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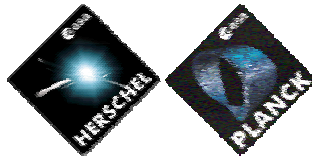
## HERSCHEL STM FAMILY TREE

Product Code : 100000

Written by	Responsibility-Office - Company	Date	Signature
	ARCHITECTURE TEAM		
<b>Supervised/Verified by</b>			
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J.J. JUILLET	PROJECT MANAGER	28/06/02	

DATA MANAGEMENT:

**Entité Emettrice** : Alcatel Space - Cannes  
(détentrice de l'original)




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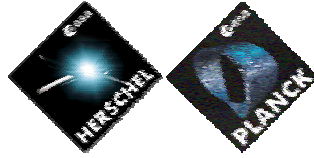
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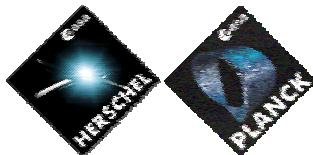
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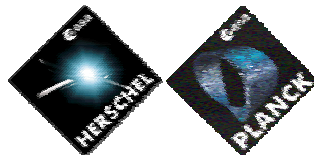


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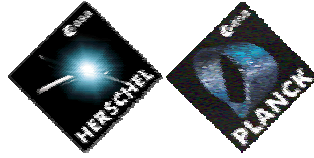
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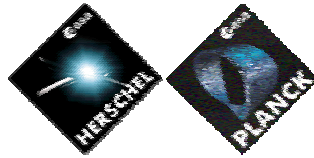


## 1. PURPOSE

This document provides the family tree for Herschel STM S/C. The purpose of the family tree is to describe the definition arborescence for Herschel S/C covering pre- integration and integration activities at System level.

This arborescence details the main steps in terms of hardware implementation, from S/S or modules hardware delivery up to completion of S/C testing.

This arborescence is based on the ongoing STM definition presented at System PDR.



## 2. APPLICABLE AND REFERENCE DOCUMENTS

### 2.1 Applicable document List

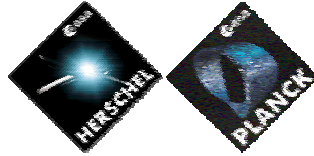
AD01 Herschel/Planck System Requirements Specification (SRS)  
SCI-PT-RS-05991, Issue 3.0

### 2.2 Reference document List

RD01 Herschel Satellite Configuration and Interface drawings files  
H-P-2-ASPI-PL-0191 Issue 01

RD02 Planck Satellite Configuration and Interface drawings files for information  
H-P-3-ASPI-PL-0192 Issue 01

RD03 Hardware Matrix  
HP-1-ASPI-LI-0058 Issue 02



### 3. ABBREVIATIONS, LABELLING AND CODING

#### 3.1 Abbreviations

##### *Launcher*

ARE ARIANESPACE

##### *Industry*

ALS ALENIA  
ASED ASTRIUM Deutschland  
ASPI Alcatel Space Industries

##### *Modules*

SVM SerVice Module  
PLM Pay-Load Module

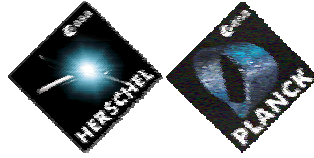
##### *Instruments*

HIFI HIFI consortium  
PACS PACS consortium  
SPIRE SPIRE consortium

#### 3.2 Labelling

SVM: supplied by ALS  
PLM: supplied by ASEDE  
SYSTEM: supplied / integrated by ASPI

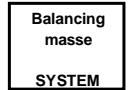




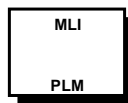
### 3.3 Coding



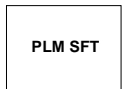
System assembly element



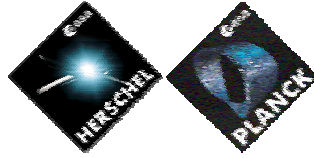
Elementary part or sub-assembly part (for example)



Multiple part (for example)



Documentation (for example)



## 4. FAMILY TREE BREAKDOWN

### 4.1 Family Tree organisation

The S/C Family Tree is split in 3 levels as defined as follows:

- first arborescence level / S/C Assy
- secondary arborescence level / Sub-Assy
- arborescence ending level / Delivery status level

The details of the S/C arborescence levels are given in the following g sections.

