

<b>SPIRE</b>	<b>Project Document</b>	<b>Ref</b>	<b>SPIRE-RAL-DOC-001971</b>
		<b>Issue</b>	<b>4.3</b>
	<b>SPIRE BUILD STATUS (ABCIDL)</b>	<b>Date</b>	<b>11<sup>th</sup> April 2005</b>
			<b>Page 1 of 9</b>
<i>Printed copies of this document are uncontrolled.</i>			

<b>SUBJECT:</b>	<b>AS BUILT CONFIGURATION ITEM DATA LIST BUILD STATUS</b>
<b>PREPARED BY:</b>	<b>Dave Smith</b>
<b>MODIFIED BY</b>	<b>E C Sawyer &amp; E A Clark</b>
<b>DOCUMENT No:</b>	<b>SPIRE-RAL-PRJ-001971</b>

<b>APPROVED BY:</b>	<b>Name</b>	<b>Signature &amp; Date</b>
<b>Instrument Development Manager</b>	<b>Eric Sawyer</b>	
<b>AIV Manager</b>	<b>Dave Smith</b>	
<b>Systems Engineer</b>	<b>Douglas. Griffin</b>	
<b>Product Assurance Manager</b>	<b>Eric Clark</b>	

**Distribution**

**Live Link**

<b>SPIRE</b>	<b>Project Document</b>	<b>Ref</b>	<b>SPIRE-RAL-DOC-001971</b>
		<b>Issue</b>	<b>4.3</b>
	<b>SPIRE BUILD STATUS (ABCIDL)</b>	<b>Date</b>	<b>11<sup>th</sup> April 2005</b>
			<b>Page 2 of 9</b>
<i>Printed copies of this document are uncontrolled.</i>			

## CHANGE RECORD

<b>ISSUE</b>	<b>DATE</b>	<b>Comments / change</b>
4.0D	03 October 04	Issued for CQM DRB
4.1D	15 November 04	Actions from CQM DRB incorporated
4.2	1 December 2004	Issued for CQM EIDP Issue 2.
4.3	11 April 2005	Issued for CQM EIDP Issue 3 (Instrument User Manual and updated documents added)

## CONTENTS

<b>AS BUILT CONFIGURATION ITEM DATA LIST BUILD STATUS.....</b>	<b>1</b>
DISTRIBUTION.....	1
<b>CHANGE RECORD.....</b>	<b>2</b>
CONTENTS .....	2
<b>1. SCOPE .....</b>	<b>3</b>
<b>2. APPLICABLE DOCUMENTS .....</b>	<b>3</b>
<b>3. CONFIGURATION STATUS.....</b>	<b>3</b>
3.1 SUBSYSTEM CONFIGURED ITEM DOCUMENT LIST (CIDL) .....	3
3.2 TOP DRAWINGS .....	4
3.3 SPECIFICATIONS - RAL.....	4
3.4 SPECIFICATIONS. – SUBSYSTEMS .....	5
3.5 INTERFACES (ICD) - RAL .....	5
3.6 INTERFACES (ICD) - SUBSYSTEMS .....	6
3.7 LISTS .....	6
3.8 PLANS - RAL.....	7
3.9 PLANS - SUBSYSTEMS.....	7
3.10 PROCEDURES.....	8
3.11 REPORTS .....	8
3.12 WORK STATEMENTS.....	8
3.13 MANUALS.....	8
<b>4. BUILD STATUS.....</b>	<b>9</b>
Build change record	
FPU	
JFETS	
Warm Electronics	





<b>SPIRE</b>	<b>Project Document</b>	<b>Ref</b>	<b>SPIRE-RAL-DOC-001971</b>
		<b>Issue</b>	<b>4.3</b>
	<b>SPIRE BUILD STATUS (ABCDL)</b>	<b>Date</b>	<b>11<sup>th</sup> April 2005</b>
			<b>Page 5 of 9</b>
<b>Printed copies of this document are uncontrolled.</b>			

<b>3.4 Specifications. – Subsystems</b>			
<b>Doc Ref</b>	<b>Doc Title</b>	<b>Iss/Rev</b>	<b>Date</b>
SPIRE-ATC-PRJ-000460	Beam Steering Mirror subsystem Specification	3.7	11 Sep 03
SPIRE-IFS-PRJ-000444	ON board \software URD	1.2	15 May 03
SPIRE-IFS-PRJ-000462	DPU Subsystem Specification	1.2	26 Nov 01
SPIRE-IFS-PRJ-001036	Onboard software Specification Document	1.0	11 Jun 03
SPIRE-JPL-PRJ-000456	SPIRE Detector Subsystem Spec	3.2	7 Jan 03
SPIRE-LAM-PRJ-000459	Spectrometer Mirror Mechanism Subsystem Spec	8.0	12 Oct 01
SPIRE-MSS-PRJ-000427	Structure Specification Doc	2.0	26 Nov 02
SPIRE-QMW-PRJ-000454	Filters Subsystem Specification	2.0	7 Sep 01
SPIRE-QMW-PRJ-000648	Spire Calibrators Software Interface Req	1.0	10/Apr/01
SPIRE-QMW-PRJ-000649	Spire Calibrators Electrical Interface Req	1.1	10/Apr/01
SPIRE-QMW-PRJ-001101	Photometer Calibrator (PCAL) Subsystem Spec	1.0	7 Sep 01
SPIRE-QMW-PRJ-001105	Spectrometer Calibrator (SCAL) Subsystem Spec	1.0	7 Sep 01
SPIRE-SAP-PRJ-000461	DRCU Subsystem Spec	1 0	14 Feb 03
SPIRE-SAP-PRJ-000638	FPU Simulator	0.3(D)	20 Jan 03
SPIRE-SBT-PRJ-000458	SPIRE & PACS Sorption Coolers Specification	3.3	20 Nov 01
SPIRE-UCF-PRJ-000064	SPIRE Science Requirements Document	3.0	21 Nov 00

