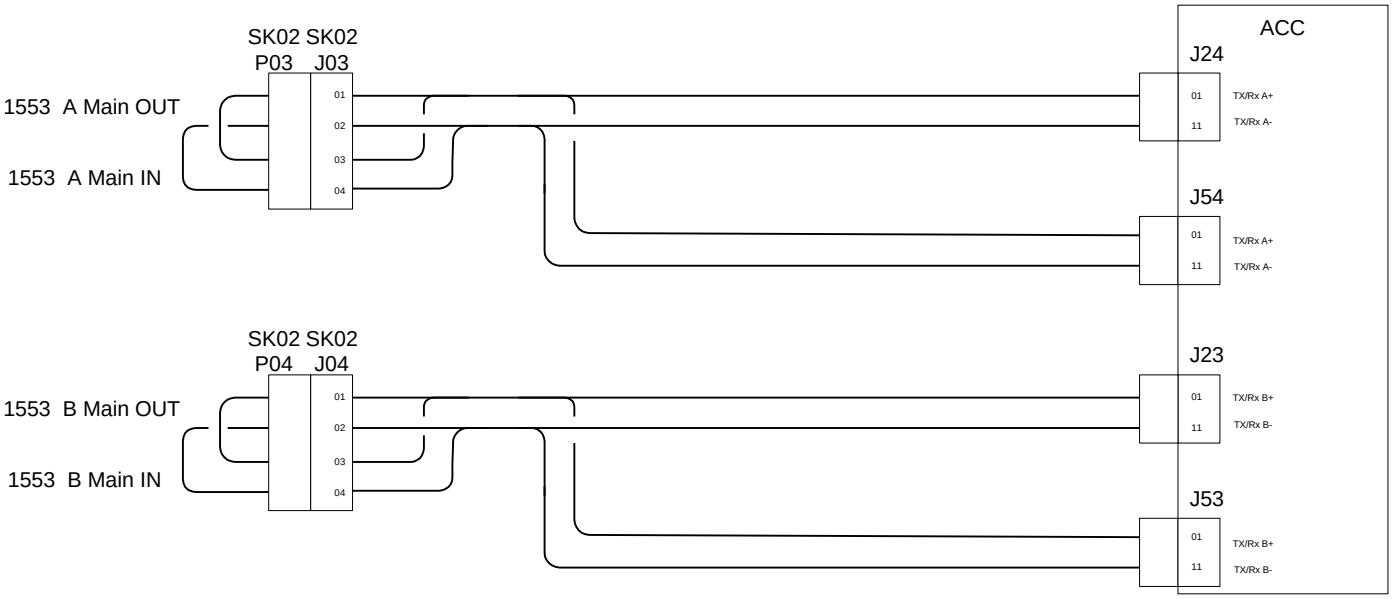
3.1.4 Satellite Level Skin Connector SK01B J09, J10, J11 & J12 Battery - PCDU & BDR ON/OFF



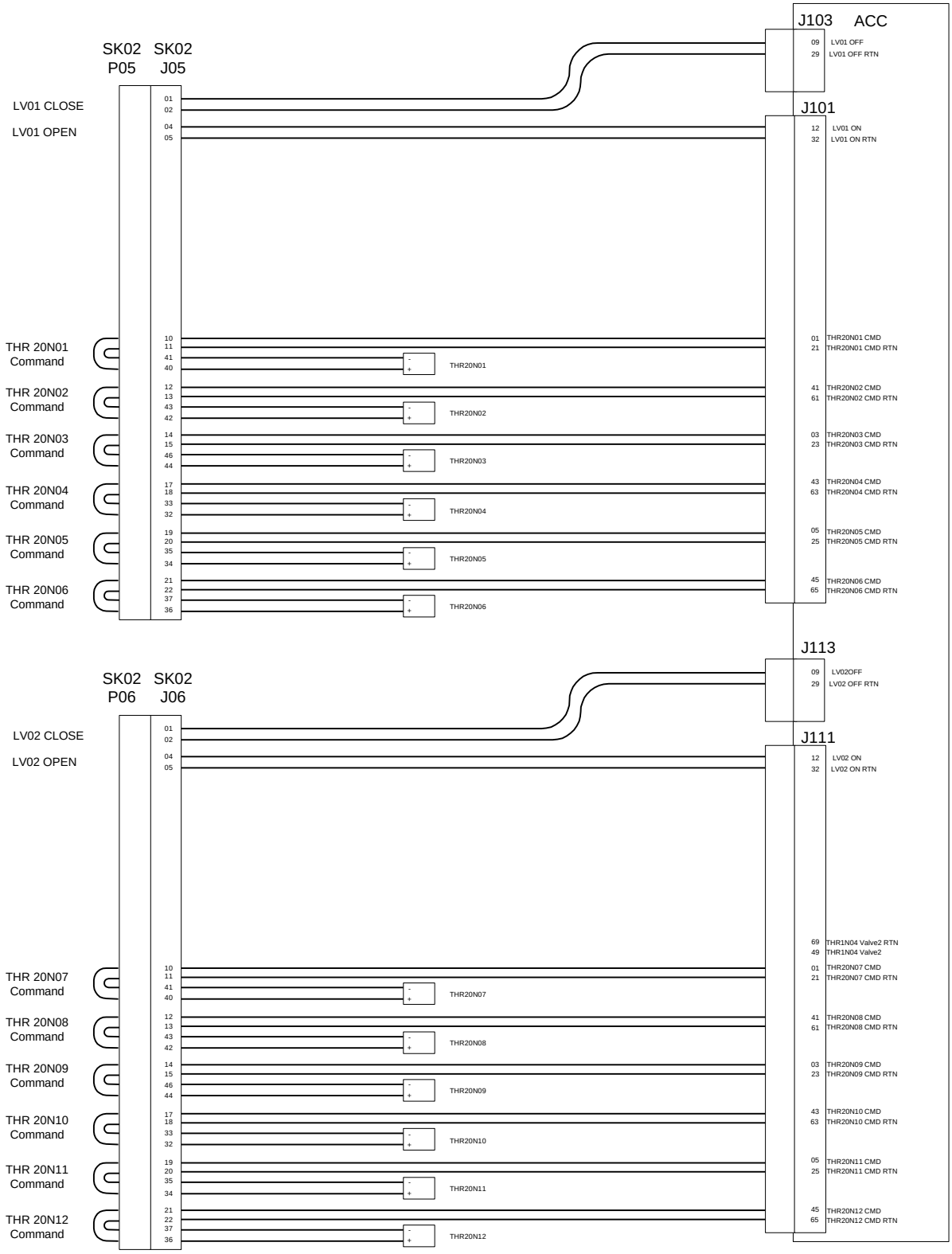
3.1.5 Satellite Level Skin Connector SK02 J01 & J02 CDMU 1553 Bus



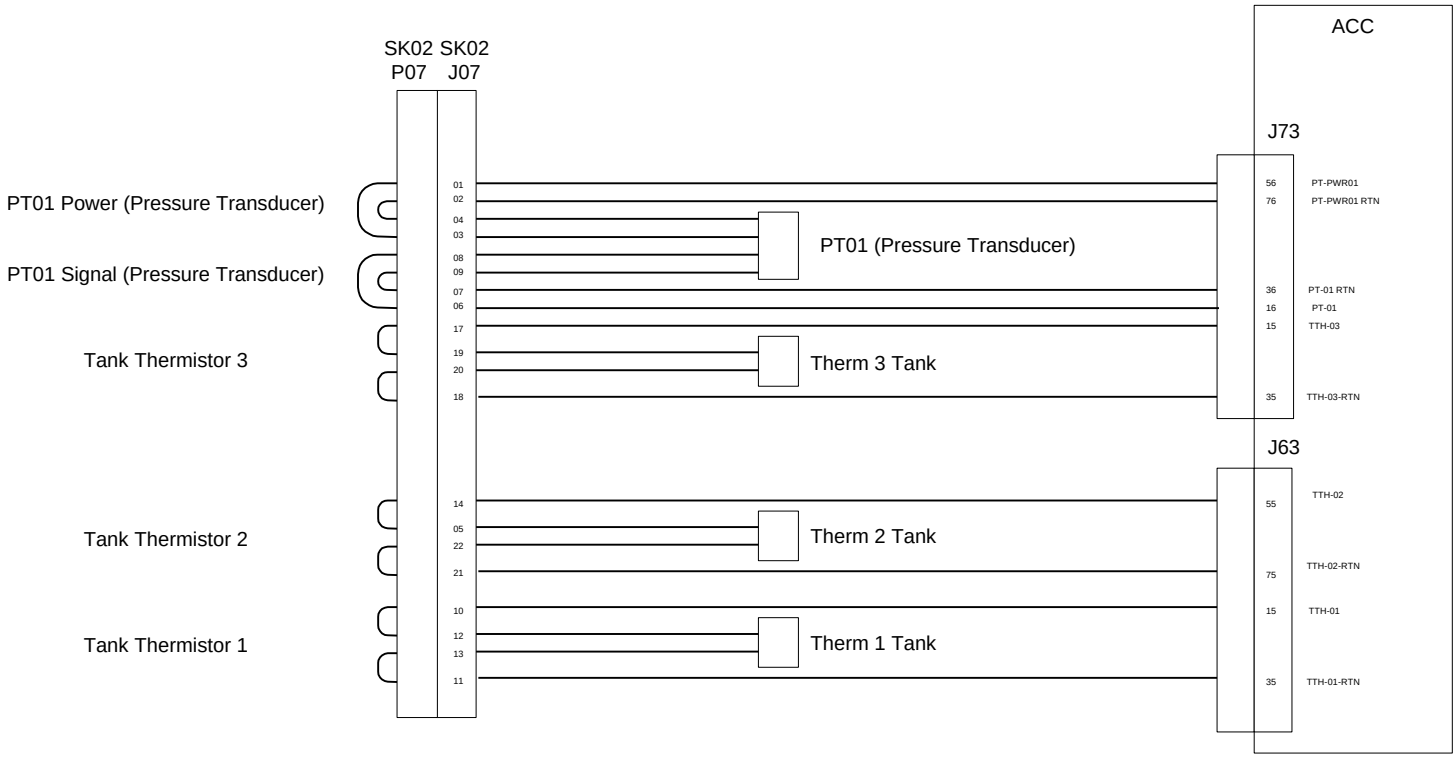
3.1.6 Satellite Level Skin Connector SK02 J03 & J04 ACC 1553 Bus



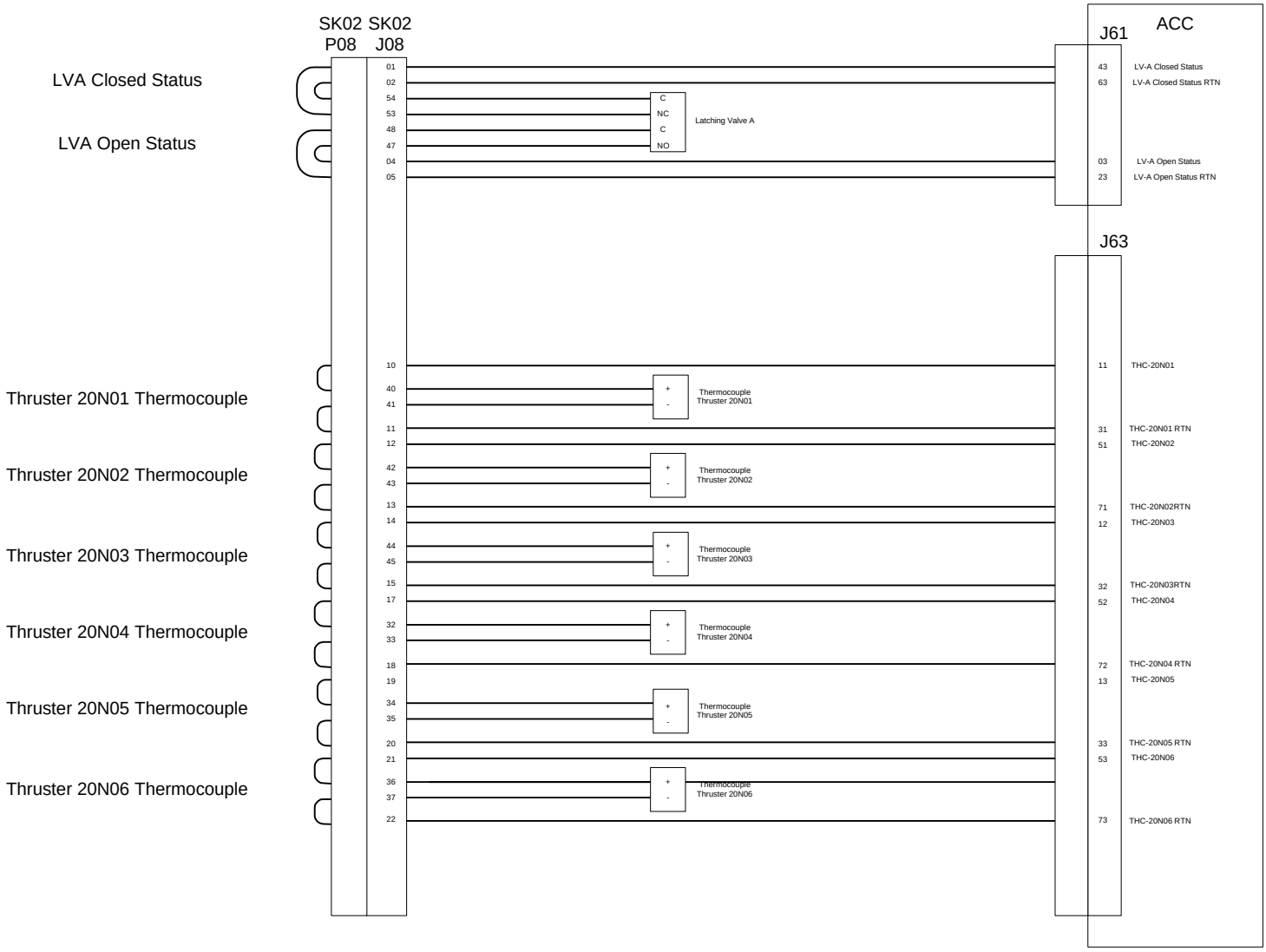
3.1.7 Satellite Level Skin Connector SK02 J05 & J06 ACC - Thruster Commands



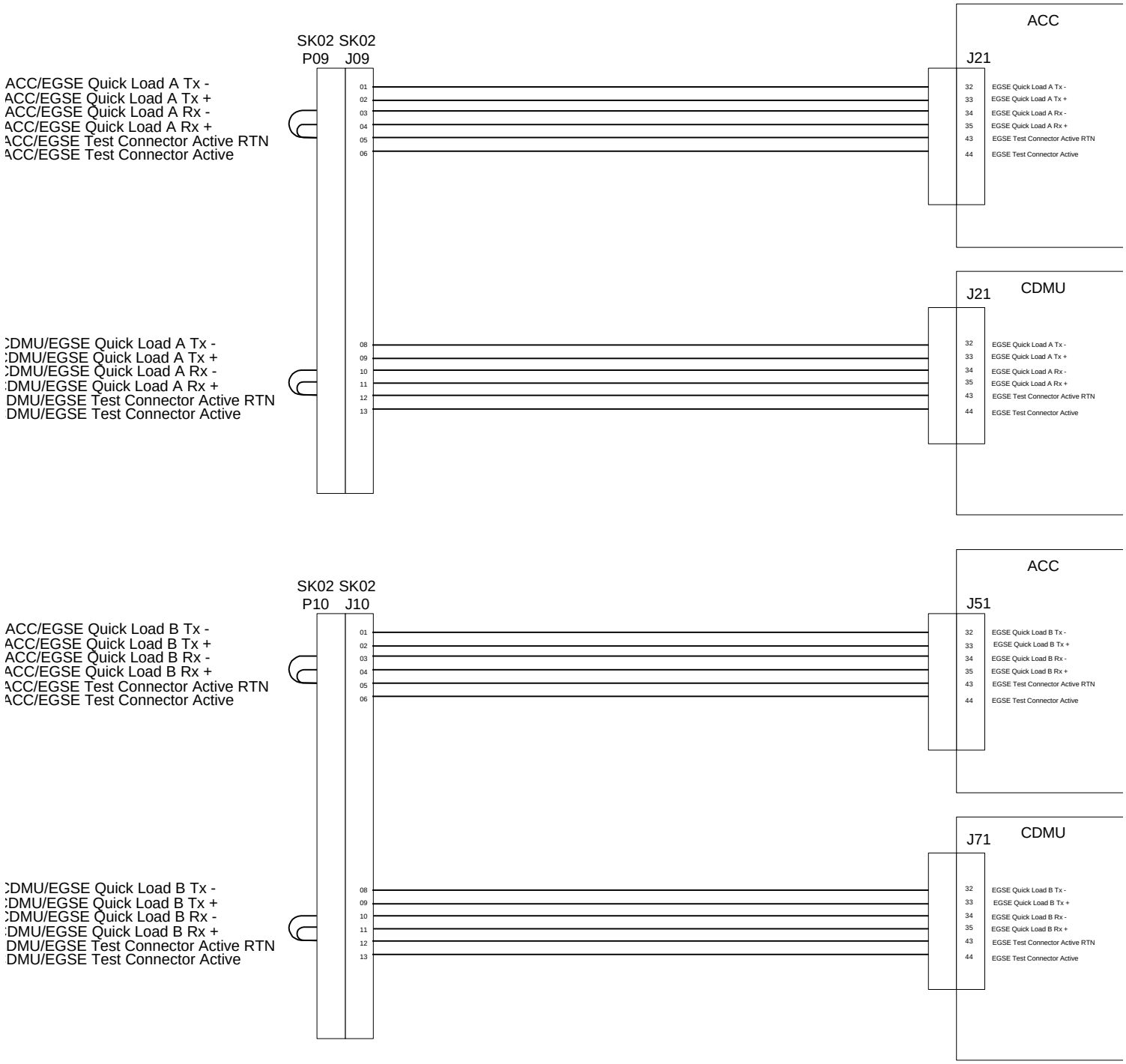
3.1.8 Satellite Level Skin Connector SK02 J07 ACC - PT+Tank Thermistors



3.1.9 Satellite Level Skin Connector SK02 J08 ACC - Thruster Thermocouples



3.1.10 Satellite Level Skin Connector SK02 J09 & J10 ACC & CDMU Quick Load Interfaces



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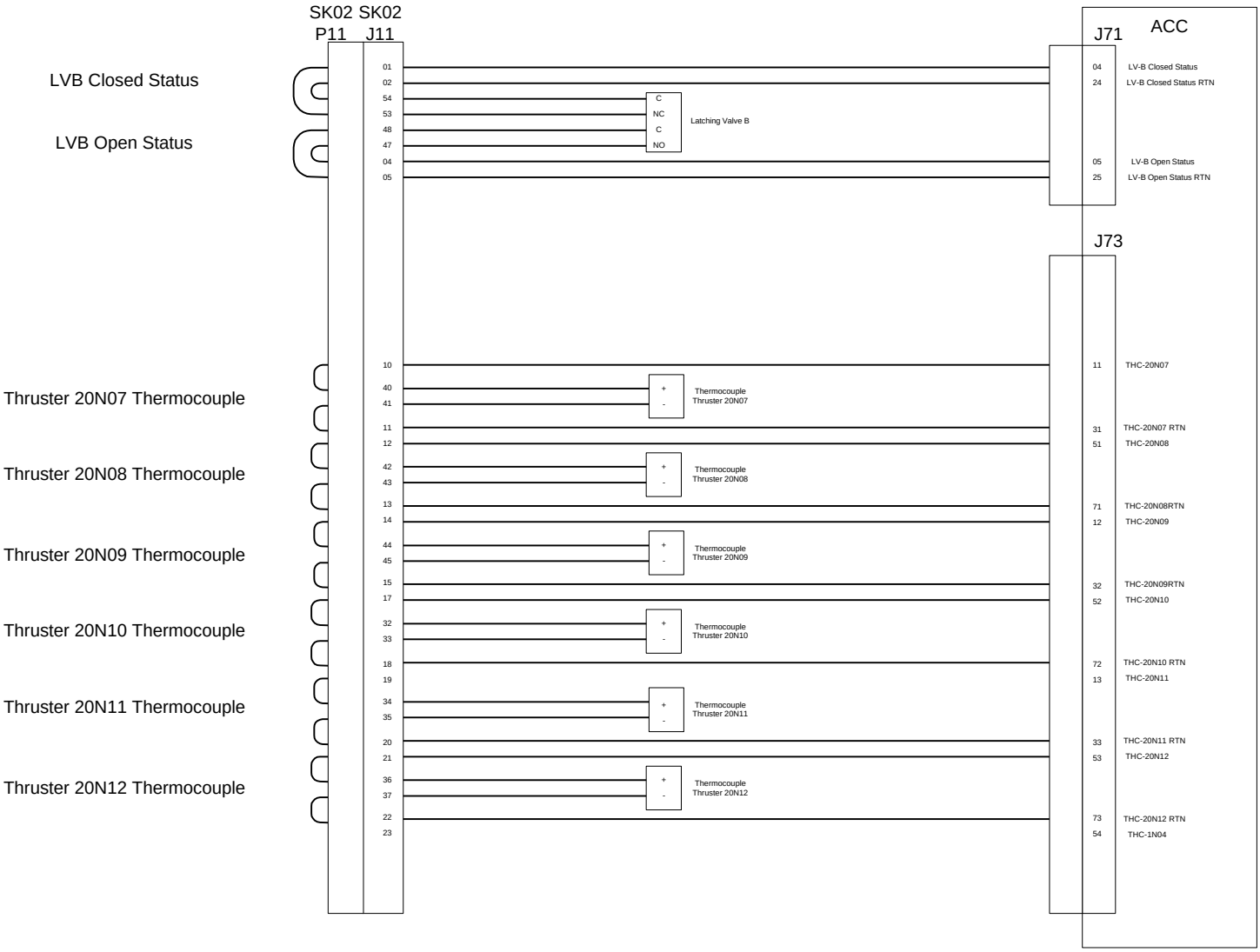
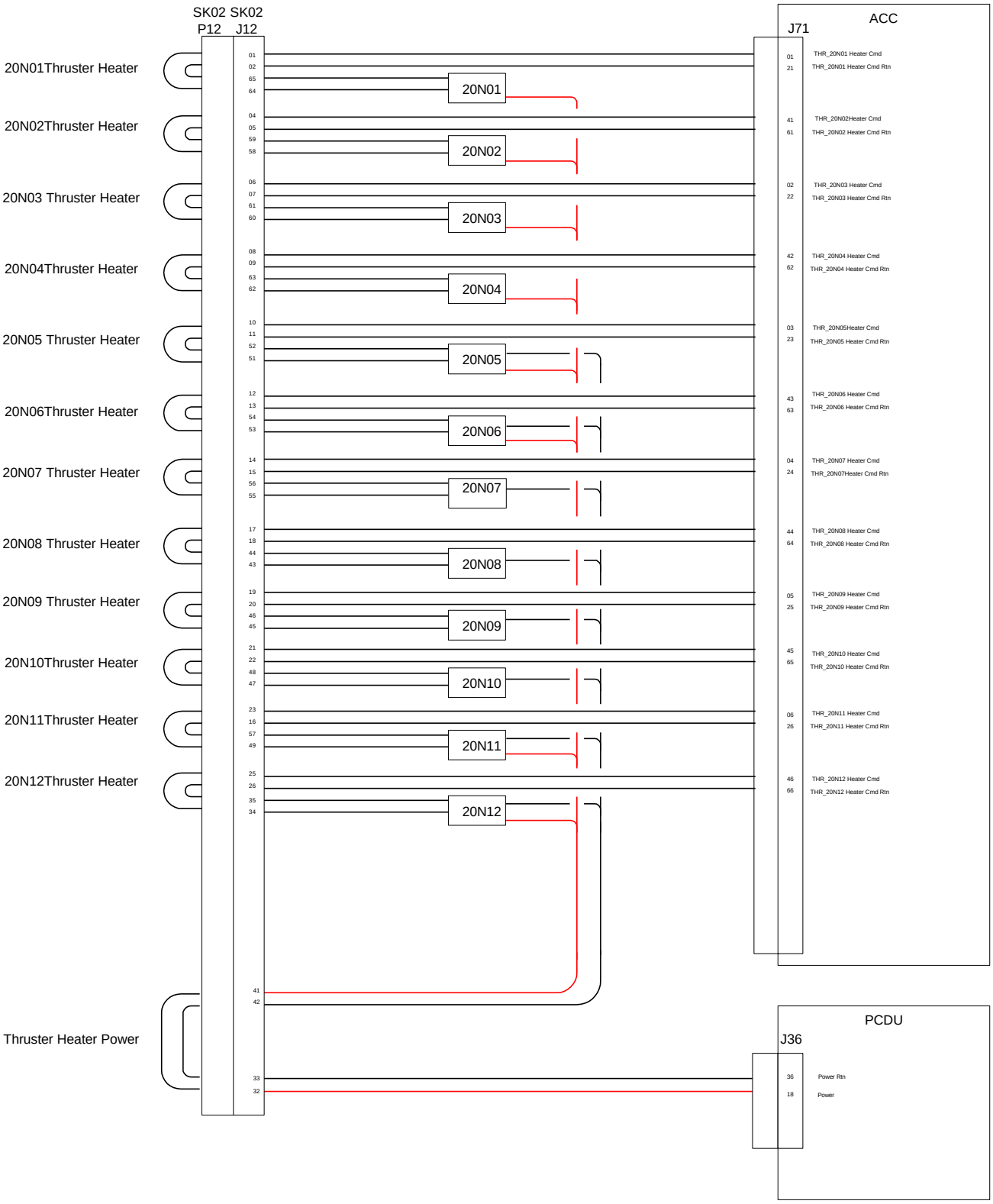


3.1.12 Satellite Level Skin Connector SK02 J12 ACC + PCDU - Thruster Heaters



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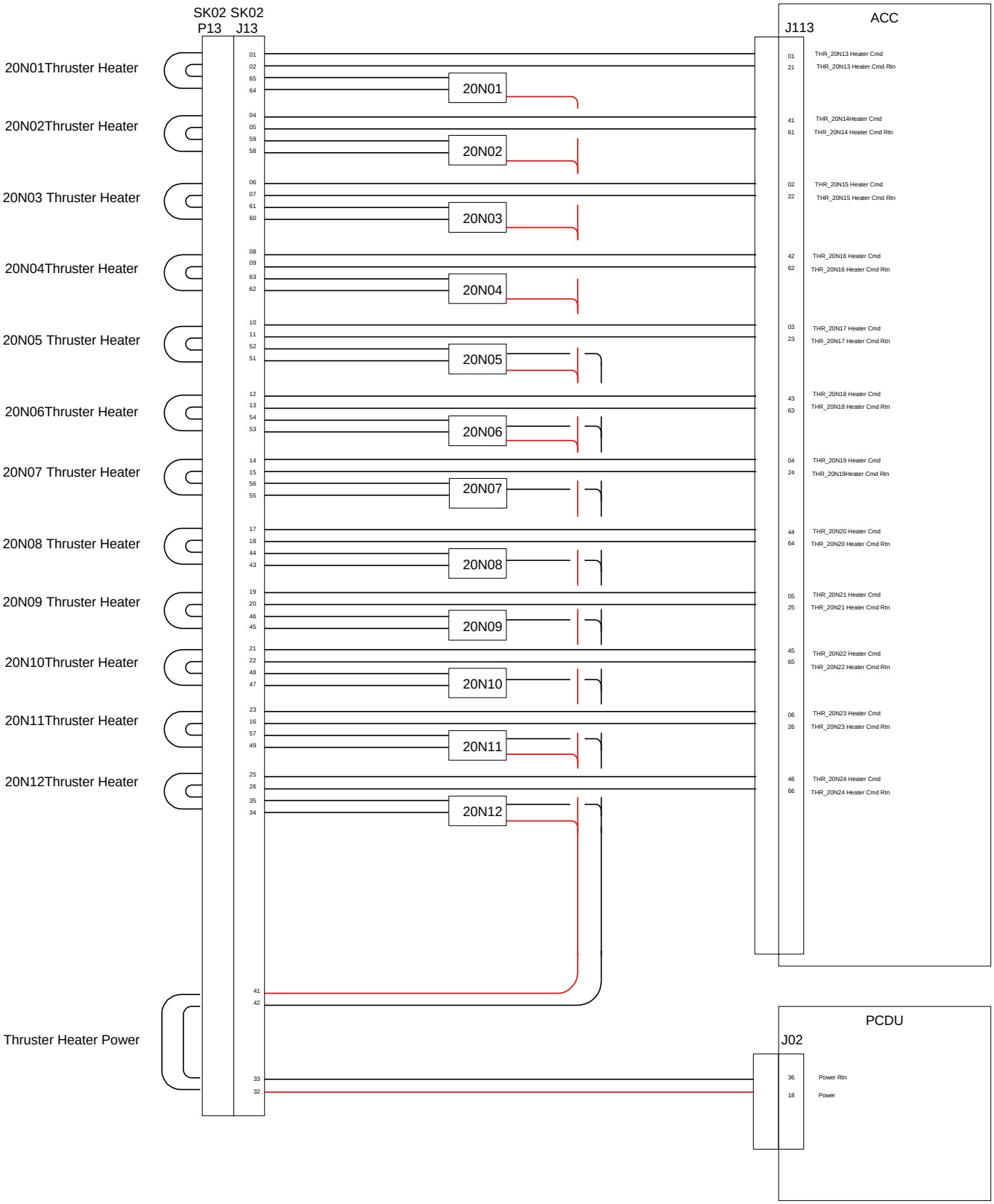

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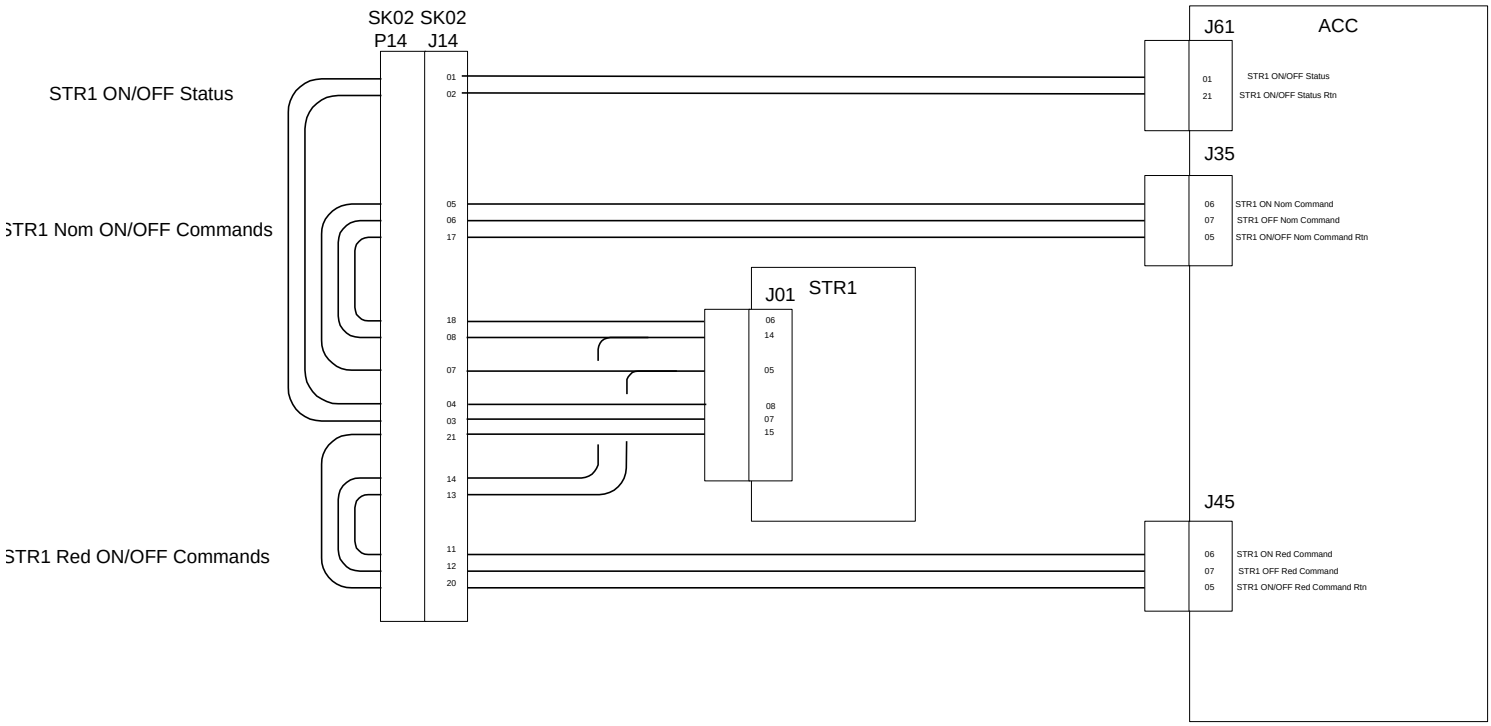

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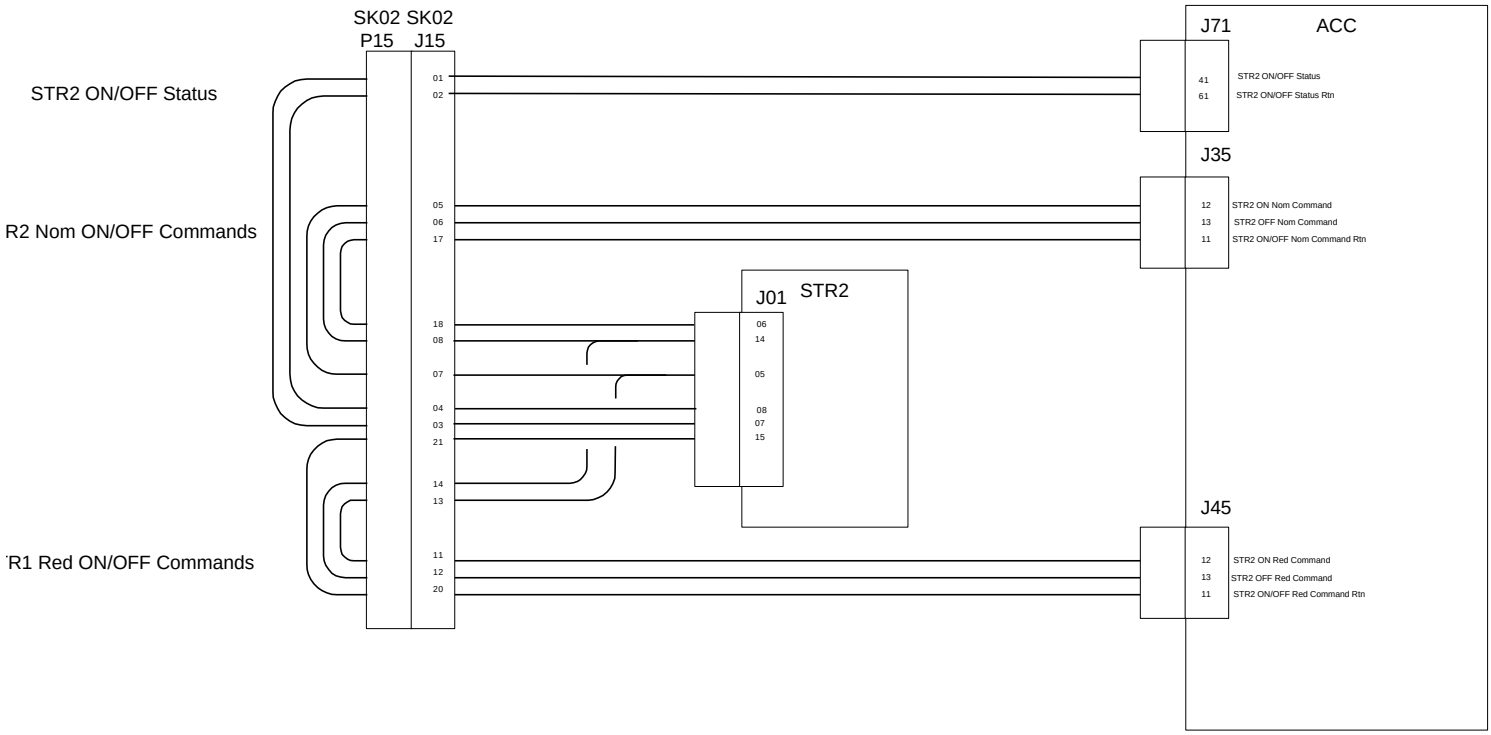
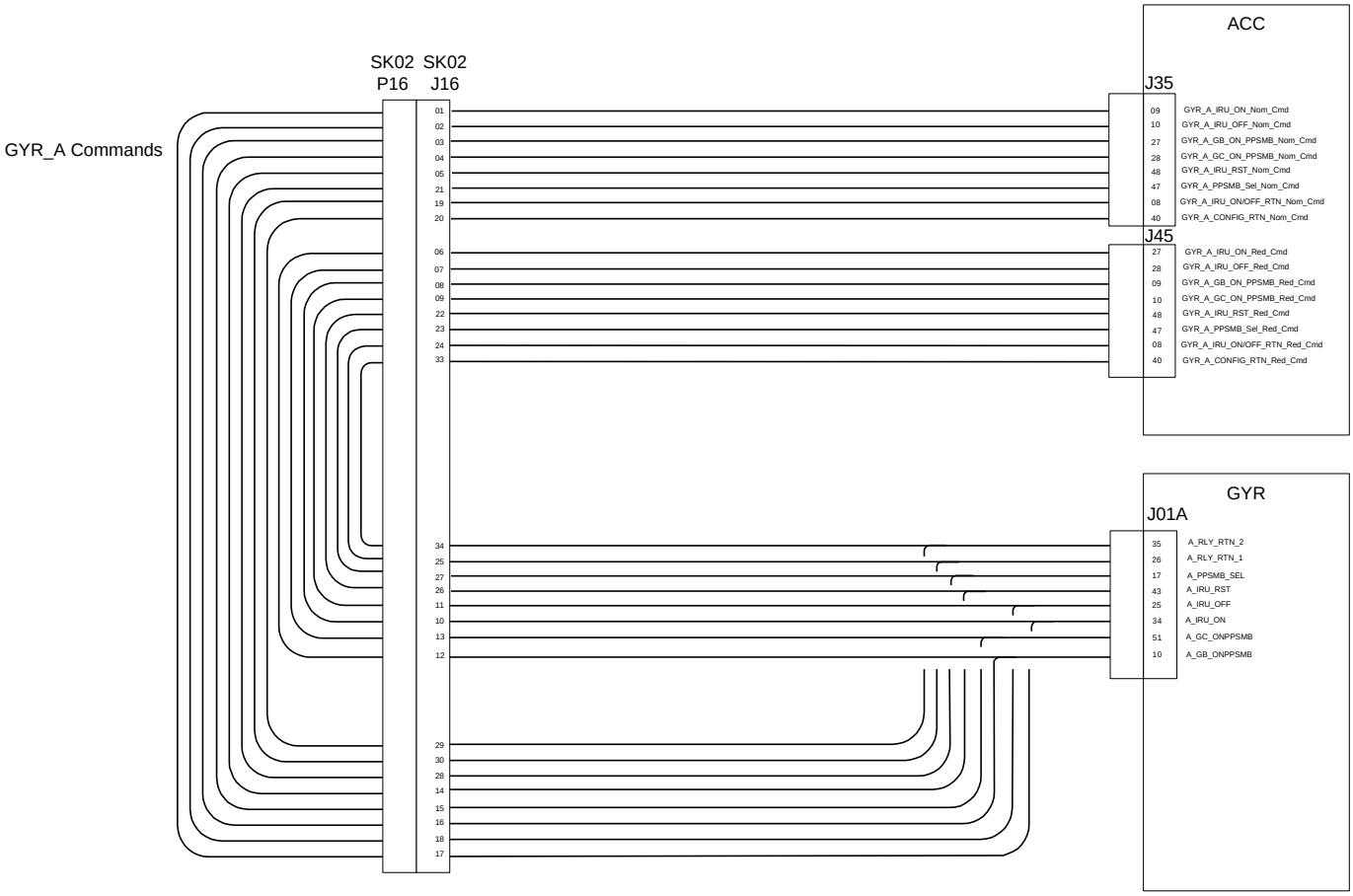


3.1.16 Satellite Level Skin Connector SK02 J16 ACC – GYR-A



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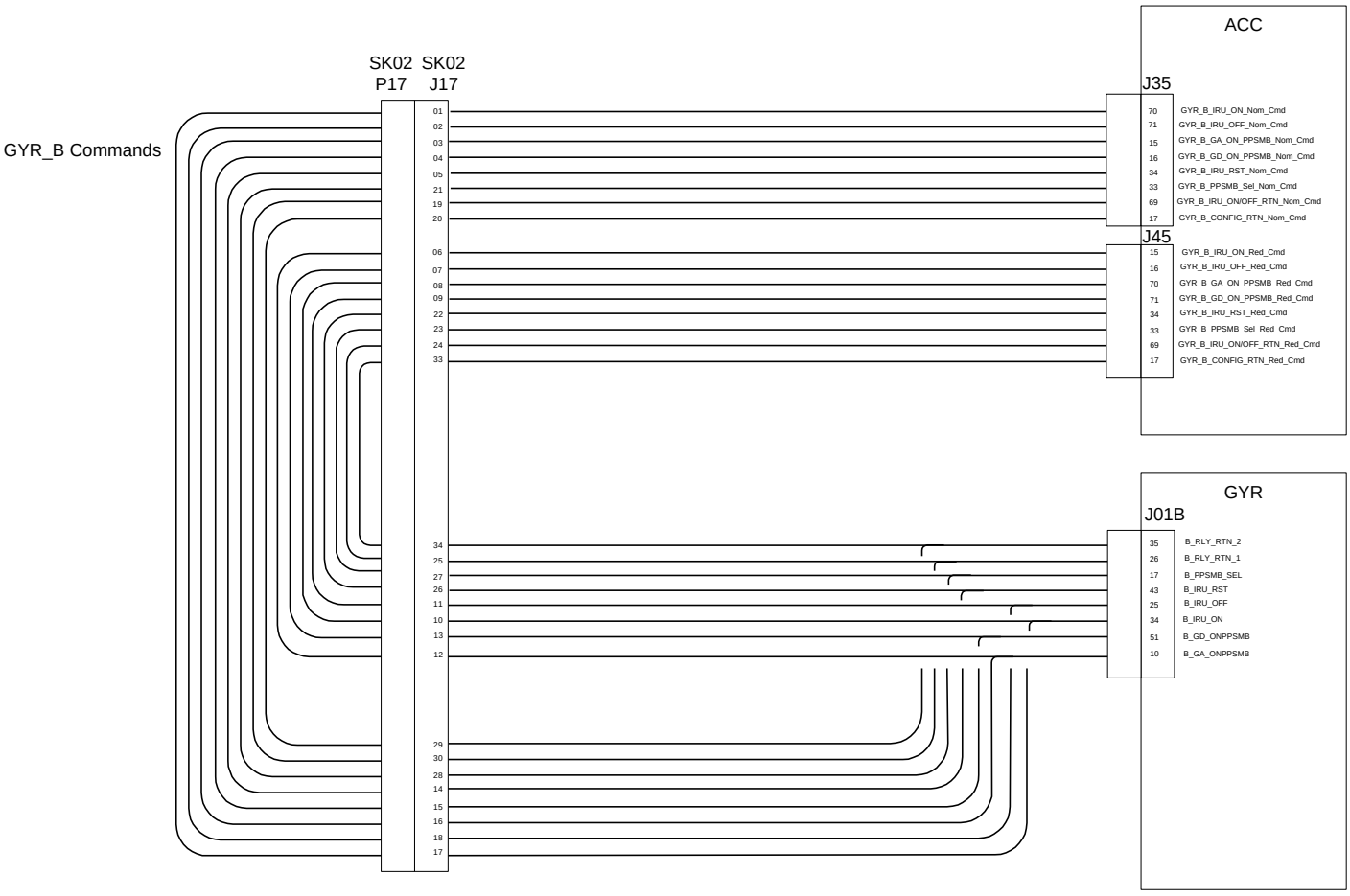
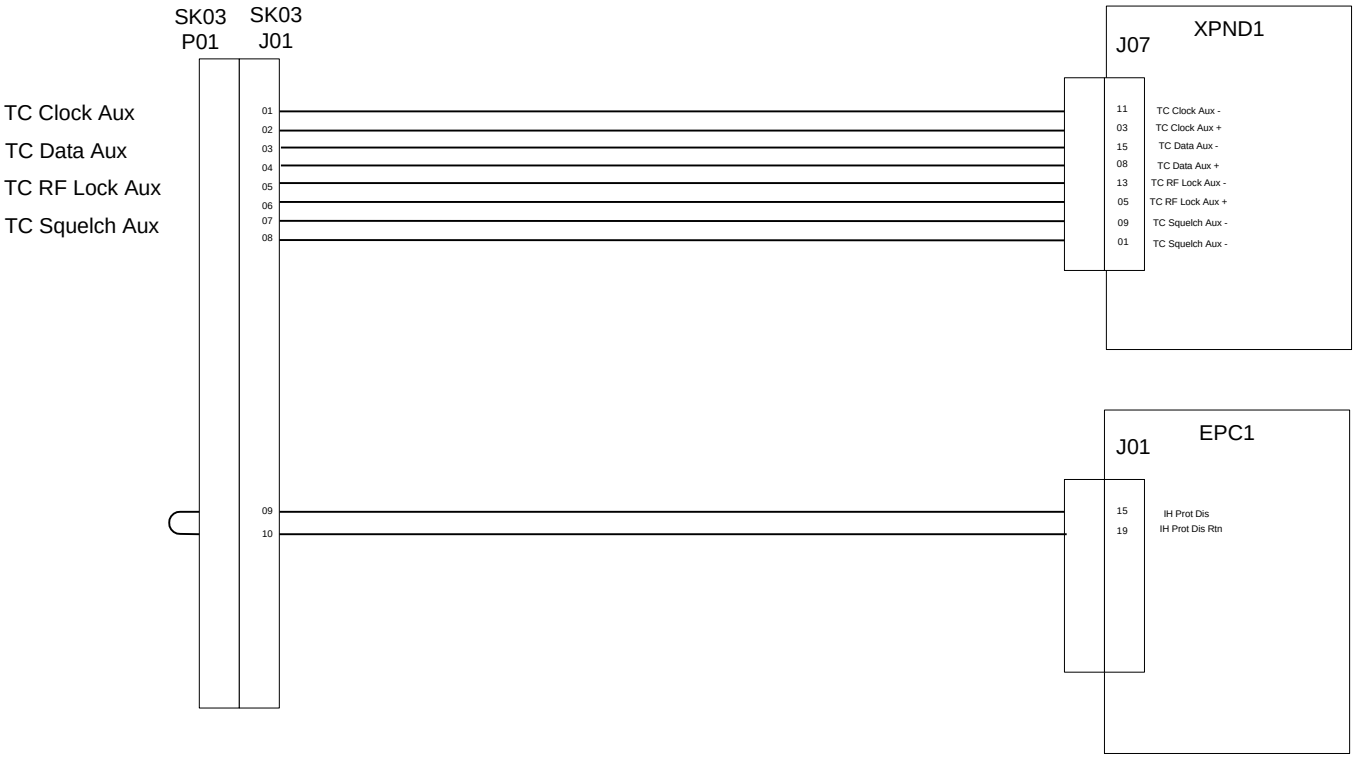
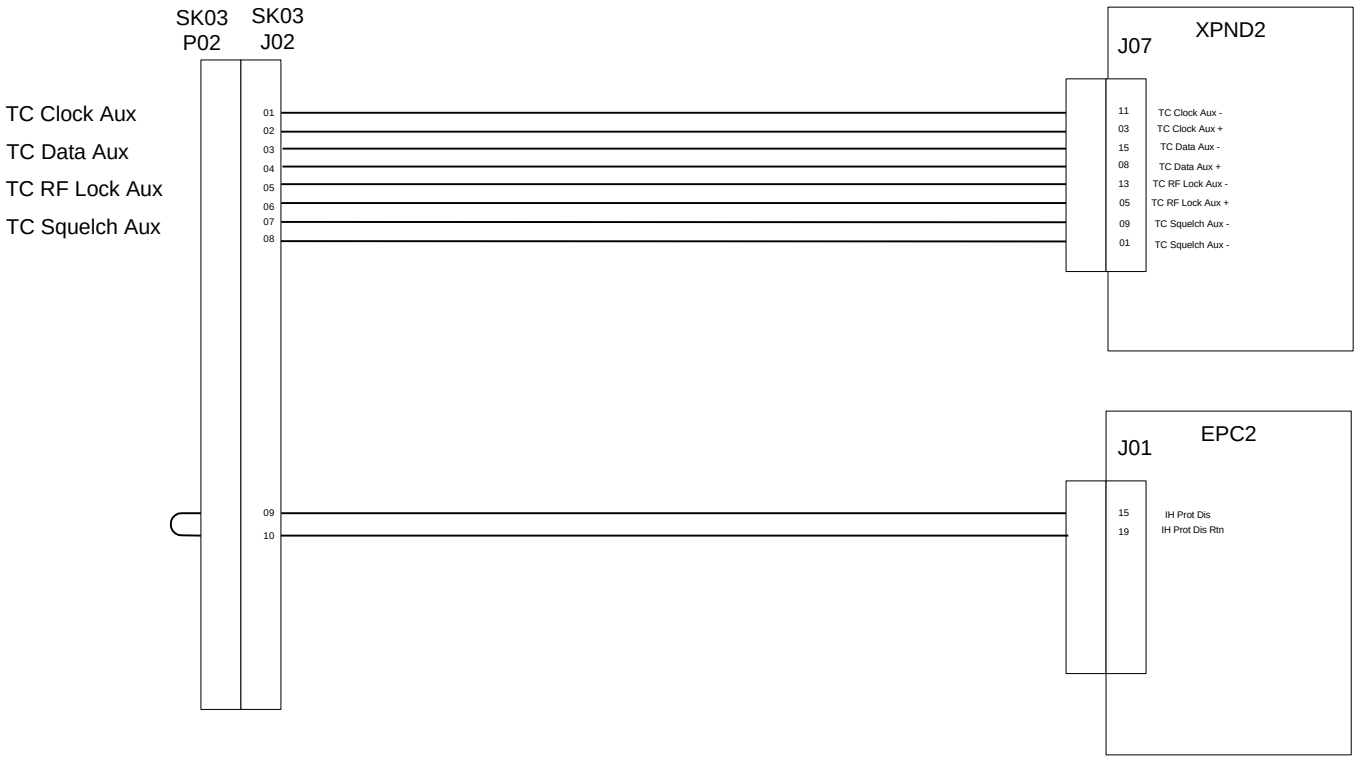


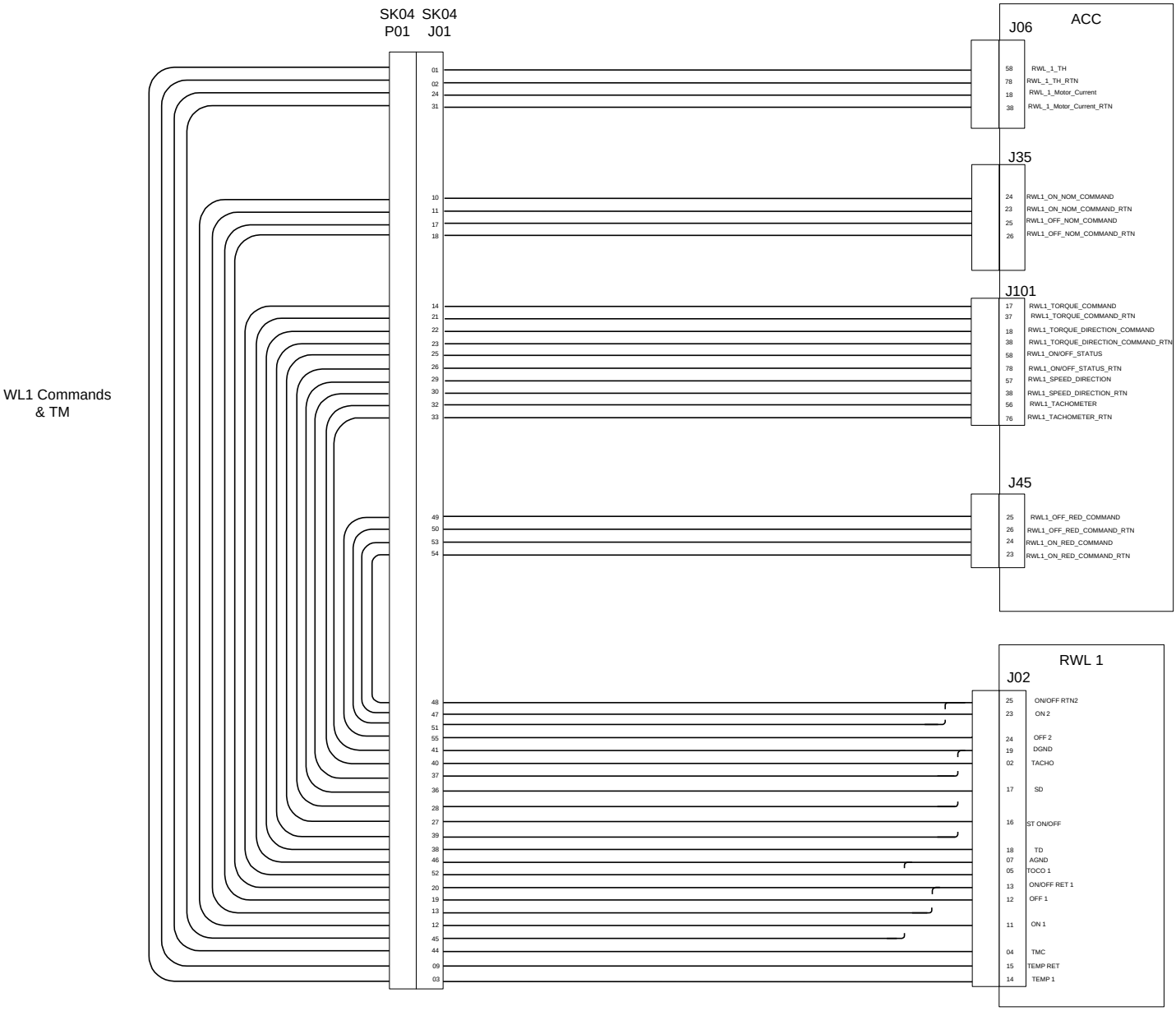
3.1.18 Satellite Level Skin Connector SK03 J01 Xponder 1 Aux Inputs



3.1.19 Satellite Level Skin Connector SK03 J02 Xponder 2 Aux Inputs



3.1.20 Satellite Level Skin Connector SK04 J01 ACC – RWL1



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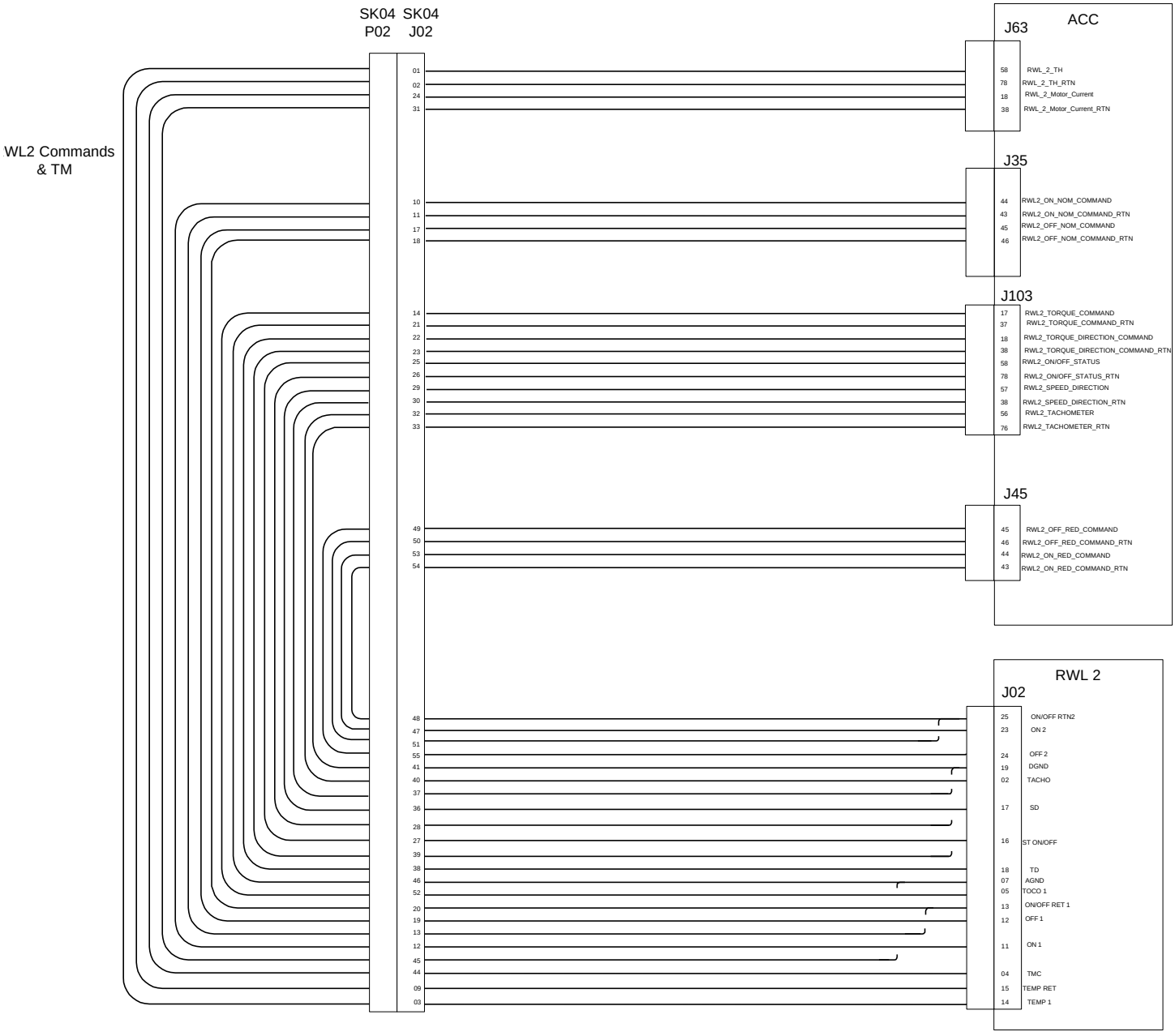

