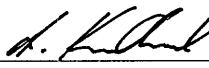

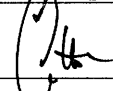
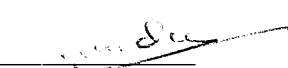
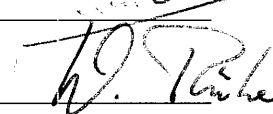


Title: **Electrical Interface Control Document**
EQM

CI-No:

Prepared by:	<u>A. Knoblauch</u> 	Date:	<u>04.05.2004</u>
Checked by:	<u>J. Kroeker</u> 		<u>5.5.2004</u>
Product Assurance:	<u>R. Stritter</u> 		<u>06.05.04</u>
Configuration Control:	<u>A. von Ivady</u> 		<u>05.04.04</u>
Project Management:	<u>W. Ruehe</u> 		<u>6. 4. 04</u>

Distribution: See Distribution List (last page)

Copying of this document, and giving it to others and the use or communication of the contents thereof, are forbidden without express authority. Offenders are liable to the payment of damages. All rights are reserved in the event of the grant of a patent or the registration of a utility model or design.

Issue	Date	Sheet	Description of Change	Release
1.0	04.05.04	All		

Table of Content

1	Scope	5
2	Document Reference	7
2.1	General	7
2.2	Harness Equipment	7
3	How to use this Document	8
3.1	General	9
3.2	Subsystem Listing	9
4	Item List	12
4.1	General	12
4.2	Item List from Datase	13
4.3	Item Location Code	18
5	EMC Classes and Harness Separation	20
5.1	Spacecraft Harness (1X, 2X, yX, ...)	20
5.2	Test & Checkout Harness (1T, 2T, XT, ...)	20
5.3	Focal Plane /Optical Bench Harness (1F, 2F, 3F, 4F, XF, ...)	21
5.4	Cryo-Harness Branch Identification	22
5.5	List of EMC Category from Database	23
6	Cable Type List	24
7	Cable Characteristic List	25
8	Connector Type List	26
9	Signal Type List	27
10	Connector Allocation List	28
10.1	Item Connector List (ICL)	28
10.2	Harness Connector Allocation List (HCL)	28

11	Pin allocation List Harness Side	29
11.1	Pin Allocation List (Harness) (PAL) see attachment 1	29
12	Attachment 1: HP-2-ASED-IC-0008-EQM	30

1 Scope

This Interface Control Document (ICD) describes the electrical Interfaces of the HERSCHEL EQM CVV int. CCH.

Interfaces, related to the **Scientific Interconnection Harness (SIH)** are identical for EQM and PFM and therefore not considered in this document.

For Information management a database (ACCESS based) called CAIE (Computer Aided Interface Engineering) will be used. The CAIE Data Base contents provides all the necessary Information for a automated Verification of the electrical Interfaces with Integrated Data Acquisition System (IDAS)

System information for

- system design data as harness weight and type
- used amount of connector types,
- routing,
- channel resistance
- etc

may also be derived from this data base

By summarising the electrical interfaces within this document, the ICD will allow a crosscheck of the I/F (harness) design from both sides of an interface.

Actual interface data (as designed/as built), after approval, shall become part of this Interface Control document.

Any change of the ICD contents shall follow the rules of configuration control

The ICD presents a database about the electrical interfaces of the Engineering Qualification Model and its GSE. Interfaces in this context are all input/output interconnections mated via the ASED provided EQM harness. For any such interface the ICD enables a fast identification of the interface harness design and the electrical parameters.

Within these features the main purpose of the ICD is:

- to act as a reference data base showing the present interface design (as designed/as built)
- to allow a quick compatibility check of any input/output interface interconnection ("on paper integration")
- to act as a supporting data base for the preparation and performance of the electrical/harness integration (IDAS)
- To facilitate failure investigations in the case of interface problems on EQM level

The purpose of this document is to reflect the EQM manufacturing baseline

2 Document Reference

2.1 General

The data of the below listed documents of the latest effective issue or the issue as defined below, are integrated as a part of this Interface Control Document (ICD)

In the event of conflict between the below listed documents and this ICD, the conflict shall be brought to the attention of the EPLM subcontractor for clarification.

2.2 Harness Equipment

HERSCHEL CRYO Harness Procurement Specification

HP-2-ASED -PS-0024

Statement of Work for HERSCHEL Cryo Harness

HP-2-ASED-SW-0016

3 How to use this Document

The EICD comprises the following generic reports from a database called CAIE_Ac97_v1_49.mdb and LDB

- HERSCHEL Subsystem List (Mechanical and electrical) SSL
- HERSCHEL Item List (Mechanical and Electrical) with Support Equipment IL
- EMC Category and Sub Harness Type (Harness separation) EML
- Cable Type and Characteristic List (used cable) CDT
- Cable Characteristic List CCL
- Connector Type List (used connectors) CTL
- Signal Type List STL
- Connector Allocation List CAL
- Functional Channel Allocation List FAL
- Functional Interfaces (Channels)
- Routing Information (via feed through and brackets, length)
- Pin Allocation List PAL
- Drawing of pin allocation in connector
- Supporting Information
 - Harness Weight according sort criteria
 - Connector weight according sort criteria
 - Used Connector Types
 - Harness/Channel Bundling

After freeze of supporting data only an extract of that database will be used to update the information

This database is numbered HP-2-ASED-IC-0012 with the proper version number.

The reports from that database will be

Connector Reference List (ICL)

(Allocated Item, Function, Connector Type, belonging to Harness Cat

Connector Allocation list (CAL)

(Channel Allocation with wiring type and target connector)

Functional Channel Allocation (FAL)

(Source Connector, Channel Information, Wiring, Routing, Target Connector)

Item Listing (IL)

Pin Allocation List (Harness) (PAL)

Subsystem Lists

3.1 General

In this list all relevant mechanical and electrical Subsystems of the HERSCHEL Project are identified

This includes the HERSCHEL Extended Payload Module Engineering Qualification Model as well as the mechanical and electrical support Systems like MGSE, EGSE and SCOE's.

The List in general reflects the Work Breakdown Structure HP-1-ASPI-WB-0036, the Product Tree HP-1-ASPI-PT-0012 and the CI Tree from the Company CM2000 System

3.2 Subsystem Listing

S/S-Code	Abbreviation	Subsystem Name
000	H/P	Herschel/Plank System
010	H	Herschel Satellite
020	P	Planck Satellite
100	CFE ITEMS	Herschel CFE Items
110	HIFI	Herschel HIFI Instrument
120	SPIRE	Herschel SPIRE Instrument
130	PACS	Herschel PACS Instrument
140	HTL	Herschel Telescope
145	H	Herschel Telescope GSE
200	EPLM	Herschel Ext.Payl.Module
210	PLM	Herschel Payload Module
211	CSS	Cryostat Structure S/S
212	CHS	Cryostat Helium S/S
213	CIS	Cryostat Insulation S/S

S/S-Code	Abbreviation	Subsystem Name
214	CES	Cryostat Electrical S/S
215	ISS	Instrument Secondary Structure
220	TMS	Telescope Module
222	TMS	Delete
230	HSS	Sunshield & Sunshade
231		Sunshield/Sunshade Structure
232		Solar Power Generator
233		Thermal Control
234		Delete
240	PLMSVM IF	PLM/SVM Interface Structure
300	SVM	SVM
310	SVM CB	SVM Connector Bracket
311	HIFISVMCB	HIFI SVM Connector Bracket
312	SPIRESVMCB	SPIRE SVM Connector Bracket
313	PACSSVMCB	PACS SVM Connector Bracket
314	CCSSVMCB	CCS SVM Con Bracket
315	EGSE CB	EGSE Con Bracket
321		SVM Thermal Shield
322		SVM Thermal Shield MLI
400	SAT GSE	Satellite GSE
410	S/C GSE	S/C GSE
411	S/C MGSE	S/C MGSE
412	S/C EGSE	S/C EGSE
413	S/C CVSE	see EPLM S/C CVSE
414	S/C OGSE	see EPLM S/C OGSE
420	EPLM GSE	EPLM GSE
421	EPLM MGSE	EPLM MGSE
422	EPLM EGSE	EPLM EGSE
423	EPLM CVSE	EPLM CVSE
424	EPLM OGSE	EPLM OGSE
42	MTD	Mass Thermal Dummies
426	TBD	Mockups
427	CTA	Cryo Test Adapter PFM
428	TBD	Miscellaneous
500	EQM PLM	Eng Qual Payload Module
510	EQM CSS	Eng Qual Cryo Struct Subsys
511	EQM CVV	Eng Qual Cryo Vac Vessel
512	EQM TSS	Eng Qual Tank Sup Spa Frame
513	EQM IOB	Eng Qual Instr. Opt Bench
520	EQM CHS	Eng Qual Cryst Helium S/S
521	EQM H2T	Eng Qual Helium 2 Tank
522	EQM HRD	Eng Qual Helium Rup Disk
523	EQM LHV	Eng Qual Liquid Helium Valv

S/S-Code	Abbreviation	Subsystem Name
524	EQM HST	Eng Qual Helium Sys Tubing
525	EQM HOT	Eng Qual Helium 1 Tank
526	EQM HSE	Eng Qual Helium Sys Equipm.
530	EQM CI	Eng Qual Cryost. Insulation
531	EQMULTHS	Eng Qual Up & lower Ther. Shd
532	EQMOBBPS	Eng Qual OB & Beam Patt. Shd
533	EQM LBFB	Eng Qual LO Beam Feed Baff
534	EQMCRYMLI	Eng Qual Cryostat MLI
540	EQM CES	Eng Qual Cryost Electr. S/S
541	EQMCCU	Eng Qual Cryost Contr Elect
542	EQM CCI	Eng Qual Cryost. Contr. Instr
543	EQM CCH	Eng Qual PLM Harness
550	EQM ISS	Eng Qual instr. Sec Struct.
552	EQM LOU SS	Eng Qual LOU Sup Struct
553	EQM WU SS	Eng Qual Warm Unit Sup Struct
554	EQM ITC	Eng Qual Inst Therm Connecotrs
560	EQM GSE	Eng Qual GSE
561	EQM EGSE	Eng Qual EGSE
562	EQM MGSE	Eng Qual MGSE
563	EQM CVSE	Eng Qual CVSE
564	EQM TESTFA	Eng Qual Test Facility

4 Item List

4.1 General

In order to standardise the subsystem/experiment item identification for electrical interfaces the acronyms as defined in the list below shall be used for item identification within electrical ICD's. This item code identifies each item unequivocally. The item code consists of six digits. The first three digits identify the subsystem (see before), the last three digits identify the item within the subsystem. This includes all mechanical and electrical items in a subsystem (Self-standing parts like Electronic Boxes, brackets etc). Following the PTI the item list contains the same code without the prominent one from the PTI list (under investigation). Items for the EQM are not listed at the moment and not foreseen in this database tbd

Product Identifier

The following numbering system is allocated to the electrical items in the HERSCHEL EPLM system

1xx xxx	HERSCHEL Instruments
2xx xxx	HERSCHEL Extended Payload Module
3xx xxx	HERSCHEL Service Module
4xx xxx	HERSCHEL GSE
5xx xxx	HERSCHEL EQM
11x xxx	HIFI Instrument
12x xxx	SPIRE Instrument
13x xxx	PACS Instrument
xx1 xxx	Items inside the cryostat and on the CVV (Cold Units)
xx2 xxx	Items on the SVM Panels (Warm Units)

For mechanical Items this schematic is not foreseen at the moment

xxx yyy	unique item identification code
---------	---------------------------------

Abreviation

Self explaining Abbreviation for the item

H= HERSCHEL

HH = HERSCHEL HIFI

etc

Item Name

The item name is the more explaining name of the item (then the Abbreviation)

Subsystem

The Subsystem Code (first 3 digits) allocates the item to a subsystem

Abbreviation

Short Code of the Subsystem to which the item belongs

M, E, X

The items will be distinctive according

- only mechanical function M
- item with electrical function E
- isolation function I
- Superordinate System -
- tbd x

Location

The location code will be explained in the chapter xx

4.2 Item List from Datase

Higher Level S/C (Item Code: 00*) not in Database

Item-Code	Item-Identifier	Item Name	PT Ref	Subsys Affili.	I.Type	Loc.
00000	H/P	Herschel/Plank System	000	H/P	-	HLS
000010	H	Herschel Satellite	010	H	-	HLS

HERSCHEL Telescope (Item Code: 14*)

Item-Code	Item-Identifier	Item Name	PT Ref	Subsys Affili.	I.Type	Loc.
140000	HTL	Herschel Telescope	14	HTL	-	83
141000	HTU	Herschel Telescope Unit	14	HTL	-	83

Item-Code	Item-Identifier	Item Name	PT Ref	Subsys Affili.	I.Type	Loc.
145000	HTGSE	Telescope GSE	14	HTL	-	GSE
145100	HTCONT	Telescope Container	14	HTL	-	GSE
145200	HTLDV	Telescope Lifting Device	14	HTL	-	GSE
145300	HTPTC	Protective Cover	14	HTL	-	GSE

EPLM (Item Code: 20*)

Item-Code	Item-Identifier	Item Name	PT Ref	Subsys Affili.	I.Type	Loc.
200000	EPLM	Extended Payload Module	200	EPLM	-	PLM

PLM (Item Code: 21*)

Item-Code	Item-Identifier	Item Name	PT Ref	Subsys Affili.	I.Type	Loc.
210000	PLM	Payload Module	210	PLM	-	PLM
211000	CSS	Cryostat Structure S/S	211	CSS	-	CSS
211100	CVV	Cryostat Vakuum Vessel	211	CSS	-	CSS
211110	CVVUB	CVV Upper Bulkhead	211	CSS	M	E1
211120	CVVCY	CVV Cylindar	211	CSS	M	30
211121	CVVUCR	Upper Connector Ring	211	CSS	E	30
211122	CVVMCR	Middle Connector Ring	211	CSS	E	30
211123	CVVLVR	Lower Connector Ring	211	CSS	E	30
211130	CCVLB	CVV Lower Bulkhead	211	CSS	-	CSS
211140	CVVR-Z	CVV -Z Radiator	211	CSS	-	CSS
211150	CVVR+Y	CVV +Y Radiator	211	CSS	-	CSS
211160	CVVR-Y	CVV -Y Radiator	211	CSS	-	CSS
211200	TSF	Tank Support & Spatial Framework	211	CSS	-	CSS
211210	STR	Tank Straps Lower and Upper	211	CSS	-	30
211211	UTSC	Upper Tank Straps Chain	211	PLM	-	CSS
211212	LTSC	Lower Tank Straps Chain	211	PLM	M	CSS
211213	CHBOL	Chain Bolts	211	PLM	M	CSS
211214	STRPREDEV	Strap Pretensioning Devices	211	PLM	M	CSS
211220	SPAF	Spatial Framework	211	CSS	-	30
211221	USPFW	Upper Spatial Framework	211	PLM	M	CSS
211222	LSPFW	Lower Spatial Framework	211	PLM	M	CSS
211300	CCC	Cryostat Cover & Cavity	211	CSS	-	CSS
211310	CC	Cryostat Cover	211	CSS	M	CSS

Item-Code	Item-Identifier	Item Name	PT Ref	Subsys Affili.	I.Type	Loc.
211320	C	Cavity	211	CSS	M	CSS
211400	IOB	Instrument Optical Bench	211	CSS	M	CSS
212000	CHS	Cryostat Helium S/S	212	CHS	-	60
212100	HTT	Helium II Tank	212	CHS	M	CSS
212200	HSC	Helium System Componentns	212	CHS	-	CSS
212210	HPS	Phase Separator	212	CHS	M	CSS
212211	PPST1T2	PPS 11 & T11 T112 ????	212	CHS	E	CSS
212220	DLMD	Direct Liquid Measm. Dev.	212	CHS	E	CSS
212221	DLMD1	Direct Liquid Measm. Dev. 1 ????	212	CHS	E	CSS
212222	DLMD2	Direct Liquid Measm. Dev 2 ????	212	CHS	E	CSS
212230	LEVPR	Level Probes	212	CHS	E	CSS
212231	LEVPR HII	Level Probe Helium II	212	CHS	E	CSS
212232	LEVPR HI	Level Probe Helium I	212	CHS	E	CSS
212240	TH&HTR	Thermometers & Heaters	212	CHS	E	CSS
212241	TITHM	Tank Internal Thermometers	212	CHS	E	CSS
212242	TSCTHM	Tank Surface Carbon Thermometers	212	CHS	E	CSS
212243	THtrs	Tank Heaters	212	CHS	E	CSS
212244	VLHRT	Vent Line Heaters	212	CHS	E	CSS
212250	RUPDIS	Rupture Disc	212	CHS	M	CSS
212260	SVALV	Safety Valves	212	CHS	E	CSS
212261	SVALH2H	Saf.Val.He II High Mass Flow	212	CHS	E	CSS
212262	SVALH1L	Saf.Val. He I Low Mass Flow	212	CHS	E	CSS
212263	SVALCVV	Safety Valves CVV	212	CHS	E	CSS
212270	ABS	Absorbers	212	CHS	M	CSS
212280	FILLPORTS	Filling Ports	212	CHS	M	CSS
212281	TINT FILL	Tank Internal Filling	212	CHS	M	CSS
212282	TEXTFILL	Tank External Filling	212	CHS	M	CSS
212300	LHV	Liquid Helium Valves	212	CHS	E	CSS
212310	ILHV	Internal Liquid He Valve	212	CHS	E	CSS
212320	ELHV	External Liquid He Valve	212	CHS	E	CSS
212400	HST	Helium System Tubing	212	CHS	M	CSS
212410	INTTUB	Internal Tubing	212	CHS	M	CSS
212411	HeIITUB	Helium II Tank Tubing	212	CHS	M	CSS
212412	HeITUB	Helium I Tank Tubing	212	CHS	M	CSS
212413	SHDTUB	Shields Tubing	212	CHS	M	CSS
212420	EXTTUB	External Tubing	212	CHS	M	CSS
212430	OBHEVENT	Optical Bench Helium Vent Line	212	CHS	M	CSS
212500	HOT	Helium I Tank	212	CHS	M	CSS
212600	HSE	Helium System Equipment	212	CHS	M	CSS
212610	HPTX	Helium Pressure Sensor	212	CHS	E	CSS
212620	VTLHTR	Ventline External Heaters	212	CHS	E	CSS
212630	TPTSTHERM	Tank Platinum Surface Thermometers	212	CHS	E	CSS

Item-Code	Item-Identifier	Item Name	PT Ref	Subsys Affili.	I.Type	Loc.
212640	VNOZ	Ventile Nozzels	212	CHS	M	CSS
212650	VACMSENS	Vacuum Measurement Sensors	212	CHS	E	CSS
212660	HEVAHTRSE	Helium Valve Heaters & Temp	212	CHS	E	CSS
213000	CIS	Cryostat Insulation S/S	213	CIS	I	I
213100	CTS	Cylinder Thermal Shields	213	CIS	I	ITS
213110	1CTS	1st Cylinder Thermal Shield	213	CIS	I	ITS
213120	2CTS	2nd Cylinder Thermal Shield	213	CIS	I	ITS
213130	3CTS	3rd Cylinder Thermal Shield	213	CIS	I	ITS
213200	ULS	Upper&Lower Thermal Shields	213	CIS	I	ITS
213210	LBHTS	LowerBulkheadThermal Shield	213	CIS	I	ITS
213211	1LBTS	1st Lower Bulkhead Thermal Shield	213	CIS	I	ITS
213212	2LBTS	2nd Lower Bilkhead Thermal Shield	213	CIS	I	ITS
213213	3LBTS	3rd Lower Bulkhead Thermal Shield	213	CIS	I	ITS
213220	UBHTS	Upper Bulkhead Thermal Shields	213	CIS	I	ITS
213221	1UBTS	1st Upper Bulkhead Thermal Shield	213	CIS	I	ITS
213222	2UBTS	2nd Upper Bulkhead Thermal Shield	213	CIS	I	ITS
213223	3UBTS	3rd Uppper Bulkhead Thermal Shield	213	CIS	I	ITS
213300	OBS	Otical Bench&Beam Pattern Shield	213	CIS	I	ITS
213400	CMLI	Cryostat MLI	213	CIS	I	IML
213410	CVV MLI	Cryostat Vacuum Vessel MLI	213	CIS	I	IML
213411	CYMLI	CVV Cylinder MLI	213	CIS	I	IML
213412	LBMLI	Lower Bulkhead MLI	213	CIS	I	IML
213413	UBMLI	Upper Bulkhead MLI	213	CIS	I	IML
213420	CC MLI	Cryostat Cover MLI	213	CIS	I	IML
213430	CA MLI	Cavity MLI	213	CIS	I	IML
213440	CY TS MLI	Cylinder Thermal Shields MLI	213	CIS	I	IML
213441	1CYTSMLI	1st Cylind. Therm Shd MLI	213	CIS	I	IML
213442	2CYTSMLI	2nd Cylind. Therm.Shd MLI	213	CIS	I	IML
213443	2CYTSMLI	3rd Cylind. Therm. Shd MLI	213	CIS	I	IML
213450	UL TS MLI	Upper & Lower Thermal Shields MLI	213	CIS	I	IML
213451	1RSLBMLI	1st Rad Shd Lower B.Head MLI	213	CIS	I	IML
213452	1RSUBMLI	1st Rad Shd Upper B.Head MLI	213	CIS	I	IML
213453	2RSLBMLI	2nd Rad Shd Lower B.Head MLI	213	CIS	I	IML
213454	2RSUBMLI	2nd Rad Shd Upper B.Head MLI	213	CIS	I	IML
213455	3RSLBMLI	3rd Rad Shd Lower B.Head MLI	213	CIS	I	IML
213456	3RSUBMLI	3rd Rad Shd Upper B.Head MLI	213	CIS	I	IML
213460	OBS MLI	Optical Bench Shield MLI	213	CIS	I	IML
213470	HEITMLI	He II Tank MLI	213	CIS	I	IML
213480	HEITMLI	He I Tank MLI	213	CIS	I	IML
213490	ISSMLI	Instr. Sec. Struct. MLI	213	CIS	I	IML
213491	LOUMLI	LOU MLI	213	CIS	I	IML
213493	WGMLI	Wave Guides MLI	213	CIS	I	IML

Item-Code	Item-Identifier	Item Name	PT Ref	Subsys Affili.	I.Type	Loc.
214000	CES	Cryostat Electrical S/S	214	CES	E	EL
214100	CCU	Cryostat Control Unit	214	CES	E	17
214200	CCI	Cryostat Control Instrumentat. ??	214	CES	E	30
214300	PCH	PLM Cryostat Harness	214	CES	E	30
214310	CCH	Cryostat Control Harness	214	CES	E	30
214311	CCHARN	CVV Internal (Cryo) Harness	214	CES	E	EL
214312	CIHARN	CVV Extern. (Cryo Intern.) Harness	214	CES	E	EL
214313	CPHARN	SVM Intern. (Cryo Panel) Harness	214	CES	E	EL
214314	WCCC?	Wired Cryo Control Comp. ???	214	CES	E	EL
214320	SIH	Scient Instr. Harness	214	CES	E	INS
214321	CHSPHARN	CVV Int HIFI SPIRE PACS Cryo Harn.	214	CES	E	EL
214322	IHSPHARN	Intern. HIFI SPIRE PACS Harness	214	CES	E	EL
214323	PHPSHARNS	SVM Panel HIFI PACS SPIRE Harness	214	CES	E	EL
214324	WCCCHAR?	Wired Cryo Control Comp. ?	214	CES	E	EL
214400	CCUCB?	Cryo. Contr. Unit SVM Bracket ?	214	CES	E	27
215000	ISS	Instrument Secondary Structure	215	ISS	M	CSS
215200	LOUSS	LOU Support Structure	215	ISS	M	30
215300	OWF	Optical Window & Filters	215	ISS	M	70
215400	SFOWF	Support Frame Opt. Window & Filter	215	ISS	M	70
215500	OBCB	Optical Bench Harness Con. Bracket	215	ISS	M	70
215600	LOU WG MS	LOU Waveguides Mounting Studs	215	ISS	M	80
215700	ITERMCON	Instrument Thermal Connectors	215	ISS	M	?
215800	ALGREF	PLM & OB Alignment References	215	ISS	M	?

SVM (Item Code: 30*)

Item-Code	Item-Identifier	Item Name	PT Ref	Subsys Affili.	I.Type	Loc.
315100	HEGSECB1	EGSE CB 1	315	EGSE CB	E	28
315200	HEGSECB2	EGSE CB 2	315	EGSE CB	E	28

4.3 Item Location Code

For ease item location identification in the HERSCHEL satellite system a location code is allocated to each electrical item which is shown in the table below.

This code will be allocated to each harness plug connector code to support harness manufacturing and integration. System integration and interface test will also benefit from this system.

Location	Meaning
?	not known
10	SVM UMB I/F CB
11	Units on SVM Sidep. 1 (CDMU)
12	Units on SVM Sidep. 2 (RWDE)
13	Units on SVM Sidep. 3 (tbd)
14	Units on SVM Sidep. 4 (Gyro)
15	Units on SVM Sidep. 5 (HIFI 1)
16	Units on SVM Sidep. 6 (HIFI 2)
17	Units on SVM Sidep.7 (SPIRECCU)
18	Units on SVM Sidep. 8 (PACS)
20	SVM I/F CB
21	I/F CB ab. SVM Panel 1 (tbd)
22	I/F CB ab. SVM Panel 2 (RWDE)
23	I/F CB ab. SVM Panel 3 (tbd)
24	I/F CB ab. SVM Panel 4 (Gyro)
25	I/F CB ab. SVM Panel 5 (HIFI1 CB)
26	I/F CB ab. SVM Panel 6 (HIFI2 CB)
27	I/F CB ab. SVM Panel 7 (SPI/CCU CB)
28	I/F CB ab. SVM Panel 8 (PACS)
30	CVV external
31	CVV I/F CB Bottom (CVVLCR)
32	CVV I/F CB Middle (CVVMCR)
33	CVV I/F CB Top PFM (CVVUCR)
34	CVV I/F CB Top EQM
35	CVV ext env Sensor I/F CB
36	NCA
40	CVV ext. Components
41	CVV ext. Comp on Struts
42	CVV ext. Comp.on Radiation Shd
44	LOU
50	CVV internal
51	on lower chains
52	on lower spat framework
53	on Thermal Shield 1 (outer)

Location	Meaning
54	on Thermal Shield 2 (mid)
55	on Thermal Shield 3 (inner)
56	on upper chains
57	on upper spat framework
60	Helium Tanks
61	on AUX Tank
62	on HOT
63	on Pipework
70	Optical Bench
71	OB lower Side
72	OB upper Side
73	on HIFI FPU
74	on PACS FPU
75	on SPIRE JFET big
76	on SPIRE JFET small
77	on SPIRE FPU
80	EPLM Components
81	Sunshield SSD
82	Sunshade SSH
83	Telescope Modul
CSS	Cryo Structure S/S
E1	upper bulkhead
E2	Wave Guides
EL	Electrical Subsystem
GSE	Ground support equip
HAR	Harness
HLS	Higher Level System
I	Insulation
IML	Insulation MLI
INS	Instruments
ITS	Insulat. Therm. Shds
PLM	Pay Load Modul
SAT	Sat Level
SVM	Service Module

5 EMC Classes and Harness Separation

A general distinction will be done between

Power harness	= EMC Class 1
Signal harness	= EMC Class 2
Low level analogue harness	= EMC Class 3
RF harness	= EMC Class 4
Harness tbd	= EMC Class tbd

Distributed in the S/C there are seven sets of harness serving the S/C and experiment payload set:

5.1 Spacecraft Harness (1X, 2X, yX, ...)

(for Data Base reasons the X is replaced by an U and will be updated to X)

This harness links the spacecraft electrical lines to the experiment units on the SVM panels
The harness will be manufactured under Service Module/Instrument/ tbd Responsibility and is only listed partly in the Database for Overview reason

Sometimes for the EPLM this harness is equivalent to T (test) harness

The spacecraft harness will be

- 1X = Primary Power from the S/C
- 2X = Signal Lines from/to the S/C (OBDH, HL Cmd etc)
- XX = Harness from S/C tbd

5.2 Test & Checkout Harness (1T, 2T, XT, ...)

This harness will be manufactured under Instrument/tbd Responsibility and connects the Checkout and Test equipment to the PLM/EPLM

The Lines will be listed in the database sometimes as X (U) for they are the same as for Checkout and S/C activities

Checkout harness for EQM/EPLM will be a subset of S/C harness

- 1T = Power harness (from SCOE or SVM simulator etc)
- 2T = Signal harness
 - OBDH Bus
 - Synchronisation (TBD)
 - S/C direct lines (Command lines) tbd,

Thermistors and Status acquired by RTU tbd

Checkout lines from the Cryo SCOE to SVM Connector (Umbilical) brackets tbd

etc

XT = Test harness, EMC Class tbd

5.3 Focal Plane /Optical Bench Harness (1F, 2F, 3F, 4F, XF, ...)

This cold harness is interconnecting the items on the optical bench and will be manufactured under instrument responsibility. The harness is listed only for overview reasons

1F = Primary Power harness on Optical Bench (not foreseen)

2F = Signal harness on optical bench

all optical bench (F) lines are declared as EMC class Signal (2) at the moment tbd

3F= Low level analogue signal on optical bench (not used tbd)

4F = RF lines on optical bench (not used tbd)

xF = Special Lines on optical bench tbd

5.4 Cryo-Harness Branch Identification

Apart from Harness separation by EMC classes there is a distinction by Harness Branch Identification for the different routing sections. This Identification is added to connector and channel information in the Data Base.

Branch-ID	Cryo-Harness Branch Identification numbers shall be compliant to Instrument numbers
CCH-WE-01	Cryo Control Harness WarmEGSE-01
CCH-WU-01	Cryo Control Harness WarmUMB-01
CCH-WV-01	Cryo Control Harness WarmCVV-01
CCH-IV-01	Cryo Control Harness-InterfaceCVV-01
CCH-IT-01	Cryo Control Harness-InterfaceTelescope-01
CCH-IN-01	Cryo Control Harness-InterfaceNCA-01
CCH-CB-01	Cryo Control Harness-Cold Optical Bench-01
CCH-CF-01	Cryo Control Harness-Cold Framework-01
CCH-CO-01	Cryo Control Harness-ColdHOT-01
CCH-CT-01	Cryo Control Harness-ColdHTT-01
CCH-CV-01	Cryo Control Harness-ColdVessel-01

5.5 List of EMC Category from Database

In following there is a list of defined EMC classes for harness separation.

This list is an extract from the used database HP-2-ASED-IC-0001,

EMC-Code	EMC-Abbreviation	EMC-Category	
1	-	Pwr	Power
1	B	PwrBr (will be updated to S)	Pwr Harness to SVM Connector Bracket (S)
1	C	PwrCry (not used)	Pwr Harness in Cryostat (C)
1	F	PwrFPU (not used)	Pwr Harness FPU Intern (F)
1	I	PwrInt	Pwr Harness Feed Through to SVM Connector Bracket (I)
1	S	PwrSC (replaces B)	Pwr Harness Unit to SVM CB (S)
1	T	PwrTes	Pwr Harness Testeq. (T)
1	U	PwrSC	Pwr Harness from S/C C/O (U)
1	W	PwrPan	Pwr Harness on SVM Panels (W)
2	-	SIG	Signal
2	B	SIH Wx (will be updated to S)	Signal Harness Unit to SVM CB (S)
2	C	SIH Cx	Signal Harness FPU to CVV Feed Through
2	F	SigFPU	Signal Harness FPU Internal
2	I	SIH Ix	Signal Harness Feed Through to -SVM CB (I)
2	S	SIH Wx (replaces B)	Signal Harness Unit to SVM CB (S)
2	T	SigTes	Signal Harness Test equipment (T)
2	U	SigSC	Signal Harness from S/C C/O
2	W	SigPan	Signal Harness on SVM Panels (W)
3	-	LLSig	Low Level An. Sig.
4	-	RF	Radio Freq. Sig
5	-	tbd	tbd
6	-	UL	Umbilical Link
7	-	COH	Check-out Harness
8	-	MXD	mixed
9	-	TBD	not known

6 Cable Type List

In this table the principal used cable types are listed. The list is not completed now and will be subject of changes. (Copper cables not yet listed)

The **Cable Code** defines a raw cable category with the following order:

0	diverse
1	single line
2	pair line
3	n-tuple, unshielded
4	single line shielded
5	pair line shielded
6	n-tuple shielded
7	double shielded lines
8	coaxial cables

The **Cable Type** is an abbreviation of the cable description in **Cable Type Name**.

Number of Cores, Twisted, Number of Shields are self explaining columns.

7 Cable Characteristic List

In the Cable Characteristic List a more detailed specification of the used cable types is done.

Different gauges of each cable type can be defined,

- Specific Resistance per meter at 293° K

- Specific Capacitance per meter

- Cable diameter

- Metal Part in cable (Thermal calculations)

- Insulation Part in Cable (Thermal Calculations)

- Specific Weight

are used for the supporting information in the Data Base as for an example calculated harness weight, calculated channel resistance, harness bundle diameters etc

8 Connector Type List

In this table all Connectors will be used in the System are listed, that means, also the connectors mounted on unit side. Connectors belonging to the harness can be identified by the attached backshell. The amount of each connector type in the Satellite is listed in the row **No. of Con.** and should not be used for ordering information because the connectors under instrument or tbd responsibility are also listed

Information's like connector mass, number of pins and connector shape will be used in the Data Base system for calculating the sum of connector mass, connector pin allocation density and automatic drawing of connector pin allocations

9 Signal Type List

(This list is subject of change because the Interfaces for SPIRE, PACS and the Cryostat Control System are still not complete defined)

This list is a refinement of the generic interfaces list and assigns a Signal Code to the interfaces with a short description of the Signal type.

Each Interface is allocated to a EMC Class as defined in 6.x before. At the moment only signal class 2 (tbc) is allocated to all interfaces.

The used cable type (**wiring**) will be shown in the next row after final definition of type and naming.

The **No. of Lines** defines the amount of signal lines and RTN lines in that cable wiring.

If the Interface requires a shield, the **Shd** column identifies were the shield is connected.

N= Shield not connected

S= Shield connected on source side

T= Shield connected on target side

B= Shield connected on both sides

In the **S/S Code** (see subsystem definition 4.x) an identification will be found to which Subsystem (Instrument or CCS) the interface is allocated to.

Finally there is a reference to a Data sheet and the Interface Definition Document.

10 Connector Allocation List

10.1 Item Connector List (ICL)

The item connector list shows all connector found at unit side. All junctions (J) are listed, even those which are not concerned by the Cold harness (CCH or EMC Cat 2C) or the interconnecting harness from feed through connectors to SVM connector brackets (SIH or EMC Cat 2I) and from the SVMCB to the warm units (EMC Cat 2B) which has to be manufactured under ASED responsibility.

The list is sorted by the item code and defines also the Junction connector type found for the unit side.

All these junction connector are not under ASED responsibility and therefore has to be supplied by the unit manufacturer. Backshells are not applicable inside of a box (only used for harness plugs)

The EMC Category is used for harness separation and is shown at unit side only for information.

10.2 Harness Connector Allocation List (HCL)

After final definition the wiring type will also be shown.

The routing status via the SVM and CVV brackets is preliminary and will be subject of change.

11 Pin allocation List Harness Side

(This list describes the Harness Connector Pin allocations based on the harness specifications.

This list will be the basic input for harness manufacturing.