<b>3.5 Interfaces (ICD) - RAL</b>			
<b>Doc Ref</b>	<b>Doc Title</b>	<b>Iss/Rev</b>	<b>Date</b>
SCI-PT-IIDB/SPIRE-02124	SPIRE IIDB	3.3	
SPIRE-RAL-DWG-001409	Forms Annex 1 to SCI-PT-IIDB/SPIRE-02124 SPIRE MECHANICAL INTERFACE DRAWINGS	10.0	Feb 04
SPIRE-RAL-PRJ-000450	Spire System Budget	4.0	01 Jun 03
SPIRE-RAL-PRJ-000608	SPIRE Harness Definition Document	1.1	5 Mar 03
SPIRE-RAL-PRJ-000728	Cryogenic Interface Thermal Mathematical Model	2.1	20 Jan 03
SPIRE-RAL-PRJ-001078	Spire Data ICD	2.0	15-Nov-04
SPIRE-RAL-PRJ-000560	Thermal Configuration Control	0.9	04 Feb 02

<b>SPIRE</b>	<b>Project Document</b>	<b>Ref</b>	<b>SPIRE-RAL-DOC-001971</b>
		<b>Issue</b>	<b>4.3</b>
	<b>SPIRE BUILD STATUS (ABCDL)</b>	<b>Date</b>	<b>11<sup>th</sup> April 2005</b>
			<b>Page 6 of 9</b>
<i>Printed copies of this document are uncontrolled.</i>			

<b>3.6 Interfaces (ICD) - Subsystems</b>			
<b>Doc Ref</b>	<b>Doc Title</b>	<b>Iss/Rev</b>	<b>Date</b>
SPIRE-ATC-PRJ-001171	BSM ICD	3.2	28 Sep 04
SPIRE-IFS-PRJ-000650	Spire DPU ICD;	1.4	24/03/03
SPIRE-JPL-PRJ-001181	Detectors (BDA) ICD	2.0	26 Feb 02
SPIRE-LAM-PRJ-000446	Optical Error Budget	4.0	17/Jan/02
SPIRE-LAM-PRJ-000944	LAM ICD (SPI.PFM.00.R1.01 A)	A	3/Oct/01
SPIRE-MSS-PRJ-000294	Structure Optics ICD	1.0	13/06/00
SPIRE-MSS-PRJ-000298	Structure SMEC-m ICD	1.0	14/06/00
SPIRE-MSS-PRJ-000299	Structure Filters ICD	1.0	13/Jun/00
SPIRE-MSS-PRJ-000331	Structure-Cooler ICD	1.0	13/Jun/00
SPIRE-MSS-PRJ-000617	Structure Mechanical ICD MSSL-SPIRE-SP004.11	3.0	14/02/03
SPIRE-SAP-PRJ-000451	DRCU ICD (SAP-SPIRE-CCa-075-02)	1.0	14/Feb/03
SPIRE-SAP-PRJ-001364	DPU/DRCU ICD (DATA: SAP-SPIRE-CCa-076-02)	1.0	14/Feb/03
SPIRE-SBT-PRJ-000690	Spire & PACS Sorption Coolers ICD	1.3	07/12/01
SPIRE-UCF-PRJ-001149	SCAL ICD	3.0	5 Jul 04
SPIRE-UCF-PRJ-001150	PCAL ICD	3.0	17 May 04
SPIRE-UCF-PRJ-001151	UCF Filters ICD	3.0	5 Jun 03

<b>3.7 Lists</b>			
<b>Doc Ref</b>	<b>Doc Title</b>	<b>Iss/Rev</b>	<b>Date</b>
SPIRE-RAL-PRJ-000455	Major Milestone List	1.4	2 Jun 03
SPIRE-RAL-PRJ-002165	Qualification Matrix	2.0	12 Nov 04
SPIRE-RAL-PRJ-002095	CQM Verification Matrix (VCD)	1.1	1 Dec 04
SPIRE-RAL-PRJ-001079	SPIRE NCR Status list	8.0	05 Apr 05
SPIRE-RAL-PRJ-001080	Engineering Change Request List	4.0	16 Nov-04
SPIRE-RAL-PRJ-001081	Request For Waiver List	4.1	25 Nov 04
SPIRE-RAL-PRJ-001092	Combined Declared Materials List	3.1	10 Nov 04
SPIRE-RAL-PRJ-001093	Combined Declared Processes List	3.1	10 Nov 04
SPIRE-RAL-PRJ-001094	Combined Declared Mechanical Parts List	3.1	10 Nov 04
SPIRE-RAL-PRJ-001095	Combined Declared EEE Parts list	3.0	06 Nov 04
SPIRE-RAL-REP-001670	PAD Status List	2.0	15 May 03
SPIRE-RAL-DOC-002069	SPR/SCR List.	1.0D	02 Jul 04
SPIRE-IFS-PRJ-001596	DPU AVM Verification Control Matrix	1.0	11 Apr 03
SPIRE-UCF-PRJ-001138	Critical Items List	2.0	06 Jun 02

