

MULLARD SPACE SCIENCE LABORATORY

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SPIRE – HARDWARE TREE

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Change Record

ISSUE	Date	Brief description of change
0.1	September 2001	New document
1.0	November 2001	Issued with updated drawing numbers

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Glossary

All terms are listed in the CIDL.

1. Scope of Document

This document presents the Hardware Tree for the Spire Structure (breakdown of the product into sub-assemblies), and a list of associated drawings.

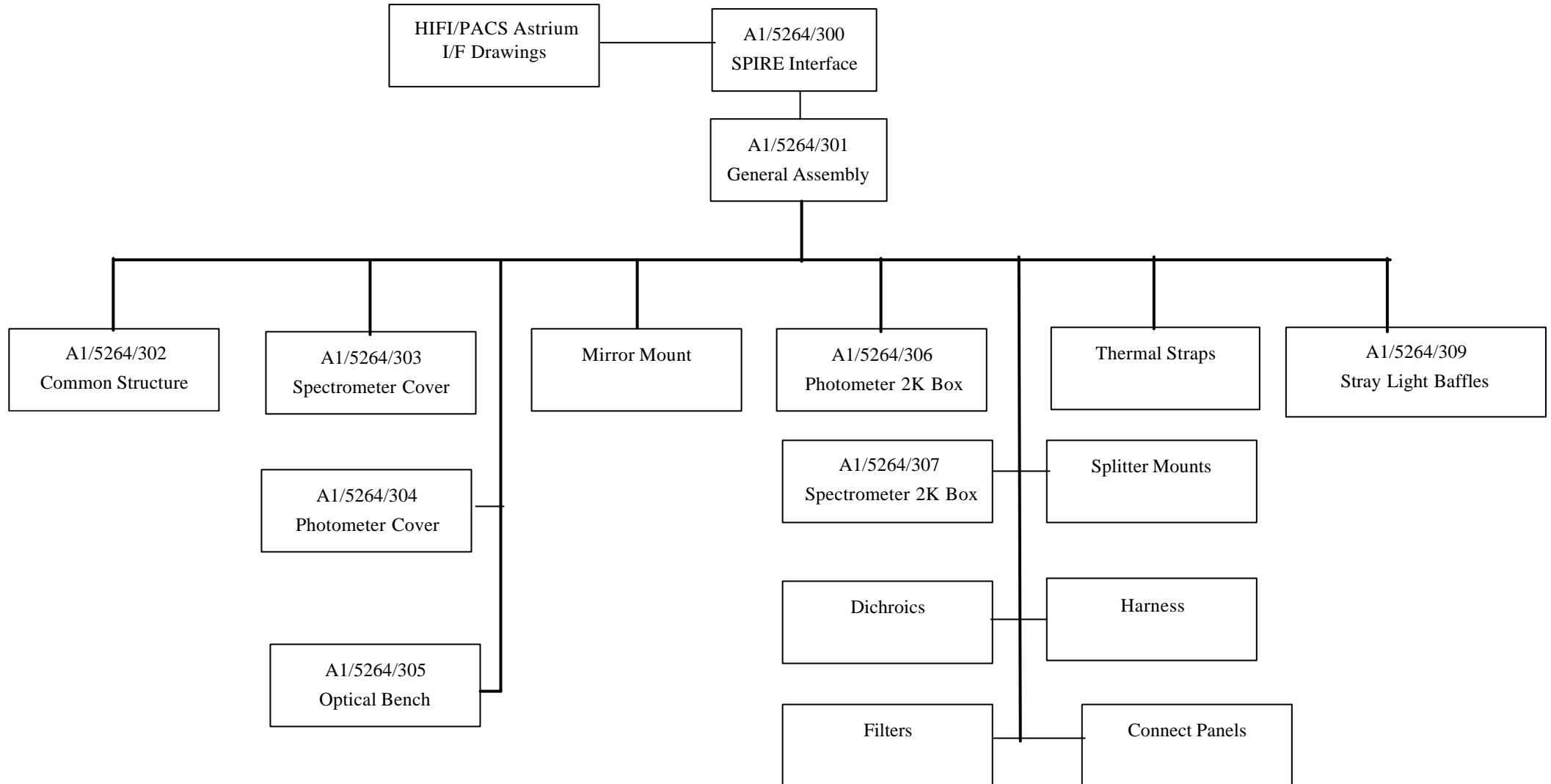
2. Documents

All documents are listed in Figure 3.2 of the CIDL.