11.1 Pin Allocation List (Harness) (PAL) see attachment 1

12 Attachment 1: HP-2-ASED-IC-0008-EQM

CVV int. CCH Pin allocation List Harness

Doc.No.: HP-2-ASED-IC-0008-EQM
Issue: 1.1 – Date: 20.09.2003

EQM-CCH
Internal Harness – EICD - Extract
Pin-Lists

Doc.No.: HP-2-ASED-IC-0008-EQM
Issue: 1.1 – Date: 20.09.2003

EQM-CCH

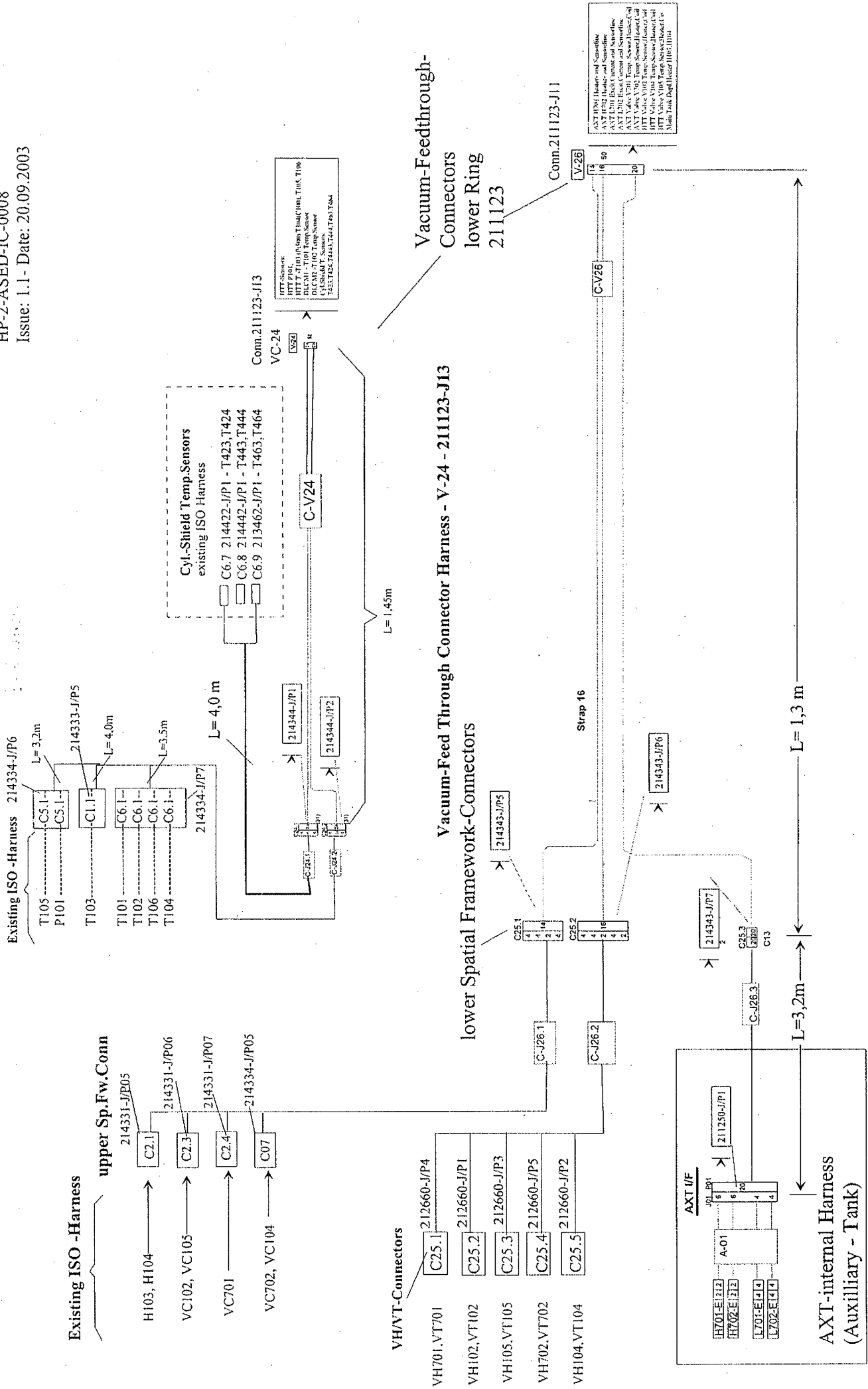
Internal Harness – EICD - Extract

Pin-Lists

Pages: CCH1 to CCH49

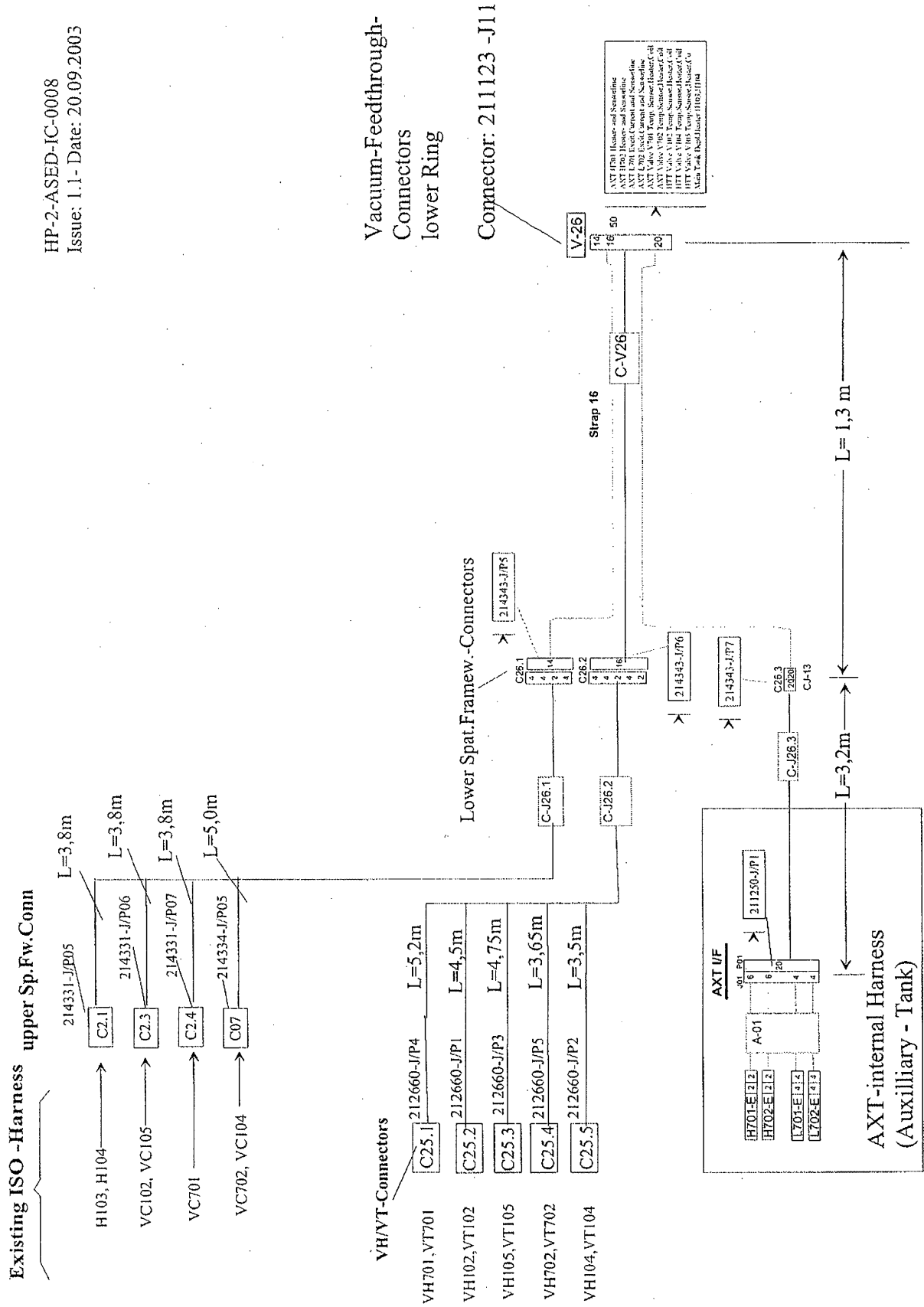
Table of Content:

- EQM-CCH Lower Ring Connector 211123-J11 ..(V26).....	Page CCH 2
- EQM-CCH Lower Ring Connector 211123-J13 ..(V24).....	Page CCH 22
- EQM-CCH Lower Ring Connector 211123-J09 ..(V12).....	Page CCH 34
-	
-	
-	



EQM Main Tank -Harness Overview
described in attached EICD

HP-2-ASED-IC-0008
Issue: 1.1- Date: 20.09.2003



Vacuum-Feed Through Connector Harness - V-26 - 211123-J11

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 2)

Connector: 211123 J11

Item: CWWLCR

EMC-Category: 2C/Sig H in Cryostat

Function: CVV LR- FThr. 235° C-V26 - (GCH)

Location: 30 / CVV external

Conn.-Type: 197-011P22-35P (Junct.)

Backshell: ASED B' Shell 100

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
34	HTT-Vaive-V102-Temp.Sens. I+	CTG.-	-	C135	TP250-38				CCHLFCB03	EL	214343 P06	01	2. 2. 2.
45	HTT-Vaive-V102-Temp.Sens. I-	CTG.-	-	C135	TP250-38				CCHLFCB03	EL	214343 P06	17	2. 2. 2.
44	HTT-Vaive-V102-Temp.Sens. U+	CTG.-	-	C135	TP250-38				CCHLFCB03	EL	214343 P06	02	2. 2. 2.
55	HTT-Vaive-V102-Temp.Sens. U-	CTG.-	-	C135	TP250-38				CCHLFCB03	EL	214343 P06	18	2. 2. 2.
65	HTT-Vaive-V104-Temp.Sens. I+	CTG.-	-	C137	TP250-38				CCHLFCB03	EL	214343 P06	03	2. 2. 2.
66	HTT-Vaive-V104-Temp.Sens. I-	CTG.-	-	C137	TP250-38				CCHLFCB03	EL	214343 P06	19	2. 2. 2.
75	HTT-Vaive-V104-Temp.Sens. U+	CTG.-	-	C137	TP250-38				CCHLFCB03	EL	214343 P06	04	2. 2. 2.
76	HTT-Vaive-V104-Temp.Sens. U-	CTG.-	-	C137	TP250-38				CCHLFCB03	EL	214343 P06	20	2. 2. 2.
84	HTT-Vaive-V105-Temp.Sens. I+	CTG.-	-	C138	TP250-38				CCHLFCB03	EL	214343 P06	05	2. 2. 2.
85	HTT-Vaive-V105-Temp.Sens. I-	CTG.-	-	C138	TP250-38				CCHLFCB03	EL	214343 P06	21	2. 2. 2.
92	HTT-Vaive-V105-Temp.Sens. U+	CTG.-	-	C138	TP250-38				CCHLFCB03	EL	214343 P06	06	2. 2. 2.
93	HTT-Vaive-V105-Temp.Sens. U-	CTG.-	-	C138	TP250-38				CCHLFCB03	EL	214343 P06	22	2. 2. 2.
83	AXT-Vaive-Temp.S-V701. I+	CTG.-	-	C144	TP250-38				CCHLFCB03	EL	214343 P06	07	2. 2. 2.
91	AXT-Vaive-Temp.S-V701. I-	CTG.-	-	C144	TP250-38				CCHLFCB03	EL	214343 P06	23	2. 2. 2.
82	AXT-Vaive-Temp.S-V701. U+	CTG.-	-	C144	TP250-38				CCHLFCB03	EL	214343 P06	08	2. 2. 2.
90	AXT-Vaive-Temp.S-V701. U-	CTG.-	-	C144	TP250-38				CCHLFCB03	EL	214343 P06	24	2. 2. 2.
81	AXT-Vaive-V702-Temp.S. I+	CTG.-	-	CX44	TP250-38				CCHLFCB03	EL	214343 P06	09	2. 2. 2.
89	AXT-Vaive-V702-Temp.S. I-	CTG.-	-	CX44	TP250-38				CCHLFCB03	EL	214343 P06	25	2. 2. 2.
80	AXT-Vaive-V702-Temp.S. U+	CTG.-	-	CX44	TP250-38				CCHLFCB03	EL	214343 P06	10	2. 2. 2.
88	AXT-Vaive-V702-Temp.S. U-	CTG.-	-	CX44	TP250-38				CCHLFCB03	EL	214343 P06	26	2. 2. 2.
67	AXT-Vaive-Heater-V701. SIG	CLQ.-	-	VH71	TP1B0-30				CCHLFCB03	EL	214343 P06	11	2. 2. 2.
68	AXT-Vaive-Heater-V701. RTN	CLQ.-	-	VH71	TP1B0-30				CCHLFCB03	EL	214343 P06	27	2. 2. 2.
56	AXT-Vaive-V702-Heater. SIG	CLQ.-	-	VH72	TP1B0-30				CCHLFCB03	EL	214343 P06	12	2. 2. 2.
57	AXT-Vaive-V702-Heater. RTN	CLQ.-	-	VH72	TP1B0-30				CCHLFCB03	EL	214343 P06	28	2. 2. 2.
46	HTT-Vaive-V102-Heater. SIG	CLQ.-	-	VH12	TP1B0-30				CCHLFCB03	EL	214343 P06	13	2. 2. 2.
47	HTT-Vaive-V102-Heater. RTN	CLQ.-	-	VH12	TP1B0-30				CCHLFCB03	EL	214343 P06	29	2. 2. 2.
35	HTT-Vaive-V104-Heater. SIG	CLQ.-	-	VH14	TP1B0-30				CCHLFCB03	EL	214343 P06	14	2. 2. 2.
36	HTT-Vaive-V104-Heater. RTN	CLQ.-	-	VH14	TP1B0-30				CCHLFCB03	EL	214343 P06	30	2. 2. 2.
25	HTT-Vaive-V105-Heater. SIG	CLQ.-	-	VH15	TP1B0-30				CCHLFCB03	EL	214343 P06	15	2. 2. 2.
26	HTT-Vaive-V105-Heater. RTN	CLQ.-	-	VH15	TP1B0-30				CCHLFCB03	EL	214343 P06	31	2. 2. 2.
15	HTT-H103. SIG	CHV.-	-	C019	TP2B0-38				CCHLFCB03	EL	214343 P05	01	2. 2. 2.
24	HTT-H103. RTN	CHV.-	-	C019	TP2B0-38				CCHLFCB03	EL	214343 P05	17	2. 2. 2.
23	HTT-H104. SIG	CHV.-	-	C020	TP2B0-38				CCHLFCB03	EL	214343 P05	02	2. 2. 2.
33	HTT-H104. RTN	CHV.-	-	C020	TP2B0-38				CCHLFCB03	EL	214343 P05	18	2. 2. 2.
100	AXT-Vaive-Coil-V701. SIG	CLQ.-	-	VC71	TP1B0-30				CCHLFCB03	EL	214343 P05	03	2. 2. 2.
99	AXT-Vaive-Coil-V701. RTN	CLQ.-	-	VC71	TP1B0-30				CCHLFCB03	EL	214343 P05	19	2. 2. 2.
96	HTT-Vaive-V102-Coil. SIG	CLQ.-	-	VC12	TP1B0-30				CCHLFCB03	EL	214343 P05	04	2. 2. 2.
95	HTT-Vaive-V102-Coil. RTN	CLQ.-	-	VC12	TP1B0-30				CCHLFCB03	EL	214343 P05	20	2. 2. 2.
87	HTT-Vaive-V105-Coil. SIG	CLQ.-	-	VC15	TP1B0-30				CCHLFCB03	EL	214343 P05	05	2. 2. 2.
86	HTT-Vaive-V105-Coil. RTN	CLQ.-	-	VC15	TP1B0-30				CCHLFCB03	EL	214343 P05	21	2. 2. 2.

CCH3

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-2 (of 2)

Connector: 211123 J11

Item: CVVLCR

EMC-Category: 2C/Sig H in Cryostat

Function: CVV LR- FThr. 235° C-V26 - (CCH)

Location: 30 / CVV external

Conn.-Type: 197-011P22-35P (Junct.)

Backshell: ASEB B'Shell 100

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
77	HTT-Valve-V104-Coil . SIG	CLQ.-	-	VC14	TP1B0-30				CCHLSFCB03	EL	214343 P05	06	2. 2. 2.
78	HTT-Valve-V104-Coil . RTN	CLQ.-	-	VC14	TP1B0-30				CCHLSFCB03	EL	214343 P05	22	2. 2. 2.
98	AXT-Valve-V702-Coil . SIG	CLQ.-	-	VC72	TP1B0-30				CCHLSFCB03	EL	214343 P05	07	2. 2. 2.
97	AXT-Valve-V702-Coil . RTN	CLQ.-	-	VC72	TP1B0-30				CCHLSFCB03	EL	214343 P05	23	2. 2. 2.
08	AXT-H701Heater line . SIG1	CHV.-	-	C023	TP2B0-38				CCHLSFCB03	EL	214343 P07	01	2. 2. 2.
16	AXT-H701Heater line . RTN1	CHV.-	-	C023	TP2B0-38				CCHLSFCB03	EL	214343 P07	17	2. 2. 2.
09	AXT-H701Heater line . SIG2	CHV.-	-	C023	TP2B0-38				CCHLSFCB03	EL	214343 P07	02	2. 2. 2.
17	AXT-H701Heater line . RTN2	CHV.-	-	C023	TP2B0-38				CCHLSFCB03	EL	214343 P07	18	2. 2. 2.
10	AXT-H702 Heater Line . SIG1	CHV.-	-	C024	TP2B0-38				CCHLSFCB03	EL	214343 P07	03	2. 2. 2.
18	AXT-H702 Heater Line . RTN1	CHV.-	-	C024	TP2B0-38				CCHLSFCB03	EL	214343 P07	19	2. 2. 2.
11	AXT-H702 Heater Line . SIG2	CHV.-	-	C024	TP2B0-38				CCHLSFCB03	EL	214343 P07	04	2. 2. 2.
19	AXT-H702 Heater Line . RTN2	CHV.-	-	C024	TP2B0-38				CCHLSFCB03	EL	214343 P07	20	2. 2. 2.
01	AXT-H701 Sensing Line . SIG	CLV.-	-	CX29	TP1S0-38				CCHLSFCB03	EL	214343 P07	05	2. 2. 2.
02	AXT-H701 Sensing Line . RTN	CLV.-	-	CX29	TP1S0-38				CCHLSFCB03	EL	214343 P07	21	2. 2. 2.
03	AXT-H702 Sensing Line . SIG	CLV.-	-	CX30	TP1S0-38				CCHLSFCB03	EL	214343 P07	06	2. 2. 2.
04	AXT-H702 Sensing Line . RTN	CLV.-	-	CX30	TP1S0-38				CCHLSFCB03	EL	214343 P07	22	2. 2. 2.
12	AXT-L701 Excit. Current . SIG	CLP.-	-	C027	TP1B0-38				CCHLSFCB03	EL	214343 P07	07	2. 2. 2.
20	AXT-L701 Excit. Current . RTN	CLP.-	-	C027	TP1B0-38				CCHLSFCB03	EL	214343 P07	23	2. 2. 2.
13	AXT-L702 Excit Current . SIG	CLP.-	-	C028	TP1B0-38				CCHLSFCB03	EL	214343 P07	08	2. 2. 2.
21	AXT-L702 Excit Current . RTN	CLP.-	-	C028	TP1B0-38				CCHLSFCB03	EL	214343 P07	24	2. 2. 2.
05	Sens-Line AXT-L701 . SIG	CLV.-	-	CX27	TP1S0-38				CCHLSFCB03	EL	214343 P07	09	2. 2. 2.
06	Sens-Line AXT-L701 . RTN	CLV.-	-	CX27	TP1S0-38				CCHLSFCB03	EL	214343 P07	25	2. 2. 2.
07	Sens-Line AXT L702 . SIG	CLV.-	-	CX28	TP1S0-38				CCHLSFCB03	EL	214343 P07	10	2. 2. 2.
14	Sens-Line AXT L702 . RTN	CLV.-	-	CX28	TP1S0-38				CCHLSFCB03	EL	214343 P07	26	2. 2. 2.

LCH4

Astrium GmbH
Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214343 P05
Item: CCHLSFCB03

EMC-Category: 2C/Sig H in Cryostat

Function: C-J26.1-allValvecoils, H103,H104
Location: EL / Electrical Subsystem

Conn.-Type: MWDM2L-31P-6C3-.630
Backshell: ISO 14F (31-P)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
04	HTT-Valve-V102-Coil . SIG	CLQ.-	-	VC12	TP1B0-30				CVVLCR	30	211123 J11	96	2. 2. 2.
20	HTT-Valve-V102-Coil . RTN	CLQ.-	-	VC12	TP1B0-30				CVVLCR	30	211123 J11	95	2. 2. 2.
05	HTT-Valve-V105-Coil . SIG	CLQ.-	-	VC15	TP1B0-30				CVVLCR	30	211123 J11	87	2. 2. 2.
21	HTT-Valve-V105-Coil . RTN	CLQ.-	-	VC15	TP1B0-30				CVVLCR	30	211123 J11	86	2. 2. 2.
03	AXT-Valve-Coil-V701 . SIG	CLQ.-	-	VC71	TP1B0-30				CVVLCR	30	211123 J11	100	2. 2. 2.
19	AXT-Valve-Coil-V701 . RTN	CLQ.-	-	VC71	TP1B0-30				CVVLCR	30	211123 J11	99	2. 2. 2.
06	HTT-Valve-V104-Coil . SIG	CLQ.-	-	VC14	TP1B0-30				CVVLCR	30	211123 J11	77	2. 2. 2.
22	HTT-Valve-V104-Coil . RTN	CLQ.-	-	VC14	TP1B0-30				CVVLCR	30	211123 J11	78	2. 2. 2.
07	AXT-Valve-V702-Coil . SIG	CLQ.-	-	VC72	TP1B0-30				CVVLCR	30	211123 J11	98	2. 2. 2.
23	AXT-Valve-V702-Coil . RTN	CLQ.-	-	VC72	TP1B0-30				CVVLCR	30	211123 J11	97	2. 2. 2.
01	HTT-H103 . SIG	CHV.-	-	C019	TP2B0-38			2 wires soldered to one pin	CVVLCR	30	211123 J11	15	2. 2. 2.
17	HTT-H103 . RTN	CHV.-	-	C019	TP2B0-38			2 wires soldered to one pin	CVVLCR	30	211123 J11	24	2. 2. 2.
02	HTT-H104 . SIG	CHV.-	-	C020	TP2B0-38			2 wires soldered to one pin	CVVLCR	30	211123 J11	23	2. 2. 2.
18	HTT-H104 . RTN	CHV.-	-	C020	TP2B0-38			2 wires soldered to one pin	CVVLCR	30	211123 J11	33	2. 2. 2.

CCHS

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214331 P05

Item: CCHUSFCB2

EMC-Category: 2C/Sig H in Cryostat

Function: H103,H104 to V-V26/J11

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-09P-6C3-.630

Backshell: ISO 11F (9-P)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	HTT-H103 . SIG	CHV.-	-	C019	TP2B0-38				CCHLSFCB03	EL	214343 J05	01	2. 2. 2.
06	HTT-H103 . RTN	CHV.-	-	C019	TP2B0-38				CCHLSFCB03	EL	214343 J05	17	2. 2. 2.
02	HTT-H104 . SIG	CHV.-	-	C020	TP2B0-38				CCHLSFCB03	EL	214343 J05	02	2. 2. 2.
07	HTT-H104 . RTN	CHV.-	-	C020	TP2B0-38				CCHLSFCB03	EL	214343 J05	18	2. 2. 2.

CCHG

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214331 P06

Item: CCHUSFCB2

EMC-Category: 2C/Sig H in Cryostat

Function: V102, V105-Coil to C-V26

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-09P-6C3-.630

Backshell: ISO 11F (9-P)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	HTT-Valve-V102-Coil . SIG	CLQ.-	-	VC12	TP1B0-30				CCHLSFCB03	EL	214343 J05	04	2. 2. 2.
06	HTT-Valve-V102-Coil . RTN	CLQ.-	-	VC12	TP1B0-30				CCHLSFCB03	EL	214343 J05	20	2. 2. 2.
02	HTT-Valve-V105-Coil . SIG	CLQ.-	-	VC15	TP1B0-30				CCHLSFCB03	EL	214343 J05	05	2. 2. 2.
07	HTT-Valve-V105-Coil . RTN	CLQ.-	-	VC15	TP1B0-30				CCHLSFCB03	EL	214343 J05	21	2. 2. 2.

CCH7

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214331 P07

Item: CCHUSFCB2

EMC-Category: 2C/Sig H in Cryostat

Function: V701-Coil to C-V26

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-09P-6C3-630

Backshell: ISO 11F (9-P)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable						
01	AXT-Valve-Coil-V701 . SIG	CLQ.-	-	VC71	TP1B0-30				CCHLSFCB03	EL	214343 J05	03	2. 2. 2.
06	AXT-Valve-Coil-V701 . RTN	CLQ.-	-	VC71	TP1B0-30				CCHLSFCB03	EL	214343 J05	19	2. 2. 2.

CCH8

Astrium GmbH
Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214334 P05

Item: CCHUSFCB1

EMC-Category: 2C/Sig H in Cryostat

Function: ISO-C-J07 - V702/704 Coil

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-09P-6C3-630

Backshell: ISO 11F (9-P)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable						
01	HTT-Valve-V104-Coil . SIG	CLQ.-	-	VC14	TP1B0-30				CCHLSFCB03	EL	214343 J05	06	2. 2. 2.
06	HTT-Valve-V104-Coil . RTN	CLQ.-	-	VC14	TP1B0-30				CCHLSFCB03	EL	214343 J05	22	2. 2. 2.
02	AXT-Valve-V702-Coil . SIG	CLQ.-	-	VC72	TP1B0-30				CCHLSFCB03	EL	214343 J05	07	2. 2. 2.
07	AXT-Valve-V702-Coil . RTN	CLQ.-	-	VC72	TP1B0-30				CCHLSFCB03	EL	214343 J05	23	2. 2. 2.

CCH9

Astrium GmbH

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Project: **HERSCHEL-E**

Connector: 214343 P06

Item: CCHLSFCB03

EMC-Category: 2C/Sig H in Cryostat

Function: C-J26.2 -allValvesignals

Location: EL / Electrical Subsystem

Conn.-Type: MWDM2L-31P-6C3-630

Backshell: ISO 14F (31-P)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
07	AXT-Valve-Temp.S-V701..I+	CTG.-	-	C144	TP2S0-38				CVVLCR	30	211123 J11	83	2. 2. 2.
23	AXT-Valve-Temp.S-V701..I-	CTG.-	-	C144	TP2S0-38				CVVLCR	30	211123 J11	91	2. 2. 2.
08	AXT-Valve-Temp.S-V701..U+	CTG.-	-	C144	TP2S0-38				CVVLCR	30	211123 J11	82	2. 2. 2.
24	AXT-Valve-Temp.S-V701..U-	CTG.-	-	C144	TP2S0-38				CVVLCR	30	211123 J11	90	2. 2. 2.
11	AXT-Valve-Heater-V701..SIG	CLQ.-	-	VH71	TP1B0-30				CVVLCR	30	211123 J11	67	2. 2. 2.
27	AXT-Valve-Heater-V701..RTN	CLQ.-	-	VH71	TP1B0-30				CVVLCR	30	211123 J11	68	2. 2. 2.
09	AXT-Valve-V702-Temp.S..I+	CTG.-	-	CX44	TP2S0-38				CVVLCR	30	211123 J11	81	2. 2. 2.
25	AXT-Valve-V702-Temp.S..I-	CTG.-	-	CX44	TP2S0-38				CVVLCR	30	211123 J11	89	2. 2. 2.
10	AXT-Valve-V702-Temp.S..U+	CTG.-	-	CX44	TP2S0-38				CVVLCR	30	211123 J11	80	2. 2. 2.
26	AXT-Valve-V702-Temp.S..U-	CTG.-	-	CX44	TP2S0-38				CVVLCR	30	211123 J11	88	2. 2. 2.
12	AXT-Valve-V702-Heater.SIG	CLQ.-	-	VH72	TP1B0-30				CVVLCR	30	211123 J11	56	2. 2. 2.
28	AXT-Valve-V702-Heater.RTN	CLQ.-	-	VH72	TP1B0-30				CVVLCR	30	211123 J11	57	2. 2. 2.
01	HIT-Valve-V102-Temp.Sens..I+	CTG.-	-	C135	TP2S0-38				CVVLCR	30	211123 J11	34	2. 2. 2.
17	HIT-Valve-V102-Temp.Sens..I-	CTG.-	-	C135	TP2S0-38				CVVLCR	30	211123 J11	45	2. 2. 2.
02	HIT-Valve-V102-Temp.Sens..U+	CTG.-	-	C135	TP2S0-38				CVVLCR	30	211123 J11	44	2. 2. 2.
18	HIT-Valve-V102-Temp.Sens..U-	CTG.-	-	C135	TP2S0-38				CVVLCR	30	211123 J11	55	2. 2. 2.
13	HIT-Valve-V102-Heater.SIG	CLQ.-	-	VH12	TP1B0-30				CVVLCR	30	211123 J11	46	2. 2. 2.
29	HIT-Valve-V102-Heater.RTN	CLQ.-	-	VH12	TP1B0-30				CVVLCR	30	211123 J11	47	2. 2. 2.
03	HIT-Valve-V104-Temp.Sens..I+	CTG.-	-	C137	TP2S0-38				CVVLCR	30	211123 J11	65	2. 2. 2.
19	HIT-Valve-V104-Temp.Sens..I-	CTG.-	-	C137	TP2S0-38				CVVLCR	30	211123 J11	66	2. 2. 2.
04	HIT-Valve-V104-Temp.Sens..U+	CTG.-	-	C137	TP2S0-38				CVVLCR	30	211123 J11	75	2. 2. 2.
20	HIT-Valve-V104-Temp.Sens..U-	CTG.-	-	C137	TP2S0-38				CVVLCR	30	211123 J11	76	2. 2. 2.
14	HIT-Valve-V104-Heater.SIG	CLQ.-	-	VH14	TP1B0-30				CVVLCR	30	211123 J11	35	2. 2. 2.
30	HIT-Valve-V104-Heater.RTN	CLQ.-	-	VH14	TP1B0-30				CVVLCR	30	211123 J11	36	2. 2. 2.
05	HIT-Valve-V105-Temp.Sens..I+	CTG.-	-	C138	TP2S0-38				CVVLCR	30	211123 J11	84	2. 2. 2.
21	HIT-Valve-V105-Temp.Sens..I-	CTG.-	-	C138	TP2S0-38				CVVLCR	30	211123 J11	85	2. 2. 2.
06	HIT-Valve-V105-Temp.Sens..U+	CTG.-	-	C138	TP2S0-38				CVVLCR	30	211123 J11	92	2. 2. 2.
22	HIT-Valve-V105-Temp.Sens..U-	CTG.-	-	C138	TP2S0-38				CVVLCR	30	211123 J11	93	2. 2. 2.
15	HIT-Valve-V105-Heater.SIG	CLQ.-	-	VH15	TP1B0-30				CVVLCR	30	211123 J11	25	2. 2. 2.
31	HIT-Valve-V105-Heater.RTN	CLQ.-	-	VH15	TP1B0-30				CVVLCR	30	211123 J11	26	2. 2. 2.

CCH 10

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 212660 P04

Item: HEVAHRSEN

EMC-Category: 2C/Sig H in Cryostat

Function: VHVT701 Conn.

Location: CSS / Cryo Structure S/S

Conn.-Type: MWDM2L-09P-6C3-.630

Backshell: ISO 17F (9-Pvk)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable						
01	AXT-Valve-Temp S-V701 . I+	CTG.-	-	C144	TP2S0-38				CCHLSFCB03	EL	214343 J06	07	2. 2. 2.
02	AXT-Valve-Temp S-V701 . I-	CTG.-	-	C144	TP2S0-38				CCHLSFCB03	EL	214343 J06	23	2. 2. 2.
03	AXT-Valve-Temp S-V701 . U+	CTG.-	-	C144	TP2S0-38				CCHLSFCB03	EL	214343 J06	08	2. 2. 2.
04	AXT-Valve-Temp S-V701 . U-	CTG.-	-	C144	TP2S0-38				CCHLSFCB03	EL	214343 J06	24	2. 2. 2.
07	AXT-Valve-Heater-V701 . SIG	CLQ.-	-	VH71	TP1B0-30				CCHLSFCB03	EL	214343 J06	11	2. 2. 2.
08	AXT-Valve-Heater-V701 . RTN	CLQ.-	-	VH71	TP1B0-30				CCHLSFCB03	EL	214343 J06	27	2. 2. 2.

CCHM

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 212660 P01

Item: HEVAHTRSEN

EMC-Category: 2C/Sig H in Cryostat

Function: VH/VT102 Conn

Location: CSS / Cryo Structure S/S

Conn.-Type: MWDM2L-09P-6C3-630

Backshell: ISO 17F (9-Pvk)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	HTT-Valve-V102-Temp.Sens. I+	CTG.-	-	C135	TP2S0-38				CCHLSFCB03	EL	214343 J06	01	2. 2. 2.
02	HTT-Valve-V102-Temp.Sens. I-	CTG.-	-	C135	TP2S0-38				CCHLSFCB03	EL	214343 J06	17	2. 2. 2.
03	HTT-Valve-V102-Temp.Sens. U+	CTG.-	-	C135	TP2S0-38				CCHLSFCB03	EL	214343 J06	02	2. 2. 2.
04	HTT-Valve-V102-Temp.Sens. U-	CTG.-	-	C135	TP2S0-38				CCHLSFCB03	EL	214343 J06	18	2. 2. 2.
07	HTT-Valve-V102-Heater. SIG	CLQ.-	-	VH12	TP1B0-30				CCHLSFCB03	EL	214343 J06	13	2. 2. 2.
08	HTT-Valve-V102-Heater. RTN	CLQ.-	-	VH12	TP1B0-30				CCHLSFCB03	EL	214343 J06	29	2. 2. 2.

CCH12

Astrium GmbH

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Project: **HERSCHEL-E**

Connector: 212660 P03

Item: HEVAHTRSEN

EMC-Category: 2C/Sig H in Cryostat

Function: VH/VT105 Conn.

Location: CSS / Cryo Structure S/S

Conn.-Type: MWDM2L-09P-6C3-630

Backshell: ISO 17F (9-Pvk)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.			Shd	Cable Twist						
01	HTT-Valve-V105-Temp.Sens . I+	CTG.-	-	C138	TP2S0-38				CCHLSFCB03	EL	214343 J06	05	2. 2. 2.
02	HTT-Valve-V105-Temp.Sens . I-	CTG.-	-	C138	TP2S0-38				CCHLSFCB03	EL	214343 J06	21	2. 2. 2.
03	HTT-Valve-V105-Temp.Sens . U+	CTG.-	-	C138	TP2S0-38				CCHLSFCB03	EL	214343 J06	06	2. 2. 2.
04	HTT-Valve-V105-Temp.Sens . U-	CTG.-	-	C138	TP2S0-38				CCHLSFCB03	EL	214343 J06	22	2. 2. 2.
07	HTT-Valve-V105-Heater . SIG	CLQ.-	-	VH15	TP1B0-30				CCHLSFCB03	EL	214343 J06	15	2. 2. 2.
08	HTT-Valve-V105-Heater . RTN	CLQ.-	-	VH15	TP1B0-30				CCHLSFCB03	EL	214343 J06	31	2. 2. 2.