<b>SPIRE</b>	<b>Project Document</b>	<b>Ref</b>	<b>SPIRE-RAL-DOC-001971</b>
		<b>Issue</b>	<b>4.3</b>
	<b>SPIRE BUILD STATUS (ABCDL)</b>	<b>Date</b>	<b>11<sup>th</sup> April 2005</b>
			<b>Page 7 of 9</b>
<b>Printed copies of this document are uncontrolled.</b>			

<b>3.8 Plans - RAL</b>			
<b>Doc Ref</b>	<b>Doc Title</b>	<b>Iss/Rev</b>	<b>Date</b>
SPIRE-RAL-DOC-001123	SPIRE SQM Performance Test Specification	0.4	29 May 02
SPIRE-RAL-DOC-001132	SPIRE Warm Electronics Integration Plan	0.1	10 Jan 02
SPIRE-RAL-DOC-001652	SPIRE Functional Test Specifications	1.2	04 Sep 04
SPIRE-RAL-NOT-001122	SPIRE STM Performance Test Plan	0.1	31 Jan 02
SPIRE-RAL-PRJ-000017	Product Assurance Plan	1.2	27 Aug 04
SPIRE-RAL-PRJ-000018	Spire Science Implementation Plan (DRAFT)	1.1	18 Mar 02
SPIRE-RAL-PRJ-000029	Spire Management plan	1.1	12 Apr 01
SPIRE-RAL-PRJ-000030	SPIRE Product Tree (DRAFT)	2.0	12 Apr 01
SPIRE-RAL-PRJ-000032	SPIRE Document Management Plan	1.1	13 Sep 00
SPIRE-RAL-PRJ-000035	Spire Instrument Development Plan	1.1	12 Apr 01
SPIRE-RAL-PRJ-0001106	ICC Software Configuration Plan	1.1	01 Feb 02
SPIRE-RAL-PRJ-000410	AIV Plan	3.0	25 May 03
SPIRE-RAL-PRJ-000626	SPIRE Configuration Management Plan	1.3	28 Feb 02
SPIRE-RAL-PRJ-000852	EMC Control Plan (DRAFT for comment)	0.4	29 May 02
SPIRE-RAL-PRJ-001070	Cleanliness Plan	1.0	9 Jan 02
SPIRE-RAL-PRJ-001866	SPIRE Calibration Plan	0.1	12 Nov 03

<b>3.9 Plans - Subsystems</b>			
<b>Doc Ref</b>	<b>Doc Title</b>	<b>Iss/Rev</b>	<b>Date</b>
SPIRE-ATC-PRJ-000736	BSM Subsystem Test Plan	4.2	24 Mar 04
SPIRE-CGS-DOC-001776	DPU-SW Verification & Validation Plan / Acceptance Test	1.0	5 Apr 02
SPIRE-IFS-PRJ-000834	DPU Test Plan	0.1	8 Aug 01
SPIRE-IFS-PRJ-001756	DPU/ICU Spacecraft Interface Test Plan	1.1	05 Sep 02
SPIRE-LAM-PRJ-001842	Optical Alignment Plan	1.0	30 Apr 03
SPIRE-MSS-PRJ-000652	SPIRE Structure Integration Plan	0.1	Apr 01
SPIRE-MSS-PRJ-001023	SPIRE STRUCTURE-MAIV Flow Chart	3.0	Feb 03
SPIRE-MSS-PRJ-001841	Vibration Test Specification STM Qualification Plan	2.0	04 Jul 03
SPIRE-QMW-PRJ-001103	Spectrometer Calibrator MAIV Flow Chart	1.0	04 Sep 01
SPIRE-SAP-PRJ-001607	Detector Control Unit EM/QM1 Preliminary Test Plan	1.0	14 Feb 03
SPIRE-SBT-PRJ-000691	SPIRE & PACS Sorption Coolers MAIV Flow Chart	1.3	13 Jan 04
SPIRE-UCF-PRJ-001686	300mk Strap Supports MAIV Flow Chart	1.0	10 Feb 03

<b>SPIRE</b>	<b>Project Document</b>	<b>Ref</b>	<b>SPIRE-RAL-DOC-001971</b>
		<b>Issue</b>	<b>4.3</b>
	<b>SPIRE BUILD STATUS (ABCDL)</b>	<b>Date</b>	<b>11<sup>th</sup> April 2005</b>
			<b>Page 8 of 9</b>
<i>Printed copies of this document are uncontrolled.</i>			

### 3.10 Procedures

<b>Doc Ref</b>	<b>Doc Title</b>	<b>Iss/Rev</b>	<b>Date</b>
SPIRE-MSS-PRJ-001650	Structure Assembly, Integration & Handling Procedure	4.0	12 Jul 04
SPIRE-RAL-DOC-001578	SPIRE Cold Optical Alignment Procedure	1.0	17 Jun 03
SPIRE-RAL-DOC-001888	Cold Verification 1-Master Procedure	1.1	22 Jan 04
SPIRE-RAL-PRC-002181	Warm Electronics Integration procedure	2.0	31-Mar-05
SPIRE-UCF-PRJ-001687	300mk Strap Supports-Photometer Support assembly Proc	1.0	10 Feb 03
SPIRE-UCF-PRJ-001895	Assembly Procedure (Electrical insulated Joints)	1.0	04 Dec 03
SPIRE-RAL-NOT-002284	Instrument Module Test (IMT)	1	15 Apr 05
SPIRE-RAL-NOT-002402	Instrument EMC Test (EMC)	1	15-Apr-05
SPIRE-RAL-NOT-002396	Functional Check (WARM)	1	06 Apr 05
SPIRE-RAL-NOT-002397	SPIRE Functional Check (WFT)	1	06 Apr 05
SPIRE-RAL-NOT-002398	Short Functional Test (SFT)	1	06 Apr 05

