

 <p>IFSI CNR</p>	<p align="center"><b>Herschel SPIRE</b> <b>DPU AVM EIDP CONTENTS</b></p>	<p><b>Ref.:</b> SPIRE-IFS-DOC-001388 <b>Issue:</b> Issue 1.1 <b>Date:</b> 15/1/2003</p>
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**Herschel SPIRE**  
**DPU AVM EIDP CONTENTS**  
**Document Ref.: SPIRE-IFS-DOC-001388**  
**Issue: 1.1**

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## Document Status Sheet:

<b>Document Title :</b> Herschel SPIRE DPU AVM EIDP Contents			
Issue	Revision	Date	Reason for Change
Issue 1		10 October 2002	First Issue
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## Document Change Record :

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	Issue 1.1
3	Added Virtual Machine Document #11
3	Updated document #9 Issue

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## 1 INTRODUCTION

### 1.1 Scope of the document

The purpose of this document is to define a list of items/documents that are part of the delivery of the DPU AVM.

## 2 Hardware

The AVM DPU is a single mechanical box containing a single DPU unit.

The DPU unit consists of the following hardware boards:

- CPU board S/N 05
- I/F board S/N 05
- DC/DC converter board S/N 03
- Motherboard S/N 05

The mechanical dimensions, the connectors positions and labelling are indicated in the DPU box interface control drawing (SPIRE\_DPUBox5.pdf).

In the AVM configuration, as there is only one DPU unit inside the box and no cold redundant unit, the redundant connectors are not mounted on the box front wall. The connectors receptacles are covered with a glued Al foil.

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## 2.1 List of Hardware documents

<b>1</b>	SPIRE DPU HW User Manual	SPIRE-IFS-PRJ-001390 Issue 1
<b>2</b>	SPIRE DPU AIV and Test Plan	SPIRE-IFS-DOC-001028 Issue 1.1
<b>3</b>	SPIRE-DPU Handling, Packing, Storage, Shipping Procedures	SPIRE-IFS-PRJ-001386 Issue 1
<b>4</b>	DPU/ICU Switch-On Procedure	CNR.IFSI.2001TR01 Issue 1
<b>5</b>	DPU/ICU Derating and Worst Case Analysis	CNR.IFSI.2001TR06 Issue 1.1
<b>6</b>	DPU/ICU ESD Control procedure	IFSI/ICU/PR/2001-001 Issue 1.1
<b>7</b>	SPIRE DPU Configuration Status List	SPIRE-IFS-DOC-00 Issue 1.4
<b>8</b>	SPIRE AVM Log-Book	SPIRE-IFS-PRJ-001387 Issue 1
<b>9</b>	SPIRE DPU AVM Design Description	SPIRE-IFS-PRJ-001389 Issue 1
<b>10</b>	SPIRE-DPU-IF-CNTRL-Drawing	SPIRE_DPUBox5.pdf
<b>11</b>	SPIRE DPU Interface Control Document	SPIRE-IFS-PRJ-000650
<b>12</b>	SPIRE DPU Declared Components, Material and Processes List	SPIRE-IFS-DOC-001031 Issue 1.1
<b>13</b>	CPU Board Specification	DPU-SP-CGS-001 Issue 1
<b>14</b>	I/F Board Specification	DPU-SP-CGS-002 Issue 1
<b>15</b>	Mother-Board Specification	DPU-SP-CGS-005 Issue 1
<b>16</b>	DC/DC Board Specification	DPU-SP-CGS-004 Issue 1
<b>17</b>	DPU/ICU Spacecraft Interface Acceptance Test Plan	CNR.IFSI.2001TR04 Draft 0.1
<b>18</b>	CPU Board Design	Herschel CPU Main EM1.DSN
<b>18.1</b>	CPU Board Design Electrical Assembly page 1/2	DPU-EM-110.00-0
<b>18.2</b>	CPU Board Design Electrical Assembly page 2/2	DPU-EM-110.00-0
<b>18.3</b>	CPU Board General Block Diagram page 1/8	DPU-EM-110.02-0
<b>18.4</b>	CPU Board Boot Loader & Clocks Generator page 2/8	DPU-EM-110.02-0
<b>18.5</b>	CPU Board Control Block page 3/8	DPU-EM-110.02-0
<b>18.6</b>	CPU Board Data Memory page 4/8	DPU-EM-110.02-0
<b>18.7</b>	CPU Board DM Mezzanine I/F page 5/8	DPU-EM-110.02-0
<b>18.8</b>	CPU Board DSP_PGA page 6/8	DPU-EM-110.02-0
<b>18.9</b>	CPU Board PM Mezzanine page 7/8	DPU-EM-110.02-0
<b>18.10</b>	CPU Board Program Memory page 8/8	DPU-EM-110.02-0
<b>19</b>	CPU Board Piggy-Back Design	Herschel CPU DM PIGGY EM1.DSN
<b>19.1</b>	CPU Piggy-Back Electrical Assembly page 1/2	DPU-EM-120.00-0
<b>19.2</b>	CPU Piggy-Back Electrical Assembly page 2/2	DPU-EM-120.00-0
<b>19.3</b>	CPU Piggy-Back Electrical Block Diagram page 1/3	DPU-EM-120.02-0
<b>19.4</b>	CPU Piggy-Back Electrical EEPROM Block page 2/3	DPU-EM-120.02-0
<b>19.5</b>	CPU Piggy-Back SMCS332 (NA for SPIRE) page 3/3	DPU-EM-120.02-0
<b>20</b>	Interface Board Design	PSI-E000_0.00.DSN
<b>20.1</b>	Interface Board Electrical Assembly page 1/2	DPU-EM-210.00-0
<b>20.2</b>	Interface Board Electrical Assembly page 2/2	DPU-EM-210.00-0
<b>20.3</b>	Interface Board Electrical Block Diagram page 1/8	DPU-EM-210.02-0
<b>20.4</b>	Interface Board IEEE 1553 Interface page 2/8	DPU-EM-210.02-0