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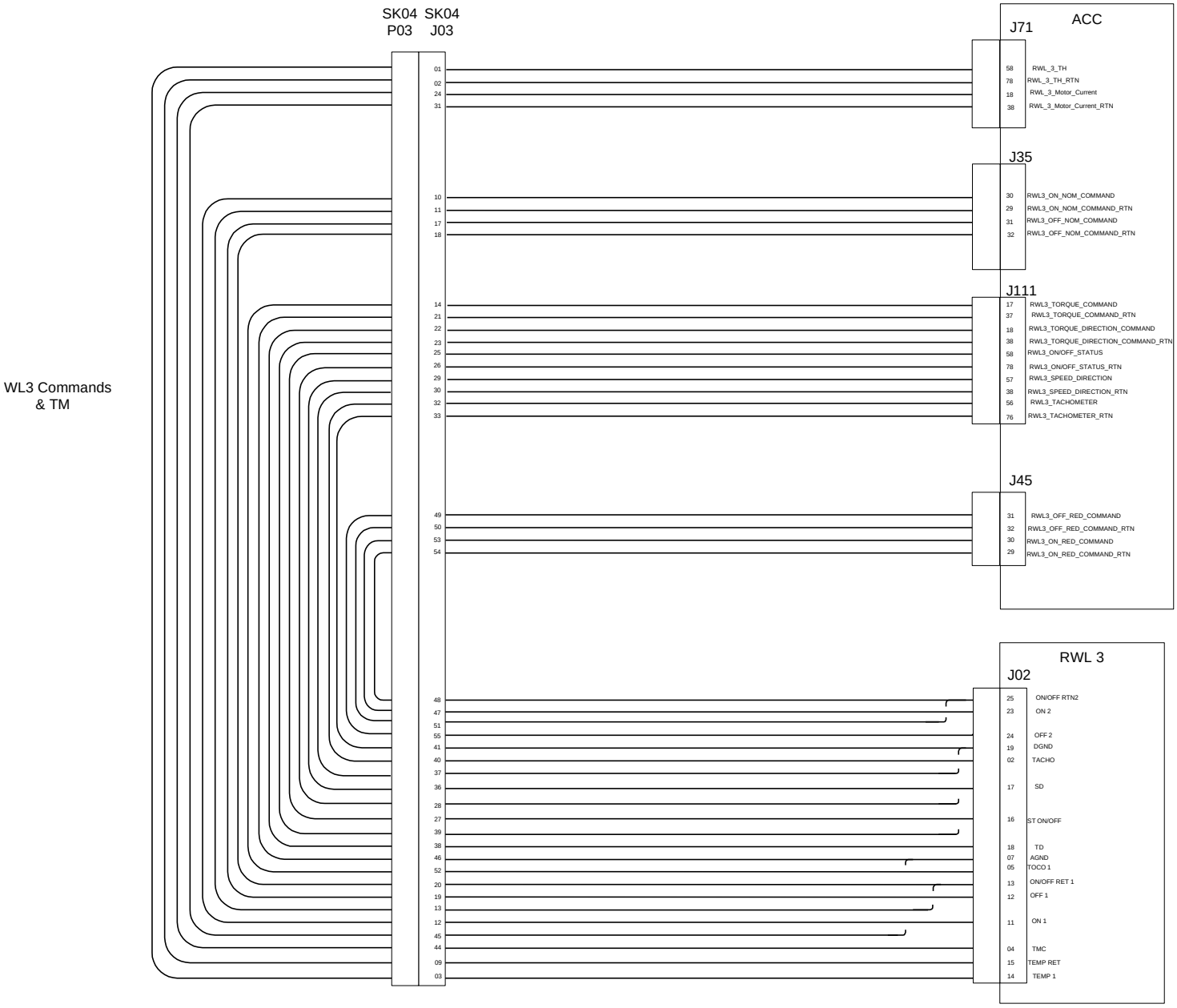

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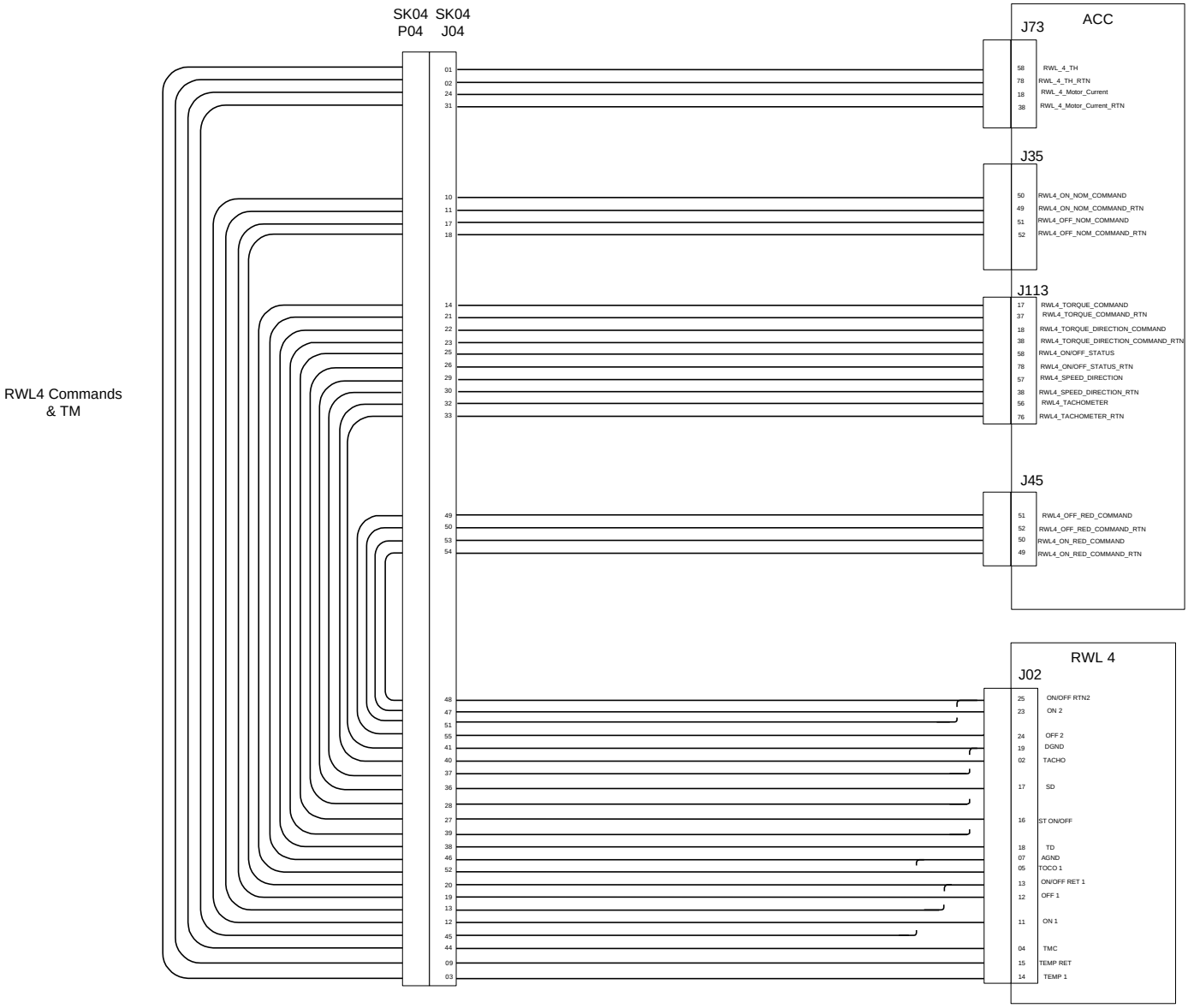
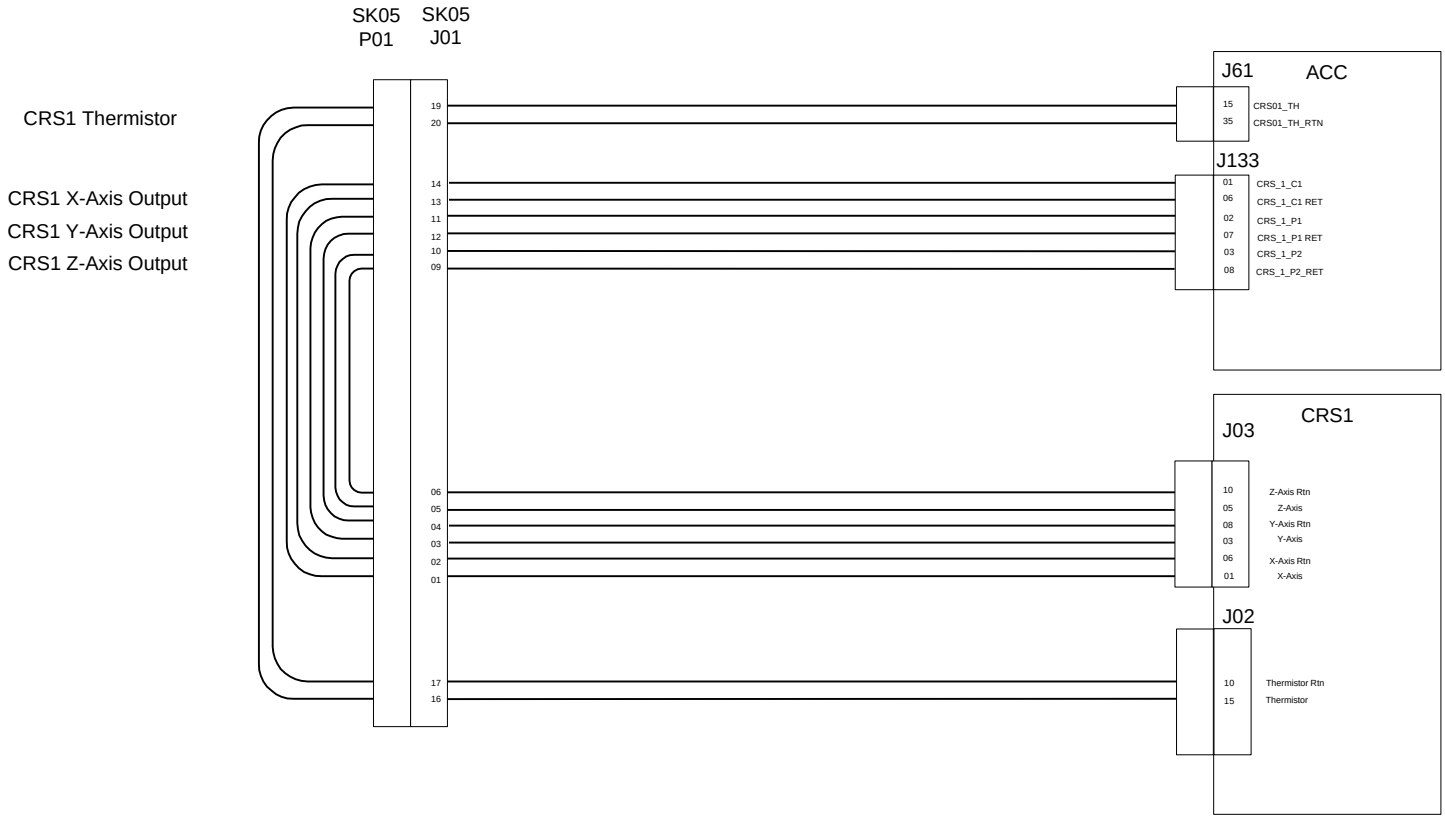
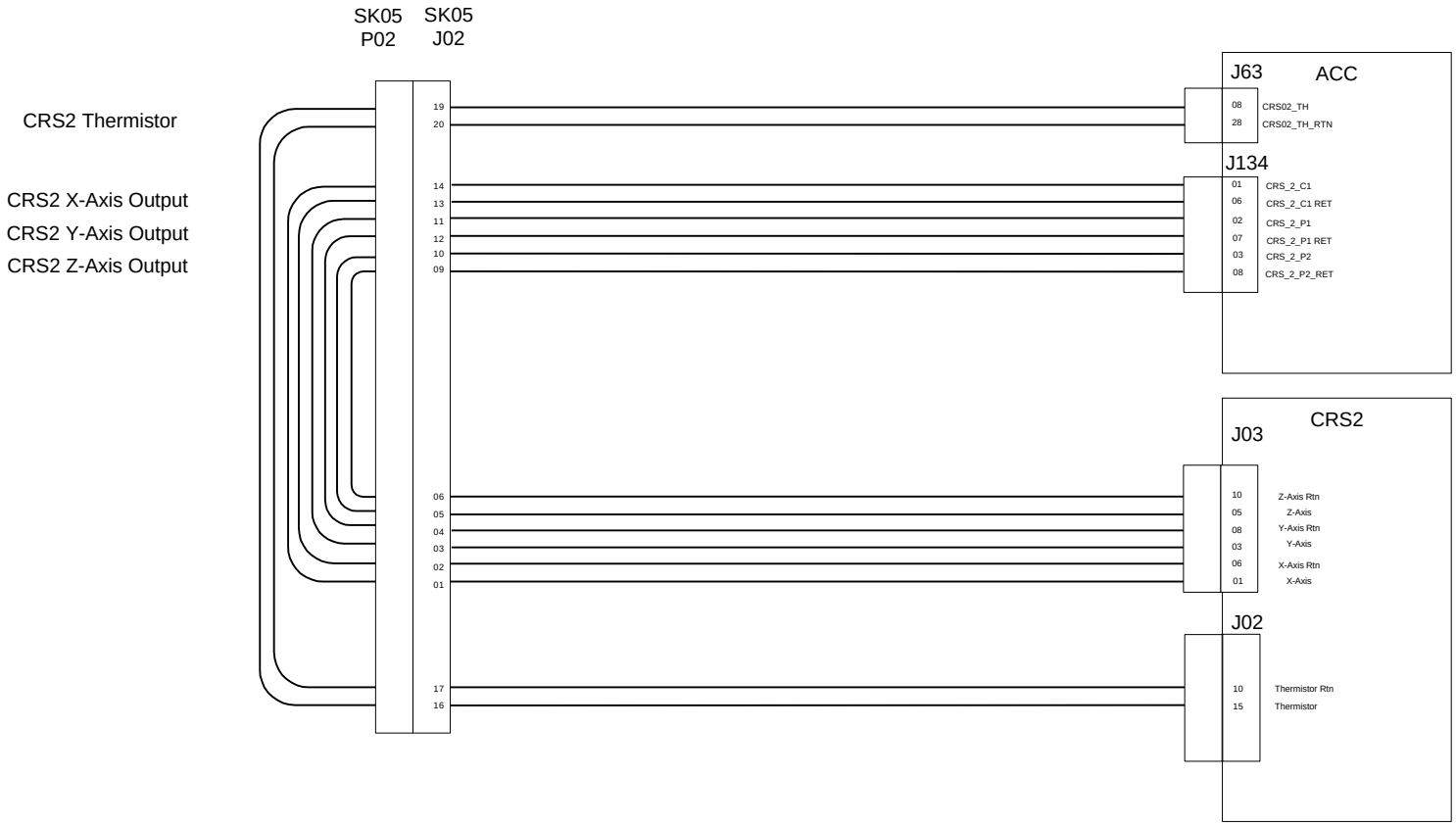


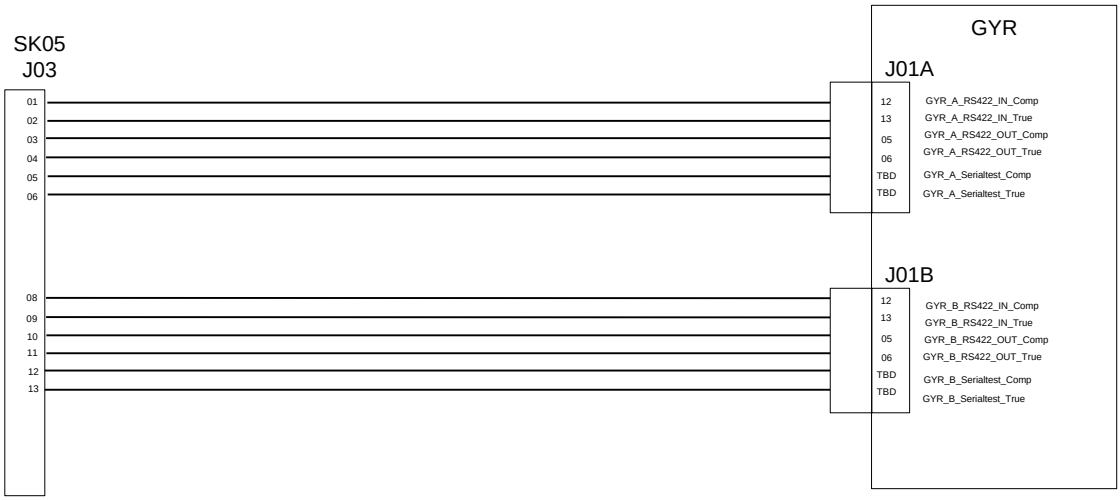
3.1.24 Satellite Level Skin Connector SK05 J01 CRS1 – ACC



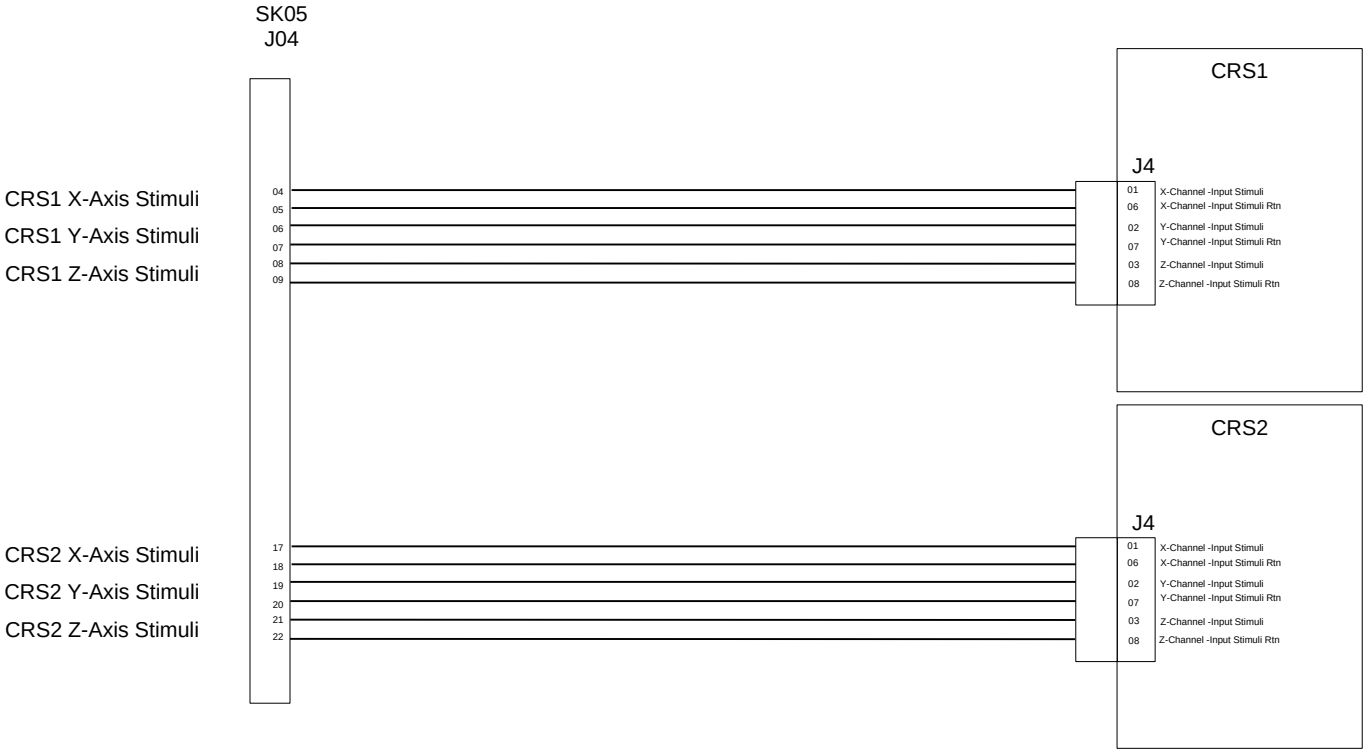
3.1.25 Satellite Level Skin Connector SK05 J02 CRS2 – ACC



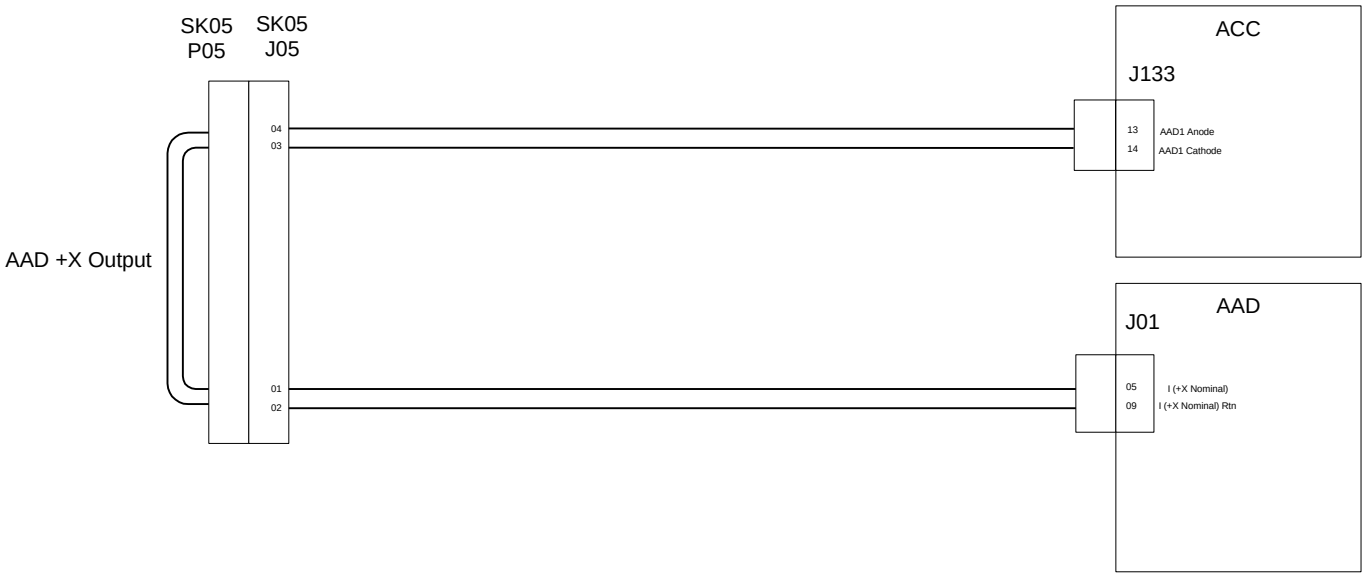
3.1.26 Satellite Level Skin Connector SK05 J03 GYR Serial Test Interfaces



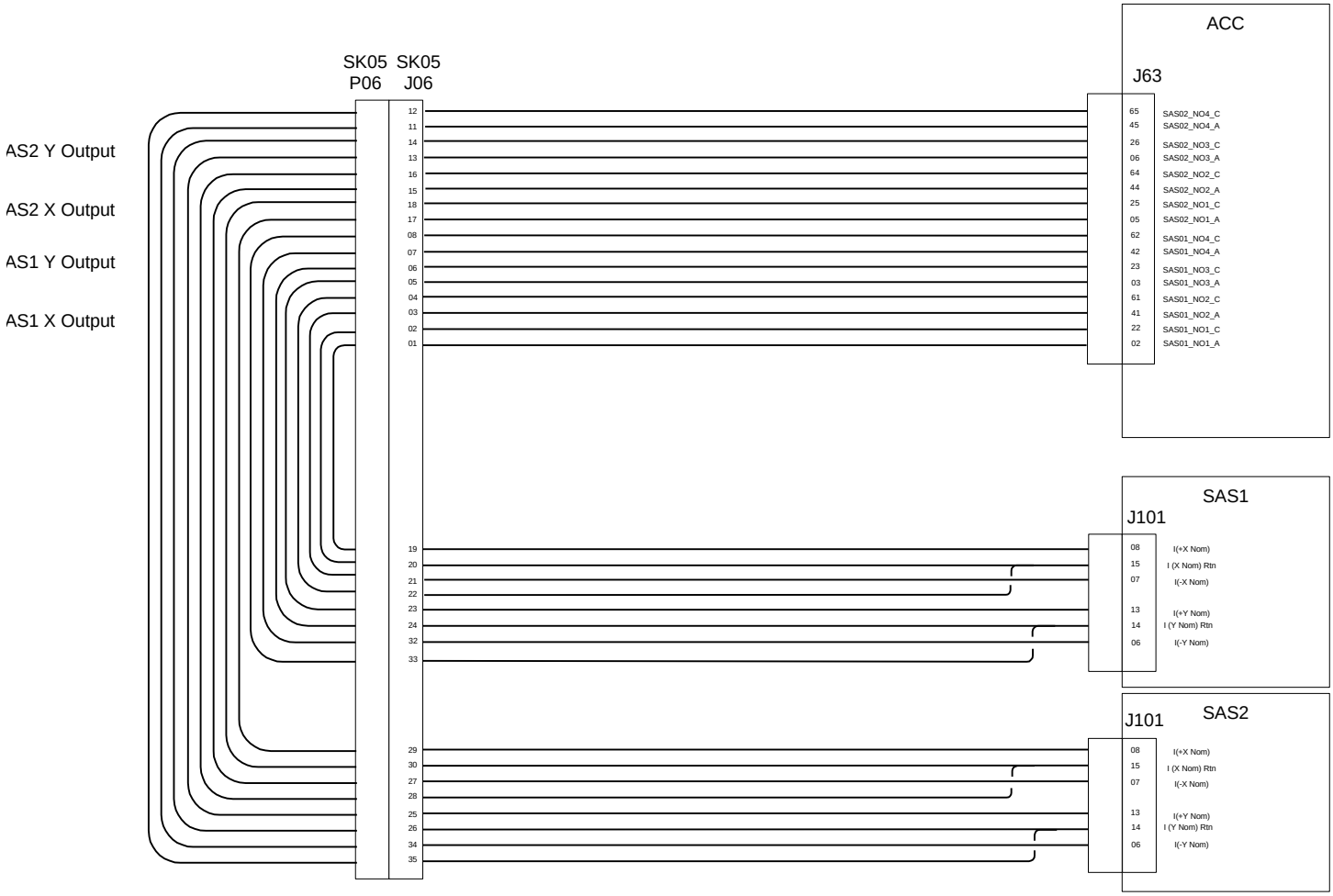
3.1.27 Satellite Level Skin Connector SK05 J04 CRS1 Stimuli



3.1.28 Satellite Level Skin Connector SK05 J05 AAD – ACC



3.1.29 Satellite Level Skin Connector SK05 J06 SAS1 & SAS2 – ACC



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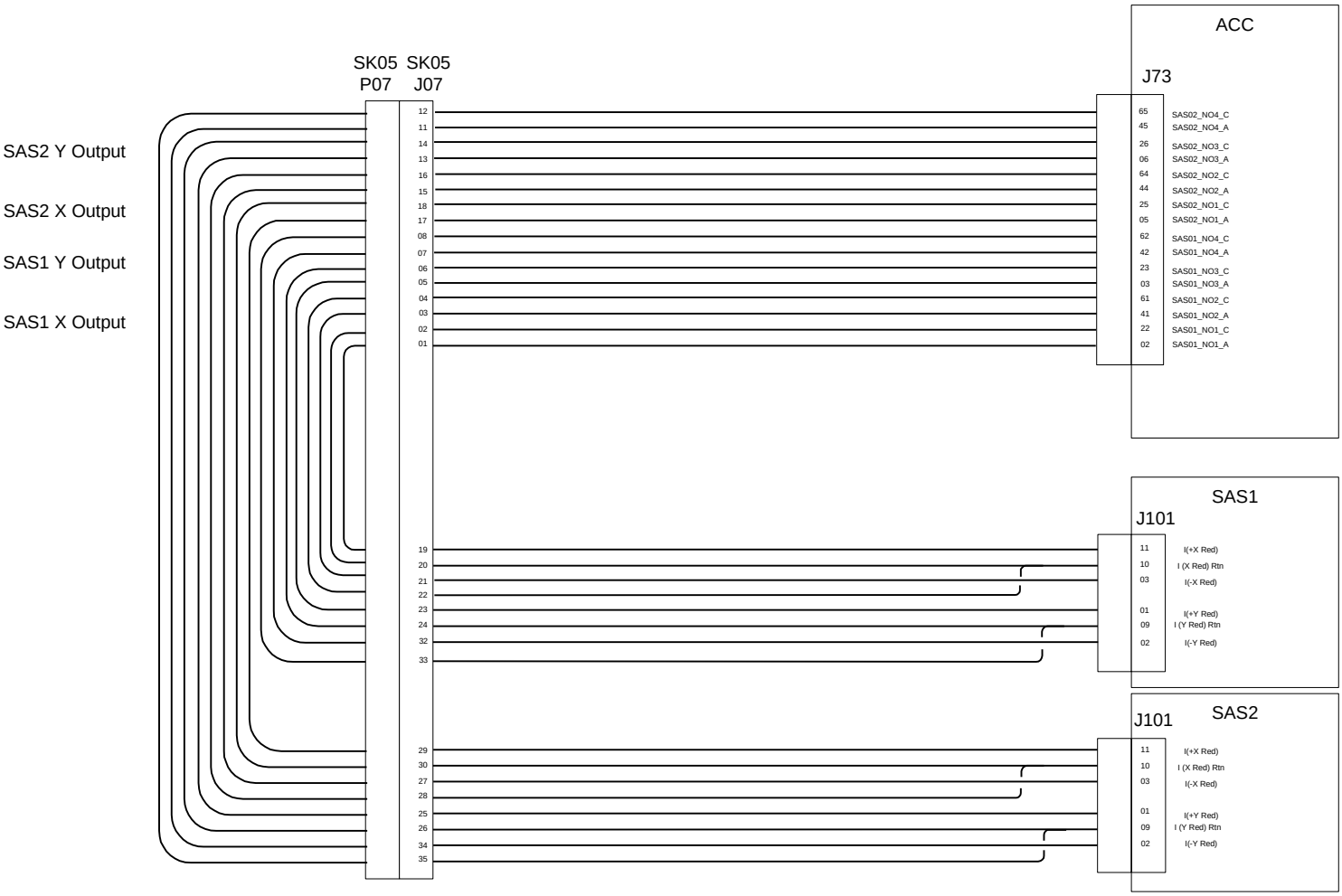
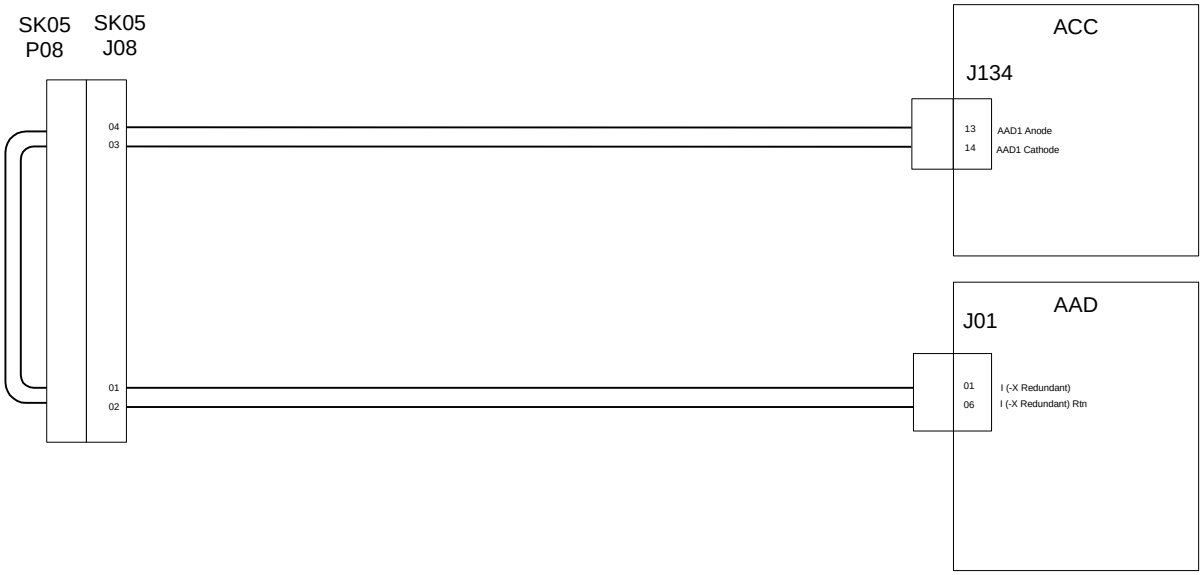
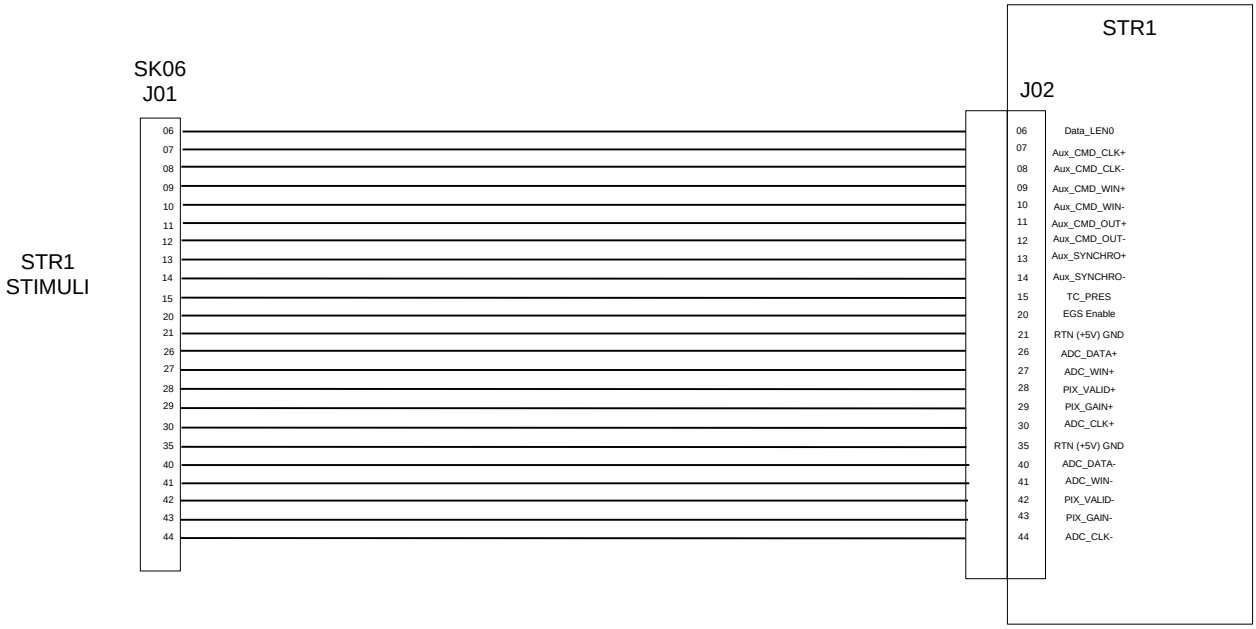


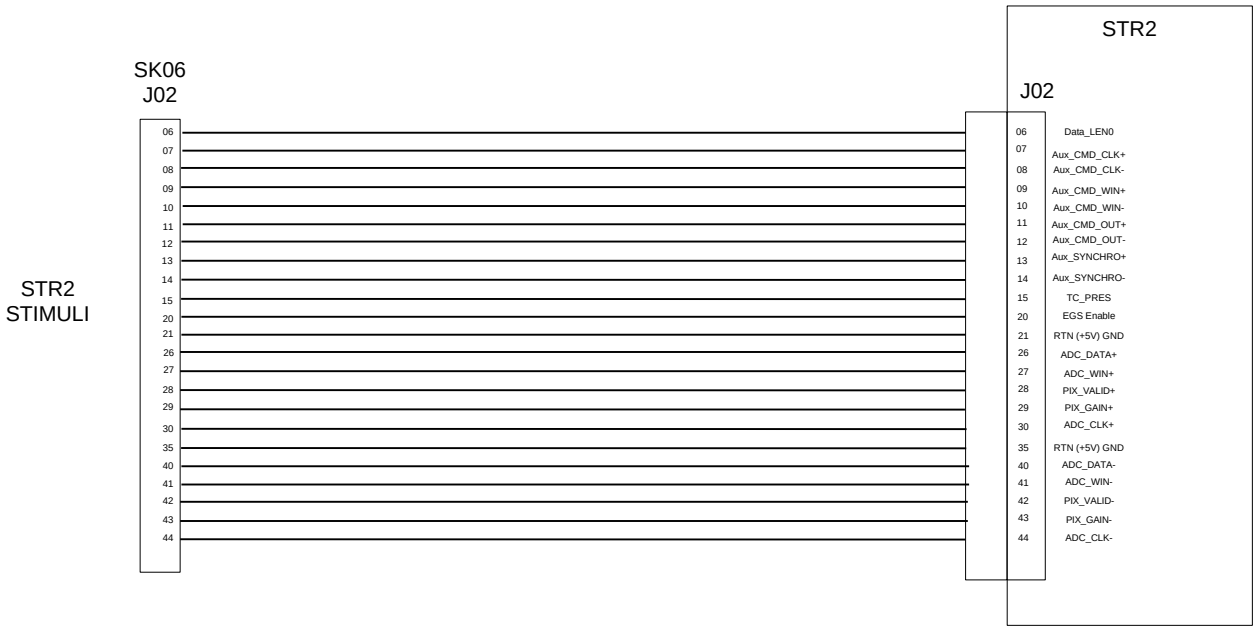
3.1.31 Satellite Level Skin Connector SK05 J08 AAD – ACC



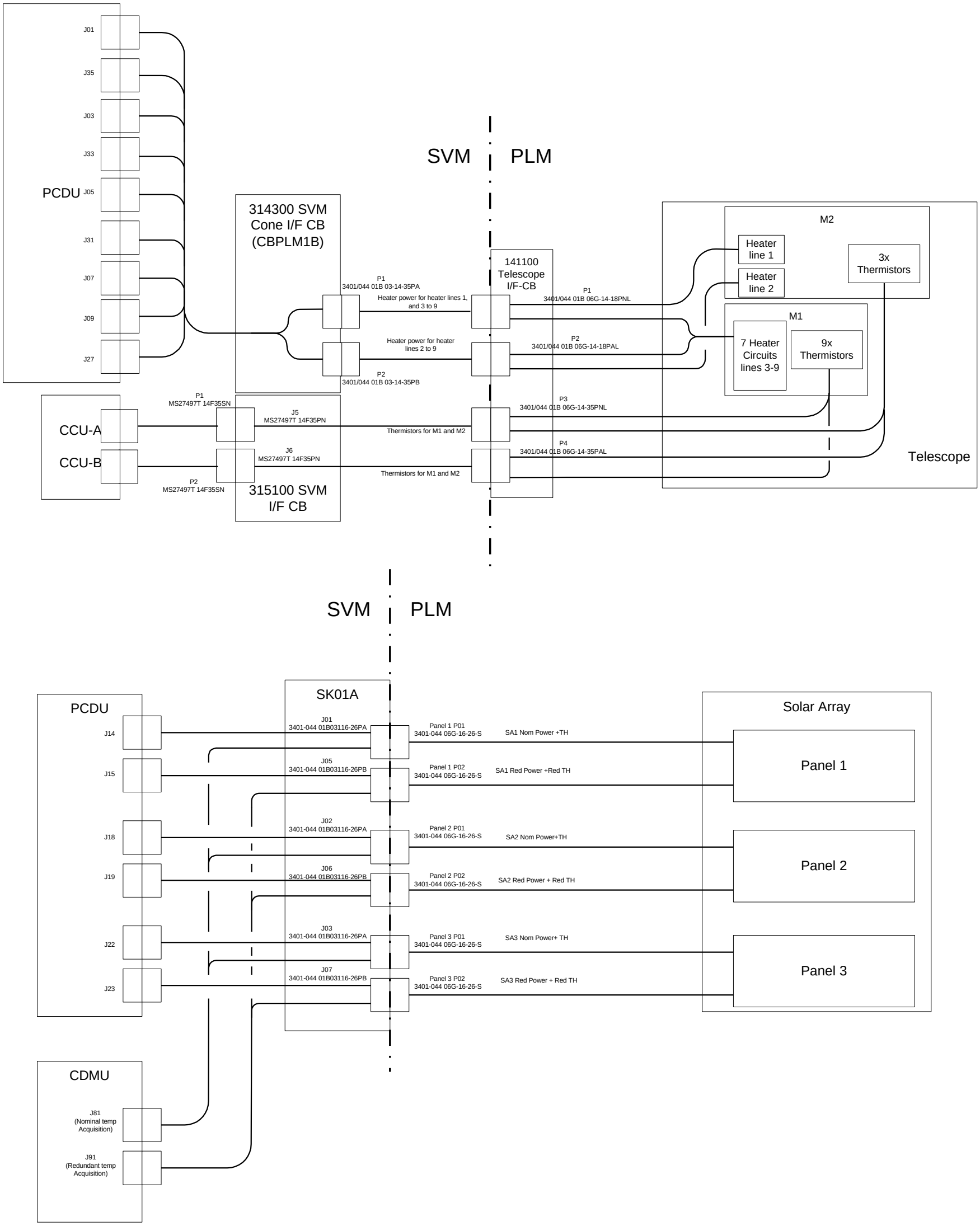
3.1.32 Satellite Level Skin Connector SK06 J01 STR1 Stimuli

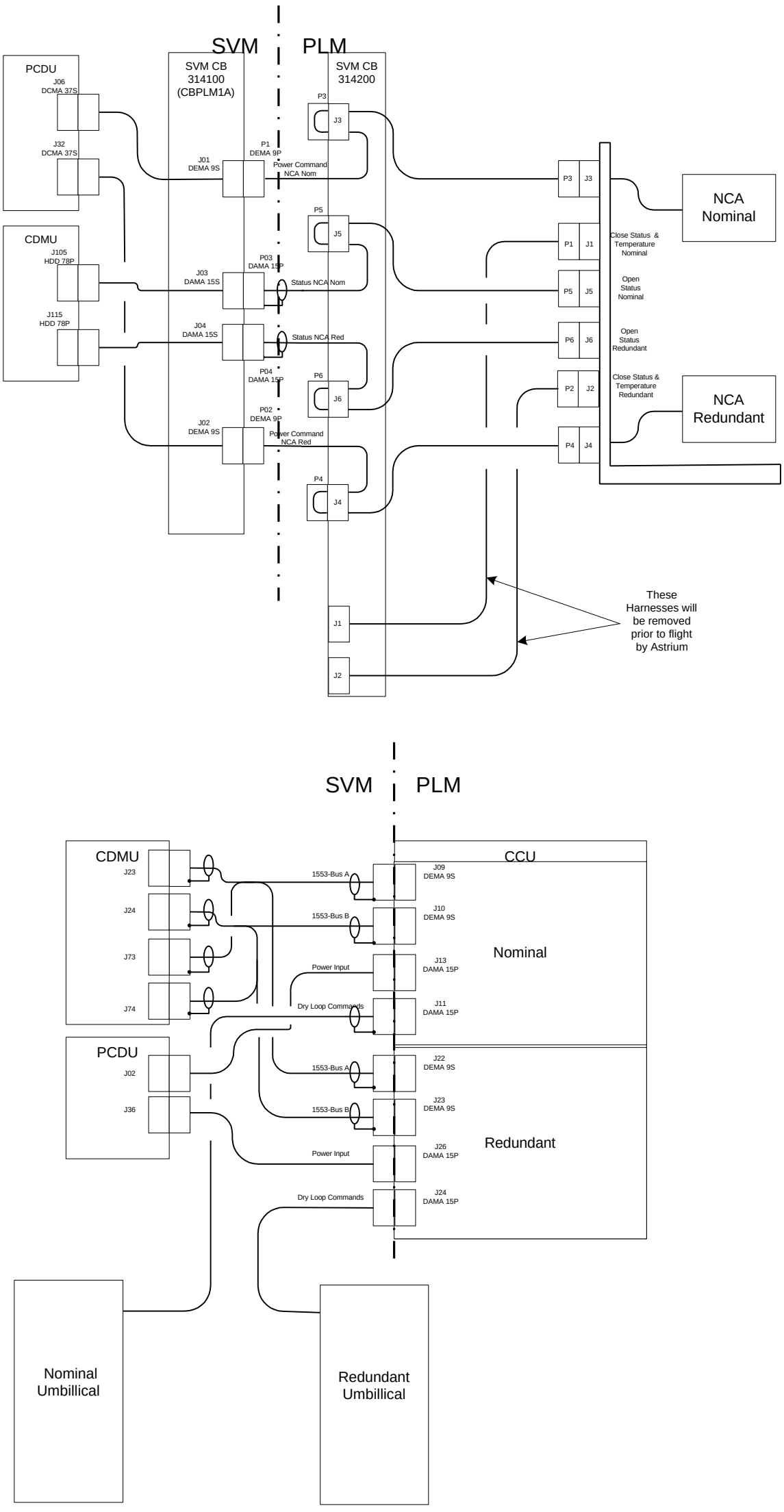


3.1.33 Satellite Level Skin Connector SK06 J02 STR2 Stimuli

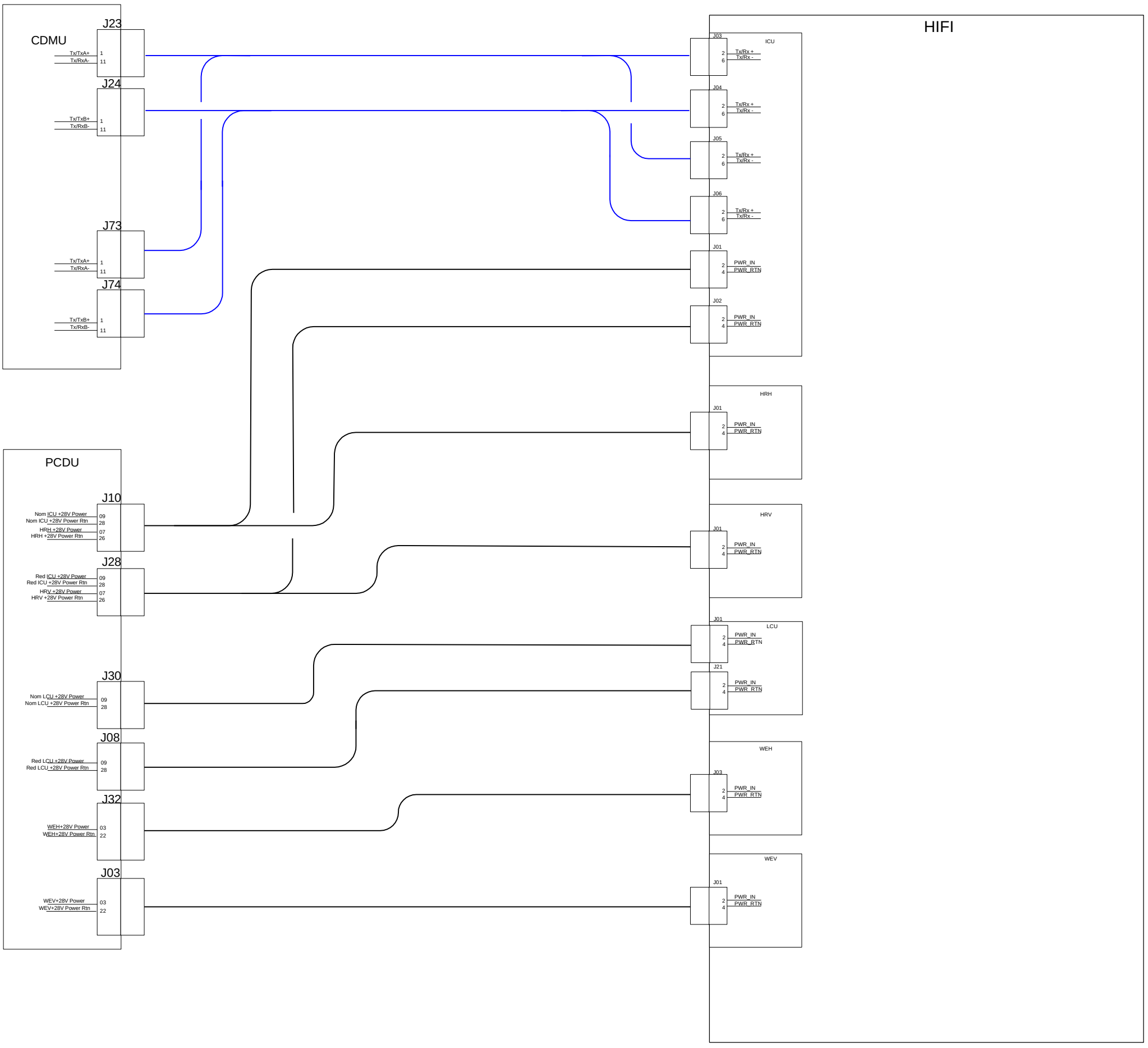


3.2 Satellite Level PLM – SVM Connections

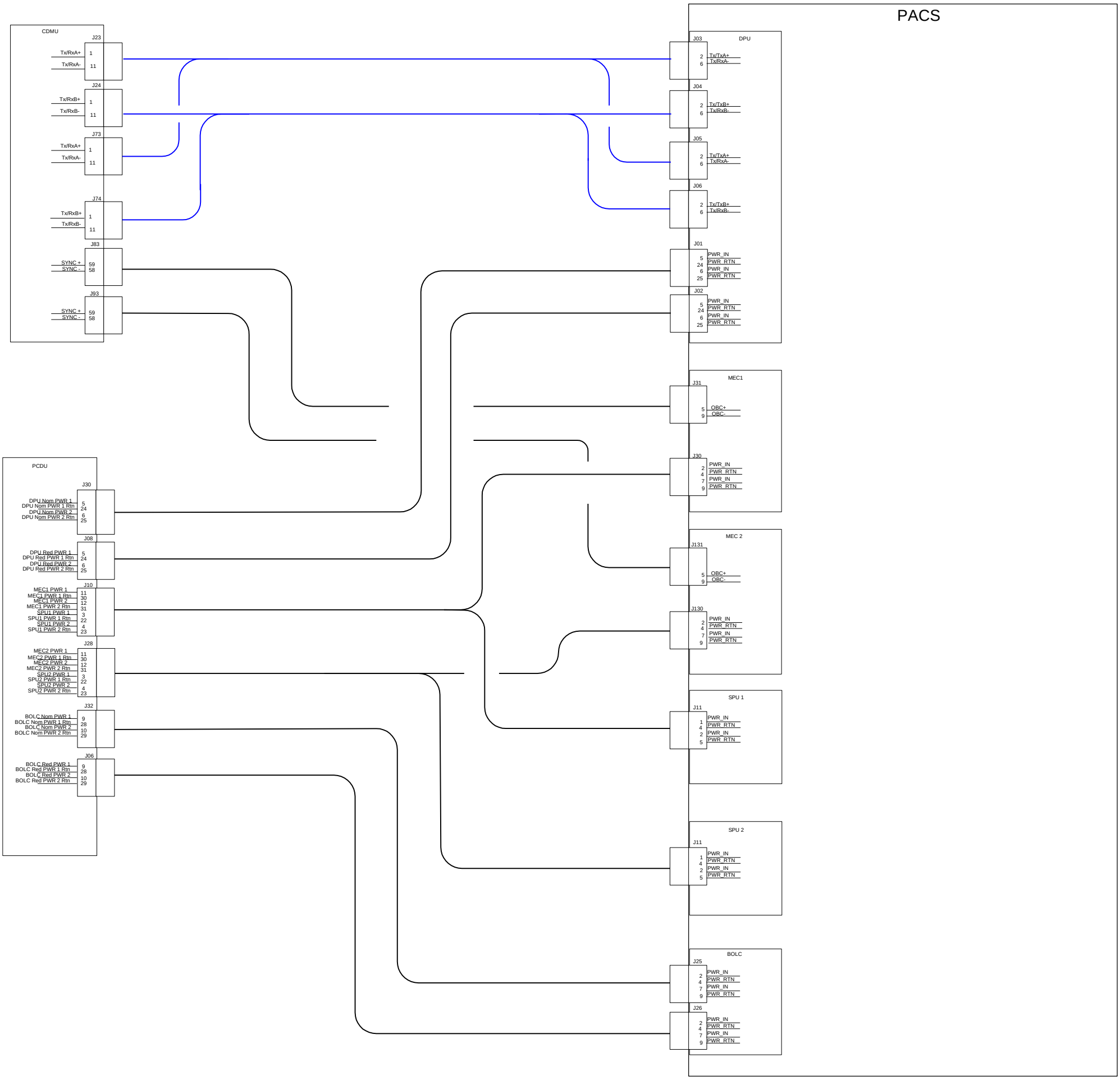




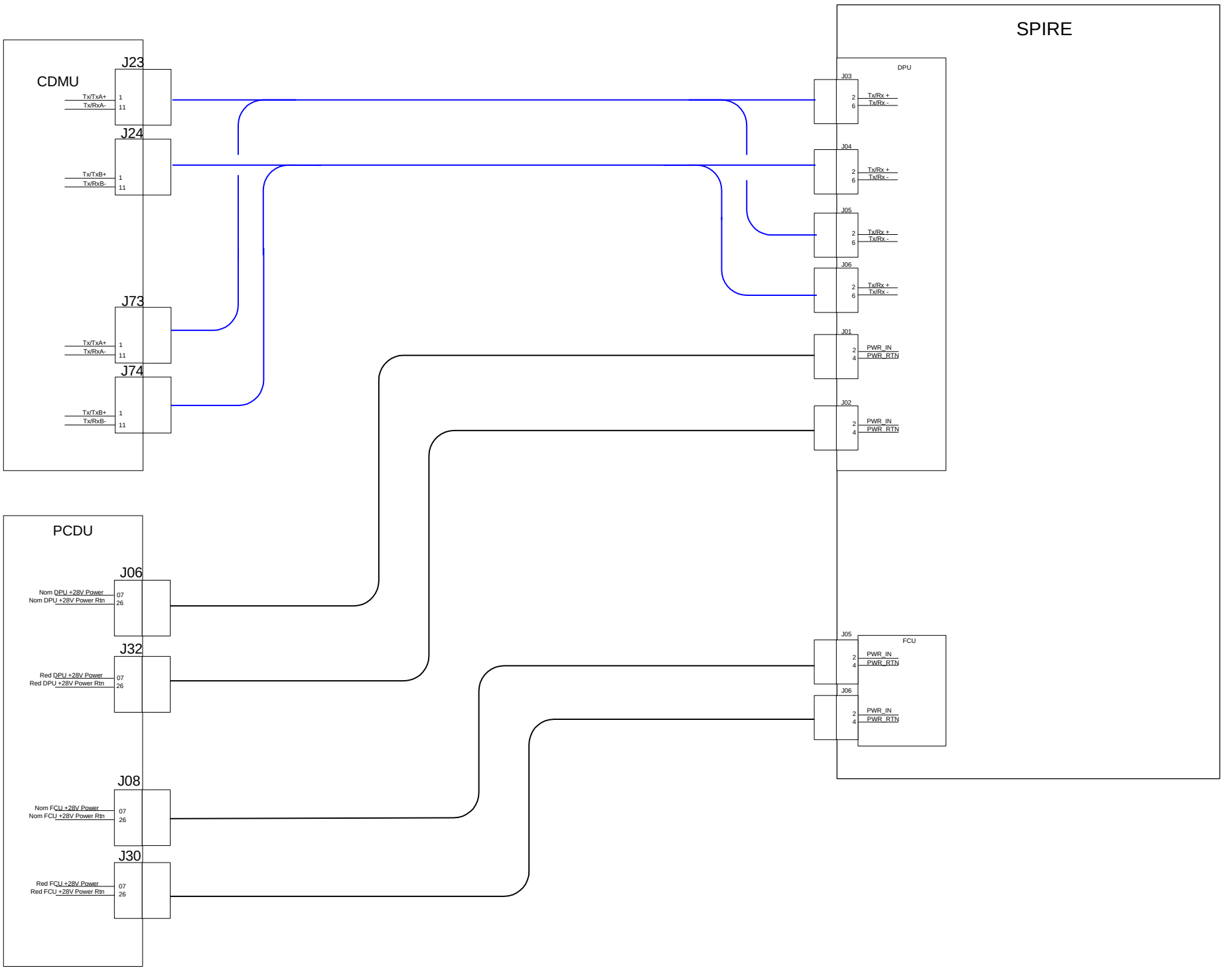
3.3 Satellite Level HIFI – SVM Connections



3.4 Satellite Level PACS – SVM Connections

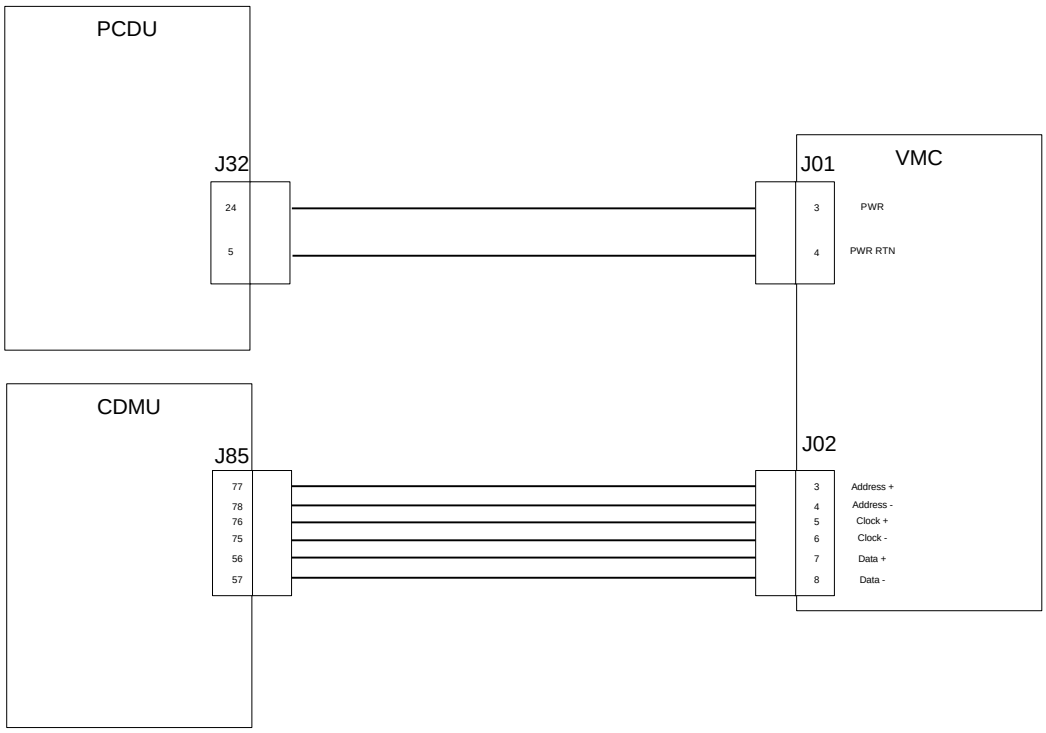


3.5 Satellite Level SPIRE – SVM Connections

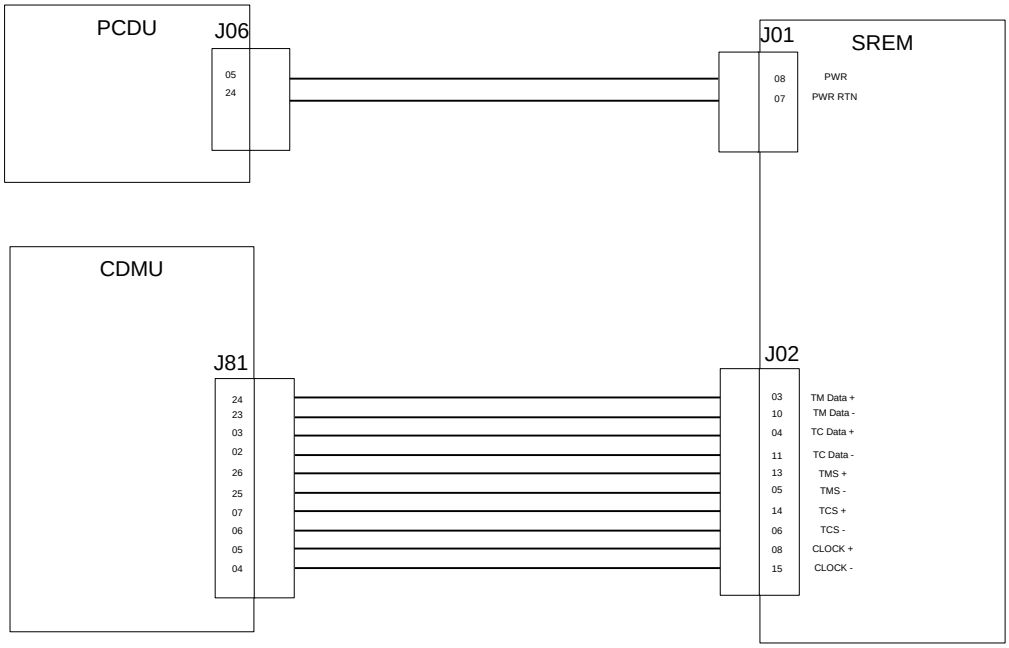


3.6 Miscellaneous Connections

3.6.1 Miscellaneous Connections, VMC



3.6.2 Miscellaneous Connections, SREM



4 LIST OF CONNECTIONS

This paragraph provides an overview of all connections within the satellite for each interface.
A table is provided for each connector shown in the previous drawings, the "Source" columns pertaining to the connector and the "Destination" columns refer to the unit/connector/pin to which the source pin is connected.