CCH13

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 212660 P05
Item: HEVAHTRSEN

EMC-Category: 2C/Sig H in Cryostat

Function: VH/VT702 Conn.

Location: CSS / Cryo Structure S/S

Conn.-Type: MWDM2L-09P-6C3-630

Backshell: ISO 17F (9-Pvk)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	AXT-Valve-V702-Temp.S.+	CTG.-	-	CX44	TP2S0-38				CCHLSFCB03	EL	214343 J06	09	2. 2. 2.
02	AXT-Valve-V702-Temp.S.-	CTG.-	-	CX44	TP2S0-38				CCHLSFCB03	EL	214343 J06	25	2. 2. 2.
03	AXT-Valve-V702-Temp.S.+	CTG.-	-	CX44	TP2S0-38				CCHLSFCB03	EL	214343 J06	10	2. 2. 2.
04	AXT-Valve-V702-Temp.S.-	CTG.-	-	CX44	TP2S0-38				CCHLSFCB03	EL	214343 J06	26	2. 2. 2.
07	AXT-Valve-V702-Heater.SIG	CLQ.-	-	VH72	TP1B0-30				CCHLSFCB03	EL	214343 J06	12	2. 2. 2.
08	AXT-Valve-V702-Heater.RTN	CLQ.-	-	VH72	TP1B0-30				CCHLSFCB03	EL	214343 J06	28	2. 2. 2.

CCH14

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 212660 P02

Item: HEVAHTRSEN

EMC-Category: 2C/Sig H in Cryostat

Function: VH/VT104 Conn.

Location: CSS / Cryo Structure S/S

Conn.-Type: MWDM2L-09P-6C3-630

Backshell: ISO 17F (9-Pvk)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
01	HTT-Valve-V104-Temp.Sens. . I+	CTG.-	-	C137	TP2S0-38				CCHLSFCB03	EL	214343 J06	03	2. 2. 2.
02	HTT-Valve-V104-Temp.Sens. . I-	CTG.-	-	C137	TP2S0-38				CCHLSFCB03	EL	214343 J06	19	2. 2. 2.
03	HTT-Valve-V104-Temp.Sens. . U+	CTG.-	-	C137	TP2S0-38				CCHLSFCB03	EL	214343 J06	04	2. 2. 2.
04	HTT-Valve-V104-Temp.Sens. . U-	CTG.-	-	C137	TP2S0-38				CCHLSFCB03	EL	214343 J06	20	2. 2. 2.
07	HTT-Valve-V104-Heater . SIG	CLQ.-	-	VH14	TP1B0-30				CCHLSFCB03	EL	214343 J06	14	2. 2. 2.
08	HTT-Valve-V104-Heater . RTN	CLQ.-	-	VH14	TP1B0-30				CCHLSFCB03	EL	214343 J06	30	2. 2. 2.

CCHAS

Astrium GmbH
 Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-1 (of 1)

Connector: 214343 P07
 Item: CCHLSFCB03

Function: C-J26.3-AXT H701,H702,L701,L702
 Location: EL / Electrical Subsystem

Conn.-Type: MWDM2L-31P-6C3-630
 Backshell: ISO 14F (31-P)

EMC-Category: 2C/Sig H in Cryostat

Pin	Signal Designation	Interface-Code Circuit Signal Pos.	Ch. ID	Wiring	Grouping: Shd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
01	AXT-H701 Heater Line . SIG1	CHV.-	C023	TP2B0-38			CVWLCR	30	211123 J11	08	2.
17	AXT-H701 Heater Line . RTN1	CHV.-	C023	TP2B0-38			CVWLCR	30	211123 J11	16	2.
02	AXT-H701 Heater Line . SIG2	CHV.-	C023	TP2B0-38			CVWLCR	30	211123 J11	09	2.
18	AXT-H701 Heater Line . RTN2	CHV.-	C023	TP2B0-38			CVWLCR	30	211123 J11	17	2.
03	AXT-H702 Heater Line . SIG1	CHV.-	C024	TP2B0-38			CVWLCR	30	211123 J11	10	2.
19	AXT-H702 Heater Line . RTN1	CHV.-	C024	TP2B0-38			CVWLCR	30	211123 J11	18	2.
04	AXT-H702 Heater Line . SIG2	CHV.-	C024	TP2B0-38			CVWLCR	30	211123 J11	11	2.
20	AXT-H702 Heater Line . RTN2	CHV.-	C024	TP2B0-38			CVWLCR	30	211123 J11	19	2.
05	AXT-H701 Sensing Line . SIG	CLV.-	CX29	TP1S0-38			CVWLCR	30	211123 J11	01	2.
21	AXT-H701 Sensing Line . RTN	CLV.-	CX29	TP1S0-38			CVWLCR	30	211123 J11	02	2.
06	AXT-H702 Sensing Line . SIG	CLV.-	CX30	TP1S0-38			CVWLCR	30	211123 J11	03	2.
22	AXT-H702 Sensing Line . RTN	CLV.-	CX30	TP1S0-38			CVWLCR	30	211123 J11	04	2.
07	AXT-L701 Excit Current . SIG	CLP.-	C027	TP1B0-38			CVWLCR	30	211123 J11	12	2.
23	AXT-L701 Excit Current . RTN	CLP.-	C027	TP1B0-38			CVWLCR	30	211123 J11	20	2.
08	AXT-L702 Excit Current . SIG	CLP.-	C028	TP1B0-38			CVWLCR	30	211123 J11	13	2.
24	AXT-L702 Excit Current . RTN	CLP.-	C028	TP1B0-38			CVWLCR	30	211123 J11	21	2.
09	Sens-Line AXT-L701 . SIG	CLV.-	CX27	TP1S0-38			CVWLCR	30	211123 J11	06	2.
25	Sens-Line AXT-L701 . RTN	CLV.-	CX27	TP1S0-38			CVWLCR	30	211123 J11	06	2.
10	Sens-Line AXT L702 . SIG	CLV.-	CX28	TP1S0-38			CVWLCR	30	211123 J11	07	2.
26	Sens-Line AXT L702 . RTN	CLV.-	CX28	TP1S0-38			CVWLCR	30	211123 J11	14	2.

CCH16

Astrium GmbH
Project: HERSCHEL-E

Pin Allocation List

(Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-1 (of 1)

Connector: 211250 P01
Item: AXT-CB

EMC-Category: 2C/Sig H in Cryostat

Function: AXT Conn for Heater and Liqu.Lev.Sensors
Location: 62 / on AXT_EQM

Conn.-Type: MWDML2L-25P-6C3-630
Backshell: ISO 19F (25-P vk)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
01	AXT-H701Heater line . SIG1	CHV.-	-	C023	TP2B0-38				CCHLSFCB03	EL	214343 J07	01	2.
14	AXT-H701Heater line . RTN1	CHV.-	-	C023	TP2B0-38				CCHLSFCB03	EL	214343 J07	17	2.
02	AXT-H701Heater line . SIG2	CHV.-	-	C023	TP2B0-38				CCHLSFCB03	EL	214343 J07	02	2.
15	AXT-H701Heater line . RTN2	CHV.-	-	C023	TP2B0-38				CCHLSFCB03	EL	214343 J07	18	2.
03	AXT-H702 Heater Line . SIG1	CHV.-	-	C024	TP2B0-38				CCHLSFCB03	EL	214343 J07	03	2.
16	AXT-H702 Heater Line . RTN1	CHV.-	-	C024	TP2B0-38				CCHLSFCB03	EL	214343 J07	19	2.
04	AXT-H702 Heater Line . SIG2	CHV.-	-	C024	TP2B0-38				CCHLSFCB03	EL	214343 J07	04	2.
17	AXT-H702 Heater Line . RTN2	CHV.-	-	C024	TP2B0-38				CCHLSFCB03	EL	214343 J07	20	2.
05	AXT-H701Sensing Line . SIG	CLV.-	-	CX29	TP1S0-38				CCHLSFCB03	EL	214343 J07	05	2.
18	AXT-H701Sensing Line . RTN	CLV.-	-	CX29	TP1S0-38				CCHLSFCB03	EL	214343 J07	21	2.
06	AXT-H702 Sensing Line . SIG	CLV.-	-	CX30	TP1S0-38				CCHLSFCB03	EL	214343 J07	06	2.
19	AXT-H702 Sensing Line . RTN	CLV.-	-	CX30	TP1S0-38				CCHLSFCB03	EL	214343 J07	22	2.
07	AXT-L701Excit Current . SIG	CLP.-	-	C027	TP1B0-38				CCHLSFCB03	EL	214343 J07	07	2.
20	AXT-L701Excit Current . RTN	CLP.-	-	C027	TP1B0-38				CCHLSFCB03	EL	214343 J07	23	2.
08	AXT-L702 Excit Current . SIG	CLP.-	-	C028	TP1B0-38				CCHLSFCB03	EL	214343 J07	08	2.
21	AXT-L702 Excit Current . RTN	CLP.-	-	C028	TP1B0-38				CCHLSFCB03	EL	214343 J07	24	2.
09	Sens-Line AXT-L701 . SIG	CLV.-	-	CX27	TP1S0-38				CCHLSFCB03	EL	214343 J07	09	2.
22	Sens-Line AXT-L701 . RTN	CLV.-	-	CX27	TP1S0-38				CCHLSFCB03	EL	214343 J07	25	2.
10	Sens-Line AXT L702 . SIG	CLV.-	-	CX28	TP1S0-38				CCHLSFCB03	EL	214343 J07	10	2.
23	Sens-Line AXT L702 . RTN	CLV.-	-	CX28	TP1S0-38				CCHLSFCB03	EL	214343 J07	26	2.

CCH17

Astrium GmbH
 Project: **HERSCHEL-E**

Pin Allocation List

(Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-1 (of 1)

Connector: 21H701 P01
Item: AXT-H701

Conn.-Type: MWDM2L-09P-6C3-.630
Backshell: ISO 17F (9-Pvk)

EMC-Category: 1C/Pwr H inside Cryostat

Function: AXT-H701
Location: 62 / on AXT_EQM
Note: Signals of different EMC classes are routed via this Connector

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Shd	Cable	Twist	Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal											
01	AXT-H701Heater line .SIG1	CHV.-	-	C023	TP2B0-38					AXT-CB	62	2C211250 J01	01	2. 2. 2.
06	AXT-H701Heater line .RTN1	CHV.-	-	C023	TP2B0-38					AXT-CB	62	2C211250 J01	14	2. 2. 2.
03	AXT-H701Heater line .SIG2	CHV.-	-	C023	TP2B0-38					AXT-CB	62	2C211250 J01	02	2. 2. 2.
07	AXT-H701Heater line .RTN2	CHV.-	-	C023	TP2B0-38					AXT-CB	62	2C211250 J01	15	2. 2. 2.
05	AXT-H701Sensing Line .SIG	CLV.-	-	CX29	TP1S0-38					AXT-CB	62	2C211250 J01	05	2. 2. 2.
09	AXT-H701Sensing Line .RTN	CLV.-	-	CX29	TP1S0-38					AXT-CB	62	2C211250 J01	18	2. 2. 2.

Grouping:

CCH 13

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 21H702 P01

Item: AXT-H702

EMC-Category: 1C/Pwr H inside Cryostat

Function: AXT-H702

Location: 62 / on AXT_EQM

Note: Signals of different EMC classes are routed via this Connector

Conn.-Type: MWDM2L-09P-6C3-630

Backshell: ISO 17F (9-Pvk)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Shd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal									
01	AXT-H702 Heater Line . SIG1	CHV.-	-	C024	TP2B0-38			AXT-CB	62	2C211250 J01	03	2.
06	AXT-H702 Heater Line . RTN1	CHV.-	-	C024	TP2B0-38			AXT-CB	62	2C211250 J01	16	2.
03	AXT-H702 Heater Line . SIG2	CHV.-	-	C024	TP2B0-38			AXT-CB	62	2C211250 J01	04	2.
07	AXT-H702 Heater Line . RTN2	CHV.-	-	C024	TP2B0-38			AXT-CB	62	2C211250 J01	17	2.
05	AXT-H702 Sensing Line . SIG	CLV.-	-	CX30	TP1S0-38			AXT-CB	62	2C211250 J01	06	2.
09	AXT-H702 Sensing Line . RTN	CLV.-	-	CX30	TP1S0-38			AXT-CB	62	2C211250 J01	19	2.

CCH 1.9

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 21L701 P01
Item: AXT-L701

EMC-Category: 2C/Sig H in Cryostat

Function: AXT-L701
Location: 62 / on AXT_EQM

Conn.-Type: MWDM2L-09P-6C3-630
Backshell: ISO 17F (9-Pvk)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
08	Sens-Line AXT-L701 . SIG	CLG	CLV	-	TP1S0-38				AXT-CB	62	211250 J01	09	2.
09	Sens-Line AXT-L701 . RTN	CLG	CLV	-	TP1S0-38				AXT-CB	62	211250 J01	22	2.
02	AXT-L701 Excit Current . SIG	CLG	CLP	-	TP1B0-38				AXT-CB	62	211250 J01	07	2.
04	AXT-L701 Excit Current . RTN	CLG	CLP	-	TP1B0-38				AXT-CB	62	211250 J01	20	2.
-	NC												2.
-	NC												2.
-	NC												2.
-	NC												2.
-	NC												2.
-	NC												2.
-	NC												2.
-	NC												2.

CCH20

Astrium GmbH
Project: HERSCHELE-E

Pin Allocation List

(Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-1 (of 1)

Connector: 21L702 P01
Item: AXT-L702
EMC-Category: 2C/Sig H in Cryostat

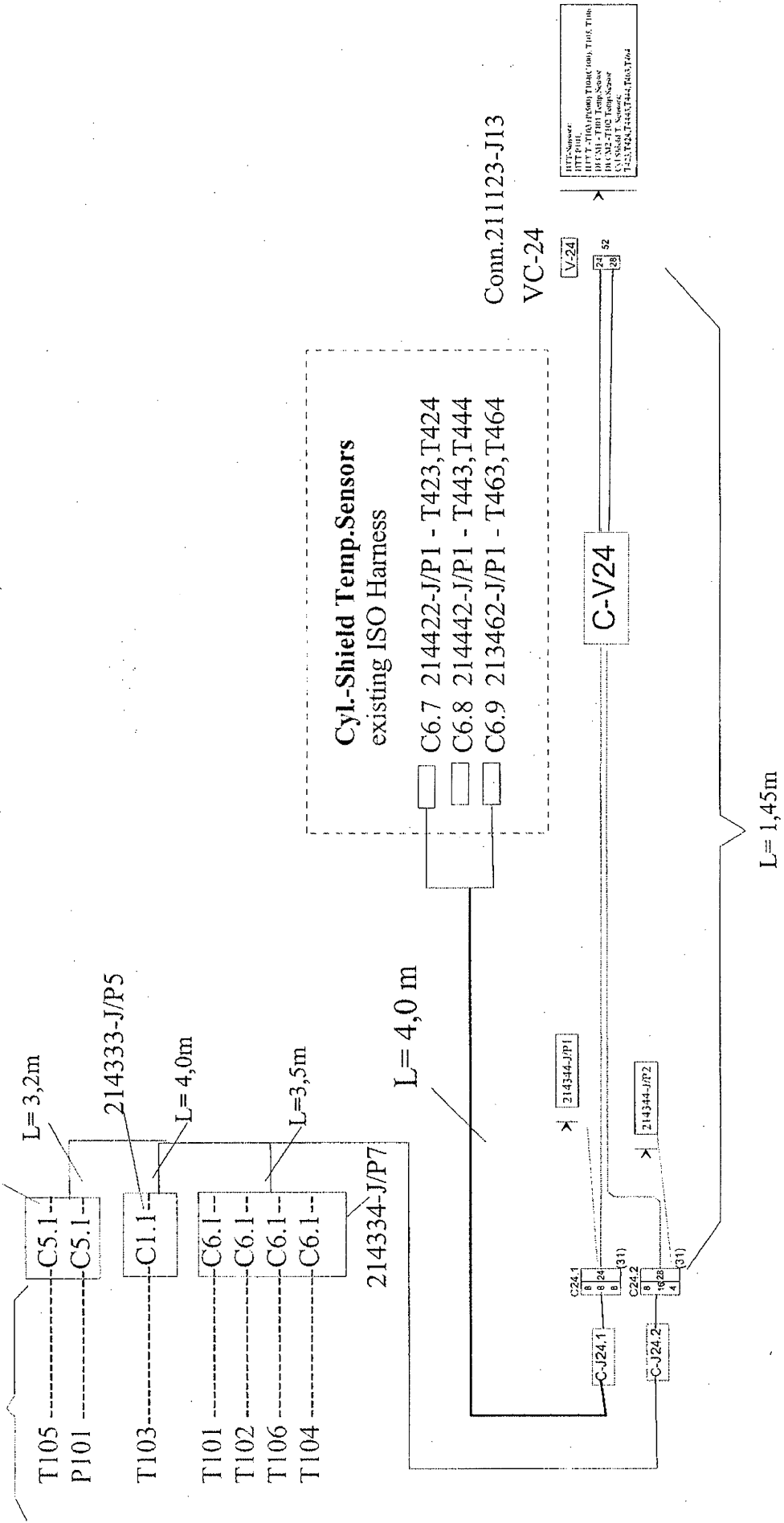
Function: AXT-L702
Location: 62 / on AXT_EQM

Conn.-Type: MWDM2L-09P-6C3-.630
Backshell: ISO 17F (9-Pvk)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd					
08	Sens-Line AXT L702 . SIG	CLG	CLV.-	-	TP1S0-38			AXT-CB	62	211250 J01	10	2. 2. 2.
09	Sens-Line AXT L702 . RTN	CLG	CLV.-	-	TP1S0-38			AXT-CB	62	211250 J01	23	2. 2. 2.
02	AXT-L702 Excit Current . SIG	CLG	CLP.-	-	TP1B0-38			AXT-CB	62	211250 J01	08	2. 2. 2.
04	AXT-L702 Excit Current . RTN	CLG	CLP.-	-	TP1B0-38			AXT-CB	62	211250 J01	21	2. 2. 2.
-	NC											R
-	NC											R
-	NC											R
-	NC											R
-	NC											R
-	NC											R
-	NC											R
-	NC											R
-	NC											R

CCH21

Existing ISO -Harness 214334-J/P6



Vacuum-Feed Through Connector Harness - V-24 - 211123-J13

WTP-SENSOR	
101	T105
102	P101
103	T103
104	T101
105	T102
106	T106
107	T104
108	T423
109	T424
110	T443
111	T444
112	T463
113	T464

Pin Allocation List (Harness)

Connector: 211123 J13
Item: CWWLGR

EMC-Category: 2C/Sig H in Cryostat

Function: CVV LR-FThr. 282° C-V24 - (CCH)
Location: 30 / CVV external

Conn.-Type: 197-011P22-35P (Junct.)
Backshell: ASEB B'Shell 100

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
08	HTT-P101 to C-V24/J13 . I+	CTG.-	-	C029	TP2S0-38				CCHLSTFCB04	EL	214344 P02	01	2. 2. 2.
16	HTT-P101 to C-V24/J13 . I-	CTG.-	-	C029	TP2S0-38				CCHLSTFCB04	EL	214344 P02	20	2. 2. 2.
09	HTT-P101 to C-V24/J13 . U+	CTG.-	-	C029	TP2S0-38				CCHLSTFCB04	EL	214344 P02	02	2. 2. 2.
17	HTT-P101 to C-V24/J13 . U-	CTG.-	-	C029	TP2S0-38				CCHLSTFCB04	EL	214344 P02	21	2. 2. 2.
25	Main T-T103 . I+	CTG.-	-	C034	TP2S0-38				CCHLSTFCB04	EL	214344 P02	03	2. 2. 2.
35	Main T-T103 . I-	CTG.-	-	C034	TP2S0-38				CCHLSTFCB04	EL	214344 P02	22	2. 2. 2.
26	Main T-T103 . U+	CTG.-	-	C034	TP2S0-38				CCHLSTFCB04	EL	214344 P02	04	2. 2. 2.
36	Main T-T103 . U-	CTG.-	-	C034	TP2S0-38				CCHLSTFCB04	EL	214344 P02	23	2. 2. 2.
46	Main T-T104-C100 . I+	CTG.-	-	C035	TP2S0-38				CCHLSTFCB04	EL	214344 P02	05	2. 2. 2.
56	Main T-T104-C100 . I-	CTG.-	-	C035	TP2S0-38				CCHLSTFCB04	EL	214344 P02	24	2. 2. 2.
47	Main T-T104-C100 . U+	CTG.-	-	C035	TP2S0-38				CCHLSTFCB04	EL	214344 P02	06	2. 2. 2.
57	Main T-T104-C100 . U-	CTG.-	-	C035	TP2S0-38				CCHLSTFCB04	EL	214344 P02	25	2. 2. 2.
67	Main T-T105 . I+	CTG.-	-	C036	TP2S0-38				CCHLSTFCB04	EL	214344 P02	07	2. 2. 2.
77	Main T-T105 . I-	CTG.-	-	C036	TP2S0-38				CCHLSTFCB04	EL	214344 P02	26	2. 2. 2.
68	Main T-T105 . U+	CTG.-	-	C036	TP2S0-38				CCHLSTFCB04	EL	214344 P02	08	2. 2. 2.
78	Main T-T105 . U-	CTG.-	-	C036	TP2S0-38				CCHLSTFCB04	EL	214344 P02	27	2. 2. 2.
10	Main T-T106 . I+	CTG.-	-	C037	TP2S0-38				CCHLSTFCB04	EL	214344 P02	09	2. 2. 2.
18	Main T-T106 . I-	CTG.-	-	C037	TP2S0-38				CCHLSTFCB04	EL	214344 P02	28	2. 2. 2.
11	Main T-T106 . U+	CTG.-	-	C037	TP2S0-38				CCHLSTFCB04	EL	214344 P02	10	2. 2. 2.
19	Main T-T106 . U-	CTG.-	-	C037	TP2S0-38				CCHLSTFCB04	EL	214344 P02	29	2. 2. 2.
01	DLCM-T101 to C-V24/J13 . I+	CTG.-	-	CX20	TP2S0-38				CCHLSTFCB04	EL	214344 P02	11	2. 2. 2.
02	DLCM-T101 to C-V24/J13 . I-	CTG.-	-	CX20	TP2S0-38				CCHLSTFCB04	EL	214344 P02	30	2. 2. 2.
03	DLCM-T101 to C-V24/J13 . U+	CTG.-	-	CX20	TP2S0-38				CCHLSTFCB04	EL	214344 P02	12	2. 2. 2.
04	DLCM-T101 to C-V24/J13 . U-	CTG.-	-	CX20	TP2S0-38				CCHLSTFCB04	EL	214344 P02	31	2. 2. 2.
12	DLCM-T102 to C-V24/J13 . I+	CTG.-	-	CX21	TP2S0-38				CCHLSTFCB04	EL	214344 P02	13	2. 2. 2.
20	DLCM-T102 to C-V24/J13 . I-	CTG.-	-	CX21	TP2S0-38				CCHLSTFCB04	EL	214344 P02	32	2. 2. 2.
13	DLCM-T102 to C-V24/J13 . U+	CTG.-	-	CX21	TP2S0-38				CCHLSTFCB04	EL	214344 P02	14	2. 2. 2.
21	DLCM-T102 to C-V24/J13 . U-	CTG.-	-	CX21	TP2S0-38				CCHLSTFCB04	EL	214344 P02	33	2. 2. 2.
79	T423 1st cyl Shield . I+	CTG.-	-	C423	TP2S0-38				CCHLSTFCB04	EL	214344 P01	01	2. 2. 2.
87	T423 1st cyl Shield . I-	CTG.-	-	C423	TP2S0-38				CCHLSTFCB04	EL	214344 P01	20	2. 2. 2.
80	T423 1st cyl Shield . U+	CTG.-	-	C423	TP2S0-38				CCHLSTFCB04	EL	214344 P01	02	2. 2. 2.
88	T423 1st cyl Shield . U-	CTG.-	-	C423	TP2S0-38				CCHLSTFCB04	EL	214344 P01	21	2. 2. 2.
81	T424 1st cyl Shld . I+	CTG.-	-	C424	TP2S0-38				CCHLSTFCB04	EL	214344 P01	03	2. 2. 2.
89	T424 1st cyl Shld . I-	CTG.-	-	C424	TP2S0-38				CCHLSTFCB04	EL	214344 P01	22	2. 2. 2.
82	T424 1st cyl Shld . U+	CTG.-	-	C424	TP2S0-38				CCHLSTFCB04	EL	214344 P01	04	2. 2. 2.
90	T424 1st cyl Shld . U-	CTG.-	-	C424	TP2S0-38				CCHLSTFCB04	EL	214344 P01	23	2. 2. 2.
94	T443 2nd cyl Shld . I+	CTG.-	-	C443	TP2S0-38				CCHLSTFCB04	EL	214344 P01	05	2. 2. 2.
95	T443 2nd cyl Shld . I-	CTG.-	-	C443	TP2S0-38				CCHLSTFCB04	EL	214344 P01	24	2. 2. 2.
96	T443 2nd cyl Shld . U+	CTG.-	-	C443	TP2S0-38				CCHLSTFCB04	EL	214344 P01	06	2. 2. 2.
97	T443 2nd cyl Shld . U-	CTG.-	-	C443	TP2S0-38				CCHLSTFCB04	EL	214344 P01	25	2. 2. 2.

CCH-23

Astrium GmbH
Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-2 (of 2)

Connector: 211123 J13
Item: CVVLCR

EMC-Category: 2C/Sig H in Cryostat

Function: CWV LR-FThr. 282° C-V24 - (CCH)
Location: 30 / CVV external

Conn.-Type: 197-011P22-35P (Junct.)
Backshell: ASED B'Shell 100

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
83	T444 2nd cyl Shld. .I+	CTG.-	-	C444	TP2S0-38				CCHLSFCB04	EL	214344 P01	07	2. 2. 2.
91	T444 2nd cyl Shld. .I-	CTG.-	-	C444	TP2S0-38				CCHLSFCB04	EL	214344 P01	26	2. 2. 2.
84	T444 2nd cyl Shld. .U+	CTG.-	-	C444	TP2S0-38				CCHLSFCB04	EL	214344 P01	08	2. 2. 2.
92	T444 2nd cyl Shld. .U-	CTG.-	-	C444	TP2S0-38				CCHLSFCB04	EL	214344 P01	27	2. 2. 2.
65	T463 3rd cyl Shld. .I+	CTG.-	-	C463	TP2S0-38				CCHLSFCB04	EL	214344 P01	09	2. 2. 2.
75	T463 3rd cyl Shld. .I-	CTG.-	-	C463	TP2S0-38				CCHLSFCB04	EL	214344 P01	28	2. 2. 2.
66	T463 3rd cyl Shld. .U+	CTG.-	-	C463	TP2S0-38				CCHLSFCB04	EL	214344 P01	10	2. 2. 2.
76	T463 3rd cyl Shld. .U-	CTG.-	-	C463	TP2S0-38				CCHLSFCB04	EL	214344 P01	29	2. 2. 2.
34	T464 3rd cyl Shld. .I+	CTG.-	-	C464	TP2S0-38				CCHLSFCB04	EL	214344 P01	11	2. 2. 2.
44	T464 3rd cyl Shld. .I-	CTG.-	-	C464	TP2S0-38				CCHLSFCB04	EL	214344 P01	30	2. 2. 2.
45	T464 3rd cyl Shld. .U+	CTG.-	-	C464	TP2S0-38				CCHLSFCB04	EL	214344 P01	12	2. 2. 2.
55	T464 3rd cyl Shld. .U-	CTG.-	-	C464	TP2S0-38				CCHLSFCB04	EL	214344 P01	31	2. 2. 2.

CCH24

Astrium GmbH

Pin Allocation List (Harness)

Project: **HERSCHEL-E**

Connector: 214344 P01
Item: CCHLSFCB04

EMC-Category: 2C/Sig H in Cryostat

Function: Cyl Shield TS 42x,44x,46x
Location: EL / Electrical Subsystem

Conn.-Type: MWDM2L-37P-6C3-630
Backshell: TBD

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:			Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd	Cable						
01	T423 1st cyl Shield . I+	CTG.-	-	C423	TP2S0-38					CVVLCR	30	211123 J13	79	2. 2. 2.
20	T423 1st cyl Shield . I-	CTG.-	-	C423	TP2S0-38					CVVLCR	30	211123 J13	87	2. 2. 2.
02	T423 1st cyl Shield . U+	CTG.-	-	C423	TP2S0-38					CVVLCR	30	211123 J13	80	2. 2. 2.
21	T423 1st cyl Shield . U-	CTG.-	-	C423	TP2S0-38					CVVLCR	30	211123 J13	88	2. 2. 2.
03	T424 1st cyl Shld . I+	CTG.-	-	C424	TP2S0-38					CVVLCR	30	211123 J13	81	2. 2. 2.
22	T424 1st cyl Shld . I-	CTG.-	-	C424	TP2S0-38					CVVLCR	30	211123 J13	89	2. 2. 2.
04	T424 1st cyl Shld . U+	CTG.-	-	C424	TP2S0-38					CVVLCR	30	211123 J13	82	2. 2. 2.
23	T424 1st cyl Shld . U-	CTG.-	-	C424	TP2S0-38					CVVLCR	30	211123 J13	90	2. 2. 2.
05	T443 2nd cyl Shld . I+	CTG.-	-	C443	TP2S0-38					CVVLCR	30	211123 J13	94	2. 2. 2.
24	T443 2nd cyl Shld . I-	CTG.-	-	C443	TP2S0-38					CVVLCR	30	211123 J13	95	2. 2. 2.
06	T443 2nd cyl Shld . U+	CTG.-	-	C443	TP2S0-38					CVVLCR	30	211123 J13	96	2. 2. 2.
25	T443 2nd cyl Shld . U-	CTG.-	-	C443	TP2S0-38					CVVLCR	30	211123 J13	97	2. 2. 2.
07	T444 2nd cyl Shld . I+	CTG.-	-	C444	TP2S0-38					CVVLCR	30	211123 J13	83	2. 2. 2.
26	T444 2nd cyl Shld . I-	CTG.-	-	C444	TP2S0-38					CVVLCR	30	211123 J13	91	2. 2. 2.
08	T444 2nd cyl Shld . U+	CTG.-	-	C444	TP2S0-38					CVVLCR	30	211123 J13	84	2. 2. 2.
27	T444 2nd cyl Shld . U-	CTG.-	-	C444	TP2S0-38					CVVLCR	30	211123 J13	92	2. 2. 2.
09	T463 3rd cyl Shld . I+	CTG.-	-	C463	TP2S0-38					CVVLCR	30	211123 J13	65	2. 2. 2.
28	T463 3rd cyl Shld . I-	CTG.-	-	C463	TP2S0-38					CVVLCR	30	211123 J13	75	2. 2. 2.
10	T463 3rd cyl Shld . U+	CTG.-	-	C463	TP2S0-38					CVVLCR	30	211123 J13	66	2. 2. 2.
29	T463 3rd cyl Shld . U-	CTG.-	-	C463	TP2S0-38					CVVLCR	30	211123 J13	76	2. 2. 2.
11	T464 3rd cyl Shld . I+	CTG.-	-	C464	TP2S0-38					CVVLCR	30	211123 J13	34	2. 2. 2.
30	T464 3rd cyl Shld . I-	CTG.-	-	C464	TP2S0-38					CVVLCR	30	211123 J13	44	2. 2. 2.
12	T464 3rd cyl Shld . U+	CTG.-	-	C464	TP2S0-38					CVVLCR	30	211123 J13	45	2. 2. 2.
31	T464 3rd cyl Shld . U-	CTG.-	-	C464	TP2S0-38					CVVLCR	30	211123 J13	55	2. 2. 2.

CCH25

Astrium GmbH
Project: HERSCHEL-E

Pin Allocation List

(Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-1 (of 1)

Connector: 214422 P01

Item: 1st_cyl_sh

EMC-Category: 2C/Sig H in Cryostat

Function: 1st cyl.shield Conn.C6.7-TS423/424
Location: 53 / on Thermal Shield 1 (outer)

Conn.-Type: MWDM2L-09P-6C3-.630
Backshell: ISO 11F (9-P)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
01	T423 1st cyl Shield . I+	CTG.-	-	C423	TP2S0-38				CCHLSFCB04	EL	214344 J01	01	2. 2. 2.
02	T423 1st cyl Shield . I-	CTG.-	-	C423	TP2S0-38				CCHLSFCB04	EL	214344 J01	20	2. 2. 2.
06	T423 1st cyl Shield . U+	CTG.-	-	C423	TP2S0-38				CCHLSFCB04	EL	214344 J01	02	2. 2. 2.
07	T423 1st cyl Shield . U-	CTG.-	-	C423	TP2S0-38				CCHLSFCB04	EL	214344 J01	21	2. 2. 2.
03	T424 1st cyl Shld . I+	CTG.-	-	C424	TP2S0-38				CCHLSFCB04	EL	214344 J01	03	2. 2. 2.
04	T424 1st cyl Shld . I-	CTG.-	-	C424	TP2S0-38				CCHLSFCB04	EL	214344 J01	22	2. 2. 2.
08	T424 1st cyl Shld . U+	CTG.-	-	C424	TP2S0-38				CCHLSFCB04	EL	214344 J01	04	2. 2. 2.
09	T424 1st cyl Shld . U-	CTG.-	-	C424	TP2S0-38				CCHLSFCB04	EL	214344 J01	23	2. 2. 2.

CCH 26

Astrium GmbH
Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214442 P01
Item: 2nd_cyl_sh

Function: 2nd cyl.shield Conn.C6.8-TS443/444
Location: 54 / on Thermal Shield 2 (mid)

Conn.-Type: MWDM2L-09P-6C3-.630
Backshell: ISO 11F (9-P)

EMC-Category: 2C/Sig H in Cryostat

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
01	T443 2nd cyl Shid. I+	CTG.-	-	C443	TP2S0-38				CCHLSFCB04	EL	214344 J01	05	2. 2. 2.
02	T443 2nd cyl Shid. I-	CTG.-	-	C443	TP2S0-38				CCHLSFCB04	EL	214344 J01	24	2. 2. 2.
06	T443 2nd cyl Shid. U+	CTG.-	-	C443	TP2S0-38				CCHLSFCB04	EL	214344 J01	06	2. 2. 2.
07	T443 2nd cyl Shid. U-	CTG.-	-	C443	TP2S0-38				CCHLSFCB04	EL	214344 J01	25	2. 2. 2.
03	T444 2nd cyl Shid. I+	CTG.-	-	C444	TP2S0-38				CCHLSFCB04	EL	214344 J01	07	2. 2. 2.
04	T444 2nd cyl Shid. I-	CTG.-	-	C444	TP2S0-38				CCHLSFCB04	EL	214344 J01	26	2. 2. 2.
08	T444 2nd cyl Shid. U+	CTG.-	-	C444	TP2S0-38				CCHLSFCB04	EL	214344 J01	08	2. 2. 2.
09	T444 2nd cyl Shid. U-	CTG.-	-	C444	TP2S0-38				CCHLSFCB04	EL	214344 J01	27	2. 2. 2.