### 3.11 Reports

<b>Doc Ref</b>	<b>Doc Title</b>	<b>Iss/Rev</b>	<b>Date</b>
SPIRE-RAL-DOC-001293	SPIRE Safety Submission	4.0	18 Jun 04
SPIRE-RAL-NOT- 001704	Harness Derating Analysis	1.0	15 May 03

### 3.12 Work Statements

<b>Doc Ref</b>	<b>Doc Title</b>	<b>Iss/Rev</b>	<b>Date</b>

### 3.13 Manuals

<b>Doc Ref</b>	<b>Doc Title</b>	<b>Iss/Rev</b>	<b>Date</b>
SPIRE-RAL-PRJ-002395	Instrument Users Manual	1.0	08 Apr 05
	Flight Operations Manual	<b>TBW</b>	
SPIRE-IFS-PRJ-001391	SPIRE OBS User Manual	1.0	24 Sep 04



<b>SPIRE</b>	<b>Project Document</b>	<b>Ref</b>	<b>SPIRE-RAL-DOC-001971</b>
		<b>Issue</b>	<b>4.3</b>
	<b>SPIRE BUILD STATUS (ABCIDL)</b>	<b>Date</b>	<b>11<sup>th</sup> April 2005</b>
			<b>Page 9 of 9</b>
<i>Printed copies of this document are uncontrolled.</i>			

#### **4. BUILD STATUS**

Date	Issue	Sheet	Change	Reason for change
13/11/2003	0.1D	All		First draft
11/03/2004	1.0	FPU  JFETS	300 mk Straps Identified Internal harnesses identified Thermometer numbers provided BDA thermometers removed from list Thermometer numbers provided	Configuration as for cold thermal verification 1
11/03/2004	2.0D	All	Columns for cold vibration added	Configuration for cold vibration
26/07/2004	3.0D	All	Columns for 2nd Cold Thermal Verification Added L1 Thermal Interface Added L0 Thermal Interfaces Added JFET sheet corrected (no filters)	Configuration for cold thermal verification 2
03/10/2004	4.0D	All	Columns for EQM delivery added	Final configuration for delivery
15/11/2004	4.1D	All	Columns added for drawing issue number, NCR and change tracking refs.	Action from CQM DRB
29/11/2004	4.2D	all	issue numbers and NCRs added ABCIDL Appendix Document list added	For CQM EIDP SPIRE-RAL-PRJ-001898 issue 2
13/04/2005	4.3	warm electronics	Modifications to DCU and FCU noted	Mods to CQM only

Subsystem	Unit	Item	Drawing/Reference	Issue	Supplier	NCR Ref	Change Ref
Structure	Optical Bench Panel	Optical bench panel	5264-302-4	2	MSSL	HR-SP-RAL-NCR-027	
						HR-SP-RAL-NCR-036	
	Photometer Cover	Photometer Cover Wall	5264-302-6	6	MSSL		
		Photometer cover lid	5264-302-10	1	MSSL		
		Photometer Seal- Top	5264-302-7	2	MSSL		
		Photometer Seal- Bottom	5264-302-8	2	MSSL		
	Spectrometer Cover	Spectrometer Cover Wall	5264-303-1	2	MSSL		
		Spectrometer Cover Lid	5264-303-2	2	MSSL		
		Spectrometer seals top	5264-303-4	1	MSSL		
		Spectrometer seals bottom	5264-303-5	2	MSSL		
	FPU Supports	A Frames	5264-302-1	5	MSSL		
		Fixed Mount Cone	5264-302-5	4	MSSL		
		A Frame Support bracket	5264-302-14	1	MSSL		
		A Frame Support Plates	5264-302-15	2	MSSL		
		A Frame Support brackets	5264-302-26	1	MSSL		
		Insulating Bush	5264-302-2	2	MSSL		
		Special Washer	5264-302-3	1	MSSL		
		Dowel retaining Plate	5264-302-39	1	MSSL		
		Tubular Dowels (8mm)	5264-302-40	1	MSSL		
		Dowel - 'A' Frame support	5264-302-41	1	MSSL		
		Dowel - 'A' Frame Top	5264-302-42	1	MSSL		
		Special Washer - A Frame Brackets	5264-302-43	1	MSSL		
		I1 Thermal I/F				RAL	

