



IMS / MCPCBs - Aluminium backed  
PCBs for LED lighting

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## **CAPABILITIES - PCB Manufacturing**

- Premium and Specialised manufacturers in Single Sided, Double Sided, Multilayer, RF/Microwave, Flexible, IMS/ MC, Aluminum Flex and Speciality PCBs.
- We confirm our manufacturing capability based upon final PCB designs & requirements.
- Acceptance of PCBs designs is subject to MRC and Feasibility checks.
- All our PCBs comply with IPC standards unless specified otherwise.

Product Features	Variant	Standard
Max. Layer Count		1
Min. Board Thickness (Finished)		0.8 mm
Max. Board Thickness (Finished)		1.6 mm
Min. Dielectric		0.1 mm
Min. Starting Copper Foil Thickness		35 micron
Max. Finished Copper Thickness		70 microns
Min. Deliverable PCB Size		As per design
Max. Deliverable PCB Size		As per design
Smallest Mech Drill Diameter		0.35 mm
NPTH Slots		Yes
Min. Line Width (trace) and Spacing		As per design
Process Pad Diameter for minimum Annular ring of 0.05 mm		Drill dia + 0.2 mm
Solder Mask Registration		4 mils
Solder Mask Min. Dam Size		6 mils
Min. Diameter Rout Cutter Available		1.0 mm
Routed Part Size Tolerance (Depends on PCB size)		0.2 mm
Bow & Twist Tolerance	Plus or minus	0.75%
Thickness Tolerance	Plus or minus	10% (+/-)
<b>Surface Finishes</b>		
HASL		Yes
Lead Free HASL		Yes
OSP (Entek)		Yes
Lacquer (for Single Side PCBs only)		Yes
Peelable mask		Yes
<b>Solder Masks UVSM / PISM</b>		
Semi - Gloss Green		Yes
Gloss Green		Yes
Matte - Green		Yes
Black		Yes
Red		No
Clear		No
Blue		Yes
White		Yes

Product Features	Variant	Standard
<b>Legend</b>		
Black		Yes
Green		Yes
White		Yes
Yellow		No
<b>Fab</b>		
Routed Array		Yes
Profile Punching		Yes
V Score, Edge to Copper		0.5 mm
V Score Angles		60°
Countersink		Yes
Counterbore		Yes
<b>Electrical Test</b>		
10 Volt		Yes
40 Volt		Yes
250 Volt		Yes
Maximum Test Area	FPT	610 x 510mm
	Bed of nails	16" x 12.8"
Minimum pitch of test pads	FPT	0.25 mm
	Bed of nails	0.5 mm
Minimum test pad size	FPT	0.2 x 0.2 mm
	Bed of nails	0.3 x 0.3 mm
Test conditions	FPT	10 ohms, 10 Meg Ohms
	Bed of nails	20 ohms, 10 Meg Ohms
<b>Laminate Materials IMS Boards</b>		
MCPCB (IMS – Insulated Metal Substrate)		Yes
<b>Reports</b>		
Quality Conformance Inspection report		Yes
Microsection		Yes
Solderability		Yes
XRF (X-ray Fluorescence)		Yes
Ionic Contamination		Yes
Time Domain Reflectometry test (TDR) for Controlled Impedance Boards		Yes
FAI (First Article Inspection)		Yes

Product Features	Variant	Standard
PPAP Documents (on specific request)		Yes
Certificate of Compliance (C of C)		Yes
<b>UL</b>		
94VO (for a large selected families of products)		Yes
<b>System Approvals</b>		
ISO 9001:2015		Yes
IATF 16949:2016		Yes
ISO 14001:2015		Yes
BS/OHSAS 18001:2007		Yes
German Automotive VDA 6.3		No

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