# PCB Specification Document

## Project Details

Specification name	GS-PCB-SPEC-0606
Release	1
Applicable projects	nanopower-p31u-11
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# Specifications

	Specification	Remarks	
Base Specification	ESA ECSS-Q-ST-70-11-C		
Construction	Multi-layer		
Material	Glass/polyimide (GI) IPC-4101/40 Arlon 85N		
Surface finish	Hot oil SnPb reflow		
Layer count	6		
Min. Track/space/ hole	200um / 150um / 300um		
Dimensions	93.17 mm x 89.28 mm		
Packaging	Individually in ESD bag. 10 pcs. in bigger bag	MIL-P-116G IA-8	

#### Panelization

	Specification	Remarks
Delivery in panel	<b>✓</b>	
Panel dimensions	208.84 mmm x 205.56 mm	
Array count X x Y	2x2	

#### File List

Layer	File	File Extension
Stencil top	project-name	GTP
Notation top	project-name	GM7
Copper top	project-name	GTL
Inner 1	project-name	GP1
Inner 2	project-name	G1
Inner 3	project-name	G2
Inner 4	project-name	GP2
Copper bottom	project-name	GBL
Notation bottom	N/A	GM6
Stencil bottom	project-name	GBP
Board outline	project-name	GM10
Drill through	project-name-PLATED	TXT
Drill blind top	N/A	TX1
Drill blind bottom	N/A	TX2
Panel drawing	nanopower-p31u-11-panelization	PDF

### Special processes

	Check	Remarks
Notation top	<b>✓</b>	White, low-outgassing epoxy
Notation bottom		
Countersunk holes	✓	2 holes. Final diameter 5.0mm. Tip angle of bit: 90. Plated. Marked in green circles below
Electrical test	<b>✓</b>	
Impedance control		
Manufacturer logo allowed	$\checkmark$	

## Build-up

	Thickness
Copper outer layers (incl. plating)	70 um
Copper inner layers	70 um
Thickness (over bare substrate)	1.6 mm (free build)

### Countersunk holes:

