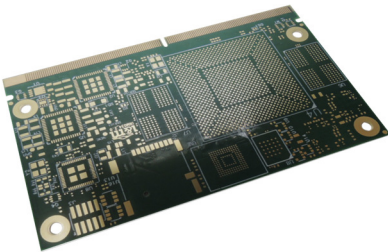


We’ve got the basics covered



Features	Standard	Advanced
Number Of Layers	2-36 Layers	64 Layers
Base Materials	FR-4 (Tg135-150℃)	High Tg (Tg>170℃) High Td (Td>310℃) Low CTE (CTE<4.5% at 50-260℃) High CTI (CTI>250V) Anti-CAF Low Dk (Dk<4.3) Low Loss (Df<0.009 at 1GHz) Ultra-low Loss (Df<0.004 at 1GHz) High Thermal Conductivity (>1W/(m.K))
Finished Board Thickness	0.5mm – 3.2mm	0.4mm - 10mm
Maximum Panel Size	620mm x 460mm	1245mm x 730mm
Finished Copper Thickness	Inner Layer: 1/2oz - 4oz Outer Layer: 1/3oz - 6oz	Inner Layer: 12oz maximum Outer Layer: 12oz maximum
Minimum Trace Width / Spacing	75um / 75um	40um / 50um

Rigid Circuit Board

ERM-0012024

Features	Standard	Advanced
Surface Finish	Electro-less Nickel / Immersion Gold (ENIG) HAL (Lead Free)	HAL (Tin Lead) Immersion Tin Immersion Silver Organic Solder-ability Preserve (OSP) Electrolytic Nickel and Gold
Minimum CNC Hole Diameter	0.2mm	0.15mm
Aspect Ratio (Through Hole)	12:1	24:1
Form Tolerance of Holes	PTH $\pm 0.075\text{mm}$ NPTH $\pm 0.05\text{mm}$	PTH $\pm 0.05\text{mm}$ NPTH $\pm 0.025\text{mm}$
Positional Tolerance of Holes	$\pm 0.1\text{mm}$	$\pm 0.075\text{mm}$
Minimum Space of Hole Wall to Conductor	0.4mm	0.25mm
Minimum Space between Hole walls	0.3mm	0.2mm
Minimum Space of Hole Wall to Routing Line	0.3mm	0.15mm
Minimum Space of Conductor to Routing Line	0.2mm	0.1mm
Solder Mask Thickness	Coverage in accordance with IPC-6012	On Conductor Surface $>10\mu\text{m}$ On Conductor Coner $>5\mu\text{m}$
Minimum Solder Mask Clearance	0.075mm	0.05mm
Minimum Solder Mask Dam	0.1mm	0.075mm
Maximum Via Plugged by Solder Mask	0.55mm	0.65mm
Fill Material in Via	Solder Mask	Epoxy Resin Copper Paste Silver Paste