CCH27

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214462 P01

Item: 3rd_cyl_sh

EMC-Category: 2C/Sig H in Cryostat

Function: 3rd cyl.shield Conn.C6.9-TS463/464

Location: 55 / on Thermal Shield 3 (inner)

Conn.-Type: MWDML-09P-6C3-630

Backshell: ISO 11F (9-P)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T463 3rd cyl Shld . I+	CTG.-	-	C463	TP2S0-38				CCHLSFCB04	EL	214344 J01	09	2. 2. 2.
02	T463 3rd cyl Shld . I-	CTG.-	-	C463	TP2S0-38				CCHLSFCB04	EL	214344 J01	28	2. 2. 2.
06	T463 3rd cyl Shld . U+	CTG.-	-	C463	TP2S0-38				CCHLSFCB04	EL	214344 J01	10	2. 2. 2.
07	T463 3rd cyl Shld . U-	CTG.-	-	C463	TP2S0-38				CCHLSFCB04	EL	214344 J01	29	2. 2. 2.
03	T464 3rd cyl Shld . I+	CTG.-	-	C464	TP2S0-38				CCHLSFCB04	EL	214344 J01	11	2. 2. 2.
04	T464 3rd cyl Shld . I-	CTG.-	-	C464	TP2S0-38				CCHLSFCB04	EL	214344 J01	30	2. 2. 2.
08	T464 3rd cyl Shld . U+	CTG.-	-	C464	TP2S0-38				CCHLSFCB04	EL	214344 J01	12	2. 2. 2.
09	T464 3rd cyl Shld . U-	CTG.-	-	C464	TP2S0-38				CCHLSFCB04	EL	214344 J01	31	2. 2. 2.

CCH28

Astrium GmbH
Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214344 P02
Item: CCHLSFCB04

EMC-Category: 2C/Sig H in Cryostat

Function: HTT T105, P101 to C-V24
Location: EL / Electrical Subsystem

Conn.-Type: MWDM2L-37P-6C3-630
Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	HTT-P101 to C-V24/J13 . I+	CTG.-	-	C029	TP2S0-38				CWVLCR	30	211123 J13	08	2. 2. 2.
20	HTT-P101 to C-V24/J13 . I-	CTG.-	-	C029	TP2S0-38				CWVLCR	30	211123 J13	16	2. 2. 2.
02	HTT-P101 to C-V24/J13 . U+	CTG.-	-	C029	TP2S0-38				CWVLCR	30	211123 J13	09	2. 2. 2.
21	HTT-P101 to C-V24/J13 . U-	CTG.-	-	C029	TP2S0-38				CWVLCR	30	211123 J13	17	2. 2. 2.
03	Main T.-T103 . I+	CTG.-	-	C034	TP2S0-38				CWVLCR	30	211123 J13	25	2. 2. 2.
22	Main T.-T103 . I-	CTG.-	-	C034	TP2S0-38				CWVLCR	30	211123 J13	35	2. 2. 2.
04	Main T.-T103 . U+	CTG.-	-	C034	TP2S0-38				CWVLCR	30	211123 J13	26	2. 2. 2.
23	Main T.-T103 . U-	CTG.-	-	C034	TP2S0-38				CWVLCR	30	211123 J13	36	2. 2. 2.
05	Main T.-T104-C100 . I+	CTG.-	-	C035	TP2S0-38				CWVLCR	30	211123 J13	46	2. 2. 2.
24	Main T.-T104-C100 . I-	CTG.-	-	C035	TP2S0-38				CWVLCR	30	211123 J13	56	2. 2. 2.
06	Main T.-T104-C100 . U+	CTG.-	-	C035	TP2S0-38				CWVLCR	30	211123 J13	47	2. 2. 2.
25	Main T.-T104-C100 . U-	CTG.-	-	C035	TP2S0-38				CWVLCR	30	211123 J13	57	2. 2. 2.
07	Main T.-T105 . I+	CTG.-	-	C036	TP2S0-38				CWVLCR	30	211123 J13	67	2. 2. 2.
26	Main T.-T105 . I-	CTG.-	-	C036	TP2S0-38				CWVLCR	30	211123 J13	77	2. 2. 2.
08	Main T.-T105 . U+	CTG.-	-	C036	TP2S0-38				CWVLCR	30	211123 J13	68	2. 2. 2.
27	Main T.-T105 . U-	CTG.-	-	C036	TP2S0-38				CWVLCR	30	211123 J13	78	2. 2. 2.
09	Main T.-T106 . I+	CTG.-	-	C037	TP2S0-38				CWVLCR	30	211123 J13	10	2. 2. 2.
28	Main T.-T106 . I-	CTG.-	-	C037	TP2S0-38				CWVLCR	30	211123 J13	18	2. 2. 2.
10	Main T.-T106 . U+	CTG.-	-	C037	TP2S0-38				CWVLCR	30	211123 J13	11	2. 2. 2.
29	Main T.-T106 . U-	CTG.-	-	C037	TP2S0-38				CWVLCR	30	211123 J13	19	2. 2. 2.
11	DLCM-T101 to C-V24/J13 . I+	CTG.-	-	CX20	TP2S0-38				CWVLCR	30	211123 J13	01	2. 2. 2.
30	DLCM-T101 to C-V24/J13 . I-	CTG.-	-	CX20	TP2S0-38				CWVLCR	30	211123 J13	02	2. 2. 2.
12	DLCM-T101 to C-V24/J13 . U+	CTG.-	-	CX20	TP2S0-38				CWVLCR	30	211123 J13	03	2. 2. 2.
31	DLCM-T101 to C-V24/J13 . U-	CTG.-	-	CX20	TP2S0-38				CWVLCR	30	211123 J13	04	2. 2. 2.
13	DLCM-T102 to C-V24/J13 . I+	CTG.-	-	CX21	TP2S0-38				CWVLCR	30	211123 J13	12	2. 2. 2.
32	DLCM-T102 to C-V24/J13 . I-	CTG.-	-	CX21	TP2S0-38				CWVLCR	30	211123 J13	20	2. 2. 2.
14	DLCM-T102 to C-V24/J13 . U+	CTG.-	-	CX21	TP2S0-38				CWVLCR	30	211123 J13	13	2. 2. 2.
33	DLCM-T102 to C-V24/J13 . U-	CTG.-	-	CX21	TP2S0-38				CWVLCR	30	211123 J13	21	2. 2. 2.

CCH29

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214334 P06
Item: CCHUSFCB1

EMC-Category: 2C/Sig H in Cryostat

Function: ISO-C5.1 T105, P101

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-09P-6C3-630

Backshell: ISO 11F (9-P)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
03	HTT-P101 to C-V24J13 . I+	CTG.-	-	C029	TP2S0-38				CCHLSFCB04	EL	214344 J02	01	2. 2. 2.
04	HTT-P101 to C-V24J13 . I-	CTG.-	-	C029	TP2S0-38				CCHLSFCB04	EL	214344 J02	20	2. 2. 2.
08	HTT-P101 to C-V24J13 . U+	CTG.-	-	C029	TP2S0-38				CCHLSFCB04	EL	214344 J02	02	2. 2. 2.
09	HTT-P101 to C-V24J13 . U-	CTG.-	-	C029	TP2S0-38				CCHLSFCB04	EL	214344 J02	21	2. 2. 2.
01	Main T.-T105 . I+	CTG.-	-	C036	TP2S0-38				CCHLSFCB04	EL	214344 J02	07	2. 2. 2.
02	Main T.-T105 . I-	CTG.-	-	C036	TP2S0-38				CCHLSFCB04	EL	214344 J02	26	2. 2. 2.
06	Main T.-T105 . U+	CTG.-	-	C036	TP2S0-38				CCHLSFCB04	EL	214344 J02	08	2. 2. 2.
07	Main T.-T105 . U-	CTG.-	-	C036	TP2S0-38				CCHLSFCB04	EL	214344 J02	27	2. 2. 2.

CCH30

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214333 P05
Item: CCHUSFCB4

EMC-Category: 2C/Sig H in Cryostat

Function: ISO-C1.1 T103

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-09P-6C3-630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:			Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.			Shd	Cable	Twist						
01	Main T.-T103 .H	CTG.-	-	C034	TP2S0-38					CCHLSFCB04	EL	214344 J02	03	2. 2. 2.
02	Main T.-T103 .I-	CTG.-	-	C034	TP2S0-38					CCHLSFCB04	EL	214344 J02	22	2. 2. 2.
03	Main T.-T103 .U+	CTG.-	-	C034	TP2S0-38					CCHLSFCB04	EL	214344 J02	04	2. 2. 2.
04	Main T.-T103 .U-	CTG.-	-	C034	TP2S0-38					CCHLSFCB04	EL	214344 J02	23	2. 2. 2.

CCH31

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214334 P07

Item: CCHUSFCB1

EMC-Category: 2C/Sig H in Cryostat

Function: ISO C6.1 -T101,102,104,106

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25P-6C3-.630

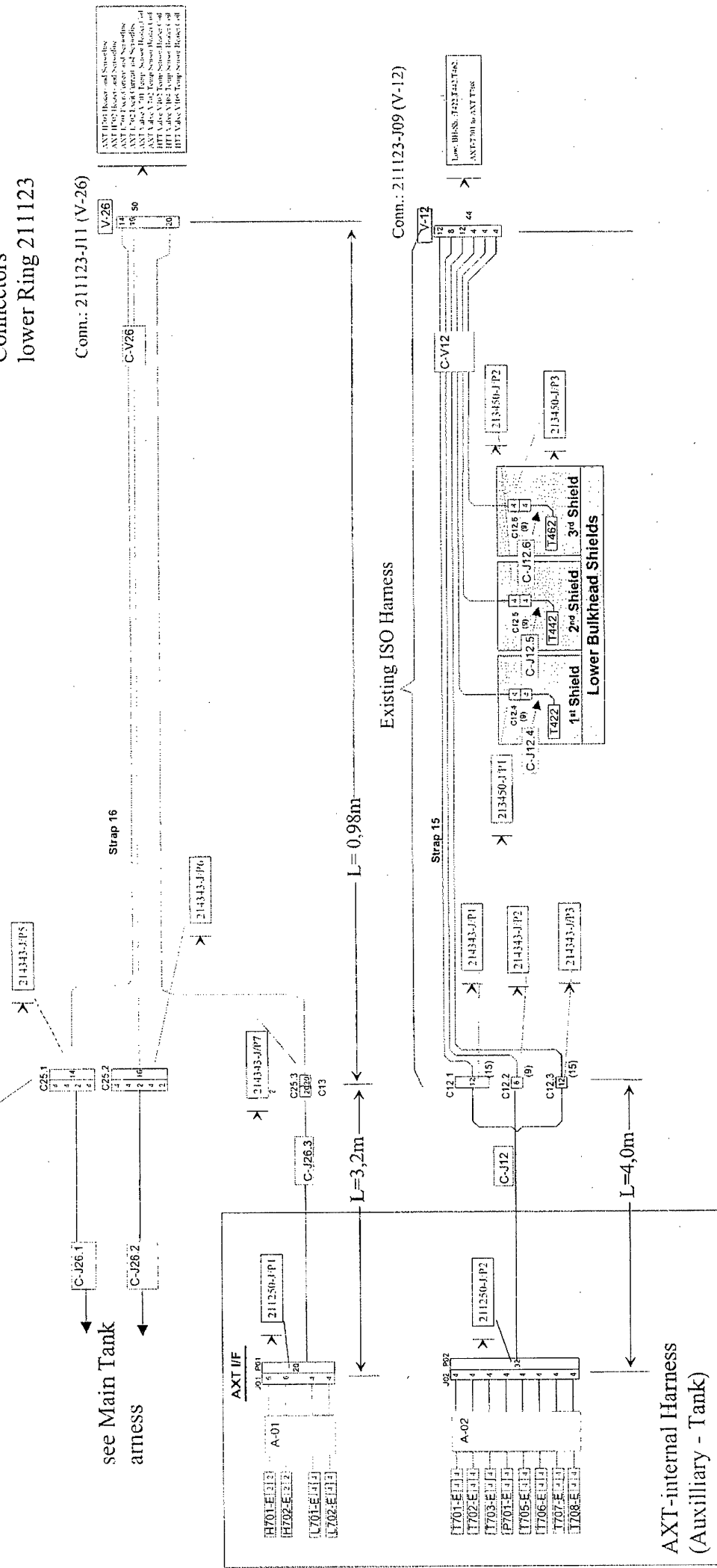
Backshell: ISO 13F (25-P)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
03	DLCM-T101 to C-V24/J13 . I+	CTG.-	-	CX20	TP250-38				CCHLSFCB04	EL	214344 J02	11	2. 2. 2.
04	DLCM-T101 to C-V24/J13 . I-	CTG.-	-	CX20	TP250-38				CCHLSFCB04	EL	214344 J02	30	2. 2. 2.
16	DLCM-T101 to C-V24/J13 . U+	CTG.-	-	CX20	TP250-38				CCHLSFCB04	EL	214344 J02	12	2. 2. 2.
17	DLCM-T101 to C-V24/J13 . U-	CTG.-	-	CX20	TP250-38				CCHLSFCB04	EL	214344 J02	31	2. 2. 2.
05	DLCM-T102 to C-V24/J13 . I+	CTG.-	-	CX21	TP250-38				CCHLSFCB04	EL	214344 J02	13	2. 2. 2.
06	DLCM-T102 to C-V24/J13 . I-	CTG.-	-	CX21	TP250-38				CCHLSFCB04	EL	214344 J02	32	2. 2. 2.
18	DLCM-T102 to C-V24/J13 . U+	CTG.-	-	CX21	TP250-38				CCHLSFCB04	EL	214344 J02	14	2. 2. 2.
19	DLCM-T102 to C-V24/J13 . U-	CTG.-	-	CX21	TP250-38				CCHLSFCB04	EL	214344 J02	33	2. 2. 2.
07	Main T.-T104-C100 . I+	CTG.-	-	C035	TP250-38				CCHLSFCB04	EL	214344 J02	05	2. 2. 2.
08	Main T.-T104-C100 . I-	CTG.-	-	C035	TP250-38				CCHLSFCB04	EL	214344 J02	24	2. 2. 2.
20	Main T.-T104-C100 . U+	CTG.-	-	C035	TP250-38				CCHLSFCB04	EL	214344 J02	06	2. 2. 2.
21	Main T.-T104-C100 . U-	CTG.-	-	C035	TP250-38				CCHLSFCB04	EL	214344 J02	25	2. 2. 2.
01	Main T-T106 . I+	CTG.-	-	C037	TP250-38				CCHLSFCB04	EL	214344 J02	09	2. 2. 2.
02	Main T-T106 . I-	CTG.-	-	C037	TP250-38				CCHLSFCB04	EL	214344 J02	28	2. 2. 2.
14	Main T-T106 . U+	CTG.-	-	C037	TP250-38				CCHLSFCB04	EL	214344 J02	10	2. 2. 2.
15	Main T-T106 . U-	CTG.-	-	C037	TP250-38				CCHLSFCB04	EL	214344 J02	29	2. 2. 2.

CCH32

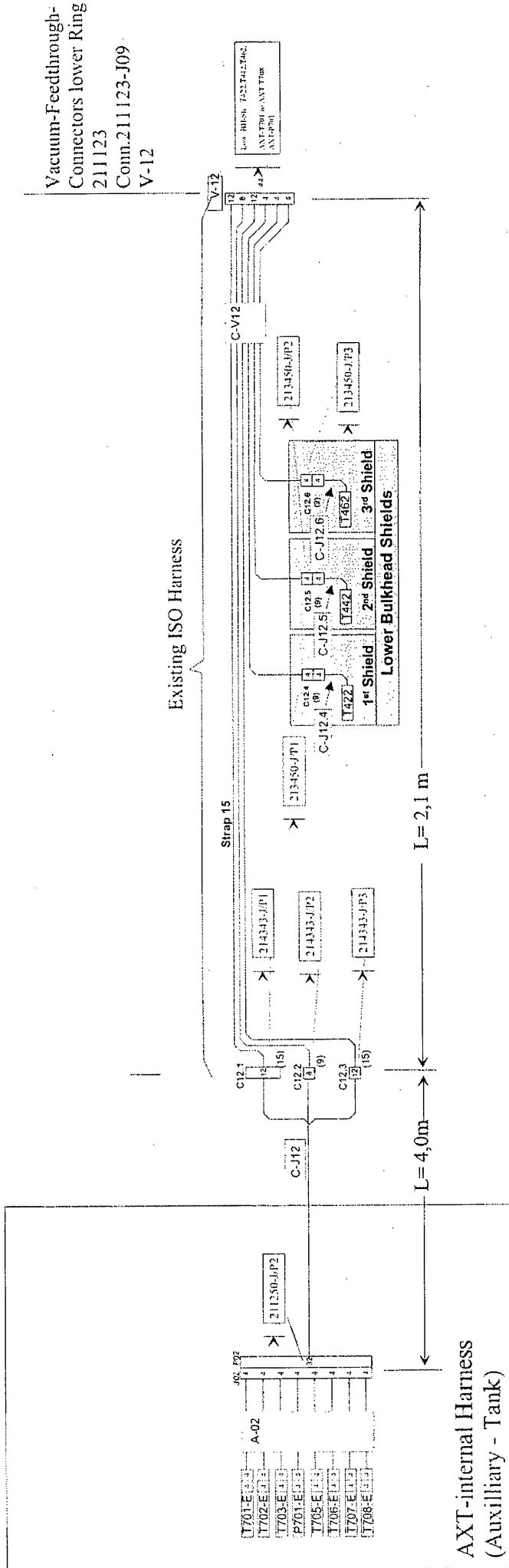
Vacuum-Feedthrough-Connectors
lower Ring 211123

lower Spatial Framework-Connectors



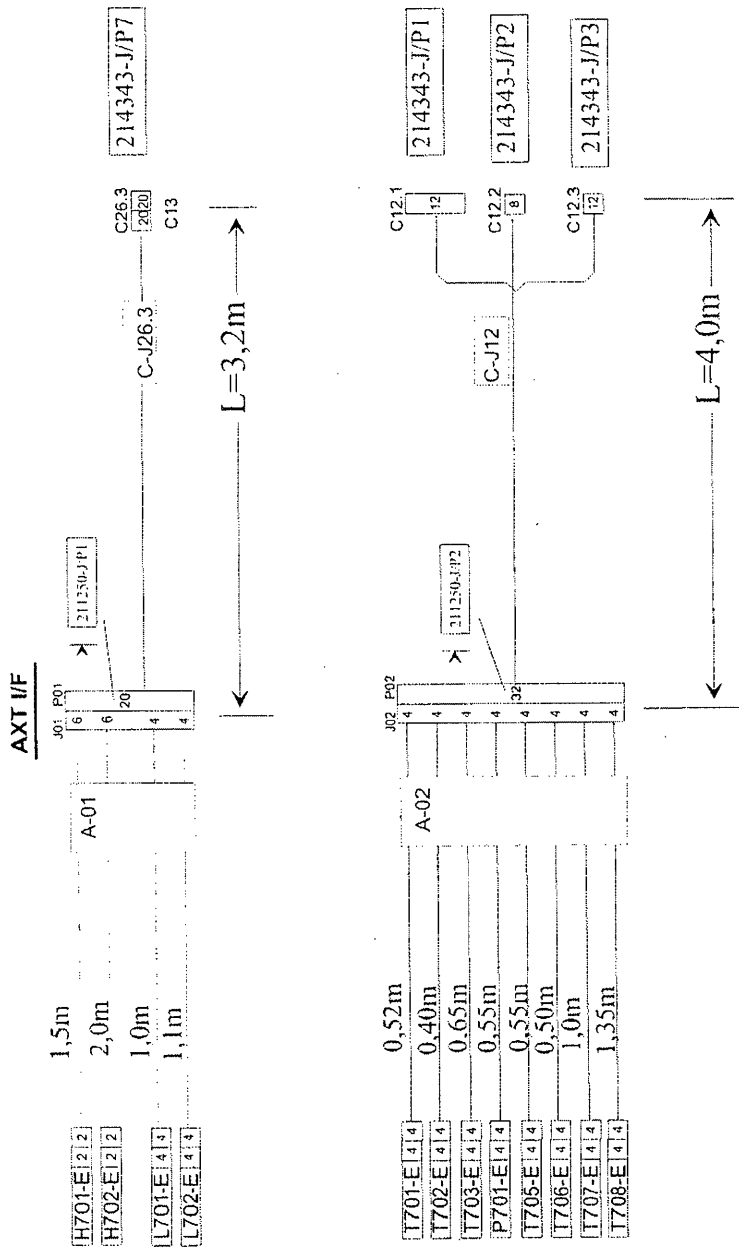
EQM AXT-Harness Overview
described in attached EICD

CCH33



Harness - ICD - VC12- Connector 211123-J09

CCH34



AXT-Harness Details

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 2)

Astrium GmbH
Project: **HERSCHEL-E**

Connector: 211123 J09
Item: CWWLCR
EMC-Category: 2C/Sig H in Cryostat

Function: CVV LR- FThr. 215°-ISO C-V12- (CCH)
Location: 30 / CVV external

Conn.-Type: KJG6T16-35SN (Plug)
Backshell: TBC

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
33	T422-Pt1000 to C-V12/J09. I+	CTG.-	-	C074	TP2S0-38				1st_lowbh	53	214423 P01	01	2. 2. 2.
34	T422-Pt1000 to C-V12/J09. I-	CTG.-	-	C074	TP2S0-38				1st_lowbh	53	214423 P01	02	2. 2. 2.
35	T422-Pt1000 to C-V12/J09. U+	CTG.-	-	C074	TP2S0-38				1st_lowbh	53	214423 P01	06	2. 2. 2.
36	T422-Pt1000 to C-V12/J09. U-	CTG.-	-	C074	TP2S0-38				1st_lowbh	53	214423 P01	07	2. 2. 2.
37	T442-Pt1000 to C-V12/J09. I+	CTG.-	-	C080	TP2S0-38				2nd_lowbh	54	214443 P01	01	2. 2. 2.
38	T442-Pt1000 to C-V12/J09. I-	CTG.-	-	C080	TP2S0-38				2nd_lowbh	54	214443 P01	02	2. 2. 2.
39	T442-Pt1000 to C-V12/J09. U+	CTG.-	-	C080	TP2S0-38				2nd_lowbh	54	214443 P01	06	2. 2. 2.
40	T442-Pt1000 to C-V12/J09. U-	CTG.-	-	C080	TP2S0-38				2nd_lowbh	54	214443 P01	07	2. 2. 2.
41	T462-Pt1000 to C-V12/J09. I+	CTG.-	-	C086	TP2S0-38				3rd_lowbh	55	214463 P01	01	2. 2. 2.
42	T462-Pt1000 to C-V12/J09. I-	CTG.-	-	C086	TP2S0-38				3rd_lowbh	55	214463 P01	02	2. 2. 2.
43	T462-Pt1000 to C-V12/J09. U+	CTG.-	-	C086	TP2S0-38				3rd_lowbh	55	214463 P01	06	2. 2. 2.
44	T462-Pt1000 to C-V12/J09. U-	CTG.-	-	C086	TP2S0-38				3rd_lowbh	55	214463 P01	07	2. 2. 2.
01	T701 to Virt-Adap.J09 at C-V12. I+	CTG.-	-	C100	TP2S0-38				CCHLSFCB03	EL	214343 P01	01	2. 2. 2.
02	T701 to Virt-Adap.J09 at C-V12. I-	CTG.-	-	C100	TP2S0-38				CCHLSFCB03	EL	214343 P01	02	2. 2. 2.
03	T701 to Virt-Adap.J09 at C-V12. U+	CTG.-	-	C100	TP2S0-38				CCHLSFCB03	EL	214343 P01	09	2. 2. 2.
04	T701 to Virt-Adap.J09 at C-V12. U-	CTG.-	-	C100	TP2S0-38				CCHLSFCB03	EL	214343 P01	10	2. 2. 2.
05	T702 to Virt-Adap.J09 at C-V12. I+	CTG.-	-	C101	TP2S0-38				CCHLSFCB03	EL	214343 P01	03	2. 2. 2.
06	T702 to Virt-Adap.J09 at C-V12. I-	CTG.-	-	C101	TP2S0-38				CCHLSFCB03	EL	214343 P01	04	2. 2. 2.
07	T702 to Virt-Adap.J09 at C-V12. U+	CTG.-	-	C101	TP2S0-38				CCHLSFCB03	EL	214343 P01	11	2. 2. 2.
08	T702 to Virt-Adap.J09 at C-V12. U-	CTG.-	-	C101	TP2S0-38				CCHLSFCB03	EL	214343 P01	12	2. 2. 2.
09	T703 to Virt-Adap.J09 at C-V12. I+	CTG.-	-	C102	TP2S0-38				CCHLSFCB03	EL	214343 P01	05	2. 2. 2.
10	T703 to Virt-Adap.J09 at C-V12. I-	CTG.-	-	C102	TP2S0-38				CCHLSFCB03	EL	214343 P01	06	2. 2. 2.
11	T703 to Virt-Adap.J09 at C-V12. U+	CTG.-	-	C102	TP2S0-38				CCHLSFCB03	EL	214343 P01	13	2. 2. 2.
12	T703 to Virt-Adap.J09 at C-V12. U-	CTG.-	-	C102	TP2S0-38				CCHLSFCB03	EL	214343 P01	14	2. 2. 2.
13	P701 to Virt-Adap.J09 at C-V12. I+	CTG.-	-	C244	TP2S0-38				CCHLSFCB03	EL	214343 P02	01	2. 2. 2.
14	P701 to Virt-Adap.J09 at C-V12. I-	CTG.-	-	C244	TP2S0-38				CCHLSFCB03	EL	214343 P02	02	2. 2. 2.
15	P701 to Virt-Adap.J09 at C-V12. U+	CTG.-	-	C244	TP2S0-38				CCHLSFCB03	EL	214343 P02	06	2. 2. 2.
16	P701 to Virt-Adap.J09 at C-V12. U-	CTG.-	-	C244	TP2S0-38				CCHLSFCB03	EL	214343 P02	07	2. 2. 2.
17	T705 to Virt-Adap.J09 at C-V12. I+	CTG.-	-	C230	TP2S0-38				CCHLSFCB03	EL	214343 P02	03	2. 2. 2.
18	T705 to Virt-Adap.J09 at C-V12. I-	CTG.-	-	C230	TP2S0-38				CCHLSFCB03	EL	214343 P02	04	2. 2. 2.
19	T705 to Virt-Adap.J09 at C-V12. U+	CTG.-	-	C230	TP2S0-38				CCHLSFCB03	EL	214343 P02	08	2. 2. 2.
20	T705 to Virt-Adap.J09 at C-V12. U-	CTG.-	-	C230	TP2S0-38				CCHLSFCB03	EL	214343 P02	09	2. 2. 2.
21	T706 to Virt-Adap.J09 at C-V12. I+	CTG.-	-	C231	TP2S0-38				CCHLSFCB03	EL	214343 P03	01	2. 2. 2.
22	T706 to Virt-Adap.J09 at C-V12. I-	CTG.-	-	C231	TP2S0-38				CCHLSFCB03	EL	214343 P03	02	2. 2. 2.
23	T706 to Virt-Adap.J09 at C-V12. U+	CTG.-	-	C231	TP2S0-38				CCHLSFCB03	EL	214343 P03	09	2. 2. 2.
24	T706 to Virt-Adap.J09 at C-V12. U-	CTG.-	-	C231	TP2S0-38				CCHLSFCB03	EL	214343 P03	10	2. 2. 2.
25	T707 to Virt-Adap.J09 at C-V12. I+	CTG.-	-	C232	TP2S0-38				CCHLSFCB03	EL	214343 P03	03	2. 2. 2.
26	T707 to Virt-Adap.J09 at C-V12. I-	CTG.-	-	C232	TP2S0-38				CCHLSFCB03	EL	214343 P03	04	2. 2. 2.
27	T707 to Virt-Adap.J09 at C-V12. U+	CTG.-	-	C232	TP2S0-38				CCHLSFCB03	EL	214343 P03	11	2. 2. 2.
28	T707 to Virt-Adap.J09 at C-V12. U-	CTG.-	-	C232	TP2S0-38				CCHLSFCB03	EL	214343 P03	12	2. 2. 2.

CCH36

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-2 (of 2)

Connector: 211123 J09
Item: CVVLCR

EMC-Category: 2C/Sig H in Cryostat

Function: CVV LR- FThr. 215°-ISO C-V12- (CCH)
Location: 30 / CVV external

Conn.-Type: KJG6T16-35SN (Plug)
Backshell: TBC

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
29	T708 to Virt-Adap.J09 at C-V12. I+	CTG.-	-	C243	TP2S0-38				CCHLSFCB03	EL	214343 P03	05	2. 2. 2.
30	T708 to Virt-Adap.J09 at C-V12. I-	CTG.-	-	C243	TP2S0-38				CCHLSFCB03	EL	214343 P03	06	2. 2. 2.
31	T708 to Virt-Adap.J09 at C-V12. U+	CTG.-	-	C243	TP2S0-38				CCHLSFCB03	EL	214343 P03	13	2. 2. 2.
32	T708 to Virt-Adap.J09 at C-V12. U-	CTG.-	-	C243	TP2S0-38				CCHLSFCB03	EL	214343 P03	14	2. 2. 2.

CCH37

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214343 P01
Item: CCHLSFCB03

EMC-Category: 2C/Sig H in Cryostat

Function: C-J12 - AXT T701, T702, T703
Location: EL / Electrical Subsystem

Conn.-Type: MWDM2L-15p-6J7-18p
Backshell: ISO 12F (15-P)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T701 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C100	TP2S0-38				CVVLCR	30	211123 J09	01	2 . 2 . 2.
02	T701 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C100	TP2S0-38				CVVLCR	30	211123 J09	02	2 . 2 . 2.
09	T701 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C100	TP2S0-38				CVVLCR	30	211123 J09	03	2 . 2 . 2.
10	T701 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C100	TP2S0-38				CVVLCR	30	211123 J09	04	2 . 2 . 2.
03	T702 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C101	TP2S0-38				CVVLCR	30	211123 J09	05	2 . 2 . 2.
04	T702 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C101	TP2S0-38				CVVLCR	30	211123 J09	06	2 . 2 . 2.
11	T702 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C101	TP2S0-38				CVVLCR	30	211123 J09	07	2 . 2 . 2.
12	T702 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C101	TP2S0-38				CVVLCR	30	211123 J09	08	2 . 2 . 2.
05	T703 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C102	TP2S0-38				CVVLCR	30	211123 J09	09	2 . 2 . 2.
06	T703 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C102	TP2S0-38				CVVLCR	30	211123 J09	10	2 . 2 . 2.
13	T703 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C102	TP2S0-38				CVVLCR	30	211123 J09	11	2 . 2 . 2.
14	T703 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C102	TP2S0-38				CVVLCR	30	211123 J09	12	2 . 2 . 2.

CCH38

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214343 P02
Item: CCHLSFCB03

EMC-Category: 2C/Sig H in Cryostat

Function: C-J12 - AXT P701,T705
Location: EL / Electrical Subsystem

Conn.-Type: MWDM2L-09P-6C3-630
Backshell: ISO 11F (9-P)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable						
01	P701 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C244	TP2S0-38				CWVLCR	30	211123 J09	13	2. 2. 2.
02	P701 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C244	TP2S0-38				CWVLCR	30	211123 J09	14	2. 2. 2.
06	P701 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C244	TP2S0-38				CWVLCR	30	211123 J09	15	2. 2. 2.
07	P701 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C244	TP2S0-38				CWVLCR	30	211123 J09	16	2. 2. 2.
03	T705 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C230	TP2S0-38				CWVLCR	30	211123 J09	17	2. 2. 2.
04	T705 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C230	TP2S0-38				CWVLCR	30	211123 J09	18	2. 2. 2.
08	T705 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C230	TP2S0-38				CWVLCR	30	211123 J09	19	2. 2. 2.
09	T705 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C230	TP2S0-38				CWVLCR	30	211123 J09	20	2. 2. 2.

CCH39

Astrium GmbH
Project: HERSCHEL-E

Pin Allocation List

(Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-1 (of 1)

Connector: 214343 P03
Item: CCHLSFCB03

Function: C-J12 - AXT T706, T707, T708
Location: EL / Electrical Subsystem

Conn.-Type: MWDM2L-15P-6C3-630
Backshell: ISO 12F (15-P)

EMC-Category: 2C/Sig H in Cryostat

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.			Shd	Cable Twist						
01	T706 to Virt-Adap-J09 at C-V12 - It	CTG.-	-	C231	TP2S0-38				CVVLCR	30	211123 J09	21	2.
02	T706 to Virt-Adap-J09 at C-V12 - I-	CTG.-	-	C231	TP2S0-38				CVVLCR	30	211123 J09	22	2.
09	T706 to Virt-Adap-J09 at C-V12 - U+	CTG.-	-	C231	TP2S0-38				CVVLCR	30	211123 J09	23	2.
10	T706 to Virt-Adap-J09 at C-V12 - U-	CTG.-	-	C231	TP2S0-38				CVVLCR	30	211123 J09	24	2.
03	T707 to Virt-Adap-J09 at C-V12 - It	CTG.-	-	C232	TP2S0-38				CVVLCR	30	211123 J09	25	2.
04	T707 to Virt-Adap-J09 at C-V12 - I-	CTG.-	-	C232	TP2S0-38				CVVLCR	30	211123 J09	26	2.
11	T707 to Virt-Adap-J09 at C-V12 - U+	CTG.-	-	C232	TP2S0-38				CVVLCR	30	211123 J09	27	2.
12	T707 to Virt-Adap-J09 at C-V12 - U-	CTG.-	-	C232	TP2S0-38				CVVLCR	30	211123 J09	28	2.
05	T708 to Virt-Adap-J09 at C-V12 - It	CTG.-	-	C243	TP2S0-38				CVVLCR	30	211123 J09	29	2.
06	T708 to Virt-Adap-J09 at C-V12 - I-	CTG.-	-	C243	TP2S0-38				CVVLCR	30	211123 J09	30	2.
13	T708 to Virt-Adap-J09 at C-V12 - U+	CTG.-	-	C243	TP2S0-38				CVVLCR	30	211123 J09	31	2.
14	T708 to Virt-Adap-J09 at C-V12 - U-	CTG.-	-	C243	TP2S0-38				CVVLCR	30	211123 J09	32	2.