For each Source and Destination the relevant interface type is listed (except for skin connectors which either have EGSE as inputs or links, in which case only the destination interface type is given). For each interface type reference the electrical schematic and the electrical characteristics are defined in subsequent chapters.

4.1 Satellite Level Umbilical Connectors

4.1.1 Satellite Level Umbilical Connector HU1 J01

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
HU1J01	8	HU1/PCDU_Charge_Array_Disable_Cmd +	PCDUJ14	2	Link	HL_Cmd
HU1J01	9	HU1/PCDU_Charge_Array_Disable_Cmd RTN	PCDUJ14	15	Link	HL_Cmd
HU1J01	13	HU1/CDMU_Sep_Strap1_Sts	CDMUJ105	32	Link	DR_Mnt
HU1J01	17	HU1/CDMU_TC_Squelch _L	CDMUJ043	25	SBDL_Receiver	SBDL_Driver
HU1J01	18	HU1/CDMU_TC_Data _L	CDMUJ043	65	SBDL_Receiver	SBDL_Driver
HU1J01	19	HU1/CDMU_TC_Clock _L	CDMUJ043	64	SBDL_Receiver	SBDL_Driver
HU1J01	21	HU1/CDMU_RM_A_Sep_Strap5a_Alarm_Sts _H	CDMUJ043	19	Link	DR_Mnt
HU1J01	22	HU1/CDMU_RM_A_Sep_Strap5a_Alarm_Sts _L	CDMUJ043	38	Link	DR_Mnt
HU1J01	25	HU1/CDMU_RM_B_Sep_Strap6a_Alarm_Sts _H	CDMUJ053	19	Link	DR_Mnt
HU1J01	26	HU1/CDMU_RM_B_Sep_Strap6a_Alarm_Sts _L	CDMUJ053	38	Link	DR_Mnt
HU1J01	27	HU1/CDMU_Sep_Strap1_Sts RTN	CDMUJ105	31	Link	DR_Mnt
HU1J01	28	HU1/PCDU_+28V_Aux_IN-3_Pwr +	PCDUJ18	1	EGSE_PWR	SA_Aux_PWR_in
HU1J01	29	HU1/PCDU_+28V_Aux_IN-1_Pwr +	PCDUJ14	1	EGSE_PWR	SA_Aux_PWR_in
HU1J01	30	HU1/PCDU_+28V_Aux_IN-2_Pwr RTN	PCDUJ15	14	EGSE_PWR	SA_Aux_PWR_in
HU1J01	31	CDMU/HU1_TM_Data _H	CDMUJ043	47	SBDL_Driver	SBDL_Receiver
HU1J01	32	CDMU/HU1_TM_Clock _L	CDMUJ043	66	SBDL_Driver	SBDL_Receiver
HU1J01	33	CDMU/HU1_TM_Clock _H	CDMUJ043	46	SBDL_Driver	SBDL_Receiver
HU1J01	34	HU1/CDMU_TC_Squelch _H	CDMUJ043	6	SBDL_Receiver	SBDL_Driver
HU1J01	35	HU1/CDMU_TC_Data _H	CDMUJ043	45	SBDL_Receiver	SBDL_Driver
HU1J01	36	HU1/CDMU_TC_Clock _H	CDMUJ043	44	SBDL_Receiver	SBDL_Driver
HU1J01	40	PCDU/HU1_+28V_Mnt +	PCDUJ16	2	+28V_TM	EGSE
HU1J01	41	PCDU/HU1_+28V_Mnt -	PCDUJ16	10	+28V_TM	EGSE
HU1J01	47	HU1/CDMU_Sep_Strap2_Sts	CDMUJ115	32	Link	DR_Mnt
HU1J01	48	HU1/CDMU_Sep_Strap2_Sts RTN	CDMUJ115	31	Link	DR_Mnt
HU1J01	49	HU1/PCDU_+28V_Aux_IN-1_Pwr RTN	PCDUJ14	14	EGSE_PWR	SA_Aux_PWR_in

HU1J01	50	HU1/PCDU_+28V_Aux_IN-2_Pwr +	PCDUJ15	1	EGSE_PWR	SA_Aux_PWR_in
HU1J01	51	HU1/PCDU_+28V_Aux_IN-3_Pwr RTN	PCDUJ18	14	EGSE_PWR	SA_Aux_PWR_in
HU1J01	52	CDMU/HU1_TM_Data _L	CDMUJ043	67	SBDL_Driver	SBDL_Receiver
HU1J01	BKSH	Shield_for_CDMU/HU1_TM_Clock	CDMUJ043	BKSH	Shield	Shield
HU1J01	BKSH	Shield_for_CDMU/HU1_TM_Data	CDMUJ043	BKSH	Shield	Shield
HU1J01	BKSH	Shield_for_PCDU/HU1_+28V_Mnt	PCDUJ16	BKSH	Shield	Shield
HU1J01	BKSH	Shield_for_HU1/CDMU_RM_A_Sep_Strap5a_Alarm_Sts	CDMUJ043	BKSH	Shield	Shield
HU1J01	BKSH	Shield_for_HU1/CDMU_RM_B_Sep_Strap6a_Alarm_Sts	CDMUJ053	BKSH	Shield	Shield
HU1J01	BKSH	Shield_for_HU1/CDMU_Sep_Strap1_Sts	CDMUJ105	BKSH	Shield	Shield
HU1J01	BKSH	Shield_for_HU1/CDMU_Sep_Strap2_Sts	CDMUJ115	BKSH	Shield	Shield
HU1J01	BKSH	Shield_for_HU1/CDMU_TC_Clock	CDMUJ043	BKSH	Shield	Shield
HU1J01	BKSH	Shield_for_HU1/CDMU_TC_Data	CDMUJ043	BKSH	Shield	Shield
HU1J01	BKSH	Shield_for_HU1/CDMU_TC_Squelch	CDMUJ043	BKSH	Shield	Shield
HU1J01	55	GHe Exhaust 650W Heater H501 -1	CB321400J03	2,7,4		Heater
HU1J01	56	GHe Exhaust 650W Heater H501 –1 RTN	CB321400J03	6,3,8		Heater
HU1J01	53	GHe Exhaust 650W Heater H501-2	CB321400J03	2,7,4		Heater
HU1J01	54	GHe Exhaust 650W Heater H501 –2 RTN	CB321400J03	6,3,8		Heater
HU1J01	15	HOT heater H701 (10W) Nom	CB321400J01	4		Heater
HU1J01	16	HOT heater H701 (10W) Nom RTN	CB321400J01	12		Heater
HU1J01	23	LHe Level Sensor L701 Sense	CB321400J01	15		LHe Level Sensor
HU1J01	42	LHe Level Sensor L701 Sense RTN	CB321400J01	7		LHe Level Sensor
HU1J01	3	LHe Level Sensor L701 Excitation	CB321400J01	14		LHe Level Sensor
HU1J01	10	LHe Level Sensor L701 Excitation RTN	CB321400J01	6		LHe Level Sensor
HU1J01	11	V105 Close	CB321400J01	1		V105
HU1J01	24	V105 Close RTN	CB321400J01	9		V105
HU1J01	4	HOT outlet valve V701	CB321400J01	2		V701
HU1J01	12	HOT outlet valve V701 RTN	CB321400J01	10		V701
HU1J01	58	Temperature sensor Excitation T502	CB321400J04	2		Temeperature Sensor
HU1J01	59	Temperature sensor Excitation T502 RTN	CB321400J04	6		Temeperature Sensor
HU1J01	20	Dry Loop Command 1N V501-arming	CCU J11	4		Dry Loop Command
HU1J01	39	Dry Loop Command 1N V501-arming RTN	CCU J11	11		Dry Loop Command
HU1J01	37	Dry Loop Command 2N V501-ON	CCU J11	5		Dry Loop Command
HU1J01	38	Dry Loop Command 2N V501-ON RTN	CCU J11	12		Dry Loop Command
HU1J01	60	Dry Loop Command 3N V103-arming	CCU J11	2		Dry Loop Command
HU1J01	61	Dry Loop Command 3N V103-armingRTN	CCU J11	9		Dry Loop Command
HU1J01	43	Dry Loop Command 4N V103-ON	CCU J11	3		Dry Loop Command
HU1J01	44	Dry Loop Command 4N V103-ON RTN	CCU J11	10		Dry Loop Command

4.1.2 Satellite Level Umbilical Connector HU2 J01

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
HU2J01						
HU2J01	8	PU2/PCDU_Charge_Array_Disable_Cmd +	PCDUJ18	2	Link	HL_Cmd
HU2J01	9	PU2/PCDU_Charge_Array_Disable_Cmd RTN	PCDUJ18	15	Link	HL_Cmd
HU2J01	13	PU2/ACC_Sep_Strap3b_Sts	ACCJ061	44	Link	DR_Mnt
HU2J01	17	PU2/CDMU_TC_Squelch _L	CDMUJ053	25	SBDL_Receiver	SBDL_Driver
HU2J01	18	PU2/CDMU_TC_Data _L	CDMUJ053	65	SBDL_Receiver	SBDL_Driver
HU2J01	19	PU2/CDMU_TC_Clock _L	CDMUJ053	64	SBDL_Receiver	SBDL_Driver
HU2J01	21	PU2/ACC_RM_A_Sep_Strap7a_Alarm_Sts _H	ACCJ033	57	Link	DR_Mnt
HU2J01	22	PU2/ACC_RM_A_Sep_Strap7a_Alarm_Sts _L	ACCJ033	76	Link	DR_Mnt
HU2J01	25	PU2/ACC_RM_B_Sep_Strap8a_Alarm_Sts _H	ACCJ043	57	Link	DR_Mnt
HU2J01	26	PU2/ACC_RM_B_Sep_Strap8a_Alarm_Sts _L	ACCJ043	76	Link	DR_Mnt
HU2J01	27	PU2/ACC_Sep_Strap3b_Sts RTN	ACCJ061	64	Link	DR_Mnt
HU2J01	28	PU2/PCDU_+28V_Aux_IN-6_Pwr +	PCDUJ23	1	EGSE_PWR	SA_Aux_PWR_in
HU2J01	29	PU2/PCDU_+28V_Aux_IN-4_Pwr +	PCDUJ19	1	EGSE_PWR	SA_Aux_PWR_in
HU2J01	30	PU2/PCDU_+28V_Aux_IN-5_Pwr RTN	PCDUJ22	14	EGSE_PWR	SA_Aux_PWR_in
HU2J01	31	CDMU/PU2_TM_Data _H	CDMUJ053	47	SBDL_Driver	SBDL_Receiver
HU2J01	32	CDMU/PU2_TM_Clock _L	CDMUJ053	66	SBDL_Driver	SBDL_Receiver
HU2J01	33	CDMU/PU2_TM_Clock _H	CDMUJ053	46	SBDL_Driver	SBDL_Receiver
HU2J01	34	PU2/CDMU_TC_Squelch _H	CDMUJ053	6	SBDL_Receiver	SBDL_Driver
HU2J01	35	PU2/CDMU_TC_Data _H	CDMUJ053	45	SBDL_Receiver	SBDL_Driver
HU2J01	36	PU2/CDMU_TC_Clock _H	CDMUJ053	44	SBDL_Receiver	SBDL_Driver
HU2J01	40	PCDU/PU2_+28V_Mnt +	PCDUJ20	2	+28V_TM	EGSE
HU2J01	41	PCDU/PU2_+28V_Mnt -	PCDUJ20	10	+28V_TM	EGSE
HU2J01	47	PU2/ACC_Sep_Strap4b_Sts	ACCJ071	44	Link	DR_Mnt
HU2J01	48	PU2/ACC_Sep_Strap4b_Sts RTN	ACCJ071	64	Link	DR_Mnt
HU2J01	49	PU2/PCDU_+28V_Aux_IN-4_Pwr RTN	PCDUJ19	14	EGSE_PWR	SA_Aux_PWR_in
HU2J01	50	PU2/PCDU_+28V_Aux_IN-5_Pwr +	PCDUJ22	1	EGSE_PWR	SA_Aux_PWR_in

HU2J01	51	PU2/PCDU_+28V_Aux_IN-6_Pwr RTN	PCDUJ23	14	EGSE_PWR	SA_Aux_PWR_in
HU2J01	52	CDMU/PU2_TM_Data _L	CDMUJ053	67	SBDL_Driver	SBDL_Receiver
HU2J01	BKSH	Shield_for_CDMU/PU2_TM_Clock	CDMUJ053	BKSH	Shield	Shield
HU2J01	BKSH	Shield_for_CDMU/PU2_TM_Data	CDMUJ053	BKSH	Shield	Shield
HU2J01	BKSH	Shield_for_PCDU/PU2_+28V_Mnt	PCDUJ20	BKSH	Shield	Shield
HU2J01	BKSH	Shield_for_PU2/ACC_RM_A_Sep_Strap7a_Alarm_Sts	ACCJ033	BKSH	Shield	Shield
HU2J01	BKSH	Shield_for_PU2/ACC_RM_B_Sep_Strap8a_Alarm_Sts	ACCJ043	BKSH	Shield	Shield
HU2J01	BKSH	Shield_for_PU2/ACC_Sep_Strap3b_Sts	ACCJ061	BKSH	Shield	Shield
HU2J01	BKSH	Shield_for_PU2/ACC_Sep_Strap4b_Sts	ACCJ071	BKSH	Shield	Shield
HU2J01	BKSH	Shield_for_PU2/CDMU_TC_Clock	CDMUJ053	BKSH	Shield	Shield
HU2J01	BKSH	Shield_for_PU2/CDMU_TC_Data	CDMUJ053	BKSH	Shield	Shield
HU2J01	BKSH	Shield_for_PU2/CDMU_TC_Squelch	CDMUJ053	BKSH	Shield	Shield
HU2J01	55	GHe Exhaust 650W Heater H501 -3	CB321400J03	2,7,4		Heater
HU2J01	56	GHe Exhaust 650W Heater H501 –3 RTN	CB321400J03	6,3,8		Heater
HU2J01	53	GHe Exhaust 650W Heater H501-4	CB321400J03	2,7,4		Heater
HU2J01	54	GHe Exhaust 650W Heater H501 –4 RTN	CB321400J03	6,3,8		Heater
HU2J01	15	HOT heater H702 (10W) Nom	CB321400J02	4		Heater
HU2J01	16	HOT heater H702 (10W) Nom RTN	CB321400J02	12		Heater
HU2J01	23	LHe Level Sensor L702 Sensel	CB321400J02	15		LHe Level Sensor
HU2J01	42	LHe Level Sensor L702 Sense RTN	CB321400J02	7		LHe Level Sensor
HU2J01	3	LHe Level Sensor L702 Excitation	CB321400J02	14		LHe Level Sensor
HU2J01	10	LHe Level Sensor L702 Excitation RTN	CB321400J02	6		LHe Level Sensor
HU2J01	11					
HU2J01	24					
HU2J01	4	HOT inlet valve V702	CB321400J02	10		V702
HU2J01	12	HOT inlet valve V702 RTN	CB321400J02	2		V702
HU2J01	58	Temperature sensor Sense T502	CB321400J04	4		Temeperature Sensor
HU2J01	59	Temperature sensor Sense T502 RTN	CB321400J04	8		Temeperature Sensor
HU2J01	20	Dry Loop Command 1N V503-arming	CCU J24	4		Dry Loop Command
HU2J01	39	Dry Loop Command 1N V503-arming RTN	CCU J24	11		Dry Loop Command
HU2J01	37	Dry Loop Command 2N V503-ON	CCU J24	5		Dry Loop Command
HU2J01	38	Dry Loop Command 2N V503-ON RTN	CCU J24	12		Dry Loop Command
HU2J01	60	Dry Loop Command 3N V106-arming	CCU J24	2		Dry Loop Command
HU2J01	61	Dry Loop Command 3N V10-armingRTN	CCU J24	9		Dry Loop Command
HU2J01	43	Dry Loop Command 4N V106-ON	CCU J24	3		Dry Loop Command
HU2J01	44	Dry Loop Command 4N V106-ON RTN	CCU J24	10		Dry Loop Command

4.1.3 Satellite Level Skin Connector SK01B J09, J10, J11 & J12 Battery - PCDU & BDR ON/

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK01BJ09	A	BATT/EGSE_Line1_Nom_Pwr-1 POSITIVE	BATTJ01	2		BatteryPower
SK01BJ09	a	PCDU/EGSE_Line1_Nom_Pwr-7 +	PCDUJ17	19		PCDU_Battery_Input
SK01BJ09	AA	BATT/EGSE_Line2_Nom_Pwr-6 NEGATIVE	BATTJ01	35		BatteryPower
SK01BJ09	B	BATT/EGSE_Line1_Nom_Pwr-1 NEGATIVE	BATTJ01	11		BatteryPower
SK01BJ09	b	PCDU/EGSE_Line1_Nom_Pwr-7 -	PCDUJ17	10		PCDU_Battery_Input
SK01BJ09	C	BATT/EGSE_Line1_Nom_Pwr-2 POSITIVE	BATTJ01	3		BatteryPower
SK01BJ09	c	BATT/EGSE_Line1_Nom_Pwr-7 POSITIVE	BATTJ01	8		BatteryPower
SK01BJ09	D	BATT/EGSE_Line1_Nom_Pwr-2 NEGATIVE	BATTJ01	12		BatteryPower
SK01BJ09	d	BATT/EGSE_Line1_Nom_Pwr-7 NEGATIVE	BATTJ01	17		BatteryPower
SK01BJ09	DD	PCDU/EGSE_Line2_Nom_Pwr-6 -	PCDUJ17	27		PCDU_Battery_Input
SK01BJ09	E	BATT/EGSE_Line1_Nom_Pwr-3 POSITIVE	BATTJ01	4		BatteryPower
SK01BJ09	e	BATT/EGSE_Line2_Nom_Pwr-1 POSITIVE	BATTJ01	21		BatteryPower
SK01BJ09	EE	PCDU/EGSE_Line2_Nom_Pwr-6 +	PCDUJ17	36		PCDU_Battery_Input
SK01BJ09	F	BATT/EGSE_Line1_Nom_Pwr-3 NEGATIVE	BATTJ01	13		BatteryPower
SK01BJ09	f	BATT/EGSE_Line2_Nom_Pwr-1 NEGATIVE	BATTJ01	30		BatteryPower
SK01BJ09	FF	PCDU/EGSE_Line2_Nom_Pwr-4 -	PCDUJ17	25		PCDU_Battery_Input
SK01BJ09	G	BATT/EGSE_Line1_Nom_Pwr-4 POSITIVE	BATTJ01	5		BatteryPower
SK01BJ09	g	BATT/EGSE_Line2_Nom_Pwr-2 POSITIVE	BATTJ01	22		BatteryPower
SK01BJ09	GG	PCDU/EGSE_Line2_Nom_Pwr-4 +	PCDUJ17	34		PCDU_Battery_Input
SK01BJ09	H	BATT/EGSE_Line1_Nom_Pwr-4 NEGATIVE	BATTJ01	14		BatteryPower
SK01BJ09	h	BATT/EGSE_Line2_Nom_Pwr-2 NEGATIVE	BATTJ01	31		BatteryPower
SK01BJ09	i	BATT/EGSE_Line2_Nom_Pwr-3 POSITIVE	BATTJ01	23		BatteryPower
SK01BJ09	J	BATT/EGSE_Line1_Nom_Pwr-5 POSITIVE	BATTJ01	6		BatteryPower
SK01BJ09	j	BATT/EGSE_Line2_Nom_Pwr-3 NEGATIVE	BATTJ01	32		BatteryPower
SK01BJ09	K	BATT/EGSE_Line1_Nom_Pwr-5 NEGATIVE	BATTJ01	15		BatteryPower
SK01BJ09	KK	BATT/EGSE_Line2_Nom_Pwr-6 POSITIVE	BATTJ01	26		BatteryPower
SK01BJ09	L	BATT/EGSE_Line1_Nom_Pwr-6 POSITIVE	BATTJ01	7		BatteryPower
SK01BJ09	M	BATT/EGSE_Line1_Nom_Pwr-6 NEGATIVE	BATTJ01	16		BatteryPower

SK01BJ09	m	PCDU/EGSE_Line1_Nom_Pwr-6 +	PCDUJ17	18		PCDU_Battery_Input
SK01BJ09	MM	PCDU/EGSE_Line2_Nom_Pwr-5 -	PCDUJ17	26		PCDU_Battery_Input
SK01BJ09	n	PCDU/EGSE_Line1_Nom_Pwr-6 -	PCDUJ17	9		PCDU_Battery_Input
SK01BJ09	NN	PCDU/EGSE_Line2_Nom_Pwr-5 +	PCDUJ17	35		PCDU_Battery_Input
SK01BJ09	P	PCDU/EGSE_Line1_Nom_Pwr-5 -	PCDUJ17	8		PCDU_Battery_Input
SK01BJ09	p	PCDU/EGSE_Line2_Nom_Pwr-3 -	PCDUJ17	24		PCDU_Battery_Input
SK01BJ09	q	PCDU/EGSE_Line2_Nom_Pwr-3 +	PCDUJ17	33		PCDU_Battery_Input
SK01BJ09	R	PCDU/EGSE_Line1_Nom_Pwr-5 +	PCDUJ17	17		PCDU_Battery_Input
SK01BJ09	r	PCDU/EGSE_Line2_Nom_Pwr-2 -	PCDUJ17	23		PCDU_Battery_Input
SK01BJ09	S	PCDU/EGSE_Line1_Nom_Pwr-4 -	PCDUJ17	7		PCDU_Battery_Input
SK01BJ09	s	PCDU/EGSE_Line2_Nom_Pwr-2 +	PCDUJ17	32		PCDU_Battery_Input
SK01BJ09	T	PCDU/EGSE_Line1_Nom_Pwr-4 +	PCDUJ17	16		PCDU_Battery_Input
SK01BJ09	t	PCDU/EGSE_Line2_Nom_Pwr-1 -	PCDUJ17	22		PCDU_Battery_Input
SK01BJ09	U	PCDU/EGSE_Line1_Nom_Pwr-3 -	PCDUJ17	6		PCDU_Battery_Input
SK01BJ09	u	PCDU/EGSE_Line2_Nom_Pwr-1 +	PCDUJ17	31		PCDU_Battery_Input
SK01BJ09	V	PCDU/EGSE_Line1_Nom_Pwr-3 +	PCDUJ17	15		PCDU_Battery_Input
SK01BJ09	w	BATT/EGSE_Line2_Nom_Pwr-4 POSITIVE	BATTJ01	24		BatteryPower
SK01BJ09	W	PCDU/EGSE_Line1_Nom_Pwr-2 -	PCDUJ17	5		PCDU_Battery_Input
SK01BJ09	x	BATT/EGSE_Line2_Nom_Pwr-4 NEGATIVE	BATTJ01	33		BatteryPower
SK01BJ09	X	PCDU/EGSE_Line1_Nom_Pwr-2 +	PCDUJ17	14		PCDU_Battery_Input
SK01BJ09	y	BATT/EGSE_Line2_Nom_Pwr-5 POSITIVE	BATTJ01	25		BatteryPower
SK01BJ09	Y	PCDU/EGSE_Line1_Nom_Pwr-1 -	PCDUJ17	4		PCDU_Battery_Input
SK01BJ09	z	BATT/EGSE_Line2_Nom_Pwr-5 NEGATIVE	BATTJ01	34		BatteryPower
SK01BJ09	Z	PCDU/EGSE_Line1_Nom_Pwr-1 +	PCDUJ17	13		PCDU_Battery_Input

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK01BJ10	A	BATT/EGSE_Line1_Red_Pwr-1 POSITIVE	BATTJ02	2		BatteryPower
SK01BJ10	a	PCDU/EGSE_Line1_Red_Pwr-7 +	PCDUJ21	19		PCDU_Battery_Input
SK01BJ10	AA	BATT/EGSE_Line2_Red_Pwr-6 NEGATIVE	BATTJ02	35		BatteryPower
SK01BJ10	B	BATT/EGSE_Line1_Red_Pwr-1 NEGATIVE	BATTJ02	11		BatteryPower
SK01BJ10	b	PCDU/EGSE_Line1_Red_Pwr-7 -	PCDUJ21	10		PCDU_Battery_Input
SK01BJ10	C	BATT/EGSE_Line1_Red_Pwr-2 POSITIVE	BATTJ02	3		BatteryPower
SK01BJ10	c	BATT/EGSE_Line1_Red_Pwr-7 POSITIVE	BATTJ02	8		BatteryPower
SK01BJ10	D	BATT/EGSE_Line1_Red_Pwr-2 NEGATIVE	BATTJ02	12		BatteryPower
SK01BJ10	d	BATT/EGSE_Line1_Red_Pwr-7 NEGATIVE	BATTJ02	17		BatteryPower
SK01BJ10	DD	PCDU/EGSE_Line2_Red_Pwr-6 -	PCDUJ21	27		PCDU_Battery_Input
SK01BJ10	E	BATT/EGSE_Line1_Red_Pwr-3 POSITIVE	BATTJ02	4		BatteryPower
SK01BJ10	e	BATT/EGSE_Line2_Red_Pwr-1 POSITIVE	BATTJ02	21		BatteryPower
SK01BJ10	EE	PCDU/EGSE_Line2_Red_Pwr-6 +	PCDUJ21	36		PCDU_Battery_Input
SK01BJ10	F	BATT/EGSE_Line1_Red_Pwr-3 NEGATIVE	BATTJ02	13		BatteryPower
SK01BJ10	f	BATT/EGSE_Line2_Red_Pwr-1 NEGATIVE	BATTJ02	30		BatteryPower
SK01BJ10	FF	PCDU/EGSE_Line2_Red_Pwr-4 -	PCDUJ21	25		PCDU_Battery_Input
SK01BJ10	G	BATT/EGSE_Line1_Red_Pwr-4 POSITIVE	BATTJ02	5		BatteryPower
SK01BJ10	g	BATT/EGSE_Line2_Red_Pwr-2 POSITIVE	BATTJ02	22		BatteryPower
SK01BJ10	GG	PCDU/EGSE_Line2_Red_Pwr-4 +	PCDUJ21	34		PCDU_Battery_Input
SK01BJ10	H	BATT/EGSE_Line1_Red_Pwr-4 NEGATIVE	BATTJ02	14		BatteryPower
SK01BJ10	h	BATT/EGSE_Line2_Red_Pwr-2 NEGATIVE	BATTJ02	31		BatteryPower
SK01BJ10	i	BATT/EGSE_Line2_Red_Pwr-3 POSITIVE	BATTJ02	23		BatteryPower
SK01BJ10	J	BATT/EGSE_Line1_Red_Pwr-5 POSITIVE	BATTJ02	6		BatteryPower
SK01BJ10	j	BATT/EGSE_Line2_Red_Pwr-3 NEGATIVE	BATTJ02	32		BatteryPower
SK01BJ10	K	BATT/EGSE_Line1_Red_Pwr-5 NEGATIVE	BATTJ02	15		BatteryPower
SK01BJ10	KK	BATT/EGSE_Line2_Red_Pwr-6 POSITIVE	BATTJ02	26		BatteryPower
SK01BJ10	L	BATT/EGSE_Line1_Red_Pwr-6 POSITIVE	BATTJ02	7		BatteryPower
SK01BJ10	M	BATT/EGSE_Line1_Red_Pwr-6 NEGATIVE	BATTJ02	16		BatteryPower
SK01BJ10	m	PCDU/EGSE_Line1_Red_Pwr-6 +	PCDUJ21	18		PCDU_Battery_Input
SK01BJ10	MM	PCDU/EGSE_Line2_Red_Pwr-5 -	PCDUJ21	26		PCDU_Battery_Input
SK01BJ10	n	PCDU/EGSE_Line1_Red_Pwr-6 -	PCDUJ21	9		PCDU_Battery_Input
SK01BJ10	NN	PCDU/EGSE_Line2_Red_Pwr-5 +	PCDUJ21	35		PCDU_Battery_Input

SK01BJ10	P	PCDU/EGSE_Line1_Red_Pwr-5 -	PCDUJ21	8		PCDU_Battery_Input
SK01BJ10	p	PCDU/EGSE_Line2_Red_Pwr-3 -	PCDUJ21	24		PCDU_Battery_Input
SK01BJ10	q	PCDU/EGSE_Line2_Red_Pwr-3 +	PCDUJ21	33		PCDU_Battery_Input
SK01BJ10	R	PCDU/EGSE_Line1_Red_Pwr-5 +	PCDUJ21	17		PCDU_Battery_Input
SK01BJ10	r	PCDU/EGSE_Line2_Red_Pwr-2 -	PCDUJ21	23		PCDU_Battery_Input
SK01BJ10	S	PCDU/EGSE_Line1_Red_Pwr-4 -	PCDUJ21	7		PCDU_Battery_Input
SK01BJ10	s	PCDU/EGSE_Line2_Red_Pwr-2 +	PCDUJ21	32		PCDU_Battery_Input
SK01BJ10	T	PCDU/EGSE_Line1_Red_Pwr-4 +	PCDUJ21	16		PCDU_Battery_Input
SK01BJ10	t	PCDU/EGSE_Line2_Red_Pwr-1 -	PCDUJ21	22		PCDU_Battery_Input
SK01BJ10	U	PCDU/EGSE_Line1_Red_Pwr-3 -	PCDUJ21	6		PCDU_Battery_Input
SK01BJ10	u	PCDU/EGSE_Line2_Red_Pwr-1 +	PCDUJ21	31		PCDU_Battery_Input
SK01BJ10	V	PCDU/EGSE_Line1_Red_Pwr-3 +	PCDUJ21	15		PCDU_Battery_Input
SK01BJ10	w	BATT/EGSE_Line2_Red_Pwr-4 POSITIVE	BATTJ02	24		BatteryPower
SK01BJ10	W	PCDU/EGSE_Line1_Red_Pwr-2 -	PCDUJ21	5		PCDU_Battery_Input
SK01BJ10	x	BATT/EGSE_Line2_Red_Pwr-4 NEGATIVE	BATTJ02	33		BatteryPower
SK01BJ10	X	PCDU/EGSE_Line1_Red_Pwr-2 +	PCDUJ21	14		PCDU_Battery_Input
SK01BJ10	y	BATT/EGSE_Line2_Red_Pwr-5 POSITIVE	BATTJ02	25		BatteryPower
SK01BJ10	Y	PCDU/EGSE_Line1_Red_Pwr-1 -	PCDUJ21	4		PCDU_Battery_Input
SK01BJ10	z	BATT/EGSE_Line2_Red_Pwr-5 NEGATIVE	BATTJ02	34		BatteryPower
SK01BJ10	Z	PCDU/EGSE_Line1_Red_Pwr-1 +	PCDUJ21	13		PCDU_Battery_Input

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK01BJ11	1	EGSE/PCDU_BDR1_AIT_ON_Cmd	PCDUJ13	72	EGSE__HL_Cmd	HL_Cmd
SK01BJ11	2	EGSE/PCDU_BDR1_AIT_ON_Cmd RTN	PCDUJ13	52	EGSE__HL_Cmd	HL_Cmd
SK01BJ11	3	EGSE/PCDU_BDR1_AIT_OFF_Cmd	PCDUJ13	73	EGSE__HL_Cmd	HL_Cmd
SK01BJ11	4	EGSE/PCDU_BDR1_AIT_OFF_Cmd RTN	PCDUJ13	53	EGSE__HL_Cmd	HL_Cmd

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK01BJ12	1	EGSE/PCDU_BDR2_AIT_ON_Cmd	PCDUJ26	72	EGSE__HL_Cmd	HL_Cmd
SK01BJ12	2	EGSE/PCDU_BDR2_AIT_ON_Cmd RTN	PCDUJ26	52	EGSE__HL_Cmd	HL_Cmd
SK01BJ12	3	EGSE/PCDU_BDR2_AIT_OFF_Cmd	PCDUJ26	73	EGSE__HL_Cmd	HL_Cmd
SK01BJ12	4	EGSE/PCDU_BDR2_AIT_OFF_Cmd RTN	PCDUJ26	53	EGSE__HL_Cmd	HL_Cmd

4.1.4 Satellite Level Skin Connector SK02 J01 & J02 CDMU 1553 Bus

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J01	1	DMS_1553A	CDMUJ023	1	1553_Link_or_RT	1553_BC
SK02J01	1	DMS_1553A	CDMUJ073	1	1553_Link_or_RT	1553_BC
SK02J01	2	DMS_1553A RTN	CDMUJ023	11	1553_Link_or_RT	1553_BC
SK02J01	2	DMS_1553A RTN	CDMUJ073	11	1553_Link_or_RT	1553_BC
SK02J01	3	DMS_1553A	CDMUJ023	1	1553_Link_or_RT	1553_BC
SK02J01	3	DMS_1553A	CDMUJ073	1	1553_Link_or_RT	1553_BC
SK02J01	4	DMS_1553A RTN	CDMUJ023	11	1553_Link_or_RT	1553_BC
SK02J01	4	DMS_1553A RTN	CDMUJ073	11	1553_Link_or_RT	1553_BC
SK02J01	BKSH	Shield_for_DMS_1553A	CDMUJ023	BKSH	Shield	Shield
SK02J01	BKSH	Shield_for_DMS_1553A	CDMUJ073	BKSH	Shield	Shield

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J02	1	DMS_1553B	CDMUJ024	1	1553_Link_or_RT	1553_BC
SK02J02	1	DMS_1553B	CDMUJ074	1	1553_Link_or_RT	1553_BC
SK02J02	2	DMS_1553B RTN	CDMUJ024	11	1553_Link_or_RT	1553_BC
SK02J02	2	DMS_1553B RTN	CDMUJ074	11	1553_Link_or_RT	1553_BC
SK02J02	3	DMS_1553B	CDMUJ024	1	1553_Link_or_RT	1553_BC
SK02J02	3	DMS_1553B	CDMUJ074	1	1553_Link_or_RT	1553_BC
SK02J02	4	DMS_1553B RTN	CDMUJ024	11	1553_Link_or_RT	1553_BC
SK02J02	4	DMS_1553B RTN	CDMUJ074	11	1553_Link_or_RT	1553_BC
SK02J02	BKSH	Shield_for_DMS_1553B	CDMUJ024	BKSH	Shield	Shield
SK02J02	BKSH	Shield_for_DMS_1553B	CDMUJ074	BKSH	Shield	Shield

4.1.5 Satellite Level Skin Connector SK02 J03 & J04 ACC 1553 Bus

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J03	1	ACMS_1553A	ACCJ024	5	1553_Link_or_RT	1553_BC
SK02J03	1	ACMS_1553A	ACCJ054	5	1553_Link_or_RT	1553_BC
SK02J03	2	ACMS_1553A RTN	ACCJ024	15	1553_Link_or_RT	1553_BC
SK02J03	2	ACMS_1553A RTN	ACCJ054	15	1553_Link_or_RT	1553_BC
SK02J03	3	ACMS_1553A	ACCJ024	5	1553_Link_or_RT	1553_BC
SK02J03	3	ACMS_1553A	ACCJ054	5	1553_Link_or_RT	1553_BC
SK02J03	4	ACMS_1553A RTN	ACCJ024	15	1553_Link_or_RT	1553_BC
SK02J03	4	ACMS_1553A RTN	ACCJ054	15	1553_Link_or_RT	1553_BC
SK02J03	BKSH	Shield_for_ACMS_1553A	ACCJ024	BKSH	Shield	Shield
SK02J03	BKSH	Shield_for_ACMS_1553A	ACCJ054	BKSH	Shield	Shield

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J04	1	ACMS_1553B	ACCJ023	5	1553_Link_or_RT	1553_BC
SK02J04	1	ACMS_1553B	ACCJ053	5	1553_Link_or_RT	1553_BC
SK02J04	2	ACMS_1553B RTN	ACCJ023	15	1553_Link_or_RT	1553_BC
SK02J04	2	ACMS_1553B RTN	ACCJ053	15	1553_Link_or_RT	1553_BC
SK02J04	3	ACMS_1553B	ACCJ023	5	1553_Link_or_RT	1553_BC
SK02J04	3	ACMS_1553B	ACCJ053	5	1553_Link_or_RT	1553_BC
SK02J04	4	ACMS_1553B RTN	ACCJ023	15	1553_Link_or_RT	1553_BC
SK02J04	4	ACMS_1553B RTN	ACCJ053	15	1553_Link_or_RT	1553BC
SK02J04	BKSH	Shield_for_ACMS_1553B	ACCJ023	BKSH	Shield	Shield
SK02J04	BKSH	Shield_for_ACMS_1553B	ACCJ053	BKSH	Shield	Shield

4.1.6 Satellite Level Skin Connector SK02 J05 & J06 ACC - Thruster Commands

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J05	1	ACC/EGSE_LV_A_Close_Cmd	ACCJ103	9		HL_Cmd
SK02J05	2	ACC/EGSE_LV_A_Close_Cmd RTN	ACCJ103	29		HL_Cmd
SK02J05	4	ACC/EGSE_LV_A_Open_Cmd	ACCJ101	12		HL_Cmd
SK02J05	5	ACC/EGSE_LV_A_Open_Cmd RTN	ACCJ101	32		HL_Cmd
SK02J05	10	ACC/EGSE_THR_20N01_Vlv_Cmd	ACCJ101	1		THRDV_Vlv-Cmd
SK02J05	11	ACC/EGSE_THR_20N01_Vlv_Cmd RTN	ACCJ101	21		THRDV_Vlv-Cmd
SK02J05	12	ACC/EGSE_THR_20N02_Vlv_Cmd	ACCJ101	41		THRDV_Vlv-Cmd
SK02J05	13	ACC/EGSE_THR_20N02_Vlv_Cmd RTN	ACCJ101	61		THRDV_Vlv-Cmd
SK02J05	14	ACC/EGSE_THR_20N03_Vlv_Cmd	ACCJ101	3		THRDV_Vlv-Cmd
SK02J05	15	ACC/EGSE_THR_20N03_Vlv_Cmd RTN	ACCJ101	23		THRDV_Vlv-Cmd
SK02J05	17	ACC/EGSE_THR_20N04_Vlv_Cmd	ACCJ101	43		THRDV_Vlv-Cmd
SK02J05	18	ACC/EGSE_THR_20N04_Vlv_Cmd RTN	ACCJ101	63		THRDV_Vlv-Cmd
SK02J05	19	ACC/EGSE_THR_20N05_Vlv_Cmd	ACCJ101	5		THRDV_Vlv-Cmd
SK02J05	20	ACC/EGSE_THR_20N05_Vlv_Cmd RTN	ACCJ101	25		THRDV_Vlv-Cmd
SK02J05	21	ACC/EGSE_THR_20N06_Vlv_Cmd	ACCJ101	45		THRDV_Vlv-Cmd
SK02J05	22	ACC/EGSE_THR_20N06_Vlv_Cmd RTN	ACCJ101	65		THRDV_Vlv-Cmd
SK02J05	32	EGSE/THR_20N04_Vlv_Cmd Positive	THR_20N04J01	Yellow		THR20_Vlv-Cmd_Input
SK02J05	33	EGSE/THR_20N04_Vlv_Cmd Negative	THR_20N04J01	Red		THR20_Vlv-Cmd_Input
SK02J05	34	EGSE/THR_20N05_Vlv_Cmd Positive	THR_20N05J01	Yellow		THR20_Vlv-Cmd_Input
SK02J05	35	EGSE/THR_20N05_Vlv_Cmd Negative	THR_20N05J01	Red		THR20_Vlv-Cmd_Input
SK02J05	36	EGSE/THR_20N06_Vlv_Cmd Positive	THR_20N06J01	Yellow		THR20_Vlv-Cmd_Input
SK02J05	37	EGSE/THR_20N06_Vlv_Cmd Negative	THR_20N06J01	Red		THR20_Vlv-Cmd_Input
SK02J05	40	EGSE/THR_20N01_Vlv_Cmd Positive	THR_20N01J01	Yellow		THR20_Vlv-Cmd_Input
SK02J05	41	EGSE/THR_20N01_Vlv_Cmd Negative	THR_20N01J01	Red		THR20_Vlv-Cmd_Input
SK02J05	42	EGSE/THR_20N02_Vlv_Cmd Positive	THR_20N02J01	Yellow		THR20_Vlv-Cmd_Input
SK02J05	43	EGSE/THR_20N02_Vlv_Cmd Negative	THR_20N02J01	Red		THR20_Vlv-Cmd_Input
SK02J05	44	EGSE/THR_20N03_Vlv_Cmd Positive	THR_20N03J01	Yellow		THR20_Vlv-Cmd_Input
SK02J05	45	EGSE/THR_20N03_Vlv_Cmd Negative	THR_20N03J01	Red		THR20_Vlv-Cmd_Input

SK02J05	47	EGSE/LVA_ON_Cmd Positive	LVAJ01	White		LV_Cmd_Input
SK02J05	48	EGSE/LVA_ON_Cmd Negative	LVAJ01	Black/White		LV_Cmd_Input
SK02J05	53	EGSE/LVA_OFF_Cmd Positive	LVAJ01	Red		LV_Cmd_Input
SK02J05	54	EGSE/LVA_OFF_Cmd Negative	LVAJ01	Black		LV_Cmd_Input
SK02J05	BKSH	Shield_for_ACC/EGSE_LV_A_Close_Cmd	ACCJ103	BKSH		Shield
SK02J05	BKSH	Shield_for_ACC/EGSE_LV_A_Open_Cmd	ACCJ101	BKSH		Shield
SK02J05	BKSH	Shield_for_ACC/EGSE_THR_20N01_Vlv_Cmd	ACCJ101	BKSH		Shield
SK02J05	BKSH	Shield_for_ACC/EGSE_THR_20N02_Vlv_Cmd	ACCJ101	BKSH		Shield
SK02J05	BKSH	Shield_for_ACC/EGSE_THR_20N03_Vlv_Cmd	ACCJ101	BKSH		Shield
SK02J05	BKSH	Shield_for_ACC/EGSE_THR_20N04_Vlv_Cmd	ACCJ101	BKSH		Shield
SK02J05	BKSH	Shield_for_ACC/EGSE_THR_20N05_Vlv_Cmd	ACCJ101	BKSH		Shield
SK02J05	BKSH	Shield_for_ACC/EGSE_THR_20N06_Vlv_Cmd	ACCJ101	BKSH		Shield
SK02J05	BKSH	Shield_for_EGSE/LVA_OFF_Cmd	LVAJ01	BKSH		Shield
SK02J05	BKSH	Shield_for_EGSE/LVA_ON_Cmd	LVAJ01	BKSH		Shield
SK02J05	BKSH	Shield_for_EGSE/THR_20N01_Vlv_Cmd	THR_20N01J01	BKSH		Shield
SK02J05	BKSH	Shield_for_EGSE/THR_20N02_Vlv_Cmd	THR_20N02J01	BKSH		Shield
SK02J05	BKSH	Shield_for_EGSE/THR_20N03_Vlv_Cmd	THR_20N03J01	BKSH		Shield
SK02J05	BKSH	Shield_for_EGSE/THR_20N04_Vlv_Cmd	THR_20N04J01	BKSH		Shield
SK02J05	BKSH	Shield_for_EGSE/THR_20N05_Vlv_Cmd	THR_20N05J01	BKSH		Shield
SK02J05	BKSH	Shield_for_EGSE/THR_20N06_Vlv_Cmd	THR_20N06J01	BKSH		Shield

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J06	1	ACC/EGSE_LV_B_OFF_Cmd	ACCJ113	9		HL_Cmd
SK02J06	2	ACC/EGSE_LV_B_OFF_Cmd RTN	ACCJ113	29		HL_Cmd
SK02J06	4	ACC/EGSE_LV_B_ON_Cmd	ACCJ111	12		HL_Cmd
SK02J06	5	ACC/EGSE_LV_B_ON_Cmd RTN	ACCJ111	32		HL_Cmd
SK02J06	10	ACC/EGSE_THR_20N07_Vlv_Cmd	ACCJ111	1		THRDV_Vlv-Cmd
SK02J06	11	ACC/EGSE_THR_20N07_Vlv_Cmd RTN	ACCJ111	21		THRDV_Vlv-Cmd
SK02J06	12	ACC/EGSE_THR_20N08_Vlv_Cmd	ACCJ111	41		THRDV_Vlv-Cmd
SK02J06	13	ACC/EGSE_THR_20N08_Vlv_Cmd RTN	ACCJ111	61		THRDV_Vlv-Cmd
SK02J06	14	ACC/EGSE_THR_20N09_Vlv_Cmd	ACCJ111	3		THRDV_Vlv-Cmd
SK02J06	15	ACC/EGSE_THR_20N09_Vlv_Cmd RTN	ACCJ111	23		THRDV_Vlv-Cmd
SK02J06	17	ACC/EGSE_THR_20N10_Vlv_Cmd	ACCJ111	43		THRDV_Vlv-Cmd
SK02J06	18	ACC/EGSE_THR_20N10_Vlv_Cmd RTN	ACCJ111	63		THRDV_Vlv-Cmd
SK02J06	19	ACC/EGSE_THR_20N11_Vlv_Cmd	ACCJ111	5		THRDV_Vlv-Cmd
SK02J06	20	ACC/EGSE_THR_20N11_Vlv_Cmd RTN	ACCJ111	25		THRDV_Vlv-Cmd
SK02J06	21	ACC/EGSE_THR_20N12_Vlv_Cmd	ACCJ111	45		THRDV_Vlv-Cmd
SK02J06	22	ACC/EGSE_THR_20N12_Vlv_Cmd RTN	ACCJ111	65		THRDV_Vlv-Cmd
SK02J06	32	EGSE/THR_20N10_Vlv_Cmd Positive	THR_20N10J01	Yellow		THR20_Vlv-Cmd_Input
SK02J06	33	EGSE/THR_20N10_Vlv_Cmd Negative	THR_20N10J01	Red		THR20_Vlv-Cmd_Input
SK02J06	34	EGSE/THR_20N11_Vlv_Cmd Positive	THR_20N11J01	Yellow		THR20_Vlv-Cmd_Input
SK02J06	35	EGSE/THR_20N11_Vlv_Cmd Negative	THR_20N11J01	Red		THR20_Vlv-Cmd_Input
SK02J06	36	EGSE/THR_20N12_Vlv_Cmd Positive	THR_20N12J01	Yellow		THR20_Vlv-Cmd_Input
SK02J06	37	EGSE/THR_20N12_Vlv_Cmd Negative	THR_20N12J01	Red		THR20_Vlv-Cmd_Input
SK02J06	40	EGSE/THR_20N07_Vlv_Cmd Positive	THR_20N07J01	Yellow		THR20_Vlv-Cmd_Input
SK02J06	41	EGSE/THR_20N07_Vlv_Cmd Negative	THR_20N07J01	Red		THR20_Vlv-Cmd_Input
SK02J06	42	EGSE/THR_20N08_Vlv_Cmd Positive	THR_20N08J01	Yellow		THR20_Vlv-Cmd_Input
SK02J06	43	EGSE/THR_20N08_Vlv_Cmd Negative	THR_20N08J01	Red		THR20_Vlv-Cmd_Input
SK02J06	44	EGSE/THR_20N09_Vlv_Cmd Positive	THR_20N09J01	Yellow		THR20_Vlv-Cmd_Input
SK02J06	45	EGSE/THR_20N09_Vlv_Cmd Negative	THR_20N09J01	Red		THR20_Vlv-Cmd_Input
SK02J06	47	EGSE/LVB_ON_Cmd Positive	LVBJ01	White		LV_Cmd_Input
SK02J06	48	EGSE/LVB_ON_Cmd Negative	LVBJ01	Black/White		LV_Cmd_Input
SK02J06	53	EGSE/LVB_OFF_Cmd Positive	LVBJ01	Red		THR1_Vlv-Cmd_Input
SK02J06	54	EGSE/LVB_OFF_Cmd Negative	LVBJ01	Black		LV_Cmd_Input

SK02J06	BKSH	Shield_for_ACC/EGSE_LV_B_OFF_Cmd	ACCJ113	BKSH		THR1_Vlv-Cmd_Input
SK02J06	BKSH	Shield_for_ACC/EGSE_LV_B_ON_Cmd	ACCJ111	BKSH		Shield
SK02J06	BKSH	Shield_for_ACC/EGSE_THR_20N07_Vlv_Cmd	ACCJ111	BKSH		Shield
SK02J06	BKSH	Shield_for_ACC/EGSE_THR_20N08_Vlv_Cmd	ACCJ111	BKSH		Shield
SK02J06	BKSH	Shield_for_ACC/EGSE_THR_20N09_Vlv_Cmd	ACCJ111	BKSH		Shield
SK02J06	BKSH	Shield_for_ACC/EGSE_THR_20N10_Vlv_Cmd	ACCJ111	BKSH		Shield
SK02J06	BKSH	Shield_for_ACC/EGSE_THR_20N11_Vlv_Cmd	ACCJ111	BKSH		Shield
SK02J06	BKSH	Shield_for_ACC/EGSE_THR_20N12_Vlv_Cmd	ACCJ111	BKSH		Shield
SK02J06	BKSH	Shield_for_EGSE/LVB_OFF_Cmd	LVBJ01	BKSH		Shield
SK02J06	BKSH	Shield_for_EGSE/LVB_ON_Cmd	LVBJ01	BKSH		Shield
SK02J06	BKSH	Shield_for_EGSE/THR_20N07_Vlv_Cmd	THR_20N07J01	BKSH		Shield
SK02J06	BKSH	Shield_for_EGSE/THR_20N08_Vlv_Cmd	THR_20N08J01	BKSH		Shield
SK02J06	BKSH	Shield_for_EGSE/THR_20N09_Vlv_Cmd	THR_20N09J01	BKSH		Shield
SK02J06	BKSH	Shield_for_EGSE/THR_20N10_Vlv_Cmd	THR_20N10J01	BKSH		Shield
SK02J06	BKSH	Shield_for_EGSE/THR_20N11_Vlv_Cmd	THR_20N11J01	BKSH		Shield
SK02J06	BKSH	Shield_for_EGSE/THR_20N12_Vlv_Cmd	THR_20N12J01	BKSH		Shield

4.1.7 Satellite Level Skin Connector SK02 J07 ACC - PT+Tank Thermistors

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J07	1	ACC/EGSE_PT_Sensor_Pwr	ACCJ073	56		PT_Pwr
SK02J07	2	ACC/EGSE_PT_Sensor_Pwr RTN	ACCJ073	76		PT_Pwr
SK02J07	3	EGSE/PT_Sensor_Pwr Positive	PTJ01	A		PT_Input_Pwr
SK02J07	4	EGSE/PT_Sensor_Pwr RTN	PTJ01	B		PT_Input_Pwr
SK02J07	5	THERM/EGSE_Therm2_Tank_Mnt	N/A	FL1		Thermistor
SK02J07	6	EGSE/ACC_PT_Sensor_Meas	ACCJ073	16		PT_Meas
SK02J07	7	EGSE/ACC_PT_Sensor_Meas RTN	ACCJ073	36		PT_Meas
SK02J07	8	PT/EGSE_Sensor_Meas Positive	PTJ01	E		PT_Meas_Output
SK02J07	9	PT/EGSE_Sensor_Meas RTN	PTJ01	D		PT_Meas_Output
SK02J07	10	EGSE/ACC_Therm1_Tank_Mnt	ACCJ063	15		Therm_Mnt
SK02J07	11	EGSE/ACC_Therm1_Tank_Mnt RTN	ACCJ063	35		Therm_Mnt
SK02J07	12	THERM/EGSE_Therm1_Tank_Mnt	N/A	FL1		Thermistor
SK02J07	13	THERM/EGSE_Therm1_Tank_Mnt	N/A	FL2		Thermistor
SK02J07	14	EGSE/ACC_Therm2_Tank_Mnt	ACCJ063	55		Therm_Mnt
SK02J07	17	EGSE/ACC_Therm3_Tank_Mnt	ACCJ073	15		Therm_Mnt
SK02J07	18	EGSE/ACC_Therm3_Tank_Mnt RTN	ACCJ073	35		Therm_Mnt
SK02J07	19	THERM/EGSE_Therm3_Tank_Mnt	N/A	FL1		Thermistor
SK02J07	20	THERM/EGSE_Therm3_Tank_Mnt	N/A	FL2		Thermistor
SK02J07	21	EGSE/ACC_Therm2_Tank_Mnt RTN	ACCJ063	75		Therm_Mnt
SK02J07	22	THERM/EGSE_Therm2_Tank_Mnt	N/A	FL2		Thermistor
SK02J07	BKSH	Shield_for_EGSE/ACC_PT_Sensor_Meas	ACCJ073	BKSH		Shield
SK02J07	BKSH	Shield_for_EGSE/ACC_Therm1_Tank_Mnt	ACCJ063	BKSH		Shield
SK02J07	BKSH	Shield_for_EGSE/ACC_Therm2_Tank_Mnt	ACCJ063	BKSH		Shield
SK02J07	BKSH	Shield_for_EGSE/ACC_Therm3_Tank_Mnt	ACCJ073	BKSH		Shield
SK02J07	BKSH	Shield_for_PT/EGSE_Sensor_Meas	PTJ01	BKSH		Shield
SK02J07	BKSH	Shield_for_THERM/EGSE_Therm1_Tank_Mnt	N/A	BKSH		Shield
SK02J07	BKSH	Shield_for_THERM/EGSE_Therm2_Tank_Mnt	N/A	BKSH		Shield
SK02J07	BKSH	Shield_for_THERM/EGSE_Therm3_Tank_Mnt	N/A	BKSH		Shield

4.1.8 Satellite Level Skin Connector SK02 J08 ACC - Thruster Thermocouples

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J08	1	EGSE/ACC_LV_A_Closed_Sts	ACCJ061	43		DR_Mnt
SK02J08	2	EGSE/ACC_LV_A_Closed_Sts RTN	ACCJ061	63		DR_Mnt
SK02J08	4	EGSE/ACC_LV_A_Open_Sts	ACCJ061	3		DR_Mnt
SK02J08	5	EGSE/ACC_LV_A_Open_Sts RTN	ACCJ061	23		DR_Mnt
SK02J08	10	EGSE/ACC_THR_20N01_TS_Mnt	ACCJ063	11		THR_TS
SK02J08	11	EGSE/ACC_THR_20N01_TS_Mnt RTN	ACCJ063	31		THR_TS
SK02J08	12	EGSE/ACC_THR_20N02_TS_Mnt	ACCJ063	51		THR_TS
SK02J08	13	EGSE/ACC_THR_20N02_TS_Mnt RTN	ACCJ063	71		THR_TS
SK02J08	14	EGSE/ACC_THR_20N03_TS_Mnt	ACCJ063	12		THR_TS
SK02J08	15	EGSE/ACC_THR_20N03_TS_Mnt RTN	ACCJ063	32		THR_TS
SK02J08	17	EGSE/ACC_THR_20N04_TS_Mnt	ACCJ063	52		THR_TS
SK02J08	18	EGSE/ACC_THR_20N04_TS_Mnt RTN	ACCJ063	72		THR_TS
SK02J08	19	EGSE/ACC_THR_20N05_TS_Mnt	ACCJ063	13		THR_TS
SK02J08	20	EGSE/ACC_THR_20N05_TS_Mnt RTN	ACCJ063	33		THR_TS
SK02J08	21	EGSE/ACC_THR_20N06_TS_Mnt	ACCJ063	53		THR_TS
SK02J08	22	EGSE/ACC_THR_20N06_TS_Mnt RTN	ACCJ063	73		THR_TS
SK02J08	32	THR_20N04/EGSE_TS_Mnt +	THR_20N04J03	Green		THR_TS_Output
SK02J08	33	THR_20N04/EGSE_TS_Mnt -	THR_20N04J03	White		THR_TS_Output
SK02J08	34	THR_20N05/EGSE_TS_Mnt +	THR_20N05J03	Green		THR_TS_Output
SK02J08	35	THR_20N05/EGSE_TS_Mnt -	THR_20N05J03	White		THR_TS_Output
SK02J08	36	THR_20N06/EGSE_TS_Mnt +	THR_20N06J03	Green		THR_TS_Output
SK02J08	37	THR_20N06/EGSE_TS_Mnt -	THR_20N06J03	White		THR_TS_Output
SK02J08	40	THR_20N01/EGSE_TS_Mnt +	THR_20N01J03	Green		THR_TS_Output
SK02J08	41	THR_20N01/EGSE_TS_Mnt -	THR_20N01J03	White		THR_TS_Output
SK02J08	42	THR_20N02/EGSE_TS_Mnt +	THR_20N02J03	Green		THR_TS_Output
SK02J08	43	THR_20N02/EGSE_TS_Mnt -	THR_20N02J03	White		THR_TS_Output
SK02J08	44	THR_20N03/EGSE_TS_Mnt +	THR_20N03J03	Green		THR_TS_Output
SK02J08	45	THR_20N03/EGSE_TS_Mnt -	THR_20N03J03	White		THR_TS_Output