Rigid Circuit Board

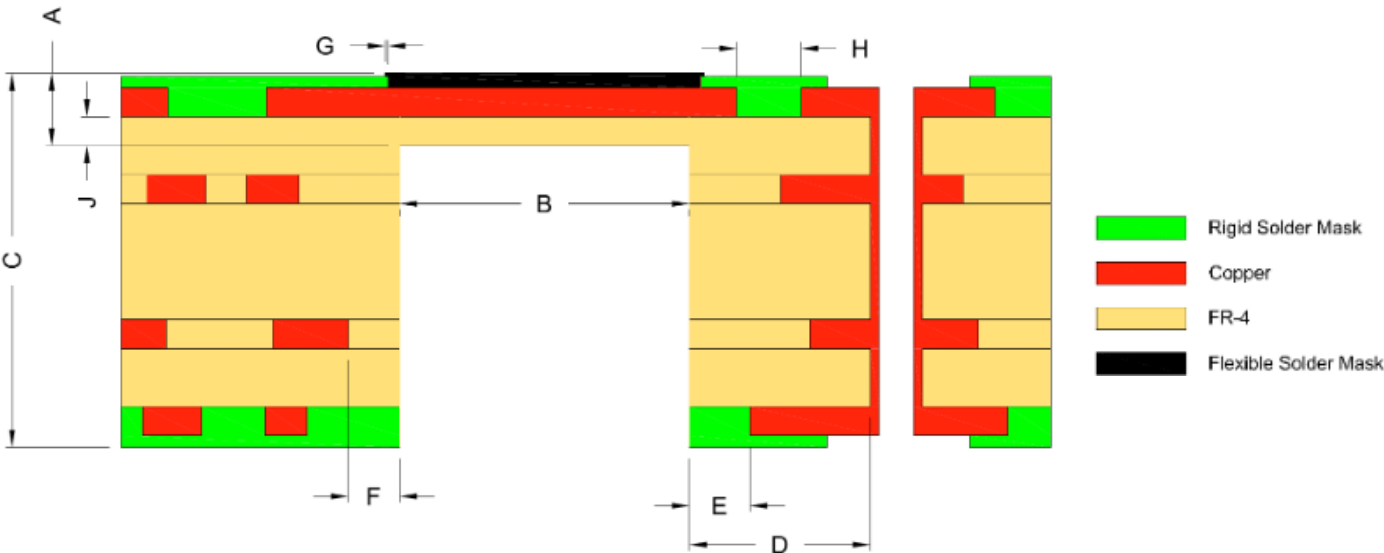
ERM-0012024

Features	Standard	Advanced
Minimum Legend Width	0.15mm	0.1mm
Profiling Tolerance	±0.127mm	±0.075mm
V-cut	Positional Tolerance: ±0.1mm Angle: 30°	Positional Tolerance: ±0.075mm Angle: 45°, 60°
Bow and Twist	Maximum 0.75%	Maximum 0.5%
Impedance Tolerance	±8%	±5%
ENIG Thickness	Minimum 0.05um gold	Minimum 0.075um gold
Gold Thickness on Edge Connector Lands	Minimum 0.8um	Minimum 1.25um
Electrolytic Nickel and Gold Plating Thickness	Minimum 0.02um Au	Minimum 0.025um – 2um Au
HAL Thickness	Coverage in accordance with IPC-6012	1-40um
Immersion Silver Thickness	Minimum 0.12um in accordance with IPC-4553	
Immersion Tin Thickness	Minimum 1um in accordance with IPC-4554	
Solder Mask Color	Green, Red, Blue, White, Yellow, Black	
Legend Color	White, Yellow, Black, Red	
Additional Processes	Beveling, Controlled Depth Milling, Counterbore and Countersink, Edge Plating, Peel-able Mask, Kapton Tape, Carbon Ink	
Special Technology	Filled and Capped Via (Via In Pad), Embedded Copper Coin, Embedded Resistor or/and Capacitor, Blind and Buried Vias (Kindly Refer to the HDI Capability)	
Other Types of Printed Boards	Semi-Flex Printed Board, Metal Base or Core Printed Board	

Semi - Flex Circuit Board

ERM-0012024

Features	Advanced
Number of Layers	1 - 8 layers
Number of Bending Layers	1 - 2 layers
Minimum Trace Width / Spacing	0.1mm
Bending Angle	Maximum 180 degrees
Maximum size of Printed Board	460mm x 610mm



A	Bending Area Thickness	0.2mm - 0.4mm
B	Bending Area Length	Minimum 10mm
C	Rigid Printed Board Thickness	0.6mm - 3.2mm
D	Distance of Hole to Bending Area	Minimum 0.8mm
E	Distance of Outer Conductor to Bending Area	Minimum 0.5mm
F	Distance of Inner Conductor to Bending Area	Minimum 0.2mm
G	Overlap of Flexible solder mask to Rigid Solder Mask	Minimum 0.25mm
H	Distance of Outer Conductor to Bending Area Conductor	Minimum 0.5mm
J	Dielectric Thickness of Bending Area	Minimum 0.05mm