1. (normative)  
   Process Identification Documentation (PID) - DRD
   1. DRD identification
      1. Requirement identification and source document

This DRD is called from ECSS-Q-ST-70-61 requirement 16.2a.

* + 1. Purpose and objective

The purpose of the PID is to consolidate the overall management, process and facilities utilised during the manufacturing and verification of the assembly.

* 1. Expected response
     1. Scope and content

SECTION 1: Document Format

The PID shall contain the following information about the Document Format:

Cover page: document title, document reference, revision number and date, page numbering, signing of Production and Quality representatives,

Follow-up of PID updates: registration of PID updates indicating the nature of the update and the sections and pages updated,

Purpose and scope of the document,

Table of contents.

SECTION 2: Manufacturing control

The PID shall contain the Manufacturing control flow chart of the verified assembly.

* 1. 1 This illustrates the various stages of procurement, manufacturing and inspection operations specific to this technology in a flow chart format.
  2. 2 It can be used to identify, among others:
     + the operation,
     + the body responsible for its implementation,
     + related documents: (only their reference),
     + procurement specifications (for materials),
     + acceptance inspection procedures (for materials and components),
     + manufacturing procedures,
     + manufacturing and quality control procedures during and at the end of production.
     + storage documentation

SECTION 3: Specifications

The PID shall contain the following information about Specifications:

List of procurement specifications, assembly procedures and inspection procedures concerning the technology dealt within the PID, including the precise title, the reference or number, the revision number and date of each document

Printed circuit design rules in compliance with requirements from ECSS-Q-ST-70-12.

General Quality Assurance documents relating to the technology.

SECTION 4: Organisation

The PID shall contain the following information about Organisation:

Represented as a flow chart: organization of the company, organization of production department and organization of the quality Department.

Focal point and PID responsible,

Operators and inspectors’ certification methodology.

SECTION 5: Manufacturing traveller or log file

The PID shall contain as a minimum the following information about the Manufacturing traveller or log file:

The sequencing of the various operations in their logical order of execution,

The references of the documents referred to and used during these operations,

The references of the Quality documents to trace the various batches of material used (record reference), together with the workstations and tools employed,

The signatures of the various actors with the date on which the task was completed.

Section 6: List of verified technologies

The PID shall contain as a minimum the following information about the list of verified technology:

List of materials,

Temperature and time profiles for the soldering machines used in the verification,

List of verified components per assembly configuration,

List of assembly sensitive components,

List of components with limited project verification,

For limited project verification, non-compliance with clause 13 shall be clearly identified.

SECTION 7: Description of production line

The PID shall contain as a minimum the following about the Description of production line:

Layout of premises with associated surface area, with indication of location of production machines and quality inspection,

Working environment; cleanliness class, ambient temperature limits, humidity, and positive pressure limits for each type of activities.

SECTION 8: List of equipment

The PID shall contain a list of all machines and tools utilised during the manufacturing activity.

SECTION 9: List of laboratory services

The PID shall contain range and capability of supporting laboratory services.

SECTION 10: Project assembly heritage

The PID shall contain a list of assembled board with associated assembly process by year manufactured in accordance with the PID.

* + 1. Special remarks

None.