CCH 40

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 211250 P02

Item: AXT-CB

EMC-Category: 2C/Sig H in Cryostat

Function: AXT Conn for Temp.Sensors

Location: 62 / on AXT_EQM

Conn.-Type: MWDML-37P-6C3-630

Backshell: ISO 20F (37-P vk)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T701 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C100	TP250-38				CCHLSFCB03	EL	214343 J01	01	R 2. 2.
02	T701 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C100	TP250-38				CCHLSFCB03	EL	214343 J01	02	R 2. 2.
20	T701 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C100	TP250-38				CCHLSFCB03	EL	214343 J01	09	R 2. 2.
21	T701 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C100	TP250-38				CCHLSFCB03	EL	214343 J01	10	R 2. 2.
03	T702 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C101	TP250-38				CCHLSFCB03	EL	214343 J01	03	R 2. 2.
04	T702 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C101	TP250-38				CCHLSFCB03	EL	214343 J01	04	R 2. 2.
22	T702 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C101	TP250-38				CCHLSFCB03	EL	214343 J01	11	R 2. 2.
23	T702 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C101	TP250-38				CCHLSFCB03	EL	214343 J01	12	R 2. 2.
05	T703 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C102	TP250-38				CCHLSFCB03	EL	214343 J01	05	R 2. 2.
06	T703 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C102	TP250-38				CCHLSFCB03	EL	214343 J01	06	R 2. 2.
24	T703 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C102	TP250-38				CCHLSFCB03	EL	214343 J01	13	R 2. 2.
25	T703 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C102	TP250-38				CCHLSFCB03	EL	214343 J01	14	R 2. 2.
07	P701 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C244	TP250-38				CCHLSFCB03	EL	214343 J02	01	R 2. 2.
08	P701 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C244	TP250-38				CCHLSFCB03	EL	214343 J02	02	R 2. 2.
26	P701 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C244	TP250-38				CCHLSFCB03	EL	214343 J02	06	R 2. 2.
27	P701 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C244	TP250-38				CCHLSFCB03	EL	214343 J02	07	R 2. 2.
09	T705 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C230	TP250-38				CCHLSFCB03	EL	214343 J02	03	R 2. 2.
10	T705 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C230	TP250-38				CCHLSFCB03	EL	214343 J02	04	R 2. 2.
28	T705 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C230	TP250-38				CCHLSFCB03	EL	214343 J02	08	R 2. 2.
29	T705 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C230	TP250-38				CCHLSFCB03	EL	214343 J02	09	R 2. 2.
11	T706 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C231	TP250-38				CCHLSFCB03	EL	214343 J03	01	R 2. 2.
12	T706 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C231	TP250-38				CCHLSFCB03	EL	214343 J03	02	R 2. 2.
30	T706 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C231	TP250-38				CCHLSFCB03	EL	214343 J03	09	R 2. 2.
31	T706 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C231	TP250-38				CCHLSFCB03	EL	214343 J03	10	R 2. 2.
13	T707 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C232	TP250-38				CCHLSFCB03	EL	214343 J03	03	R 2. 2.
14	T707 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C232	TP250-38				CCHLSFCB03	EL	214343 J03	04	R 2. 2.
32	T707 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C232	TP250-38				CCHLSFCB03	EL	214343 J03	11	R 2. 2.
33	T707 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C232	TP250-38				CCHLSFCB03	EL	214343 J03	12	R 2. 2.
15	T708 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C243	TP250-38				CCHLSFCB03	EL	214343 J03	05	R 2. 2.
16	T708 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C243	TP250-38				CCHLSFCB03	EL	214343 J03	06	R 2. 2.
34	T708 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C243	TP250-38				CCHLSFCB03	EL	214343 J03	13	R 2. 2.
35	T708 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C243	TP250-38				CCHLSFCB03	EL	214343 J03	14	R 2. 2.

CCH44

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 21T701 P01

Item: AXTT701

EMC-Category: 2C/Sig H in Cryostat

Function: AXT-T701-Pt1000
Location: 62 / on AXT_EQM

Conn.-Type: MRN4194- NDDM15PN-Type
Backshell: N/A

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.			Shd	Cable Twist						
15	T701 to Virt-Adap.J09 at C-V12. I+	CTG.-	-	C100	TP2S0-38				AXT-CB	62	211250 J02	01	2. 2. R
08	T701 to Virt-Adap.J09 at C-V12. I-	CTG.-	-	C100	TP2S0-38				AXT-CB	62	211250 J02	02	2. 2. R
13	T701 to Virt-Adap.J09 at C-V12. U+	CTG.-	-	C100	TP2S0-38				AXT-CB	62	211250 J02	20	2. 2. R
10	T701 to Virt-Adap.J09 at C-V12. U-	CTG.-	-	C100	TP2S0-38				AXT-CB	62	211250 J02	21	2. 2. R

CCH42

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-1 (of 1)

Astrium GmbH
 Project: **HERSCHEL-E**

Connector: 21T702 P01
 Item: AXTT702

EMC-Category: 2C/Sig H in Cryostat

Function: AXT-T702-C100
 Location: 62 / on AXT_EQM

Conn.-Type: MRN4194- NDDM15PN-Type
 Backshell: NVA

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
15	T702 to Virt-Adap J09 at C-V12 . I+	CTG.-	-	C101	TP2S0-38				AXT-CB	62	211250 J02	03	2. 2. R
08	T702 to Virt-Adap J09 at C-V12 . I-	CTG.-	-	C101	TP2S0-38				AXT-CB	62	211250 J02	04	2. 2. R
13	T702 to Virt-Adap J09 at C-V12 . U+	CTG.-	-	C101	TP2S0-38				AXT-CB	62	211250 J02	22	2. 2. R
10	T702 to Virt-Adap J09 at C-V12 . U-	CTG.-	-	C101	TP2S0-38				AXT-CB	62	211250 J02	23	2. 2. R

CCH43

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 21T705 P01
Item: AXTT704

Function: AXT-T705-Pt1000
Location: 62 / on AXT_EQM

Conn.-Type: MRN4194- NDDM15PN-Type
Backshell: N/A

EMC-Category: 2C/Sig H in Cryostat

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable						
15	T705 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C230	TP2S0-38				AXT-CB	62	211250 J02	09	2. 2. R
08	T705 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C230	TP2S0-38				AXT-CB	62	211250 J02	10	2. 2. R
13	T705 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C230	TP2S0-38				AXT-CB	62	211250 J02	28	2. 2. R
10	T705 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C230	TP2S0-38				AXT-CB	62	211250 J02	29	2. 2. R

CCH 44

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 21T706 P01

Item: AXTT706

EMC-Category: 2C/Sig H in Cryostat

Function: AXT-T706-P11000

Location: 62 / on AXT_EQM

Conn.-Type: MRN4194- NDDM15PN-Type

Backshell: N/A

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.			Shd	Cable Twist						
15	T706 to Virt-Adap-J09 at C-V12 .I+	CTG.-	-	C231	TP2S0-38				AXT-CB	62	211250 J02	11	2. 2. R
08	T706 to Virt-Adap-J09 at C-V12 .I-	CTG.-	-	C231	TP2S0-38				AXT-CB	62	211250 J02	12	2. 2. R
13	T706 to Virt-Adap-J09 at C-V12 .U+	CTG.-	-	C231	TP2S0-38				AXT-CB	62	211250 J02	30	2. 2. R
10	T706 to Virt-Adap-J09 at C-V12 .U-	CTG.-	-	C231	TP2S0-38				AXT-CB	62	211250 J02	31	2. 2. R

CCH45

Astrium GmbH
Project: **HERSCHEL-E**

Connector: 21T707 P01
Item: AX1T707

EMC-Category: 2C/Sig H in Cryostat

Function: AXT-T707-Pt1000
Location: 62 / on AXT_EQM

Conn.-Type: MRN4194- NDDM15PN-Type
Backshell: N/A

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
15	T707 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C232	TP2S0-38				AXT-CB	62	211250 J02	13	2. 2. R
08	T707 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C232	TP2S0-38				AXT-CB	62	211250 J02	14	2. 2. R
13	T707 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C232	TP2S0-38				AXT-CB	62	211250 J02	32	2. 2. R
10	T707 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C232	TP2S0-38				AXT-CB	62	211250 J02	33	2. 2. R

CCH46

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 21T708 P01

Item: AXTT708

EMC-Category: 2C/Sig H in Cryostat

Function: AXT-T708-PI1000

Location: 62 / on AXT_EQM

Conn.-Type: MRN4194- NDDM15PN-Type

Backshell: N/A

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:			Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd	Cable						
15	T708 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C243	TP2S0-38					AXT-CB	62	211250 J02	15	2. 2. R
08	T708 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C243	TP2S0-38					AXT-CB	62	211250 J02	16	2. 2. R
13	T708 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C243	TP2S0-38					AXT-CB	62	211250 J02	34	2. 2. R
10	T708 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C243	TP2S0-38					AXT-CB	62	211250 J02	35	2. 2. R

CCH47

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 21P701 P01
Item: AXTP701

EMC-Category: 2C/Sig H in Cryostat

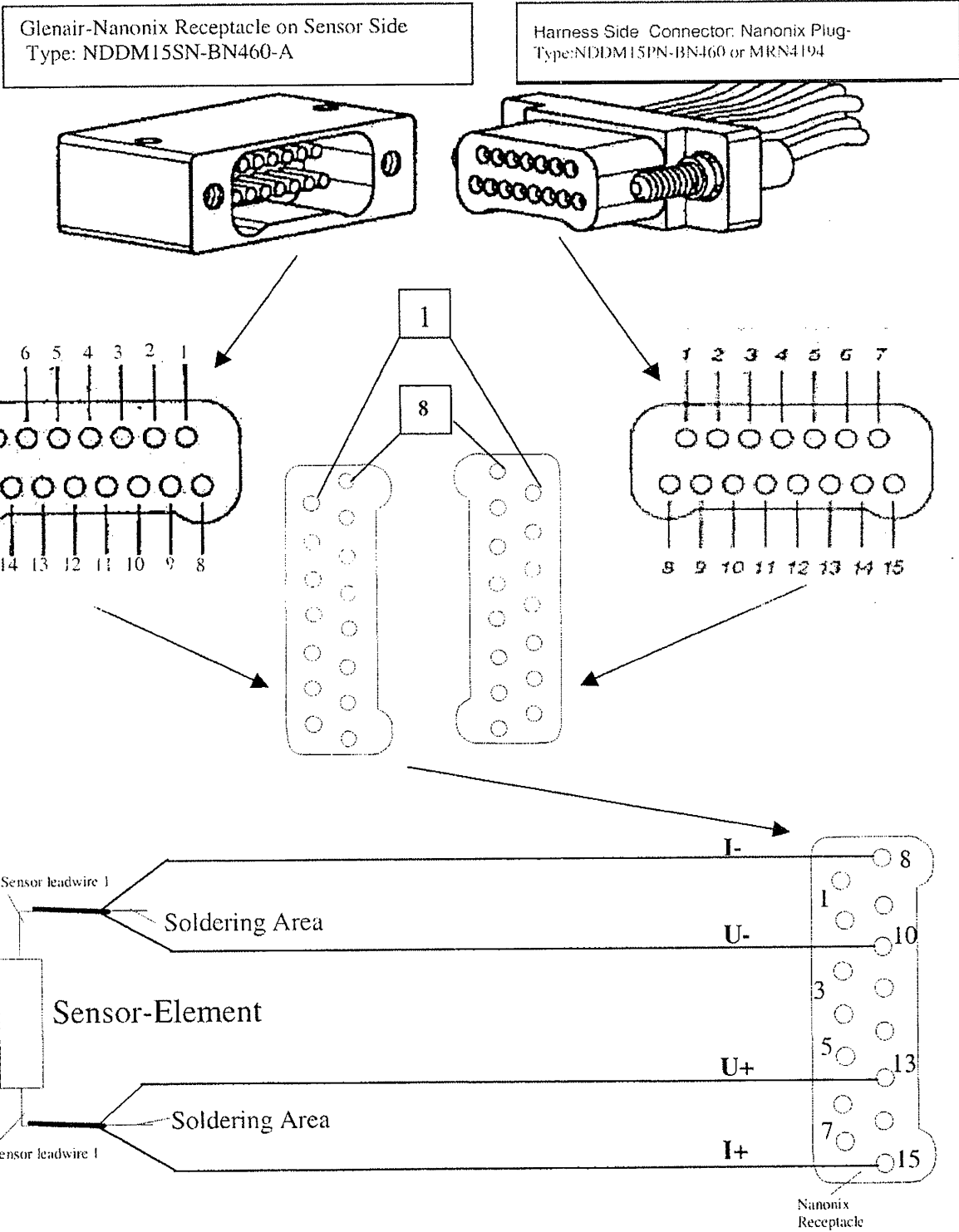
Function: AXT-P701
Location: 62 / on AXT_EQM

Conn.-Type: MWDM2L-09P-6C3-.630
Backshell: NVA

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	P701 to Virt-Adap.J09 at C-V12 . I+	CTG.-	-	C244	TP2S0-38				AXT-CB	62	211250 J02	07	2. 2. R
06	P701 to Virt-Adap.J09 at C-V12 . I-	CTG.-	-	C244	TP2S0-38				AXT-CB	62	211250 J02	08	2. 2. R
05	P701 to Virt-Adap.J09 at C-V12 . U+	CTG.-	-	C244	TP2S0-38				AXT-CB	62	211250 J02	26	2. 2. R
09	P701 to Virt-Adap.J09 at C-V12 . U-	CTG.-	-	C244	TP2S0-38				AXT-CB	62	211250 J02	27	2. 2. R

CCH48

Herschel Temperaturesensor Pin-Allocation



Doc.No.: HP-2-ASED-IC-0008-EQM
Issue: 1.1 – Date: 20.09.2003

EQM-OBA
Internal Harness – EICD - Extract
Pin-Lists

Doc.No.: HP-2-ASED-IC-0008-EQM
Issue: 1.1 – Date: 20.09.2003

EQM-OBA

Internal Harness – EICD - Extract

Pin-Lists

Pages: OBA1 to OBA65

Table of Content:

- EQM-OBA Connector Top Ring Connector 211121-J35	Page OBA 1
- EQM-OBA Connector Top Ring Connector 211121-J36	Page OBA 18
- EQM-OBA Connector Top Ring Connector 211121-J37	Page OBA 34
- EQM-OBA Connector Top Ring Connector 211121-J38	Page OBA 56

OBA7

Doc.No.: HP-2-ASED-IC-0008-EQM
Issue: 1.1 – Date: 20.09.2003

EQM-OBA- Connector Top-Ring
211121-J35

Internal Harness

Pin Allocation List

(Harness)

Connector: 211121 J35

Item: CVVUCR

EMC-Category: 2C/Sig H in Cryostat

Function: UFThr. 324.3° (CCH V01 to CCU A)
 Location: 33 / CVV I/F CB Top PFM (CVVUCR)

Conn.-Type: 197-011P22-35P (Junct.)
 Backshell: ASED B'Shell 100

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
-	T244 OBA HIFI A L1FPUSr5 .-I	CTG.-	-	T244	TP2S0-38			Excitation -	CCHUSFCB3	57	214333 J01	04	
-	T244 OBA HIFI A L1FPUSr5 .-U	CTG.-	-	T244	TP2S0-38			Sense -	CCHUSFCB3	57	214333 J01	17	
-	T244 OBA HIFI A L1FPUSr5 .+I	CTG.-	-	T244	TP2S0-38			Excitation +	CCHUSFCB3	57	214333 J01	05	
-	T244 OBA HIFI A L1FPUSr5 .+U	CTG.-	-	T244	TP2S0-38			Sense +	CCHUSFCB3	57	214333 J01	18	
-	T246 OBA SPIRE A L3JFP/Sr2 .-I	CTG.-	-	T246	TP2S0-38			Excitation -	CCHUSFCB3	57	214333 J01	01	
-	T246 OBA SPIRE A L3JFP/Sr2 .-U	CTG.-	-	T246	TP2S0-38			Sense -	CCHUSFCB3	57	214333 J01	14	
-	T246 OBA SPIRE A L3JFP/Sr2 .+I	CTG.-	-	T246	TP2S0-38			Excitation +	CCHUSFCB3	57	214333 J01	02	
-	T246 OBA SPIRE A L3JFP/Sr2 .+U	CTG.-	-	T246	TP2S0-38			Sense +	CCHUSFCB3	57	214333 J01	15	
-	T258 OBA SPIRE A L2-Y-Zfoot .-I	CTG.-	-	T258	TP2S0-38			Excitation -	CCHUSFCB3	57	214333 J01	07	
-	T258 OBA SPIRE A L2-Y-Zfoot .-U	CTG.-	-	T258	TP2S0-38			Sense -	CCHUSFCB3	57	214333 J01	20	
-	T258 OBA SPIRE A L2-Y-Zfoot .+I	CTG.-	-	T258	TP2S0-38			Excitation +	CCHUSFCB3	57	214333 J01	08	
-	T258 OBA SPIRE A L2-Y-Zfoot .+U	CTG.-	-	T258	TP2S0-38			Sense +	CCHUSFCB3	57	214333 J01	21	
-	T202 OBA PACS A L2+Zr .-I	CTG.-	-	T202	TP2S0-38			Excitation -	CCHUSFCB2	57	214332 J01	01	
-	T202 OBA PACS A L2+Zr .-U	CTG.-	-	T202	TP2S0-38			Sense -	CCHUSFCB2	57	214332 J01	14	
-	T202 OBA PACS A L2+Zr .+I	CTG.-	-	T202	TP2S0-38			Excitation +	CCHUSFCB2	57	214332 J01	02	
-	T202 OBA PACS A L2+Zr .+U	CTG.-	-	T202	TP2S0-38			Sense +	CCHUSFCB2	57	214332 J01	15	
-	T232 OBA PACS A L1dsSr1 .-I	CTG.-	-	T232	TP2S0-38			Excitation -	CCHUSFCB2	57	214332 J01	04	
-	T232 OBA PACS A L1dsSr1 .-U	CTG.-	-	T232	TP2S0-38			Sense -	CCHUSFCB2	57	214332 J01	17	
-	T232 OBA PACS A L1dsSr1 .+I	CTG.-	-	T232	TP2S0-38			Excitation +	CCHUSFCB2	57	214332 J01	05	
-	T232 OBA PACS A L1dsSr1 .+U	CTG.-	-	T232	TP2S0-38			Sense +	CCHUSFCB2	57	214332 J01	18	
-	T242 OBA PACS A L1FPUSr1 .-I	CTG.-	-	T242	TP2S0-38			Excitation -	CCHUSFCB2	57	214332 J01	07	
-	T242 OBA PACS A L1FPUSr1 .-U	CTG.-	-	T242	TP2S0-38			Sense -	CCHUSFCB2	57	214332 J01	20	
-	T242 OBA PACS A L1FPUSr1 .+I	CTG.-	-	T242	TP2S0-38			Excitation +	CCHUSFCB2	57	214332 J01	08	
-	T242 OBA PACS A L1FPUSr1 .+U	CTG.-	-	T242	TP2S0-38			Sense +	CCHUSFCB2	57	214332 J01	21	
-	T221 OBA PACS A L0CSr1 .-I	CTG.-	-	T221	TP2S0-38			Excitation -	CCHUSFCB2	57	214332 J04	07	
-	T221 OBA PACS A L0CSr1 .-U	CTG.-	-	T221	TP2S0-38			Sense -	CCHUSFCB2	57	214332 J04	20	
-	T221 OBA PACS A L0CSr1 .+I	CTG.-	-	T221	TP2S0-38			Excitation +	CCHUSFCB2	57	214332 J04	08	
-	T221 OBA PACS A L0CSr1 .+U	CTG.-	-	T221	TP2S0-38			Sense +	CCHUSFCB2	57	214332 J04	21	
-	T223 OBA PACS A L0CSr3 .-I	CTG.-	-	T223	TP2S0-38			Excitation -	CCHUSFCB2	57	214332 J04	04	
-	T223 OBA PACS A L0CSr3 .-U	CTG.-	-	T223	TP2S0-38			Sense -	CCHUSFCB2	57	214332 J04	17	

OBA2

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-2 (of 4)

Connector: 211121 J35

Item: CVVUCR

EMC-Category: 2C/Sig H in Cryostat

Function: UFThr. 324.3° (CCH V01 to CCU A)

Location: 33 / CVV I/F CB Top PFM (CVVUCR)

Conn.-Type: 197-011P22-35P (Junct.)

Backshell: ASED B Shell 100

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
-	T223 OBA PACS A LOCStr3 . +I	CTG.-	-	T223	TP2S0-38			Excitation +	CCHUSFCB2	57	214332 J04	05	
-	T223 OBA PACS A LOCStr3 . +U	CTG.-	-	T223	TP2S0-38			Sense +	CCHUSFCB2	57	214332 J04	18	
-	T227 OBA SPIRE A LOCStr7 . -I	CTG.-	-	T227	TP2S0-38			Excitation -	CCHUSFCB2	57	214332 J04	01	
-	T227 OBA SPIRE A LOCStr7 . -U	CTG.-	-	T227	TP2S0-38			Sense -	CCHUSFCB2	57	214332 J04	14	
-	T227 OBA SPIRE A LOCStr7 . +I	CTG.-	-	T227	TP2S0-38			Excitation +	CCHUSFCB2	57	214332 J04	02	
-	T227 OBA SPIRE A LOCStr7 . +U	CTG.-	-	T227	TP2S0-38			Sense +	CCHUSFCB2	57	214332 J04	15	
-	T228 OBA HIFI A LOCStr8 . -I	CTG.-	-	T228	TP2S0-38			Excitation -	CCHUSFCB2	57	214332 J04	10	
-	T228 OBA HIFI A LOCStr8 . -U	CTG.-	-	T228	TP2S0-38			Sense -	CCHUSFCB2	57	214332 J04	23	
-	T228 OBA HIFI A LOCStr8 . +I	CTG.-	-	T228	TP2S0-38			Excitation +	CCHUSFCB2	57	214332 J04	11	
-	T228 OBA HIFI A LOCStr8 . +U	CTG.-	-	T228	TP2S0-38			Sense +	CCHUSFCB2	57	214332 J04	24	
-	T234 OBA PACS A L1dsStr3 . -I	CTG.-	-	T234	TP2S0-38			Excitation -	CCHUSFCB4	57	214334 J01	10	
-	T234 OBA PACS A L1dsStr3 . -U	CTG.-	-	T234	TP2S0-38			Sense -	CCHUSFCB4	57	214334 J01	23	
-	T234 OBA PACS A L1dsStr3 . +I	CTG.-	-	T234	TP2S0-38			Excitation +	CCHUSFCB4	57	214334 J01	11	
-	T234 OBA PACS A L1dsStr3 . +U	CTG.-	-	T234	TP2S0-38			Sense +	CCHUSFCB4	57	214334 J01	24	
-	T236 OBA SPIRE A L1dsStr4 . -I	CTG.-	-	T236	TP2S0-38			Excitation -	CCHUSFCB4	57	214334 J01	01	
-	T236 OBA SPIRE A L1dsStr4 . -U	CTG.-	-	T236	TP2S0-38			Sense -	CCHUSFCB4	57	214334 J01	14	
-	T236 OBA SPIRE A L1dsStr4 . +I	CTG.-	-	T236	TP2S0-38			Excitation +	CCHUSFCB4	57	214334 J01	02	
-	T236 OBA SPIRE A L1dsStr4 . +U	CTG.-	-	T236	TP2S0-38			Sense +	CCHUSFCB4	57	214334 J01	15	
-	T250 OBA SPIRE A JFS . -I	CTG.-	-	T250	TP2S0-38			Excitation -	CCHUSFCB4	57	214334 J01	07	
-	T250 OBA SPIRE A JFS . -U	CTG.-	-	T250	TP2S0-38			Sense -	CCHUSFCB4	57	214334 J01	20	
-	T250 OBA SPIRE A JFS . +I	CTG.-	-	T250	TP2S0-38			Excitation +	CCHUSFCB4	57	214334 J01	08	
-	T250 OBA SPIRE A JFS . +U	CTG.-	-	T250	TP2S0-38			Sense +	CCHUSFCB4	57	214334 J01	21	
-	T254 OBA SPIRE A CF . -I	CTG.-	-	T254	TP2S0-38			Excitation -	CCHUSFCB4	57	214334 J01	04	
-	T254 OBA SPIRE A CF . -U	CTG.-	-	T254	TP2S0-38			Sense -	CCHUSFCB4	57	214334 J01	17	
-	T254 OBA SPIRE A CF . +I	CTG.-	-	T254	TP2S0-38			Excitation +	CCHUSFCB4	57	214334 J01	05	
-	T254 OBA SPIRE A CF . +U	CTG.-	-	T254	TP2S0-38			Sense +	CCHUSFCB4	57	214334 J01	18	
-	T212 OBA Instr Shld n PACS A . -I	CTG.-	-	T212	TP2S0-38			Excitation -	OBTSHCB1	72	214411 J02	01	
-	T212 OBA Instr Shld n PACS A . -U	CTG.-	-	T212	TP2S0-38			Sense -	OBTSHCB1	72	214411 J02	06	
-	T212 OBA Instr Shld n PACS A . +I	CTG.-	-	T212	TP2S0-38			Excitation +	OBTSHCB1	72	214411 J02	02	
-	T212 OBA Instr Shld n PACS A . +U	CTG.-	-	T212	TP2S0-38			Sense +	OBTSHCB1	72	214411 J02	07	

OBA3

Astrium GmbH
Project: HERSCHELE-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-3 (of 4)

Connector: 211121 J35
Item: CVVUCR
EMC-Category: 2C/Sig H in Cryostat

Function: UFThr. 324.3° (CCH V01 to CCU A)
Location: 33 / CVV I/F CB Top PFM (CVVUCR)

Conn.-Type: 197-011P22-35P (Junct.)
Backshell: ASED B Shell 100

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:			Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd	Cable						
-	T424 1st Shd upp cone . -I	CTG.-	-	T424	TP2S0-38				Excitation -	UBTS1CB2	53	214424 P01	01	
-	T424 1st Shd upp cone . -U	CTG.-	-	T424	TP2S0-38				Sense -	UBTS1CB2	53	214424 P01	06	
-	T424 1st Shd upp cone . +I	CTG.-	-	T424	TP2S0-38				Excitation +	UBTS1CB2	53	214424 P01	02	
-	T424 1st Shd upp cone . +U	CTG.-	-	T424	TP2S0-38				Sense +	UBTS1CB2	53	214424 P01	07	
-	T464 3rd Shd upp cone . -I	CTG.-	-	T464	TP2S0-38				Excitation -	UBTS3CB2	55	214464 P01	01	
-	T464 3rd Shd upp cone . -U	CTG.-	-	T464	TP2S0-38				Sense -	UBTS3CB2	55	214464 P01	06	
-	T464 3rd Shd upp cone . +I	CTG.-	-	T464	TP2S0-38				Excitation +	UBTS3CB2	55	214464 P01	02	
-	T464 3rd Shd upp cone . +U	CTG.-	-	T464	TP2S0-38				Sense +	UBTS3CB2	55	214464 P01	07	
-	NC													
-	NC													
-	NC													
-	NC													
-	NC													
-	NC													
-	NC													
-	NC													
-	NC													
-	NC													
-	NC													
-	NC													
-	NC													
-	NC													
-	NC													
-	NC													

OBA4

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-4 (of 4)

Connector: 211121 J35

Item: CVVUCR

EMC-Category: 2C/Sig H in Cryostat

Function: UFThr. 324.3° (CCH V01 to CCU A)

Location: 33 / CVV I/F CB Top PFM (CVVUCR)

Conn.-Type: 197-011P22-35P (Junct.)

Backshell: ASED B Shell 100

Pin Signal Designation

NC
NC

Interface-Code	Signal	Pos.	Ch. ID	Wiring	Grouping:	Comment	Target-Item	Location	Connector	Pin	New
Circuit	Signal				Shd Cable Twist						

OBAS

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214333 J01

Item: CCHUSFCB3

EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to CCU A (DCA13)

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25S-6C3-630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target/Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
01	T246 OBA SPIRE A L3JFP/Sir2 . -I	CTG.-	-	T246	TP2S0-38			Excitation -	CVVUCR	33	211121 J35	-	
14	T246 OBA SPIRE A L3JFP/Sir2 . -U	CTG.-	-	T246	TP2S0-38			Sense -	CVVUCR	33	211121 J35	-	
02	T246 OBA SPIRE A L3JFP/Sir2 . +I	CTG.-	-	T246	TP2S0-38			Excitation +	CVVUCR	33	211121 J35	-	
15	T246 OBA SPIRE A L3JFP/Sir2 . +U	CTG.-	-	T246	TP2S0-38			Sense +	CVVUCR	33	211121 J35	-	
03	NC												
16	NC												
04	T244 OBA HIFI A L1FPU5tr5 . -I	CTG.-	-	T244	TP2S0-38			Excitation -	CVVUCR	33	211121 J35	-	
17	T244 OBA HIFI A L1FPU5tr5 . -U	CTG.-	-	T244	TP2S0-38			Sense -	CVVUCR	33	211121 J35	-	
05	T244 OBA HIFI A L1FPU5tr5 . +I	CTG.-	-	T244	TP2S0-38			Excitation +	CVVUCR	33	211121 J35	-	
18	T244 OBA HIFI A L1FPU5tr5 . +U	CTG.-	-	T244	TP2S0-38			Sense +	CVVUCR	33	211121 J35	-	
06	NC												
19	NC												
07	T258 OBA SPIRE A L2-Y-Zfoot . -I	CTG.-	-	T258	TP2S0-38			Excitation -	CVVUCR	33	211121 J35	-	
20	T258 OBA SPIRE A L2-Y-Zfoot . -U	CTG.-	-	T258	TP2S0-38			Sense -	CVVUCR	33	211121 J35	-	
08	T258 OBA SPIRE A L2-Y-Zfoot . +I	CTG.-	-	T258	TP2S0-38			Excitation +	CVVUCR	33	211121 J35	-	
21	T258 OBA SPIRE A L2-Y-Zfoot . +U	CTG.-	-	T258	TP2S0-38			Sense +	CVVUCR	33	211121 J35	-	
09	NC												
22	NC												
10	NC												
23	NC												
11	NC												
24	NC												
12	NC												
25	NC												
13	NC												

OBA G

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214333 P01

Function: OBA T Sensors to CCU A (DCA13)

Conn.-Type: MWDML-25P-6C3-.630

Item: CCHUSFCB3

Location: 57 / on upper spat framework

Backshell: TBD

EMC-Category: 2C/Sig H in Cryostat

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
01	T246 OBA SPIRE A L3JFP/Sir2 . -I	CTG.-	-	T246	TP2S0-38			Excitation -	OBAT246	77	21T246 P01	08	
14	T246 OBA SPIRE A L3JFP/Sir2 . -U	CTG.-	-	T246	TP2S0-38			Sense -	OBAT246	77	21T246 P01	10	
02	T246 OBA SPIRE A L3JFP/Sir2 . +I	CTG.-	-	T246	TP2S0-38			Excitation +	OBAT246	77	21T246 P01	15	
15	T246 OBA SPIRE A L3JFP/Sir2 . +U	CTG.-	-	T246	TP2S0-38			Sense +	OBAT246	77	21T246 P01	13	
03	NC												
16	NC												
04	T244 OBA HIFI A L1FPUSts . -I	CTG.-	-	T244	TP2S0-38			Excitation -	OBAT244	73	21T244 P01	08	
17	T244 OBA HIFI A L1FPUSts . -U	CTG.-	-	T244	TP2S0-38			Sense -	OBAT244	73	21T244 P01	10	
05	T244 OBA HIFI A L1FPUSts . +I	CTG.-	-	T244	TP2S0-38			Excitation +	OBAT244	73	21T244 P01	15	
18	T244 OBA HIFI A L1FPUSts . +U	CTG.-	-	T244	TP2S0-38			Sense +	OBAT244	73	21T244 P01	13	
06	NC												
19	NC												
07	T258 OBA SPIRE A L2-Y-Zfoot . -I	CTG.-	-	T258	TP2S0-38			Excitation -	OBAT258	77	21T258 P01	08	
20	T258 OBA SPIRE A L2-Y-Zfoot . -U	CTG.-	-	T258	TP2S0-38			Sense -	OBAT258	77	21T258 P01	10	
08	T258 OBA SPIRE A L2-Y-Zfoot . +I	CTG.-	-	T258	TP2S0-38			Excitation +	OBAT258	77	21T258 P01	15	
21	T258 OBA SPIRE A L2-Y-Zfoot . +U	CTG.-	-	T258	TP2S0-38			Sense +	OBAT258	77	21T258 P01	13	
09	NC												
22	NC												
10	NC												
23	NC												
11	NC												
24	NC												
12	NC												
25	NC												
13	NC												

OBA 7

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ.
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214332 J01

Item: CCHUSFCB2

EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to CCU A

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25S-6C3-630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
01	T202 OBA PACS A L2+Zfr. -I	CTG.-	-	T202	TP2S0-38			Excitation -	CVVUCR	33	211121 J35	-	
14	T202 OBA PACS A L2+Zfr. -U	CTG.-	-	T202	TP2S0-38			Sense -	CVVUCR	33	211121 J35	-	
02	T202 OBA PACS A L2+Zfr. +I	CTG.-	-	T202	TP2S0-38			Excitation +	CVVUCR	33	211121 J35	-	
15	T202 OBA PACS A L2+Zfr. +U	CTG.-	-	T202	TP2S0-38			Sense +	CVVUCR	33	211121 J35	-	
03	NC												
16	NC												
04	T232 OBA PACS A L1dsStr1. -I	CTG.-	-	T232	TP2S0-38			Excitation -	CVVUCR	33	211121 J35	-	
17	T232 OBA PACS A L1dsStr1. -U	CTG.-	-	T232	TP2S0-38			Sense -	CVVUCR	33	211121 J35	-	
05	T232 OBA PACS A L1dsStr1. +I	CTG.-	-	T232	TP2S0-38			Excitation +	CVVUCR	33	211121 J35	-	
18	T232 OBA PACS A L1dsStr1. +U	CTG.-	-	T232	TP2S0-38			Sense +	CVVUCR	33	211121 J35	-	
06													
19													
07	T242 OBA PACS A L1FPUStr1. -I	CTG.-	-	T242	TP2S0-38			Excitation -	CVVUCR	33	211121 J35	-	
20	T242 OBA PACS A L1FPUStr1. -U	CTG.-	-	T242	TP2S0-38			Sense -	CVVUCR	33	211121 J35	-	
08	T242 OBA PACS A L1FPUStr1. +I	CTG.-	-	T242	TP2S0-38			Excitation +	CVVUCR	33	211121 J35	-	
21	T242 OBA PACS A L1FPUStr1. +U	CTG.-	-	T242	TP2S0-38			Sense +	CVVUCR	33	211121 J35	-	
09	NC												
22	NC												
10	NC												
23	NC												
11	NC												
24	NC												
12	NC												
25	NC												
13	NC												

OBA 8

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Project: **HERSCHEL-E**

Connector: 214332 P01

Item: CCHUSFCB2

EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to CCU A

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25P-6C3-630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
01	T202 OBA PACS A L2+Zfr. -I	CTG.-	-	T202	TP2S0-38			Excitation -	OBAT202	70	21T202 P01	08	
14	T202 OBA PACS A L2+Zfr. -U	CTG.-	-	T202	TP2S0-38			Sense -	OBAT202	70	21T202 P01	10	
02	T202 OBA PACS A L2+Zfr. +I	CTG.-	-	T202	TP2S0-38			Excitation +	OBAT202	70	21T202 P01	15	
15	T202 OBA PACS A L2+Zfr. +U	CTG.-	-	T202	TP2S0-38			Sense +	OBAT202	70	21T202 P01	13	
03	NC												
16	NC												
04	T232 OBA PACS A L1dsStr1. -I	CTG.-	-	T232	TP2S0-38			Excitation -	OBAT232	70	21T232 P01	08	
17	T232 OBA PACS A L1dsStr1. -U	CTG.-	-	T232	TP2S0-38			Sense -	OBAT232	70	21T232 P01	10	
05	T232 OBA PACS A L1dsStr1. +I	CTG.-	-	T232	TP2S0-38			Excitation +	OBAT232	70	21T232 P01	15	
18	T232 OBA PACS A L1dsStr1. +U	CTG.-	-	T232	TP2S0-38			Sense +	OBAT232	70	21T232 P01	13	
06													
19													
07	T242 OBA PACS A L1FPUStr1. -I	CTG.-	-	T242	TP2S0-38			Excitation -	OBAT242	77	21T242 P01	08	
20	T242 OBA PACS A L1FPUStr1. -U	CTG.-	-	T242	TP2S0-38			Sense -	OBAT242	77	21T242 P01	10	
08	T242 OBA PACS A L1FPUStr1. +I	CTG.-	-	T242	TP2S0-38			Excitation +	OBAT242	77	21T242 P01	15	
21	T242 OBA PACS A L1FPUStr1. +U	CTG.-	-	T242	TP2S0-38			Sense +	OBAT242	77	21T242 P01	13	
09	NC												
22	NC												
10	NC												
23	NC												
11	NC												
24	NC												
12	NC												
25	NC												
13	NC												