Subsystem	Unit	Item	Drawing/Reference	Issue	Supplier	NCR Ref	Change Ref	
Photometer Box	Photometer detector box	Back cover	5264-306-1	4	MSSL	HR-SP-JPL-NCR-047		
		Spine	5264-306-2	6	MSSL			
		Front cover	5264-306-3	4	MSSL			
		BDA Adapter Plate	5264-911	2	MSSL			
		PDIC 1 mount	5264-310-1	2	MSSL			
		PDIC 1 clamp ring	5264-310-2	1	MSSL			
		PDIC dowel bolt	5264-310-3	2	MSSL			
		PDIC 2 mount	5264-311-1	2	MSSL			
		PDIC 2 clamp ring	5264-311-2	1	MSSL			
		Detector Box support Cone	5264-312	1	MSSL			
		Photometer Detector Box A frames supports(2 per set)	5234-313	2	MSSL		HR-SP-RAL-NCR-083	
		Washer	5264-313-1	1	MSSL			
		Bushes	5264-313-2	1	MSSL			
			L0 Thermal I/F				MSSL	
Spectrometer Box		Spectrometer detector box	5264-307-1	4	MSSL	HR-SP-RAL-NCR-031		
		Filter mount	5264-307-2	4	MSSL			
		Spectrometer Detector Box supports(3 per set)	5264-307-4	2	MSSL			
		BDA Adapter Plate	5264-911	2	MSSL			
		Bushes	5264-307-5	1	MSSL			
			L0 Thermal I/F				MSSL	
SCAL Box		Scal Box	5264-314-1	4	MSSL	HR-SP-RAL-NCR-066		
		SCAI Cover	5264-314-2	1	MSSL			
		SCAL Exit Baffle Ring	5264-314-3	1	MSSL			
		SCAL Baffle Clamp	5264-314-4	1	MSSL			

Subsystem	Unit	Item	Drawing/Reference	Issue	Supplier	NCR Ref	Change Ref
<b>Mirror Mounts</b>		Secondary optical Bench	5264-305-12	1	MSSL	HR-SP-RAL-NCR-030	
		Support PM6	5264-305-13	2	MSSL		
		PM6 Support Spare	5264-305-19	1	MSSL		
		Support PM8	5264-305-14	1	MSSL		
		PM10 Support	5264-305-17	1	MSSL		
		Support SM6	5264-305-2	2	MSSL		
		sm6 Support Spare	5264-305-18	1	MSSL		
		Support SM7	5264-305-3	2	MSSL		
		Bulkhead SM6 and SM7	5264-305-15	1	MSSL		
		Support SM8a	5264-305-4	2	MSSL		
		Support SM9-10a	5264-305-6	2	MSSL		
		Support SM9-10b	5264-305-7	2	MSSL		
		Support SM11a	5264-305-8	2	MSSL		
		Support SM11b	5264-305-9	2	MSSL		
		Support SM12a	5264-305-10	1	MSSL		
		Support SM12b	5264-305-11	1	MSSL		
<b>Other Optics</b>		SFIL2 Cold Stop	5264-305-22	3	MSSL		
		Photometer Cold Stop Clamp PFII3	5264-306-4	1	MSSL		
		Photometer Cold Stop PFII3	5264-306-5	2	MSSL		
		CFIL1 Baffle Mount	5264-304-6	6	MSSL		
		CFIL1 Baffle Clamp Ring	5264-304-7	2	MSSL		
		PFIL2 Mount Back Plate	5264-302-12	1	MSSL		
		PFIL2 Mount CLamp plate	5264-302-17	1	MSSL		
		Filter Mounts - SFIL2	5264-305-20	4	MSSL		
		Filter Mount - SFIL2 clamp ring	5264-305-21	2	MSSL		
		SFIL2 dowels	5264-305-27	1	MSSL		
		SBS 1and 2 Filter mount (2 per set)	5264-305-23	3	MSSL		
		SBS 1and 2 Filter Clamp	5264-305-24	1	MSSL		
		Clamp Plate SFIL -3	5264-307-3	1	MSSL		
				s/n			

Subsystem	Unit	Item	Drawing/Reference	Issue	Supplier	NCR Ref	Change Ref	
Optics	Mirrors	CM3	SPI-MIR-11-DD-01-A	01	LAM	HR-SP-RAL-NCR-042		
		CM5	SPI-MIR-12-DD-01-A	01	LAM	LAM.QUA.SPI.NCR.020068		
							LAM.QUA.SPI.NCR.020074	
							LAM.QUA.SPI.NCR.030025	
							LAM.QUA.SPI.NCR.030026	
							LAM.QUA.SPI.NCR.030037	
			PM6	SPI-MIR-21-DD-01-A	01	LAM	LAM.QUA.SPI.NCR.030035	
							LAM.QUA.SPI.NCR.030036	
			PM7	SPI-MIR-22-DD-01-A	02	LAM		
			PM8	SPI-MIR-23-DD-01-A	03	LAM		
			PM9	SPI-MIR-24-DD-01-A	02	LAM		
			PM10	SPI-MIR-25-DD-01-A	03	LAM		
			PM11	SPI-MIR-26-DD-01-A	02	LAM		
			SM6	SPI-MIR-31-DD-01-A	01	LAM		
			SM7	SPI-MIR-32-DD-01-A	02	LAM	LAM.QUA.SPI.NCR.030004	
			SM8A	SPI-MIR-33-DD-01-A	01	LAM	LAM.QUA.SPI.NCR.030031	
							LAM.QUA.SPI.NCR.030032	
			SM9A	SPI-MIR-34-DD-01-A	01	LAM		
			SM10A	SPI-MIR-36-DD-01-A	02	LAM		
			SM11A	SPI-MIR-37-DD-01-A	01	LAM	LAM.QUA.SPI.NCR.020076	
							LAM.QUA.SPI.NCR.030027	
							LAM.QUA.SPI.NCR.030028	
			SM12A	SPI-MIR-38-DD-01-A	01	LAM	LAM.QUA.SPI.NCR.020020	
	SM8B	SPI-MIR-33-DD-02-A	01	LAM	LAM.QUA.SPI.NCR.020026			
					LAM.QUA.SPI.NCR.030033			
					LAM.QUA.SPI.NCR.030034			