SK02J08	47	LVA/EGSE_Open_Sts	LVAJ01	White		LVA_DR_Output
SK02J08	48	LVA/EGSE_Open_Sts	LVAJ01	Red/White		LVA_DR_Output
SK02J08	53	LVA/EGSE_Closed_Sts	LVAJ01	Green/White		LVA_DR_Output
SK02J08	54	LVA/EGSE_Closed_Sts	LVAJ01	Red/White		LVA_DR_Output
SK02J08	BKSH	Shield_for_EGSE/ACC_LV_A_Closed_Sts	ACCJ061	BKSH		Shield
SK02J08	BKSH	Shield_for_EGSE/ACC_LV_A_Open_Sts	ACCJ061	BKSH		Shield
SK02J08	BKSH	Shield_for_EGSE/ACC_THR_20N01_TS_Mnt	ACCJ063	BKSH		Shield
SK02J08	BKSH	Shield_for_EGSE/ACC_THR_20N02_TS_Mnt	ACCJ063	BKSH		Shield
SK02J08	BKSH	Shield_for_EGSE/ACC_THR_20N03_TS_Mnt	ACCJ063	BKSH		Shield
SK02J08	BKSH	Shield_for_EGSE/ACC_THR_20N04_TS_Mnt	ACCJ063	BKSH		Shield
SK02J08	BKSH	Shield_for_EGSE/ACC_THR_20N05_TS_Mnt	ACCJ063	BKSH		Shield
SK02J08	BKSH	Shield_for_EGSE/ACC_THR_20N06_TS_Mnt	ACCJ063	BKSH		Shield
SK02J08	BKSH	Shield_for_LVA/EGSE_Closed_Sts	LVAJ01	BKSH		Shield
SK02J08	BKSH	Shield_for_LVA/EGSE_Open_Sts	LVAJ01	BKSH		Shield
SK02J08	BKSH	Shield_for_THR_20N01/EGSE_TS_Mnt	THR_20N01J03	BKSH		Shield
SK02J08	BKSH	Shield_for_THR_20N02/EGSE_TS_Mnt	THR_20N02J03	BKSH		Shield
SK02J08	BKSH	Shield_for_THR_20N03/EGSE_TS_Mnt	THR_20N03J03	BKSH		Shield
SK02J08	BKSH	Shield_for_THR_20N04/EGSE_TS_Mnt	THR_20N04J03	BKSH		Shield
SK02J08	BKSH	Shield_for_THR_20N05/EGSE_TS_Mnt	THR_20N05J03	BKSH		Shield
SK02J08	BKSH	Shield_for_THR_20N06/EGSE_TS_Mnt	THR_20N06J03	BKSH		Shield

4.1.9 Satellite Level Skin Connector SK02 J09 & J10 ACC & CDMU Quick Load Interfaces

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J09	1	ACC/EGSE_Quick_SW_Load_A_Tx _L	ACCJ021	32	EGSE_SBDL_Receiver	SBDL_Driver
SK02J09	2	ACC/EGSE_Quick_SW_Load_A_Tx _H	ACCJ021	33	EGSE_SBDL_Receiver	SBDL_Driver
SK02J09	3	EGSE/ACC_Quick_SW_Load_A_Rx _L	ACCJ021	34	EGSE_SBDL_Driver	SBDL_Receiver
SK02J09	4	EGSE/ACC_Quick_SW_Load_A_Rx _H	ACCJ021	35	EGSE_SBDL_Driver	SBDL_Receiver
SK02J09	5	ACC/EGSE_ACC_A_Test_Connector_Active GND	ACCJ021	43	Link	
SK02J09	6	ACC/EGSE_ACC_A_Test_Connector_Active	ACCJ021	44	Link	

SK02J09	8	CDMU/EGSE_Quick_SW_Load_A_Tx _L	CDMUJ021	32	EGSE_SBDL_Receiver	SBDL_Driver
SK02J09	9	CDMU/EGSE_Quick_SW_Load_A_Tx _H	CDMUJ021	33	EGSE_SBDL_Receiver	SBDL_Driver
SK02J09	10	EGSE/CDMU_Quick_SW_Load_A_Rx _L	CDMUJ021	34	EGSE_SBDL_Driver	SBDL_Receiver
SK02J09	11	EGSE/CDMU_Quick_SW_Load_A_Rx _H	CDMUJ021	35	EGSE_SBDL_Driver	SBDL_Receiver
SK02J09	12	ACC/EGSE_ACC_B_Test_Connector_Active GND	ACCJ051	43	Link	
SK02J09	13	ACC/EGSE_ACC_B_Test_Connector_Active	ACCJ051	44	Link	
SK02J09	BKSH	Shield_for_ACC/EGSE_Quick_SW_Load_A_Tx	ACCJ021	BKSH	Shield	Shield
SK02J09	BKSH	Shield_for_CDMU/EGSE_Quick_SW_Load_A_Tx	CDMUJ021	BKSH	Shield	Shield
SK02J09	BKSH	Shield_for_EGSE/ACC_Quick_SW_Load_A_Rx	ACCJ021	BKSH	Shield	Shield
SK02J09	BKSH	Shield_for_EGSE/CDMU_Quick_SW_Load_A_Rx	CDMUJ021	BKSH	Shield	Shield

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J10	1	ACC/EGSE_Quick_SW_Load_B_Tx _L	ACCJ051	32	EGSE_SBDL_Receiver	SBDL_Driver
SK02J10	2	ACC/EGSE_Quick_SW_Load_B_Tx _H	ACCJ051	33	EGSE_SBDL_Receiver	SBDL_Driver
SK02J10	3	EGSE/ACC_Quick_SW_Load_B_Rx _L	ACCJ051	34	EGSE_SBDL_Driver	SBDL_Receiver
SK02J10	4	EGSE/ACC_Quick_SW_Load_B_Rx _H	ACCJ051	35	EGSE_SBDL_Driver	SBDL_Receiver
SK02J10	5	CDMU/EGSE_CDMU_A_Test_Connector_Active GND	CDMUJ021	43	Link	
SK02J10	6	CDMU/EGSE_CDMU_A_Test_Connector_Active	CDMUJ021	44	Link	
SK02J10	8	CDMU/EGSE_Quick_SW_Load_B_Tx _L	CDMUJ071	32	EGSE_SBDL_Receiver	SBDL_Driver
SK02J10	9	CDMU/EGSE_Quick_SW_Load_B_Tx _H	CDMUJ071	33	EGSE_SBDL_Receiver	SBDL_Driver
SK02J10	10	EGSE/CDMU_Quick_SW_Load_B_Rx _L	CDMUJ071	34	EGSE_SBDL_Driver	SBDL_Receiver
SK02J10	11	EGSE/CDMU_Quick_SW_Load_B_Rx _H	CDMUJ071	35	EGSE_SBDL_Driver	SBDL_Receiver
SK02J10	12	CDMU/EGSE_CDMU_B_Test_Connector_Active GND	CDMUJ071	43	Link	
SK02J10	13	CDMU/EGSE_CDMU_B_Test_Connector_Active	CDMUJ071	44	Link	
SK02J10	BKSH	Shield_for_ACC/EGSE_Quick_SW_Load_B_Tx	ACCJ051	BKSH	Shield	Shield
SK02J10	BKSH	Shield_for_CDMU/EGSE_Quick_SW_Load_B_Tx	CDMUJ071	BKSH	Shield	Shield
SK02J10	BKSH	Shield_for_EGSE/ACC_Quick_SW_Load_B_Rx	ACCJ051	BKSH	Shield	Shield
SK02J10	BKSH	Shield_for_EGSE/CDMU_Quick_SW_Load_B_Rx	CDMUJ071	BKSH	Shield	Shield

4.1.10 Satellite Level Skin Connector SK02 J11 ACC - Thruster Thermocouples

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J11	1	EGSE/ACC_LV_B_Closed_Sts	ACCJ071	4		DR_Mnt
SK02J11	2	EGSE/ACC_LV_B_Closed_Sts RTN	ACCJ071	24		DR_Mnt
SK02J11	4	EGSE/ACC_LV_B_Open_Sts	ACCJ071	5		DR_Mnt
SK02J11	5	EGSE/ACC_LV_B_Open_Sts RTN	ACCJ071	25		DR_Mnt
SK02J11	10	EGSE/ACC_THR_20N07_TS_Mnt	ACCJ073	11		THR_TS
SK02J11	11	EGSE/ACC_THR_20N07_TS_Mnt RTN	ACCJ073	31		THR_TS
SK02J11	12	EGSE/ACC_THR_20N08_TS_Mnt	ACCJ073	51		THR_TS
SK02J11	13	EGSE/ACC_THR_20N08_TS_Mnt RTN	ACCJ073	71		THR_TS
SK02J11	14	EGSE/ACC_THR_20N09_TS_Mnt	ACCJ073	12		THR_TS
SK02J11	15	EGSE/ACC_THR_20N09_TS_Mnt RTN	ACCJ073	32		THR_TS
SK02J11	17	EGSE/ACC_THR_20N10_TS_Mnt	ACCJ073	52		THR_TS
SK02J11	18	EGSE/ACC_THR_20N10_TS_Mnt RTN	ACCJ073	72		THR_TS
SK02J11	19	EGSE/ACC_THR_20N11_TS_Mnt	ACCJ073	13		THR_TS
SK02J11	20	EGSE/ACC_THR_20N11_TS_Mnt RTN	ACCJ073	33		THR_TS
SK02J11	21	EGSE/ACC_THR_20N12_TS_Mnt	ACCJ073	53		THR_TS
SK02J11	22	EGSE/ACC_THR_20N12_TS_Mnt RTN	ACCJ073	73		THR_TS
SK02J11	32	THR_20N10/EGSE_TS_Mnt +	THR_20N10J03	Green		THR_TS_Output
SK02J11	33	THR_20N10/EGSE_TS_Mnt -	THR_20N10J03	White		THR_TS_Output
SK02J11	34	THR_20N11/EGSE_TS_Mnt +	THR_20N11J03	Green		THR_TS_Output
SK02J11	35	THR_20N11/EGSE_TS_Mnt -	THR_20N11J03	White		THR_TS_Output
SK02J11	36	THR_20N12/EGSE_TS_Mnt +	THR_20N12J03	Green		THR_TS_Output
SK02J11	37	THR_20N12/EGSE_TS_Mnt -	THR_20N12J03	White		THR_TS_Output
SK02J11	40	THR_20N07/EGSE_TS_Mnt +	THR_20N07J03	Green		THR_TS_Output
SK02J11	41	THR_20N07/EGSE_TS_Mnt -	THR_20N07J03	White		THR_TS_Output
SK02J11	42	THR_20N08/EGSE_TS_Mnt +	THR_20N08J03	Green		THR_TS_Output
SK02J11	43	THR_20N08/EGSE_TS_Mnt -	THR_20N08J03	White		THR_TS_Output
SK02J11	44	THR_20N09/EGSE_TS_Mnt +	THR_20N09J03	Green		THR_TS_Output
SK02J11	45	THR_20N09/EGSE_TS_Mnt -	THR_20N09J03	White		THR_TS_Output

SK02J11	47	LVB/EGSE_Open_Sts	LVBJ01	White		LVA_DR_Output
SK02J11	48	LVB/EGSE_Open_Sts	LVBJ01	Red/White		LVA_DR_Output
SK02J11	53	LVB/EGSE_Closed_Sts	LVBJ01	Green/White		LVA_DR_Output
SK02J11	54	LVB/EGSE_Closed_Sts	LVBJ01	Red/White		LVA_DR_Output
SK02J11	BKSH	Shield_for_EGSE/ACC_LV_B_Closed_Sts	ACCJ071	BKSH		Shield
SK02J11	BKSH	Shield_for_EGSE/ACC_LV_B_Open_Sts	ACCJ071	BKSH		Shield
SK02J11	BKSH	Shield_for_EGSE/ACC_THR_20N07_TS_Mnt	ACCJ073	BKSH		Shield
SK02J11	BKSH	Shield_for_EGSE/ACC_THR_20N08_TS_Mnt	ACCJ073	BKSH		Shield
SK02J11	BKSH	Shield_for_EGSE/ACC_THR_20N09_TS_Mnt	ACCJ073	BKSH		Shield
SK02J11	BKSH	Shield_for_EGSE/ACC_THR_20N10_TS_Mnt	ACCJ073	BKSH		Shield
SK02J11	BKSH	Shield_for_EGSE/ACC_THR_20N11_TS_Mnt	ACCJ073	BKSH		Shield
SK02J11	BKSH	Shield_for_EGSE/ACC_THR_20N12_TS_Mnt	ACCJ073	BKSH		Shield
SK02J11	BKSH	Shield_for_LVB/EGSE_Closed_Sts	LVBJ01	BKSH		Shield
SK02J11	BKSH	Shield_for_LVB/EGSE_Open_Sts	LVBJ01	BKSH		Shield
SK02J11	BKSH	Shield_for_THR_20N07/EGSE_TS_Mnt	THR_20N07J03	BKSH		Shield
SK02J11	BKSH	Shield_for_THR_20N08/EGSE_TS_Mnt	THR_20N08J03	BKSH		Shield
SK02J11	BKSH	Shield_for_THR_20N09/EGSE_TS_Mnt	THR_20N09J03	BKSH		Shield
SK02J11	BKSH	Shield_for_THR_20N10/EGSE_TS_Mnt	THR_20N10J03	BKSH		Shield
SK02J11	BKSH	Shield_for_THR_20N11/EGSE_TS_Mnt	THR_20N11J03	BKSH		Shield
SK02J11	BKSH	Shield_for_THR_20N12/EGSE_TS_Mnt	THR_20N12J03	BKSH		Shield

4.1.11 Satellite Level Skin Connector SK02 J12 ACC + PCDU - Thruster Heaters

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J12	1	ACC/EGSE_THR_20N01_Htr_Nom_Cmd	ACCJ103	1		THRDV_Htr-Cmd
SK02J12	2	ACC/EGSE_THR_20N01_Htr_Nom_Cmd RTN	ACCJ103	21		THRDV_Htr-Cmd
SK02J12	4	ACC/EGSE_THR_20N02_Htr_Nom_Cmd	ACCJ103	41		THRDV_Htr-Cmd
SK02J12	5	ACC/EGSE_THR_20N02_Htr_Nom_Cmd RTN	ACCJ103	61		THRDV_Htr-Cmd
SK02J12	6	ACC/EGSE_THR_20N03_Htr_Nom_Cmd	ACCJ103	2		THRDV_Htr-Cmd
SK02J12	7	ACC/EGSE_THR_20N03_Htr_Nom_Cmd RTN	ACCJ103	22		THRDV_Htr-Cmd
SK02J12	8	ACC/EGSE_THR_20N04_Htr_Nom_Cmd	ACCJ103	42		THRDV_Htr-Cmd
SK02J12	9	ACC/EGSE_THR_20N04_Htr_Nom_Cmd RTN	ACCJ103	62		THRDV_Htr-Cmd

SK02J12	10	ACC/EGSE_THR_20N05_Htr_Nom_Cmd	ACCJ103	3		THRDV_Htr-Cmd
SK02J12	11	ACC/EGSE_THR_20N05_Htr_Nom_Cmd RTN	ACCJ103	23		THRDV_Htr-Cmd
SK02J12	12	ACC/EGSE_THR_20N06_Htr_Nom_Cmd	ACCJ103	43		THRDV_Htr-Cmd
SK02J12	13	ACC/EGSE_THR_20N06_Htr_Nom_Cmd RTN	ACCJ103	63		THRDV_Htr-Cmd
SK02J12	14	ACC/EGSE_THR_20N07_Htr_Nom_Cmd	ACCJ103	4		THRDV_Htr-Cmd
SK02J12	15	ACC/EGSE_THR_20N07_Htr_Nom_Cmd RTN	ACCJ103	24		THRDV_Htr-Cmd
SK02J12	16	ACC/EGSE_THR_20N11_Htr_Nom_Cmd RTN	ACCJ103	26		THRDV_Htr-Cmd
SK02J12	17	ACC/EGSE_THR_20N08_Htr_Nom_Cmd	ACCJ103	44		THRDV_Htr-Cmd
SK02J12	18	ACC/EGSE_THR_20N08_Htr_Nom_Cmd RTN	ACCJ103	64		THRDV_Htr-Cmd
SK02J12	19	ACC/EGSE_THR_20N09_Htr_Nom_Cmd	ACCJ103	5		THRDV_Htr-Cmd
SK02J12	20	ACC/EGSE_THR_20N09_Htr_Nom_Cmd RTN	ACCJ103	25		THRDV_Htr-Cmd
SK02J12	21	ACC/EGSE_THR_20N10_Htr_Nom_Cmd	ACCJ103	45		THRDV_Htr-Cmd
SK02J12	22	ACC/EGSE_THR_20N10_Htr_Nom_Cmd RTN	ACCJ103	65		THRDV_Htr-Cmd
SK02J12	23	ACC/EGSE_THR_20N11_Htr_Nom_Cmd	ACCJ103	6		THRDV_Htr-Cmd
SK02J12	25	ACC/EGSE_THR_20N12_Htr_Nom_Cmd	ACCJ103	46		THRDV_Htr-Cmd
SK02J12	26	ACC/EGSE_THR_20N12_Htr_Nom_Cmd RTN	ACCJ103	66		THRDV_Htr-Cmd
SK02J12	32	PCDU/EGSE_THR_20N01-12_Htr_Nom_Pwr	PCDUJ36	18		PCDU_LCL
SK02J12	33	PCDU/EGSE_THR_20N01-12_Htr_Nom_Pwr	PCDUJ36	36		PCDU_LCL
SK02J12	34	EGSE/THR_20N12_Htr_Nom_Cmd	THR_20N12J02	Black		THR_20N_Heater
SK02J12	35	EGSE/THR_20N12_Htr_Nom_Cmd	THR_20N12J02	Black		THR_20N_Heater
SK02J12	41	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N01J02	Black		THR_20N_Heater
SK02J12	41	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N02J02	Black		THR_20N_Heater
SK02J12	41	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N03J02	Black		THR_20N_Heater
SK02J12	41	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N04J02	Black		THR_20N_Heater
SK02J12	41	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N05J02	Black		THR_20N_Heater
SK02J12	41	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N06J02	Black		THR_20N_Heater
SK02J12	41	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N11J02	Black		THR_20N_Heater
SK02J12	41	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N12J02	Black		THR_20N_Heater
SK02J12	42	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N05J02	Black		THR_20N_Heater
SK02J12	42	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N06J02	Black		THR_20N_Heater
SK02J12	42	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N07J02	Black		THR_20N_Heater
SK02J12	42	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N08J02	Black		THR_20N_Heater
SK02J12	42	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N09J02	Black		THR_20N_Heater
SK02J12	42	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N10J02	Black		THR_20N_Heater
SK02J12	42	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N11J02	Black		THR_20N_Heater
SK02J12	42	EGSE/THR_20N01-12_Htr_Nom_Pwr	THR_20N12J02	Black		THR_20N_Heater
SK02J12	43	EGSE/THR_20N08_Htr_Nom_Cmd	THR_20N08J02	Black		THR_20N_Heater

SK02J12	44	EGSE/THR_20N08_Htr_Nom_Cmd	THR_20N08J02	Black		THR_20N_Heater
SK02J12	45	EGSE/THR_20N09_Htr_Nom_Cmd	THR_20N09J02	Black		THR_20N_Heater
SK02J12	46	EGSE/THR_20N09_Htr_Nom_Cmd	THR_20N09J02	Black		THR_20N_Heater
SK02J12	47	EGSE/THR_20N10_Htr_Nom_Cmd	THR_20N10J02	Black		THR_20N_Heater
SK02J12	48	EGSE/THR_20N10_Htr_Nom_Cmd	THR_20N10J02	Black		THR_20N_Heater
SK02J12	49	EGSE/THR_20N11_Htr_Nom_Cmd	THR_20N11J02	Black		THR_20N_Heater
SK02J12	51	EGSE/THR_20N05_Htr_Nom_Cmd	THR_20N05J02	Black		THR_20N_Heater
SK02J12	52	EGSE/THR_20N05_Htr_Nom_Cmd	THR_20N05J02	Black		THR_20N_Heater
SK02J12	53	EGSE/THR_20N06_Htr_Nom_Cmd	THR_20N06J02	Black		THR_20N_Heater
SK02J12	54	EGSE/THR_20N06_Htr_Nom_Cmd	THR_20N06J02	Black		THR_20N_Heater
SK02J12	55	EGSE/THR_20N07_Htr_Nom_Cmd	THR_20N07J02	Black		THR_20N_Heater
SK02J12	56	EGSE/THR_20N07_Htr_Nom_Cmd	THR_20N07J02	Black		THR_20N_Heater
SK02J12	57	EGSE/THR_20N11_Htr_Nom_Cmd	THR_20N11J02	Black		THR_20N_Heater
SK02J12	58	EGSE/THR_20N02_Htr_Nom_Cmd	THR_20N02J02	Black		THR_20N_Heater
SK02J12	59	EGSE/THR_20N02_Htr_Nom_Cmd	THR_20N02J02	Black		THR_20N_Heater
SK02J12	60	EGSE/THR_20N03_Htr_Nom_Cmd	THR_20N03J02	Black		THR_20N_Heater
SK02J12	61	EGSE/THR_20N03_Htr_Nom_Cmd	THR_20N03J02	Black		THR_20N_Heater
SK02J12	62	EGSE/THR_20N04_Htr_Nom_Cmd	THR_20N04J02	Black		THR_20N_Heater
SK02J12	63	EGSE/THR_20N04_Htr_Nom_Cmd	THR_20N04J02	Black		THR_20N_Heater
SK02J12	64	EGSE/THR_20N01_Htr_Nom_Cmd	THR_20N01J02	Black		THR_20N_Heater
SK02J12	65	EGSE/THR_20N01_Htr_Nom_Cmd	THR_20N01J02	Black		THR_20N_Heater
SK02J12	BKSH	Shield_for_ACC/EGSE_THR_20N01_Htr_Nom_Cmd	ACCJ103	BKSH		Shield
SK02J12	BKSH	Shield_for_ACC/EGSE_THR_20N02_Htr_Nom_Cmd	ACCJ103	BKSH		Shield
SK02J12	BKSH	Shield_for_ACC/EGSE_THR_20N03_Htr_Nom_Cmd	ACCJ103	BKSH		Shield
SK02J12	BKSH	Shield_for_ACC/EGSE_THR_20N04_Htr_Nom_Cmd	ACCJ103	BKSH		Shield
SK02J12	BKSH	Shield_for_ACC/EGSE_THR_20N05_Htr_Nom_Cmd	ACCJ103	BKSH		Shield
SK02J12	BKSH	Shield_for_ACC/EGSE_THR_20N06_Htr_Nom_Cmd	ACCJ103	BKSH		Shield
SK02J12	BKSH	Shield_for_ACC/EGSE_THR_20N07_Htr_Nom_Cmd	ACCJ103	BKSH		Shield
SK02J12	BKSH	Shield_for_ACC/EGSE_THR_20N08_Htr_Nom_Cmd	ACCJ103	BKSH		Shield
SK02J12	BKSH	Shield_for_ACC/EGSE_THR_20N09_Htr_Nom_Cmd	ACCJ103	BKSH		Shield
SK02J12	BKSH	Shield_for_ACC/EGSE_THR_20N10_Htr_Nom_Cmd	ACCJ103	BKSH		Shield
SK02J12	BKSH	Shield_for_ACC/EGSE_THR_20N11_Htr_Nom_Cmd	ACCJ103	BKSH		Shield
SK02J12	BKSH	Shield_for_ACC/EGSE_THR_20N12_Htr_Nom_Cmd	ACCJ103	BKSH		Shield
SK02J12	BKSH	Shield_for_EGSE/THR_20N01_Htr_Nom_Cmd	THR_20N01J02	BKSH		Shield
SK02J12	BKSH	Shield_for_EGSE/THR_20N02_Htr_Nom_Cmd	THR_20N02J02	BKSH		Shield
SK02J12	BKSH	Shield_for_EGSE/THR_20N03_Htr_Nom_Cmd	THR_20N03J02	BKSH		Shield
SK02J12	BKSH	Shield_for_EGSE/THR_20N04_Htr_Nom_Cmd	THR_20N04J02	BKSH		Shield

SK02J12	BKSH	Shield_for_EGSE/THR_20N05_Htr_Nom_Cmd	THR_20N05J02	BKSH		Shield
SK02J12	BKSH	Shield_for_EGSE/THR_20N06_Htr_Nom_Cmd	THR_20N06J02	BKSH		Shield
SK02J12	BKSH	Shield_for_EGSE/THR_20N07_Htr_Nom_Cmd	THR_20N07J02	BKSH		Shield
SK02J12	BKSH	Shield_for_EGSE/THR_20N08_Htr_Nom_Cmd	THR_20N08J02	BKSH		Shield
SK02J12	BKSH	Shield_for_EGSE/THR_20N09_Htr_Nom_Cmd	THR_20N09J02	BKSH		Shield
SK02J12	BKSH	Shield_for_EGSE/THR_20N10_Htr_Nom_Cmd	THR_20N10J02	BKSH		Shield
SK02J12	BKSH	Shield_for_EGSE/THR_20N11_Htr_Nom_Cmd	THR_20N11J02	BKSH		Shield
SK02J12	BKSH	Shield_for_EGSE/THR_20N12_Htr_Nom_Cmd	THR_20N12J02	BKSH		Shield

4.1.12 Satellite Level Skin Connector SK02 J13 ACC + PCDU - Thruster Heaters

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J13	1	ACC/EGSE_THR_20N01_Htr_Red_Cmd	ACCJ113	1		THRDV_Htr-Cmd
SK02J13	2	ACC/EGSE_THR_20N01_Htr_Red_Cmd RTN	ACCJ113	21		THRDV_Htr-Cmd
SK02J13	4	ACC/EGSE_THR_20N02_Htr_Red_Cmd	ACCJ113	41		THRDV_Htr-Cmd
SK02J13	5	ACC/EGSE_THR_20N02_Htr_Red_Cmd RTN	ACCJ113	61		THRDV_Htr-Cmd
SK02J13	6	ACC/EGSE_THR_20N03_Htr_Red_Cmd	ACCJ113	2		THRDV_Htr-Cmd
SK02J13	7	ACC/EGSE_THR_20N03_Htr_Red_Cmd RTN	ACCJ113	22		THRDV_Htr-Cmd
SK02J13	8	ACC/EGSE_THR_20N04_Htr_Red_Cmd	ACCJ113	42		THRDV_Htr-Cmd
SK02J13	9	ACC/EGSE_THR_20N04_Htr_Red_Cmd RTN	ACCJ113	62		THRDV_Htr-Cmd
SK02J13	10	ACC/EGSE_THR_20N05_Htr_Red_Cmd	ACCJ113	3		THRDV_Htr-Cmd
SK02J13	11	ACC/EGSE_THR_20N05_Htr_Red_Cmd RTN	ACCJ113	23		THRDV_Htr-Cmd
SK02J13	12	ACC/EGSE_THR_20N06_Htr_Red_Cmd	ACCJ113	43		THRDV_Htr-Cmd
SK02J13	13	ACC/EGSE_THR_20N06_Htr_Red_Cmd RTN	ACCJ113	63		THRDV_Htr-Cmd
SK02J13	14	ACC/EGSE_THR_20N07_Htr_Red_Cmd	ACCJ113	4		THRDV_Htr-Cmd
SK02J13	15	ACC/EGSE_THR_20N07_Htr_Red_Cmd RTN	ACCJ113	24		THRDV_Htr-Cmd
SK02J13	16	ACC/EGSE_THR_20N11_Htr_Red_Cmd RTN	ACCJ113	26		THRDV_Htr-Cmd
SK02J13	17	ACC/EGSE_THR_20N08_Htr_Red_Cmd	ACCJ113	44		THRDV_Htr-Cmd
SK02J13	18	ACC/EGSE_THR_20N08_Htr_Red_Cmd RTN	ACCJ113	64		THRDV_Htr-Cmd
SK02J13	19	ACC/EGSE_THR_20N09_Htr_Red_Cmd	ACCJ113	5		THRDV_Htr-Cmd
SK02J13	20	ACC/EGSE_THR_20N09_Htr_Red_Cmd RTN	ACCJ113	25		THRDV_Htr-Cmd
SK02J13	21	ACC/EGSE_THR_20N10_Htr_Red_Cmd	ACCJ113	45		THRDV_Htr-Cmd

SK02J13	22	ACC/EGSE_THR_20N10_Htr_Red_Cmd RTN	ACCJ113	65		THRDV_Htr-Cmd
SK02J13	23	ACC/EGSE_THR_20N11_Htr_Red_Cmd	ACCJ113	6		THRDV_Htr-Cmd
SK02J13	25	ACC/EGSE_THR_20N12_Htr_Red_Cmd	ACCJ113	46		THRDV_Htr-Cmd
SK02J13	26	ACC/EGSE_THR_20N12_Htr_Red_Cmd RTN	ACCJ113	66		THRDV_Htr-Cmd
SK02J13	32	PCDU/EGSE_THR_20N01-12_Htr_Red_Pwr	PCDUJ02	18		PCDU_LCL
SK02J13	33	PCDU/EGSE_THR_20N01-12_Htr_Red_Pwr	PCDUJ02	36		PCDU_LCL
SK02J13	34	EGSE/THR_20N12_Htr_Red_Cmd	THR_20N12J02	Black		THR_20N_Heater
SK02J13	35	EGSE/THR_20N12_Htr_Red_Cmd	THR_20N12J02	Black		THR_20N_Heater
SK02J13	41	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N01J02	Black		THR_20N_Heater
SK02J13	41	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N02J02	Black		THR_20N_Heater
SK02J13	41	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N03J02	Black		THR_20N_Heater
SK02J13	41	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N04J02	Black		THR_20N_Heater
SK02J13	41	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N05J02	Black		THR_20N_Heater
SK02J13	41	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N06J02	Black		THR_20N_Heater
SK02J13	41	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N11J02	Black		THR_20N_Heater
SK02J13	41	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N12J02	Black		THR_20N_Heater
SK02J13	42	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N05J02	Black		THR_20N_Heater
SK02J13	42	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N06J02	Black		THR_20N_Heater
SK02J13	42	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N07J02	Black		THR_20N_Heater
SK02J13	42	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N08J02	Black		THR_20N_Heater
SK02J13	42	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N09J02	Black		THR_20N_Heater
SK02J13	42	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N10J02	Black		THR_20N_Heater
SK02J13	42	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N11J02	Black		THR_20N_Heater
SK02J13	42	EGSE/THR_20N01-12_Htr_Red_Pwr	THR_20N12J02	Black		THR_20N_Heater
SK02J13	43	EGSE/THR_20N08_Htr_Red_Cmd	THR_20N08J02	Black		THR_20N_Heater
SK02J13	44	EGSE/THR_20N08_Htr_Red_Cmd	THR_20N08J02	Black		THR_20N_Heater
SK02J13	45	EGSE/THR_20N09_Htr_Red_Cmd	THR_20N09J02	Black		THR_20N_Heater
SK02J13	46	EGSE/THR_20N09_Htr_Red_Cmd	THR_20N09J02	Black		THR_20N_Heater
SK02J13	47	EGSE/THR_20N10_Htr_Red_Cmd	THR_20N10J02	Black		THR_20N_Heater
SK02J13	48	EGSE/THR_20N10_Htr_Red_Cmd	THR_20N10J02	Black		THR_20N_Heater
SK02J13	49	EGSE/THR_20N11_Htr_Red_Cmd	THR_20N11J02	Black		THR_20N_Heater
SK02J13	51	EGSE/THR_20N05_Htr_Red_Cmd	THR_20N05J02	Black		THR_20N_Heater
SK02J13	52	EGSE/THR_20N05_Htr_Red_Cmd	THR_20N05J02	Black		THR_20N_Heater
SK02J13	53	EGSE/THR_20N06_Htr_Red_Cmd	THR_20N06J02	Black		THR_20N_Heater
SK02J13	54	EGSE/THR_20N06_Htr_Red_Cmd	THR_20N06J02	Black		THR_20N_Heater
SK02J13	55	EGSE/THR_20N07_Htr_Red_Cmd	THR_20N07J02	Black		THR_20N_Heater
SK02J13	56	EGSE/THR_20N07_Htr_Red_Cmd	THR_20N07J02	Black		THR_20N_Heater

SK02J13	57	EGSE/THR_20N11_Htr_Red_Cmd	THR_20N11J02	Black		THR_20N_Heater
SK02J13	58	EGSE/THR_20N02_Htr_Red_Cmd	THR_20N02J02	Black		THR_20N_Heater
SK02J13	59	EGSE/THR_20N02_Htr_Red_Cmd	THR_20N02J02	Black		THR_20N_Heater
SK02J13	60	EGSE/THR_20N03_Htr_Red_Cmd	THR_20N03J02	Black		THR_20N_Heater
SK02J13	61	EGSE/THR_20N03_Htr_Red_Cmd	THR_20N03J02	Black		THR_20N_Heater
SK02J13	62	EGSE/THR_20N04_Htr_Red_Cmd	THR_20N04J02	Black		THR_20N_Heater
SK02J13	63	EGSE/THR_20N04_Htr_Red_Cmd	THR_20N04J02	Black		THR_20N_Heater
SK02J13	64	EGSE/THR_20N01_Htr_Red_Cmd	THR_20N01J02	Black		THR_20N_Heater
SK02J13	65	EGSE/THR_20N01_Htr_Red_Cmd	THR_20N01J02	Black		THR_20N_Heater
SK02J13	BKSH	Shield_for_ACC/EGSE_THR_20N01_Htr_Red_Cmd	ACCJ113	BKSH		Shield
SK02J13	BKSH	Shield_for_ACC/EGSE_THR_20N02_Htr_Red_Cmd	ACCJ113	BKSH		Shield
SK02J13	BKSH	Shield_for_ACC/EGSE_THR_20N03_Htr_Red_Cmd	ACCJ113	BKSH		Shield
SK02J13	BKSH	Shield_for_ACC/EGSE_THR_20N04_Htr_Red_Cmd	ACCJ113	BKSH		Shield
SK02J13	BKSH	Shield_for_ACC/EGSE_THR_20N05_Htr_Red_Cmd	ACCJ113	BKSH		Shield
SK02J13	BKSH	Shield_for_ACC/EGSE_THR_20N06_Htr_Red_Cmd	ACCJ113	BKSH		Shield
SK02J13	BKSH	Shield_for_ACC/EGSE_THR_20N07_Htr_Red_Cmd	ACCJ113	BKSH		Shield
SK02J13	BKSH	Shield_for_ACC/EGSE_THR_20N08_Htr_Red_Cmd	ACCJ113	BKSH		Shield
SK02J13	BKSH	Shield_for_ACC/EGSE_THR_20N09_Htr_Red_Cmd	ACCJ113	BKSH		Shield
SK02J13	BKSH	Shield_for_ACC/EGSE_THR_20N10_Htr_Red_Cmd	ACCJ113	BKSH		Shield
SK02J13	BKSH	Shield_for_ACC/EGSE_THR_20N11_Htr_Red_Cmd	ACCJ113	BKSH		Shield
SK02J13	BKSH	Shield_for_ACC/EGSE_THR_20N12_Htr_Red_Cmd	ACCJ113	BKSH		Shield
SK02J13	BKSH	Shield_for_EGSE/THR_20N01_Htr_Red_Cmd	THR_20N01J02	BKSH		Shield
SK02J13	BKSH	Shield_for_EGSE/THR_20N02_Htr_Red_Cmd	THR_20N02J02	BKSH		Shield
SK02J13	BKSH	Shield_for_EGSE/THR_20N03_Htr_Red_Cmd	THR_20N03J02	BKSH		Shield
SK02J13	BKSH	Shield_for_EGSE/THR_20N04_Htr_Red_Cmd	THR_20N04J02	BKSH		Shield
SK02J13	BKSH	Shield_for_EGSE/THR_20N05_Htr_Red_Cmd	THR_20N05J02	BKSH		Shield
SK02J13	BKSH	Shield_for_EGSE/THR_20N06_Htr_Red_Cmd	THR_20N06J02	BKSH		Shield
SK02J13	BKSH	Shield_for_EGSE/THR_20N07_Htr_Red_Cmd	THR_20N07J02	BKSH		Shield
SK02J13	BKSH	Shield_for_EGSE/THR_20N08_Htr_Red_Cmd	THR_20N08J02	BKSH		Shield
SK02J13	BKSH	Shield_for_EGSE/THR_20N09_Htr_Red_Cmd	THR_20N09J02	BKSH		Shield
SK02J13	BKSH	Shield_for_EGSE/THR_20N10_Htr_Red_Cmd	THR_20N10J02	BKSH		Shield
SK02J13	BKSH	Shield_for_EGSE/THR_20N11_Htr_Red_Cmd	THR_20N11J02	BKSH		Shield
SK02J13	BKSH	Shield_for_EGSE/THR_20N12_Htr_Red_Cmd	THR_20N12J02	BKSH		Shield

4.1.13 Satellite Level Skin Connector SK02 J14 ACC – STR1

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J14	1	EGSE/ACC_STR1_ON/OFF_Sts	ACCJ061	1		DR_Mnt
SK02J14	2	EGSE/ACC_STR1_ON/OFF_Sts RTN	ACCJ061	21		DR_Mnt
SK02J14	3	STR1/EGSE_ON/OFF_Sts	STR1J01	7		DR_Mnt
SK02J14	4	STR1/EGSE_ON/OFF_Sts RTN	STR1J01	8		DR_Mnt
SK02J14	5	ACC/EGSE_STR1_ON_Nom_Cmd	ACCJ035	6		HP_Cmd
SK02J14	6	ACC/EGSE_STR1_OFF_Nom_Cmd	ACCJ035	7		HP_Cmd
SK02J14	7	EGSE/STR1_ON_Nom_Cmd	STR1J01	5		STR_HP_Input
SK02J14	8	EGSE/STR1_OFF_Nom_Cmd	STR1J01	14		STR_HP_Input
SK02J14	11	ACC/EGSE_STR1_ON_Red_Cmd	ACCJ045	6		HP_Cmd
SK02J14	12	ACC/EGSE_STR1_OFF_Red_Cmd	ACCJ045	7		HP_Cmd
SK02J14	13	EGSE/STR1_ON_Red_Cmd	STR1J01	5		STR_HP_Input
SK02J14	14	EGSE/STR1_OFF_Red_Cmd	STR1J01	14		STR_HP_Input
SK02J14	17	ACC/EGSE_STR1_ON/OFF_RTN_Nom_Cmd RTN	ACCJ035	5		HP_Cmd
SK02J14	18	EGSE/STR1_ON/OFF_RTN_Nom_Cmd RTN	STR1J01	6		STR_HP_Input
SK02J14	20	ACC/EGSE_STR1_ON/OFF_RTN_Red_Cmd RTN	ACCJ045	5		HP_Cmd
SK02J14	21	EGSE/STR1_ON/OFF_RTN_Red_Cmd RTN	STR1J01	15		STR_HP_Input
SK02J14	BKSH	Shield_for_EGSE/ACC_STR1_ON/OFF_Sts	ACCJ061	BKSH		Shield
SK02J14	BKSH	Shield_for_STR1/EGSE_ON/OFF_Sts	STR1J01	BKSH		Shield

4.1.14 Satellite Level Skin Connector SK02 J15 ACC – STR2

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J15	1	EGSE/ACC_STR2_ON/OFF_Sts	ACCJ071	41		DR_Mnt
SK02J15	2	EGSE/ACC_STR2_ON/OFF_Sts RTN	ACCJ071	61		DR_Mnt
SK02J15	3	STR2/EGSE_ON/OFF_Sts	STR2J01	7		DR_Mnt
SK02J15	4	STR2/EGSE_ON/OFF_Sts RTN	STR2J01	8		DR_Mnt
SK02J15	5	ACC/EGSE_STR2_ON_Nom_Cmd	ACCJ035	12		HP_Cmd
SK02J15	6	ACC/EGSE_STR2_OFF_Nom_Cmd	ACCJ035	13		HP_Cmd
SK02J15	7	EGSE/STR2_ON_Nom_Cmd	STR2J01	5		STR_HP_Input
SK02J15	8	EGSE/STR2_OFF_Nom_Cmd	STR2J01	14		STR_HP_Input
SK02J15	11	ACC/EGSE_STR2_ON_Red_Cmd	ACCJ045	12		HP_Cmd
SK02J15	12	ACC/EGSE_STR2_OFF_Red_Cmd	ACCJ045	13		HP_Cmd
SK02J15	13	EGSE/STR2_ON_Red_Cmd	STR2J01	5		STR_HP_Input
SK02J15	14	EGSE/STR2_OFF_Red_Cmd	STR2J01	14		STR_HP_Input
SK02J15	17	ACC/EGSE_STR2_ON/OFF_RTN_Nom_Cmd RTN	ACCJ035	11		HP_Cmd
SK02J15	18	EGSE/STR2_ON/OFF_RTN_Nom_Cmd RTN	STR2J01	6		STR_HP_Input
SK02J15	20	ACC/EGSE_STR2_ON/OFF_RTN_Red_Cmd RTN	ACCJ045	11		HP_Cmd
SK02J15	21	EGSE/STR2_ON/OFF_RTN_Red_Cmd RTN	STR2J01	15		STR_HP_Input
SK02J15	BKSH	Shield_for_EGSE/ACC_STR2_ON/OFF_Sts	ACCJ071	BKSH		Shield
SK02J15	BKSH	Shield_for_STR2/EGSE_ON/OFF_Sts	STR2J01	BKSH		Shield

4.1.15 Satellite Level Skin Connector SK02 J16 ACC – GYR-A

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J16	1	ACC/EGSE_GYR_A_IRU_ON_Nom_Cmd	ACCJ035	9	HP_Cmd	
SK02J16	2	ACC/EGSE_GYR_A_IRU_OFF_Nom_Cmd	ACCJ035	10	HP_Cmd	
SK02J16	3	ACC/EGSE_GYR_A_GB_ON_PPSMB_Nom_Cmd	ACCJ035	27	HP_Cmd	
SK02J16	4	ACC/EGSE_GYR_A_GC_ON_PPSMB_Nom_Cmd	ACCJ035	28	HP_Cmd	
SK02J16	5	ACC/EGSE_GYR_A_IRU_RST_Nom_Cmd	ACCJ035	48	HP_Cmd	
SK02J16	6	ACC/EGSE_GYR_A_GB_ON_PPSMB_Red_Cmd	ACCJ045	27	HP_Cmd	
SK02J16	7	ACC/EGSE_GYR_A_GC_ON_PPSMB_Red_Cmd	ACCJ045	28	HP_Cmd	
SK02J16	8	ACC/EGSE_GYR_A_IRU_ON_Red_Cmd	ACCJ045	9	HP_Cmd	
SK02J16	9	ACC/EGSE_GYR_A_IRU_OFF_Red_Cmd	ACCJ045	10	HP_Cmd	
SK02J16	10	EGSE/GYR_A_IRU_ON_Red_Cmd	GYRJ01A	34		Gyro-HL_Cmd-Input
SK02J16	11	EGSE/GYR_A_IRU_OFF_Red_Cmd	GYRJ01A	25		Gyro-HL_Cmd-Input
SK02J16	12	EGSE/GYR_A_GB_ON_PPSMB_Red_Cmd	GYRJ01A	10		Gyro-HL_Cmd-Input
SK02J16	13	EGSE/GYR_A_GC_ON_PPSMB_Red_Cmd	GYRJ01A	51		Gyro-HL_Cmd-Input
SK02J16	14	EGSE/GYR_A_IRU_RST_Nom_Cmd	GYRJ01A	43		
SK02J16	15	EGSE/GYR_A_GC_ON_PPSMB_Nom_Cmd	GYRJ01A	51		
SK02J16	16	EGSE/GYR_A_GB_ON_PPSMB_Nom_Cmd	GYRJ01A	10		
SK02J16	17	EGSE/GYR_A_IRU_ON_Nom_Cmd	GYRJ01A	34		
SK02J16	18	EGSE/GYR_A_IRU_OFF_Nom_Cmd	GYRJ01A	25		
SK02J16	19	ACC/EGSE_GYR_A_IRU_ON/OFF__Rtn_Nom_Cmd_Rtn	ACCJ035	8	HP_Cmd	
SK02J16	20	ACC/EGSE_GYR_A_Config__Rtn_Nom_Cmd_Rtn	ACCJ035	40	HP_Cmd	
SK02J16	21	ACC/EGSE_GYR_A_PPSMB_Sel_Nom_Cmd	ACCJ035	47	HP_Cmd	
SK02J16	22	ACC/EGSE_GYR_A_IRU_RST_Red_Cmd	ACCJ045	48	HP_Cmd	
SK02J16	23	ACC/EGSE_GYR_A_PPSMB_Sel_Red_Cmd	ACCJ045	47	HP_Cmd	
SK02J16	24	ACC/EGSE_GYR_A_IRU_ON/OFF__Rtn_Red_Cmd_Rtn	ACCJ045	8	HP_Cmd	
SK02J16	25	EGSE/GYR_A_IRU_ON/OFF__Rtn_Red_Cmd_Rtn	GYRJ01A	26		Gyro-HL_Cmd-Input
SK02J16	26	EGSE/GYR_A_IRU_RST_Red_Cmd	GYRJ01A	43		
SK02J16	27	EGSE/GYR_A_PPSMB_Sel_Red_Cmd	GYRJ01A	17		Gyro-HL_Cmd-Input

SK02J16	28	EGSE/GYR_A_PPSMB_Sel_Nom_Cmd	GYRJ01A	17		Gyro-HL_Cmd-Input
SK02J16	29	EGSE/GYR_A_Config__Rtn_Nom_Cmd_Rtn	GYRJ01A	35		
SK02J16	30	EGSE/GYR_A_IRU_ON/OFF__Rtn_Nom_Cmd_Rtn	GYRJ01A	26		
SK02J16	33	ACC/EGSE_GYR_A_Config__Rtn_Red_Cmd_Rtn	ACCJ045	40	HP_Cmd	
SK02J16	34	EGSE/GYR_A_Config__Rtn_Red_Cmd_Rtn	GYRJ01A	35		Gyro-HL_Cmd-Input

4.1.16 Satellite Level Skin Connector SK02 J17 ACC – GYR-B

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
SK02J17	1	ACC/EGSE_GYR_B_IRU_ON_Nom_Cmd	ACCJ035	70	HP_Cmd	
SK02J17	2	ACC/EGSE_GYR_B_IRU_OFF_Nom_Cmd	ACCJ035	71	HP_Cmd	
SK02J17	3	ACC/EGSE_GYR_B_GA_ON_PPSMB_Nom_Cmd	ACCJ035	15	HP_Cmd	
SK02J17	4	ACC/EGSE_GYR_B_GD_ON_PPSMA_Nom_Cmd	ACCJ035	16	HP_Cmd	
SK02J17	5	ACC/EGSE_GYR_B_IRU_RST_Nom_Cmd	ACCJ035	34	HP_Cmd	
SK02J17	6	ACC/EGSE_GYR_B_GA_ON_PPSMB_Red_Cmd	ACCJ045	15	HP_Cmd	
SK02J17	7	ACC/EGSE_GYR_B_GD_ON_PPSMA_Red_Cmd	ACCJ045	16	HP_Cmd	
SK02J17	8	ACC/EGSE_GYR_B_IRU_ON_Red_Cmd	ACCJ045	70	HP_Cmd	
SK02J17	9	ACC/EGSE_GYR_B_IRU_OFF_Red_Cmd	ACCJ045	71	HP_Cmd	
SK02J17	10	EGSE/GYR_B_IRU_ON_Red_Cmd	GYRJ01B	34		Gyro-HL_Cmd-Input
SK02J17	11	EGSE/GYR_B_IRU_OFF_Red_Cmd	GYRJ01B	25		Gyro-HL_Cmd-Input
SK02J17	12	EGSE/GYR_B_GA_ON_PPSMB_Red_Cmd	GYRJ01B	10		Gyro-HL_Cmd-Input
SK02J17	13	EGSE/GYR_B_GD_ON_PPSMA_Red_Cmd	GYRJ01B	51		Gyro-HL_Cmd-Input
SK02J17	14	EGSE/GYR_B_IRU_RST_Nom_Cmd	GYRJ01B	43		
SK02J17	15	EGSE/GYR_B_GD_ON_PPSMA_Nom_Cmd	GYRJ01B	51		
SK02J17	16	EGSE/GYR_B_GA_ON_PPSMB_Nom_Cmd	GYRJ01B	10		
SK02J17	17	EGSE/GYR_B_IRU_ON_Nom_Cmd	GYRJ01B	34		
SK02J17	18	EGSE/GYR_B_IRU_OFF_Nom_Cmd	GYRJ01B	25		
SK02J17	19	ACC/EGSE_GYR_B_IRU_ON/OFF__Rtn_Nom_Cmd_Rtn	ACCJ035	69	HP_Cmd	
SK02J17	20	ACC/EGSE_GYR_B_Config__Rtn_Nom_Cmd_Rtn	ACCJ035	17	HP_Cmd	
SK02J17	21	ACC/EGSE_GYR_B_PPSMB_Sel_Nom_Cmd	ACCJ035	33	HP_Cmd	
SK02J17	22	ACC/EGSE_GYR_B_IRU_RST_Red_Cmd	ACCJ045	34	HP_Cmd	
SK02J17	23	ACC/EGSE_GYR_B_PPSMB_Sel_Red_Cmd	ACCJ045	33	HP_Cmd	
SK02J17	24	ACC/EGSE_GYR_B_IRU_ON/OFF__Rtn_Red_Cmd_Rtn	ACCJ045	69	HP_Cmd	
SK02J17	25	EGSE/GYR_B_IRU_ON/OFF__Rtn_Red_Cmd_Rtn	GYRJ01B	26		Gyro-HL_Cmd-Input
SK02J17	26	EGSE/GYR_B_IRU_RST_Red_Cmd	GYRJ01B	43		
SK02J17	27	EGSE/GYR_B_PPSMB_Sel_Red_Cmd	GYRJ01B	17		Gyro-HL_Cmd-Input
SK02J17	28	EGSE/GYR_B_PPSMB_Sel_Nom_Cmd	GYRJ01B	17		Gyro-HL_Cmd-Input

SK02J17	29	EGSE/GYR_B_Config__Rtn_Nom_Cmd_Rtn	GYRJ01B	35		
SK02J17	30	EGSE/GYR_B_IRU_ON/OFF__Rtn_Nom_Cmd_Rtn	GYRJ01B	26		
SK02J17	33	ACC/EGSE_GYR_B_Config__Rtn_Red_Cmd_Rtn	ACCJ045	17	HP_Cmd	
SK02J17	34	EGSE/GYR_B_Config__Rtn_Red_Cmd_Rtn	GYRJ01B	35		Gyro-HL_Cmd-Input

4.1.17 Satellite Level Skin Connector SK03 J01 Xponder 1 Aux Inputs

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK03J01	1	XPND1/SK03_TC_Clock -	XPND1J07	11		SBDL_Receiver
SK03J01	2	XPND1/SK03_TC_Clock +	XPND1J07	3		SBDL_Receiver
SK03J01	3	XPND1/SK03_TC_Data -	XPND1J07	15		SBDL_Receiver
SK03J01	4	XPND1/SK03_TC_Data +	XPND1J07	8		SBDL_Receiver
SK03J01	5	XPND1/SK03_TC_RF_Lock -	XPND1J07	13		SBDL_Receiver
SK03J01	6	XPND1/SK03_TC_RF_Lock +	XPND1J07	5		SBDL_Receiver
SK03J01	7	XPND1/SK03_TC_Squelch -	XPND1J07	9		SBDL_Receiver
SK03J01	8	XPND1/SK03_TC_Squelch +	XPND1J07	1		SBDL_Receiver
SK03J01	9	EPC1/SK03_ProtDIS_Jmp	EPC1J01	15		JUMPER-DIS
SK03J01	10	EPC1/SK03_ProtDIS_Jmp RTN	EPC1J01	19		JUMPER-DIS
SK03J01	BKSH	Shield_for_XPND1/SK03_TC_Clock	XPND1J07	4		Shield
SK03J01	BKSH	Shield_for_XPND1/SK03_TC_Data	XPND1J07	14		Shield
SK03J01	BKSH	Shield_for_XPND1/SK03_TC_RF_Lock	XPND1J07	12		Shield
SK03J01	BKSH	Shield_for_XPND1/SK03_TC_Squelch	XPND1J07	2		Shield

4.1.18 Satellite Level Skin Connector SK03 J02 Xponder 2 Aux Inputs

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK03J02	1	XPND2/SK03_TC_Clock -	XPND2J07	11		SBDL_Receiver
SK03J02	2	XPND2/SK03_TC_Clock +	XPND2J07	3		SBDL_Receiver
SK03J02	3	XPND2/SK03_TC_Data -	XPND2J07	15		SBDL_Receiver
SK03J02	4	XPND2/SK03_TC_Data +	XPND2J07	8		SBDL_Receiver
SK03J02	5	XPND2/SK03_TC_RF_Lock -	XPND2J07	13		SBDL_Receiver
SK03J02	6	XPND2/SK03_TC_RF_Lock +	XPND2J07	5		SBDL_Receiver
SK03J02	7	XPND2/SK03_TC_Squelch -	XPND2J07	9		SBDL_Receiver
SK03J02	8	XPND2/SK03_TC_Squelch +	XPND2J07	1		SBDL_Receiver
SK03J02	9	EPC2/SK03_ProtDIS_Jmp	EPC2J01	15		JUMPER-DIS
SK03J02	10	EPC2/SK03_ProtDIS_Jmp RTN	EPC2J01	19		JUMPER-DIS
SK03J02	BKSH	Shield_for_XPND2/SK03_TC_Clock	XPND2J07	4		Shield
SK03J02	BKSH	Shield_for_XPND2/SK03_TC_Data	XPND2J07	14		Shield
SK03J02	BKSH	Shield_for_XPND2/SK03_TC_RF_Lock	XPND2J07	12		Shield
SK03J02	BKSH	Shield_for_XPND2/SK03_TC_Squelch	XPND2J07	2		Shield

4.1.19 Satellite Level Skin Connector SK04 J01 ACC – RWL1

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
SK04J01	1	EGSE/ACC_RWL1_Therm_Mnt	ACCJ061	58	Therm_Mnt	
SK04J01	2	EGSE/ACC_RWL1_Therm_Mnt_Rtn	ACCJ061	78	Therm_Mnt	
SK04J01	3	RWL1/EGSE_Therm_Mnt	RWL1J02	14		Thermistor
SK04J01	9	RWL1/EGSE_Therm_Mnt_Rtn	RWL1J02	15		Thermistor
SK04J01	10	ACC/EGSE_RWL1_ON_Nom_Cmd	ACCJ035	24		
SK04J01	11	ACC/EGSE_RWL1_ON_Nom_Cmd_Rtn	ACCJ035	23	HP_Cmd	
SK04J01	12	EGSE/RWL1_ON_Nom_Cmd	RWL1J02	11	HP_Cmd	RWL_ON/OFF_input
SK04J01	13	EGSE/RWL1_ON_Nom_Cmd_Rtn	RWL1J02	13		RWL_ON/OFF_input
SK04J01	14	ACC/EGSE_RWL1_Torque_Cmd	ACCJ101	17	HP_Cmd	
SK04J01	17	ACC/EGSE_RWL1_OFF_Nom_Cmd	ACCJ035	25	HP_Cmd	
SK04J01	18	ACC/EGSE_RWL1_OFF_Nom_Cmd_Rtn	ACCJ035	26	HP_Cmd	
SK04J01	19	EGSE/RWL1_OFF_Nom_Cmd	RWL1J02	12		RWL_ON/OFF_input
SK04J01	20	EGSE/RWL1_OFF_Nom_Cmd_Rtn	RWL1J02	13		RWL_ON/OFF_input
SK04J01	21	ACC/EGSE_RWL1_Torque_Cmd_Rtn	ACCJ101	37	HP_Cmd	RWL-T-input
SK04J01	22	ACC/EGSE_RWL1_Torque_Direction_Cmd	ACCJ101	18	HP_Cmd	
SK04J01	23	ACC/EGSE_RWL1_Torque_Direction_Cmd_Rtn	ACCJ101	38	HP_Cmd	
SK04J01	24	EGSE/ACC_RWL1_Motor_Current_Mnt	ACCJ061	18		
SK04J01	25	EGSE/ACC_RWL1_ON/OFF_Sts	ACCJ101	58	RWL-Psts	
SK04J01	26	EGSE/ACC_RWL1_ON/OFF_Sts_Rtn	ACCJ101	78	RWL-Psts	
SK04J01	27	RWL1/EGSE_ON/OFF_Sts	RWL1J02	16		RWL-ON/OFF-Status
SK04J01	28	RWL1/EGSE_ON/OFF_Sts_Rtn	RWL1J02	19		RWL-ON/OFF-Status
SK04J01	29	EGSE/ACC_RWL1_Speed_Direction_Mnt	ACCJ101	57	RWL-Sd	
SK04J01	30	EGSE/ACC_RWL1_Speed_Direction_Mnt_Rtn	ACCJ101	77	RWL-Sd	
SK04J01	31	EGSE/ACC_RWL1_Motor_Current_Mnt_Rtn	ACCJ061	38		
SK04J01	32	EGSE/ACC_RWL1_Tachometer_Mnt	ACCJ101	56	RWL-S	
SK04J01	33	EGSE/ACC_RWL1_Tachometer_Mnt_Rtn	ACCJ101	76	RWL-S	
SK04J01	36	RWL1/EGSE_Speed_Direction_Mnt	RWL1J02	17		SD-input