### 4.2 First arborescence level / S/C Assy

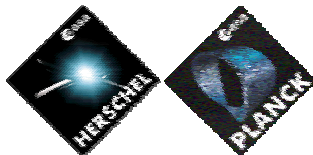
The first arborescence level provides a full picture of AIT activities starting the complete S/C integration from sub-assemblies provided by the Secondary arborescence level, or from ending items in provenance from S/S H/W delivery.

### 4.3 Secondary arborescence level / Sub-Assy

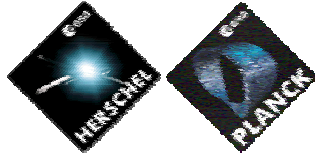
The Secondary arborescence level depicts AIT activities at sub-assemblies level, that could be performed off-line or in advance of the main S/C activities as evoked above. The sub-assemblies are performed from ending items in provenance from S/S H/W delivery.

### 4.4 Arborescence ending level / Delivery status

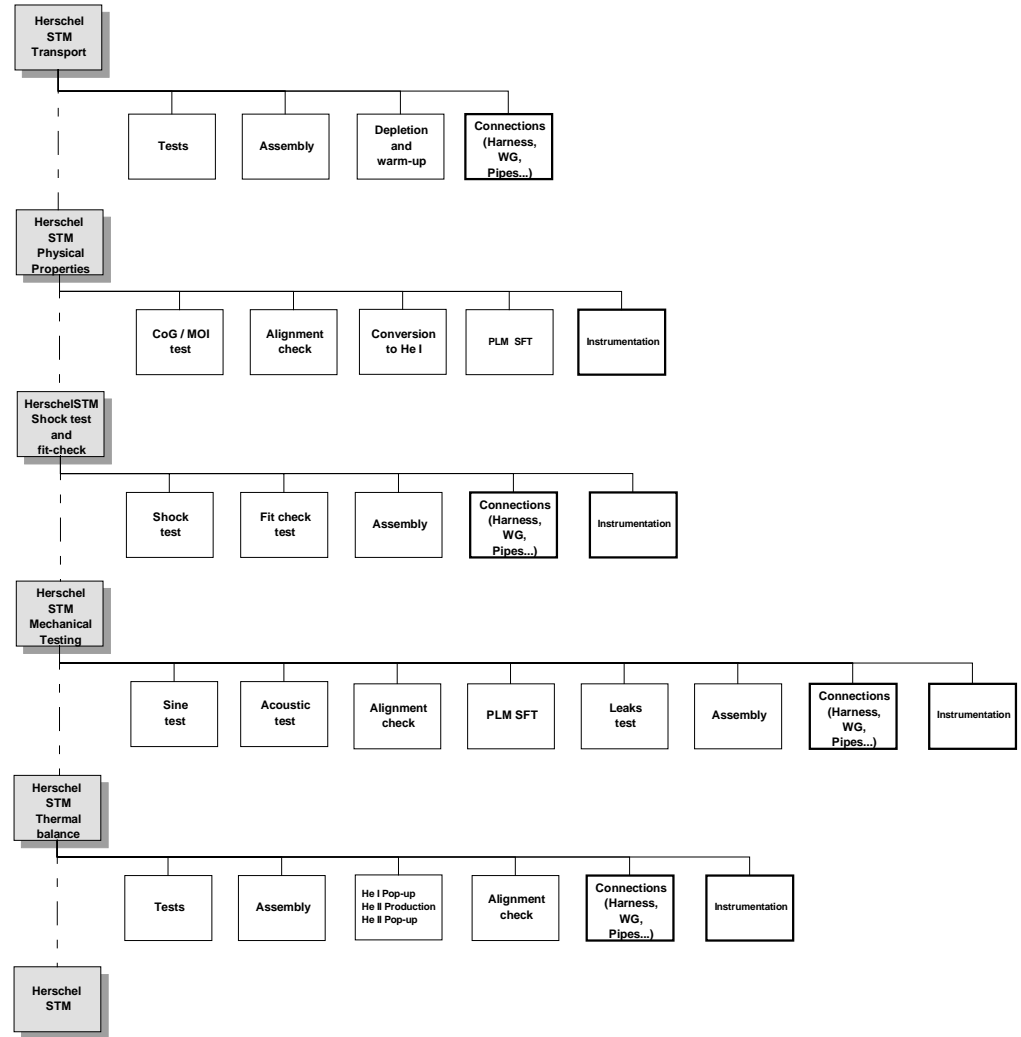
The arborescence ending level defines the delivery status for each S/S H/W called in the S/C construction. The delivery status identifies the number and content of H/W delivery packs, which are necessary to be used at S/C Assy or Sub-Assy levels.