Subsystem	Unit	Item	Drawing/Reference	Issue	Supplier	NCR Ref	Change Ref
		SM9B	SPI-MIR-34-DD-02-A	01	LAM		
		SM10B	SPI-MIR-36-DD-02-A	03	LAM	LAM.QUA.SPI.NCR.030003	
		SM11B	SPI-MIR-37-DD-01-A	01	LAM	LAM.QUA.SPI.NCR.020076	
						LAM.QUA.SPI.NCR.030029	
						LAM.QUA.SPI.NCR.030030	
		SM12B	SPI-MIR-38-DD-01-A	01	LAM	LAM.QUA.SPI.NCR.020014	
		All mirrors				LAM.QUA.SPI.NCR.030002	
		SCCA1	not fitted		LAM		
		SCCA2	not fitted		LAM		
		SCCB1	not fitted		LAM		
		SCCB2	not fitted		LAM		
	Filters	CFIL1	FILT-CQM-101	B690	UWC		
		PFIL-2	FILT-CQM-102	B604	UWC		
		PFIL-3	FILT-CQM-103	B654	UWC	HR-SP-RAL-NCR-072	
		PDIC-1	FILT-CQM-310	1191	UWC		
		PDIC-2	FILT-CQM-320	1193	UWC		
		PFIL-4L	not fitted		UWC		
		SBS1	Dummy		UWC		
		SBS2	Dummy		UWC		
		SFIL2	FILT-CQM-113	B671	UWC		
		SFIL3S	FILT-CQM-116	B701	UWC		
		SFIL3L	FILT-CQM-120	B700	UWC		
		SFIL4S	not fitted		UWC		
		SFIL5S	not fitted		UWC		
		SFIL4L	not fitted		UWC		
		SFIL5L	not fitted		UWC		
<b>Beam steering mirror</b>		BSM assembly	SPIRE-BSM-030-001	1	ATC		
<b>3He Cooler</b>		Cooler assembly S/N 1	2000-14B 000	D	SBT	HR-SP-RAL-NCR-063	

Subsystem	Unit	Item	Drawing/Reference	Issue	Supplier	NCR Ref	Change Ref
<b>300 mK thermal straps and supports</b>		Bus Bar Upper	5264-306-7	2	MSSL	HR-SP-RAL-NCR-082	
		Busbar Lower	5264-306-8	2	MSSL		HR-SP-RAL-NCR-088
		BDA-Busbar Flange	5264-306-9	2	MSSL		
		Bus Connector PLW	5264-306-10	2	MSSL		
		Bus Junction ans PMW Connector	5264-306-11	2	MSSL		
		Bus Junction Clamp Plate	5264-306-12	2	MSSL		
		Light Trap to Bus Junction	5264-306-13	3	MSSL		
		Bus Connector PSW	5264-306-14	2	MSSL		
		BDA-Busbar Flange	5264-306-15	2	MSSL		
		PLW Bus Strap	5264-306-16	1	MSSL		
		PMW Bus Strap	5264-306-17	1	MSSL		
		PSW Bus Strap	5264-306-18	1	MSSL		
		End stop Photometer Light Trap	5264-306-19	2	MSSL		
		Light Trap Feed Through - Photometer	5264-306-20	1	MSSL	HR-SP-RAL-NCR-038	
		Stop Bush -Bus Bar Mountings	5264-306-21	1	MSSL		
		Light Trap Feedthrough spect.	5264-307-6	1	MSSL	HR-SP-RAL-NCR-079	
		Light Baffle Junction	5264-307-7	1	MSSL		
		SSW Spect. BDA to light trap strap	5264-307-8	1	MSSL		
		SLW Spect. BDA to Light Trap Strap	5264-307-9	1	MSSL		
		BDA Cold Interface Spectrometer	5264-307-10	3	MSSL		
		Bush inner Spectrometer light trap	5264-307-11	1	MSSL		
		Bush outer Spectrometer light trap	5264-307-12	1	MSSL		
		Cold Strap Support	5264-307-13	1	MSSL		
		Photometer Baffle	LTS CQM2 311	1	UWC		
		Spectrometer Baffle	LTS CQM2 411	1	UWC		
		Cooler to photometer det box	5264-302-30	2	MSSL		
	Cooler to spectrometer det box	5264-302-31	2	MSSL	HR-SP-UWC-NCR-001		
<b>L0 Thermal Straps</b>		Detector Box I/F	5264-309A	2	MSSL		
		Cooler Pump I/F	5264-309A	2	MSSL		
		Cooler Evap I/F	5264-309A	2	MSSL		



Subsystem	Unit	Item	Drawing/Reference	Issue	Supplier	NCR Ref	Change Ref
<b>300 mK Thermal control system</b>		Not fitted to CQM					
<b>BDA</b>	Photometer LW array	S/N 006	10209800	6	JPL	HR-SP-JPL-NCR-004	
						HR-SP-JPL-NCR-057	
	Photometer MW array		10209727	B	JPL		
	Photometer SW array		10209727	B	JPL		
	Spectrometer SW array		10209727	B	JPL		
	Spectrometer LW array		10209727	B	JPL		
<b>SMEC</b>		SMEC STM	SPI-STM-00-D1-01	A	LAM	HR-SP-RAL-NCR-045	
						HR-SP-RAL-NCR-070	
<b>PCAL</b>		PCAL assembly	PCAL-CQM-000	B	UWC		
<b>SCAL</b>		SCAL assembly	SCAL-CQM-000		UWC	HR-SP-RAL-NCR-048	
						HR-SP-RAL-NCR-064	
						HR-SP-RAL-NCR-066	