0849

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Project: **HERSCHEL-E**

Connector: 214332 J04
Item: CCHUSFCB2

EMC-Category: 2C/Sig H in Cryostat

Function: OBA tbd
Location: 57 / on upper spat framework
Conn.-Type: MWDM2L-25S-6C3-630
Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T227 OBA SPIRE A LOCSr7 . -I	CTG.-	-	T227	TP2S0-38			Excitation -	CWVUCR	33	211121 J35	-	
14	T227 OBA SPIRE A LOCSr7 . -U	CTG.-	-	T227	TP2S0-38			Sense -	CWVUCR	33	211121 J35	-	
02	T227 OBA SPIRE A LOCSr7 . +I	CTG.-	-	T227	TP2S0-38			Excitation +	CWVUCR	33	211121 J35	-	
15	T227 OBA SPIRE A LOCSr7 . +U	CTG.-	-	T227	TP2S0-38			Sense +	CWVUCR	33	211121 J35	-	
03	NC												
16	NC												
04	T223 OBA PACS A LOCSr3 . -I	CTG.-	-	T223	TP2S0-38			Excitation -	CWVUCR	33	211121 J35	-	
17	T223 OBA PACS A LOCSr3 . -U	CTG.-	-	T223	TP2S0-38			Sense -	CWVUCR	33	211121 J35	-	
05	T223 OBA PACS A LOCSr3 . +I	CTG.-	-	T223	TP2S0-38			Excitation +	CWVUCR	33	211121 J35	-	
18	T223 OBA PACS A LOCSr3 . +U	CTG.-	-	T223	TP2S0-38			Sense +	CWVUCR	33	211121 J35	-	
06	NC												
19	NC												
07	T221 OBA PACS A LOCSr1 . -I	CTG.-	-	T221	TP2S0-38			Excitation -	CWVUCR	33	211121 J35	-	
20	T221 OBA PACS A LOCSr1 . -U	CTG.-	-	T221	TP2S0-38			Sense -	CWVUCR	33	211121 J35	-	
08	T221 OBA PACS A LOCSr1 . +I	CTG.-	-	T221	TP2S0-38			Excitation +	CWVUCR	33	211121 J35	-	
21	T221 OBA PACS A LOCSr1 . +U	CTG.-	-	T221	TP2S0-38			Sense +	CWVUCR	33	211121 J35	-	
09	NC												
22	NC												
10	T228 OBA HIFI A LOCSr8 . -I	CTG.-	-	T228	TP2S0-38			Excitation -	CWVUCR	33	211121 J35	-	
23	T228 OBA HIFI A LOCSr8 . -U	CTG.-	-	T228	TP2S0-38			Sense -	CWVUCR	33	211121 J35	-	
11	T228 OBA HIFI A LOCSr8 . +I	CTG.-	-	T228	TP2S0-38			Excitation +	CWVUCR	33	211121 J35	-	
24	T228 OBA HIFI A LOCSr8 . +U	CTG.-	-	T228	TP2S0-38			Sense +	CWVUCR	33	211121 J35	-	
12	NC												
25	NC												
13	NC												

OBA10

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214332 P04

Item: CCHUSFCB2

EMC-Category: 2C/Sig H in Cryostat

Function: OBA tbd

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25P-6C3-.630

Backshell: TBD

Pin	Signal Designation	Interface-Code Circuit Signal Pos	Ch. ID	Wiring	Grouping: Shd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
01	T227 OBA SPIRE A LOCStr7 .-I	CTG.- -	T227	TP2S0-38		Excitation -	OBAT227	70	21T227 P01	08	
14	T227 OBA SPIRE A LOCStr7 .-U	CTG.- -	T227	TP2S0-38		Sense -	OBAT227	70	21T227 P01	10	
02	T227 OBA SPIRE A LOCStr7 .+I	CTG.- -	T227	TP2S0-38		Excitation +	OBAT227	70	21T227 P01	15	
15	T227 OBA SPIRE A LOCStr7 .+U	CTG.- -	T227	TP2S0-38		Sense +	OBAT227	70	21T227 P01	13	
03	NC										
16	NC										
04	T223 OBA PACS A LOCStr3 .-I	CTG.- -	T223	TP2S0-38		Excitation -	OBAT223	70	21T223 P01	08	
17	T223 OBA PACS A LOCStr3 .-U	CTG.- -	T223	TP2S0-38		Sense -	OBAT223	70	21T223 P01	10	
05	T223 OBA PACS A LOCStr3 .+I	CTG.- -	T223	TP2S0-38		Excitation +	OBAT223	70	21T223 P01	15	
18	T223 OBA PACS A LOCStr3 .+U	CTG.- -	T223	TP2S0-38		Sense +	OBAT223	70	21T223 P01	13	
06	NC										
19	NC										
07	T221 OBA PACS A LOCStr1 .-I	CTG.- -	T221	TP2S0-38		Excitation -	OBAT221	70	21T221 P01	08	
20	T221 OBA PACS A LOCStr1 .-U	CTG.- -	T221	TP2S0-38		Sense -	OBAT221	70	21T221 P01	10	
08	T221 OBA PACS A LOCStr1 .+I	CTG.- -	T221	TP2S0-38		Excitation +	OBAT221	70	21T221 P01	15	
21	T221 OBA PACS A LOCStr1 .+U	CTG.- -	T221	TP2S0-38		Sense +	OBAT221	70	21T221 P01	13	
09	NC										
22	NC										
10	T228 OBA HIFI A LOCStr8 .-I	CTG.- -	T228	TP2S0-38		Excitation -	OBAT228	70	21T228 P01	08	
23	T228 OBA HIFI A LOCStr8 .-U	CTG.- -	T228	TP2S0-38		Sense -	OBAT228	70	21T228 P01	10	
11	T228 OBA HIFI A LOCStr8 .+I	CTG.- -	T228	TP2S0-38		Excitation +	OBAT228	70	21T228 P01	15	
24	T228 OBA HIFI A LOCStr8 .+U	CTG.- -	T228	TP2S0-38		Sense +	OBAT228	70	21T228 P01	13	
12	NC										
25	NC										
13	NC										

CBA 11

Astrium GmbH
Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214334 J01
Item: CCHUSFCB4

Function: OBA T Sensors to CCU A
Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25S-6C3-630
Backshell: TBD

EMC-Category: 2C/Sig H in Cryostat

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.			Shd	Cable Twist						
01	T236 OBA SPIRE AL1dsStr 4 . -I	CTG.-	-	T236	TP2S0-38			Excitation -	CVVUCR	33	211121 J35	-	
14	T236 OBA SPIRE AL1dsStr 4 . -U	CTG.-	-	T236	TP2S0-38			Sense -	CVVUCR	33	211121 J35	-	
02	T236 OBA SPIRE AL1dsStr 4 . +I	CTG.-	-	T236	TP2S0-38			Excitation +	CVVUCR	33	211121 J35	-	
15	T236 OBA SPIRE AL1dsStr 4 . +U	CTG.-	-	T236	TP2S0-38			Sense +	CVVUCR	33	211121 J35	-	
03	NC												
16	NC												
04	T254 OBA SPIRE A CF . -I	CTG.-	-	T254	TP2S0-38			Excitation -	CVVUCR	33	211121 J35	-	
17	T254 OBA SPIRE A CF . -U	CTG.-	-	T254	TP2S0-38			Sense -	CVVUCR	33	211121 J35	-	
05	T254 OBA SPIRE A CF . +I	CTG.-	-	T254	TP2S0-38			Excitation +	CVVUCR	33	211121 J35	-	
18	T254 OBA SPIRE A CF . +U	CTG.-	-	T254	TP2S0-38			Sense +	CVVUCR	33	211121 J35	-	
06	NC												
19	NC												
07	T250 OBA SPIRE A JFS . -I	CTG.-	-	T250	TP2S0-38			Excitation -	CVVUCR	33	211121 J35	-	
20	T250 OBA SPIRE A JFS . -U	CTG.-	-	T250	TP2S0-38			Sense -	CVVUCR	33	211121 J35	-	
08	T250 OBA SPIRE A JFS . +I	CTG.-	-	T250	TP2S0-38			Excitation +	CVVUCR	33	211121 J35	-	
21	T250 OBA SPIRE A JFS . +U	CTG.-	-	T250	TP2S0-38			Sense +	CVVUCR	33	211121 J35	-	
09	NC												
22	NC												
10	T234 OBA PACS AL1dsStr3 . -I	CTG.-	-	T234	TP2S0-38			Excitation -	CVVUCR	33	211121 J35	-	
23	T234 OBA PACS AL1dsStr3 . -U	CTG.-	-	T234	TP2S0-38			Sense -	CVVUCR	33	211121 J35	-	
11	T234 OBA PACS AL1dsStr3 . +I	CTG.-	-	T234	TP2S0-38			Excitation +	CVVUCR	33	211121 J35	-	
24	T234 OBA PACS AL1dsStr3 . +U	CTG.-	-	T234	TP2S0-38			Sense +	CVVUCR	33	211121 J35	-	
12	NC												
25	NC												
13	NC												

OBA12

Astrium GmbH
Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214334 P01
Item: CCHUSFCB4

Function: OBA T Sensors to CCU A
Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25P-6C3-630
Backshell: TBD

EMC-Category: 2C/Sig H in Cryostat

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T236 OBA SPIRE AL1dsStr4 .-I	CTG.-	-	T236	TP2S0-38			Excitation -	OBAT236	70	21T236 P01	08	
14	T236 OBA SPIRE AL1dsStr4 .-U	CTG.-	-	T236	TP2S0-38			Sense -	OBAT236	70	21T236 P01	10	
02	T236 OBA SPIRE AL1dsStr4 .+I	CTG.-	-	T236	TP2S0-38			Excitation +	OBAT236	70	21T236 P01	15	
15	T236 OBA SPIRE AL1dsStr4 .+U	CTG.-	-	T236	TP2S0-38			Sense +	OBAT236	70	21T236 P01	13	
03	NC												
16	NC												
04	T254 OBA SPIRE A CF .-I	CTG.-	-	T254	TP2S0-38			Excitation -	OBAT254	77	21T254 P01	08	
17	T254 OBA SPIRE A CF .-U	CTG.-	-	T254	TP2S0-38			Sense -	OBAT254	77	21T254 P01	10	
05	T254 OBA SPIRE A CF .+I	CTG.-	-	T254	TP2S0-38			Excitation +	OBAT254	77	21T254 P01	15	
18	T254 OBA SPIRE A CF .+U	CTG.-	-	T254	TP2S0-38			Sense +	OBAT254	77	21T254 P01	13	
06	NC												
19	NC												
07	T250 OBA SPIRE A JFS .-I	CTG.-	-	T250	TP2S0-38			Excitation -	OBAT250	77	21T250 P01	08	
20	T250 OBA SPIRE A JFS .-U	CTG.-	-	T250	TP2S0-38			Sense -	OBAT250	77	21T250 P01	10	
08	T250 OBA SPIRE A JFS .+I	CTG.-	-	T250	TP2S0-38			Excitation +	OBAT250	77	21T250 P01	15	
21	T250 OBA SPIRE A JFS .+U	CTG.-	-	T250	TP2S0-38			Sense +	OBAT250	77	21T250 P01	13	
09	NC												
22	NC												
10	T234 OBA PACS AL1dsStr3 .-I	CTG.-	-	T234	TP2S0-38			Excitation -	OBAT234	70	21T234 P01	08	
23	T234 OBA PACS AL1dsStr3 .-U	CTG.-	-	T234	TP2S0-38			Sense -	OBAT234	70	21T234 P01	10	
11	T234 OBA PACS AL1dsStr3 .+I	CTG.-	-	T234	TP2S0-38			Excitation +	OBAT234	70	21T234 P01	15	
24	T234 OBA PACS AL1dsStr3 .+U	CTG.-	-	T234	TP2S0-38			Sense +	OBAT234	70	21T234 P01	13	
12	NC												
25	NC												
13	NC												

OBA13

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214411 J02
Item: OBTSHCB1

EMC-Category: 2C/Sig H in Cryostat

Function: PACS Instr Shd T212 Sensors to CCU A
Location: 72 / OB upper Side

Conn.-Type: MWDM2L-09S-6C3-630
Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
01	T212 OBA Instr Shld n PACS A -I	CTG.-	-	T212	TP2S0-38	1		Excitation -	CVWUCR	33	211121 J35	-	
06	T212 OBA Instr Shld n PACS A -U	CTG.-	-	T212	TP2S0-38	1		Sense -	CVWUCR	33	211121 J35	-	
02	T212 OBA Instr Shld n PACS A +I	CTG.-	-	T212	TP2S0-38	1		Excitation +	CVWUCR	33	211121 J35	-	
07	T212 OBA Instr Shld n PACS A +U	CTG.-	-	T212	TP2S0-38	1		Sense +	CVWUCR	33	211121 J35	-	
03	NC												
08	NC												
04	NC												
09	NC												
05	NC												

OBA14

Astrium GmbH

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Project: **HERSCHEL-E**

Connector: 214411 P02
Item: OBTSCHB1

Function: PACS Instr Shd T212 Sensors to CCU A
Location: 72 / OB upper Side

Conn.-Type: MWDM2L-09P-6C3-630
Backshell: TBD

EMC-Category: 2C/Sig H in Cryostat

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.			Shd	Cable Twist						
01	T212 OBA Instr Shld n PACS A .-I	CTG.-	-	T212	TP2S0-38			Excitation -	OBIST212	70	21T212 P01	08	
06	T212 OBA Instr Shld n PACS A .-U	CTG.-	-	T212	TP2S0-38			Sense -	OBIST212	70	21T212 P01	10	
02	T212 OBA Instr Shld n PACS A .+I	CTG.-	-	T212	TP2S0-38			Excitation +	OBIST212	70	21T212 P01	15	
07	T212 OBA Instr Shld n PACS A .+U	CTG.-	-	T212	TP2S0-38			Sense +	OBIST212	70	21T212 P01	13	
03	NC												
08	NC												
04	NC												
09	NC												
05	NC												

OBA 15

Astrium GmbH
Project: **HERSCHELE-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214424 P01
Item: UBTS1CB2

Conn.-Type: MWDM2L-09S-6C3-.630
Backshell: TBD

EMC-Category: 2C/Sig H in Cryostat

Function: T424 1st Shd UCFS to CCU A
Location: 53 / on Thermal Shield 1 (outer)

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping: Shd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal									
01	T424 1st Shd upp cone .-I	CTG.-	-	T424	TP2S0-38		Excitation -	CWUCR	33	211121 J35	-	
06	T424 1st Shd upp cone .-U	CTG.-	-	T424	TP2S0-38		Sense -	CWUCR	33	211121 J35	-	
02	T424 1st Shd upp cone .+I	CTG.-	-	T424	TP2S0-38		Excitation +	CWUCR	33	211121 J35	-	
07	T424 1st Shd upp cone .+U	CTG.-	-	T424	TP2S0-38		Sense +	CWUCR	33	211121 J35	-	
03	NC						Sensors from lower Cone tbd !!!					
08	NC											
04	NC											
09	NC											
05	NC						Sensors from lower Cone tbd !!!					

CBA 16

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-1 (of 1)

Pin Allocation List (Harness)

Astrium GmbH
 Project: **HERSCHEL-E**

Connector: 214464 P01
Item: UBTS3CB2
EMC-Category: 2C/Sig H in Cryostat

Function: 3rd Shd UCTS to CCU A
Location: 55 / on Thermal Shield 3 (inner)

Conn.-Type: MWDM2L-09P-6C3-630
Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.			Shd	Cable Twist						
01	T464 3rd Shd upp cone . -I	CTG.-	-	T464	TP2S0-38			Excitation -	CVWUCR	33	211121 J35	-	
06	T464 3rd Shd upp cone . -U	CTG.-	-	T464	TP2S0-38			Sense -	CVWUCR	33	211121 J35	-	
02	T464 3rd Shd upp cone . +I	CTG.-	-	T464	TP2S0-38			Excitation +	CVWUCR	33	211121 J35	-	
07	T464 3rd Shd upp cone . +U	CTG.-	-	T464	TP2S0-38			Sense +	CVWUCR	33	211121 J35	-	
03	NC							Sensors from lower Cone tbd !!!					
08	NC												
04	NC												
09	NC							Sensors from lower Cone tbd !!!					
05	NC							Sensors from lower Cone tbd !!!					

OBA17

CBA 18

Doc.No.: HP-2-ASED-IC-0008-EQM
Issue: 1.1 – Date: 20.09.2003

EQM-OBA- Connector Top-Ring
211121-J36
Internal Harness

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 4)

Connector: 211121 J36

Item: CVVUCR

EMC-Category: 2C/Sig H in Cryostat

Function: (U)FThr. 340.8° (CCH V02 to CCU B)
Location: 33 / CVV / IF CB Top PFM (CVWUCR)

Conn.-Type: 197-011P22-35P (Junct.)
Backshell: ASEB B'Shell 100

well with the position J37
337 mm behind J36
well behind J36

Pin	Signal Designation	Interface-Code	Circuit Signal	Pos.	Ch. ID	Wiring	Grouping: Shd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
-	T208 OBA HIFI B L2-Y+Z .-I		CTG.-	-	T208	TP2S0-38		Excitation -	CCHUSFCB2	57	214332 J02	04	
-	T208 OBA HIFI B L2-Y+Z .-U		CTG.-	-	T208	TP2S0-38		Sense -	CCHUSFCB2	57	214332 J02	17	
-	T208 OBA HIFI B L2-Y+Z .+I		CTG.-	-	T208	TP2S0-38		Excitation +	CCHUSFCB2	57	214332 J02	05	
-	T208 OBA HIFI B L2-Y+Z .+U		CTG.-	-	T208	TP2S0-38		Sense +	CCHUSFCB2	57	214332 J02	18	
-	T231 OBA PACS B L1inlet .-I		CTG.-	-	T231	TP2S0-38		Excitation -	CCHUSFCB2	57	214332 J02	01	
-	T231 OBA PACS B L1inlet .-U		CTG.-	-	T231	TP2S0-38		Sense -	CCHUSFCB2	57	214332 J02	14	
-	T231 OBA PACS B L1inlet .+I		CTG.-	-	T231	TP2S0-38		Excitation +	CCHUSFCB2	57	214332 J02	02	
-	T231 OBA PACS B L1inlet .+U		CTG.-	-	T231	TP2S0-38		Sense +	CCHUSFCB2	57	214332 J02	15	
-	T237 OBA HIFI B L1dsStr5 .-I		CTG.-	-	T237	TP2S0-38		Excitation -	CCHUSFCB3	57	214333 J02	01	
-	T237 OBA HIFI B L1dsStr5 .-U		CTG.-	-	T237	TP2S0-38		Sense -	CCHUSFCB3	57	214333 J02	14	
-	T237 OBA HIFI B L1dsStr5 .+I		CTG.-	-	T237	TP2S0-38		Excitation +	CCHUSFCB3	57	214333 J02	02	
-	T237 OBA HIFI B L1dsStr5 .+U		CTG.-	-	T237	TP2S0-38		Sense +	CCHUSFCB3	57	214333 J02	15	
-	T252 OBA SPIRE B JFP .-I		CTG.-	-	T252	TP2S0-38		Excitation -	CCHUSFCB3	57	214333 J02	04	
-	T252 OBA SPIRE B JFP .-U		CTG.-	-	T252	TP2S0-38		Sense -	CCHUSFCB3	57	214333 J02	17	
-	T252 OBA SPIRE B JFP .+I		CTG.-	-	T252	TP2S0-38		Excitation +	CCHUSFCB3	57	214333 J02	05	
-	T252 OBA SPIRE B JFP .+U		CTG.-	-	T252	TP2S0-38		Sense +	CCHUSFCB3	57	214333 J02	18	
-	T222 OBA PACS B L0CSir2 .-I		CTG.-	-	T222	TP2S0-38		Excitation -	CCHUSFCB3	57	214333 J03	10	
-	T222 OBA PACS B L0CSir2 .-U		CTG.-	-	T222	TP2S0-38		Sense -	CCHUSFCB3	57	214333 J03	23	
-	T222 OBA PACS B L0CSir2 .+I		CTG.-	-	T222	TP2S0-38		Excitation +	CCHUSFCB3	57	214333 J03	11	
-	T222 OBA PACS B L0CSir2 .+U		CTG.-	-	T222	TP2S0-38		Sense +	CCHUSFCB3	57	214333 J03	24	
-	T224 OBA PACS B L0CSir4 .-I		CTG.-	-	T224	TP2S0-38		Excitation -	CCHUSFCB3	57	214333 J03	07	
-	T224 OBA PACS B L0CSir4 .-U		CTG.-	-	T224	TP2S0-38		Sense -	CCHUSFCB3	57	214333 J03	20	
-	T224 OBA PACS B L0CSir4 .+I		CTG.-	-	T224	TP2S0-38		Excitation +	CCHUSFCB3	57	214333 J03	08	
-	T224 OBA PACS B L0CSir4 .+U		CTG.-	-	T224	TP2S0-38		Sense +	CCHUSFCB3	57	214333 J03	21	
-	T225 OBA SPIRE B L0CSir5 .-I		CTG.-	-	T225	TP2S0-38		Excitation -	CCHUSFCB3	57	214333 J03	04	
-	T225 OBA SPIRE B L0CSir5 .-U		CTG.-	-	T225	TP2S0-38		Sense -	CCHUSFCB3	57	214333 J03	17	
-	T225 OBA SPIRE B L0CSir5 .+I		CTG.-	-	T225	TP2S0-38		Excitation +	CCHUSFCB3	57	214333 J03	05	
-	T225 OBA SPIRE B L0CSir5 .+U		CTG.-	-	T225	TP2S0-38		Sense +	CCHUSFCB3	57	214333 J03	18	
-	T226 OBA SPIRE B L0CSir6 .-I		CTG.-	-	T226	TP2S0-38		Excitation -	CCHUSFCB3	57	214333 J03	01	
-	T226 OBA SPIRE B L0CSir6 .-U		CTG.-	-	T226	TP2S0-38		Sense -	CCHUSFCB3	57	214333 J03	14	

OBA19

Astrium GmbH
HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-2 (of 4)

Connector: 211121 J66-
 Item: CVVUCR
 EMC-Category: 2C/Sig H in Cryostat

Function: UFThr. 340.8° (CCH V02 to CCU B)
 Location: 33 / CVW I/F CB Top PFM (CVWUCR)

Conn.-Type: 197-011P22-35P (Junct.)
 Backshell: ASEB B Shell 100

Pin	Signal Designation	Interface-Code	Ch. ID	Wiring	Grouping:	Comment	Target-Item	Location	Connector	Pin	New
		Circuit Signal Pos.			Shd Cable Twist						
-	T226 OBA SPIRE B L0CSir6 . +I	CTG. -	T226	TP2S0-38		Excitation +	CCHUSFCB3	57	214333 J03	02	
-	T226 OBA SPIRE B L0CSir6 . +U	CTG. -	T226	TP2S0-38		Sense +	CCHUSFCB3	57	214333 J03	15	
-	T233 OBA PACS B L1dsSir2 . -I	CTG. -	T233	TP2S0-38		Excitation -	CCHUSFCB4	57	214334 J02	09	
-	T233 OBA PACS B L1dsSir2 . -U	CTG. -	T233	TP2S0-38		Sense -	CCHUSFCB4	57	214334 J02	22	
-	T233 OBA PACS B L1dsSir2 . +I	CTG. -	T233	TP2S0-38		Excitation +	CCHUSFCB4	57	214334 J02	10	
-	T233 OBA PACS B L1dsSir2 . +U	CTG. -	T233	TP2S0-38		Sense +	CCHUSFCB4	57	214334 J02	23	
-	T235 OBA SPIRE B L1usSir4 . -I	CTG. -	T235	TP2S0-38		Excitation -	CCHUSFCB4	57	214334 J02	07	
-	T235 OBA SPIRE B L1usSir4 . -U	CTG. -	T235	TP2S0-38		Sense -	CCHUSFCB4	57	214334 J02	20	
-	T235 OBA SPIRE B L1usSir4 . +I	CTG. -	T235	TP2S0-38		Excitation +	CCHUSFCB4	57	214334 J02	08	
-	T235 OBA SPIRE B L1usSir4 . +U	CTG. -	T235	TP2S0-38		Sense +	CCHUSFCB4	57	214334 J02	21	
-	T247 OBA SPIRE B L3JFSSir1 . -I	CTG. -	T247	TP2S0-38		Excitation -	CCHUSFCB4	57	214334 J02	11	
-	T247 OBA SPIRE B L3JFSSir1 . -U	CTG. -	T247	TP2S0-38		Sense -	CCHUSFCB4	57	214334 J02	24	
-	T247 OBA SPIRE B L3JFSSir1 . +I	CTG. -	T247	TP2S0-38		Excitation +	CCHUSFCB4	57	214334 J02	12	
-	T247 OBA SPIRE B L3JFSSir1 . +U	CTG. -	T247	TP2S0-38		Sense +	CCHUSFCB4	57	214334 J02	25	
-	T248 OBA SPIRE B L1FPUSir4 . -I	CTG. -	T248	TP2S0-38		Excitation -	CCHUSFCB4	57	214334 J02	04	
-	T248 OBA SPIRE B L1FPUSir4 . -U	CTG. -	T248	TP2S0-38		Sense -	CCHUSFCB4	57	214334 J02	17	
-	T248 OBA SPIRE B L1FPUSir4 . +I	CTG. -	T248	TP2S0-38		Excitation +	CCHUSFCB4	57	214334 J02	05	
-	T248 OBA SPIRE B L1FPUSir4 . +U	CTG. -	T248	TP2S0-38		Sense +	CCHUSFCB4	57	214334 J02	18	
-	T256 OBA SPIRE B +Y-Zir . -I	CTG. -	T256	TP2S0-38		Excitation -	CCHUSFCB4	57	214334 J02	01	
-	T256 OBA SPIRE B +Y-Zir . -U	CTG. -	T256	TP2S0-38		Sense -	CCHUSFCB4	57	214334 J02	14	
-	T256 OBA SPIRE B +Y-Zir . +I	CTG. -	T256	TP2S0-38		Excitation +	CCHUSFCB4	57	214334 J02	02	
-	T256 OBA SPIRE B +Y-Zir . +U	CTG. -	T256	TP2S0-38		Sense +	CCHUSFCB4	57	214334 J02	15	
-	T213 OBA Instr Shld n SPIRE B . -I	CTG. -	T213	TP2S0-38		Excitation -	OBTSHCB1	72	214411 J03	01	
-	T213 OBA Instr Shld n SPIRE B . -U	CTG. -	T213	TP2S0-38		Sense -	OBTSHCB1	72	214411 J03	06	
-	T213 OBA Instr Shld n SPIRE B . +I	CTG. -	T213	TP2S0-38		Excitation +	OBTSHCB1	72	214411 J03	02	
-	T213 OBA Instr Shld n SPIRE B . +U	CTG. -	T213	TP2S0-38		Sense +	OBTSHCB1	72	214411 J03	07	
-	T444 2nd Shd upp cone . -I	CTG. -	T444	TP2S0-38		Excitation -	UBTS2CB2	54	214444 P01	01	
-	T444 2nd Shd upp cone . -U	CTG. -	T444	TP2S0-38		Sense -	UBTS2CB2	54	214444 P01	06	
-	T444 2nd Shd upp cone . +I	CTG. -	T444	TP2S0-38		Excitation +	UBTS2CB2	54	214444 P01	02	
-	T444 2nd Shd upp cone . +U	CTG. -	T444	TP2S0-38		Sense +	UBTS2CB2	54	214444 P01	07	

CBA20

Astrium GmbH
 Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-3 (of 4)

Connector: 211121 J36

Item: CVVUCR

EMC-Category: 2C/Sig H in Cryostat

Function: UFTThr. 340.8° (CCH V02 to CCU B)

Location: 33 / CVV / F CB Top PFM (CVVUCR)

Conn.-Type: 197-011P22-35P (Junct.)

Backshell: ASED B Shell 100

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Shd Cable Twist	Grouping:	Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.										
-	T862 Upper Spat Fw Sens . -I	CTG.-	-	T862	TP2S0-38			Excitation -	USFT862	57	21T862 P01	08	
-	T862 Upper Spat Fw Sens . -U	CTG.-	-	T862	TP2S0-38			Sense -	USFT862	57	21T862 P01	10	
-	T862 Upper Spat Fw Sens . +I	CTG.-	-	T862	TP2S0-38			Excitation +	USFT862	57	21T862 P01	15	
-	T862 Upper Spat Fw Sens . +U	CTG.-	-	T862	TP2S0-38			Sense +	USFT862	57	21T862 P01	13	
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												

Handwritten notes:
 fesh...
 o her...
 PFM / EQ

OBA21

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-4 (of 4)

Connector: 211121 J36

Item: CVVJCR

EMC-Category: 2C/Sig H in Cryostat

Function: UFThr. 340.8° (CCH V02 to CCU B)

Location: 33 / CVV I/F CB Top PFM (CVVUCR)

Conn.-Type: 197-011P22-35P (Junct.)

Backshell: ASE D B Shell 100

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
.	NC												

CBA22

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214332 J02

Item: CCHUSFCB2

EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to CCU B

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25S-6C3-.630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T231 OBA PACS B L1inlet . -I	CTG.-	-	T231	TP2S0-38			Excitation -	CVWUCR	33	211121 J36	.	
14	T231 OBA PACS B L1inlet . -U	CTG.-	-	T231	TP2S0-38			Sense -	CVWUCR	33	211121 J36	.	
02	T231 OBA PACS B L1inlet . +I	CTG.-	-	T231	TP2S0-38			Excitation +	CVWUCR	33	211121 J36	.	
15	T231 OBA PACS B L1inlet . +U	CTG.-	-	T231	TP2S0-38			Sense +	CVWUCR	33	211121 J36	.	
03	NC												
16	NC												
04	T208 OBA HIFI B L2-Y+Z . -I	CTG.-	-	T208	TP2S0-38			Excitation -	CVWUCR	33	211121 J36	.	
17	T208 OBA HIFI B L2-Y+Z . -U	CTG.-	-	T208	TP2S0-38			Sense -	CVWUCR	33	211121 J36	.	
05	T208 OBA HIFI B L2-Y+Z . +I	CTG.-	-	T208	TP2S0-38			Excitation +	CVWUCR	33	211121 J36	.	
18	T208 OBA HIFI B L2-Y+Z . +U	CTG.-	-	T208	TP2S0-38			Sense +	CVWUCR	33	211121 J36	.	
06	NC												
19	NC												
07	NC												
20	NC												
08	NC												
21	NC												
09	NC												
22	NC												
10	NC												
23	NC												
11	NC												
24	NC												
12	NC												
25	NC												
13	NC												

OBA 23

Astrium GmbH

Project: **HERSCHELE**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0009-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214332 P02
Item: CCHUSFCB2

EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to CCU B
Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25P-6C3-630
Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Shd Cable Twist	Grouping:	Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.										
01	T231 OBA PACS B L'inlet. -I	CTG.-	-	T231	TP2S0-38			Excitation -	OBAT231	70	21T231 P01	08	
14	T231 OBA PACS B L'inlet. -U	CTG.-	-	T231	TP2S0-38			Sense -	OBAT231	70	21T231 P01	10	
02	T231 OBA PACS B L'inlet. +I	CTG.-	-	T231	TP2S0-38			Excitation +	OBAT231	70	21T231 P01	15	
15	T231 OBA PACS B L'inlet. +U	CTG.-	-	T231	TP2S0-38			Sense +	OBAT231	70	21T231 P01	13	
03	NC												
16	NC												
04	T208 OBA HIFI B L2-Y+Z. -I	CTG.-	-	T208	TP2S0-38			Excitation -	OBAT208	70	21T208 P01	08	
17	T208 OBA HIFI B L2-Y+Z. -U	CTG.-	-	T208	TP2S0-38			Sense -	OBAT208	70	21T208 P01	10	
05	T208 OBA HIFI B L2-Y+Z. +I	CTG.-	-	T208	TP2S0-38			Excitation +	OBAT208	70	21T208 P01	15	
18	T208 OBA HIFI B L2-Y+Z. +U	CTG.-	-	T208	TP2S0-38			Sense +	OBAT208	70	21T208 P01	13	
06	NC												
19	NC												
07	NC												
20	NC												
08	NC												
21	NC												
09	NC												
22	NC												
10	NC												
23	NC												
11	NC												
24	NC												
12	NC												
25	NC												
13	NC												

OBA24

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214333 J03

Item: CCHUSFCB3

EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to CCU B (DCB16)

Location: 57 / on upper spat framework

Conn.-Type: MWDML-25S-6C3-630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T226 OBA SPIRE B LOCStr 6 . -I	CTG.-	-	T226	TP2S0-38			Excitation -	CVVUCR	33	211121 J36	-	
14	T226 OBA SPIRE B LOCStr 6 . -U	CTG.-	-	T226	TP2S0-38			Sense -	CVVUCR	33	211121 J36	-	
02	T226 OBA SPIRE B LOCStr 6 . +I	CTG.-	-	T226	TP2S0-38			Excitation +	CVVUCR	33	211121 J36	-	
15	T226 OBA SPIRE B LOCStr 6 . +U	CTG.-	-	T226	TP2S0-38			Sense +	CVVUCR	33	211121 J36	-	
03	NC												
16	NC												
04	T225 OBA SPIRE B LOCStr 5 . -I	CTG.-	-	T225	TP2S0-38			Excitation -	CVVUCR	33	211121 J36	-	
17	T225 OBA SPIRE B LOCStr 5 . -U	CTG.-	-	T225	TP2S0-38			Sense -	CVVUCR	33	211121 J36	-	
05	T225 OBA SPIRE B LOCStr 5 . +I	CTG.-	-	T225	TP2S0-38			Excitation +	CVVUCR	33	211121 J36	-	
18	T225 OBA SPIRE B LOCStr 5 . +U	CTG.-	-	T225	TP2S0-38			Sense +	CVVUCR	33	211121 J36	-	
06	NC												
19	NC												
07	T224 OBA PACS B LOCStr 4 . -I	CTG.-	-	T224	TP2S0-38			Excitation -	CVVUCR	33	211121 J36	-	
20	T224 OBA PACS B LOCStr 4 . -U	CTG.-	-	T224	TP2S0-38			Sense -	CVVUCR	33	211121 J36	-	
08	T224 OBA PACS B LOCStr 4 . +I	CTG.-	-	T224	TP2S0-38			Excitation +	CVVUCR	33	211121 J36	-	
21	T224 OBA PACS B LOCStr 4 . +U	CTG.-	-	T224	TP2S0-38			Sense +	CVVUCR	33	211121 J36	-	
09	NC												
22	NC												
10	T222 OBA PACS B LOCStr 2 . -I	CTG.-	-	T222	TP2S0-38			Excitation -	CVVUCR	33	211121 J36	-	
23	T222 OBA PACS B LOCStr 2 . -U	CTG.-	-	T222	TP2S0-38			Sense -	CVVUCR	33	211121 J36	-	
11	T222 OBA PACS B LOCStr 2 . +I	CTG.-	-	T222	TP2S0-38			Excitation +	CVVUCR	33	211121 J36	-	
24	T222 OBA PACS B LOCStr 2 . +U	CTG.-	-	T222	TP2S0-38			Sense +	CVVUCR	33	211121 J36	-	
12	NC												
25	NC												
13	NC												

OBA25

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214333 P03

Item: CCHUSFCB3

EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to CCU B (DCB16)