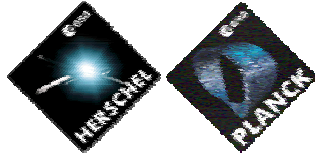


## APPENDIX 1 - S/C ASSY DESCRIPTION

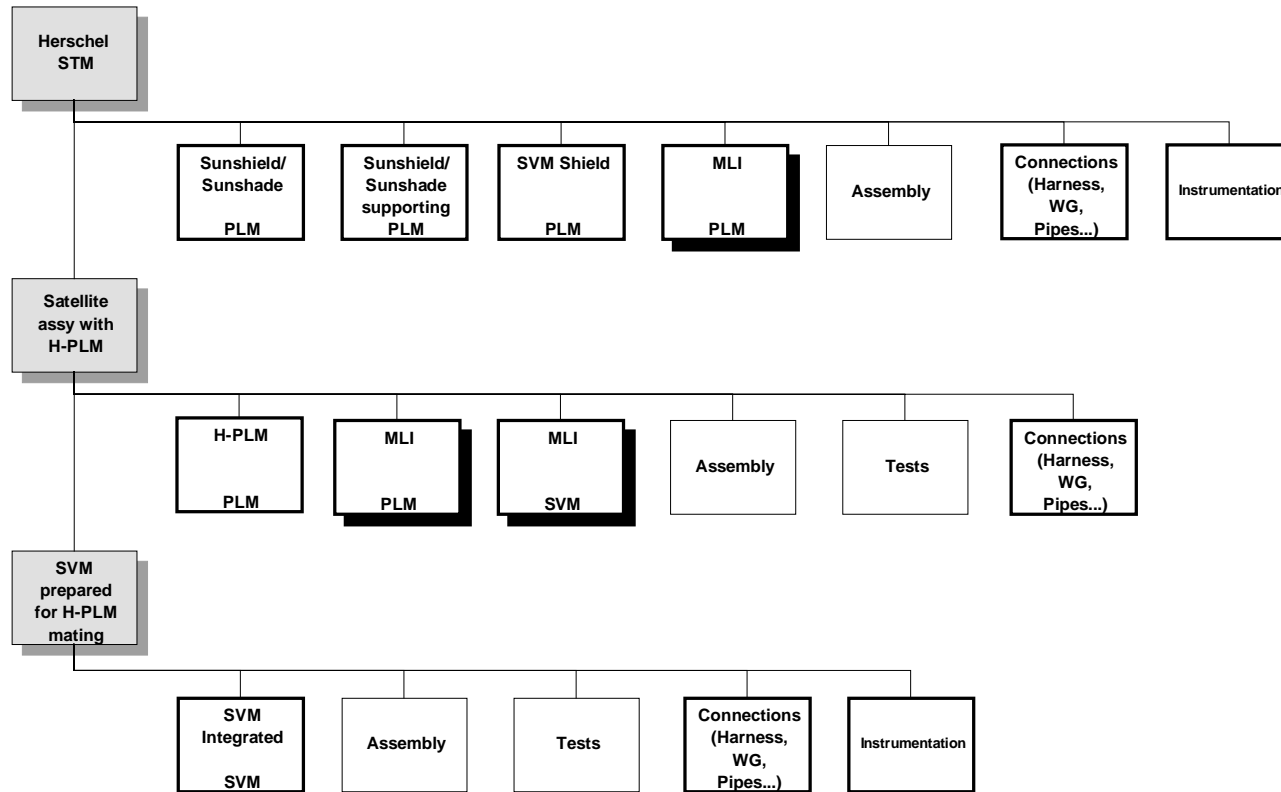


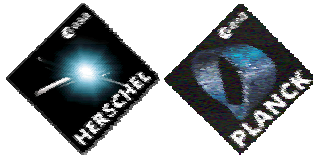
Appendix 1 - S/C Assy Description - sheet 1/2





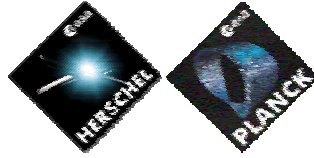