SK04J01	37	RWL1/EGSE_Speed_Direction_Mnt_Rtn	RWL1J02	19		SD-input
SK04J01	38	EGSE/RWL1_Torque_Direction_Cmd	RWL1J02	18		RWL-Td-input
SK04J01	39	EGSE/RWL1_Torque_Direction_Cmd_Rtn	RWL1J02	19		RWL-Td-input
SK04J01	40	RWL1/EGSE_Tachometer_Mnt	RWL1J02	2		RWL-Tacho-input
SK04J01	41	RWL1/EGSE_Tachometer_Mnt_Rtn	RWL1J02	19		RWL-Tacho-input
SK04J01	44	RWL1/EGSE_Motor_Current_Mnt	RWL1J02	4		RWL-M
SK04J01	45	RWL1/EGSE_Motor_Current_Mnt_Rtn	RWL1J02	7		RWL-M
SK04J01	46	EGSE/RWL1_Torque_Cmd_Rtn	RWL1J02	7		RWL-T-input
SK04J01	47	EGSE/RWL1_ON_Red_Cmd	RWL1J02	23		RWL_ON/OFF_input
SK04J01	48	EGSE/RWL1_ON_Red_Cmd_Rtn	RWL1J02	25		RWL_ON/OFF_input
SK04J01	49	ACC/EGSE_RWL1_OFF_Red_Cmd	ACCJ045	25	HP_Cmd	
SK04J01	50	ACC/EGSE_RWL1_OFF_Red_Cmd_Rtn	ACCJ045	26	HP_Cmd	
SK04J01	51	EGSE/RWL1_OFF_Red_Cmd_Rtn	RWL1J02	25		RWL_ON/OFF_input
SK04J01	52	EGSE/RWL1_Torque_Cmd	RWL1J02	5		RWL-T-input
SK04J01	53	ACC/EGSE_RWL1_ON_Red_Cmd	ACCJ045	24	HP_Cmd	
SK04J01	54	ACC/EGSE_RWL1_ON_Red_Cmd_Rtn	ACCJ045	23	HP_Cmd	
SK04J01	55	EGSE/RWL1_OFF_Red_Cmd	RWL1J02	24		RWL_ON/OFF_input
SK04J01	BKSH	ACC/EGSE_RWL1_Torque_Direction_Cmd	ACCJ101	BKSH	Shield	Shield
SK04J01	BKSH	EGSE/ACC_RWL1_Therm_Mnt	ACCJ061	BKSH	Shield	Shield
SK04J01	BKSH	RWL1/EGSE_Motor_Current_Mnt	RWL1J02	BKSH	Shield	Shield
SK04J01	BKSH	RWL1/EGSE_ON/OFF_Sts	RWL1J02	BKSH	Shield	Shield
SK04J01	BKSH	RWL1/EGSE_Speed_Direction_Mnt	RWL1J02	BKSH	Shield	Shield
SK04J01	BKSH	RWL1/EGSE_Tachometer_Mnt	RWL1J02	BKSH	Shield	Shield
SK04J01	BKSH	ACC/EGSE_RWL1_Torque_Cmd	ACCJ101	BKSH	Shield	Shield
SK04J01	BKSH	EGSE/ACC_RWL1_Motor_Current_Mnt	ACCJ061	BKSH	Shield	Shield
SK04J01	BKSH	EGSE/ACC_RWL1_ON/OFF_Sts	ACCJ101	BKSH	Shield	Shield
SK04J01	BKSH	EGSE/ACC_RWL1_Speed_Direction_Mnt	ACCJ101	BKSH	Shield	Shield
SK04J01	BKSH	EGSE/ACC_RWL1_Tachometer_Mnt	ACCJ101	BKSH	Shield	Shield
SK04J01	BKSH	EGSE/RWL1_Torque_Cmd	RWL1J02	BKSH	Shield	Shield
SK04J01	BKSH	EGSE/RWL1_Torque_Direction_Cmd	RWL1J02	BKSH	Shield	Shield
SK04J01	BKSH	RWL1/EGSE_Therm_Mnt	RWL1J02	BKSH	Shield	Shield

4.1.20 Satellite Level Skin Connector SK04 J02 ACC – RWL2

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
SK04J02	1	EGSE/ACC_RWL2_Therm_Mnt	ACCJ063	58	Therm_Mnt	
SK04J02	2	EGSE/ACC_RWL2_Therm_Mnt_Rtn	ACCJ063	78	Therm_Mnt	
SK04J02	3	RWL2/EGSE_Therm_Mnt	RWL2J02	14		Thermistor
SK04J02	9	RWL2/EGSE_Therm_Mnt_Rtn	RWL2J02	15		Thermistor
SK04J02	10	ACC/EGSE_RWL2_ON_Nom_Cmd	ACCJ035	44		
SK04J02	11	ACC/EGSE_RWL2_ON_Nom_Cmd_Rtn	ACCJ035	43	HP_Cmd	
SK04J02	12	EGSE/RWL2_ON_Nom_Cmd	RWL2J02	11	HP_Cmd	RWL_ON/OFF_input
SK04J02	13	EGSE/RWL2_ON_Nom_Cmd_Rtn	RWL2J02	13		RWL_ON/OFF_input
SK04J02	14	ACC/EGSE_RWL2_Torque_Cmd	ACCJ103	17	HP_Cmd	
SK04J02	17	ACC/EGSE_RWL2_OFF_Nom_Cmd	ACCJ035	45	HP_Cmd	
SK04J02	18	ACC/EGSE_RWL2_OFF_Nom_Cmd_Rtn	ACCJ035	46	HP_Cmd	
SK04J02	19	EGSE/RWL2_OFF_Nom_Cmd	RWL2J02	12		RWL_ON/OFF_input
SK04J02	20	EGSE/RWL2_OFF_Nom_Cmd_Rtn	RWL2J02	13		RWL_ON/OFF_input
SK04J02	21	ACC/EGSE_RWL2_Torque_Cmd_Rtn	ACCJ103	37	HP_Cmd	RWL-T-input
SK04J02	22	ACC/EGSE_RWL2_Torque_Direction_Cmd	ACCJ103	18	HP_Cmd	
SK04J02	23	ACC/EGSE_RWL2_Torque_Direction_Cmd_Rtn	ACCJ103	38	HP_Cmd	
SK04J02	24	EGSE/ACC_RWL2_Motor_Current_Mnt	ACCJ063	18		
SK04J02	25	EGSE/ACC_RWL2_ON/OFF_Sts	ACCJ103	58	RWL-Psts	
SK04J02	26	EGSE/ACC_RWL2_ON/OFF_Sts_Rtn	ACCJ103	78	RWL-Psts	
SK04J02	27	RWL2/EGSE_ON/OFF_Sts	RWL2J02	16		RWL-ON/OFF-Status
SK04J02	28	RWL2/EGSE_ON/OFF_Sts_Rtn	RWL2J02	19		RWL-ON/OFF-Status
SK04J02	29	EGSE/ACC_RWL2_Speed_Direction_Mnt	ACCJ103	57	RWL-Sd	
SK04J02	30	EGSE/ACC_RWL2_Speed_Direction_Mnt_Rtn	ACCJ103	77	RWL-Sd	
SK04J02	31	EGSE/ACC_RWL2_Motor_Current_Mnt_Rtn	ACCJ063	38		
SK04J02	32	EGSE/ACC_RWL2_Tachometer_Mnt	ACCJ103	56	RWL-S	
SK04J02	33	EGSE/ACC_RWL2_Tachometer_Mnt_Rtn	ACCJ103	76	RWL-S	
SK04J02	36	RWL2/EGSE_Speed_Direction_Mnt	RWL2J02	17		SD-input
SK04J02	37	RWL2/EGSE_Speed_Direction_Mnt_Rtn	RWL2J02	19		SD-input

SK04J02	38	EGSE/RWL2_Torque_Direction_Cmd	RWL2J02	18		RWL-Td-input
SK04J02	39	EGSE/RWL2_Torque_Direction_Cmd_Rtn	RWL2J02	19		RWL-Td-input
SK04J02	40	RWL2/EGSE_Tachometer_Mnt	RWL2J02	2		RWL-Tacho-input
SK04J02	41	RWL2/EGSE_Tachometer_Mnt_Rtn	RWL2J02	19		RWL-Tacho-input
SK04J02	44	RWL2/EGSE_Motor_Current_Mnt	RWL2J02	4		RWL-M
SK04J02	45	RWL2/EGSE_Motor_Current_Mnt_Rtn	RWL2J02	7		RWL-M
SK04J02	46	EGSE/RWL2_Torque_Cmd_Rtn	RWL2J02	7		RWL-T-input
SK04J02	47	EGSE/RWL2_ON_Red_Cmd	RWL2J02	23		RWL_ON/OFF_input
SK04J02	48	EGSE/RWL2_ON_Red_Cmd_Rtn	RWL2J02	25		RWL_ON/OFF_input
SK04J02	49	ACC/EGSE_RWL2_OFF_Red_Cmd	ACCJ045	45	HP_Cmd	
SK04J02	50	ACC/EGSE_RWL2_OFF_Red_Cmd_Rtn	ACCJ045	46	HP_Cmd	
SK04J02	51	EGSE/RWL2_OFF_Red_Cmd_Rtn	RWL2J02	25		RWL_ON/OFF_input
SK04J02	52	EGSE/RWL2_Torque_Cmd	RWL2J02	5		RWL-T-input
SK04J02	53	ACC/EGSE_RWL2_ON_Red_Cmd	ACCJ045	44	HP_Cmd	
SK04J02	54	ACC/EGSE_RWL2_ON_Red_Cmd_Rtn	ACCJ045	43	HP_Cmd	
SK04J02	55	EGSE/RWL2_OFF_Red_Cmd	RWL2J02	24		RWL_ON/OFF_input
SK04J02	BKSH	ACC/EGSE_RWL2_Torque_Direction_Cmd	ACCJ103	BKSH	Shield	Shield
SK04J02	BKSH	EGSE/ACC_RWL2_Therm_Mnt	ACCJ063	BKSH	Shield	Shield
SK04J02	BKSH	RWL2/EGSE_Motor_Current_Mnt	RWL2J02	BKSH	Shield	Shield
SK04J02	BKSH	RWL2/EGSE_ON/OFF_Sts	RWL2J02	BKSH	Shield	Shield
SK04J02	BKSH	RWL2/EGSE_Speed_Direction_Mnt	RWL2J02	BKSH	Shield	Shield
SK04J02	BKSH	RWL2/EGSE_Tachometer_Mnt	RWL2J02	BKSH	Shield	Shield
SK04J02	BKSH	ACC/EGSE_RWL2_Torque_Cmd	ACCJ103	BKSH	Shield	Shield
SK04J02	BKSH	EGSE/ACC_RWL2_Motor_Current_Mnt	ACCJ063	BKSH	Shield	Shield
SK04J02	BKSH	EGSE/ACC_RWL2_ON/OFF_Sts	ACCJ103	BKSH	Shield	Shield
SK04J02	BKSH	EGSE/ACC_RWL2_Speed_Direction_Mnt	ACCJ103	BKSH	Shield	Shield
SK04J02	BKSH	EGSE/ACC_RWL2_Tachometer_Mnt	ACCJ103	BKSH	Shield	Shield
SK04J02	BKSH	EGSE/RWL2_Torque_Cmd	RWL2J02	BKSH	Shield	Shield
SK04J02	BKSH	EGSE/RWL2_Torque_Direction_Cmd	RWL2J02	BKSH	Shield	Shield
SK04J02	BKSH	RWL2/EGSE_Therm_Mnt	RWL2J02	BKSH	Shield	Shield

4.1.21 Satellite Level Skin Connector SK04 J03 ACC – RWL3

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
SK04J03	1	EGSE/ACC_RWL3_Therm_Mnt	ACCJ071	58	Therm_Mnt	
SK04J03	2	EGSE/ACC_RWL3_Therm_Mnt_Rtn	ACCJ071	78	Therm_Mnt	
SK04J03	3	RWL3/EGSE_Therm_Mnt	RWL3J02	14		Thermistor
SK04J03	9	RWL3/EGSE_Therm_Mnt_Rtn	RWL3J02	15		Thermistor
SK04J03	10	ACC/EGSE_RWL3_ON_Nom_Cmd	ACCJ035	30		
SK04J03	11	ACC/EGSE_RWL3_ON_Nom_Cmd_Rtn	ACCJ035	29	HP_Cmd	
SK04J03	12	EGSE/RWL3_ON_Nom_Cmd	RWL3J02	11	HP_Cmd	RWL_ON/OFF_input
SK04J03	13	EGSE/RWL3_ON_Nom_Cmd_Rtn	RWL3J02	13		RWL_ON/OFF_input
SK04J03	14	ACC/EGSE_RWL3_Torque_Cmd	ACCJ111	17	HP_Cmd	
SK04J03	17	ACC/EGSE_RWL3_OFF_Nom_Cmd	ACCJ035	31	HP_Cmd	
SK04J03	18	ACC/EGSE_RWL3_OFF_Nom_Cmd_Rtn	ACCJ035	32	HP_Cmd	
SK04J03	19	EGSE/RWL3_OFF_Nom_Cmd	RWL3J02	12		RWL_ON/OFF_input
SK04J03	20	EGSE/RWL3_OFF_Nom_Cmd_Rtn	RWL3J02	13		RWL_ON/OFF_input
SK04J03	21	ACC/EGSE_RWL3_Torque_Cmd_Rtn	ACCJ111	37	HP_Cmd	RWL-T-input
SK04J03	22	ACC/EGSE_RWL3_Torque_Direction_Cmd	ACCJ111	18	HP_Cmd	
SK04J03	23	ACC/EGSE_RWL3_Torque_Direction_Cmd_Rtn	ACCJ111	38	HP_Cmd	
SK04J03	24	EGSE/ACC_RWL3_Motor_Current_Mnt	ACCJ071	18		
SK04J03	25	EGSE/ACC_RWL3_ON/OFF_Sts	ACCJ111	58	RWL-Psts	
SK04J03	26	EGSE/ACC_RWL3_ON/OFF_Sts_Rtn	ACCJ111	78	RWL-Psts	
SK04J03	27	RWL3/EGSE_ON/OFF_Sts	RWL3J02	16		RWL-ON/OFF-Status
SK04J03	28	RWL3/EGSE_ON/OFF_Sts_Rtn	RWL3J02	19		RWL-ON/OFF-Status
SK04J03	29	EGSE/ACC_RWL3_Speed_Direction_Mnt	ACCJ111	57	RWL-Sd	
SK04J03	30	EGSE/ACC_RWL3_Speed_Direction_Mnt_Rtn	ACCJ111	77	RWL-Sd	
SK04J03	31	EGSE/ACC_RWL3_Motor_Current_Mnt_Rtn	ACCJ071	38		
SK04J03	32	EGSE/ACC_RWL3_Tachometer_Mnt	ACCJ111	56	RWL-S	
SK04J03	33	EGSE/ACC_RWL3_Tachometer_Mnt_Rtn	ACCJ111	76	RWL-S	
SK04J03	36	RWL3/EGSE_Speed_Direction_Mnt	RWL3J02	17		SD-input

SK04J03	37	RWL3/EGSE_Speed_Direction_Mnt_Rtn	RWL3J02	19		SD-input
SK04J03	38	EGSE/RWL3_Torque_Direction_Cmd	RWL3J02	18		RWL-Td-input
SK04J03	39	EGSE/RWL3_Torque_Direction_Cmd_Rtn	RWL3J02	19		RWL-Td-input
SK04J03	40	RWL3/EGSE_Tachometer_Mnt	RWL3J02	2		RWL-Tacho-input
SK04J03	41	RWL3/EGSE_Tachometer_Mnt_Rtn	RWL3J02	19		RWL-Tacho-input
SK04J03	44	RWL3/EGSE_Motor_Current_Mnt	RWL3J02	4		RWL-M
SK04J03	45	RWL3/EGSE_Motor_Current_Mnt_Rtn	RWL3J02	7		RWL-M
SK04J03	46	EGSE/RWL3_Torque_Cmd_Rtn	RWL3J02	7		RWL-T-input
SK04J03	47	EGSE/RWL3_ON_Red_Cmd	RWL3J02	23		RWL_ON/OFF_input
SK04J03	48	EGSE/RWL3_ON_Red_Cmd_Rtn	RWL3J02	25		RWL_ON/OFF_input
SK04J03	49	ACC/EGSE_RWL3_OFF_Red_Cmd	ACCJ045	31	HP_Cmd	
SK04J03	50	ACC/EGSE_RWL3_OFF_Red_Cmd_Rtn	ACCJ045	32	HP_Cmd	
SK04J03	51	EGSE/RWL3_OFF_Red_Cmd_Rtn	RWL3J02	25		RWL_ON/OFF_input
SK04J03	52	EGSE/RWL3_Torque_Cmd	RWL3J02	5		RWL-T-input
SK04J03	53	ACC/EGSE_RWL3_ON_Red_Cmd	ACCJ045	30	HP_Cmd	
SK04J03	54	ACC/EGSE_RWL3_ON_Red_Cmd_Rtn	ACCJ045	29	HP_Cmd	
SK04J03	55	EGSE/RWL3_OFF_Red_Cmd	RWL3J02	24		RWL_ON/OFF_input
SK04J03	BKSH	ACC/EGSE_RWL3_Torque_Direction_Cmd	ACCJ111	BKSH	Shield	Shield
SK04J03	BKSH	EGSE/ACC_RWL3_Therm_Mnt	ACCJ071	BKSH	Shield	Shield
SK04J03	BKSH	RWL3/EGSE_Motor_Current_Mnt	RWL3J02	BKSH	Shield	Shield
SK04J03	BKSH	RWL3/EGSE_ON/OFF_Sts	RWL3J02	BKSH	Shield	Shield
SK04J03	BKSH	RWL3/EGSE_Speed_Direction_Mnt	RWL3J02	BKSH	Shield	Shield
SK04J03	BKSH	RWL3/EGSE_Tachometer_Mnt	RWL3J02	BKSH	Shield	Shield
SK04J03	BKSH	ACC/EGSE_RWL3_Torque_Cmd	ACCJ111	BKSH	Shield	Shield
SK04J03	BKSH	EGSE/ACC_RWL3_Motor_Current_Mnt	ACCJ071	BKSH	Shield	Shield
SK04J03	BKSH	EGSE/ACC_RWL3_ON/OFF_Sts	ACCJ111	BKSH	Shield	Shield
SK04J03	BKSH	EGSE/ACC_RWL3_Speed_Direction_Mnt	ACCJ111	BKSH	Shield	Shield
SK04J03	BKSH	EGSE/ACC_RWL3_Tachometer_Mnt	ACCJ111	BKSH	Shield	Shield
SK04J03	BKSH	EGSE/RWL3_Torque_Cmd	RWL3J02	BKSH	Shield	Shield
SK04J03	BKSH	EGSE/RWL3_Torque_Direction_Cmd	RWL3J02	BKSH	Shield	Shield
SK04J03	BKSH	RWL3/EGSE_Therm_Mnt	RWL3J02	BKSH	Shield	Shield

4.1.22 Satellite Level Skin Connector SK04 J04 ACC – RWL4

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
SK04J04	1	EGSE/ACC_RWL4_Therm_Mnt	ACCJ073	58	Therm_Mnt	
SK04J04	2	EGSE/ACC_RWL4_Therm_Mnt_Rtn	ACCJ073	78	Therm_Mnt	
SK04J04	3	RWL4/EGSE_Therm_Mnt	RWL4J02	14		Thermistor
SK04J04	9	RWL4/EGSE_Therm_Mnt_Rtn	RWL4J02	15		Thermistor
SK04J04	10	ACC/EGSE_RWL4_ON_Nom_Cmd	ACCJ035	50		
SK04J04	11	ACC/EGSE_RWL4_ON_Nom_Cmd_Rtn	ACCJ035	49	HP_Cmd	
SK04J04	12	EGSE/RWL4_ON_Nom_Cmd	RWL4J02	11	HP_Cmd	RWL_ON/OFF_input
SK04J04	13	EGSE/RWL4_ON_Nom_Cmd_Rtn	RWL4J02	13		RWL_ON/OFF_input
SK04J04	14	ACC/EGSE_RWL4_Torque_Cmd	ACCJ113	17	HP_Cmd	
SK04J04	17	ACC/EGSE_RWL4_OFF_Nom_Cmd	ACCJ035	51	HP_Cmd	
SK04J04	18	ACC/EGSE_RWL4_OFF_Nom_Cmd_Rtn	ACCJ035	52	HP_Cmd	
SK04J04	19	EGSE/RWL4_OFF_Nom_Cmd	RWL4J02	12		RWL_ON/OFF_input
SK04J04	20	EGSE/RWL4_OFF_Nom_Cmd_Rtn	RWL4J02	13		RWL_ON/OFF_input
SK04J04	21	ACC/EGSE_RWL4_Torque_Cmd_Rtn	ACCJ113	37	HP_Cmd	RWL-T-input
SK04J04	22	ACC/EGSE_RWL4_Torque_Direction_Cmd	ACCJ113	18	HP_Cmd	
SK04J04	23	ACC/EGSE_RWL4_Torque_Direction_Cmd_Rtn	ACCJ113	38	HP_Cmd	
SK04J04	24	EGSE/ACC_RWL4_Motor_Current_Mnt	ACCJ073	18		
SK04J04	25	EGSE/ACC_RWL4_ON/OFF_Sts	ACCJ113	58	RWL-Psts	
SK04J04	26	EGSE/ACC_RWL4_ON/OFF_Sts_Rtn	ACCJ113	78	RWL-Psts	
SK04J04	27	RWL4/EGSE_ON/OFF_Sts	RWL4J02	16		RWL-ON/OFF-Status
SK04J04	28	RWL4/EGSE_ON/OFF_Sts_Rtn	RWL4J02	19		RWL-ON/OFF-Status
SK04J04	29	EGSE/ACC_RWL4_Speed_Direction_Mnt	ACCJ113	57	RWL-Sd	
SK04J04	30	EGSE/ACC_RWL4_Speed_Direction_Mnt_Rtn	ACCJ113	77	RWL-Sd	
SK04J04	31	EGSE/ACC_RWL4_Motor_Current_Mnt_Rtn	ACCJ073	38		
SK04J04	32	EGSE/ACC_RWL4_Tachometer_Mnt	ACCJ113	56	RWL-S	
SK04J04	33	EGSE/ACC_RWL4_Tachometer_Mnt_Rtn	ACCJ113	76	RWL-S	
SK04J04	36	RWL4/EGSE_Speed_Direction_Mnt	RWL4J02	17		SD-input
SK04J04	37	RWL4/EGSE_Speed_Direction_Mnt_Rtn	RWL4J02	19		SD-input
SK04J04	38	EGSE/RWL4_Torque_Direction_Cmd	RWL4J02	18		RWL-Td-input
SK04J04	39	EGSE/RWL4_Torque_Direction_Cmd_Rtn	RWL4J02	19		RWL-Td-input
SK04J04	40	RWL4/EGSE_Tachometer_Mnt	RWL4J02	2		RWL-Tacho-input

SK04J04	41	RWL4/EGSE_Tachometer_Mnt_Rtn	RWL4J02	19		RWL-Tacho-input
SK04J04	44	RWL4/EGSE_Motor_Current_Mnt	RWL4J02	4		RWL-M
SK04J04	45	RWL4/EGSE_Motor_Current_Mnt_Rtn	RWL4J02	7		RWL-M
SK04J04	46	EGSE/RWL4_Torque_Cmd_Rtn	RWL4J02	7		RWL-T-input
SK04J04	47	EGSE/RWL4_ON_Red_Cmd	RWL4J02	23		RWL_ON/OFF_input
SK04J04	48	EGSE/RWL4_ON_Red_Cmd_Rtn	RWL4J02	25		RWL_ON/OFF_input
SK04J04	49	ACC/EGSE_RWL4_OFF_Red_Cmd	ACCJ045	51	HP_Cmd	
SK04J04	50	ACC/EGSE_RWL4_OFF_Red_Cmd_Rtn	ACCJ045	52	HP_Cmd	
SK04J04	51	EGSE/RWL4_OFF_Red_Cmd_Rtn	RWL4J02	25		RWL_ON/OFF_input
SK04J04	52	EGSE/RWL4_Torque_Cmd	RWL4J02	5		RWL-T-input
SK04J04	53	ACC/EGSE_RWL4_ON_Red_Cmd	ACCJ045	50	HP_Cmd	
SK04J04	54	ACC/EGSE_RWL4_ON_Red_Cmd_Rtn	ACCJ045	49	HP_Cmd	
SK04J04	55	EGSE/RWL4_OFF_Red_Cmd	RWL4J02	24		RWL_ON/OFF_input
SK04J04	BKSH	ACC/EGSE_RWL4_Torque_Direction_Cmd	ACCJ113	BKSH	Shield	Shield
SK04J04	BKSH	EGSE/ACC_RWL4_Therm_Mnt	ACCJ073	BKSH	Shield	Shield
SK04J04	BKSH	RWL4/EGSE_Motor_Current_Mnt	RWL4J02	BKSH	Shield	Shield
SK04J04	BKSH	RWL4/EGSE_ON/OFF_Sts	RWL4J02	BKSH	Shield	Shield
SK04J04	BKSH	RWL4/EGSE_Speed_Direction_Mnt	RWL4J02	BKSH	Shield	Shield
SK04J04	BKSH	RWL4/EGSE_Tachometer_Mnt	RWL4J02	BKSH	Shield	Shield
SK04J04	BKSH	ACC/EGSE_RWL4_Torque_Cmd	ACCJ113	BKSH	Shield	Shield
SK04J04	BKSH	EGSE/ACC_RWL4_Motor_Current_Mnt	ACCJ073	BKSH	Shield	Shield
SK04J04	BKSH	EGSE/ACC_RWL4_ON/OFF_Sts	ACCJ113	BKSH	Shield	Shield
SK04J04	BKSH	EGSE/ACC_RWL4_Speed_Direction_Mnt	ACCJ113	BKSH	Shield	Shield
SK04J04	BKSH	EGSE/ACC_RWL4_Tachometer_Mnt	ACCJ113	BKSH	Shield	Shield
SK04J04	BKSH	EGSE/RWL4_Torque_Cmd	RWL4J02	BKSH	Shield	Shield
SK04J04	BKSH	EGSE/RWL4_Torque_Direction_Cmd	RWL4J02	BKSH	Shield	Shield
SK04J04	BKSH	RWL4/EGSE_Therm_Mnt	RWL4J02	BKSH	Shield	Shield

4.1.23 Satellite Level Skin Connector SK05 J01 CRS1 – ACC

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK05J01	1	CRS1/EGSE_Ang_X_Meas	CRS1J03	1		CRS_Output
SK05J01	2	CRS1/EGSE_Ang_X_Meas RTN	CRS1J03	6		CRS_Output
SK05J01	3	CRS1/EGSE_Ang_Y_Meas	CRS1J03	3		CRS_Output
SK05J01	4	CRS1/EGSE_Ang_Y_Meas RTN	CRS1J03	8		CRS_Output
SK05J01	5	CRS1/EGSE_Ang_Z_Meas	CRS1J03	5		CRS_Output
SK05J01	6	CRS1/EGSE_Ang_Z_Meas RTN	CRS1J03	10		CRS_Output
SK05J01	9	EGSE/ACC_CRS1_Ang_Z_Meas RTN	ACCJ133	8		CRS_Meas
SK05J01	10	EGSE/ACC_CRS1_Ang_Z_Meas	ACCJ133	3		CRS_Meas
SK05J01	11	EGSE/ACC_CRS1_Ang_Y_Meas	ACCJ133	2		CRS_Meas
SK05J01	12	EGSE/ACC_CRS1_Ang_Y_Meas RTN	ACCJ133	7		CRS_Meas
SK05J01	13	EGSE/ACC_CRS1_Ang_X_Meas RTN	ACCJ133	6		CRS_Meas
SK05J01	14	EGSE/ACC_CRS1_Ang_X_Meas	ACCJ133	1		CRS_Meas
SK05J01	16	CRS1/EGSE_Therm_Mnt	CRS1J02	15		Therm_Mnt
SK05J01	17	CRS1/EGSE_Therm_Mnt	CRS1J02	10		Therm_Mnt
SK05J01	19	EGSE/ACC_CRS1_Therm_Mnt	ACCJ061	15		Therm_Mnt
SK05J01	20	EGSE/ACC_CRS1_Therm_Mnt RTN	ACCJ061	35		Therm_Mnt
SK05J01	BKSH	Shield_for_CRS1/EGSE_Ang_X_Meas	CRS1J03	BKSH		Shield
SK05J01	BKSH	Shield_for_CRS1/EGSE_Ang_Y_Meas	CRS1J03	BKSH		Shield
SK05J01	BKSH	Shield_for_CRS1/EGSE_Ang_Z_Meas	CRS1J03	BKSH		Shield
SK05J01	BKSH	Shield_for_CRS1/EGSE_Therm_Mnt	CRS1J02	BKSH		Shield
SK05J01	BKSH	Shield_for_EGSE/ACC_CRS1_Ang_X_Meas	ACCJ133	BKSH		Shield
SK05J01	BKSH	Shield_for_EGSE/ACC_CRS1_Ang_Y_Meas	ACCJ133	BKSH		Shield
SK05J01	BKSH	Shield_for_EGSE/ACC_CRS1_Ang_Z_Meas	ACCJ133	BKSH		Shield
SK05J01	BKSH	Shield_for_EGSE/ACC_CRS1_Therm_Mnt	ACCJ061	BKSH		Shield

4.1.24 Satellite Level Skin Connector SK05 J02 CRS2 – ACC

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK05J02	1	CRS2/EGSE_Ang_X_Meas	CRS2J03	1		CRS_Output
SK05J02	2	CRS2/EGSE_Ang_X_Meas RTN	CRS2J03	6		CRS_Output
SK05J02	3	CRS2/EGSE_Ang_Y_Meas	CRS2J03	3		CRS_Output
SK05J02	4	CRS2/EGSE_Ang_Y_Meas RTN	CRS2J03	8		CRS_Output
SK05J02	5	CRS2/EGSE_Ang_Z_Meas	CRS2J03	5		CRS_Output
SK05J02	6	CRS2/EGSE_Ang_Z_Meas RTN	CRS2J03	10		CRS_Output
SK05J02	9	EGSE/ACC_CRS2_Ang_Z_Meas RTN	ACCJ134	8		CRS_Meas
SK05J02	10	EGSE/ACC_CRS2_Ang_Z_Meas	ACCJ134	3		CRS_Meas
SK05J02	11	EGSE/ACC_CRS2_Ang_Y_Meas	ACCJ134	2		CRS_Meas
SK05J02	12	EGSE/ACC_CRS2_Ang_Y_Meas RTN	ACCJ134	7		CRS_Meas
SK05J02	13	EGSE/ACC_CRS2_Ang_X_Meas RTN	ACCJ134	6		CRS_Meas
SK05J02	14	EGSE/ACC_CRS2_Ang_X_Meas	ACCJ134	1		CRS_Meas
SK05J02	16	CRS2/EGSE_Therm_Mnt	CRS2J02	15		Therm_Mnt
SK05J02	17	CRS2/EGSE_Therm_Mnt	CRS2J02	10		Therm_Mnt
SK05J02	19	EGSE/ACC_CRS2_Therm_Mnt	ACCJ063	8		Therm_Mnt
SK05J02	20	EGSE/ACC_CRS2_Therm_Mnt RTN	ACCJ063	28		Therm_Mnt
SK05J02	BKSH	Shield_for_CRS2/EGSE_Ang_X_Meas	CRS2J03	BKSH		Shield
SK05J02	BKSH	Shield_for_CRS2/EGSE_Ang_Y_Meas	CRS2J03	BKSH		Shield
SK05J02	BKSH	Shield_for_CRS2/EGSE_Ang_Z_Meas	CRS2J03	BKSH		Shield
SK05J02	BKSH	Shield_for_CRS2/EGSE_Therm_Mnt	CRS2J02	BKSH		Shield
SK05J02	BKSH	Shield_for_EGSE/ACC_CRS2_Ang_X_Meas	ACCJ134	BKSH		Shield
SK05J02	BKSH	Shield_for_EGSE/ACC_CRS2_Ang_Y_Meas	ACCJ134	BKSH		Shield
SK05J02	BKSH	Shield_for_EGSE/ACC_CRS2_Ang_Z_Meas	ACCJ134	BKSH		Shield
SK05J02	BKSH	Shield_for_EGSE/ACC_CRS2_Therm_Mnt	ACCJ063	BKSH		Shield

4.1.25 Satellite Level Skin Connector SK05 J03 GYR Serial Test Interfaces

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
SK05J03	1	EGSE/GYR_A_RS422_In_Comp	GYRJ01A	12	SBDL	
SK05J03	2	EGSE/GYR_A_RS422_In_True	GYRJ01A	13	SBDL	
SK05J03	3	GYR_A/EGSE_RS422_Out_Comp	GYRJ01A	5	SBDL	
SK05J03	4	GYR_A/EGSE_RS422_Out_True	GYRJ01A	6	SBDL	
SK05J03	5	EGSE/GYR_A_Serial_Test_A_(TBD_LINES)_Comp	GYRJ01A	TBD	TBD	
SK05J03	6	EGSE/GYR_A_Serial_Test_A_(TBD_LINES)_True	GYRJ01A	TBD	TBD	
SK05J03	8	EGSE/GYR_B_RS422_In_Comp	GYRJ01B	12	SBDL	
SK05J03	9	EGSE/GYR_B_RS422_In_True	GYRJ01B	13	SBDL	
SK05J03	10	GYR_B/EGSE_RS422_Out_Comp	GYRJ01B	5	SBDL	
SK05J03	11	GYR_B/EGSE_RS422_Out_True	GYRJ01B	6	SBDL	
SK05J03	12	EGSE/GYR_B_Serial_Test_B_(TBD_LINES)_Comp	GYRJ01B	TBD	TBD	
SK05J03	13	EGSE/GYR_B_Serial_Test_B_(TBD_LINES)_True	GYRJ01B	TBD	TBD	
SK05J03	BKSH	GYR_A/EGSE_RS422_Out	GYRJ01A	BKSH	Shield	Shield
SK05J03	BKSH	GYR_B/EGSE_RS422_Out	GYRJ01B	BKSH	Shield	Shield
SK05J03	BKSH	EGSE/GYR_A_RS422_In	GYRJ01A	BKSH	Shield	Shield
SK05J03	BKSH	EGSE/GYR_A_Serial_Test_A_(TBD_LINES)	GYRJ01A	BKSH	Shield	Shield
SK05J03	BKSH	EGSE/GYR_B_RS422_In	GYRJ01B	BKSH	Shield	Shield
SK05J03	BKSH	EGSE/GYR_B_Serial_Test_B_(TBD_LINES)	GYRJ01B	BKSH	Shield	Shield

4.1.26 Satellite Level Skin Connector SK05 J04 CRS1 Stimuli

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK05J04	4	EGSE/CRS1_X-Chan_TE_Stimuli	CRS1J04	1		CRS_Stim_input
SK05J04	5	EGSE/CRS1_X-Chan_TE_Stimuli RTN	CRS1J04	6		CRS_Stim_input
SK05J04	6	EGSE/CRS1_Y-Chan_TE_Stimuli	CRS1J04	2		CRS_Stim_input
SK05J04	7	EGSE/CRS1_Y-Chan_TE_Stimuli RTN	CRS1J04	7		CRS_Stim_input
SK05J04	8	EGSE/CRS1_Z-Chan_TE_Stimuli	CRS1J04	3		CRS_Stim_input
SK05J04	9	EGSE/CRS1_Z-Chan_TE_Stimuli RTN	CRS1J04	8		CRS_Stim_input
SK05J04	17	EGSE/CRS2_X-Chan_TE_Stimuli	CRS2J04	1		CRS_Stim_input
SK05J04	18	EGSE/CRS2_X-Chan_TE_Stimuli RTN	CRS2J04	6		CRS_Stim_input
SK05J04	19	EGSE/CRS2_Y-Chan_TE_Stimuli	CRS2J04	2		CRS_Stim_input
SK05J04	20	EGSE/CRS2_Y-Chan_TE_Stimuli RTN	CRS2J04	7		CRS_Stim_input
SK05J04	21	EGSE/CRS2_Z-Chan_TE_Stimuli	CRS2J04	3		CRS_Stim_input
SK05J04	22	EGSE/CRS2_Z-Chan_TE_Stimuli RTN	CRS2J04	8		CRS_Stim_input
SK05J04	32	EGSE/CRS3_X-Chan_TE_Stimuli	CRS3J04	1		CRS_Stim_input
SK05J04	33	EGSE/CRS3_X-Chan_TE_Stimuli RTN	CRS3J04	6		CRS_Stim_input
SK05J04	34	EGSE/CRS3_Y-Chan_TE_Stimuli	CRS3J04	2		CRS_Stim_input
SK05J04	35	EGSE/CRS3_Y-Chan_TE_Stimuli RTN	CRS3J04	7		CRS_Stim_input
SK05J04	36	EGSE/CRS3_Z-Chan_TE_Stimuli	CRS3J04	3		CRS_Stim_input
SK05J04	37	EGSE/CRS3_Z-Chan_TE_Stimuli RTN	CRS3J04	8		CRS_Stim_input

4.1.27 Satellite Level Skin Connector SK05 J05 AAD – ACC

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK05J05	1	AAD/EGSE_PH_Conical_Mnt	AADJ01	5		AAD_Output
SK05J05	2	AAD/EGSE_PH_Conical_Mnt RTN	AADJ01	9		AAD_Output
SK05J05	3	EGSE/ACC_AAD_PH_Conical_Mnt Cathode	ACCJ133	14		AAD_Mnt
SK05J05	4	EGSE/ACC_AAD_PH_Conical_Mnt Anode	ACCJ133	13		AAD_Mnt
SK05J05	BKSH	Shield_for_AAD/EGSE_PH_Conical_Mnt	AADJ01	BKSH		Shield
SK05J05	BKSH	Shield_for_EGSE/ACC_AAD_PH_Conical_Mnt	ACCJ133	BKSH		Shield

4.1.28 Satellite Level Skin Connector SK05 J06 SAS1 & SAS2 – ACC

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK05J06	1	EGSE/ACC_SAS1_PH1_Nom_Mnt Anode	ACCJ063	2		SAS_Mnt
SK05J06	2	EGSE/ACC_SAS1_PH1_Nom_Mnt Cathode	ACCJ063	22		SAS_Mnt
SK05J06	3	EGSE/ACC_SAS1_PH2_Nom_Mnt Anode	ACCJ063	41		SAS_Mnt
SK05J06	4	EGSE/ACC_SAS1_PH2_Nom_Mnt Cathode	ACCJ063	61		SAS_Mnt
SK05J06	5	EGSE/ACC_SAS1_PH3_Nom_Mnt Anode	ACCJ063	3		SAS_Mnt
SK05J06	6	EGSE/ACC_SAS1_PH3_Nom_Mnt Cathode	ACCJ063	23		SAS_Mnt
SK05J06	7	EGSE/ACC_SAS1_PH4_Nom_Mnt Anode	ACCJ063	42		SAS_Mnt
SK05J06	8	EGSE/ACC_SAS1_PH4_Nom_Mnt Cathode	ACCJ063	62		SAS_Mnt
SK05J06	11	EGSE/ACC_SAS2_PH4_Nom_Mnt Anode	ACCJ063	45		SAS_Mnt
SK05J06	12	EGSE/ACC_SAS2_PH4_Nom_Mnt Cathode	ACCJ063	65		SAS_Mnt
SK05J06	13	EGSE/ACC_SAS2_PH3_Nom_Mnt Anode	ACCJ063	6		SAS_Mnt
SK05J06	14	EGSE/ACC_SAS2_PH3_Nom_Mnt Cathode	ACCJ063	26		SAS_Mnt
SK05J06	15	EGSE/ACC_SAS2_PH2_Nom_Mnt Anode	ACCJ063	44		SAS_Mnt
SK05J06	16	EGSE/ACC_SAS2_PH2_Nom_Mnt Cathode	ACCJ063	64		SAS_Mnt
SK05J06	17	EGSE/ACC_SAS2_PH1_Nom_Mnt Anode	ACCJ063	5		SAS_Mnt
SK05J06	18	EGSE/ACC_SAS2_PH1_Nom_Mnt Cathode	ACCJ063	25		SAS_Mnt
SK05J06	19	SAS1/EGSE_PH1_Nom_Mnt	SAS1J01	8		SAS_Output
SK05J06	20	SAS1/EGSE_PH1_Nom_Mnt RTN	SAS1J01	15		SAS_Output
SK05J06	21	SAS1/EGSE_PH2_Nom_Mnt	SAS1J01	7		SAS_Output
SK05J06	22	SAS1/EGSE_PH2_Nom_Mnt RTN	SAS1J01	15		SAS_Output
SK05J06	23	SAS1/EGSE_PH3_Nom_Mnt	SAS1J01	13		SAS_Output
SK05J06	24	SAS1/EGSE_PH3_Nom_Mnt RTN	SAS1J01	14		SAS_Output
SK05J06	25	SAS2/EGSE_PH3_Nom_Mnt	SAS2J01	13		SAS_Output
SK05J06	26	SAS2/EGSE_PH3_Nom_Mnt RTN	SAS2J01	14		SAS_Output
SK05J06	27	SAS2/EGSE_PH2_Nom_Mnt	SAS2J01	7		SAS_Output
SK05J06	28	SAS2/EGSE_PH2_Nom_Mnt RTN	SAS2J01	15		SAS_Output
SK05J06	29	SAS2/EGSE_PH1_Nom_Mnt	SAS2J01	8		SAS_Output

SK05J06	30	SAS2/EGSE_PH1_Nom_Mnt RTN	SAS2J01	15		SAS_Output
SK05J06	32	SAS1/EGSE_PH4_Nom_Mnt	SAS1J01	6		SAS_Output
SK05J06	33	SAS1/EGSE_PH4_Nom_Mnt RTN	SAS1J01	14		SAS_Output
SK05J06	34	SAS2/EGSE_PH4_Nom_Mnt	SAS2J01	6		SAS_Output
SK05J06	35	SAS2/EGSE_PH4_Nom_Mnt RTN	SAS2J01	14		SAS_Output
SK05J06	BKSH	Shield_for_EGSE/ACC_SAS1_PH1_Nom_Mnt	ACCJ063	BKSH		Shield
SK05J06	BKSH	Shield_for_EGSE/ACC_SAS1_PH2_Nom_Mnt	ACCJ063	BKSH		Shield
SK05J06	BKSH	Shield_for_EGSE/ACC_SAS1_PH3_Nom_Mnt	ACCJ063	BKSH		Shield
SK05J06	BKSH	Shield_for_EGSE/ACC_SAS1_PH4_Nom_Mnt	ACCJ063	BKSH		Shield
SK05J06	BKSH	Shield_for_EGSE/ACC_SAS2_PH1_Nom_Mnt	ACCJ063	BKSH		Shield
SK05J06	BKSH	Shield_for_EGSE/ACC_SAS2_PH2_Nom_Mnt	ACCJ063	BKSH		Shield
SK05J06	BKSH	Shield_for_EGSE/ACC_SAS2_PH3_Nom_Mnt	ACCJ063	BKSH		Shield
SK05J06	BKSH	Shield_for_EGSE/ACC_SAS2_PH4_Nom_Mnt	ACCJ063	BKSH		Shield
SK05J06	BKSH	Shield_for_SAS1/EGSE_PH1_Nom_Mnt	SAS1J01	BKSH		Shield
SK05J06	BKSH	Shield_for_SAS1/EGSE_PH2_Nom_Mnt	SAS1J01	BKSH		Shield
SK05J06	BKSH	Shield_for_SAS1/EGSE_PH3_Nom_Mnt	SAS1J01	BKSH		Shield
SK05J06	BKSH	Shield_for_SAS1/EGSE_PH4_Nom_Mnt	SAS1J01	BKSH		Shield
SK05J06	BKSH	Shield_for_SAS2/EGSE_PH1_Nom_Mnt	SAS2J01	BKSH		Shield
SK05J06	BKSH	Shield_for_SAS2/EGSE_PH2_Nom_Mnt	SAS2J01	BKSH		Shield
SK05J06	BKSH	Shield_for_SAS2/EGSE_PH3_Nom_Mnt	SAS2J01	BKSH		Shield
SK05J06	BKSH	Shield_for_SAS2/EGSE_PH4_Nom_Mnt	SAS2J01	BKSH		Shield

4.1.29 Satellite Level Skin Connector SK05 J07 SAS1 & SAS2 – ACC

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK05J07	1	EGSE/ACC_SAS1_PH1_Red_Mnt Anode	ACCJ073	2		SAS_Mnt
SK05J07	2	EGSE/ACC_SAS1_PH1_Red_Mnt Cathode	ACCJ073	22		SAS_Mnt
SK05J07	3	EGSE/ACC_SAS1_PH2_Red_Mnt Anode	ACCJ073	41		SAS_Mnt
SK05J07	4	EGSE/ACC_SAS1_PH2_Red_Mnt Cathode	ACCJ073	61		SAS_Mnt
SK05J07	5	EGSE/ACC_SAS1_PH3_Red_Mnt Anode	ACCJ073	3		SAS_Mnt
SK05J07	6	EGSE/ACC_SAS1_PH3_Red_Mnt Cathode	ACCJ073	23		SAS_Mnt
SK05J07	7	EGSE/ACC_SAS1_PH4_Red_Mnt Anode	ACCJ073	42		SAS_Mnt
SK05J07	8	EGSE/ACC_SAS1_PH4_Red_Mnt Cathode	ACCJ073	62		SAS_Mnt
SK05J07	11	EGSE/ACC_SAS2_PH4_Red_Mnt Anode	ACCJ073	45		SAS_Mnt
SK05J07	12	EGSE/ACC_SAS2_PH4_Red_Mnt Cathode	ACCJ073	65		SAS_Mnt
SK05J07	13	EGSE/ACC_SAS2_PH3_Red_Mnt Anode	ACCJ073	6		SAS_Mnt
SK05J07	14	EGSE/ACC_SAS2_PH3_Red_Mnt Cathode	ACCJ073	26		SAS_Mnt
SK05J07	15	EGSE/ACC_SAS2_PH2_Red_Mnt Anode	ACCJ073	44		SAS_Mnt
SK05J07	16	EGSE/ACC_SAS2_PH2_Red_Mnt Cathode	ACCJ073	64		SAS_Mnt
SK05J07	17	EGSE/ACC_SAS2_PH1_Red_Mnt Anode	ACCJ073	5		SAS_Mnt
SK05J07	18	EGSE/ACC_SAS2_PH1_Red_Mnt Cathode	ACCJ073	25		SAS_Mnt
SK05J07	19	SAS1/EGSE_PH1_Red_Mnt	SAS1J01	11		SAS_Output
SK05J07	20	SAS1/EGSE_PH1_Red_Mnt RTN	SAS1J01	10		SAS_Output
SK05J07	21	SAS1/EGSE_PH2_Red_Mnt	SAS1J01	3		SAS_Output
SK05J07	22	SAS1/EGSE_PH2_Red_Mnt RTN	SAS1J01	10		SAS_Output
SK05J07	23	SAS1/EGSE_PH3_Red_Mnt	SAS1J01	1		SAS_Output
SK05J07	24	SAS1/EGSE_PH3_Red_Mnt RTN	SAS1J01	9		SAS_Output
SK05J07	25	SAS2/EGSE_PH3_Red_Mnt	SAS2J01	1		SAS_Output
SK05J07	26	SAS2/EGSE_PH3_Red_Mnt RTN	SAS2J01	9		SAS_Output
SK05J07	27	SAS2/EGSE_PH2_Red_Mnt	SAS2J01	3		SAS_Output
SK05J07	28	SAS2/EGSE_PH2_Red_Mnt RTN	SAS2J01	10		SAS_Output
SK05J07	29	SAS2/EGSE_PH1_Red_Mnt	SAS2J01	11		SAS_Output
SK05J07	30	SAS2/EGSE_PH1_Red_Mnt RTN	SAS2J01	10		SAS_Output

SK05J07	32	SAS1/EGSE_PH4_Red_Mnt	SAS1J01	2		SAS_Output
SK05J07	33	SAS1/EGSE_PH4_Red_Mnt RTN	SAS1J01	9		SAS_Output
SK05J07	34	SAS2/EGSE_PH4_Red_Mnt	SAS2J01	2		SAS_Output
SK05J07	35	SAS2/EGSE_PH4_Red_Mnt RTN	SAS2J01	9		SAS_Output
SK05J07	BKSH	Shield_for_EGSE/ACC_SAS1_PH1_Red_Mnt	ACCJ073	BKSH		Shield
SK05J07	BKSH	Shield_for_EGSE/ACC_SAS1_PH2_Red_Mnt	ACCJ073	BKSH		Shield
SK05J07	BKSH	Shield_for_EGSE/ACC_SAS1_PH3_Red_Mnt	ACCJ073	BKSH		Shield
SK05J07	BKSH	Shield_for_EGSE/ACC_SAS1_PH4_Red_Mnt	ACCJ073	BKSH		Shield
SK05J07	BKSH	Shield_for_EGSE/ACC_SAS2_PH1_Red_Mnt	ACCJ073	BKSH		Shield
SK05J07	BKSH	Shield_for_EGSE/ACC_SAS2_PH2_Red_Mnt	ACCJ073	BKSH		Shield
SK05J07	BKSH	Shield_for_EGSE/ACC_SAS2_PH3_Red_Mnt	ACCJ073	BKSH		Shield
SK05J07	BKSH	Shield_for_EGSE/ACC_SAS2_PH4_Red_Mnt	ACCJ073	BKSH		Shield
SK05J07	BKSH	Shield_for_SAS1/EGSE_PH1_Red_Mnt	SAS1J01	BKSH		Shield
SK05J07	BKSH	Shield_for_SAS1/EGSE_PH2_Red_Mnt	SAS1J01	BKSH		Shield
SK05J07	BKSH	Shield_for_SAS1/EGSE_PH3_Red_Mnt	SAS1J01	BKSH		Shield
SK05J07	BKSH	Shield_for_SAS1/EGSE_PH4_Red_Mnt	SAS1J01	BKSH		Shield
SK05J07	BKSH	Shield_for_SAS2/EGSE_PH1_Red_Mnt	SAS2J01	BKSH		Shield
SK05J07	BKSH	Shield_for_SAS2/EGSE_PH2_Red_Mnt	SAS2J01	BKSH		Shield
SK05J07	BKSH	Shield_for_SAS2/EGSE_PH3_Red_Mnt	SAS2J01	BKSH		Shield
SK05J07	BKSH	Shield_for_SAS2/EGSE_PH4_Red_Mnt	SAS2J01	BKSH		Shield

4.1.30 Satellite Level Skin Connector SK05 J08 AAD – ACC

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK05J08	1	AAD/EGSE_PH_Square_Mnt	AADJ01	1		AAD_Output
SK05J08	2	AAD/EGSE_PH_Square_Mnt RTN	AADJ01	6		AAD_Output
SK05J08	3	EGSE/ACC_AAD_PH_Square_Mnt Cathode	ACCJ134	14		AAD_Mnt
SK05J08	4	EGSE/ACC_AAD_PH_Square_Mnt Anode	ACCJ134	13		AAD_Mnt
SK05J08	BKSH	Shield_for_AAD/EGSE_PH_Square_Mnt	AADJ01	BKSH		Shield
SK05J08	BKSH	Shield_for_EGSE/ACC_AAD_PH_Square_Mnt	ACCJ134	BKSH		Shield

4.1.31 Satellite Level Skin Connector SK06 J01 STR1 Stimuli

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK06J01	6	STR1/EGSE_JMP_Data_Len0	STR1J02	6		JUMPER
SK06J01	7	STR1/EGSE_AUX_CMD_CLK_Stimuli +	STR1J02	7		STR_Stim
SK06J01	8	STR1/EGSE_AUX_CMD_CLK_Stimuli -	STR1J02	8		STR_Stim
SK06J01	9	STR1/EGSE_AUX_CMD_WIN_Stimuli +	STR1J02	9		STR_Stim
SK06J01	10	STR1/EGSE_AUX_CMD_WIN_Stimuli -	STR1J02	10		STR_Stim
SK06J01	11	STR1/EGSE_AUX_CMD_OUT_Stimuli +	STR1J02	11		STR_Stim
SK06J01	12	STR1/EGSE_AUX_CMD_OUT_Stimuli -	STR1J02	12		STR_Stim
SK06J01	13	STR1/EGSE_AUX_SYNCHRO_Stimuli +	STR1J02	13		STR_Stim
SK06J01	14	STR1/EGSE_AUX_SYNCHRO_Stimuli -	STR1J02	14		STR_Stim
SK06J01	15	STR1/EGSE_JMP_TC_Pres	STR1J02	15		JUMPER
SK06J01	20	STR1/EGSE_JMP_EGS_Enable	STR1J02	20		JUMPER
SK06J01	21	STR1/EGSE_JMP_J02-21_GROUND RTN	STR1J02	21		GND
SK06J01	26	EGSE/STR1_ADC_DATA_Stimuli +	STR1J02	26		STR_Stim
SK06J01	27	EGSE/STR1_ADC_WIN_Stimuli +	STR1J02	27		STR_Stim
SK06J01	28	STR1/EGSE_PIX_VALID_Stimuli +	STR1J02	28		STR_Stim
SK06J01	29	STR1/EGSE_PIX_GAIN_Stimuli +	STR1J02	29		STR_Stim
SK06J01	30	EGSE/STR1_ADC_CLK_Stimuli +	STR1J02	30		STR_Stim
SK06J01	35	STR1/EGSE_JMP_J02-35_GROUND RTN	STR1J02	35		GND
SK06J01	40	EGSE/STR1_ADC_DATA_Stimuli -	STR1J02	40		STR_Stim
SK06J01	41	EGSE/STR1_ADC_WIN_Stimuli -	STR1J02	41		STR_Stim
SK06J01	42	STR1/EGSE_PIX_VALID_Stimuli -	STR1J02	42		STR_Stim
SK06J01	43	STR1/EGSE_PIX_GAIN_Stimuli -	STR1J02	43		STR_Stim
SK06J01	44	EGSE/STR1_ADC_CLK_Stimuli -	STR1J02	44		STR_Stim
SK06J01	BKSH	Shield_for_STR1/EGSE_Overall_Shield	STR1J02	BKSH		Shield

4.1.32 Satellite Level Skin Connector SK06 J02 STR2 Stimuli

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SK06J02	6	STR2/EGSE_JMP_Data_Len0	STR2J02	6		JUMPER
SK06J02	7	STR2/EGSE_AUX_CMD_CLK_Stimuli +	STR2J02	7		STR_Stim
SK06J02	8	STR2/EGSE_AUX_CMD_CLK_Stimuli -	STR2J02	8		STR_Stim
SK06J02	9	STR2/EGSE_AUX_CMD_WIN_Stimuli +	STR2J02	9		STR_Stim
SK06J02	10	STR2/EGSE_AUX_CMD_WIN_Stimuli -	STR2J02	10		STR_Stim
SK06J02	11	STR2/EGSE_AUX_CMD_OUT_Stimuli +	STR2J02	11		STR_Stim
SK06J02	12	STR2/EGSE_AUX_CMD_OUT_Stimuli -	STR2J02	12		STR_Stim
SK06J02	13	STR2/EGSE_AUX_SYNCHRO_Stimuli +	STR2J02	13		STR_Stim
SK06J02	14	STR2/EGSE_AUX_SYNCHRO_Stimuli -	STR2J02	14		STR_Stim
SK06J02	15	STR2/EGSE_JMP_TC_Pres	STR2J02	15		JUMPER
SK06J02	20	STR2/EGSE_JMP_EGS_Enable	STR2J02	20		JUMPER
SK06J02	21	STR2/EGSE_JMP_J02-21_GROUND RTN	STR2J02	21		GND
SK06J02	26	EGSE/STR2_ADC_DATA_Stimuli +	STR2J02	26		STR_Stim
SK06J02	27	EGSE/STR2_ADC_WIN_Stimuli +	STR2J02	27		STR_Stim
SK06J02	28	STR2/EGSE_PIX_VALID_Stimuli +	STR2J02	28		STR_Stim
SK06J02	29	STR2/EGSE_PIX_GAIN_Stimuli +	STR2J02	29		STR_Stim
SK06J02	30	EGSE/STR2_ADC_CLK_Stimuli +	STR2J02	30		STR_Stim
SK06J02	35	STR2/EGSE_JMP_J02-35_GROUND RTN	STR2J02	35		GND
SK06J02	40	EGSE/STR2_ADC_DATA_Stimuli -	STR2J02	40		STR_Stim
SK06J02	41	EGSE/STR2_ADC_WIN_Stimuli -	STR2J02	41		STR_Stim
SK06J02	42	STR2/EGSE_PIX_VALID_Stimuli -	STR2J02	42		STR_Stim
SK06J02	43	STR2/EGSE_PIX_GAIN_Stimuli -	STR2J02	43		STR_Stim
SK06J02	44	EGSE/STR2_ADC_CLK_Stimuli -	STR2J02	44		STR_Stim
SK06J02	BKSH	Shield_for_STR2/EGSE_Overall_Shield	STR2J02	BKSH		Shield

4.2 Satellite Level PLM – SVM Connections

4.2.1 PLM – SVM Connections – Telescope CBPLM1B J01

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
CBPLM1BJ01	1	PCDU/CBPLM_Telescope_Htr_Deco-1_(H338)_Pwr	PCDUJ01	1	Heater	PCDU_LCL
CBPLM1BJ01	3	PCDU/CBPLM_Telescope_Htr_Deco-9_(H331)_Pwr	PCDUJ35	1	Heater	PCDU_LCL
CBPLM1BJ01	5	PCDU/CBPLM_Telescope_Htr_Deco-3_(H332)_Pwr	PCDUJ03	1	Heater	PCDU_LCL
CBPLM1BJ01	7	PCDU/CBPLM_Telescope_Htr_Deco-4_(H333)_Pwr	PCDUJ33	8	Heater	PCDU_LCL
CBPLM1BJ01	9	PCDU/CBPLM_Telescope_Htr_Deco-5_(H334)_Pwr	PCDUJ05	1	Heater	PCDU_LCL
CBPLM1BJ01	11	PCDU/CBPLM_Telescope_Htr_Deco-6_(H335)_Pwr	PCDUJ31	8	Heater	PCDU_LCL
CBPLM1BJ01	13	PCDU/CBPLM_Telescope_Htr_Deco-8_(H336)_Pwr	PCDUJ07	1	Heater	PCDU_LCL
CBPLM1BJ01	15	PCDU/CBPLM_Telescope_Htr_Deco-8_(H337)_Pwr	PCDUJ09	8	Heater	PCDU_LCL
CBPLM1BJ01	17	PCDU/CBPLM_Telescope_Htr_Deco-10_(H339)_Pwr	PCDUJ27	1	Heater	PCDU_LCL
CBPLM1BJ01	20	PCDU/CBPLM_Telescope_Htr_Deco-1_(H338)_Pwr_Rtn	PCDUJ01	14	Heater	PCDU_LCL
CBPLM1BJ01	22	PCDU/CBPLM_Telescope_Htr_Deco-9_(H331)_Pwr_Rtn	PCDUJ35	14	Heater	PCDU_LCL
CBPLM1BJ01	24	PCDU/CBPLM_Telescope_Htr_Deco-3_(H332)_Pwr_Rtn	PCDUJ03	14	Heater	PCDU_LCL
CBPLM1BJ01	26	PCDU/CBPLM_Telescope_Htr_Deco-4_(H333)_Pwr_Rtn	PCDUJ33	20	Heater	PCDU_LCL
CBPLM1BJ01	28	PCDU/CBPLM_Telescope_Htr_Deco-5_(H334)_Pwr	PCDUJ05	14	Heater	PCDU_LCL
CBPLM1BJ01	30	PCDU/CBPLM_Telescope_Htr_Deco-6_(H335)_Pwr_Rtn	PCDUJ31	20	Heater	PCDU_LCL
CBPLM1BJ01	32	PCDU/CBPLM_Telescope_Htr_Deco-7_(H336)_Pwr_Rtn	PCDUJ07	14	Heater	PCDU_LCL
CBPLM1BJ01	34	PCDU/CBPLM_Telescope_Htr_Deco-8_(H337)_Pwr_Rtn	PCDUJ09	20	Heater	PCDU_LCL
CBPLM1BJ01	36	PCDU/CBPLM_Telescope_Htr_Deco-10_(H339)_Rtn	PCDUJ27	14	Heater	PCDU_LCL

4.2.2 PLM – SVM Connections – Telescope CBPLM1B J02

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
CBPLM1BJ02	1	PCDU/CBPLM_Telescope_Htr_Deco-1_(H338)_Pwr	PCDUJ01	1	Heater	PCDU_LCL
CBPLM1BJ02	3	PCDU/CBPLM_Telescope_Htr_Deco-9_(H331)_Pwr	PCDUJ35	1	Heater	PCDU_LCL
CBPLM1BJ02	5	PCDU/CBPLM_Telescope_Htr_Deco-3_(H332)_Pwr	PCDUJ03	1	Heater	PCDU_LCL
CBPLM1BJ02	7	PCDU/CBPLM_Telescope_Htr_Deco-4_(H333)_Pwr	PCDUJ33	8	Heater	PCDU_LCL
CBPLM1BJ02	9	PCDU/CBPLM_Telescope_Htr_Deco-5_(H334)_Pwr	PCDUJ05	1	Heater	PCDU_LCL
CBPLM1BJ02	11	PCDU/CBPLM_Telescope_Htr_Deco-6_(H335)_Pwr	PCDUJ31	8	Heater	PCDU_LCL
CBPLM1BJ02	13	PCDU/CBPLM_Telescope_Htr_Deco-8_(H336)_Pwr	PCDUJ07	1	Heater	PCDU_LCL
CBPLM1BJ02	15	PCDU/CBPLM_Telescope_Htr_Deco-8_(H337)_Pwr	PCDUJ09	8	Heater	PCDU_LCL
CBPLM1BJ02	17	PCDU/CBPLM_Telescope_Htr_Deco-10_(H339)_Pwr	PCDUJ27	1	Heater	PCDU_LCL
CBPLM1BJ02	20	PCDU/CBPLM_Telescope_Htr_Deco-1_(H338)_Pwr_Rtn	PCDUJ01	14	Heater	PCDU_LCL
CBPLM1BJ02	22	PCDU/CBPLM_Telescope_Htr_Deco-9_(H331)_Pwr_Rtn	PCDUJ35	14	Heater	PCDU_LCL
CBPLM1BJ02	24	PCDU/CBPLM_Telescope_Htr_Deco-3_(H332)_Pwr_Rtn	PCDUJ03	14	Heater	PCDU_LCL
CBPLM1BJ02	26	PCDU/CBPLM_Telescope_Htr_Deco-4_(H333)_Pwr_Rtn	PCDUJ33	20	Heater	PCDU_LCL
CBPLM1BJ02	28	PCDU/CBPLM_Telescope_Htr_Deco-5_(H334)_Pwr	PCDUJ05	14	Heater	PCDU_LCL
CBPLM1BJ02	30	PCDU/CBPLM_Telescope_Htr_Deco-6_(H335)_Pwr_Rtn	PCDUJ31	20	Heater	PCDU_LCL
CBPLM1BJ02	32	PCDU/CBPLM_Telescope_Htr_Deco-7_(H336)_Pwr_Rtn	PCDUJ07	14	Heater	PCDU_LCL
CBPLM1BJ02	34	PCDU/CBPLM_Telescope_Htr_Deco-8_(H337)_Pwr_Rtn	PCDUJ09	20	Heater	PCDU_LCL
CBPLM1BJ02	36	PCDU/CBPLM_Telescope_Htr_Deco-10_(H339)_Rtn	PCDUJ27	14	Heater	PCDU_LCL

4.2.3 PLM – SVM Connections – CCU Power J13 & J26

Note that in addition to the following 1553 and power connections, the CCU also interfaces to the Telescope and Umbilical Connectors, details of which can be found in the appropriate paragraphs.