Subsystem	Unit	Item	Drawing/Reference	Issue	Supplier	NCR Ref	Change Ref	
FPU RF Filters	RF filter box	FPU RF Filter assembly	2-KE-0104-373	C		HR-SP-RAL-NCR-049		
						HR-SP-RAL-NCR-069		
						HR-SP-RAL-NCR-028		
		supports	RFI Filter Bracket Corner Bracket	A2/5264/302-27	1	MSSL		
			Tempory RFI Bracket	A2/5264/302-28	2	MSSL		
			RFI Filter Frame Edge Bracket	A2/5264/302-29	1	MSSL		
		RF Filter Modules	RF-1	10209780-1	A	JPL		
			RF-2	10209780-2	A	JPL		
			RF-3	10209780-3	A	JPL		
			RF-4	10209780-4	A	JPL		
			RF-5	10209780-5	A	JPL		
			RF-6	10209780-6	A	JPL		
			RF-7	10209780-7	A	JPL		
		RF-8	10209780-8	A	JPL			
		RF-9	10209780-9	A	JPL			
		RF-10	10209780-10	A	JPL			
		RF-11	10209780-11	A	JPL			
		RF-12	10209780-12	A	JPL			

Subsystem	Unit	Item	Drawing/Reference	Issue	Supplier	NCR Ref	Change Ref
FPU internal harnesses		F1 PSW BDA J01 to HSJFP J29	41		Tekdata	HR-SP-RAL-NCR-071	
		F2 PSW BDA J02 to HSJFP J30	43		Tekdata		
		F3 PSW BDA J03 to HSJFP J31	45		Tekdata		
		F4 PSW BDA J04 to HSJFP J32	47		Tekdata		
		F5 PSW BDA J05 to HSJFP J33	49		Tekdata		
		F6 PSW BDA J06 to HSJFP J34	51		Tekdata		
		F7 PLW BDA J01 to HSJFP J35	21		Tekdata		
		F8 PLW BDA J02 to HSJFP J36	23		Tekdata		
		F9 PMW BDA J01 to HSJFP J37	25		Tekdata		
		F10 PMW BDA J02 to HSJFP to J38	27		Tekdata		
		F11 PMW BDA J03 to HSJFP to J39	29		Tekdata		
		F12 PMW BDA J04 to HSJFP to J40	31		Tekdata		
		F13 SSW BDA J05 to HSJFS J11	34		Tekdata		
		F14 SSW BDA J06 to HSJFS J12	36		Tekdata		
		F15 SLW BDA J01 to HSJFS J13 (plus PTC Cold harnessing – F28)	37 and 39		Tekdata	HR-SP-RAL-NCR-073	
		F16 COOLER-P to FPU J19A	8		Tekdata		
		F17 COOLER-R to FPU J20A	10		Tekdata		
		F18 SCal-P to FPU J21A	12		Tekdata		
		F19 SCal-R to FPU J22A	14		Tekdata		
		F20 THERM-P to FPU J23A	4		Tekdata		
		F21 THERM-R from FPU J24A	6		Tekdata		
		F22 BSM-P to FPU J25A	16		Tekdata		
		F23 BSM-R to FPU J26A	18		Tekdata		
		F24 SMEC Launch (Prime) connected to FPU J27A	Part of SMEC		Tekdata		
		F25 SMEC Control (Prime) connected to FPU J29A	Part of SMEC		Tekdata		
		F26 SMEC Launch (Red.) connected to FPU J28A	Part of SMEC		Tekdata		
		F27 SMEC Control (Red.) connected to FPU J30A	Part of SMEC		Tekdata		

Subsystem	Unit	Item	Drawing/Reference	Issue	Supplier	NCR Ref	Change Ref
Thermometers	Level 1	T_SOBJ_1	HSFPU Harness Filter Bracket			RAL	
		T_SOBJ_2	HSFPU Optical Bench			RAL	
		T_SUB_1	M3,5,7 Optical Sub Bench			RAL	
		T_SUB_2	M3,5,7 Optical Sub Bench			RAL	
		T_BAF_1	Input Baffle			RAL	
		T_BAF_2	Input Baffle			RAL	
		T_BSMS_1	BSM/SOB I/F(SOB side)			RAL	
		T_BSMS_2	BSM/SOB I/F(SOB side)			RAL	
		T_SCST_1	SCAL Structure			UWC	
		T_SCST_2	SCAL Structure			UWC	
		T_CPHP_1	Cooler Pump			LAM	
		T_CPHP_2	Cooler Pump			LAM	
		T_CEV_1	Cooler Evap			LAM	
		T_CEV_2	Cooler Evap			LAM	
		T_CPHS_1	Cooler Pump Heat Switch			LAM	
		T_CPHS_2	Cooler Pump Heat Switch			LAM	
		T_CEHS_1	Cooler Evap Heat Switch			LAM	
		T_CEHS_2	Cooler Evap Heat Switch			LAM	
		T_CSHT_1	Cooler Shunt			LAM	
		T_CSHT_2	Cooler Shunt			LAM	
T_SCL4_1	SCAL 4%			UWC			
T_SCL4_2	SCAL 4%			UWC			
T_SCL2_1	SCAL 2%			UWC			

Subsystem	Unit	Item	Drawing/Reference	Issue	Supplier	NCR Ref	Change Ref
		T_SCL2_2 SCAL 2%			UWC		
		T_BSM_1 BSM			ATC		
		T_BSM_2 BSM			ATC		
		T_FTS_1 SMEC			RAL		
		T_FTS_2 SMEC			RAL		
		T_FTS_3 SMEC/SOB I/F			RAL		
		T_FTS_4 SMEC/SOB I/F			RAL		
		FPU +X A-Frame Interface			RAL		
		FPU -X A-Frame Interface			RAL		
		SOB Cone Interface			RAL		
		SOB L1 Strap Interface			RAL		
		SOB Cooler Interface			RAL		
		L1 photo connector bracket			RAL		
	Level 0	T_PL0_1 Phot L0 Encl Strap IF			RAL		
		T_PL0_2 Phot L0 Encl			RAL		
		T_SL0_1 Spec L0 Encl Strap IF			RAL		
		T_SL0_2 Spec L0 Encl			RAL		
		T_PL0_3Photometer Level 0 Enclosure			RAL		
		T_SL0_3Spectrometer Level 0 Enclosure			RAL		

**JFET Units**

Subsystem	Unit	Item	Drawing/Reference	Issue	Supplier	NCR Ref	Change Ref
<b>HSJFP</b>							
	JFET Structure	Structure assembly 6 JFET rack	0-KE-0104-350-H	H	RAL	HR-SP-RAL-NCR-081	
	JFET Modules	JFET Module 1	10209750-1	1	JPL	HR-SP-JPL-NCR-001	
		JFET Module 2	10209750-2	4	JPL	HR-SP-JPL-NCR-001	
		JFET Module 3	10209750-2	4	JPL	HR-SP-JPL-NCR-001	
		JFET Module 4	10209750-2	4	JPL	HR-SP-JPL-NCR-001	
		JFET Module 5	10209750-2	4	JPL	HR-SP-JPL-NCR-001	
		JFET Module 6	10209750-2	4	JPL	HR-SP-JPL-NCR-001	
	JFET Backharness		10209785	A	JPL	HS-SP-RAL-NCR-074	
			10209786	A	JPL		
		Thermometer			RAL		
<b>HSJFS</b>							
	JFET Structure	Structure assembly 2 JFET rack	0-KE-0104-360-K	K	RAL	HS-SP-RAL-NCR-068	
						HR-SP-RAL-NCR-081	
	JFET Modules	JFET Module 1	10209750-2	4	JPL	HR-SP-JPL-NCR-001	
		JFET Module 2	10209750-2	4	JPL	HR-SP-JPL-NCR-001	
	JFET Backharness		10209784	B	JPL	HS-SP-RAL-NCR-074	
					JPL		
		Thermometer			RAL		

Warm Electronics

Subsystem	Unit	Item	Drawing/Reference	Issue	Supplier	NCR Ref	Change Ref	
DRCU	DCU					HR-SP-RAL-NCR-058		
						HR-SP-CEA-NCR-109		
						HR-SP-CEA-NCR-110		
						HR-SP-CEA-NCR-121		
						HR-SP-CEA-NCR-124		
						HR-SP-CEA-NCR-125		
						HR-SP-CEA-NCR-126		
						HR-SP-CEA-NCR-127		
						HR-SP-CEA-NCR-129		
						HR-SP-CEA-NCR-131		
						HR-SP-CEA-NCR-132		
				LIA-P	SPIR-EL13100	SN 1	SAP	
				LIA-P	SPIR-EL13100	SN 2	SAP	
				LIA-S	SPIR-EL13200	SN1	SAP	
				LIA-S	SPIR-EL13200	SN2	SAP	
				LIA-S	SPIR-EL13200	SN3	SAP	
				BIAS	SPIR-EL140000	SN1	SAP	
		DAQ + IF	SPIR-EL150000	SN2	SAP			
		Backplane	SPIR-EL320000	SN1	SAP			
		Note For CQM only a remote Power switch is attached to the DCU, see HP-SPIRE-RAL-NOT-002383						
	FCU					HR-SP-CEA-NCR-118		
						HR-SP-CEA-NCR-128		
						HR-SP-CEA-NCR-130		
						HR-SP-CEA-NCR-123		
						HR-SP-CEA-NCR-122		
						HR-SP-CEA-NCR-105		
				TEMP	SPIR-EL330000	SN2	SAP	
		CCHK	SPIR-EL340000	SN2	SAP			
		Backplane	SPIR-EL320000	SN1	SAP			
		MCU Note one MCU pcb removed and replaced with connection panel for remote power supply for dummy mechanisms during thermal tests.			LAM			
DPU	Electronics Unit	CPU board S/N 5	DPU-EM-110.00-0	1	IFSI			
		CPU piggy back board	DPU-EM-120.00-0	1	IFSI			
		I/F board S/N 05	DPU-EM-210.03-0	1	IFSI			
		DC/DC converter board S/N 03	DPU-EM-310.00-0	1	IFSI			
		Motherboard S/N 05	DPU-EM-410.00-0	1	IFSI			
	Software				IFSI			