APPENDIX 1 - S/C ASSY DESCRIPTION - SHEET 2/2



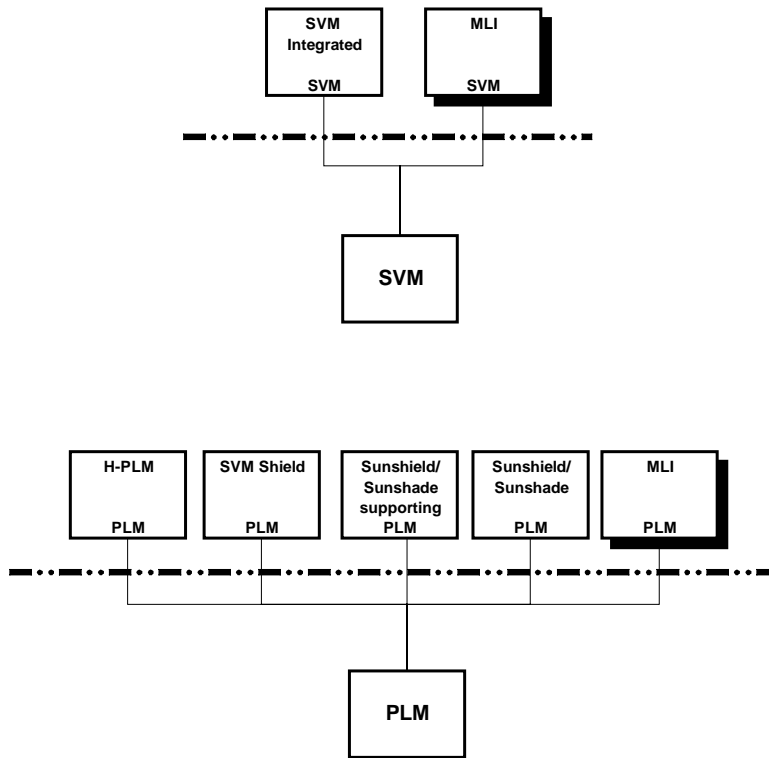


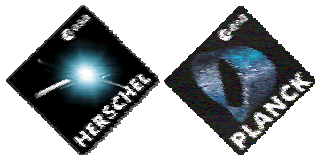
## APPENDIX 2 - SUB-ASSY DESCRIPTION

INCLUDED IN DELIVERY STATUS LEVEL



### APPENDIX 3 - DELIVERY STATUS DESCRIPTION





END OF DOCUMENT