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
CCUJ13	2	PCDU/CCU_A_Pwr	PCDUJ02	3	PWR_Input	PCDU_LCL
CCUJ13	9	PCDU/CCU_A_Pwr_Rtn	PCDUJ02	22	PWR_Input	PCDU_LCL

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
CCUJ26	2	PCDU/CCU_B_Pwr	PCDUJ36	3	PWR_Input	PCDU_LCL
CCUJ26	9	PCDU/CCU_B_Pwr_Rtn	PCDUJ36	22	PWR_Input	PCDU_LCL

4.2.4 PLM – SVM Connections – CCU 1553 Busses J09, J10, J22 & J23

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
CCUJ09	2	DMS_1553A_True	CDMUJ023	1	1553_RT	1553_BC
CCUJ09	2	DMS_1553A_True	CDMUJ073	1	1553_RT	1553_BC
CCUJ09	6	DMS_1553A_Comp	CDMUJ023	11	1553_RT	1553_BC
CCUJ09	6	DMS_1553A_Comp	CDMUJ073	11	1553_RT	1553_BC
CCUJ09	BKSH	DMS_1553A	CDMUJ023	BKSH	Shield	Shield
CCUJ09	BKSH	DMS_1553A	CDMUJ073	BKSH	Shield	Shield

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
CCUJ10	2	DMS_1553B_True	CDMUJ024	1	1553_RT	1553_BC
CCUJ10	2	DMS_1553B_True	CDMUJ074	1	1553_RT	1553_BC
CCUJ10	6	DMS_1553B_Comp	CDMUJ024	11	1553_RT	1553_BC
CCUJ10	6	DMS_1553B_Comp	CDMUJ074	11	1553_RT	1553_BC
CCUJ10	BKSH	DMS_1553B	CDMUJ024	BKSH	Shield	Shield
CCUJ10	BKSH	DMS_1553B	CDMUJ074	BKSH	Shield	Shield

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
CCUJ22	2	DMS_1553A_True	CDMUJ023	1	1553_RT	1553_BC
CCUJ22	2	DMS_1553A_True	CDMUJ073	1	1553_RT	1553_BC
CCUJ22	6	DMS_1553A_Comp	CDMUJ023	11	1553_RT	1553_BC
CCUJ22	6	DMS_1553A_Comp	CDMUJ073	11	1553_RT	1553_BC
CCUJ22	BKSH	DMS_1553A	CDMUJ023	BKSH	Shield	Shield
CCUJ22	BKSH	DMS_1553A	CDMUJ073	BKSH	Shield	Shield

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
CCUJ23	2	DMS_1553B_True	CDMUJ024	1	1553_RT	1553_BC
CCUJ23	2	DMS_1553B_True	CDMUJ074	1	1553_RT	1553_BC
CCUJ23	6	DMS_1553B_Comp	CDMUJ024	11	1553_RT	1553_BC
CCUJ23	6	DMS_1553B_Comp	CDMUJ074	11	1553_RT	1553_BC
CCUJ23	BKSH	DMS_1553B	CDMUJ024	BKSH	Shield	Shield
CCUJ23	BKSH	DMS_1553B	CDMUJ074	BKSH	Shield	Shield

4.2.5 PLM – SVM Connections – Solar Array SK01A J01

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
SK01AJ01	a	SA1/PCDU_SA_Sect4_Nom_Pwr	PCDUJ14	5	SA_Pwr	PCDU_SA_Input
SK01AJ01	b	SA1/PCDU_SA_Sect1_Nom_Pwr	PCDUJ14	4	SA_Pwr	PCDU_SA_Input
SK01AJ01	c	SA1/PCDU_SA_Sect1_Nom_Pwr_Rtn	PCDUJ14	16	SA_Pwr	PCDU_SA_Input
SK01AJ01	E	SA1/PCDU_SA_Sect28_Nom_Pwr_Rtn	PCDUJ14	25	SA_Pwr	PCDU_SA_Input
SK01AJ01	F	SA1/PCDU_SA_Sect28_Nom_Pwr	PCDUJ14	13	SA_Pwr	PCDU_SA_Input
SK01AJ01	G	SA1/PCDU_SA_Sect25_Nom_Pwr_Rtn	PCDUJ14	24	SA_Pwr	PCDU_SA_Input
SK01AJ01	H	SA1/PCDU_SA_Sect25_Nom_Pwr	PCDUJ14	12	SA_Pwr	PCDU_SA_Input
SK01AJ01	J	SA1/PCDU_SA_Sect22_Nom_Pwr_Rtn	PCDUJ14	23	SA_Pwr	PCDU_SA_Input
SK01AJ01	K	SA1/PCDU_SA_Sect22_Nom_Pwr	PCDUJ14	11	SA_Pwr	PCDU_SA_Input
SK01AJ01	L	SA1/PCDU_SA_Sect19_Nom_Pwr_Rtn	PCDUJ14	22	SA_Pwr	PCDU_SA_Input
SK01AJ01	M	SA1/PCDU_SA_Sect19_Nom_Pwr	PCDUJ14	10	SA_Pwr	PCDU_SA_Input
SK01AJ01	N	SA1/PCDU_SA_Sect16_Nom_Pwr_Rtn	PCDUJ14	21	SA_Pwr	PCDU_SA_Input
SK01AJ01	S	SA1/PCDU_SA_Sect4_Nom_Pwr_Rtn	PCDUJ14	17	SA_Pwr	PCDU_SA_Input
SK01AJ01	T	SA1/PCDU_SA_Sect7_Nom_Pwr	PCDUJ14	6	SA_Pwr	PCDU_SA_Input
SK01AJ01	U	SA1/PCDU_SA_Sect7_Nom_Pwr_Rtn	PCDUJ14	18	SA_Pwr	PCDU_SA_Input
SK01AJ01	V	SA1/PCDU_SA_Sect10_Nom_Pwr	PCDUJ14	7	SA_Pwr	PCDU_SA_Input
SK01AJ01	W	SA1/PCDU_SA_Sect10_Nom_Pwr_Rtn	PCDUJ14	19	SA_Pwr	PCDU_SA_Input
SK01AJ01	X	SA1/PCDU_SA_Sect13_Nom_Pwr	PCDUJ14	8	SA_Pwr	PCDU_SA_Input
SK01AJ01	Y	SA1/PCDU_SA_Sect13_Nom_Pwr_Rtn	PCDUJ14	20	SA_Pwr	PCDU_SA_Input
SK01AJ01	Z	SA1/PCDU_SA_Sect16_Nom_Pwr	PCDUJ14	9	SA_Pwr	PCDU_SA_Input
SK01AJ01	R	SA1/CDMU_CRS_Temp1_Nom_Mnt	CDMUJ081	74	Thermistor	CR-S
SK01AJ01	P	SA1/CDMU_CRS_Temp1_Nom_Mnt_Rtn	CDMUJ081	73	Thermistor	CR-S
SK01AJ01	BKSH	SA1/CDMU_CRS_Temp1_Nom_Mnt	CDMUJ081	BKSH	Shield	Shield

4.2.6 PLM – SVM Connections – Solar Array SK01A J02

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
SK01AJ02	a	SA2/PCDU_SA_Sect5_Nom_Pwr	PCDUJ18	5	SA_Pwr	PCDU_SA_Input
SK01AJ02	b	SA2/PCDU_SA_Sect2_Nom_Pwr	PCDUJ18	4	SA_Pwr	PCDU_SA_Input
SK01AJ02	c	SA2/PCDU_SA_Sect2_Nom_Pwr_Rtn	PCDUJ18	16	SA_Pwr	PCDU_SA_Input
SK01AJ02	E	SA2/PCDU_SA_Sect29_Nom_Pwr_Rtn	PCDUJ18	25	SA_Pwr	PCDU_SA_Input
SK01AJ02	F	SA2/PCDU_SA_Sect29_Nom_Pwr	PCDUJ18	13	SA_Pwr	PCDU_SA_Input
SK01AJ02	G	SA2/PCDU_SA_Sect26_Nom_Pwr_Rtn	PCDUJ18	24	SA_Pwr	PCDU_SA_Input
SK01AJ02	H	SA2/PCDU_SA_Sect26_Nom_Pwr	PCDUJ18	12	SA_Pwr	PCDU_SA_Input
SK01AJ02	J	SA2/PCDU_SA_Sect23_Nom_Pwr_Rtn	PCDUJ18	23	SA_Pwr	PCDU_SA_Input
SK01AJ02	K	SA2/PCDU_SA_Sect23_Nom_Pwr	PCDUJ18	11	SA_Pwr	PCDU_SA_Input
SK01AJ02	L	SA2/PCDU_SA_Sect20_Nom_Pwr_Rtn	PCDUJ18	22	SA_Pwr	PCDU_SA_Input
SK01AJ02	M	SA2/PCDU_SA_Sect20_Nom_Pwr	PCDUJ18	10	SA_Pwr	PCDU_SA_Input
SK01AJ02	N	SA2/PCDU_SA_Sect17_Nom_Pwr_Rtn	PCDUJ18	21	SA_Pwr	PCDU_SA_Input
SK01AJ02	S	SA2/PCDU_SA_Sect5_Nom_Pwr_Rtn	PCDUJ18	17	SA_Pwr	PCDU_SA_Input
SK01AJ02	T	SA2/PCDU_SA_Sect8_Nom_Pwr	PCDUJ18	6	SA_Pwr	PCDU_SA_Input
SK01AJ02	U	SA2/PCDU_SA_Sect8_Nom_Pwr_Rtn	PCDUJ18	18	SA_Pwr	PCDU_SA_Input
SK01AJ02	V	SA2/PCDU_SA_Sect11_Nom_Pwr	PCDUJ18	7	SA_Pwr	PCDU_SA_Input
SK01AJ02	W	SA2/PCDU_SA_Sect11_Nom_Pwr_Rtn	PCDUJ18	19	SA_Pwr	PCDU_SA_Input
SK01AJ02	X	SA2/PCDU_SA_Sect14_Nom_Pwr	PCDUJ18	8	SA_Pwr	PCDU_SA_Input
SK01AJ02	Y	SA2/PCDU_SA_Sect14_Nom_Pwr_Rtn	PCDUJ18	20	SA_Pwr	PCDU_SA_Input
SK01AJ02	Z	SA2/PCDU_SA_Sect17_Nom_Pwr	PCDUJ18	9	SA_Pwr	PCDU_SA_Input
SK01AJ02	R	SA2/CDMU_CRS_Temp2_Nom_Mnt_Rtn	CDMUJ081	54	Thermistor	CR-S
SK01AJ02	P	SA2/CDMU_CRS_Temp2_Nom_Mnt	CDMUJ081	55	Thermistor	CR-S
SK01AJ02	BKSH	SA2/CDMU_CRS_Temp2_Nom_Mnt	CDMUJ081	BKSH	Shield	Shield

4.2.7 PLM – SVM Connections – Solar Array SK01A J03

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
SK01AJ03	a	SA3/PCDU_SA_Sect6_Nom_Pwr	PCDUJ22	5	SA_Pwr	PCDU_SA_Input
SK01AJ03	b	SA3/PCDU_SA_Sect3_Nom_Pwr	PCDUJ22	4	SA_Pwr	PCDU_SA_Input
SK01AJ03	c	SA3/PCDU_SA_Sect3_Nom_Pwr_Rtn	PCDUJ22	16	SA_Pwr	PCDU_SA_Input
SK01AJ03	E	SA3/PCDU_SA_Sect30_Nom_Pwr_Rtn	PCDUJ22	25	SA_Pwr	PCDU_SA_Input
SK01AJ03	F	SA3/PCDU_SA_Sect30_Nom_Pwr	PCDUJ22	13	SA_Pwr	PCDU_SA_Input
SK01AJ03	G	SA3/PCDU_SA_Sect27_Nom_Pwr_Rtn	PCDUJ22	24	SA_Pwr	PCDU_SA_Input
SK01AJ03	H	SA3/PCDU_SA_Sect27_Nom_Pwr	PCDUJ22	12	SA_Pwr	PCDU_SA_Input
SK01AJ03	J	SA3/PCDU_SA_Sect24_Nom_Pwr_Rtn	PCDUJ22	23	SA_Pwr	PCDU_SA_Input
SK01AJ03	K	SA3/PCDU_SA_Sect24_Nom_Pwr	PCDUJ22	11	SA_Pwr	PCDU_SA_Input
SK01AJ03	L	SA3/PCDU_SA_Sect21_Nom_Pwr_Rtn	PCDUJ22	22	SA_Pwr	PCDU_SA_Input
SK01AJ03	M	SA3/PCDU_SA_Sect21_Nom_Pwr	PCDUJ22	10	SA_Pwr	PCDU_SA_Input
SK01AJ03	N	SA3/PCDU_SA_Sect18_Nom_Pwr_Rtn	PCDUJ22	21	SA_Pwr	PCDU_SA_Input
SK01AJ03	S	SA3/PCDU_SA_Sect6_Nom_Pwr_Rtn	PCDUJ22	17	SA_Pwr	PCDU_SA_Input
SK01AJ03	T	SA3/PCDU_SA_Sect9_Nom_Pwr	PCDUJ22	6	SA_Pwr	PCDU_SA_Input
SK01AJ03	U	SA3/PCDU_SA_Sect9_Nom_Pwr_Rtn	PCDUJ22	18	SA_Pwr	PCDU_SA_Input
SK01AJ03	V	SA3/PCDU_SA_Sect12_Nom_Pwr	PCDUJ22	7	SA_Pwr	PCDU_SA_Input
SK01AJ03	W	SA3/PCDU_SA_Sect12_Nom_Pwr_Rtn	PCDUJ22	19	SA_Pwr	PCDU_SA_Input
SK01AJ03	X	SA3/PCDU_SA_Sect15_Nom_Pwr	PCDUJ22	8	SA_Pwr	PCDU_SA_Input
SK01AJ03	Y	SA3/PCDU_SA_Sect15_Nom_Pwr_Rtn	PCDUJ22	20	SA_Pwr	PCDU_SA_Input
SK01AJ03	Z	SA3/PCDU_SA_Sect18_Nom_Pwr	PCDUJ22	9	SA_Pwr	PCDU_SA_Input
SK01AJ03	R	SA3/CDMU_CRS_Temp3_Nom_Mnt_Rtn	CDMUJ081	33	Thermistor	CR-S
SK01AJ03	P	SA3/CDMU_CRS_Temp3_Nom_Mnt	CDMUJ081	34	Thermistor	CR-S
SK01AJ03	BKSH	SA3/CDMU_CRS_Temp3_Nom_Mnt	CDMUJ081	BKSH	Shield	Shield

4.2.8 PLM – SVM Connections – Solar Array SK01A J05

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
SK01AJ05	a	SA1/PCDU_SA_Sect4_Red_Pwr	PCDUJ15	5	SA_Pwr	PCDU_SA_Input
SK01AJ05	b	SA1/PCDU_SA_Sect1_Red_Pwr	PCDUJ15	4	SA_Pwr	PCDU_SA_Input
SK01AJ05	c	SA1/PCDU_SA_Sect1_Red_Pwr_Rtn	PCDUJ15	16	SA_Pwr	PCDU_SA_Input
SK01AJ05	E	SA1/PCDU_SA_Sect28_Red_Pwr_Rtn	PCDUJ15	25	SA_Pwr	PCDU_SA_Input
SK01AJ05	F	SA1/PCDU_SA_Sect28_Red_Pwr	PCDUJ15	13	SA_Pwr	PCDU_SA_Input
SK01AJ05	G	SA1/PCDU_SA_Sect25_Red_Pwr_Rtn	PCDUJ15	24	SA_Pwr	PCDU_SA_Input
SK01AJ05	H	SA1/PCDU_SA_Sect25_Red_Pwr	PCDUJ15	12	SA_Pwr	PCDU_SA_Input
SK01AJ05	J	SA1/PCDU_SA_Sect22_Red_Pwr_Rtn	PCDUJ15	23	SA_Pwr	PCDU_SA_Input
SK01AJ05	K	SA1/PCDU_SA_Sect22_Red_Pwr	PCDUJ15	11	SA_Pwr	PCDU_SA_Input
SK01AJ05	L	SA1/PCDU_SA_Sect19_Red_Pwr_Rtn	PCDUJ15	22	SA_Pwr	PCDU_SA_Input
SK01AJ05	M	SA1/PCDU_SA_Sect19_Red_Pwr	PCDUJ15	10	SA_Pwr	PCDU_SA_Input
SK01AJ05	N	SA1/PCDU_SA_Sect16_Red_Pwr_Rtn	PCDUJ15	21	SA_Pwr	PCDU_SA_Input
SK01AJ05	S	SA1/PCDU_SA_Sect4_Red_Pwr_Rtn	PCDUJ15	17	SA_Pwr	PCDU_SA_Input
SK01AJ05	T	SA1/PCDU_SA_Sect7_Red_Pwr	PCDUJ15	6	SA_Pwr	PCDU_SA_Input
SK01AJ05	U	SA1/PCDU_SA_Sect7_Red_Pwr_Rtn	PCDUJ15	18	SA_Pwr	PCDU_SA_Input
SK01AJ05	V	SA1/PCDU_SA_Sect10_Red_Pwr	PCDUJ15	7	SA_Pwr	PCDU_SA_Input
SK01AJ05	W	SA1/PCDU_SA_Sect10_Red_Pwr_Rtn	PCDUJ15	19	SA_Pwr	PCDU_SA_Input
SK01AJ05	X	SA1/PCDU_SA_Sect13_Red_Pwr	PCDUJ15	8	SA_Pwr	PCDU_SA_Input
SK01AJ05	Y	SA1/PCDU_SA_Sect13_Red_Pwr_Rtn	PCDUJ15	20	SA_Pwr	PCDU_SA_Input
SK01AJ05	Z	SA1/PCDU_SA_Sect16_Red_Pwr	PCDUJ15	9	SA_Pwr	PCDU_SA_Input
SK01AJ05	R	SA1/CDMU_CRS_Temp1_Red_Mnt	CDMUJ091	74	Thermistor	CR-S
SK01AJ05	P	SA1/CDMU_CRS_Temp1_Red_Mnt_Rtn	CDMUJ091	73	Thermistor	CR-S
SK01AJ05	BKSH	SA1/CDMU_CRS_Temp1_Red_Mnt	CDMUJ091	BKSH	Shield	Shield

4.2.9 PLM – SVM Connections – Solar Array SK01A J06

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
SK01AJ06	a	SA2/PCDU_SA_Sect5_Red_Pwr	PCDUJ19	5	SA_Pwr	PCDU_SA_Input
SK01AJ06	b	SA2/PCDU_SA_Sect2_Red_Pwr	PCDUJ19	4	SA_Pwr	PCDU_SA_Input
SK01AJ06	c	SA2/PCDU_SA_Sect2_Red_Pwr_Rtn	PCDUJ19	16	SA_Pwr	PCDU_SA_Input
SK01AJ06	E	SA2/PCDU_SA_Sect29_Red_Pwr_Rtn	PCDUJ19	25	SA_Pwr	PCDU_SA_Input
SK01AJ06	F	SA2/PCDU_SA_Sect29_Red_Pwr	PCDUJ19	13	SA_Pwr	PCDU_SA_Input
SK01AJ06	G	SA2/PCDU_SA_Sect26_Red_Pwr_Rtn	PCDUJ19	24	SA_Pwr	PCDU_SA_Input
SK01AJ06	H	SA2/PCDU_SA_Sect26_Red_Pwr	PCDUJ19	12	SA_Pwr	PCDU_SA_Input
SK01AJ06	J	SA2/PCDU_SA_Sect23_Red_Pwr_Rtn	PCDUJ19	23	SA_Pwr	PCDU_SA_Input
SK01AJ06	K	SA2/PCDU_SA_Sect23_Red_Pwr	PCDUJ19	11	SA_Pwr	PCDU_SA_Input
SK01AJ06	L	SA2/PCDU_SA_Sect20_Red_Pwr_Rtn	PCDUJ19	22	SA_Pwr	PCDU_SA_Input
SK01AJ06	M	SA2/PCDU_SA_Sect20_Red_Pwr	PCDUJ19	10	SA_Pwr	PCDU_SA_Input
SK01AJ06	N	SA2/PCDU_SA_Sect17_Red_Pwr_Rtn	PCDUJ19	21	SA_Pwr	PCDU_SA_Input
SK01AJ06	S	SA2/PCDU_SA_Sect5_Red_Pwr_Rtn	PCDUJ19	17	SA_Pwr	PCDU_SA_Input
SK01AJ06	T	SA2/PCDU_SA_Sect8_Red_Pwr	PCDUJ19	6	SA_Pwr	PCDU_SA_Input
SK01AJ06	U	SA2/PCDU_SA_Sect8_Red_Pwr_Rtn	PCDUJ19	18	SA_Pwr	PCDU_SA_Input
SK01AJ06	V	SA2/PCDU_SA_Sect11_Red_Pwr	PCDUJ19	7	SA_Pwr	PCDU_SA_Input
SK01AJ06	W	SA2/PCDU_SA_Sect11_Red_Pwr_Rtn	PCDUJ19	19	SA_Pwr	PCDU_SA_Input
SK01AJ06	X	SA2/PCDU_SA_Sect14_Red_Pwr	PCDUJ19	8	SA_Pwr	PCDU_SA_Input
SK01AJ06	Y	SA2/PCDU_SA_Sect14_Red_Pwr_Rtn	PCDUJ19	20	SA_Pwr	PCDU_SA_Input
SK01AJ06	Z	SA2/PCDU_SA_Sect17_Red_Pwr	PCDUJ19	9	SA_Pwr	PCDU_SA_Input
SK01AJ06	R	SA2/CDMU_CRS_Temp2_Red_Mnt	CDMUJ091	55	Thermistor	CR-S
SK01AJ06	P	SA2/CDMU_CRS_Temp2_Red_Mnt_Rtn	CDMUJ091	54	Thermistor	CR-S
SK01AJ06	BKSH	SA2/CDMU_CRS_Temp2_Red_Mnt	CDMUJ091	BKSH	Shield	Shield

4.2.10 PLM – SVM Connections – Solar Array SK01A J07

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
SK01AJ07	a	SA3/PCDU_SA_Sect6_Red_Pwr	PCDUJ23	5	SA_Pwr	PCDU_SA_Input
SK01AJ07	b	SA3/PCDU_SA_Sect3_Red_Pwr	PCDUJ23	4	SA_Pwr	PCDU_SA_Input
SK01AJ07	c	SA3/PCDU_SA_Sect3_Red_Pwr_Rtn	PCDUJ23	16	SA_Pwr	PCDU_SA_Input
SK01AJ07	E	SA3/PCDU_SA_Sect30_Red_Pwr_Rtn	PCDUJ23	25	SA_Pwr	PCDU_SA_Input
SK01AJ07	F	SA3/PCDU_SA_Sect30_Red_Pwr	PCDUJ23	13	SA_Pwr	PCDU_SA_Input
SK01AJ07	G	SA3/PCDU_SA_Sect27_Red_Pwr_Rtn	PCDUJ23	24	SA_Pwr	PCDU_SA_Input
SK01AJ07	H	SA3/PCDU_SA_Sect27_Red_Pwr	PCDUJ23	12	SA_Pwr	PCDU_SA_Input
SK01AJ07	J	SA3/PCDU_SA_Sect24_Red_Pwr_Rtn	PCDUJ23	23	SA_Pwr	PCDU_SA_Input
SK01AJ07	K	SA3/PCDU_SA_Sect24_Red_Pwr	PCDUJ23	11	SA_Pwr	PCDU_SA_Input
SK01AJ07	L	SA3/PCDU_SA_Sect21_Red_Pwr_Rtn	PCDUJ23	22	SA_Pwr	PCDU_SA_Input
SK01AJ07	M	SA3/PCDU_SA_Sect21_Red_Pwr	PCDUJ23	10	SA_Pwr	PCDU_SA_Input
SK01AJ07	N	SA3/PCDU_SA_Sect18_Red_Pwr_Rtn	PCDUJ23	21	SA_Pwr	PCDU_SA_Input
SK01AJ07	S	SA3/PCDU_SA_Sect6_Red_Pwr_Rtn	PCDUJ23	17	SA_Pwr	PCDU_SA_Input
SK01AJ07	T	SA3/PCDU_SA_Sect9_Red_Pwr	PCDUJ23	6	SA_Pwr	PCDU_SA_Input
SK01AJ07	U	SA3/PCDU_SA_Sect9_Red_Pwr_Rtn	PCDUJ23	18	SA_Pwr	PCDU_SA_Input
SK01AJ07	V	SA3/PCDU_SA_Sect12_Red_Pwr	PCDUJ23	7	SA_Pwr	PCDU_SA_Input
SK01AJ07	W	SA3/PCDU_SA_Sect12_Red_Pwr_Rtn	PCDUJ23	19	SA_Pwr	PCDU_SA_Input
SK01AJ07	X	SA3/PCDU_SA_Sect15_Red_Pwr	PCDUJ23	8	SA_Pwr	PCDU_SA_Input
SK01AJ07	Y	SA3/PCDU_SA_Sect15_Red_Pwr_Rtn	PCDUJ23	20	SA_Pwr	PCDU_SA_Input
SK01AJ07	Z	SA3/PCDU_SA_Sect18_Red_Pwr	PCDUJ23	9	SA_Pwr	PCDU_SA_Input
SK01AJ07	R	SA3/CDMU_CRS_Temp3_Red_Mnt	CDMUJ091	34	Thermistor	CR-S
SK01AJ07	P	SA3/CDMU_CRS_Temp3_Red_Mnt_Rtn	CDMUJ091	33	Thermistor	CR-S
SK01AJ07	BKSH	SA3/CDMU_CRS_Temp3_Red_Mnt	CDMUJ091	BKSH	Shield	Shield

4.2.11 PLM – SVM Connections – NCA CBPLM1A 01

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
CBPLM1AJ01	TBD	PCDU/CBPLM_NCA_Nom_Pwr	PCDJ06	15	PCDU_LCL	NCA_Input
CBPLM1AJ01	TBD	PCDU/CBPLM_NCA_Nom_Pwr_Rtn	PCDJ06	34	PCDU_LCL	NCA_Input
CBPLM1AJ01	2	PCDU/CBPLM_NCA_Nom_Pwr_1	NCAJ3	TBD	PCDU_LCL	NCA_Input
CBPLM1AJ01	6	PCDU/CBPLM_NCA_Nom_Pwr_1_Rtn	NCAJ3	TBD	PCDU_LCL	NCA_Input
CBPLM1AJ01	7	PCDU/CBPLM_NCA_Nom_Pwr_2	NCAJ3	TBD	PCDU_LCL	NCA_Input
CBPLM1AJ01	3	PCDU/CBPLM_NCA_Nom_Pwr_2_Rtn	NCAJ3	TBD	PCDU_LCL	NCA_Input
CBPLM1AJ01	4	PCDU/CBPLM_NCA_Nom_Pwr_3	NCAJ3	TBD	PCDU_LCL	NCA_Input
CBPLM1AJ01	5	PCDU/CBPLM_NCA_Nom_Pwr_3_Rtn	NCAJ3	TBD	PCDU_LCL	NCA_Input
CBPLM1AJ01	9	PCDU/CBPLM_NCA_Nom_Pwr_4	NCAJ3	TBD	PCDU_LCL	NCA_Input
CBPLM1AJ01	5	PCDU/CBPLM_NCA_Nom_Pwr_4_Rtn	NCAJ3	TBD	PCDU_LCL	NCA_Input

4.2.12 PLM – SVM Connections – NCA CBPLM1A J02

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
CBPLM1AJ02	TBD	PCDU/CBPLM_NCA_Red_Pwr	PCDJ32	15	PCDU_LCL	NCA_Input
CBPLM1AJ02	TBD	PCDU/CBPLM_NCA_Red_Pwr_Rtn	PCDJ32	34	PCDU_LCL	NCA_Input
CBPLM1AJ02	2	PCDU/CBPLM_NCA_Red_Pwr_1	NCAJ4	TBD	PCDU_LCL	NCA_Input
CBPLM1AJ02	6	PCDU/CBPLM_NCA_Red_Pwr_1_Rtn	NCAJ4	TBD	PCDU_LCL	NCA_Input
CBPLM1AJ02	7	PCDU/CBPLM_NCA_Red_Pwr_2	NCAJ4	TBD	PCDU_LCL	NCA_Input
CBPLM1AJ02	3	PCDU/CBPLM_NCA_Red_Pwr_2_Rtn	NCAJ4	TBD	PCDU_LCL	NCA_Input
CBPLM1AJ02	4	PCDU/CBPLM_NCA_Red_Pwr_3	NCAJ4	TBD	PCDU_LCL	NCA_Input
CBPLM1AJ02	5	PCDU/CBPLM_NCA_Red_Pwr_3_Rtn	NCAJ4	TBD	PCDU_LCL	NCA_Input
CBPLM1AJ02	9	PCDU/CBPLM_NCA_Red_Pwr_4	NCAJ4	TBD	PCDU_LCL	NCA_Input
CBPLM1AJ02	5	PCDU/CBPLM_NCA_Red_Pwr_4_Rtn	NCAJ4	TBD	PCDU_LCL	NCA_Input

4.2.13 PLM – SVM Connections – NCA CBPLM1A J03

Connector Reference			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
CBPLM1AJ03	4	CBPLM/CDMU_NCA_Nom_Sts	CDMUJ105	12	DR_Mnt	
CBPLM1AJ03	5	CBPLM/CDMU_NCA_Nom_Sts_Rtn	CDMUJ105	11	DR_Mnt	
CBPLM1AJ03	BKSH	CBPLM/CDMU_NCA_Nom_Sts	CDMUJ105	BKSH	Shield	Shield

4.2.14 PLM – SVM Connections – NCA CBPLM1A J04

Connector Reference			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
CBPLM1AJ04	4	CBPLM/CDMU_NCA_Red_Sts	CDMUJ115	12	DR_Mnt	
CBPLM1AJ04	5	CBPLM/CDMU_NCA_Red_Sts_Rtn	CDMUJ115	11	DR_Mnt	
CBPLM1AJ04	BKSH	CBPLM/CDMU_NCA_Red_Sts	CDMUJ115	BKSH	Shield	Shield

4.3 Satellite Level HIFI – SVM Connections

4.3.1 ICU

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
FHICUJ01	2	PCDU/FHICU_Nom_Pwr	PCDUJ10	9	PWR_Input	PCDU_LCL
FHICUJ01	4	PCDU/FHICU_Nom_Pwr_Rtn	PCDUJ10	28	PWR_Input	PCDU_LCL
FHICUJ02	2	PCDU/FHICU_Red_Pwr	PCDUJ28	9	PWR_Input	PCDU_LCL
FHICUJ02	4	PCDU/FHICU_Red_Pwr_Rtn	PCDUJ28	28	PWR_Input	PCDU_LCL
FHICUJ03	2	DMS_1553A_True	CDMUJ023	1	1553_RT	1553_BC
FHICUJ03	2	DMS_1553A_True	CDMUJ073	1	1553_RT	1553_BC
FHICUJ03	6	DMS_1553A_Comp	CDMUJ023	11	1553_RT	1553_BC
FHICUJ03	6	DMS_1553A_Comp	CDMUJ073	11	1553_RT	1553_BC
FHICUJ03	BKSH	DMS_1553A	CDMUJ023	BKSH	Shield	Shield
FHICUJ03	BKSH	DMS_1553A	CDMUJ073	BKSH	Shield	Shield
FHICUJ04	2	DMS_1553B_True	CDMUJ024	1	1553_RT	1553_BC
FHICUJ04	2	DMS_1553B_True	CDMUJ074	1	1553_RT	1553_BC
FHICUJ04	6	DMS_1553B_Comp	CDMUJ024	11	1553_RT	1553_BC
FHICUJ04	6	DMS_1553B_Comp	CDMUJ074	11	1553_RT	1553_BC
FHICUJ04	BKSH	DMS_1553B	CDMUJ024	BKSH	Shield	Shield
FHICUJ04	BKSH	DMS_1553B	CDMUJ074	BKSH	Shield	Shield
FHICUJ05	2	DMS_1553A_True	CDMUJ023	1	1553_RT	1553_BC
FHICUJ05	2	DMS_1553A_True	CDMUJ073	1	1553_RT	1553_BC
FHICUJ05	6	DMS_1553A_Comp	CDMUJ023	11	1553_RT	1553_BC
FHICUJ05	6	DMS_1553A_Comp	CDMUJ073	11	1553_RT	1553_BC
FHICUJ05	BKSH	DMS_1553A	CDMUJ023	BKSH	Shield	Shield
FHICUJ05	BKSH	DMS_1553A	CDMUJ073	BKSH	Shield	Shield

FHICUJ06	2	DMS_1553B_True	CDMUJ024	1	1553_RT	1553_BC
FHICUJ06	2	DMS_1553B_True	CDMUJ074	1	1553_RT	1553_BC
FHICUJ06	6	DMS_1553B_Comp	CDMUJ024	11	1553_RT	1553_BC
FHICUJ06	6	DMS_1553B_Comp	CDMUJ074	11	1553_RT	1553_BC
FHICUJ06	BKSH	DMS_1553B	CDMUJ024	BKSH	Shield	Shield
FHICUJ06	BKSH	DMS_1553B	CDMUJ074	BKSH	Shield	Shield

4.3.2 HRH

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
FHHRHJ01	2	PCDU/FHHRH_Pwr	PCDUJ10	7	PWR_Input	PCDU_LCL
FHHRHJ01	4	PCDU/FHHRH_Pwr_Rtn	PCDUJ10	26	PWR_Input	PCDU_LCL

4.3.3 HRV

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
FHHRVJ01	2	PCDU/FHHRV_Pwr	PCDUJ28	7	PWR_Input	PCDU_LCL
FHHRVJ01	4	PCDU/FHHRV_Pwr_Rtn	PCDUJ28	26	PWR_Input	PCDU_LCL

4.3.4 LCU

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
FHLCUJ01	2	PCDU/FHLCU_Nom_Pwr	PCDUJ30	9	PWR_Input	PCDU_LCL
FHLCUJ01	4	PCDU/FHLCU_Nom_Pwr_Rtn	PCDUJ30	28	PWR_Input	PCDU_LCL
FHLCUJ21	2	PCDU/FHLCU_Red_Pwr	PCDUJ08	9	PWR_Input	PCDU_LCL
FHLCUJ21	4	PCDU/FHLCU_Red_Pwr_Rtn	PCDUJ08	28	PWR_Input	PCDU_LCL

4.3.5 WEH

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
FHWEHJ03	2	PCDU/FHWEH_Pwr	PCDUJ32	3	PWR_Input	PCDU_LCL
FHWEHJ03	4	PCDU/FHWEH_Pwr_Rtn	PCDUJ32	22	PWR_Input	PCDU_LCL

4.3.6 WEV

SOURCE			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
FHWEVJ03	2	PCDU/FHWEV_Pwr	PCDUJ06	3	PWR_Input	PCDU_LCL
FHWEVJ03	4	PCDU/FHWEV_Pwr_Rtn	PCDUJ06	22	PWR_Input	PCDU_LCL

4.4 Satellite Level PACS – SVM Connections

4.4.1 DPU

Connector Reference			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
FPDPUJ01	2	PCDU/FPDPU_Nom_Pwr-1	PCDUJ30	5	PWR_Input	PCDU_LCL
FPDPUJ01	4	PCDU/FPDPU_Nom_Pwr-1_Rtn	PCDUJ30	24	PWR_Input	PCDU_LCL
FPDPUJ01	7	PCDU/FPDPU_Nom_Pwr-2	PCDUJ30	6	PWR_Input	PCDU_LCL
FPDPUJ01	9	PCDU/FPDPU_Nom_Pwr-2_Rtn	PCDUJ30	25	PWR_Input	PCDU_LCL
FPDPUJ02	2	PCDU/FPDPU_Red_Pwr-1	PCDUJ08	5	PWR_Input	PCDU_LCL
FPDPUJ02	4	PCDU/FPDPU_Red_Pwr-1_Rtn	PCDUJ08	24	PWR_Input	PCDU_LCL
FPDPUJ02	7	PCDU/FPDPU_Red_Pwr-2	PCDUJ08	6	PWR_Input	PCDU_LCL
FPDPUJ02	9	PCDU/FPDPU_Red_Pwr-2_Rtn	PCDUJ08	25	PWR_Input	PCDU_LCL
FPDPUJ03	2	DMS_1553A_True	CDMUJ023	1	1553_RT	1553_BC
FPDPUJ03	2	DMS_1553A_True	CDMUJ073	1	1553_RT	1553_BC
FPDPUJ03	6	DMS_1553A_Comp	CDMUJ023	11	1553_RT	1553_BC
FPDPUJ03	6	DMS_1553A_Comp	CDMUJ073	11	1553_RT	1553_BC
FPDPUJ03	BKSH	DMS_1553A	CDMUJ023	BKSH	Shield	Shield
FPDPUJ03	BKSH	DMS_1553A	CDMUJ073	BKSH	Shield	Shield
FPDPUJ04	2	DMS_1553B_True	CDMUJ024	1	1553_RT	1553_BC
FPDPUJ04	2	DMS_1553B_True	CDMUJ074	1	1553_RT	1553_BC
FPDPUJ04	6	DMS_1553B_Comp	CDMUJ024	11	1553_RT	1553_BC
FPDPUJ04	6	DMS_1553B_Comp	CDMUJ074	11	1553_RT	1553_BC
FPDPUJ04	BKSH	DMS_1553B	CDMUJ024	BKSH	Shield	Shield
FPDPUJ04	BKSH	DMS_1553B	CDMUJ074	BKSH	Shield	Shield
FPDPUJ05	2	DMS_1553A_True	CDMUJ023	1	1553_RT	1553_BC
FPDPUJ05	2	DMS_1553A_True	CDMUJ073	1	1553_RT	1553_BC
FPDPUJ05	6	DMS_1553A_Comp	CDMUJ023	11	1553_RT	1553_BC

FPDPUJ05	6	DMS_1553A_Comp	CDMUJ073	11	1553_RT	1553_BC
FPDPUJ05	BKSH	DMS_1553A	CDMUJ023	BKSH	Shield	Shield
FPDPUJ05	BKSH	DMS_1553A	CDMUJ073	BKSH	Shield	Shield
FPDPUJ06	2	DMS_1553B_True	CDMUJ024	1	1553_RT	1553_BC
FPDPUJ06	2	DMS_1553B_True	CDMUJ074	1	1553_RT	1553_BC
FPDPUJ06	6	DMS_1553B_Comp	CDMUJ024	11	1553_RT	1553_BC
FPDPUJ06	6	DMS_1553B_Comp	CDMUJ074	11	1553_RT	1553_BC
FPDPUJ06	BKSH	DMS_1553B	CDMUJ024	BKSH	Shield	Shield
FPDPUJ06	BKSH	DMS_1553B	CDMUJ074	BKSH	Shield	Shield

4.4.2 MEC1

Connector Reference			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
FPMEC1J30	2	PCDU/FPMEC1_Pwr-1	PCDUJ10	11	PWR_Input	PCDU_LCL
FPMEC1J30	4	PCDU/FPMEC1_Pwr-1_Rtn	PCDUJ10	30	PWR_Input	PCDU_LCL
FPMEC1J30	7	PCDU/FPMEC1_Pwr-2	PCDUJ10	12	PWR_Input	PCDU_LCL
FPMEC1J30	9	PCDU/FPMEC1_Pwr-2_Rtn	PCDUJ10	31	PWR_Input	PCDU_LCL
FPMEC1J31	5	CDMU/FPMEC1_Nom_Sync	CDMUJ083	59	LOBT_Sync	MEC_Sync_Input
FPMEC1J31	9	CDMU/FPMEC1_Nom_Sync_Rtn	CDMUJ083	58	LOBT_Sync	MEC_Sync_Input
FPMEC1J31	BKSH	CDMU/FPMEC1_Nom_Sync	CDMUJ083	BKSH	Shield	Shield

4.4.3 MEC2

Connector Reference			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
FPMEC2J130	2	PCDU/FPMEC2_Pwr-1	PCDUJ28	11	PWR_Input	PCDU_LCL
FPMEC2J130	4	PCDU/FPMEC2_Pwr-1_Rtn	PCDUJ28	30	PWR_Input	PCDU_LCL
FPMEC2J130	7	PCDU/FPMEC2_Pwr-2	PCDUJ28	12	PWR_Input	PCDU_LCL
FPMEC2J130	9	PCDU/FPMEC2_Pwr-2_Rtn	PCDUJ28	31	PWR_Input	PCDU_LCL
FPMEC2J131	5	CDMU/FPMEC2_Red_Sync	CDMUJ093	59	LOBT_Sync	MEC_Sync_Input
FPMEC2J131	9	CDMU/FPMEC2_Red_Sync_Rtn	CDMUJ093	58	LOBT_Sync	MEC_Sync_Input
FPMEC2J131	BKSH	CDMU/FPMEC2_Red_Sync	CDMUJ093	BKSH	Shield	Shield

4.4.4 SPU1

Connector Reference			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
FPSPU1J11	1	PCDU/FPSPU1_Pwr-2	PCDUJ10	4	PWR_Input	PCDU_LCL
FPSPU1J11	2	PCDU/FPSPU1_Pwr-1	PCDUJ10	3	PWR_Input	PCDU_LCL
FPSPU1J11	4	PCDU/FPSPU1_Pwr-1_Rtn	PCDUJ10	22	PWR_Input	PCDU_LCL
FPSPU1J11	5	PCDU/FPSPU1_Pwr-2_Rtn	PCDUJ10	23	PWR_Input	PCDU_LCL

4.4.5 SPU2

Connector Reference			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
FPSPU2J11	1	PCDU/FPSPU2_Pwr-2	PCDUJ28	4	PWR_Input	PCDU_LCL
FPSPU2J11	2	PCDU/FPSPU2_Pwr-1	PCDUJ28	3	PWR_Input	PCDU_LCL
FPSPU2J11	4	PCDU/FPSPU2_Pwr-1_Rtn	PCDUJ28	22	PWR_Input	PCDU_LCL
FPSPU2J11	5	PCDU/FPSPU2_Pwr-2_Rtn	PCDUJ28	23	PWR_Input	PCDU_LCL

4.4.6 BOLC

Connector Reference			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
FPBOLCJ25	2	PCDU/FPBOLC_Nom_Pwr-1	PCDUJ32	9	PWR_Input	PCDU_LCL
FPBOLCJ25	4	PCDU/FPBOLC_Nom_Pwr-1_Rtn	PCDUJ32	28	PWR_Input	PCDU_LCL
FPBOLCJ25	7	PCDU/FPBOLC_Nom_Pwr-2	PCDUJ32	10	PWR_Input	PCDU_LCL
FPBOLCJ25	9	PCDU/FPBOLC_Nom_Pwr-2_Rtn	PCDUJ32	29	PWR_Input	PCDU_LCL
FPBOLCJ26	2	PCDU/FPBOLC_Red_Pwr-1	PCDUJ06	9	PWR_Input	PCDU_LCL
FPBOLCJ26	4	PCDU/FPBOLC_Red_Pwr-1_Rtn	PCDUJ06	28	PWR_Input	PCDU_LCL
FPBOLCJ26	7	PCDU/FPBOLC_Red_Pwr-2	PCDUJ06	10	PWR_Input	PCDU_LCL
FPBOLCJ26	9	PCDU/FPBOLC_Red_Pwr-2_Rtn	PCDUJ06	29	PWR_Input	PCDU_LCL

4.5 Satellite Level SPIRE – SVM Connections

4.5.1 DPU

Connector Reference			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
HSDPUJ01	2	PCDU/HSDPU_Nom_Pwr	PCDUJ06	7	PWR_Input	PCDU_LCL
HSDPUJ01	4	PCDU/HSDPU_Nom_Pwr_Rtn	PCDUJ06	26	PWR_Input	PCDU_LCL
HSDPUJ02	2	PCDU/HSDPU_Red_Pwr	PCDUJ32	7	PWR_Input	PCDU_LCL
HSDPUJ02	4	PCDU/HSDPU_Red_Pwr_Rtn	PCDUJ32	26	PWR_Input	PCDU_LCL
HSDPUJ03	2	DMS_1553A_True	CDMUJ023	1	1553_RT	1553_BC
HSDPUJ03	2	DMS_1553A_True	CDMUJ073	1	1553_RT	1553_BC
HSDPUJ03	6	DMS_1553A_Comp	CDMUJ023	11	1553_RT	1553_BC
HSDPUJ03	6	DMS_1553A_Comp	CDMUJ073	11	1553_RT	1553_BC
HSDPUJ03	BKSH	DMS_1553A	CDMUJ023	BKSH	Shield	Shield
HSDPUJ03	BKSH	DMS_1553A	CDMUJ073	BKSH	Shield	Shield
HSDPUJ04	2	DMS_1553B_True	CDMUJ024	1	1553_RT	1553_BC
HSDPUJ04	2	DMS_1553B_True	CDMUJ074	1	1553_RT	1553_BC
HSDPUJ04	6	DMS_1553B_Comp	CDMUJ024	11	1553_RT	1553_BC
HSDPUJ04	6	DMS_1553B_Comp	CDMUJ074	11	1553_RT	1553_BC
HSDPUJ04	BKSH	DMS_1553B	CDMUJ024	BKSH	Shield	Shield
HSDPUJ04	BKSH	DMS_1553B	CDMUJ074	BKSH	Shield	Shield
HSDPUJ05	2	DMS_1553A_True	CDMUJ023	1	1553_RT	1553_BC
HSDPUJ05	2	DMS_1553A_True	CDMUJ073	1	1553_RT	1553_BC
HSDPUJ05	6	DMS_1553A_Comp	CDMUJ023	11	1553_RT	1553_BC
HSDPUJ05	6	DMS_1553A_Comp	CDMUJ073	11	1553_RT	1553_BC

HSDPUJ05	BKSH	DMS_1553A	CDMUJ023	BKSH	Shield	Shield
HSDPUJ05	BKSH	DMS_1553A	CDMUJ073	BKSH	Shield	Shield
HSDPUJ06	2	DMS_1553B_True	CDMUJ024	1	1553_RT	1553_BC
HSDPUJ06	2	DMS_1553B_True	CDMUJ074	1	1553_RT	1553_BC
HSDPUJ06	6	DMS_1553B_Comp	CDMUJ024	11	1553_RT	1553_BC
HSDPUJ06	6	DMS_1553B_Comp	CDMUJ074	11	1553_RT	1553_BC
HSDPUJ06	BKSH	DMS_1553B	CDMUJ024	BKSH	Shield	Shield
HSDPUJ06	BKSH	DMS_1553B	CDMUJ074	BKSH	Shield	Shield

4.5.2 FCU

Connector Reference			DESTINATION			
Connector Reference	Pin	SignalName	ConnectedtoUnit/Connector	Pin	Interface_of_Source	Interface of Destination
HSFCUJ05	2	PCDU/HSFCU_Nom_Pwr	PCDUJ08	7	PWR_Input	PCDU_LCL
HSFCUJ05	4	PCDU/HSFCU_Nom_Pwr_Rtn	PCDUJ08	26	PWR_Input	PCDU_LCL
HSFCUJ06	2	PCDU/HSFCU_Red_Pwr	PCDUJ30	7	PWR_Input	PCDU_LCL
HSFCUJ06	4	PCDU/HSFCU_Red_Pwr_Rtn	PCDUJ30	26	PWR_Input	PCDU_LCL

4.6 Miscellaneous Connections

4.6.1 Miscellaneous Connections, VMC

Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
VMCJ01	3	PCDU/VMC_Pwr RTN	PCDUJ32	24	PWR_Input	PCDU_LCL
VMCJ01	4	PCDU/VMC_Pwr	PCDUJ32	5	PWR_Input	PCDU_LCL
VMCJ02	3	VMC/CDMU_DS2_Address_Mnt	CDMUJ085	77	VMC_SBDL_Receiver	SBDL_Driver
VMCJ02	4	VMC/CDMU_DS2_Address_Mnt	CDMUJ085	78	VMC_SBDL_Receiver	SBDL_Driver
VMCJ02	5	VMC/CDMU_DS2_Clock_Mnt	CDMUJ085	76	VMC_SBDL_Driver	SBDL_Driver
VMCJ02	6	VMC/CDMU_DS2_Clock_Mnt	CDMUJ085	75	VMC_SBDL_Driver	SBDL_Driver
VMCJ02	7	VMC/CDMU_DS2_Data_Mnt	CDMUJ085	56	VMC_SBDL_Driver	SBDL_Receiver
VMCJ02	8	VMC/CDMU_DS2_Data_Mnt	CDMUJ085	57	VMC_SBDL_Driver	SBDL_Receiver
VMCJ02	BKSH	Shield_for_VMC/CDMU_DS2_Address_Mnt	CDMUJ085	BKSH	Shield	Shield
VMCJ02	BKSH	Shield_for_VMC/CDMU_DS2_Clock_Mnt	CDMUJ085	BKSH	Shield	Shield
VMCJ02	BKSH	Shield_for_VMC/CDMU_DS2_Data_Mnt	CDMUJ085	BKSH	Shield	Shield

4.6.2 Miscellaneous Connections, SREM

Connector Reference	Pin	SignalName	Connected to Unit/Connector	Pin	Interface_of_Source	Interface of Destination
SREMJ01	7	PCDU/SREM_Pwr RTN	PCDUJ06	24	PWR_Input	PCDU_LCL
SREMJ01	8	PCDU/SREM_Pwr	PCDUJ06	5	PWR_Input	PCDU_LCL
SREMJ02	3	SREM/CDMU_DS1_Data_Mnt	CDMUJ081	24	SREM_SBDL_Driver	SBDL_Receiver
SREMJ02	4	CDMU/SREM_ML1_Data_Cmd	CDMUJ081	3	SREM_SBDL_Receiver	SBDL_Driver
SREMJ02	5	SREM/CDMU_DS1_Address_Mnt	CDMUJ081	25	SREM_SBDL_Receiver	SBDL_Driver
SREMJ02	6	CDMU/SREM_ML1_Address_Cmd	CDMUJ081	6	SREM_SBDL_Receiver	SBDL_Driver
SREMJ02	8	CDMU/SREM_ML1_Clock_Cmd	CDMUJ081	5	SREM_SBDL_Receiver	SBDL_Driver
SREMJ02	10	SREM/CDMU_DS1_Data_Mnt	CDMUJ081	23	SREM_SBDL_Driver	SBDL_Receiver
SREMJ02	11	CDMU/SREM_ML1_Data_Cmd	CDMUJ081	2	SREM_SBDL_Receiver	SBDL_Driver
SREMJ02	13	SREM/CDMU_DS1_Address_Mnt	CDMUJ081	26	SREM_SBDL_Receiver	SBDL_Driver
SREMJ02	14	CDMU/SREM_ML1_Address_Cmd	CDMUJ081	7	SREM_SBDL_Receiver	SBDL_Driver
SREMJ02	15	CDMU/SREM_ML1_Clock_Cmd	CDMUJ081	4	SREM_SBDL_Receiver	SBDL_Driver
SREMJ02	BKSH	Shield_for_CDMU/SREM_ML1_Address_Cmd	CDMUJ081	BKSH	Shield	Shield
SREMJ02	BKSH	Shield_for_CDMU/SREM_ML1_Clock_Cmd	CDMUJ081	BKSH	Shield	Shield
SREMJ02	BKSH	Shield_for_CDMU/SREM_ML1_Data_Cmd	CDMUJ081	BKSH	Shield	Shield
SREMJ02	BKSH	Shield_for_SREM/CDMU_DS1_Address_Mnt	CDMUJ081	BKSH	Shield	Shield
SREMJ02	BKSH	Shield_for_SREM/CDMU_DS1_Data_Mnt	CDMUJ081	BKSH	Shield	Shield

5 INTERFACE SIGNAL CHARACTERISTICS

This chapter gives the electrical interface characteristics per individual interface. for each interface type referenced in the tables in paragraph 4 . Where available actual performance figures are given , derived from unit test data, otherwise specified parameters are given.

5.1 Power Interfaces

5.1.1 BatteryPower & PCDU_Battery_Input

Battery/PCDU

The battery consists of 24 strings of 6 Li-ion 1.5Ah@cells.

Battery power output I/F.

The electrical characteristics of the power source and destination during the battery discharging shall be as listed in the following table:

Parameter	*SOURCE (BATTERY)*	*RECEIVER (PCDU BDR)*	*Remarks*
Circuit type	Isolated Li-ion battery	Grounded	
Transfer	DC coupled	DC coupled	
Battery capacity	36Ah±2.5%	N/A	
Voltage discharge threshold Maximum	16V±20mV	16±0.25V	
Voltage discharge threshold Minimum	14.75V	15±0.25V	
Voltage nominal range	17.1V to 25.5V	16 to 26V(2)	
Resistance	<30mOhm (1)	N/A	
Fault discharge tolerance	up to 120A peak for 1ms	N/A	
Discharge rate limiter	N/A	120A peak for 1ms	
Grounding isolation	≥100MΩ@500V	N/A	

(1) The battery resistance is referred to the following conditions:
ambient temperature, nominal max voltage and up to 1000Hz frequency

Battery power Input I/F.

The electrical characteristics of the power source and destination during the battery charging shall be as listed in the following table:

Parameter	*SOURCE (PCDU BCR)*	*RECEIVER (BATTERY)*	*Remarks*
Circuit type	Grounded	Isolated Li-ion battery	
Transfer	DC coupled	DC coupled	
Battery capacity (C)	N/A	36Ah±2.5%	
Voltage E.o.C. nominal threshold	25.2+0.3/-0V	25.2V±2V	
Voltage E.o.C. maximum threshold	<26.4V	N/A	Only allowed once in the mission period due to degradation of BCR
Ripple	3.5Apeak (DC+150KHz)	N/A	
Resistance	N/A	<30mOhm (1)	
Max Charge rate	5A<I<7A	7.5A	
Fault charge voltage	(2)	N/A	
Fault condition tolerance	N/A	28V for 2s	
Grounding isolation	N/A	≥100MΩ@500V	

(1) The battery resistance is referred to the following conditions:ambient temperature,nominal max voltage and up to 1000Hz frequency

5.1.2 PCDU_SA_Input & SA_Aux_PWR_in

SOLAR ARRAY/ PCDU

The association of solar arrays is the primary source of power for the satellite.
The solar array consists of 30 sections which are connected to the SAR and 3 of them also to the BCR.
Each section collects up to 5 strings of 21 cells. The SAR and the BCR sections are part of the PCDU.

