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CARLO GAVAZZI SPACE SEA

Herschel/FIRST - DPU Progress Meeting 3

Carlo Gavazzi Space S.p.A.
Milano, 04 September 2001
MITA Meeting Room

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Progress Meeting 3 - Agenda

- Presentation of activities status
- Open Points
- Any Other Business

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EM DELIVERABLES

* CPU BOARD			
Qty	Payload	Scope	Tot
	1 HIFI	Payload	
	1 SPIRE	Payload	
	1 PACS	Payload	
	1 HIFI	Software dev.	
	1 SPIRE	Software dev.	
	1 PACS	Software dev.	
Total EM boards			6

* PL-SC I/F			
Qty	Payload	Scope	Tot
	1 HIFI	Payload	
	1 SPIRE	Payload	
	1 PACS	Payload	
	1 HIFI	Software dev.	
	1 SPIRE	Software dev.	
	1 PACS	Software dev.	
Total EM boards			6

* DC/DC CONV			
Qty	Payload	Scope	Tot
	1 HIFI	Payload	
	1 SPIRE	Payload	
	1 PACS	Payload	
Total EM boards			3

* MOTHER BOARD			
Qty	Payload	Scope	Tot
	1 HIFI	Payload	
	1 SPIRE	Payload	
	1 PACS	Payload	
	1 HIFI	Software dev.	
	1 SPIRE	Software dev.	
	1 PACS	Software dev.	
Total EM boards			6

** No Redundancy*

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EQM DELIVERABLES

CPU BOARD			
Qty	Payload	Scope	Tot
	1 HIFI	Main	
	1 SPIRE	Main	
	1 PACS	Main	
	1 HIFI	Red	
	1 SPIRE	Red	
	1 PACS	Red	
Total EQM boards			6

PL-SC I/F			
Qty	Payload	Scope	Tot
	1 HIFI	Main	
	1 SPIRE	Main	
	1 PACS	Main	
	1 HIFI	Red	
	1 SPIRE	Red	
	1 PACS	Red	
Total EQM boards			6

DC/DC BOARD			
Qty	Payload	Scope	Tot
	1 HIFI	Main	
	1 SPIRE	Main	
	1 PACS	Main	
	1 HIFI	Red	
	1 SPIRE	Red	
	1 PACS	Red	
Total EQM boards			6

MOTHER BOARD			
Qty	Payload	Scope	Tot
	1 HIFI	Main/Red	
	1 SPIRE	Main/Red	
	1 PACS	Main/Red	
Total EQM boards			3

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FM/FS DELIVERABLES

CPU BOARD			
Qty	Payload	Scope	Tot
	2 HIFI	Main/Red	
	2 SPIRE	Main/Red	
	2 PACS	Main/Red	
	1 PACS	Spare	
	1 SPIRE/HIFI	Spares	
Total FM/FS boards			8

PL-SC I/F			
Qty	Payload	Scope	Tot
	2 HIFI	Main/Red	
	2 SPIRE	Main/Red	
	2 PACS	Main/Red	
	1 PACS	Spares	
	1 SPIRE/HIFI	Spares	
Total FM/FS boards			8

DC/DC CONV			
Qty	Payload	Scope	Tot
	1 HIFI	Main/Red	
	1 SPIRE	Main/Red	
	1 PACS	Main/Red	
	1 HIFI	Spare	
	1 PACS/SPIRE	Spare	
Total FM/FS boards			5

MOTHER BOARD			
Qty	Payload	Scope	Tot
	1 HIFI	Main/Red	
	1 SPIRE	Main/Red	
	1 PACS	Main/Red	
	2	Spares	
Total FM/FS boards			5

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Deliverable Documents

- S/W
 - SRD
 - ADD
 - Test Procedure and Test Result
 - SVVP
- H/W
 - Specification (DSP, I/F, DC/DC, Motherboard)
 - DCL - DML - DPL - DMPL
 - Electrical Drawings
 - Part List
 - Layout
 - Test Procedure - Test Report

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Current Status

- Hardware
 - DSP Board
 - I/F Board
 - DC/DC Converter Board
 - Motherboard
- Software
- Test Equipment

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DSP Board

- **Electrical Design**: Completed
- **Kitting**: Completed
- **Test Procedure Document**: Completed
- **Artwork**: Completed
- **PCB Manufacturing**: Completed
- **FPGA Programming**: Completed
- **Board Assembly (S/N 01)**: Completed
- **Board Testing (S/N 01)**: In Progress
- **Board Assembly (S/N 02)**: In Progress

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I/F Board

- **Electrical Design**: Completed
- **Kitting**: Completed
- **Test Procedure Document**: Completed
- **Artwork**: Completed
- **PCB Manufacturing**: Completed
- **FPGA Programming**: Completed
- **Board Assembly (S/N 01)**: Completed
- **Board Testing (S/N 01)**: In Progress
- **Board Assembly (S/N 02)**: In Progress

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DC/DC Board

- **Electrical Design**: Completed
- **Test Procedure Document**: In Progress (delayed, expected within 14/09/2001)
- **Artwork**: In Progress (delayed, expected within 14/09/2001)

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Motherboard

- **Electrical Design**: Completed
- **Test Procedure Document**: In Progress (expected within 14/09/2001)
- **Artwork**: In Progress (delayed, expected within 07/09/2001)

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Software Status

- **1355 Coding**: In Progress (80%)
- **1553 Coding**: In Progress (50%)
- **Power On Procedure Coding**: In Progress (50%)

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Test Equipment

- Based on two simulators:
 - IFSI Simulator for FSDL and LSL links
 - CGS Simulator for MIL 1553 and IEEE 1355
- CGS Test equipment shall be composed by a PC with two interface boards installed
 - 1355 Link
 - Condor PCI-1553 Board

 - The installation of both boards inside the CGS TE will be performed only after the completion of tests at board level (1355 for CPU and 1553 for PL I/F)

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Open Points

- The delay in the delivery of IFSI FSDL and LSL Simulators is resulting in a delay in the testing of the Payload & Spacecraft Interface board.