3. Hardware Tree and Drawing List

The Structure Hardware Tree and associated Drawings are presented in the figures below.

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Dwg Level	Drawing Number	Issue	Sheets	System	Title	Material
X	A1/5264/300	13	6	SPIRE Interface	SPIRE Interface	-
X	A2/5264/904	1	1	SPIRE Interface	Beam Splitter Mounts (Spectrometer)	-
X	A3/5264/905	1	1	SPIRE Interface	Dichroic Mounts (Photometer)	-
X	A3/5264/906			SPIRE Interface	Optical Bench Dimension WRT Focal Plane	-
X	A2/5264/907	6	1	SPIRE Interface	Bean Steering Mechanism Interface	-
X	A2/5264/908	3	1	SPIRE Interface	Cooler Interface	-
X	A1/5264/909	3	2	SPIRE Interface	SMEC Interface	-
X	A2/5264/910	3	1	SPIRE Interface	Spectrometer Calibrator Interface	-
X	A3/5264/911	2	1	SPIRE Interface	Detector Interface Adapter Plate	Alum Alloy BS1470 6082 T6
X	A1/5264/912			SPIRE Interface	Wiring Harness Spectrometer Side/Photometer Side	
X	A3/5264/913			SPIRE Interface	Detector Focal Plane Definition Check	
X	A1/5264/914	1	1	SPIRE Interface	Shutter Interface	-
X	A3/5264/915			SPIRE Interface	4K Cooler Strap Joint & Light Baffles	
X	A1/5264/916	1	1	SPIRE Interface	Mirror Fixing Envelope	-
X	A1/5264/917	1	1	SPIRE Interface	RFI Filter Interface	-
X	A1/5264/301			General Assembly	General Assembly	
X	A1/5264/302			Common Structure	Common Structure Assembly	
X	A2/5264/302-1			Common Structure	Blade Mount	
X	A3/5264/302-2			Common Structure	Insulating Bush	
X	A3/5264/302-3			Common Structure	Special Washer	
X	A1/5264/302-4			Common Structure	Optical Bench	
X	A1/5264/303			Spectrometer Cover	Spectrometer Cover Assembly	
X	A1/5264/304			Photometer Cover	Photometer Cover Assembly	
X	A1/5264/304-1			Photometer Cover	Top Plate	