Power source I/F

The electrical characteristics of each power source section and destination shall be as listed in the following table:

Parameter	*SOURCE (SA)*	*RECEIVER (PCDU SAR/BCR)*	*Remarks*
Circuit type	Isolated	Grounded	
Transfer	DC coupled	DC coupled	
Open circuit voltage	0 to 60V	N/A	
Current nominal range	0 to 3A	N/A	
Peak current	N/A	(2)	
Capacitance	≤2µF	N/A	
Resistance: - **series** - **parallel**	 0.09Ω 203Ω	(3)	
Inductance	1 to 6µH	N/A	
Operating point	N/A	29.72V/3A (1)	
Blocking diodes (Y/N)	Y	N/A	

(1) The regulation point (A) is internal to the SAR downstream the diodes and the value is 28.14V±0.5%.
(2) THE RATE OF CHANGE OF VOLTAGE OF THE PCDU SHE INTERFACE DESIGN SHALL ENSURE THAT THE PEAK SOLAR ARRAY SECTION CURRENT DOES NOT EXCEED 7.5 AMPS (INCLUDING THE DC ARRAY SECTION CURRENT) AND SHALL IN ANY CASE NOT EXCEED 17 AMPS AFTER A FAILURE
(3) Regulated to maintain the operating point.

5.1.3 PCDU_LCL

Electrical CharacteristicsTo be provided

5.1.4 PCDU_Heater_pwr

Electrical Characteristics To be provided

5.1.5 PT_Input_Pwr & PT_Pwr

PT 28V Power I/F.

The electrical characteristics of the power source and destination shall be as listed in the following table:

Parameter	*SOURCE (ACC)*	*RECEIVER (PT)*	*Remarks*
Voltage range	25 to 32Vdc	24 to 32Vdc	
Impedance (DC to 100KHz)	N/A	2KΩ	
Fault voltage	32.85Vdc up to 10ms	N/A	
Overvoltage tolerance	N/A	32.85Vdc up to 10ms	
U/V switch-off	N/A	<24Vdc	
Maximum Current	N/A	17mA	
Nominal current	N/A	10mA	
Protection type	Current Limiter	Current Limiter	
- limitation current	100mA	22mA	
- limitation duration	Infinite	Infinite	
Drop-out duration	N/A	10ms	
Input power isolation	N/A	>1 GΩ	

5.1.6 PWR_Input

Electrical Characteristics to be provided for :

SREM_Pwr
VMC_Pwr
CCU
HIFI HRH
HIFI HRV
HIFI ICU
HIFI LCU
HIFI WEH
HIFI WEV
PACS BOLC
PACS DPU
PACS MEC
PACS SPU
SPIRE DPU
SPIRE FCU

5.1.7 THR_20N_Heater

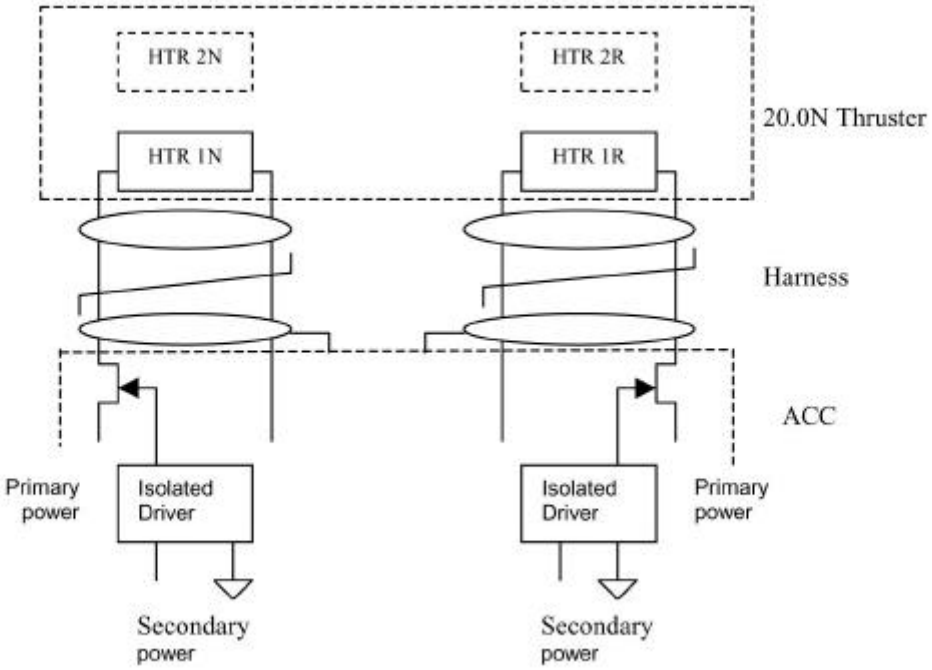
ACC to 20.0N Thruster Cat Bed Heater power I/F.

Parameter	*SOURCE (ACC)*	*RECEIVER (Thruster)*	*Remarks*
OutputVoltage range	25Vdc to 32Vdc	N/A	
Heater Voltage range	N/A	24Vdc to 32Vdc	
Quiescent Voltage	-0.5 to +2Vdc	N/A	
Fault Voltage Emission	≤+37Vdc	N/A	
Heater resistance	N/A	257Ω±13Ω (2)	
Current capability	>250mA	N/A	
Short circuit tolerance	(1)	N/A	

(1) the value corresponds to the upstream LCL III current limitation specified in GDEL-600
(2) The values refer to the ambient temperature20±3°C.
The electrical characteristics of the interconnecting harness shall be as listed in the following table:

Line characteristics	Bonded Ends	CC capacitance (pF)	CS capacitance (pF/m)	Resistance (Ω)
TSP type	source side	<900	<1800	<1 (1)

(1) referred to the line included return.



5.1.8 NCA_Input

To be provided

5.1.9 H501 Heater

Characteristics of H501 Heater to be provided

5.1.10 H701 Heater

Characteristics of H701 Heater to be provided

5.1.11 H702 Heater

Characteristics of H702 Heater to be provided

5.2 MIL-1553 Interfaces

5.3 TM Interfaces

5.3.1 +28V_TM

The +28V TM interface is the Mainbus voltage protected by a 100kΩ resistor, therefore the characteristics of the TM will be the same as for the Mainbus,i.e Mainbus Voltage = 28.14V

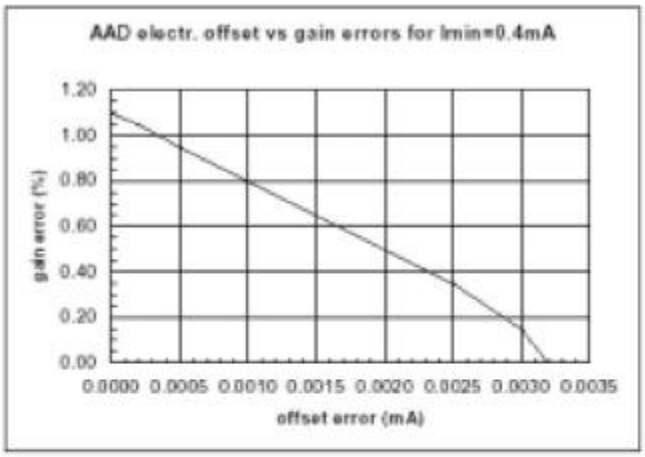
5.3.2 AAD_Mnt & AAD_Output

AAD Current Analog signal I/F:

Parameter	*SOURCE (AAD)*	*RECEIVER (ACC AAU)*	*Remarks*
Circuit type	Isolated	Single ended	
Transfer	DC coupled	DC coupled	
Current range	0 to 0.57mA (7)	0 to 0.60mA	
LPF Frequency (-3dB)	N/A	30Hz <f<150Hz 1st order Low Pass Filter	
Capacitance	<17nF (5)	N/A	
Impedance	>10MΩ Current source parallel resistance 1Ω series resistance (5)	<1Ω @100Hz <100mΩ@10Hz (4)	
Absolute accuracy	N/A	(1)(2)(3)	
Input bias voltage	N/A	±50μV	
Fault Voltage Emission	N/A	±16.5V in series with ≥1.5KΩ	
Overvoltage tolerance	±16.5V with an overvoltage source series impedance ≥1.5KΩ	N/A	
Sampling Frequency	N/A	250Hz	
Dead time delay	N/A	<7ms (6)	Includes multiplexing, AD conversion,processing, internal data transfer

(1) receiver accuracy at A/D Converter output
(2) The combination of offset and gain errors in the receiver, with a temperature in the receiver electronics stable in a band of 20K and Imin.=0.4mA, shall not exceed the combination of offset and scale factor figures listed below:

offset (mA)	gain(%)
0.0000	1.10
0.0002	1.05
0.0005	0.95
0.0010	0.80
0.0015	0.65
0.0020	0.50
0.0025	0.35
0.0030	0.15
0.0032	0.00

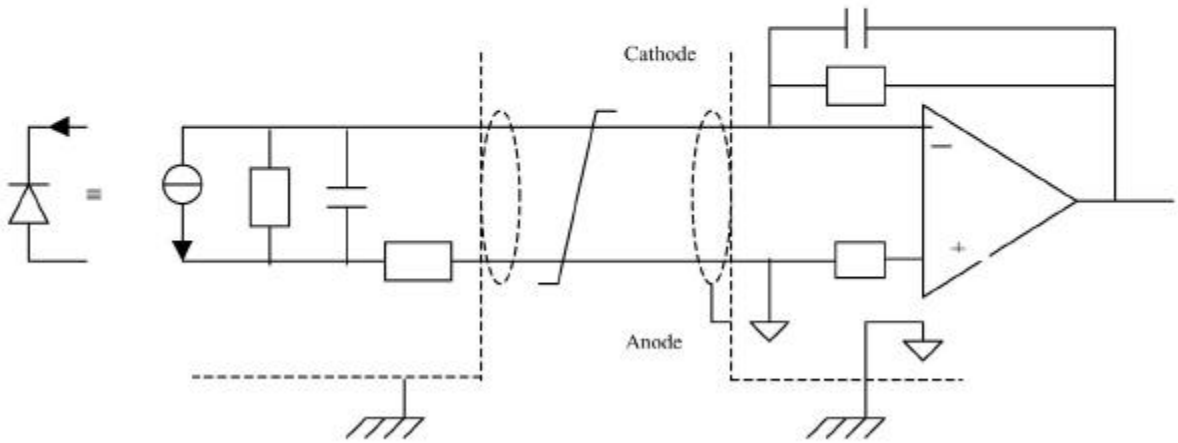


(3) Since calibration in flight is not possible, the manufacturer of the receiver shall factory calibrate the interface so that initial offsets and scale factor are accurately known and only changes in orbit due to temperature variations, aging and radiation are to be considered. The temperature stability of the electronics may be assumed 20K.
(4) Input impedance shall be maintained sufficiently low to ensure that the photo-cell works in a linear range.
(5) The values refer to the 1st order model.
(6) The overall delay, including the LP-filter delay and dead time delay, shall be <0.1s.
(7) The dark current (leakage) is <50µA.

The electrical characteristics of the interconnecting harness shall be as listed in the following table:

Line characteristics	Bonded Ends	CC capacitance (pF)	CS capacitance (nF)	Resistance (Ω)
TPS type	receiver side	<900	<1.8	<2.5 (1)

(1) referred to the line included return.



5.3.3 Thermistor and Therm_Mnt

Electrical Characteristics of implementation to be provided

General requirements are :

	SOURCE	RECEIVER
CIRCUIT TYPE	Thermistor (Ex: Type Fenwall - GB 42)	Single ended Receiver
VOLTAGE AFTER THERMISTOR CONDITIONING (after resistor bridge)		0 V < U < 5.12 V (cod. range) -->LSB = 20 mV
IMPEDANCE Min, Max	TBD (Typical: 15 kΩ at 25°C)	depends on bridge resistances values
CAPACITANCE (differential)		< 1µF (at input) < 100 pF (after MUX)
THERMISTOR SELF POWER DISSIPATION < 0.05 W	Th. current < $\sqrt{\frac{0.05\ W}{R\min}}$ Rmin = thermistor min. resist.	Voltage applied to thermistor < $\sqrt{0.05\ W * R\min}$
FAULT VOLTAGE - Emission Tolerance	short circuit to mechanical ground -16 V < U < +16 V (in series with ≥ 1.5 kΩ)	-16 V < U < +16 V (in series with ≥ 1.5 kΩ) short circuit to mechanical ground **(1)**
LINE CHARACTERISTICS Type Total Core to core Capacitance Total Core to shield Capacitance		Twisted shielded pair - AWG26 < 900 pF < 1.8 nF

THERM/EGSE_Therm1_Tank
THERM/EGSE_Therm2_Tank
THERM/EGSE_Therm3_Tank

Solar Array
RWL

Component number Fenwal 526-31-BS09-153

Nominal resistance (at 25°C) 15KΩ±1%

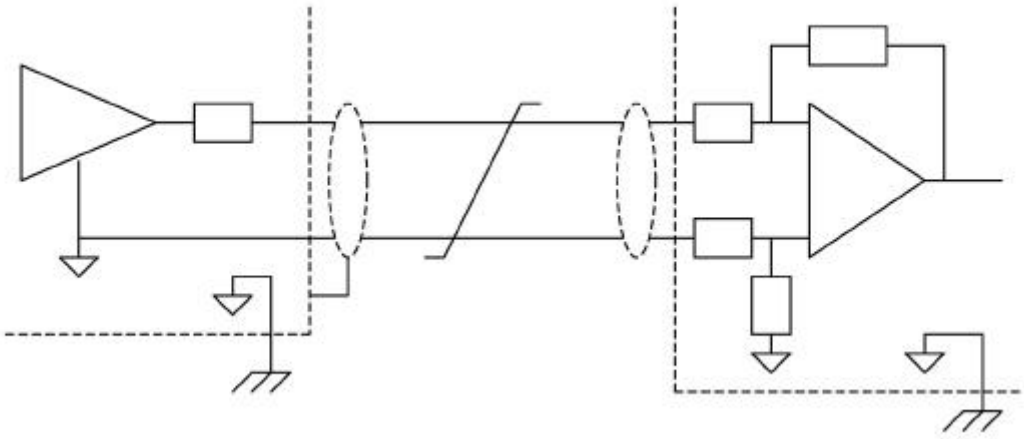
Temp [°C]	Nom R [Ohm]	Min R [Ohm]	Max R [Ohm]
10	28230	27945	28515
11	27020	26746	27294
12	25860	25597	26123
13	24770	24517	25023
14	23720	23477	23963
15	22730	22497	22963
16	21780	21556	22004
17	20870	20655	21085
18	20010	19804	20216
19	19190	18992	19388
20	18410	18220	18600
21	17660	17479	17841
22	16950	16777	17123
23	16280	16114	16446
24	15620	15461	15779
25	15000	14848	15152
26	14410	14263	14557
27	13840	13699	13981
28	13310	13174	13446
29	12790	12659	12921
30	12300	12174	12426
31	11820	11699	11941
32	11370	11253	11487
33	10940	10828	11052
34	10530	10422	10638
35	10130	10026	10234
36	9756	9656	9856
37	9393	9296	9490
38	9047	8954	9140
39	8715	8625	8805
40	8397	8310	8484

5.3.4 CRS_Meas & CRS_Output

CRS Angular rate analog signal I/F.

Parameter	*SOURCE (CRS)*	*RECEIVER (ACC AAU)*	*Remarks*
Circuit type	single ended	Differential	
Transfer	DC coupled	DC coupled	
Voltage range channel X	-10.2V to +10.2V (2)	-8.5V to +8.5V (3)	
Voltage range precision channels Y, Z	-10.2V to +10.2V (2)	-2V to +2V	
CMV	N/A	± 2.5V	
CMRR (up to 10KHz)	N/A	60dB up to 10KHz falling 20dBdecade up to 1MHz	
Common mode impedance	N/A	>10MΩ	
LPF Frequency (-3dB)	N/A	30Hz <f< 150Hz 1st order Low Pass Filter	
Impedance	100Ω±1%	>20KΩ (5)	
Capacitance	<50nF	N/A	
Absolute Accuracy channel X	±0.02% f.s. (±5mV)	±0.1V in the range ± 8.5V (1)	
Absolute Accuracy precision channels Y,Z	±0.02% f.s. (±5mV)	±16mV (1)(4)	
Fault Voltage Emission (max)	±16.5V	±16.5V in series with ≥1.5KΩ	
Overvoltage tolerance (min.)	±16.5V with an overvoltage source series impedance ≥1.5KΩ	±16.5V	both ON and OFF condition
Short circuit protection	Yes	N/A	
Sampling frequency	N/A	250Hz	
Dead time delay	N/A	<7ms	Includes Sampling, ADC, internal data transfer to ASW. No input filter included.

(1) receiver accuracy at A/D Converter output
The manufacturer of the receiver shall factory calibrate the interface so that initial offsets and scale factor are accurately known. Only changes in orbit due to temperature variations, aging and radiation are to be considered.
Condition between calibrations are: thermal stability 20K (pp variation), time 1 month
(2) maximum expected range is up to ±7V.
(3) The guaranteed conversion range shall be ±8.39V.
(4) ±8mV assuming a monthly in-orbit calibration..
(5) To be measured with an accuracy of 5% by manufacturer.



5.3.5 DR_Mnt

General Requirements :

	SOURCE	LOAD
CIRCUIT TYPE	Single ended driver	Relay
VOLTAGE - Active voltage - Passive voltage	 22 V < U < 29 V (when load > 162 Ω) 0 V < U < 2 V	 Max switching threshold: [a] < 22 V ; [b] < 16.6 V Min switch. threshold > 4V
CURRENT - Sinking current - Driving capability - Leakage - Short circuit	 < 50 µA ≥ 180 mA (with U > 16.6V) ≥ 135 mA (with U > 22 V) ≤ 2.5 µA ≤ 400 mA (during pulse)	 [b] Rmin > 92 Ω [a] Rmin > 162 Ω
SIGNAL SHAPE - Pulse length (Tp) - Rise time(10%-90%) - Fall time(10%-90%)	 26 ms ± 2 ms 50 µs < Tr < 500 µs (*) 50 µs < Tf < 500 µs (*)	
CAPACITY	< 50 pF	< 300 pF
REPETITION RATE	Pulse rate < 4 Hz	
FAILURE CASE - Max. Emission - Tolerance	 0 V < U < 33 V (current limited to 400 mA) The interface shall withstand a permanent short circuit condition between ✚ & return outputs with no resulting damage -5 V < U < 48 V	 ✚ & return short circuit -5 V < U < 48 V 0 V < U < 33 V (Fault source limited to 400 mA)
LINE CHARACTERISTICS Type Total Differential Capacitance Total Voltage Drop		 Twisted-AWG26 < 600 pF < 240mV

5.3.6 PT_Meas & PT_Meas_Output

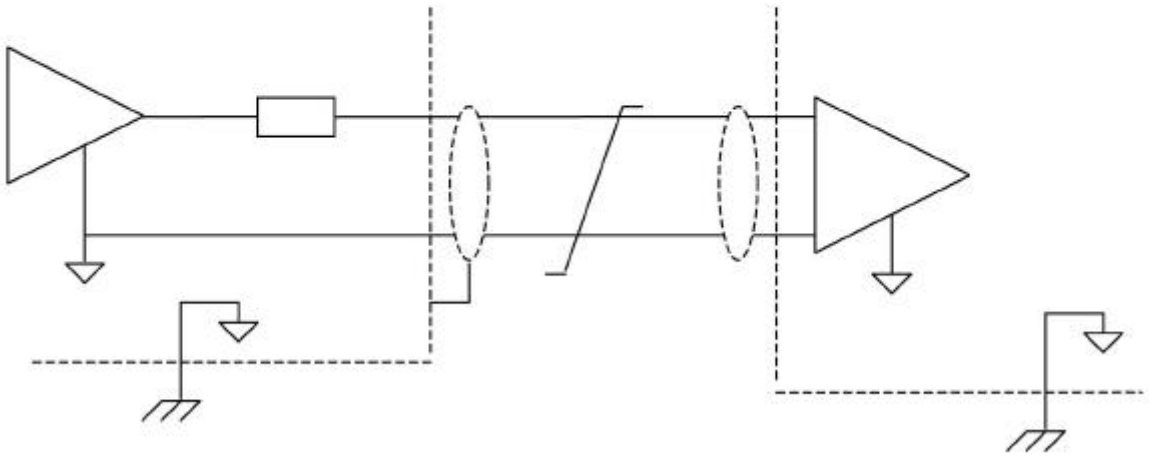
Parameter	*SOURCE (PT)*	*RECEIVER (ACC)*	*Remarks*
Circuit type	Single ended	Differential	
Transfer	DC coupled	DC coupled	
Output voltage	0 to +5V	0 to +5V	
CMV	N/A	± 2.5V	
CMRR (up to 10KHz)	N/A	≥ 60dB falling 20dB/dec. up 1MHz	
LPF Frequency (-3dB)	N/A	1KHz max	
Roll-off rate	N/A	6dB/Oct	
Output Ripple and Noise	20mVpp	N/A	
Capacitance	50pF	<10nF	
Impedance	<100Ω	≥500KΩ	
Accuracy	±0.7%f.s.	±2% f.s. (1)	
Fault Voltage Emission	-1V /+7.5V	±16.5V in series with ≥1.5KΩ	
Overvoltage tolerance	±16.5V with an overvoltage source series impedance ≥1.5KΩ	1V /+7.5V	
Current limitation	10mA	N/A	

(1) receiver accuracy at A/D Converter output

The electrical characteristics of the interconnecting harness shall be as listed in the following table:

Line characteristics	Bonded Ends	CC capacitance (pF)	CS capacitance (nF)	Resistance (Ω)
TPS type	source side	900	1.8	<2.5 (1)

(1) referred to the line included return.



5.3.7 SAS_Mnt & SAS_Output

SAS Current Analog signal I/F :

Parameter	*SOURCE (SAS)*	*RECEIVER (ACC AIU)*	*Remarks*
Circuit type	Isolated	Single ended	
Transfer	DC coupled	DC coupled	
Current range	0 to 35mA (4)	0 to 40mA	
Input Bias Voltage	N/A	±4mV	
LPF Frequency (-3dB)	N/A	20Hz <f< 100Hz 1° order LPF	
Capacitance (parasitic)	<17nF (3)	N/A	
Impedance	>10MΩ Current source parallel resistance (3) 1Ω series resistance	<1Ω @100Hz <100mΩ @10Hz (2)	
Absolute Accuracy	N/A	±0.15mA @10mA (1)	
Fault Voltage Emission	N/A	±16.5V in series with ≥1.5KΩ	
Overvoltage tolerance	±16.5V with an overvoltage source series impedance ≥1.5KΩ	N/A	
Dead time delay	N/A	≤3ms	Includes AD conversion, processing, internal data transfer (5)
Sampling frequency	N/A	4Hz	

(1) This figure includes offset and gain errors. If offsets are negligible or can be trimmed to zero or calibrated this error corresponds to a scale factor error of 1.5%. Alternatively, if the scale factor would be accurately known by calibration and if stability over temperature and aging is assured, an offset of 0.15mA would still acceptable. The manufacturer of the receiver has the freedom to select components and perform calibration/characterization in such a way that the absolute accuracy requirement of 0.15mA @ 10mA can be met. This accuracy is absolute and applies to each individual channel. It does not consider possible improvement by matching channels.

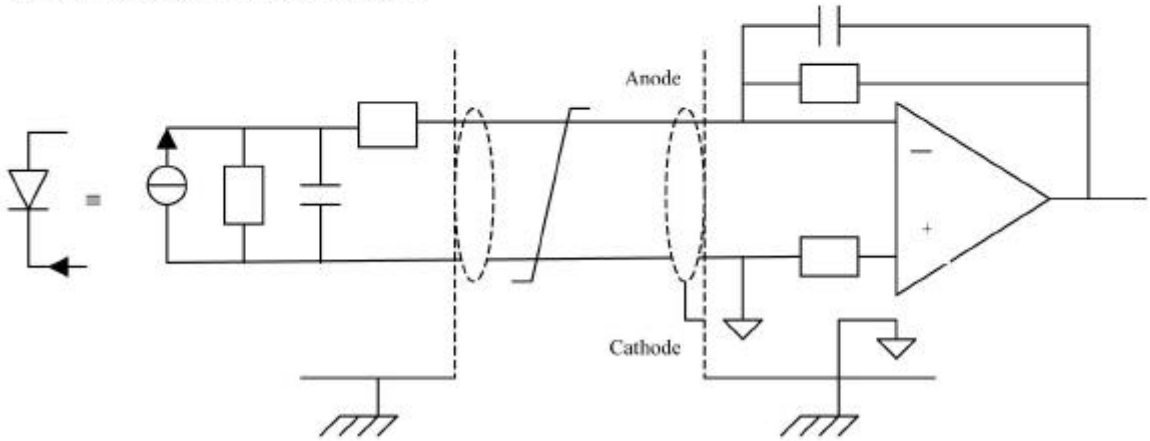
(2) Input impedance shall be maintained sufficiently low to ensure thet the photo-cell works in a linear range.

(3)The values refer to the 1st order model.
(4) The dark current (leakage) is <50µA(5).
(5) The total delay (including LP-filter and the dead time delay) shall not exceed 0.1s

The electrical characteristics of the interconnecting harness shall be as listed in the following table:

Line characteristics	Bonded Ends	CC capacitance (pF)	CS capacitance (nF)	Resistance (Ω)
TPS type	receiver side	<900	<1.8	<2.5 (1)

(1) referred to the line included return.



5.3.8 SBDL_Driver & SBDL_Receiver

CDMU/XPND TC/TM Interfaces.

The CDMU exchanges TC/TM with XPND transponder.

- Each CDMU /XPDN TM interface consists of the following signals:

TM_data
TM_clock

- Each XPND / CDMU TC interface consists of the following signals:

TC_Act (Squelch Function: validation of data and clock signals)
TC_Clk (TC bit clock signal)
TC_In (TC incoming data bit Stream)
RF Av_N (Rx carrier lock: transponder has locked on an RF carrier)

4.1.3.1 CDMU/XPND TM Interface.

The interface used for the TM_Data and the TM_Clock signals is a Special I/F which, although it is a Balanced Digital type, differs from the SBDL I/F already specified in H-P-I-ASPI-SP-0027 GDIR section 6.8.1.4.

The electrical characteristics of the Balanced Digital Link source and receiver shall be as listed in the following table:

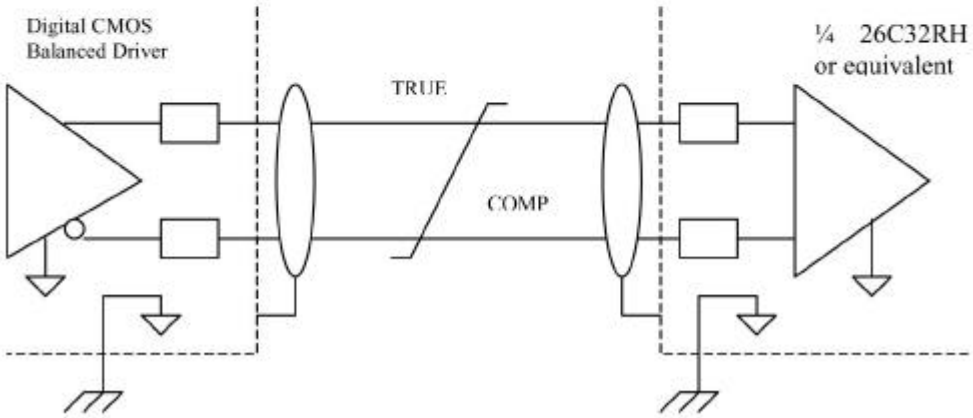
Parameter	*SOURCE (CDMU)*	*RECEIVER (XPND)*	*Remarks*
Low Level Output Voltage	$0\ V \leq V_{OL} \leq 0.5\ V$ (1)	N/A	
High Level Output Voltage	$2.5\ V \leq V_{OH} \leq 5.5\ V$ (1)	N/A	
Differential Voltage	$2.0\ V \leq \lvert V_{OD} \rvert \leq 5.5\ V$	Low : $V_{ID} \leq -1V$ High $V_{ID} \geq +1V$	
Rise and Fall Times	$10ns \leq tr \leq 58ns$ (2) $10ns \leq tr \leq 58ns$ (2)	N/A	
Differential Impedance	$107\Omega \leq Zd \leq 140\Omega$ (4)	DC: $\geq$ 5 kOhm (4)	
Common Mode Voltage	N/A	$-2.5\ V \leq V_{CM} \leq +2.5\ V$	
Current Drive and Sink Capability	sufficient to comply with specified tr & tf (2)	N/A	
Short Circuit	short circuit proof; current limited to <150 mA	N/A	
Fault Voltage Emission	0V to +5V	0 V to +5V (3)	
Fault Voltage Tolerance	-12 V to +12 V (3)	-0.5 V to +7 V	(5)
Zero Reference	signal ground	N/A	

(1) non-inverting (true) & inverting (comp) output with ref. to signal ground;
(2) when loaded with differential 400pF (harness & user input capacitance). Max TM rate is 3441300 Symbol Rate = 290 ns Symbol period).
(3) with an overvoltage source impedance of 1kOhm.
(4) Both source and receiver I/Fs shall provide a serial termination on the true and complemantary line.
(5) additional protection components may be added as deemed necessary by the circuit designer.

The electrical characteristics of the interconnecting harness shall be as listed in the following table:

Line characteristics	Bonded Ends	Differential capacitance (pF)	Characteristic Impedance (Ω)
TSP (1)	both side	< 380 (2)	125

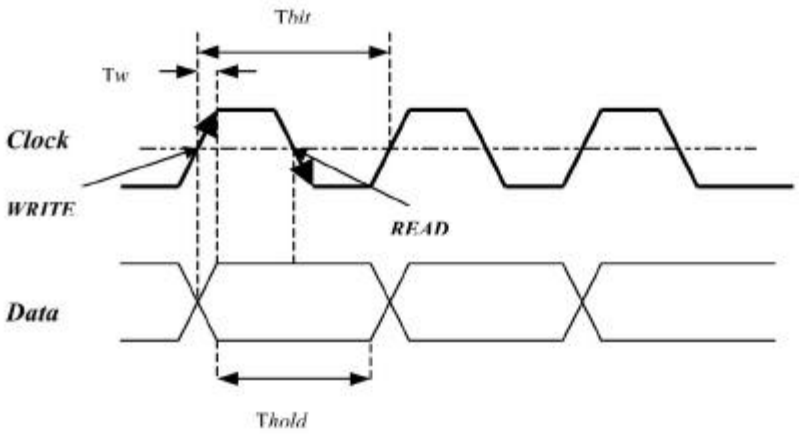
(1) the TwinAx Gore GSC 6509,Rev.6 shall be used.
(2) the value is referred to a cable length ~ 5m



TM_Clock/DataTiming.

The serial digital data provided by the transmitter shall be a serial NRZ-L binary.

The transfer of the data shall be controlled by the edges of the clock signal.
The transmitter shall transfer (WRITE) the TM data on the data channel during the low level to high level voltage transition of clock signal (rising edge).
The receiver shall acquire (READ) the TM data during the high level to low level voltage transition of clock signal (falling edge).
The requested timing for the CLOCK and DATA lines is the following:



Data rate (bps)	LOW-1 500	LOW-2 5000	MEDIUM 150000	HIGH 1500000
Symbol rate (sps)	1147.1	11471	344130	3441300
Tbit (µs)	871.764	87.176	2.906	0.291
Tw (µs)	87.176	8.718	0.291	0.029
Thold (µs)	697.411	69.741	2.325	0.232

All the timing are referred at the zero level crossing of the differential signals."Tw" is the max elapsed time from the rising edge of clock after that the new data shall have to be stable.
"Thold" shall be the guaranteed time duration of the stable data on the channel by the transmitter.
"Tbit" is the clock signal time period.

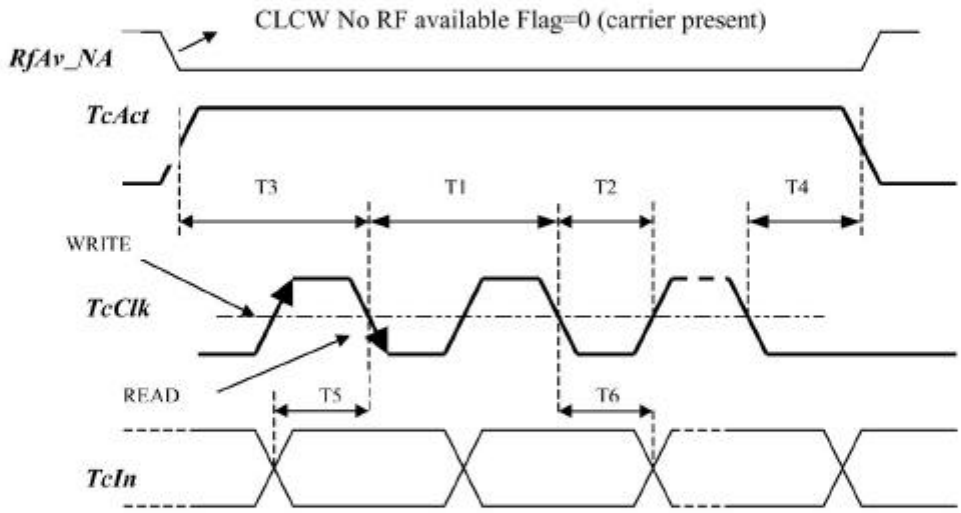
XPND/CDMU TC Interface.

The interface type used for these signals is a SBDL I/F and the electrical characteristics of the source and destination will be in accordance with H-P-1-ASPI-SP-0027 GDIR section 6.8.1.4.

TC_Act/Clock/DataTiming

The serial digital data provided by the transmitter (XPND) shall be a serial NRZ-L binary.

The transfer of the data shall be controlled by the edges of the clock signal.
The transmitter (XPND) shall transfer (WRITE) the TC data on the data channel during the low level to high level voltage transition of clock signal (rising edge).
The receiver (CDMU) shall acquire (READ) the TM data during the high level to low level voltage transition of clock signal (falling edge).
The requested timing for the ACT, CLOCK and DATA lines is the following:



parameter	*parameter description*	*Min.time*
T1	Tc*Clk* period	10µs
T2	Tc*Clk* width high, low	5µs
T3	Tc*Act* high to first TcClk falling	4µs
T4	Tc*Clk* to TcAct low	4µs
T5	Tc*In* setup before TcClk falling	2µs
T6	Tc*In* hold after TcClk falling	4µs

All the timing are referred at the zero level crossing of the differential signals

- *TcAct, (Squelch Function)* a high level on this signal indicates that clock and data are valid
- *TcClk, (TC Bit Clock)* clock signal
- *TcIn, (TC Data Bit Stream)* incoming data
- *RFAv_N, (Rx Carrier Lock)* indicates that the Transponder has locked on an RF carrier.

5.3.9 SREM_SBDL_Driver

Electrical characteristics to be provided

5.3.10 SREM_SBDL_Receiver

Electrical characteristics to be provided

5.3.11 VMC_SBDL_Driver

Electrical characteristics to be provided

5.3.12 VMC_SBDL_Receiver

Electrical characteristics to be provided

5.3.13 RWL-M

Reaction Wheel Motor Current Monitoring electrical characteristics to be provided

5.3.14 RWL-ON/OFF-Status

Reaction Wheel Motor ON/OFF Status electrical characteristics to be provided

5.3.15 SD-Input

Reaction Wheel Speed Direction electrical characteristics to be provided

5.3.16 RWL-SD

Reaction Wheel Motor Speed Direction electrical characteristics to be provided (ACC input)

5.3.17 RWL-S

Reaction Wheel Tacho monitor electrical characteristics to be provided

5.3.18 RWL-Tacho Input

Reaction Wheel Motor Tacho monitor electrical characteristics to be provided (ACC input)

5.3.19 T502 Temperature Sensor

T502 Temperature Sensor electrical characteristics to be provided

5.3.20 L701 & L702 LHe Level Sensor

L701 and L702 LHe Level Sensor electrical characteristics to be provided

5.4 TC Interfaces

5.4.1 CRS_Stim_input

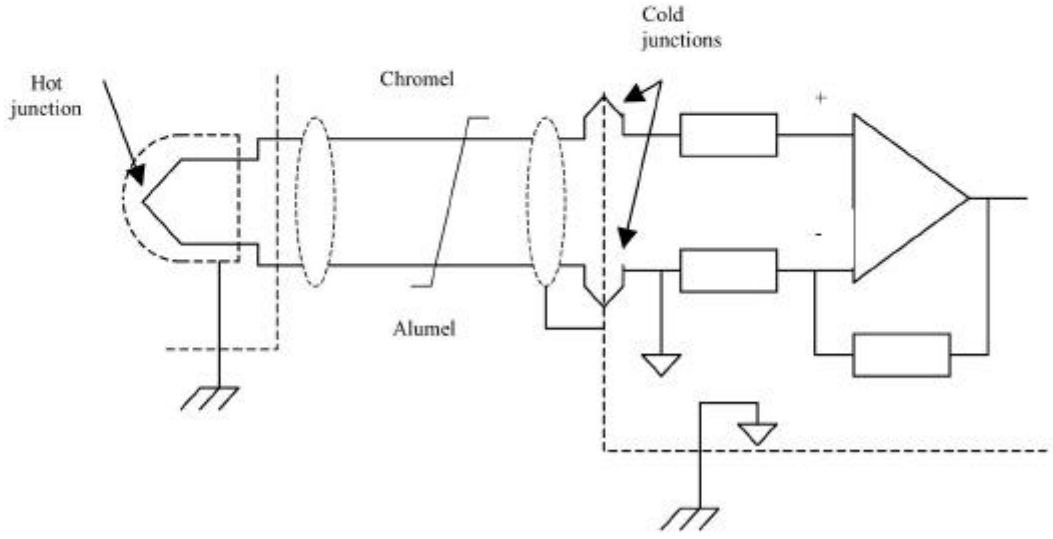
Electrical characteristics to be provided

5.4.2 THR_TS & THR_TS_Output

1.0N Thermocouple signal I/F.

Parameter	*SOURCE (Thruster)*	*RECEIVER (ACC)*	*Remarks*
Circuit type	Isolated hot junction	Single ended	
Transfer	DC coupled	DC coupled	
Component type	type K	N/A	Thermocoax Part Number 2ABI10/TI/65/D50/2ABT35/2m
Resolution	see table below	N/A	i.e. 41µV/°C
Impedance	10-20Ω	N/A	
Full temperature range	-200 to 1370°C	N/A	
Operating temperature range	0 to 800°C	N/A	
LPF Frequency (-3dB)	N/A	>10Hz	
Relative Accuracy	N/A	±2°C (2)	
Cold junction compensation (Y/N)	N	Y (1)	
Fault Voltage emission	short circuit to ground	16.5V in series with ≥1.5KΩ	
Overvoltage tolerance	16.5V with an overvoltage source eries impedance ≥1.5KΩ	N/A	

(1) the cold junctions shall be represented by the ACC and Harness S/S mated contacts at I/F plane as default but the receiver manufacturer can place the junctions inside the ACC unit if the connections are extended by using Nickel-Chrom/Nickel contacts and internal wires.
(2) receiver accuracy at A/D Converter output.



°C	0	10	20	30	40	50	60	70	80	90
-200	5.891	-6.035	-6.158	6.262	6.344	6.404	6.441	-6.458		
-100	3.553	-3.852	-4.138	4.410	4.669	4.912	5.141	5.354	5.550	5.730
0	0	-0.392	-0.777	-1.156	- 1.527	- 1.889	- 2.243	- 2.586	- 2.920	- 3.242
+0	0	0.397	0.798	1.203	1.611	2.022	2.436	2.850	3.266	3.681
100	4.095	4.508	4.919	5.327	5.733	6.137	6.539	6.939	7.388	7.737
200	8.137	8.537	8.938	9.341	9.745	10.151	10.560	10.969	11.381	11.793
300	12.207	12.623	13.039	13.456	13.874	14.292	14.712	15.132	15.552	15.974
400	16.396	16.818	17.241	17.664	18.088	18.513	18.938	19.363	19.788	20.214
500	20.640	21.066	21.493	21.919	22.346	22.772	23.198	23.624	24.050	24.476
600	24.902	25.327	25.751	26.176	26.599	27.022	27.445	27.867	28.288	28.709
700	29.128	29.547	29.965	30.383	30.799	31.214	31.629	32.042	32.455	32.866
800	33.277	33.686	34.095	34.502	34.909	35.314	35.718	36.121	36.524	36.925
900	37.325	37.724	38.122	38.519	38.915	39.310	39.703	40.096	40.488	40.879
1000	41.269	41.657	42.045	42.432	42.817	43.202	43.585	43.968	44.349	44.729
1100	45.108	45.486	45.863	46.238	46.612	46.985	47.356	47.726	48.095	48.462
1200	48.828	49.192	49.555	49.916	50.276	50.633	50.990	51.344	51.697	52.049
1300	52.398	52.747	53.093	53.439	53.782	54.125	54.466	54.807		

(voltages in [mV])

The cable wires and the plug connector contacts shall be Nickel-Chrom/Nickel.

5.4.3 HL_Cmd & HP_Cmd

	SOURCE	LOAD
CIRCUIT TYPE	Single ended driver	Opto-coupler
VOLTAGE - Active voltage - Passive voltage	 22 V < U < 29 V (when load > 162 Ω) 0 V < U < 2 V	 Max switching threshold: < 14 V Min switch. threshold: > 5 V
CURRENT - Sinking current - Driving capability - Leakage - Short circuit	 < 50 µA ≥ 10 mA ≤ 2.5 µA ≤ 400 mA (during pulse)	 Min. current > 2.5 mA
SIGNAL SHAPE - Pulse length - Rise time(10%-90%) - Fall time(10%-90%)	 Tp = 26 ms ± 2 ms 50 µs < Tr < 500 µs (*) 50 µs < Tf < 500 µs (*)	 command validation: time threshold ≥ 5 ms
CAPACITY	< 50 pF	< 300 pF
° REPETITION RATE	Pulse rate < 4Hz	
FAILURE CASE - Max. Emission - Tolerance	 0 V < U < 33 V (Fault source imp. ≥ 1.5 kΩ) The interface shall withstand a permanent short circuit condition between ✚ & return outputs with no resulting damage -5 V < U < 48 V	 ✚ & return short circuit -5 V < U < 48 V » 0 V < U < 33 V (Fault source imp. ≥ 1.5 kΩ)
² LINE CHARACTERISTICS Type Total Differential Capacitance Total Voltage Drop		Twisted-AWG26 < 600 pF < 240mV

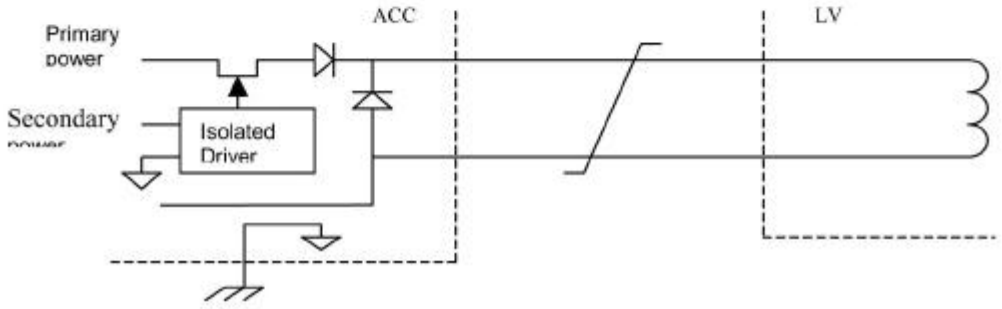
5.4.4 LV_Cmd_Input

LV 28V Pulse Command I/F.

The electrical characteristics of the command source and destination shall be as listed in the following table:

Parameter	*SOURCE (ACC)*	*RECEIVER (LV)*	*Remarks*
Circuit type	Single ended	Isolated coil	
Transfer	DC coupled	DC coupled	
Voltage active	25V to 32V	24V to 32V	
Voltage quiescent	-0.5V to +2V (4)	-0.5V to +2V (4)	
Leakage (quiescent state)	<1mA	N/A	
Current driver capability	≥ 1.2A (3)	N/A	
Pulse width	50ms to 100ms	N/A	
Rise/Fall time	t ≤ 100 µs	N/A	
Fault Voltage Emission	+32V	N/A	
Short circuit tolerance	(2)	N/A	
Overvoltage tolerance	(1)	35V up 125ms	
Coil ohmic resistance	N/A	29 to 31 Ω	
Coil inductance	N/A	≤200 mH	
Switching time	N/A	<20ms	

(1) The driver shall be equipped with opportune suppress device.
(2) The value corresponds to the upstream LCL III current limitation.
(3) Calculated at min. 26.21Ω @0°C.
(4) With a max provided current 1mA by ACC.



5.4.5 LVA_DR_Output

The LV position status shall be a Standard I/F and the electrical characteristics of the monitor source and destination shall be in accordance with H-P-1-ASPI-SP-0027 GDIR section 6.8.2.4.

The harness shall realize the interconnection with a twisted three-wires (T3).

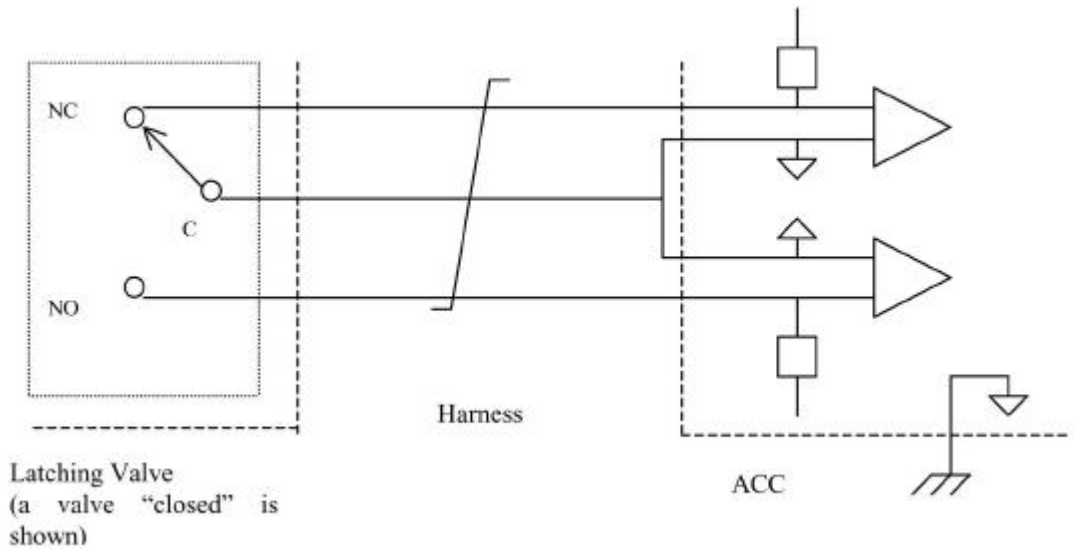
The harness manufacturer shall perform the splicing for the common return at ACC side providing two separated return signal contacts on the plug connector.

The LV µSWITCH shall be equipped with flying leads which characteristics are listed below:

Line characteristics	CC capacitance (pF/m)	CS capacitance (pF/m)	Length (m)	Resistance (Ω/m)
Flying leads TP AWG22 MIL-W-81381/7	115	N/A	1	0.1 (1)

(1) referred to the line included return

Flying leads identification	**Function**
Green/White	Microswitch NC (Contact closed =LV OFF status=valve closed)
White	Microswitch NO (Contact closed =LV ON status=valve open)
Red/White	Microswitch Common



5.4.6 STR_HP_Input

Electrical characteristics to be provided

5.4.7 STR_Stim

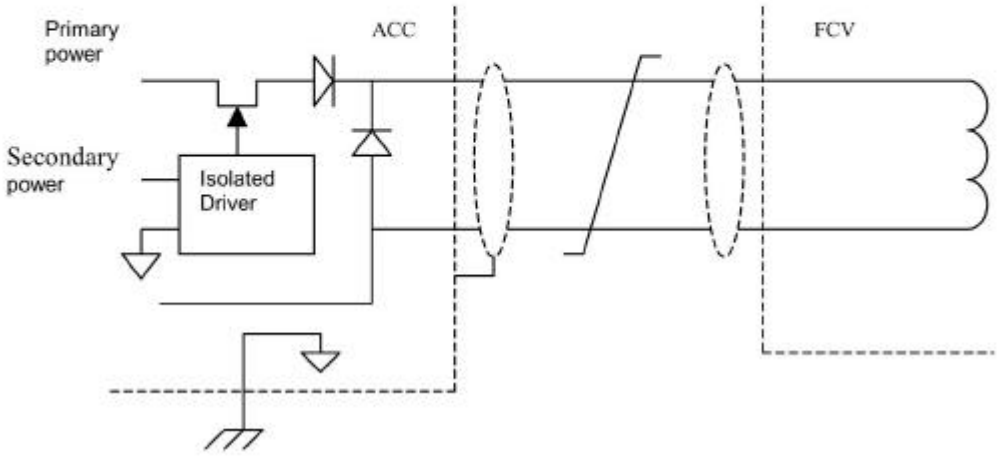
Electrical characteristics to be provided

5.4.8 THRDV_Vlv-Cmd & THR20_Vlv-Cmd_Input

20.0N FCV 28Vdc Pulse Command I/F:

Parameter	*SOURCE (ACC)*	*RECEIVER (Thruster)*	*Remarks*
Circuit type	single ended	Isolated coil	
Transfer	DC coupled	DC coupled	
Voltage active	25Vdc to 32Vdc	24Vdc to 32Vdc	
Voltage quiescent	-0.5 to +2Vdc (3)	-0.5 to +2Vdc (3)	
Current driver capability	>500mA	N/A	
Leakage (quiescent state)	<1mA	N/A	
Pulse width (at 28Vdc)	30ms to 2250s	N/A	
Rise/Fall time	≤100µs	N/A	
Fault Voltage Emission	+32Vdc	N/A	
Short circuit tolerance	(2)	N/A	
Overvoltage tolerance	(1)	35Vdc up to TBDms	
Coil ohmic resistance	N/A	59 to 61Ω	
Coil inductance	N/A	540mH	
Switching time	N/A	<20ms	
Drop-out voltage	N/A	1Vdc	
Pull-in voltage	N/A	20Vdc	

(1) the driver shall be equipped with opportune suppress device
(2) the value corresponds to the upstream LCL III current limitation specified in GDEL-600.
(3) with a max provided current 1mA by ACC.



5.4.9 THRDV_Htr-Cmd

Electrical characteristics to be provided

5.4.10 LOBT_Sync

The Sync line uses the SDBL interfaces :

The electrical characteristics of the Balanced Digital Link source and receiver shall be as listed in the following table:

Parameter	*SOURCE (CDMU)*	*RECEIVER*	*Remarks*
Low Level Output Voltage	$0\ V \leq V_{OL} \leq 0.5\ V$ (1)	N/A	
High Level Output Voltage	$2.5\ V \leq V_{OH} \leq 5.5\ V$ (1)	N/A	
Differential Voltage	$2.0\ V \leq \lvert V_{OD} \rvert \leq 5.5\ V$	Low : $V_{ID} \leq -1V$ High $V_{ID} \geq +1V$	
Rise and Fall Times	$10ns \leq tr \leq 58ns$ (2) $10ns \leq tr \leq 58ns$ (2)	N/A	
Differential Impedance	$107\Omega \leq Zd \leq 140\Omega$ (4)	DC: $\geq$ 5 kOhm (4)	
Common Mode Voltage	N/A	$-2.5\ V \leq V_{CM} \leq +2.5\ V$	
Current Drive and Sink Capability	sufficient to comply with specified tr & tf (2)	N/A	
Short Circuit	short circuit proof; current limited to <150 mA	N/A	
Fault Voltage Emission	0V to +5V	0 V to +5V (3)	
Fault Voltage Tolerance	-12 V to +12 V (3)	-0.5 V to +7 V	(5)
Zero Reference	signal ground	N/A	

(1) non-inverting (true) & inverting (comp) output with ref. to signal ground;
(2) when loaded with differential 400pF (harness & user input capacitance). Max TM rate is 3441300 Symbol Rate = 290 ns Symbol period).
(3) with an overvoltage source impedance of 1kOhm.
(4) Both source and receiver I/Fs shall provide a serial termination on the true and complemantary line.
(5) additional protection components may be added as deemed necessary by the circuit designer.

5.4.11 Sync_in

Electrical characteristics to be provided for :
PACS MEC

5.4.12 GYRO_HL_Command_Input

Electrical characteristics to be provided

5.4.13 RWL-Td

Reaction Wheel Torque-Direction Command input electrical characteristics to be provided

5.4.14 RWL-T-input

Reaction Wheel Torque- Command input electrical characteristics to be provided

5.4.15 RWL-ON/OFF-input

Reaction Wheel ON/OFF Command input electrical characteristics to be provided

5.4.16 CCU Dry Loop Command Interface

CCU Dry Loop Command input electrical characteristics to be provided

5.4.17 V105, V701 & V702 Valve

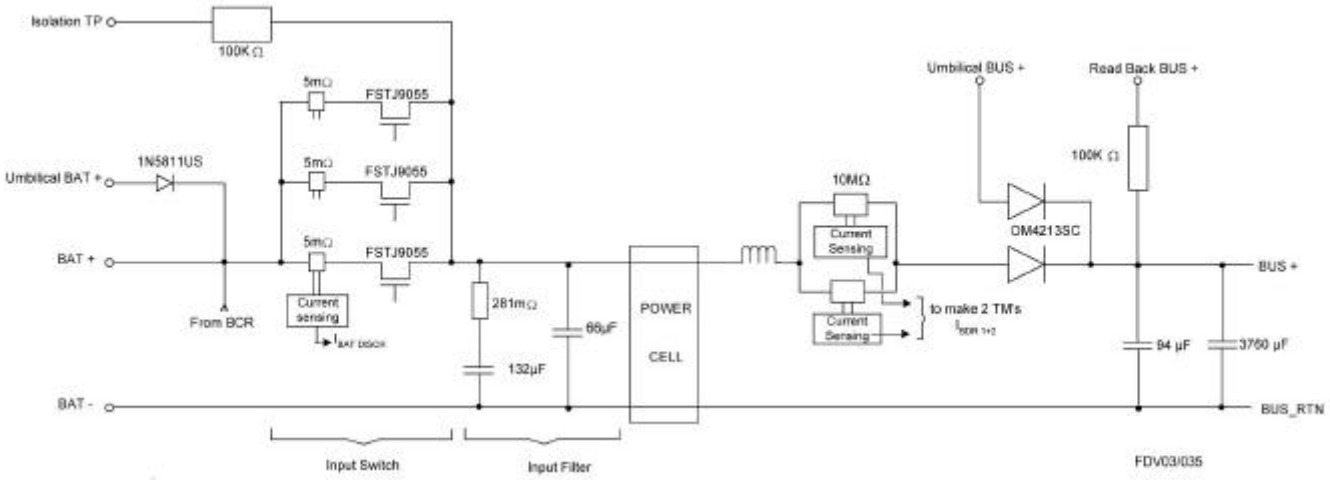
Electrical characteristics to be provided for these valves

6 INTERFACE CIRCUIT DIAGRAMS

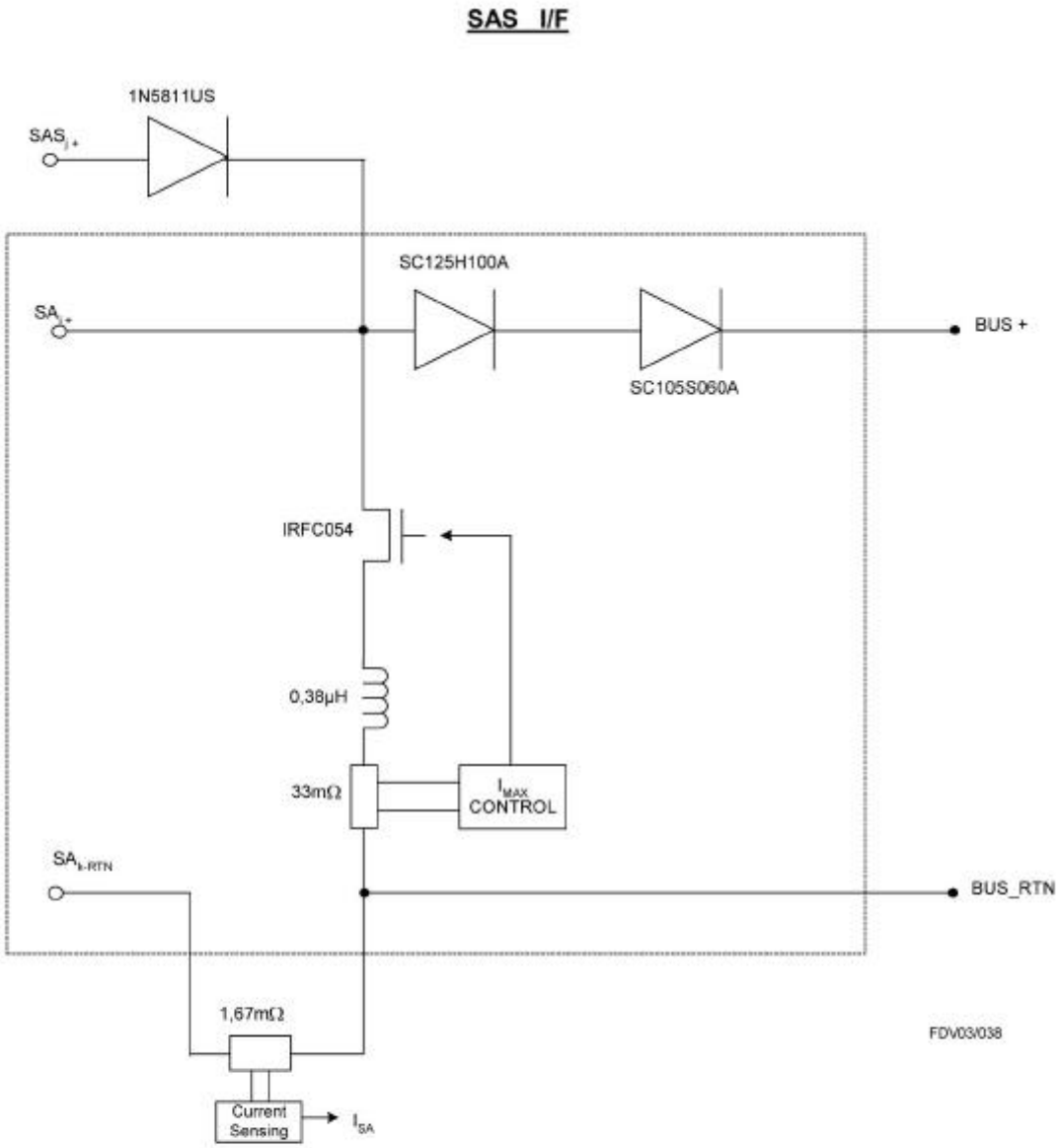
This chapter gives the electrical interface circuits per individual interface. for each interface type referenced in the tables in paragraph 4.

6.1 Power Interfaces

6.1.1 PCDU_Battery_Input



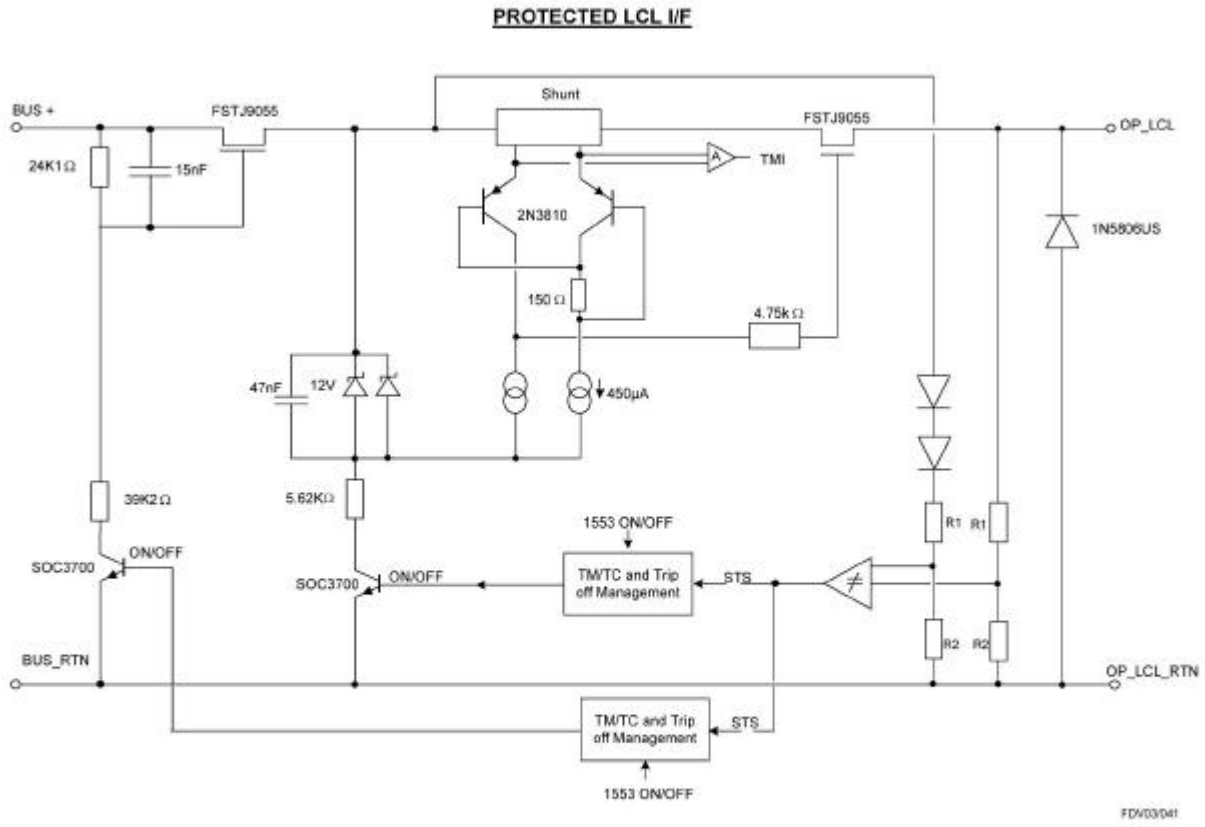
6.1.2 PCDU_SA_input & SA_Aux_PWR_in



Module	SAS I/F	Corresponding SA I/F
SUN 1	J = 1 J = 2	I = 25, k = 1 I = 28, k = 1
SUN 2	J = 3 J = 4	I = 26, k = 2 I = 29, k = 2
SUN 3	J = 5 J = 6	I = 27, k = 3 I = 30, k = 3

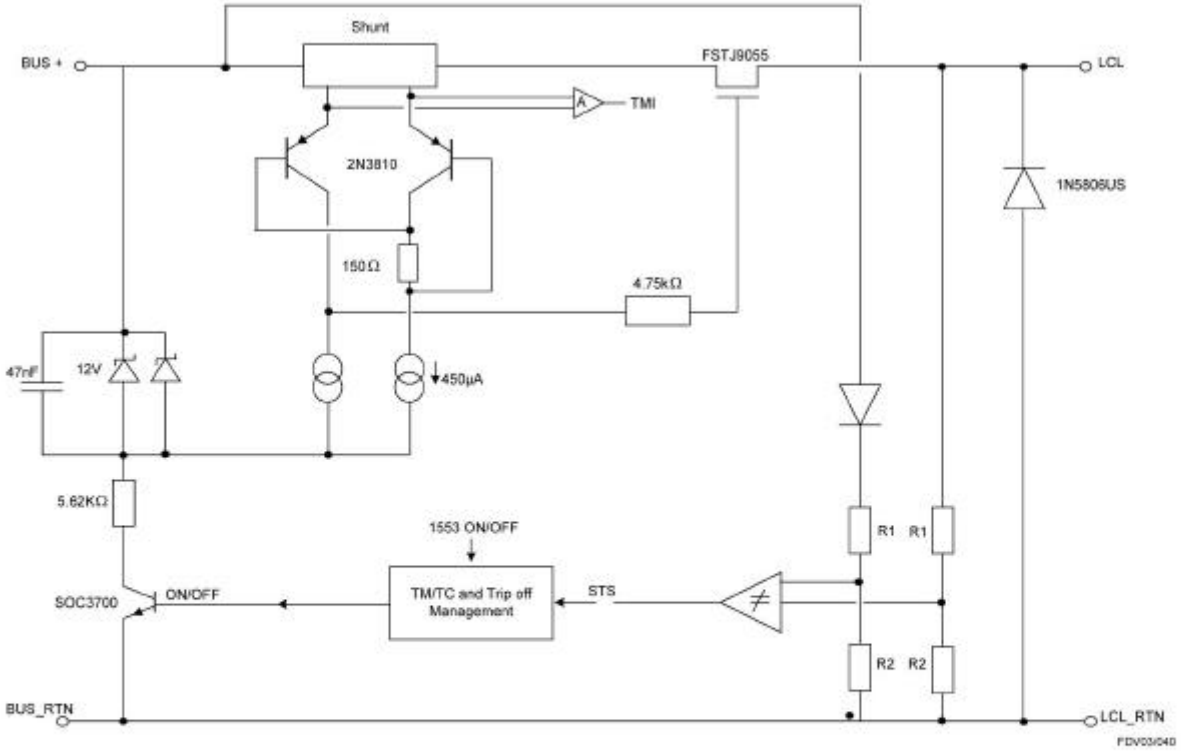
6.1.3 PCDU_LCL

Protected LCL I/F



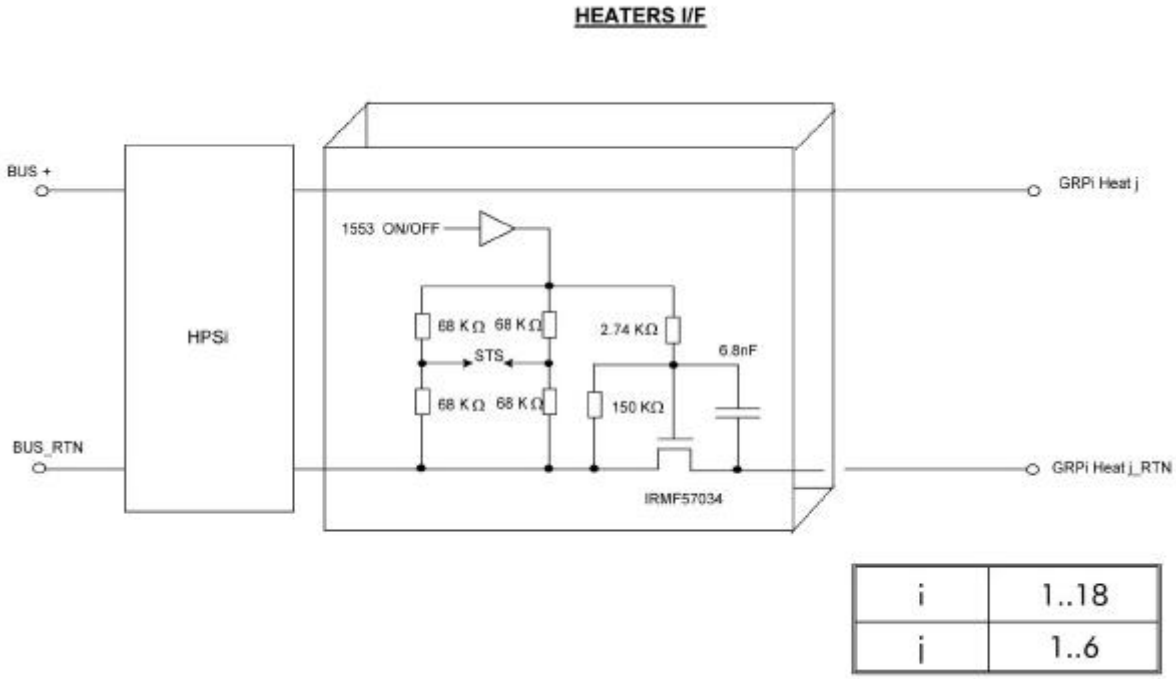
	Class I	Class II	Class III
Shunt Value	50 mΩ	20 mΩ	10 mΩ

LCL I/F and HPS I/F



	Class I	Class II	Class III	HPS
Shunt Value	50 mΩ	20 mΩ	10 mΩ	5 mΩ

6.1.4 PCDU_Heater_pwr

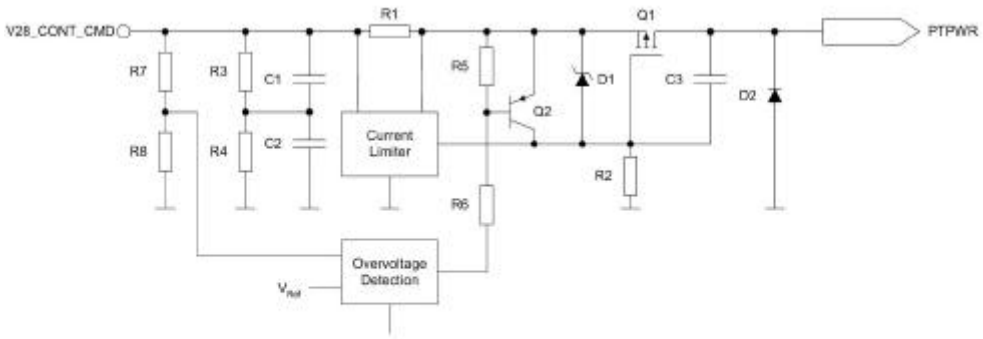


i	1..18
j	1..6

6.1.5 PT_Input_Pwr

TO BE PROVIDED

6.1.6 PT_Pwr

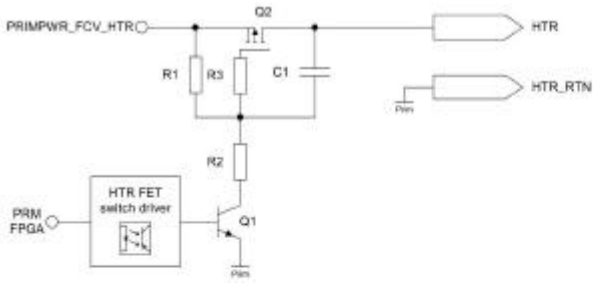


Component	Value
R1	2R49
R2	27k4
R3, R4	1M
R5	10k
R6	68k1
R7	50k9
R8	10k
C1, C2	1µF
C3	470pF
D1	1N4106UR
D2	1N5806US
Q1	IRHNJ597130
Q2	2N2907

6.1.7 PWR_Input

SREM_Pwr
VMC_Pwr
CCU
HIFI HRH
HIFI HRV
HIFI ICU
HIFI LCU
HIFI WEH
HIFI WEV
PACS BOLC
PACS DPU
PACS MEC
PACS SPU
SPIRE DPU
SPIRE FCU

6.1.8 THR_20N_Heater

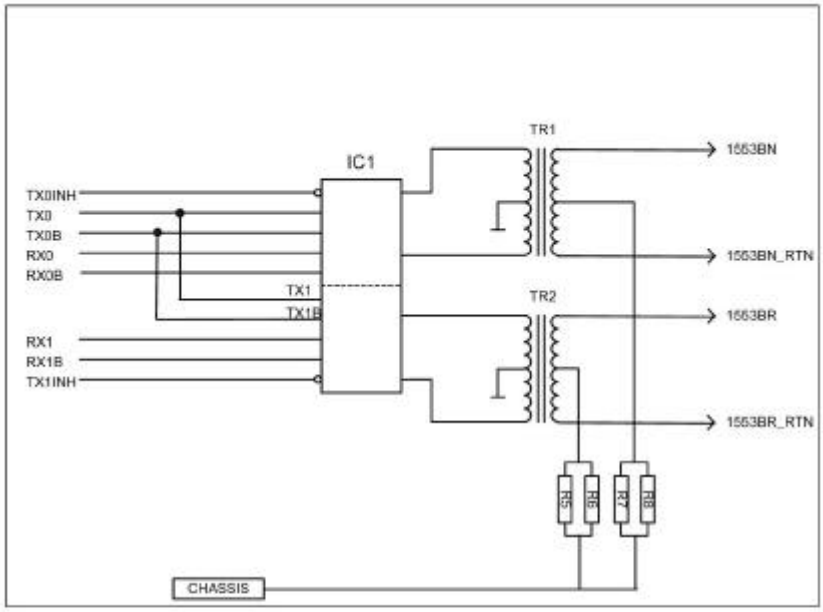


Component	Value
R1	3k32
R2	6k81
R3	21R5
C1	1.5nF
D1	1N5806US
Q1	2N3700
Q2	IRHNJ597130

6.1.9 NCA_Input

To be provided

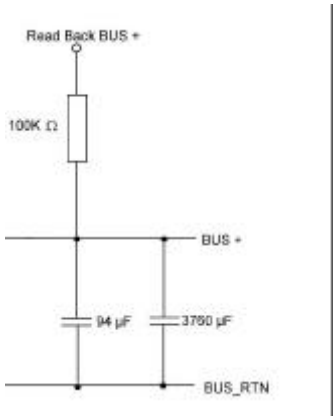
6.2 MIL-1553 Interfaces



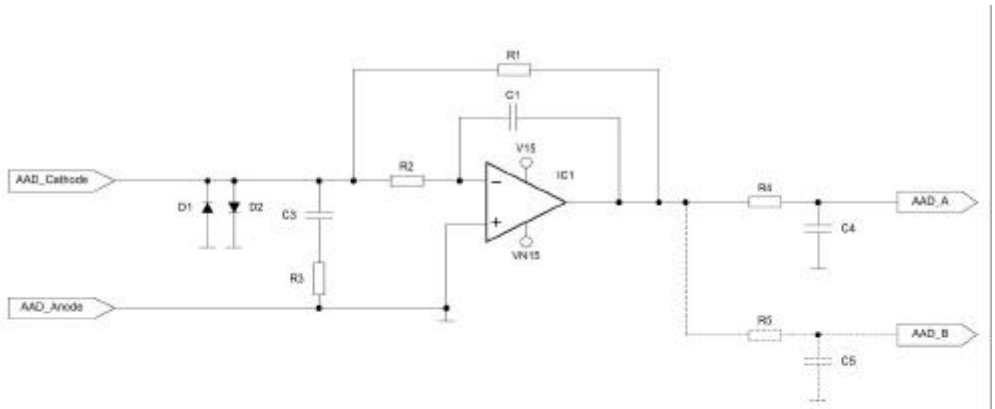
IC1	UT63M147	
TR1	B-3226	
TR2	B-3226	
R5	RM1206	1MΩ
R6	RM1206	1MΩ
R7	RM1206	1MΩ
R8	RM1206	1MΩ

6.3 TM Interfaces

6.3.1 +28V_TM



6.3.2 AAD_Mnt



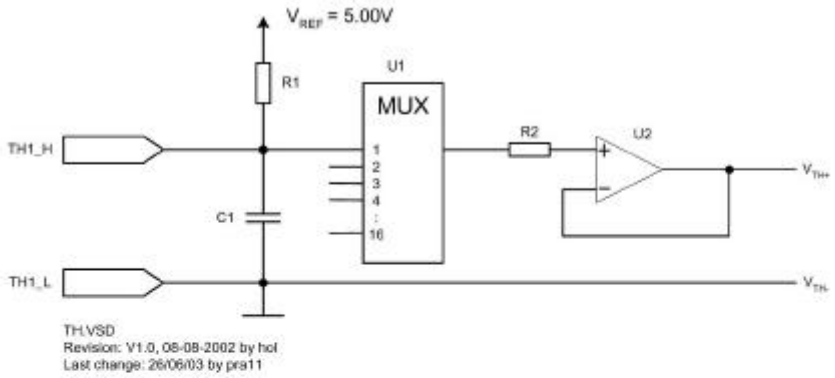
C1	CDR03BP	1.0nF
C3-C5	2220-II	1.0uF
D1-D2	1N3595US-1	
R1	RM1206-P	8.25kohm
R2	RM1206	100ohm
R3	RM1206	2.61kohm
R4-R5	RM1206	3.16kohm
IC1	OP27A	

6.3.3 AAD_Output

TO BE PROVIDED

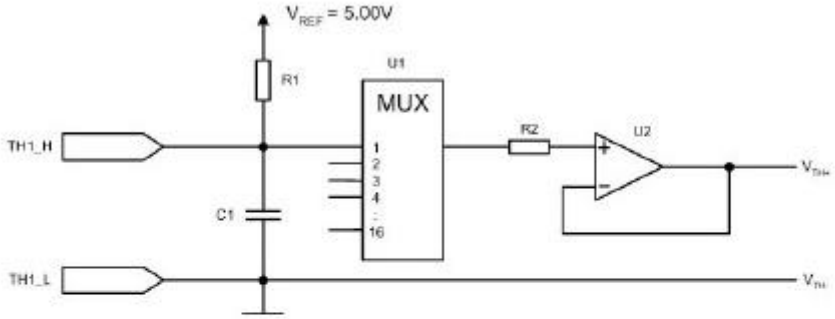
6.3.4 Therm_Mnt

The ACC input :



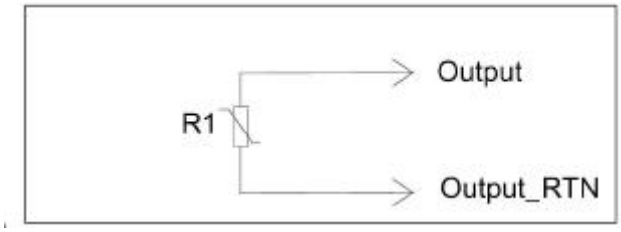
Component	Value
R1	RWL-TH: 10k, CRS-TH, Tank-TH: 26k1 THC-TH: 26k1 (internal)
R2	1k78
C1	560nF
U1	HS1840A
U2	AD648

CDMU Input:



Component	Value
R1	26k1
R2	1k78
C1	560nF
U1	HS1840
U2	AD648

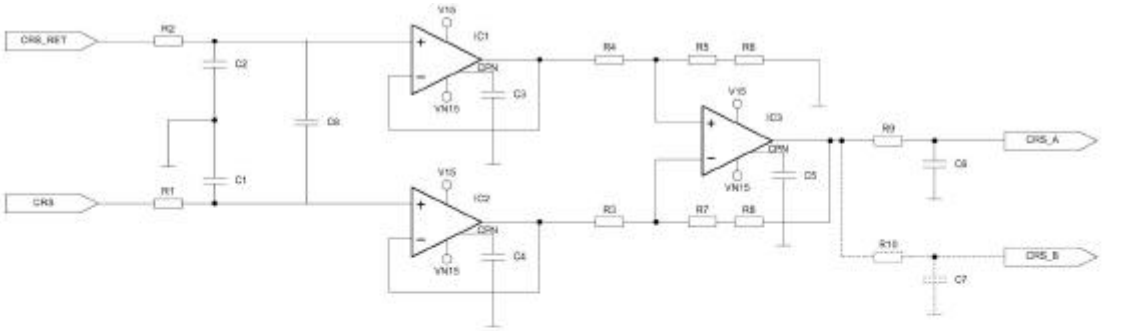
6.3.5 Thermistor



THERM/EGSE_Therm1_Tank
THERM/EGSE_Therm2_Tank
THERM/EGSE_Therm3_Tank

Solar Array
RWL

6.3.6 CRS_Meas



CRS Coarse (+/-8.5V) (CRS_C)

C1-C2	CDR34BP	10nF
C3-C5	CDR31BP	100pF
C6-C7	CDR04BP	3.3nF
C8	2220-II	1.0µF
R1-R2	RM1206	1.78kohm
R3-R4	RM1206	100kohm
R5, R7	RM1206	1.78kohm
R6, R8	RNC90	56.2kohm
R9-R10	RM1206	5.62kohm
IC1-IC3	LM108A	

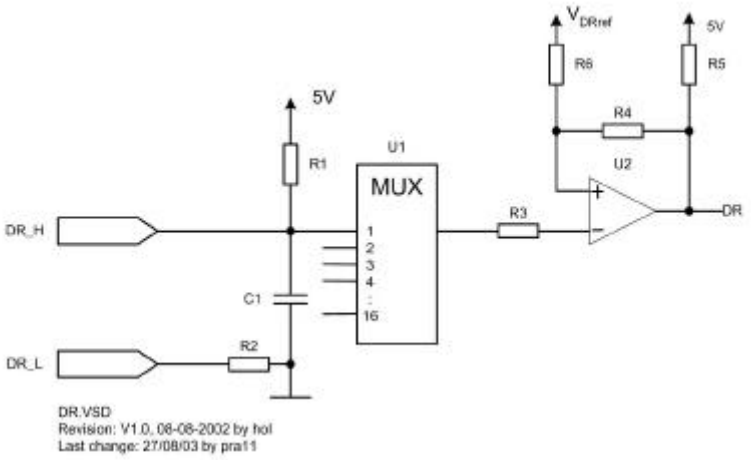
CRS Precision (+/-2V) (CRS_P1/CRS_P2)

C1-C2	CDR34BP	10nF
C3-C5	CDR31BP	100pF
C6-C7	CDR04BP	3.3nF
C8	2220-II	1.0µF
R1-R2	RM1206	1.78kohm
R3-R4	RM1206	28.0kohm
R5, R7	RM1206	100ohm
R6, R8	RNC90	68.1kohm
R9-R10	RM1206	5.62kohm
IC1-IC3	LM108A	

6.3.7 CRS_Output

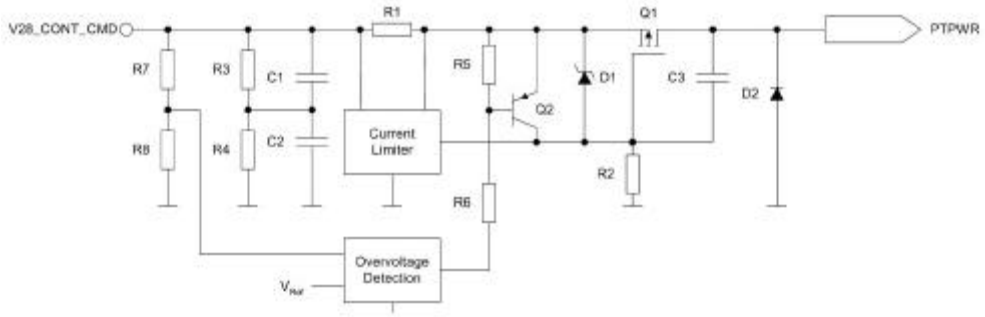
TO BE PROVIDED

6.3.8 DR_Mnt



Component	Value
R1	10k
R2	1k78
R3	1k78
R4	31k6
R5	1k21
R6	1k78
C1	10nF
U1	HS1840A
U2	RH1011

6.3.9 PT_Meas

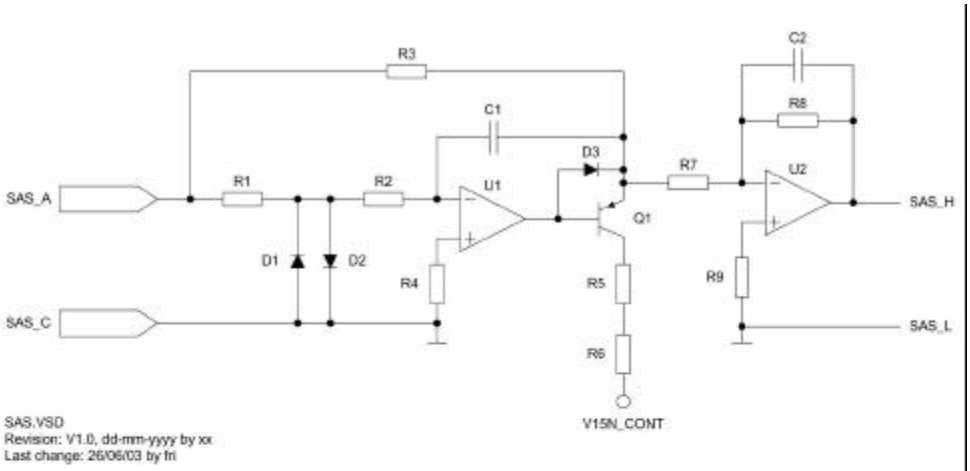


Component	Value
R1	2R49
R2	27k4
R3, R4	1M
R5	10k
R6	68k1
R7	50k9
R8	10k
C1, C2	1µF
C3	470pF
D1	1N4106UR
D2	1N5806US
Q1	IRHNJ597130
Q2	2N2907

6.3.10 PT_Meas_Output

TO BE PROVIDED

6.3.11 SAS_Mnt



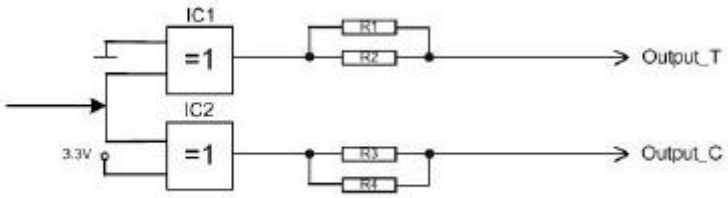
Component	Value
R1	40R2
R2	1k78
R3	121R
R4	1k96
R5, R6	100R
R7, R8	10k
R9	4k87
C1	3.3nF
C2	330nF
D1 – D3	1N6638US
Q1	2N2907
U1, U2	OP400

6.3.12 SAS_Output

TO BE PROVIDED

6.3.13 SBDL_Driver

Interface between Umbilical and CDMU

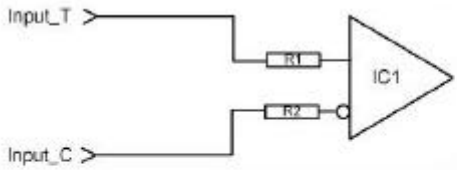


R1	RM1206	90.9Ω
R2	RM1206	100Ω (Trimmed)
R3	RM1206	90.9Ω
R4	RM1206	100Ω (Trimmed)
IC1	AC86	
IC2	AC86	

Telemetry Output Interface Telemetry Encoded

6.3.14 SBDL_Receiver

Interface between Umbilical and CDMU



R1	RM1206	1.78kΩ
R2	RM1206	1.78kΩ
IC1	26CLV32	

Telecommand Link Interface Telecommand

6.3.15 SREM_SBDL_Driver

TO BE PROVIDED

6.3.16 SREM_SBDL_Receiver

TO BE PROVIDED

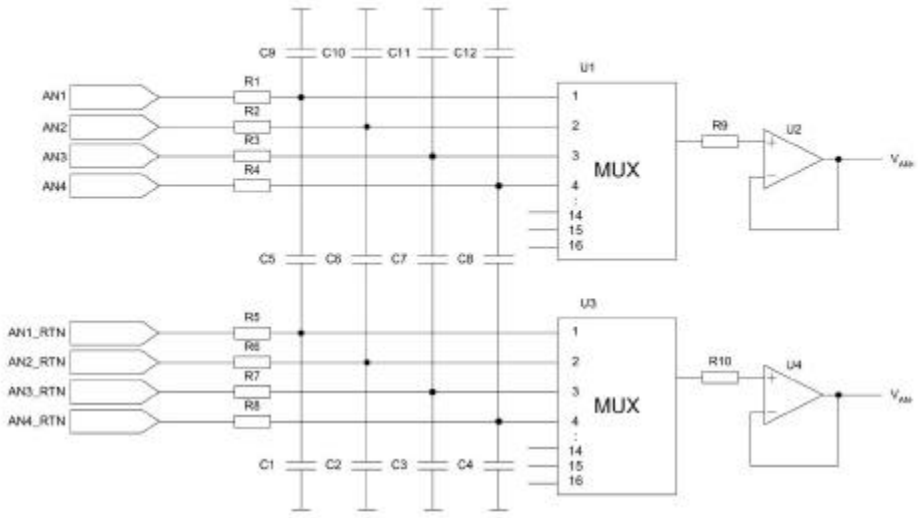
6.3.17 VMC_SBDL_Driver

TO BE PROVIDED

6.3.18 VMC_SBDL_Receiver

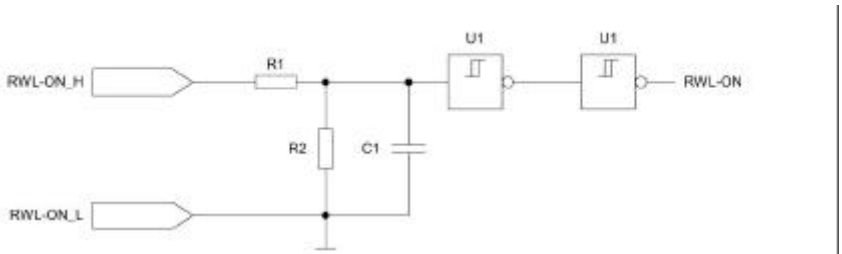
TO BE PROVIDED

6.3.19 RWL-M



Component	Value
R1 – R8	100k
R9 – R10	1k78
C1 - C4	10nF
C5 - C8	2µF
C9 - C16	10nF
U1, U3	HS1840A
U2, U4	AD648

6.3.20 RWL-ON/OFF-Status



Component	Value
R1	68k1
R2	49k9
C1	10nF
U1	54AC14

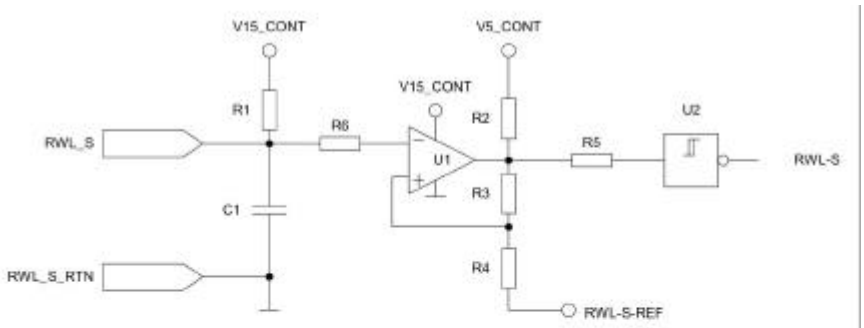
6.3.21 SD-Input

Reaction Wheel Speed Direction electrical interface schematic to be provided

6.3.22 RWL-SD

Reaction Wheel Motor Speed Direction electrical interface schematic to be provided (ACC input)

6.3.23 RWL-S



Component	Value
R1, R2	4k87
R3	68k1
R4	20k
R5, R6	10k
C1	3.3nF
U1	HS139
U2	54AC14

6.3.24 RWL-Tacho Input

Reaction Wheel Motor Tacho monitor electrical interface schematic to be provided (ACC input)

6.3.25 L702 & L701 LHe Level Sensors

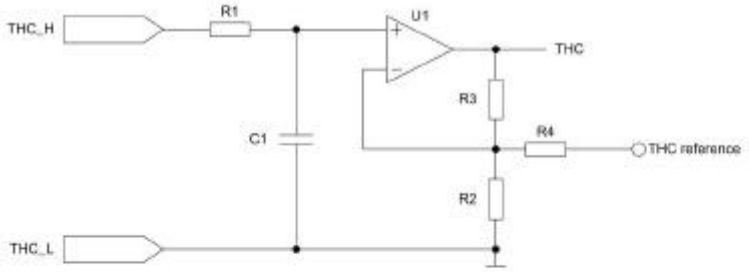
Electrical interface schematic to be provided for the LHe Level Sensors

6.4 TC Interfaces

6.4.1 CRS_Stim_input

TO BE PROVIDED

6.4.2 THR_TS

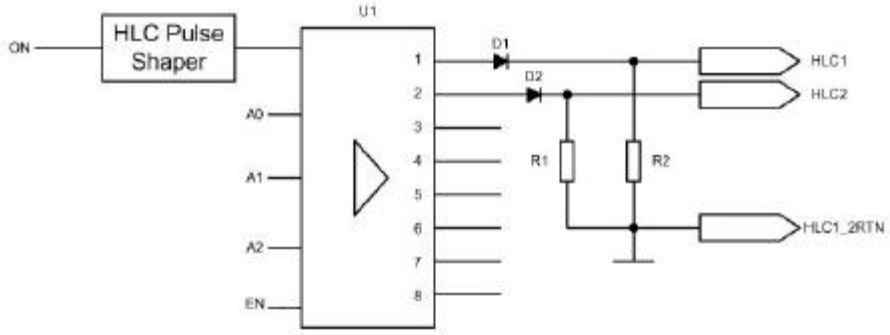


Component	Value
R1	9k09
R2	1k
R3	82k5
R4	100k
C1	1µF
U1	OP400

6.4.3 THR_TS_Output

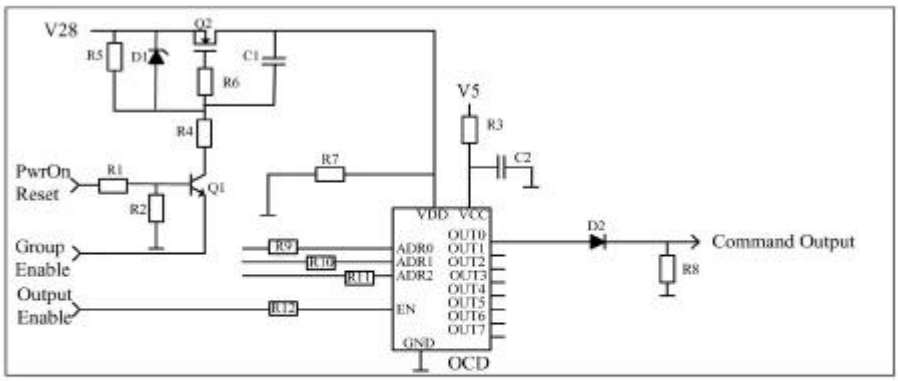
Thruster Thermocouple Output TO BE PROVIDED

6.4.4 HL_Cmd



Component	Value
R1	17.8 k
R2	17.8 k
D1	1N5806US
D2	1N5806US
U1	OCD ASIC

6.4.5 HP_Cmd

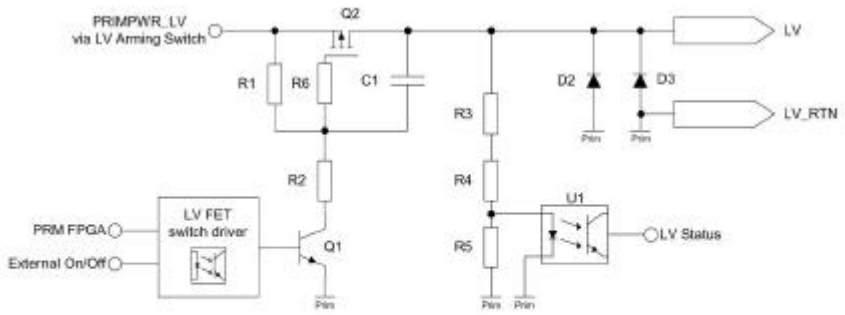


R1	RM1206	3.83kΩ
R2	RM1206	38.3kΩ
R3	RM1206	825Ω
R4	RM1206	14.7kΩ
R5	RM1206	10kΩ
R6	RM1206	38.3Ω
R7	RM1206	10kΩ
R8	RM1206	14.7kΩ
R9	RM1206	10kΩ
R10	RM1206	10kΩ
R11	RM1206	10kΩ
R12	RM1206	10kΩ
C1	CDR34BP	4.7nF/100V
C2	CDR04BX	150nF/50V
D1	1N4107-1	10V/500mW
D2	1N5806	
Q1	2N3700	
Q2	FSYE913A0	

6.4.6 LV_Cmd_Input

TO BE PROVIDED

6.4.7 LV_DR_Output



Component	Value
R1	3k32
R2	6k81
R3	1k
R4	1k
R5	1k78
R6	21R5
C1	1.5nF
D2, D3	1N5806UR
Q1	2N3700
Q2	IRHNJ597130
U1	66179

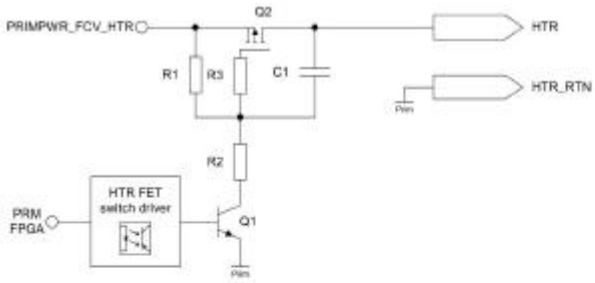
6.4.8 STR_HP_Input

TO BE PROVIDED

6.4.9 THR20_Vlv-Cmd_Input

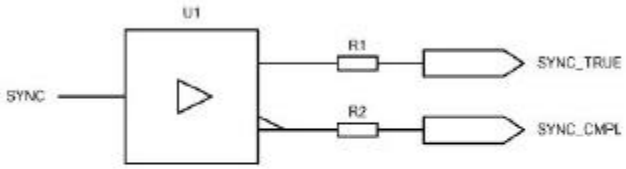
TO BE PROVIDED

6.4.10 THRDV_Htr-Cmd



Component	Value
R1	3k32
R2	6k81
R3	21R5
C1	1.5nF
D1	1N5806US
Q1	2N3700
Q2	IRHNJ597130

6.4.11 LOBT_Sync



Component	Value
R1, R2	46R4
U1	26C31

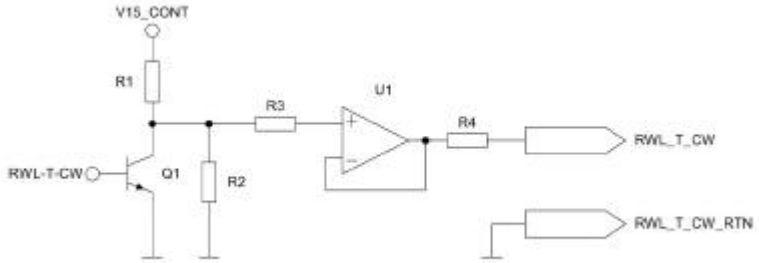
6.4.12 Sync_in

HFI_DPU_Nom
HFI_DPU_Red
LFI_BEU
LFI_REBA_Nom
LFI_REBA_Red

6.4.13 GYRO_HL_Command_Input

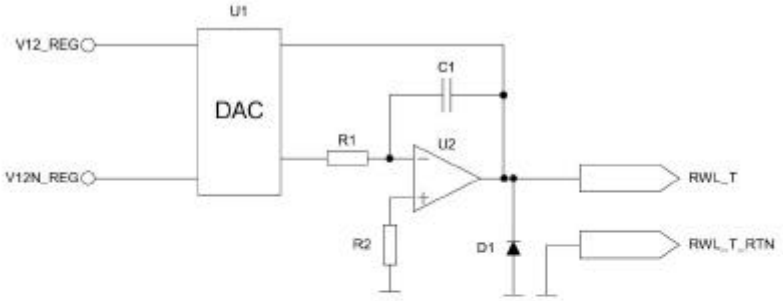
Electrical Interface Schematic to be provided

6.4.14 RWL-Td



Component	Value
R1	27k4
R2	68k1
R3	10k
R4	1k78
Q1	2N3700
U1	OP400

6.4.15 RWL-T-input



Component	Value
R1	10k
R2	12k1
C1	1nF
D1	1N5806US
U1	HS-565
U2	OP400

6.4.16 RWL-ON/OFF-input

Reaction Wheel ON/OFF Command input electrical Interface Schematic to be provided

6.4.17 CCU Dry Loop Command Interface

CCU Dry Loop Command input electrical Interface Schematic to be provided

6.4.18 V105, V701 & V702 Valves

Electrical interface schematic to be provided for these Valves

7 LIST OF CONNECTOR TYPES

This paragraph to list the connectors which are used as interfaces at the satellite level; i.e. umbilical and skin connectors and at the payload interfaces

7.1.1 Umbilical and Skin Connectors

HU1J01	DBAS70-61-0SY-090	Umbilical Nominal
HU2J01	DBAS70-61-0SN-090	Umbilical Redundant
SK01BJ09	340105601B00-25-61SN	PWR Panel (Battery S/A M)
SK01BJ10	340105601B00-25-61SA	PWR Panel (Battery S/A R)
SK01BJ11	340105601B00-09-35SN	PWR Panel (SA EGSE I/F 1)
SK01BJ12	340105601B00-09-35SA	PWR Panel (SA EGSE I/F 2)
SK02J01	340105601B00-09-35SN	PWR Panel (DMS 1553 M)
SK02J02	340105601B00-09-35SA	PWR Panel (DMS 1553 R)
SK02J03	340105601B00-09-35SB	PWR Panel (ACMS 1553 M)
SK02J04	340105601B00-09-35SC	PWR Panel (ACMS 1553 R)
SK02J05	340105601B00-17-35SN	PWR Panel (LV1/FCV 20N CMD S/A M)
SK02J06	340105601B00-17-35SA	PWR Panel (LV2/FCV 20N CMD S/A R)
SK02J07	340105601B00-13-35SN	PWR Panel (RCS Press/Tank Temp/PTPWR)
SK02J08	340105601B00-17-35SB	PWR Panel (Thruster Temp M/LV1 Sts)
SK02J09	340105601B00-13-35SB	PWR Panel (ACC/CDMU SW Load M)
SK02J10	340105601B00-13-35SA	PWR Panel (ACC/CDMU SW Load R)
SK02J11	340105601B00-17-35SC	PWR Panel (Thruster Temp R/LV2 Sts)
SK02J12	340105601B00-19-35SN	PWR Panel (Thruster C/B Heaters M)
SK02J13	340105601B00-19-35SA	PWR Panel (Thruster C/B Heaters R)
SK02J14	340105601B00-13-35SD	PWR Panel (Str1/2 On/Off Cmd M/Str1 Sts)
SK02J15	340105601B00-13-35SE	PWR Panel (Str1/2 On/Off Cmd R/Str2 Sts)
SK02J16	340105601B00-15-35SB	PWR Panel (Gyro A On/Off Cmd)
SK02J17	340105601B00-15-35SC	PWR Panel (Gyro B On/Off Cmd)
SK03J01	340105601B00-13-35SN	TTC Panel (XPND1 -EPC1 to EGSE)
SK03J02	340105601B00-13-35SA	TTC Panel (XPND2 -EPC2 to EGSE)
SK04J01	340105601B00-17-35SN	RWL1 Sgn
SK04J02	340105601B00-17-35SA	RWL2 Sgn
SK04J03	340105601B00-17-35SB	RWL3 Sgn
SK04J04	340105601B00-17-35SC	RWL4 Sgn
SK05J01	340105601B00-13-35SN	CRS1 AOCS Sgn
SK05J02	340105601B00-13-35SA	CRS2 AOCS Sgn
SK05J03	340105601B00-13-35SC	GYRO RS422 / Test
SK05J04	340105601B00-17-35SN	CRS 1/2 Stimuli
SK05J05	340105601B00-9-35SN	AAD Sgn M
SK05J06	340105601B00-15-35SN	SAS1/2 Sgn M
SK05J07	340105601B00-15-35SA	SAS1/2 Sgn R
SK05J08	340105601B00-9-35SA	AAD Sgn R
SK06J01	340105601B00-17-35SN	STR1 Stimuli
SK06J02	340105601B00-17-35SA	STR2 Stimuli

7.1.2 PLM Connectors

The Connectors on the SVM side are :

CBPLM1AJ01	340100201BDEMA9SNMB	NCA Power Main
CBPLM1AJ02	340100201BDEMA9SNMB	NCA Power Red
CBPLM1AJ03	340100201BDAMA15SNMB	Cryo Cover Sensors M
CBPLM1AJ04	340100201BDAMA15SNMB	Cryo Cover Sensors R
CBPLM1BJ01	340104401B03-14-35SA	Telescope DEC. Heater Pwr M
CBPLM1BJ02	340104401B03-14-35SB	Telescope DEC. Heater Pwr R
SK01AJ01	340104401B0316-26PA	PWR Panel (SA 1 Power M)
SK01AJ02	340104401B0316-26PA	PWR Panel (SA 2 Power M)
SK01AJ03	340104401B0316-26PA	PWR Panel (SA 3 Power M)
SK01AJ05	340104401B0316-26PB	PWR Panel (SA 1 Power R)
SK01AJ06	340104401B0316-26PB	PWR Panel (SA 2 Power R)
SK01AJ07	340104401B0316-26PB	PWR Panel (SA 3 Power R)
315100 SVM I/F CB J5	MS27497T 14F35PN	Telescope Thermistors-CCUA
315100 SVM I/F CB J6	MS27497T 14F35PN	Telescope Thermistors-CCUB

On the PLM side for the CCU:

CCUJ09	DEM-9S-1A0N	1553 A Nom
CCUJ10	DEM-9S-1A0N	1553 B Nom
CCUJ13	DAM-15P-1A0N	Power 28V Main
CCUJ22	DEM-9S-1A0N	1553 A Red
CCUJ23	DEM-9S-1A0N	1553 B Red
CCUJ24	DAM-15P-1A0N	Dry Valve Commands Red
CCUJ26	DAM-15P-1A0N	Power 28V Red

7.1.3 HIFI Connectors

HRH	FHHRHJ01	DEMA9P	Power
HRV	FHHRVJ01	DEMA9P	Power
ICU	FHICUJ01	DEMA9P	Power Nom
ICU	FHICUJ02	DEMA9P	Power Red
ICU	FHICUJ03	DEMA9S	1553 A Main
ICU	FHICUJ04	DEMA9S	1553 B Main
ICU	FHICUJ05	DEMA9S	1553 A Red
ICU	FHICUJ06	DEMA9S	1553 B Red
LCU	FHLCUJ01	DEMA9P	Power Main
LCU	FHLCUJ21	DEMA9P	Power Red
WEH	FHWEHJ03	DEMA9P	Power
WEV	FHWEVJ03	DEMA9P	Power

7.1.4 PACS Connectors

BOLC	FPBOLCJ25	DEMA9P	Power Nom
BOLC	FPBOLCJ26	DEMA9P	Power Red
DPU	FPDPUJ01	DEMA9P	Power Nom
DPU	FPDPUJ02	DEMA9P	Power Red
DPU	FPDPUJ03	DEMA9S	1553 A Main
DPU	FPDPUJ04	DEMA9S	1553 B Main
DPU	FPDPUJ05	DEMA9S	1553 A Red
DPU	FPDPUJ06	DEMA9S	1553 B Red
MEC1	FPMEC1J30	DEMA9P	Power
MEC1	FPMEC1J31	DEMA9S	OBT Nom
MEC2	FPMEC2J130	DEMA9P	Power
MEC2	FPMEC2J131	DEMA9S	OBT Red
SPU1	FPSPU1J11	DEMA9P	Power
SPU2	FPSPU2J11	DEMA9P	Power

7.1.5 SPIRE Connectors

DPU	HSDPUJ01	DEMA9P	Power Main
DPU	HSDPUJ02	DEMA9P	Power Red
DPU	HSDPUJ03	DEMA9S	1553 A Main
DPU	HSDPUJ04	DEMA9S	1553 B Main
DPU	HSDPUJ05	DEMA9S	1553 A Red
DPU	HSDPUJ06	DEMA9S	1553 B Red
FCU	HSFCUJ05	DEMA9P	Power Main
FCU	HSFCUJ06	DEMA9P	Power Red

7.1.6 Miscellaneous Connectors

SREM	SREMJ01		3401029001B15SFR115	Power
SREM	SREMJ02		3401029001B15PFR115	ML16 Memory Load Serial Command OBDH
VMC	VMCJ01		DSUB 9P	Power supply
VMC	VMCJ02		DSUB 15P	Data handling interface

8 UMBILICAL CONNECTORS

Two Umbilical Connectors (1 Nominal + 1 Redundant) each of 61 Pins, of which 37 are routed to the COTE and 24 available for S/C thus:

HU1 - DBAS 70 61 OSY 090					
Pin #	**Signal**	**V max (V)**	**I Max (A)**	**Line Start**	**Line End**
1	Shielding COTE Harness	0	0	SVM	COTE #1
29	+28V Aux IN 1	30	3	SVM	COTE #1
50	+28V Aux IN 2	30	3	SVM	COTE #1
28	+28V Aux IN 3	30	3	SVM	COTE #1
49	+28V Aux IN 1 RTN	0	3	SVM	COTE #1
30	+28V Aux IN 2 RTN	0	3	SVM	COTE #1
51	+28V Aux IN 3 RTN	0	3	SVM	COTE #1
40	+28V Monitoring1	30	<10mA	SVM	COTE #1
41	+28V Monitoring1 RTN	0	<10mA	SVM	COTE #1
36	TC Clock +	3.6	2mA	SVM	STFO
19	TC Clock -	3.6	2mA	SVM	STFO
35	TC Data +	3.6	2mA	SVM	STFO
18	TC Data -	3.6	2mA	SVM	STFO
34	TC Squelch +	3.6	2mA	SVM	STFO
17	TC Squelch -	3.6	2mA	SVM	STFO
33	TM Clock +	3.6	24mA	SVM	STFO
32	TM Clock -	3.6	24mA	SVM	STFO
31	TM Data +	3.6	24mA	SVM	STFO
52	TM Data -	3.6	24mA	SVM	STFO
8	Charge Array Disable link	0	0	SVM	COTE #1
9	Charge Array Disable link RTN	0	0	SVM	COTE #1
55	GHe Exhaust 650W Heater H501 -1	50	6.5	HPLM	Cryo COTE
56	GHe Exhaust 650W Heater H501 –1 RTN	0	6.5	HPLM	Cryo COTE
53	GHe Exhaust 650W Heater H501-2	50	6.5	HPLM	Cryo COTE
54	GHe Exhaust 650W Heater H501 –2 RTN	0	6.5	HPLM	Cryo COTE
15	HOT heater H701 (10W) Nom	28	0.5A	HPLM	Cryo COTE
16	HOT heater H701 (10W) Nom RTN	0	0.5A	HPLM	Cryo COTE
23	LHe Level Sensor L701 signal	<30	75mA	HPLM	Cryo COTE
42	LHe Level Sensor L701 Signal RTN	0	75mA	HPLM	Cryo COTE
3	LHe Level Sensor L701 Power	<30	75mA	HPLM	Cryo COTE
10	LHe Level Sensor L701 Power RTN	0	75mA	HPLM	Cryo COTE
11	V105 Close	<30	0.5A	HPLM	Cryo COTE
24	V105 Close RTN	0	0.5A	HPLM	Cryo COTE
4	HOT outlet valve V701	<30	0.5A	HPLM	Cryo COTE
12	HOT outlet valve V701 RTN	0	0.5A	HPLM	Cryo COTE
58	Temperature sensor T502	<30	1mA	HPLM	Cryo COTE
59	Temperature sensor T502 RTN	0	1mA	HPLM	Cryo COTE
Total to COTE					**37**

HU1 - DBAS 70 61 OSY 090 – (cont'd)					
Pin #	**Signal**	**V max (V)**	**I Max (A)**	**Line Start**	**Line End**
6	S/C Grounding				Not Used by Ariane
20	Dry Loop Command 1N V501-arming	28	<0.28	CCU	launcher
39	Dry Loop Command 1N V501-arming RTN	0	<0.28	CCU	launcher
37	Dry Loop Command 2N V501-ON	28	<0.28	CCU	launcher
38	Dry Loop Command 2N V501-ON RTN	0	<0.28	CCU	launcher
60	Dry Loop Command 3N V103-arming	28	<0.28	CCU	launcher
61	Dry Loop Command 3N V103-armingRTN	0	<0.28	CCU	launcher
43	Dry Loop Command 4N V103-ON	28	<0.28	CCU	launcher
44	Dry Loop Command 4N V103-ON RTN	0	<0.28	CCU	launcher
13	CDMU Separation Strap 1Status	5	1mA	SVM	launcher
27	CDMU Separation Strap 1Status RTN	0	1mA	SVM	launcher
47	CDMU Separation Strap 2 Status	5	1mA	SVM	launcher
48	CDMU Separation Strap 2 Status RTN	0	1mA	SVM	launcher
21	CDMU RMA Separation Strap 5a Status	5	1mA	SVM	launcher
22	CDMU RMA Separation Strap 5a Status RTN	0	1mA	SVM	launcher
25	CDMU RMB Separation Strap 6a Status	5	1mA	SVM	launcher
26	CDMU RMB Separation Strap 6a Status RTN	0	1mA	SVM	launcher
2	Spare				
5	Spare				
7	Spare				
14	Spare				
45	Spare				
46	Spare				
57	Spare				
Total to Launcher					**24**
OVERALL TOTAL					**61**

HU2 - DBAS 70 61 OSN 090					
Pin #	**Signal**	**V max (V)**	**I Max (A)**	**Line Start**	**Line End**
1	Shielding COTE Harness	0	0	SVM	COTE #1
29	+28V Aux IN 4	30	3	SVM	COTE #1
50	+28V Aux IN 5	30	3	SVM	COTE #1
28	+28V Aux IN 6	30	3	SVM	COTE #1
49	+28V Aux IN 4 RTN	0	3	SVM	COTE #1
30	+28V Aux IN 5 RTN	0	3	SVM	COTE #1
51	+28V Aux IN 6 RTN	0	3	SVM	COTE #1
40	+28V Monitoring 2	30	<10mA	SVM	COTE #1
41	+28V Monitoring 2 RTN	0	<10mA	SVM	COTE #1
36	TC Clock +	3.6	2mA	SVM	STFO
19	TC Clock -	3.6	2mA	SVM	STFO
35	TC Data +	3.6	2mA	SVM	STFO
18	TC Data -	3.6	2mA	SVM	STFO
34	TC Squelch +	3.6	2mA	SVM	STFO
17	TC Squelch -	3.6	2mA	SVM	STFO
33	TM Clock +	3.6	2mA	SVM	STFO
32	TM Clock -	3.6	2mA	SVM	STFO
31	TM Data +	3.6	2mA	SVM	STFO
52	TM Data -	3.6	2mA	SVM	STFO
8	Charge Array Disable link	0	0	SVM	COTE #1
9	Charge Array Disable link RTN	0	0	SVM	COTE #1
55	GHe Exhaust 650W Heater H501 -3	50	6.5	HPLM	Cryo COTE
56	GHe Exhaust 650W Heater H501 –3 RTN	0	6.5	HPLM	Cryo COTE
53	GHe Exhaust 650W Heater H501-4	50	6.5	HPLM	Cryo COTE
54	GHe Exhaust 650W Heater H501 –4 RTN	0	6.5	HPLM	Cryo COTE
15	HOT heater H702 (10W) Red	28	0.5	HPLM	Cryo COTE
16	HOT heater H702 (10W) Red RTN	0	0.5	HPLM	Cryo COTE
23	LHe Level Sensor L702 Signal	<30	75mA	HPLM	Cryo COTE
42	LHe Level Sensor Signal L702 RTN	0	75mA	HPLM	Cryo COTE
3	LHe Level Sensor L702 Power	<30	75mA	HPLM	Cryo COTE
10	LHe Level Sensor L702Power RTN	0	75mA	HPLM	Cryo COTE
11	Spare				
24	Spare				
4	HOT inlet valve V702	<30	75mA	HPLM	Cryo COTE
12	HOT inlet valve V702 RTN	0	75mA	HPLM	Cryo COTE
58	Temperature sensor T502	<30	1mA	HPLM	Cryo COTE
59	Temperature sensor T502 RTN	0	1mA	HPLM	Cryo COTE
Total to COTE					**37**

HU2 - DBAS 70 61 OSN 090 – (cont'd)					
Pin #	**Signal**	**V max (V)**	**I Max (A)**	**Line Start**	**Line End**
6	S/C Grounding				Not Used by Ariane
20	Dry Loop Command 1R V503-arming	28	<0.28	CCU	launcher
39	Dry Loop Command 1R V503-arming RTN	0	<0.28	CCU	launcher
37	Dry Loop Command 2R V503-ON	28	<0.28	CCU	launcher
38	Dry Loop Command 2R V503-ON RTN	0	<0.28	CCU	launcher
60	Dry Loop Command 3R V106-arming	28	<0.28	CCU	launcher
61	Dry Loop Command 3R V106-armingRTN	0	<0.28	CCU	launcher
43	Dry Loop Command 4R V106-ON	28	<0.28	CCU	launcher
44	Dry Loop Command 4R V106-ON RTN	0	<0.28	CCU	launcher
13	ACC Separation Strap Status 3b	5	1mA	SVM	launcher
27	ACC Separation Strap Status 3b RTN	0	1mA	SVM	launcher
47	ACC Separation Strap Status 4b	5	1mA	SVM	launcher
48	ACC Separation Strap Status 4b RTN	0	1mA	SVM	launcher
21	ACC RMA Separation Strap Status 7a	5	1mA	SVM	launcher
22	ACC RMA Separation Strap Status 7a RTN	0	1mA	SVM	launcher
25	ACC RMB Separation Strap Status 8a	5	1mA	SVM	launcher
26	ACC RMB Separation Strap Status 8a RTN	0	1mA	SVM	launcher
2	Spare				
5	Spare				
7	Spare				
14	Spare				
45	Spare				
46	Spare				
57	Spare				
Total to Launcher					**24**
OVERALL TOTAL					**61**

9 1553 ADDRESSES

Bus Address	Bus Terminal
1	CDMU A
2	CDMU B
3	ACC A
4	ACC B
5	PCDU A
6	PCDU B
7	CCU A
8	CCU B
9	TRSP A
10	TRSP B
11	Spare
12	Spare
13	Spare
14	Spare
15	Spare
16	HIFI A
17	Spare
18	Spare
19	HIFI B
20	Spare
21	SPIRE A
22	SPIRE B
23	Spare
24	Spare
25	PACS A
26	PACS B
27	Spare
28	Spare
29	Spare
30	Spare
31	Reserved for Broadcast

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