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25P-6C3-630

Backshell: TBD

Pin	Signal Designation	Interface-Code Circuit Signal Pos.	Ch. ID	Wiring	Grouping: Shd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
01	T226 OBA SPIRE B L0CS16 .-I	CTG.- .-	T226	TP2S0-38		Excitation -	OBAT226	70	21T226 P01	08	
14	T226 OBA SPIRE B L0CS16 .-U	CTG.- .-	T226	TP2S0-38		Sense -	OBAT226	70	21T226 P01	10	
02	T226 OBA SPIRE B L0CS16 .+I	CTG.- .-	T226	TP2S0-38		Excitation +	OBAT226	70	21T226 P01	15	
15	T226 OBA SPIRE B L0CS16 .+U	CTG.- .-	T226	TP2S0-38		Sense +	OBAT226	70	21T226 P01	13	
03	NC										
16	NC										
04	T225 OBA SPIRE B L0CS16 .-I	CTG.- .-	T225	TP2S0-38		Excitation -	OBAT225	70	21T225 P01	08	
17	T225 OBA SPIRE B L0CS16 .-U	CTG.- .-	T225	TP2S0-38		Sense -	OBAT225	70	21T225 P01	10	
05	T225 OBA SPIRE B L0CS16 .+I	CTG.- .-	T225	TP2S0-38		Excitation +	OBAT225	70	21T225 P01	15	
18	T225 OBA SPIRE B L0CS16 .+U	CTG.- .-	T225	TP2S0-38		Sense +	OBAT225	70	21T225 P01	13	
06	NC										
19	NC										
07	T224 OBA PACS B L0CS16 .-I	CTG.- .-	T224	TP2S0-38		Excitation -	OBAT224	70	21T224 P01	08	
20	T224 OBA PACS B L0CS16 .-U	CTG.- .-	T224	TP2S0-38		Sense -	OBAT224	70	21T224 P01	10	
08	T224 OBA PACS B L0CS16 .+I	CTG.- .-	T224	TP2S0-38		Excitation +	OBAT224	70	21T224 P01	15	
21	T224 OBA PACS B L0CS16 .+U	CTG.- .-	T224	TP2S0-38		Sense +	OBAT224	70	21T224 P01	13	
09	NC										
22	NC										
10	T222 OBA PACS B L0CS16 .-I	CTG.- .-	T222	TP2S0-38		Excitation -	OBAT222	70	21T222 P01	08	
23	T222 OBA PACS B L0CS16 .-U	CTG.- .-	T222	TP2S0-38		Sense -	OBAT222	70	21T222 P01	10	
11	T222 OBA PACS B L0CS16 .+I	CTG.- .-	T222	TP2S0-38		Excitation +	OBAT222	70	21T222 P01	15	
24	T222 OBA PACS B L0CS16 .+U	CTG.- .-	T222	TP2S0-38		Sense +	OBAT222	70	21T222 P01	13	
12	NC										
25	NC										
13	NC										

OBA26

Astrium GmbH
Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-1 (of 1)

Connector: 214334 J02
Item: CCHUSFCB4
EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to CCU B
Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25S-6C3-630
Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T256 OBA SPIRE B +Y-ZIt. -I	CTG.-	-	T256	TP250-38			Excitation -	CVVUCR	33	211121 J36	-	
14	T256 OBA SPIRE B +Y-ZIt. -U	CTG.-	-	T256	TP250-38			Sense -	CVVUCR	33	211121 J36	-	
02	T256 OBA SPIRE B +Y-ZIt. +I	CTG.-	-	T256	TP250-38			Excitation +	CVVUCR	33	211121 J36	-	
15	T256 OBA SPIRE B +Y-ZIt. +U	CTG.-	-	T256	TP250-38			Sense +	CVVUCR	33	211121 J36	-	
03	NC												
16	NC												
04	T248 OBA SPIRE B L1FPUSIr4. -I	CTG.-	-	T248	TP250-38			Excitation -	CVVUCR	33	211121 J36	-	
17	T248 OBA SPIRE B L1FPUSIr4. -U	CTG.-	-	T248	TP250-38			Sense -	CVVUCR	33	211121 J36	-	
05	T248 OBA SPIRE B L1FPUSIr4. +I	CTG.-	-	T248	TP250-38			Excitation +	CVVUCR	33	211121 J36	-	
18	T248 OBA SPIRE B L1FPUSIr4. +U	CTG.-	-	T248	TP250-38			Sense +	CVVUCR	33	211121 J36	-	
06	NC												
19	NC												
07	T235 OBA SPIRE B L1usSir4. -I	CTG.-	-	T235	TP250-38			Excitation -	CVVUCR	33	211121 J36	-	
20	T235 OBA SPIRE B L1usSir4. -U	CTG.-	-	T235	TP250-38			Sense -	CVVUCR	33	211121 J36	-	
08	T235 OBA SPIRE B L1usSir4. +I	CTG.-	-	T235	TP250-38			Excitation +	CVVUCR	33	211121 J36	-	
21	T235 OBA SPIRE B L1usSir4. +U	CTG.-	-	T235	TP250-38			Sense +	CVVUCR	33	211121 J36	-	
09	T233 OBA PACS B L1dsSr2. -I	CTG.-	-	T233	TP250-38			Excitation -	CVVUCR	33	211121 J36	-	
22	T233 OBA PACS B L1dsSr2. -U	CTG.-	-	T233	TP250-38			Sense -	CVVUCR	33	211121 J36	-	
10	T233 OBA PACS B L1dsSr2. +I	CTG.-	-	T233	TP250-38			Excitation +	CVVUCR	33	211121 J36	-	
23	T233 OBA PACS B L1dsSr2. +U	CTG.-	-	T233	TP250-38			Sense +	CVVUCR	33	211121 J36	-	
11	T247 OBA SPIRE B L3JFSSr1. -I	CTG.-	-	T247	TP250-38			Excitation -	CVVUCR	33	211121 J36	-	
24	T247 OBA SPIRE B L3JFSSr1. -U	CTG.-	-	T247	TP250-38			Sense -	CVVUCR	33	211121 J36	-	
12	T247 OBA SPIRE B L3JFSSr1. +I	CTG.-	-	T247	TP250-38			Excitation +	CVVUCR	33	211121 J36	-	
25	T247 OBA SPIRE B L3JFSSr1. +U	CTG.-	-	T247	TP250-38			Sense +	CVVUCR	33	211121 J36	-	
13	NC												

OBA27

Astrium GmbH
Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: **HP-2-ASED-IC-0008-EQ**
Issue: **1.1** Date: **20.09.2003**
Sheet: **PAL-1 (of 1)**

Connector: 214334 P02
Item: CCHUSFCB4
EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to CCU B
Location: 57 / on upper spat framework

Conn.-Type: MWD2L-25P-603-630
Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T256 OBA SPIRE B +Y-Zh. -I	CTG.-	-	T256	TP2S0-38			Excitation -	OBAT256	77	21T256 P01	08	
14	T256 OBA SPIRE B +Y-Zh. -U	CTG.-	-	T256	TP2S0-38			Sense -	OBAT256	77	21T256 P01	10	
02	T256 OBA SPIRE B +Y-Zh. +I	CTG.-	-	T256	TP2S0-38			Excitation +	OBAT256	77	21T256 P01	15	
15	T256 OBA SPIRE B +Y-Zh. +U	CTG.-	-	T256	TP2S0-38			Sense +	OBAT256	77	21T256 P01	13	
03	NC												
16	NC												
04	T248 OBA SPIRE B L1FPUSr4. -I	CTG.-	-	T248	TP2S0-38			Excitation -	OBAT248	77	21T248 P01	08	
17	T248 OBA SPIRE B L1FPUSr4. -U	CTG.-	-	T248	TP2S0-38			Sense -	OBAT248	77	21T248 P01	10	
05	T248 OBA SPIRE B L1FPUSr4. +I	CTG.-	-	T248	TP2S0-38			Excitation +	OBAT248	77	21T248 P01	15	
18	T248 OBA SPIRE B L1FPUSr4. +U	CTG.-	-	T248	TP2S0-38			Sense +	OBAT248	77	21T248 P01	13	
06	NC												
19	NC												
07	T235 OBA SPIRE B L1usSr4. -I	CTG.-	-	T235	TP2S0-38			Excitation -	OBAT235	70	21T235 P01	08	
20	T235 OBA SPIRE B L1usSr4. -U	CTG.-	-	T235	TP2S0-38			Sense -	OBAT235	70	21T235 P01	10	
08	T235 OBA SPIRE B L1usSr4. +I	CTG.-	-	T235	TP2S0-38			Excitation +	OBAT235	70	21T235 P01	15	
21	T235 OBA SPIRE B L1usSr4. +U	CTG.-	-	T235	TP2S0-38			Sense +	OBAT235	70	21T235 P01	13	
09	T233 OBA PACS B L1dsSr2. -I	CTG.-	-	T233	TP2S0-38			Excitation -	OBAT233	70	21T233 P01	08	
22	T233 OBA PACS B L1dsSr2. -U	CTG.-	-	T233	TP2S0-38			Sense -	OBAT233	70	21T233 P01	10	
10	T233 OBA PACS B L1dsSr2. +I	CTG.-	-	T233	TP2S0-38			Excitation +	OBAT233	70	21T233 P01	15	
23	T233 OBA PACS B L1dsSr2. +U	CTG.-	-	T233	TP2S0-38			Sense +	OBAT233	70	21T233 P01	13	
11	T247 OBA SPIRE B L3JFSSr1. -I	CTG.-	-	T247	TP2S0-38			Excitation -	OBAT247	77	21T247 P01	08	
24	T247 OBA SPIRE B L3JFSSr1. -U	CTG.-	-	T247	TP2S0-38			Sense -	OBAT247	77	21T247 P01	10	
12	T247 OBA SPIRE B L3JFSSr1. +I	CTG.-	-	T247	TP2S0-38			Excitation +	OBAT247	77	21T247 P01	15	
25	T247 OBA SPIRE B L3JFSSr1. +U	CTG.-	-	T247	TP2S0-38			Sense +	OBAT247	77	21T247 P01	13	
13	NC												

OBA28

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214411 J03
Item: OBTSCHB1

Function: SPIRE Instr Shd T213 Sensors to CCU B
Location: 72 / OB upper Side

Conn.-Type: MWDM2L-09S-6C3-630
Backshell: TBD

EMC-Category: 2C/Sig H in Cryostat

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.			Shd	Cable Twist						
01	T213 OBA Instr Shd n SPIRE B .-I	CTG.-	-	T213	TP2S0-38	1	1	Excitation -	CVVUCR	33	211121 J36	-	
06	T213 OBA Instr Shd n SPIRE B .-U	CTG.-	-	T213	TP2S0-38	1	1	Sense -	CVVUCR	33	211121 J36	-	
02	T213 OBA Instr Shd n SPIRE B .+I	CTG.-	-	T213	TP2S0-38	1	1	Excitation +	CVVUCR	33	211121 J36	-	
07	T213 OBA Instr Shd n SPIRE B .+U	CTG.-	-	T213	TP2S0-38	1	1	Sense +	CVVUCR	33	211121 J36	-	
03	NC												
08	NC												
04	NC												
09	NC												
05	NC												

OBA29

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214411 P03

Item: OBTSHCB1

EMC-Category: 2C/Sig H in Cryostat

Function: SPIRE Instr Shd T213 Sensors to CCU B

Location: 72 / OB upper Side

Conn.-Type: MWDM2L-09P-6C3-.630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
01	T213 OBA Instr Shld n SPIRE B . -I	CTG.-	-	T213	TP2S0-38			Excitation -	OBIST213	70	21T213 P01	08	
06	T213 OBA Instr Shld n SPIRE B . -U	CTG.-	-	T213	TP2S0-38			Sense -	OBIST213	70	21T213 P01	10	
02	T213 OBA Instr Shld n SPIRE B . +I	CTG.-	-	T213	TP2S0-38			Excitation +	OBIST213	70	21T213 P01	15	
07	T213 OBA Instr Shld n SPIRE B . +U	CTG.-	-	T213	TP2S0-38			Sense +	OBIST213	70	21T213 P01	13	
03	NC												
08	NC												
04	NC												
09	NC												
05	NC												

OBA 30

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: **HP-2-ASED-IC-0008-EQ**
 Issue: **1.1** Date: **20.09.2003**
 Sheet: **PAL-1 (of 1)**

Connector: **214444 J01**
 Item: **UBTS2CB2**

Function: **2nd Shd UCSS to CCU B**
 Location: **54 / on Thermal Shield 2 (mid)**

Conn.-Type: **MWDM2L-09P-6C3-630**
 Backshell: **TBD**

EMC-Category: **2C/Sig H in Cryostat**

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T444 2nd Shd upp cone .-I	CTG.-	.	T444	TP2S0-38	1		Excitation -	T4442ndSh	54	21T444 P01	08	
06	T444 2nd Shd upp cone .-U	CTG.-	.	T444	TP2S0-38	1		Sense -	T4442ndSh	54	21T444 P01	10	
02	T444 2nd Shd upp cone .+I	CTG.-	.	T444	TP2S0-38	1		Excitation +	T4442ndSh	54	21T444 P01	15	
07	T444 2nd Shd upp cone .+U	CTG.-	.	T444	TP2S0-38	1		Sense +	T4442ndSh	54	21T444 P01	13	
03	NC							Sensors from lower Cone tbd !!!					
08	NC												
04	NC												
09	NC							Sensors from lower Cone tbd !!!					
05	NC							Sensors from lower Cone tbd !!!					

03A 31

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: **HP-2-ASED-IC-0008-EQ**
 Issue: **1.1** Date: **20.09.2003**
 Sheet: **PAL-1 (of 1)**

Connector: **214444 P01**

Item: **UBTS2CB2**

EMC-Category: **2C/Sig H in Cryostat**

Function: **2nd Shd UCSS to CCU B**

Location: **54 / on Thermal Shield 2 (mid)**

Conn.-Type: **MWDM2L-09S-6C3-630**

Backshell: **TBD**

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T444 2nd Shd upp cone .-I	CTG.-	-	T444	TP2S0-38	1		Excitation -	CWUCR	33	211121 J36	-	
06	T444 2nd Shd upp cone .-U	CTG.-	-	T444	TP2S0-38	1		Sense -	CWUCR	33	211121 J36	-	
02	T444 2nd Shd upp cone .+I	CTG.-	-	T444	TP2S0-38	1		Excitation +	CWUCR	33	211121 J36	-	
07	T444 2nd Shd upp cone .+U	CTG.-	-	T444	TP2S0-38	1		Sense +	CWUCR	33	211121 J36	-	
03	NC							Sensors from lower Cone tbd !!!					
08	NC												
04	NC												
09	NC							Sensors from lower Cone tbd !!!					
05	NC							Sensors from lower Cone tbd !!!					

OBA32

Astrium GmbH
Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-1 (of 1)

Connector: 21T862 P01
Item: USFT862
EMC-Category: 2C/Sig H in Cryostat

Function: T862 Upper SpatFwSens
Location: 57 / on upper spat framework
Note: Signals of different EMC classes are routed via this Connector

Conn.-Type: NDDM15PN-BN460
Backshell: N/A

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Shd	Cable	Twist	Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal											
08	T862 Upper Spat Fw Sens . -I	CTG.-	-	T862	TP2S0-38				Excitation -	CVVUCR	33	211121 J36	-	
01	NC													
09	NC													
02	NC													
10	T862 Upper Spat Fw Sens . -U	CTG.-	-	T862	TP2S0-38				Sense -	CVVUCR	33	211121 J36	-	
03	NC													
11	NC													
04	NC													
12	NC													
05	NC													
13	T862 Upper Spat Fw Sens . +U	CTG.-	-	T862	TP2S0-38				Sense +	CVVUCR	33	211121 J36	-	
06	NC													
14	NC													
07	NC													
15	T862 Upper Spat Fw Sens . +I	CTG.-	-	T862	TP2S0-38				Excitation +	CVVUCR	33	211121 J36	-	

03A33

OBA 34

Doc.No.: HP-2-ASED-IC-0008-EQM
Issue: 1.1 - Date: 20.09.2003

EQM-OBA- Connector Top-Ring
211121-J37
Internal Harness

Astrium GmbH

Project: **HERSCHELE**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 3)

Connector: 211121 J38

Item: CVVUCR

EMC-Category: 2C/Sig H in Cryostat

Function: UFThr. 347.0° (CCH V03 to Cryo SCOE 1)

Location: 33 / CVV I/F CB Top PFM (CVVUCR)

Conn.-Type: 197-011P22-35P (Junct.)

Backshell: ASEB B'Shell 100

OBA35

Pin	Signal Designation	Interface-Code Circuit Signal Pos.	Ch. ID	Wiring	Grouping: Shd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
091	T253 OBA SPIRE E CF .-I	CTG.-.-	T253	TP2S0-38	1	Excitation -	CCHUSFCB4	57	214334 J03	04	
092	T253 OBA SPIRE E CF .-U	CTG.-.-	T253	TP2S0-38	1	Sense -	CCHUSFCB4	57	214334 J03	17	
100	T253 OBA SPIRE E CF .+I	CTG.-.-	T253	TP2S0-38	1	Excitation +	CCHUSFCB4	57	214334 J03	05	
093	T253 OBA SPIRE E CF .+U	CTG.-.-	T253	TP2S0-38	1	Sense +	CCHUSFCB4	57	214334 J03	18	
073	T249 OBA SPIRE E JFS .-I	CTG.-.-	T249	TP2S0-38	2	Excitation -	CCHUSFCB4	57	214334 J03	07	
074	T249 OBA SPIRE E JFS .-U	CTG.-.-	T249	TP2S0-38	2	Sense -	CCHUSFCB4	57	214334 J03	20	
083	T249 OBA SPIRE E JFS .+I	CTG.-.-	T249	TP2S0-38	2	Excitation +	CCHUSFCB4	57	214334 J03	08	
082	T249 OBA SPIRE E JFS .+U	CTG.-.-	T249	TP2S0-38	2	Sense +	CCHUSFCB4	57	214334 J03	21	
075	T255 OBA SPIRE E +Y-ZIt .-I	CTG.-.-	T255	TP2S0-38	3	Excitation -	CCHUSFCB4	57	214334 J03	10	
076	T255 OBA SPIRE E +Y-ZIt .-U	CTG.-.-	T255	TP2S0-38	3	Sense -	CCHUSFCB4	57	214334 J03	23	
085	T255 OBA SPIRE E +Y-ZIt .+I	CTG.-.-	T255	TP2S0-38	3	Excitation +	CCHUSFCB4	57	214334 J03	11	
084	T255 OBA SPIRE E +Y-ZIt .+U	CTG.-.-	T255	TP2S0-38	3	Sense +	CCHUSFCB4	57	214334 J03	24	
054	T207 OBA HIFI E L2-Y+Z .-I	CTG.-.-	T207	TP2S0-38	4	Excitation -	CCHUSFCB2	57	214332 J03	01	
055	T207 OBA HIFI E L2-Y+Z .-U	CTG.-.-	T207	TP2S0-38	4	Sense -	CCHUSFCB2	57	214332 J03	14	
066	T207 OBA HIFI E L2-Y+Z .+I	CTG.-.-	T207	TP2S0-38	4	Excitation +	CCHUSFCB2	57	214332 J03	02	
065	T207 OBA HIFI E L2-Y+Z .+U	CTG.-.-	T207	TP2S0-38	4	Sense +	CCHUSFCB2	57	214332 J03	15	
052	T251 OBA SPIRE E JFP .-I	CTG.-.-	T251	TP2S0-38	5	Excitation -	CCHUSFCB4	57	214334 J03	01	
053	T251 OBA SPIRE E JFP .-U	CTG.-.-	T251	TP2S0-38	5	Sense -	CCHUSFCB4	57	214334 J03	14	
064	T251 OBA SPIRE E JFP .+I	CTG.-.-	T251	TP2S0-38	5	Excitation +	CCHUSFCB4	57	214334 J03	02	
063	T251 OBA SPIRE E JFP .+U	CTG.-.-	T251	TP2S0-38	5	Sense +	CCHUSFCB4	57	214334 J03	15	
031	T211 OBA Inst Shld n HIFI E .-I	CTG.-.-	T211	TP2S0-38	6	Excitation -	OBTSHCB1	72	214411 J01	01	
032	T211 OBA Inst Shld n HIFI E .-U	CTG.-.-	T211	TP2S0-38	6	Sense -	OBTSHCB1	72	214411 J01	06	
043	T211 OBA Inst Shld n HIFI E .+I	CTG.-.-	T211	TP2S0-38	6	Excitation +	OBTSHCB1	72	214411 J01	02	
042	T211 OBA Inst Shld n HIFI E .+U	CTG.-.-	T211	TP2S0-38	6	Sense +	OBTSHCB1	72	214411 J01	07	
033	T423 1st Shld upp cone .-I	CTG.-.-	T423	TP2S0-38	7	Excitation -	UBTS1CB3	53	214423 P01	01	
034	T423 1st Shld upp cone .-U	CTG.-.-	T423	TP2S0-38	7	Sense -	UBTS1CB3	53	214423 P01	06	
045	T423 1st Shld upp cone .+I	CTG.-.-	T423	TP2S0-38	7	Excitation +	UBTS1CB3	53	214423 P01	02	
044	T423 1st Shld upp cone .+U	CTG.-.-	T423	TP2S0-38	7	Sense +	UBTS1CB3	53	214423 P01	07	
014	T443 2nd Shd upp cone .-I	CTG.-.-	T443	TP2S0-38	8	Excitation -	UBTS2CB1	54	214443 P01	01	
015	T443 2nd Shd upp cone .-U	CTG.-.-	T443	TP2S0-38	8	Sense -	UBTS2CB1	54	214443 P01	06	

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-2 (of 3)

Connector: 211121 J37
Item: CVVUCR
EMC-Category: 2C/Sig H in Cryostat

Function: UFThr. 347.0° (CCH V03 to Cryo SCOE 1)
Location: 33 / CVV I/F CB Top PFM (CVVUCR)

Conn.-Type: 197-011P22-35P (Junct.)
Backshell: ASEB B'Shell 100

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
024	T443 2nd Shd upp cone .+1	CTG.-	-	T443	TP2S0-38	8		Excitation +	UBTS2CB1	54	214443 P01	02	
023	T443 2nd Shd upp cone .+U	CTG.-	-	T443	TP2S0-38	8		Sense +	UBTS2CB1	54	214443 P01	07	
012	T463 3rd Shd upp cone .-1	CTG.-	-	T463	TP2S0-38	9		Excitation -	UBTS3CB1	55	214463 P01	01	
013	T463 3rd Shd upp cone .-U	CTG.-	-	T463	TP2S0-38	9		Sense -	UBTS3CB1	55	214463 P01	06	
022	T463 3rd Shd upp cone .+1	CTG.-	-	T463	TP2S0-38	9		Excitation +	UBTS3CB1	55	214463 P01	02	
021	T463 3rd Shd upp cone .+U	CTG.-	-	T463	TP2S0-38	9		Sense +	UBTS3CB1	55	214463 P01	07	
002	T851 Upper Chain Sens lid .-1	CTG.-	-	T851	TP2S0-38	10		Excitation -	UChT851	56	21T851 P01	08	
003	T851 Upper Chain Sens lid .-U	CTG.-	-	T851	TP2S0-38	10		Sense -	UChT851	56	21T851 P01	10	
011	T851 Upper Chain Sens lid .+1	CTG.-	-	T851	TP2S0-38	10		Excitation +	UChT851	56	21T851 P01	15	
010	T851 Upper Chain Sens lid .+U	CTG.-	-	T851	TP2S0-38	10		Sense +	UChT851	56	21T851 P01	13	
097	T852 Upper Chain Sens lid .-1	CTG.-	-	T852	TP2S0-38	11		Excitation -	UChT852	56	21T852 P01	08	
090	T852 Upper Chain Sens lid .-U	CTG.-	-	T852	TP2S0-38	11		Sense -	UChT852	56	21T852 P01	10	
099	T852 Upper Chain Sens lid .+1	CTG.-	-	T852	TP2S0-38	11		Excitation +	UChT852	56	21T852 P01	15	
098	T852 Upper Chain Sens lid .+U	CTG.-	-	T852	TP2S0-38	11		Sense +	UChT852	56	21T852 P01	13	
071	T853 Upper Chain Sens lid .-1	CTG.-	-	T853	TP2S0-38	12		Excitation -	UChT853	56	21T853 P01	08	
072	T853 Upper Chain Sens lid .-U	CTG.-	-	T853	TP2S0-38	12		Sense -	UChT853	56	21T853 P01	10	
081	T853 Upper Chain Sens lid .+1	CTG.-	-	T853	TP2S0-38	12		Excitation +	UChT853	56	21T853 P01	15	
080	T853 Upper Chain Sens lid .+U	CTG.-	-	T853	TP2S0-38	12		Sense +	UChT853	56	21T853 P01	13	
004	T861 Upper SpatFwSens .-1	CTG.-	-	T861	TP2S0-38	13		Excitation -	USFT861	57	21T861 P01	08	
005	T861 Upper SpatFwSens .-U	CTG.-	-	T861	TP2S0-38	13		Sense -	USFT861	57	21T861 P01	10	
007	T861 Upper SpatFwSens .+1	CTG.-	-	T861	TP2S0-38	13		Excitation +	USFT861	57	21T861 P01	15	
006	T861 Upper SpatFwSens .+U	CTG.-	-	T861	TP2S0-38	13		Sense +	USFT861	57	21T861 P01	13	
-													NC
-													NC
-													NC
-													NC
-													NC
-													NC
-													NC
-													NC
-													NC
-													NC

Handwritten signature

CBA36

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HIP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-3 (of 3)

Connector: 211121 J37

Item: CVVUCR

EMC-Category: 2C/Sig H in Cryostat

Function: UFThr. 347.0° (CCH V03 to Cryo SCOE 1)

Location: 33 / CVV I/F CB Top PFM (CVVUGR)

Conn.-Type: 197-011P22-35P (Junct.)

Backshell: ASEB B'Shell 100

Pin	Signal Designation	Interface-Code Circuit Signal Pos.	Ch. ID	Wiring	Grouping: Shd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										

No Overall Shield at Junction
side

CBA 37

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Project: **HERSCHEL-E**

Connector: 214334 J03

Item: CCHUSFCB4

EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to EGSE

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25S-6C3-630

Backshell: TBD

Pin	Signal Designation	Interface-Code Circuit Signal Pos.	Ch. ID	Wiring	Grouping: Shd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
01	T251 OBA SPIRE E JFP .-I	CTG.- .-	T251	TP250-38		Excitation -	CVWUCR	33	211121 J37	052	
14	T251 OBA SPIRE E JFP .-U	CTG.- .-	T251	TP250-38		Sense -	CVWUCR	33	211121 J37	053	
02	T251 OBA SPIRE E JFP .+I	CTG.- .-	T251	TP250-38		Excitation +	CVWUCR	33	211121 J37	064	
15	T251 OBA SPIRE E JFP .+U	CTG.- .-	T251	TP250-38		Sense +	CVWUCR	33	211121 J37	063	
03	NC										
16	NC										
04	T253 OBA SPIRE E CF .-I	CTG.- .-	T253	TP250-38		Excitation -	CVWUCR	33	211121 J37	091	
17	T253 OBA SPIRE E CF .-U	CTG.- .-	T253	TP250-38		Sense -	CVWUCR	33	211121 J37	092	
05	T253 OBA SPIRE E CF .+I	CTG.- .-	T253	TP250-38		Excitation +	CVWUCR	33	211121 J37	100	
18	T253 OBA SPIRE E CF .+U	CTG.- .-	T253	TP250-38		Sense +	CVWUCR	33	211121 J37	093	
06	NC										
19	NC										
07	T249 OBA SPIRE E JFS .-I	CTG.- .-	T249	TP250-38		Excitation -	CVWUCR	33	211121 J37	073	
20	T249 OBA SPIRE E JFS .-U	CTG.- .-	T249	TP250-38		Sense -	CVWUCR	33	211121 J37	074	
08	T249 OBA SPIRE E JFS .+I	CTG.- .-	T249	TP250-38		Excitation +	CVWUCR	33	211121 J37	083	
21	T249 OBA SPIRE E JFS .+U	CTG.- .-	T249	TP250-38		Sense +	CVWUCR	33	211121 J37	082	
09	NC										
22	NC										
10	T255 OBA SPIRE E +Y-ZIt .-I	CTG.- .-	T255	TP250-38		Excitation -	CVWUCR	33	211121 J37	075	
23	T255 OBA SPIRE E +Y-ZIt .-U	CTG.- .-	T255	TP250-38		Sense -	CVWUCR	33	211121 J37	076	
11	T255 OBA SPIRE E +Y-ZIt .+I	CTG.- .-	T255	TP250-38		Excitation +	CVWUCR	33	211121 J37	085	
24	T255 OBA SPIRE E +Y-ZIt .+U	CTG.- .-	T255	TP250-38		Sense +	CVWUCR	33	211121 J37	084	
12	NC										
25	NC										
13	NC										

OBA38

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214334 P03

Item: CCHUSFCB4

EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to EGSE

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25P-6C3-.630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T251 OBA SPIRE E JFP .-I	CTG.-	-	T251	TP2S0-38			Excitation -	OBAT251	77	21T251 P01	08	
14	T251 OBA SPIRE E JFP .-U	CTG.-	-	T251	TP2S0-38			Sense -	OBAT251	77	21T251 P01	10	
02	T251 OBA SPIRE E JFP .+I	CTG.-	-	T251	TP2S0-38			Excitation +	OBAT251	77	21T251 P01	15	
15	T251 OBA SPIRE E JFP .+U	CTG.-	-	T251	TP2S0-38			Sense +	OBAT251	77	21T251 P01	13	
03	NC												
16	NC												
04	T253 OBA SPIRE E CF .-I	CTG.-	-	T253	TP2S0-38			Excitation -	OBAT253	77	21T253 P01	08	
17	T253 OBA SPIRE E CF .-U	CTG.-	-	T253	TP2S0-38			Sense -	OBAT253	77	21T253 P01	10	
05	T253 OBA SPIRE E CF .+I	CTG.-	-	T253	TP2S0-38			Excitation +	OBAT253	77	21T253 P01	15	
18	T253 OBA SPIRE E CF .+U	CTG.-	-	T253	TP2S0-38			Sense +	OBAT253	77	21T253 P01	13	
06	NC												
19	NC												
07	T249 OBA SPIRE E JFS .-I	CTG.-	-	T249	TP2S0-38			Excitation -	OBAT249	77	21T249 P01	08	
20	T249 OBA SPIRE E JFS .-U	CTG.-	-	T249	TP2S0-38			Sense -	OBAT249	77	21T249 P01	10	
08	T249 OBA SPIRE E JFS .+I	CTG.-	-	T249	TP2S0-38			Excitation +	OBAT249	77	21T249 P01	15	
21	T249 OBA SPIRE E JFS .+U	CTG.-	-	T249	TP2S0-38			Sense +	OBAT249	77	21T249 P01	13	
09	NC												
22	NC												
10	T255 OBA SPIRE E +Y-ZH .-I	CTG.-	-	T255	TP2S0-38			Excitation -	OBAT255	77	21T255 P01	08	
23	T255 OBA SPIRE E +Y-ZH .-U	CTG.-	-	T255	TP2S0-38			Sense -	OBAT255	77	21T255 P01	10	
11	T255 OBA SPIRE E +Y-ZH .+I	CTG.-	-	T255	TP2S0-38			Excitation +	OBAT255	77	21T255 P01	15	
24	T255 OBA SPIRE E +Y-ZH .+U	CTG.-	-	T255	TP2S0-38			Sense +	OBAT255	77	21T255 P01	13	
12	NC												
25	NC												
13	NC												

OBA 39

Astrium GmbH

Project: **HERSCHELE-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214332 J03

Item: CCHUSFCB2

EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to EGSE

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25S-6C3-.630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T207 OBA HIFI E L2-Y+Z. -I	CTG.-	-	T207	TP2S0-38			Excitation -	CVWUCR	33	211121 J37	054	
14	T207 OBA HIFI E L2-Y+Z. -U	CTG.-	-	T207	TP2S0-38			Sense -	CVWUCR	33	211121 J37	055	
02	T207 OBA HIFI E L2-Y+Z. +I	CTG.-	-	T207	TP2S0-38			Excitation +	CVWUCR	33	211121 J37	066	
15	T207 OBA HIFI E L2-Y+Z. +U	CTG.-	-	T207	TP2S0-38			Sense +	CVWUCR	33	211121 J37	065	
03	NC												
16	NC												
04	NC												
17	NC												
05	NC												
18	NC												
06	NC												
19	NC												
07	NC												
20	NC												
08	NC												
21	NC												
09	NC												
22	NC												
10	NC												
23	NC												
11	NC												
24	NC												
12	NC												
25	NC												
13													

OBA40

Astrium GmbH

Project: **HERSCHELE**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214332 P03

Item: CCHUSFCB2

EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to EGSE

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25P-6C3-.630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable						
01	T207 OBA HIFI E L2-Y+Z. -I	CTG.-	-	T207	TP250-38			Excitation -	OBAT207	70	21T207 P01	08	
14	T207 OBA HIFI E L2-Y+Z. -U	CTG.-	-	T207	TP250-38			Sense -	OBAT207	70	21T207 P01	10	
02	T207 OBA HIFI E L2-Y+Z. +I	CTG.-	-	T207	TP250-38			Excitation +	OBAT207	70	21T207 P01	15	
15	T207 OBA HIFI E L2-Y+Z. +U	CTG.-	-	T207	TP250-38			Sense +	OBAT207	70	21T207 P01	13	
03	NC												
16	NC												
04	NC												
17	NC												
05	NC												
18	NC												
06	NC												
19	NC												
07	NC												
20	NC												
08	NC												
21	NC												
09	NC												
22	NC												
10	NC												
23	NC												
11	NC												
24	NC												
12	NC												
25	NC												
13													

OBA 41

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214334 J03
Item: CCHUSFCB4

EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to EGSE
Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25S-6C3-630
Backshell: TBD

Pin	Signal Designation	Interface-Code Circuit Signal Pos.	Ch. ID	Wiring	Grouping: Snd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
01	T251 OBA SPIRE E JFP .-I	CTG.-	T251	TP2S0-38		Excitation -	CVVUCR	33	211121 J37	052	
14	T251 OBA SPIRE E JFP .-U	CTG.-	T251	TP2S0-38		Sense -	CVVUCR	33	211121 J37	053	
02	T251 OBA SPIRE E JFP .+I	CTG.-	T251	TP2S0-38		Excitation +	CVVUCR	33	211121 J37	064	
15	T251 OBA SPIRE E JFP .+U	CTG.-	T251	TP2S0-38		Sense +	CVVUCR	33	211121 J37	063	
03	NC										
16	NC										
04	T253 OBA SPIRE E CF .-I	CTG.-	T253	TP2S0-38		Excitation -	CVVUCR	33	211121 J37	091	
17	T253 OBA SPIRE E CF .-U	CTG.-	T253	TP2S0-38		Sense -	CVVUCR	33	211121 J37	092	
05	T253 OBA SPIRE E CF .+I	CTG.-	T253	TP2S0-38		Excitation +	CVVUCR	33	211121 J37	100	
18	T253 OBA SPIRE E CF .+U	CTG.-	T253	TP2S0-38		Sense +	CVVUCR	33	211121 J37	093	
06	NC										
19	NC										
07	T249 OBA SPIRE E JFS .-I	CTG.-	T249	TP2S0-38		Excitation -	CVVUCR	33	211121 J37	073	
20	T249 OBA SPIRE E JFS .-U	CTG.-	T249	TP2S0-38		Sense -	CVVUCR	33	211121 J37	074	
08	T249 OBA SPIRE E JFS .+I	CTG.-	T249	TP2S0-38		Excitation +	CVVUCR	33	211121 J37	083	
21	T249 OBA SPIRE E JFS .+U	CTG.-	T249	TP2S0-38		Sense +	CVVUCR	33	211121 J37	082	
09	NC										
22	NC										
10	T255 OBA SPIRE E +Y-ZH .-I	CTG.-	T255	TP2S0-38		Excitation -	CVVUCR	33	211121 J37	075	
23	T255 OBA SPIRE E +Y-ZH .-U	CTG.-	T255	TP2S0-38		Sense -	CVVUCR	33	211121 J37	076	
11	T255 OBA SPIRE E +Y-ZH .+I	CTG.-	T255	TP2S0-38		Excitation +	CVVUCR	33	211121 J37	085	
24	T255 OBA SPIRE E +Y-ZH .+U	CTG.-	T255	TP2S0-38		Sense +	CVVUCR	33	211121 J37	084	
12	NC										
25	NC										
13	NC										