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20.5	Interface Board Analogue Inputs page 3/8	DPU-EM-210.02-0
20.6	Interface Board Control Logic page 4/8	DPU-EM-210.02-0
20.7	Interface Board FSL,LSL Interfaces page 5/8	DPU-EM-210.02-0
20.8	Interface Board FSL Channel 0,1 FIFOs page 6/8	DPU-EM-210.02-0
20.9	Interface Board FSL Channel 2,3 FIFOs page 7/8	DPU-EM-210.02-0
20.10	Interface Board Power and Spares page 8/8	DPU-EM-210.02-0
21	DC/DC Converter Board Design	DC DC FIRST DESIGN1 EM.DSN
21.1	DC/DC Converter Board Electrical Assembly page 1/2	DPU-EM-310.00-0
21.2	DC/DC Converter Board Electrical Assembly page 2/2	DPU-EM-310.00-0
21.3	DC/DC Converter Board Electrical Block Diagram page 1/6	PDU-EM-310.02-0
21.4	DC/DC Converter Board Electrical Drawing page 2/6	PDU-EM-310.02-0
21.5	DC/DC Converter Board Electrical Drawing page 3/6	PDU-EM-310.02-0
21.6	DC/DC Converter Board Electrical Drawing page 4/6	PDU-EM-310.02-0
21.7	DC/DC Converter Board Electrical Drawing page 5/6	PDU-EM-310.02-0
21.8	DC/DC Converter Board Electrical Drawing page 6/6	PDU-EM-310.02-0
22	Motherboard Design	MOTHERBOARD_2_D.DSN
22.1	Motherboard Electrical Assembly page 1/1	DPU-EM-410.00-0
23.2	Motherboard Electrical Drawing page 1/3	DPU-EM-410.02-0
23.3	Motherboard Electrical Drawing page 2/3	DPU-EM-410.02-0
23.4	Motherboard Electrical Drawing page 3/3	DPU-EM-410.02-0
24	CPU BOARD Test Procedure	DPU-PR-CGS-001 Issue 2
25	I/F BOARD Test Procedure	DPU-PR-CGS-002 Issue 1
26	DC/DC BOARD Test Procedure	DPU-PR-CGS-003 Issue 1
27	MOTHER BOARD Test Procedure	DPU-PR-CGS-004 Issue 1
28	CPU Board S/N 05 Test Report	DPU-RP-CGS-026 Issue 1
29	I/F Board S/N 05 Test Report	DPU-RP-CGS-032 Issue 1
30	DC/DC Converter S/N 03 Board Test Report	DPU-RP-CGS-031 Issue 1
31	Mother- Board S/N 05 Test Report	DPU-RP-CGS-011 Issue 1
32	SPIRE 1553B Test Report	SPIRE-IFS-REP-001385 Issue 1
33	SPIRE AVM DPU Test Summary Report	SPIRE-IFS-REP-001394 Issue 1

### 3 List of Software documents

1	DPU-BSW SOFTWARE REQUIREMENTS DOCUMENT	DPU-SQ-CGS-001 Issue 2
2	DPU-BSW SOFTWARE A.D. DOCUMENT	DPU-AD-CGS-001 Issue 1
3	DPU SW VV Plan/Acceptance Test	DPU-PL-CGS-002 Issue 1
4	DPU Basic SW Test Report	DPU-RP-CGS-030 Issue 1
5	DPU Basic SW User Manual	DPU-MA-CGS-003 Issue 1
6	SPIRE DPU OBS SSD	SPIRE-IFS-PRJ-001036 Draft 0.9
7	HSO DPU/ICU OBS Product Assurance Plan	IFSI/OBS/PL/2000-001 Issue 1.1
8	SPIRE OBS URD	SPIRE-IFS-PRJ-000444 Issue 1.1
9	Herschel DPU OBS SVVP/Acceptance Test Plan	SPIRE-IFS-DOC-001392 Issue 1.1
10	SPIRE DPU OBS Test Report (TBW)	SPIRE-IFS-REP-001393 Issue 1

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<b>11</b>	SPIRE DPU Virtual Machine	CNR.IFSI.2003.TR01
<b>12</b>	SPIRE DPU OBS Software User Manual	SPIRE-IFS-PRJ-001391 Draft 0.5