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X	A1/5264/304-2			Photometer Cover	Top Rear Plate	
X	A1/5264/304-3			Photometer Cover	Front Plate	
X	A1/5264/304-4			Photometer Cover	Back Plate	
X	A1/5264/304-5			Photometer Cover	Outer Plate	
X	A1/5264/305			Optical Bench	Optical Bench Assembly	
X	A1/5264/305-1	1	1	Optical Bench	Optical Bench	
X	A1/5264/305-2	1	1	Optical Bench	SM06 Mirror Mount	Alum Alloy BS1470 6082 T6
X	A1/5264/305-3	2	1	Optical Bench	SM07 Mirror Mount	Alum Alloy BS1470 6082 T6
X	A1/5264/305-4	1	1	Optical Bench	SM08A Mirror Mount	Alum Alloy BS1470 6082 T6
X	A1/5264/305-5	1	1	Optical Bench	SM08B Mirror Mount	Alum Alloy BS1470 6082 T6
X	A1/5264/305-6	1	1	Optical Bench	SM09A & SM10A Mirror Mount	Alum Alloy BS1470 6082 T6
X	A1/5264/305-7	1	1	Optical Bench	SM09B & SM10B Mirror Mount	Alum Alloy BS1470 6082 T6
X	A1/5264/305-8	1	1	Optical Bench	SM11A Mirror Mount	Alum Alloy BS1470 6082 T6
X	A1/5264/305-9	1	1	Optical Bench	SM11B Mirror Mount	Alum Alloy BS1470 6082 T6
X	A1/5264/305-10	1	1	Optical Bench	SM12A Mirror Mount	Alum Alloy BS1470 6082 T6
X	A1/5264/305-11	1	1	Optical Bench	SM12B Mirror Mount	Alum Alloy BS1470 6082 T6
X	A1/5264/305-12	1	1	Optical Bench	Secondary Optical Bench (CM3/SPMOT)	Alum Alloy BS1470 6082 T6
X	A1/5264/305-13	1	1	Optical Bench	PM06 Mirror Mount	Alum Alloy BS1470 6082 T6
X	A1/5264/305-14	1	1	Optical Bench	PM08 Mirror Mount	Alum Alloy BS1470 6082 T6
X	A1/5264/305-15	1	1	Optical Bench	PM06 & SM06 Bulkhead	Alum Alloy BS1470 6082 T6
X	A3/5264/305-16	1	1	Optical Bench	Optical Reference Cube	Alum Alloy BS1470 6082 T6
X	A2/5264/305-17	1	1	Optical Bench	PM10 Mirror mount	Alum Alloy BS1470 6082 T6
X	A1/5264/306			Photometer 2K Box	Photometer 2K Box Assembly	
X	A1/5264/306-1			Photometer 2K Box	Back Cover	
X	A1/5264/306-2			Photometer 2K Box	Spine	
X	A1/5264/306-3			Photometer 2K Box	Front Cover	

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Dwg Level	Drawing Number	Issue	Sheets	System	Title	Material
X	A1/5264/307			Spectrometer 2K Box	Spectrometer 2K Box Assembly	
X	A3/5264/309			Level 0 Feed Thorough	Strap/Light Baffle Assembly	
	X	A3/5264/309-1		Level 0 Feed Thorough	Baffle Inner	
	X	A3/5264/309-2		Level 0 Feed Thorough	Baffle Outer	
	X	A3/5264/309-3		Level 0 Feed Thorough	Junction Plate Inner	
	X	A3/5264/309-4		Level 0 Feed Thorough	Junction Plate Outer	
	X	A3/5264/309-5		Level 0 Feed Thorough	Anti Torque Plate	
	X	A3/5264/309-6		Level 0 Feed Thorough	Special Washer	
	X	A3/5264/309-7		Level 0 Feed Thorough	Stop Screw	
X	A2/5264/310	1	1	Dichroics	PDIC-1 Assv	-
	X	A2/5264/310-1	1	Dichroics	PDIC-1 Mount	Alum Alloy BS1470 6082 T6
	X	A2/5264/310-2	1	Dichroics	PDIC-1 Clamp Ring	Alum Alloy BS1470 6082 T6
	X	A2/5264/310-3	1	Dichroics	Dowel Bolt 6-32 UNC	Stainless Steel BS970 303/S31
	X	A2/5264/311	1	Dichroics	PDIC-2 Assv	-
	X	A2/5264/311-1	1	Dichroics	PDIC-2 Mount	Alum Alloy BS1470 6082 T6
	X	A2/5264/311-2	1	Dichroics	PDIC-2 Clamp Ring	Alum Alloy BS1470 6082 T6
X	A1/5264/401			Test Gear	'A' Frame Dynamic Test Rig	
	X	A1/5264/401-1		Test Gear	Dead Weight	
	X	A1/5264/401-2		Test Gear	Support Plate	
	X	A1/5264/401-3		Test Gear	Cover Plate	
X	A2/5264/402			Test Gear	Busbar Test Rig Assembly	
	X	A1/5264/402-1		Test Gear	Base Plate	
	X	A3/5264/402-2		Test Gear	Mounting Plate	
	X	A3/5264/402-3		Test Gear	Anchor Capstan	
	X	A3/5264/402-4		Test Gear	Tensioning Capstan	

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