OBA42

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214334 P03

Item: CCHUSFCB4

EMC-Category: 2C/Sig H in Cryostat

Function: OBA T Sensors to EGSE

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25P-6C3-.630

Backshell: TBD

Pin	Signal Designation	Interface-Circuit	Signal	Pos.	Ch. ID	Wiring	Shd	Cable	Twist	Grouping:	Comment	Target-Item	Location	Connector	Pin	New
01	T251 OBA SPIRE E JFP .-I	CTG.-	-	T251	TP2S0-38						Excitation -	OBAT251	77	21T251 P01	08	
14	T251 OBA SPIRE E JFP .-U	CTG.-	-	T251	TP2S0-38						Sense -	OBAT251	77	21T251 P01	10	
02	T251 OBA SPIRE E JFP .+I	CTG.-	-	T251	TP2S0-38						Excitation +	OBAT251	77	21T251 P01	15	
15	T251 OBA SPIRE E JFP .+U	CTG.-	-	T251	TP2S0-38						Sense +	OBAT251	77	21T251 P01	13	
03	NC															
16	NC															
04	T253 OBA SPIRE E CF .-I	CTG.-	-	T253	TP2S0-38						Excitation -	OBAT253	77	21T253 P01	08	
17	T253 OBA SPIRE E CF .-U	CTG.-	-	T253	TP2S0-38						Sense -	OBAT253	77	21T253 P01	10	
05	T253 OBA SPIRE E CF .+I	CTG.-	-	T253	TP2S0-38						Excitation +	OBAT253	77	21T253 P01	15	
18	T253 OBA SPIRE E CF .+U	CTG.-	-	T253	TP2S0-38						Sense +	OBAT253	77	21T253 P01	13	
06	NC															
19	NC															
07	T249 OBA SPIRE E JFS .-I	CTG.-	-	T249	TP2S0-38						Excitation -	OBAT249	77	21T249 P01	08	
20	T249 OBA SPIRE E JFS .-U	CTG.-	-	T249	TP2S0-38						Sense -	OBAT249	77	21T249 P01	10	
08	T249 OBA SPIRE E JFS .+I	CTG.-	-	T249	TP2S0-38						Excitation +	OBAT249	77	21T249 P01	15	
21	T249 OBA SPIRE E JFS .+U	CTG.-	-	T249	TP2S0-38						Sense +	OBAT249	77	21T249 P01	13	
09	NC															
22	NC															
10	T255 OBA SPIRE E +Y-ZIt .-I	CTG.-	-	T255	TP2S0-38						Excitation -	OBAT255	77	21T255 P01	08	
23	T255 OBA SPIRE E +Y-ZIt .-U	CTG.-	-	T255	TP2S0-38						Sense -	OBAT255	77	21T255 P01	10	
11	T255 OBA SPIRE E +Y-ZIt .+I	CTG.-	-	T255	TP2S0-38						Excitation +	OBAT255	77	21T255 P01	15	
24	T255 OBA SPIRE E +Y-ZIt .+U	CTG.-	-	T255	TP2S0-38						Sense +	OBAT255	77	21T255 P01	13	
12	NC															
25	NC															
13	NC															

OBA 43

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214411 J01

Item: OBTSHC B1

EMC-Category: 2C/Sig H in Cryostat

Function: HIFI Instr Shd T211 Sensors to EGSE

Location: 72 / OB upper Side

Conn.-Type: MWDM2L-09P-6C3-630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T211 OBA Inst Shd n HIFI E . -I	CTG.-	-	T211	TP250-38	1	1	Excitation -	CVVUCR	33	211121 J37	031	
06	T211 OBA Inst Shd n HIFI E . -U	CTG.-	-	T211	TP250-38	1	1	Sense -	CVVUCR	33	211121 J37	032	
02	T211 OBA Inst Shd n HIFI E . +I	CTG.-	-	T211	TP250-38	1	1	Excitation +	CVVUCR	33	211121 J37	043	
07	T211 OBA Inst Shd n HIFI E . +U	CTG.-	-	T211	TP250-38	1	1	Sense +	CVVUCR	33	211121 J37	042	
03	NC												
08	NC												
04	NC												
09	NC												
05	NC												

OBA44

Astrium GmbH
Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-1 (of 1)

Connector: 214411 P01
Item: OBTSHCB1

Function: HIFI Instr Shd T211 Sensors to EGSE
Location: 72 / OB upper Side

Conn.-Type: MWD2L-09S-6C3-630
Backshell: TBD

EMC-Category: 2C/Sig H in Cryostat

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T211 OBA Inst Shld n HIFI E . -1	CTG.-	-	T211	TP2S0-38			Excitation -	OBIST211	70	21T211 P01	08	
06	T211 OBA Inst Shld n HIFI E . -U	CTG.-	-	T211	TP2S0-38			Sense -	OBIST211	70	21T211 P01	10	
02	T211 OBA Inst Shld n HIFI E . +1	CTG.-	-	T211	TP2S0-38			Excitation +	OBIST211	70	21T211 P01	15	
07	T211 OBA Inst Shld n HIFI E . +U	CTG.-	-	T211	TP2S0-38			Sense +	OBIST211	70	21T211 P01	13	
03	NC												
08	NC												
04	NC												
09	NC												
05	NC												

CBA 45

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214423 J01

Item: UBTS1CB3

EMC-Category: 2C/Sig H in Cryostat

Function: T423 1st Shd UCFS to EGSE 1
Location: 53 / on Thermal Shield 1 (outer)

Conn.-Type: MWDM2L-09P-6C3-630
Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
01	T423 1st Shld upp cone . -I	CTG.-	-	T423	TP2S0-38	1	1	Excitation -	T4231stSh	53	21T423 P01	08	
06	T423 1st Shld upp cone . -U	CTG.-	-	T423	TP2S0-38	1	1	Sense -	T4231stSh	53	21T423 P01	10	
02	T423 1st Shld upp cone . +I	CTG.-	-	T423	TP2S0-38	1	1	Excitation +	T4231stSh	53	21T423 P01	15	
07	T423 1st Shld upp cone . +U	CTG.-	-	T423	TP2S0-38			Sense +	T4231stSh	53	21T423 P01	13	
03	NC							Sensors from lower Cone tbd !!!					
08	NC												
04	NC												
09	NC							Sensors from lower Cone tbd !!!					
05	NC												
.								Sensors from lower Cone tbd !!!					

OBA 46

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214423 P01

Item: UBTS1CB3

EMC-Category: 2C/Sig H in Cryostat

Function: T423 1st Shd UCFS to EGSE 1

Location: 53 / on Thermal Shield 1 (outer)

Conn.-Type: MWDM2L-09S-6C3-630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T423 1st Shld upp cone . -I	CTG.	-	T423	TP2S0-38			Excitation -	CVVUCR	33	211121 J37	033	
06	T423 1st Shld upp cone . -U	CTG.	-	T423	TP2S0-38			Sense -	CVVUCR	33	211121 J37	034	
02	T423 1st Shld upp cone . +I	CTG.	-	T423	TP2S0-38			Excitation +	CVVUCR	33	211121 J37	045	
07	T423 1st Shld upp cone . +U	CTG.	-	T423	TP2S0-38			Sense +	CVVUCR	33	211121 J37	044	
03	NC							Sensors from lower Cone tbd !!!					
08	NC												
04	NC												
09	NC												
05	NC							Sensors from lower Cone tbd !!!					
.	NC							Sensors from lower Cone tbd !!!					

OBA 47

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214443 J01

Item: UBTSZCB1

EMC-Category: 2C/Sig H in Cryostat

Function: 2nd Shd UCSS to EGSE 1

Location: 54 / on Thermal Shield 2 (mid)

Conn.-Type: MWDM2L-09P-6C3-630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T443 2nd Shd upp cone .-I	CTG.-	-	T443	TP2S0-38	1	1	Excitation -	T4432ndSh	54	21T443 P01	08	
06	T443 2nd Shd upp cone .-U	CTG.-	-	T443	TP2S0-38	1	1	Sense -	T4432ndSh	54	21T443 P01	10	
02	T443 2nd Shd upp cone .+I	CTG.-	-	T443	TP2S0-38	1	1	Excitation +	T4432ndSh	54	21T443 P01	15	
07	T443 2nd Shd upp cone .+U	CTG.-	-	T443	TP2S0-38	1	1	Sense +	T4432ndSh	54	21T443 P01	13	
03	NC							Sensors from lower Cone tbd !!!					
08	NC												
04	NC												
09	NC							Sensors from lower Cone tbd !!!					
05	NC							Sensors from lower Cone tbd !!!					

CBA48

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214443 P01

Item: UBTS2CB1

EMC-Category: 2C/Sig H in Cryostat

Function: 2nd Shd UCSS to EGSE 1

Location: 54 / on Thermal Shield 2 (mid)

Conn.-Type: MWDM2L-09S-6C3-630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T443 2nd Shd upp cone .-I	CTG.-	-	T443	TP2S0-38			Excitation -	CVVUCR	33	211121 J37	014	
06	T443 2nd Shd upp cone .-U	CTG.-	-	T443	TP2S0-38			Sense -	CVVUCR	33	211121 J37	015	
02	T443 2nd Shd upp cone .+I	CTG.-	-	T443	TP2S0-38			Excitation +	CVVUCR	33	211121 J37	024	
07	T443 2nd Shd upp cone .+U	CTG.-	-	T443	TP2S0-38			Sense +	CVVUCR	33	211121 J37	023	
03	NC							Sensors from lower Cone tbd !!!					
08	NC												
04	NC												
09	NC							Sensors from lower Cone tbd !!!					
05	NC							Sensors from lower Cone tbd !!!					

OBA49

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: **HP-2-ASED-IC-0008-EQ**
 Issue: **1.1** Date: **20.09.2003**
 Sheet: **PAL-1 (of 1)**

Connector: **214463 J01**
 Item: **UBTS3CB1**

Function: **3rd Shd UCTS to EGSE 1**
 Location: **55 / on Thermal Shield 3 (inner)**

Conn.-Type: **MWDM2L-09S-6C3-630**
 Backshell: **TBD**

EMC-Category: **2C/Sig H in Cryostat**

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T463 3rd Shd upp cone . -J	CTG.-	.	T463	TP2S0-38	1		Excitation -	T4633rddSh	55	21T463 P01	08	
06	T463 3rd Shd upp cone . -U	CTG.-	.	T463	TP2S0-38	1		Sense -	T4633rddSh	55	21T463 P01	10	
02	T463 3rd Shd upp cone . +I	CTG.-	.	T463	TP2S0-38	1		Excitation +	T4633rddSh	55	21T463 P01	15	
07	T463 3rd Shd upp cone . +U	CTG.-	.	T463	TP2S0-38	1		Sense +	T4633rddSh	55	21T463 P01	13	
03	NC							Sensors from lower Cone tbd !!!					
08	NC												
04	NC												
09	NC							Sensors from lower Cone tbd !!!					
05	NC							Sensors from lower Cone tbd !!!					

OBA.50

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214463 P01
Item: UBTS3CB1

Function: 3rd Shd UCTS to EGSE 1
Location: 55 / on Thermal Shield 3 (inner)

Conn.-Type: MWDML-09P-6C3-630
Backshell: TBD

EMC-Category: 2C/Sig H in Cryostat

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
01	T463 3rd Shd upp cone .-I	CTG.-	-	T463	TP2S0-38			Excitation -	CVVUCR	33	211121 J37	012	
06	T463 3rd Shd upp cone .-U	CTG.-	-	T463	TP2S0-38			Sense -	CVVUCR	33	211121 J37	013	
02	T463 3rd Shd upp cone .+I	CTG.-	-	T463	TP2S0-38			Excitation +	CVVUCR	33	211121 J37	022	
07	T463 3rd Shd upp cone .+U	CTG.-	-	T463	TP2S0-38			Sense +	CVVUCR	33	211121 J37	021	
03	NC							Sensors from lower Cone tbd !!!					
08	NC												
04	NC												
09	NC							Sensors from lower Cone tbd !!!					
05	NC							Sensors from lower Cone tbd !!!					

OBAS1

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 21T851 P01

Item: UChT851

EMC-Category: 2C/Sig H in Cryostat

Function: T851 UpperChain Sens flying lead

Location: 56 / on upper chains

Note: Signals of different EMC classes are routed via this Connector

Conn.-Type: NDDM15PN-BN460

Backshell: NVA

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Shd Cable Twist	Comment	Target-item	Location	Connector	Pin	New
		Circuit	Signal									
08	T851 Upper Chain Sens fld. -I	CTG.-	-	T851	TP2S0-38		Excitation -	CVVUCR	33	211121 J37	002	
01	NC											
09	NC											
02	NC											
10	T851 Upper Chain Sens fld. -U	CTG.-	-	T851	TP2S0-38		Sense -	CVVUCR	33	211121 J37	003	
03	NC											
11	NC											
04	NC											
12	NC											
05	NC											
13	T851 Upper Chain Sens fld. +U	CTG.-	-	T851	TP2S0-38		Sense +	CVVUCR	33	211121 J37	010	
06	NC											
14	NC											
07	NC											
15	T851 Upper Chain Sens fld. +I	CTG.-	-	T851	TP2S0-38		Excitation +	CVVUCR	33	211121 J37	011	

OBAS2

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 21T852 P01

Item: UChT852

EMC-Category: 2C/Sig H in Cryostat

Function: T852 UpperChain Sens flying lead

Location: 56 / on upper chains

Note: Signals of different EMC classes are routed via this Connector

Conn.-Type: NDDM15PN-BN460

Backshell: N/A

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Shd	Cable	Twist	Grouping:	Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal												
08	T852 Upper Chain Sens fld. -I	CTG.-	-	T852	TP250-38					Excitation -	CVVUCR	33	211121 J37	097	
01	NC														
09	NC														
02	NC														
10	T852 Upper Chain Sens fld. -U	CTG.-	-	T852	TP250-38					Sense -	CVVUCR	33	211121 J37	090	
03	NC														
11	NC														
04	NC														
12	NC														
05	NC														
13	T852 Upper Chain Sens fld. +U	CTG.-	-	T852	TP250-38					Sense +	CVVUCR	33	211121 J37	098	
06	NC														
14	NC														
07	NC														
15	T852 Upper Chain Sens fld. +I	CTG.-	-	T852	TP250-38					Excitation +	CVVUCR	33	211121 J37	099	

OBAS3

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 21T853 P01

Item: UChT853

EMC-Category: 2C/Sig H in Cryostat

Function: T853 UpperChain Sens flying lead

Location: 56 / on upper chains

Note: Signals of different EMC classes are routed via this Connector

Grouping:

Conn.-Type: NDDM15PN-BN460

Backshell: N/A

Pin	Signal Designation	Interface-Code Circuit Signal Pos.	Ch. ID	Wiring	Shd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
08	T853 Upper Chain Sens fld. -I	CTG.- -	T853	TP2S0-38		Excitation -	CVVUCR	33	211121 J37	071	
01	NC										
09	NC										
02	NC										
10	T853 Upper Chain Sens fld. -U	CTG.- -	T853	TP2S0-38		Sense -	CVVUCR	33	211121 J37	072	
03	NC										
11	NC										
04	NC										
12	NC										
05	NC										
13	T853 Upper Chain Sens fld. +U	CTG.- -	T853	TP2S0-38		Sense +	CVVUCR	33	211121 J37	080	
06	NC										
14	NC										
07	NC										
15	T853 Upper Chain Sens fld. +I	CTG.- -	T853	TP2S0-38		Excitation +	CVVUCR	33	211121 J37	081	

CBA54

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0006-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 21T861 P01

Item: USFT861

EMC-Category: 2C/Sig H in Cryostat

Function: T861 Upper SpatFwSens

Location: 57 / on upper spat framework

Note: Signals of different EMC classes are routed via this Connector Grouping:

Conn.-Type: NDDM15PN-BN460

Backshell: N/A

Pin	Signal Designation	Interface-Code Circuit Signal Pos.	Ch. ID	Wiring	Shd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
08	T861 Upper SpatFwSens .-I	CTG.- -	T861	TP2S0-38		Excitation -	CVVUCR	33	211121 J37	004	
09	NC										
10	T861 Upper SpatFwSens .-U	CTG.- -	T861	TP2S0-38		Sense -	CVVUCR	33	211121 J37	005	
11	NC										
12	NC										
13	T861 Upper SpatFwSens .+U	CTG.- -	T861	TP2S0-38		Sense +	CVVUCR	33	211121 J37	006	
14	NC										
15	T861 Upper SpatFwSens .+I	CTG.- -	T861	TP2S0-38		Excitation +	CVVUCR	33	211121 J37	007	

ORASS

Doc.No.: HP-2-ASED-IC-0008-EQM
Issue: 1.1 – Date: 20.09.2003

OBA56

EQM-OBA- Connector Top-Ring
211121-J38
Internal Harness

Astrium GmbH

Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 3)

Connector: 211121 J38
Item: CVWUCR

EMC-Category: 2C/Sig H in Cryostat

Function: UThr. 353.2° (CCH V04 to Cryo SCOE 2)
Location: 33 / CVV I/F CB Top PFM (CVWUCR)

Conn.-Type: 197-011P22-35P (Junct.)
Backshell: ASEB B'Shell 100

Pin	Signal Designation	Interface-Code Circuit Signal Pos.	Ch. ID	Wiring	Grouping: Shd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
-	A204 OBA Accelerom. . SIG	CAG.-	A204	021SS-38	1		CCHUSFCB3	57	214333 J04	05	
-	A204 OBA Accelerom. . SIG2	CAG.-	A204	021SS-38	1	Cable Shield to Con Housing	CCHUSFCB3	57	214333 J04	18	
-	A204 OBA Accelerom. . SHD	CAG.-	A204	021SS-38	1		CCHUSFCB3	57	214333 J04	CH	
-	A205 OBA Accelerom. . SIG	CAG.-	A205	021SS-38	2		CCHUSFCB3	57	214333 J04	03	
-	A205 OBA Accelerom. . SIG2	CAG.-	A205	021SS-38	2	Cable Shield to Con Housing	CCHUSFCB3	57	214333 J04	16	
-	A205 OBA Accelerom. . SHD	CAG.-	A205	021SS-38	2		CCHUSFCB3	57	214333 J04	CH	
-	A206 OBA Accelerom. . SIG	CAG.-	A206	021SS-38	3		CCHUSFCB3	57	214333 J04	01	
-	A206 OBA Accelerom. . SIG2	CAG.-	A206	021SS-38	3	Cable Shield to Con Housing	CCHUSFCB3	57	214333 J04	14	
-	A206 OBA Accelerom. . SHD	CAG.-	A206	021SS-38	3		CCHUSFCB3	57	214333 J04	CH	
-	A201 OBA Accelerom. . SIG	CAG.-	A201	021SS-38	4		CCHUSFCB4	57	214334 J04	05	
-	A201 OBA Accelerom. . SIG2	CAG.-	A201	021SS-38	4	Cable Shield to Con Housing	CCHUSFCB4	57	214334 J04	18	
-	A201 OBA Accelerom. . SHD	CAG.-	A201	021SS-38	4		CCHUSFCB4	57	214334 J04	CH	
-	A202 OBA Accelerom. . SIG	CAG.-	A202	021SS-38	5		CCHUSFCB4	57	214334 J04	03	
-	A202 OBA Accelerom. . SIG2	CAG.-	A202	021SS-38	5	Cable Shield to Con Housing	CCHUSFCB4	57	214334 J04	16	
-	A202 OBA Accelerom. . SHD	CAG.-	A202	021SS-38	5		CCHUSFCB4	57	214334 J04	CH	
-	A203 OBA Accelerom. . SIG	CAG.-	A203	021SS-38	6		CCHUSFCB4	57	214334 J04	01	
-	A203 OBA Accelerom. . SIG2	CAG.-	A203	021SS-38	6	Cable Shield to Con Housing	CCHUSFCB4	57	214334 J04	14	
-	A203 OBA Accelerom. . SHD	CAG.-	A203	021SS-38	6		CCHUSFCB4	57	214334 J04	CH	
-	A421 1st Shd Accelerom. . SIG	CAG.-	A421	021SS-38	7		UBTSTCB1	53	214425 P01	01	
-	A421 1st Shd Accelerom. . SIG2	CAG.-	A421	021SS-38	7	Cable Shield to Con Housing	UBTSTCB1	53	214425 P01	01	
-	A421 1st Shd Accelerom. . SHD	CAG.-	A421	021SS-38	7		UBTSTCB1	53	214425 P01	01	
-	A422 1st Shd Accelerom. . SIG	CAG.-	A422	021SS-38	8		UBTSTCB1	53	214425 P01	01	
-	A422 1st Shd Accelerom. . SIG2	CAG.-	A422	021SS-38	8	Cable Shield to Con Housing	UBTSTCB1	53	214425 P01	01	
-	A422 1st Shd Accelerom. . SHD	CAG.-	A422	021SS-38	8		UBTSTCB1	53	214425 P01	01	
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										
-	NC										

OBA57

Astrium GmbH
Project: HERSCHEL-E

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-3 (of 3)

Connector: 211121 J38
Item: CVUUCR
EMC-Category: 2C/Sig H in Cryostat

Function: UFThr. 353.2° (CCH V04 to Cyo SCOE 2)
Location: 33 / CVV I/F CB Top PFM (CVUUCR)

Conn.-Type: 197-011P22-35P (Junct.)
Backshell: ASEB B'Shell 100

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Pos.	Shd						
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												

CBA59

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008:EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214333 J04

Item: CCHUSFCB3

EMC-Category: 2C/Sig H in Cryostat

Function: OBA Acc. To EGSE (DCE22)

Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25S-6C3-.630

Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.			Shd	Cable Twist						
01	A206 OBA Accelerom. . SIG	CAG.-	-	A206	021SS-38			Cable Shield to Con Housing	CVVUCR	33	211121 J38	-	
14	A206 OBA Accelerom. . SIG2	CAG.-	-	A206	021SS-38				CVVUCR	33	211121 J38	-	
CH	A206 OBA Accelerom. . SHD	CAG.-	-	A206	021SS-38				CVVUCR	33	211121 J38	-	
02	NC												
15	NC												
03	A205 OBA Accelerom. . SIG	CAG.-	-	A205	021SS-38			Cable Shield to Con Housing	CVVUCR	33	211121 J38	-	
16	A205 OBA Accelerom. . SIG2	CAG.-	-	A205	021SS-38				CVVUCR	33	211121 J38	-	
CH	A205 OBA Accelerom. . SHD	CAG.-	-	A205	021SS-38				CVVUCR	33	211121 J38	-	
04	NC												
17	NC												
05	A204 OBA Accelerom. . SIG	CAG.-	-	A204	021SS-38			Cable Shield to Con Housing	CVVUCR	33	211121 J38	-	
18	A204 OBA Accelerom. . SIG2	CAG.-	-	A204	021SS-38				CVVUCR	33	211121 J38	-	
CH	A204 OBA Accelerom. . SHD	CAG.-	-	A204	021SS-38				CVVUCR	33	211121 J38	-	
06	NC												
19	NC												
07	NC												
20	NC												
08	NC												
21	NC												
09	NC												
22	NC												
10	NC												
23	NC												
11	NC												
24	NC												
12	NC												
25	NC												
13	NC												

Not yet allocated

Not yet allocated

OBA 60

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214333 P04

Item: CCHUSFCB3

EMC-Category: 2C/Sig H in Cryostat

Function: OBA Acc. To EGSE (DCE22)
Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25P-6C3-.630
Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping: Shd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.									
01	A206 OBA Accelerom. . SIG	CAG.-	-	A206	021SS-38		Cable Shield to Con Housing	OBA206	70	21A206 P01	01	
14	A206 OBA Accelerom. . SIG2	CAG.-	-	A206	021SS-38			OBA206	70	21A206 P01	01	
CH	A206 OBA Accelerom. . SHD	CAG.-	-	A206	021SS-38			OBA206	70	21A206 P01	CH	
02	NC											
15	NC											
03	A205 OBA Accelerom. . SIG	CAG.-	-	A205	021SS-38		Cable Shield to Con Housing	OBA205	70	21A205 P01	01	
16	A205 OBA Accelerom. . SIG2	CAG.-	-	A205	021SS-38			OBA205	70	21A205 P01	01	
CH	A205 OBA Accelerom. . SHD	CAG.-	-	A205	021SS-38			OBA205	70	21A205 P01	CH	
04	NC											
17	NC											
05	A204 OBA Accelerom. . SIG	CAG.-	-	A204	021SS-38		Cable Shield to Con Housing	OBA204	70	21A204 P01	01	
18	A204 OBA Accelerom. . SIG2	CAG.-	-	A204	021SS-38			OBA204	70	21A204 P01	01	
CH	A204 OBA Accelerom. . SHD	CAG.-	-	A204	021SS-38			OBA204	70	21A204 P01	CH	
06	NC											
19	NC											
07	NC											
20	NC											
08	NC											
21	NC											
09	NC											
22	NC											
10	NC											
23	NC											
11	NC											
24	NC											
12	NC											
25	NC											
13	NC											

OBA61

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214334 J04
Item: CCHUSFCB4
EMC-Category: 2C/Sig H in Cryostat

Function: OBA Acceler. to EGSE
Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25S-6C3-630
Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal			Shd	Cable Twist						
01	A203 OBA Accelerom. . SIG	CAG.-	-	A203	021SS-38			Cable Shield to Con Housing	CVVUCR	33	211121 J38	-	
14	A203 OBA Accelerom. . SIG2	CAG.-	-	A203	021SS-38				CVVUCR	33	211121 J38	-	
CH	A203 OBA Accelerom. . SHD	CAG.-	-	A203	021SS-38				CVVUCR	33	211121 J38	-	
02	NC												
15	NC												
03	A202 OBA Accelerom. . SIG	CAG.-	-	A202	021SS-38			Cable Shield to Con Housing	CVVUCR	33	211121 J38	-	
16	A202 OBA Accelerom. . SIG2	CAG.-	-	A202	021SS-38				CVVUCR	33	211121 J38	-	
CH	A202 OBA Accelerom. . SHD	CAG.-	-	A202	021SS-38				CVVUCR	33	211121 J38	-	
04	NC												
17	NC												
05	A201 OBA Accelerom. . SIG	CAG.-	-	A201	021SS-38			Cable Shield to Con Housing	CVVUCR	33	211121 J38	-	
18	A201 OBA Accelerom. . SIG2	CAG.-	-	A201	021SS-38				CVVUCR	33	211121 J38	-	
CH	A201 OBA Accelerom. . SHD	CAG.-	-	A201	021SS-38				CVVUCR	33	211121 J38	-	
06	NC												
19	NC												
07	NC												
20	NC												
08	NC												
21	NC												
09	NC												
22	NC												
10	NC												
23	NC												
11	NC												
24	NC												
12	NC												
25	NC												
13	NC												

OBA 62

Astrium GmbH

Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Connector: 214334 P04
Item: CCHUSFCB4
EMC-Category: 2C/Sig H in Cryostat

Function: OBA Acceler. to EGSE
Location: 57 / on upper spat framework

Conn.-Type: MWDM2L-25P-6C3-630
Backshell: TBD

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping: Shd Cable Twist	Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.									
01	A203 OBA Accelerom. .SIG	CAG.-	-	A203	021SS-38			OBA203	70	21A203 P01	01	
14	A203 OBA Accelerom. .SIG2	CAG.-	-	A203	021SS-38		Cable Shield to Con Housing	OBA203	70	21A203 P01	01	
CH	A203 OBA Accelerom. .SHD	CAG.-	-	A203	021SS-38			OBA203	70	21A203 P01	CH	
02	NC											
15	NC											
03	A202 OBA Accelerom. .SIG	CAG.-	-	A202	021SS-38			OBA202	70	21A202 P01	01	
16	A202 OBA Accelerom. .SIG2	CAG.-	-	A202	021SS-38			OBA202	70	21A202 P01	01	
CH	A202 OBA Accelerom. .SHD	CAG.-	-	A202	021SS-38		Cable Shield to Con Housing	OBA202	70	21A202 P01	CH	
04	NC											
17	NC											
05	A201 OBA Accelerom. .SIG	CAG.-	-	A201	021SS-38			OBA201	70	21A201 P01	01	
18	A201 OBA Accelerom. .SIG2	CAG.-	-	A201	021SS-38			OBA201	70	21A201 P01	01	
CH	A201 OBA Accelerom. .SHD	CAG.-	-	A201	021SS-38		Cable Shield to Con Housing	OBA201	70	21A201 P01	CH	
06	NC											
19	NC											
07	NC											
20	NC											
08	NC											
21	NC											
09	NC											
22	NC											
10	NC											
23	NC											
11	NC											
24	NC											
12	NC											
13	NC											

OBA63

Astrium GmbH

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
Issue: 1.1 Date: 20.09.2003
Sheet: PAL-1 (of 1)

Project: **HERSCHEL-E**

Connector: 214425 J01

Item: UBTS/CB1

EMC-Category: 2C/Sig H in Cryostat

Function: ACC 1st Shd UCFS to EGSE 2
Location: 53 / on Thermal Shield 1 (outer)

Conn.-Type: MWDM2L-09S-6C3-630

Backshell: TBD

Pin	Signal Designation	Interface-Code Circuit Signal Pos.	Ch. ID	Wiring	Shd Cable Twist	Grouping:	Comment	Target-Item	Location	Connector	Pin	New
-	A421 1st Shd Accelerom. . SIG	CAG.- -	A421	021SS-38	1			A421 1stSh	53	21A421 P01	01	
-	CABLE SHIELD	SHD										
-	A422 1st Shld Accelerom. . SIG	CAG.- -	A422	021SS-38	2			A422 1stSh	53	21A422 P01	01	
-	CABLE SHIELD	SHD										
-	NC											
-	NC											
-	NC											
-	NC											
-	NC											

OBA64

Astrium GmbH
 Project: **HERSCHEL-E**

Pin Allocation List (Harness)

Doc.No.: HP-2-ASED-IC-0008-EQ
 Issue: 1.1 Date: 20.09.2003
 Sheet: PAL-1 (of 1)

Connector: 214425 P01
Item: UBTS1CB1

Function: ACC 1st Shd UCFS to EGSE 2
Location: 53 / on Thermal Shield 1 (outer)

Conn.-Type: MWDM2L-09P-6C3-630
Backshell: TBD

EMC-Category: 2C/Sig H in Cryostat

Pin	Signal Designation	Interface-Code		Ch. ID	Wiring	Grouping:		Comment	Target-Item	Location	Connector	Pin	New
		Circuit	Signal Pos.			Shd	Cable Twist						
01	A421 1st Shd Accelerom. SIG	CAG.-	-	A421	021SS-38	1			CVVUCR	33	211121 J38	-	
-	CABLE SHIELD	SHD											
01	A422 1st Shd Accelerom. SIG	CAG.-	-	A422	021SS-38	2			CVVUCR	33	211121 J38	-	
-	CABLE SHIELD	SHD											
-	NC												
-	NC												
-	NC												
-	NC												
-	NC												

OBAGS

END OF DOCUMENT

	Name	Dep./Comp.		Name	Dep./Comp.
	Alberti von Mathias Dr.	AOE22		Stritter Rene	AED11
	Alo Hakan	OTN/TP 45		Tenhaeff Dieter	AOE22
	Barlage Bernhard	AED11		Thörmer Klaus-Horst Dr.	OTN/AED65
	Bayer Thomas	AET52		Wagner Klaus	AOE23
	Faas Horst	AEA65		Wietbrock, Walter	AET12
	Fehringer Alexander	AOE13		Wöhler Hans	AOE22
	Frey Albrecht	AED422			
	Gerner Willi	AED11			
X	Grasl Andreas	OTN/AET52			
	Grasshoff Brigitte	AET12	X	Alcatel	ASP
	Hauser Armin	AOE23	X	ESA/ESTEC	ESA
	Hinger Jürgen	AOE23			
	Hohn Rüdiger	AET52		Instruments:	
	Huber Johann	AOA4		MPE (PACS)	MPE
X	Hund Walter	ASE4A		RAL (SPIRE)	RAL
	Idler Siegmund	AED432		SRON (HIFI)	SRON
	Ivány von András	FAE22			
	Jahn Gerd Dr.	AOE23		Subcontractors:	
	Kalde Clemens	APE3		Air Liquide, Space Department	AIR
X	Kameter Rudolf	OTN/AET52		Air Liquide, Space Department	AIRS
	Kettner Bernhard	AOE22		Air Liquide, Orbital System	AIRT
X	Knoblauch August	AET32		Alcatel Bell Space	ABSP
	Koelle Markus	AET22		Astrium Sub-Subsyst. & Equipment	ASSE
X	Kroeker Jürgen	AED65		Austrian Aerospace	AAE
	Kunz Oliver Dr.	AOE23		Austrian Aerospace	AAEM
	Lamprecht Ernst	OTN/ASI21		APCO Technologies S. A.	APCO
X	Lang Jürgen	ASE4A		Bieri Engineering B. V.	BIER
	Langfermann Michael	AET52		BOC Edwards	BOCE
	Mack Paul	OTN/AET52		Dutch Space Solar Arrays	DSSA
	Muhl Eckhard	OTN/AET52		EADS CASA Espacio	CASA
	Pastorino Michel	ASPI Resid.		EADS CASA Espacio	ECAS
	Peitzker Helmut	AED65		EADS Space Transportation	ASIP
	Peltz Heinz-Willi	AET42		Eurocopter	ECD
	Pietroboni Karin	AED65		HTS AG Zürich	HTSZ
	Platzer Wilhelm	AED22		Linde	LIND
	Puttlitz Joachim	OTN/AET52		Patria New Technologies Oy	PANT
	Rebholz Reinhold	AET52		Phoenix, Volkmarsen	PHOE
	Reuß Friedhelm	AED62		Prototech AS	PROT
	Rühe Wolfgang	AED65		QMC Instruments Ltd.	QMC
	Runge Axel	OTN/AET52		Rembe, Brilon	REMB
	Sachsse Bernt	AED21		Rosemount Aerospace GmbH	ROSE
	Schink Dietmar	AED422		RYMSA, Radiación y Microondas S.A.	RYM
	Schlosser Christian	OTN/AET52		SENER Ingenieria SA	SEN
	Schmidt Rudolf	FAE22		Stöhr, Königsbrunn	STOE
	Schweickert Gunn	AOE22		Terma A/S, Birkerød	TER
	Stauss Oliver	AOE13			
X	Steininger Eric	AED422			