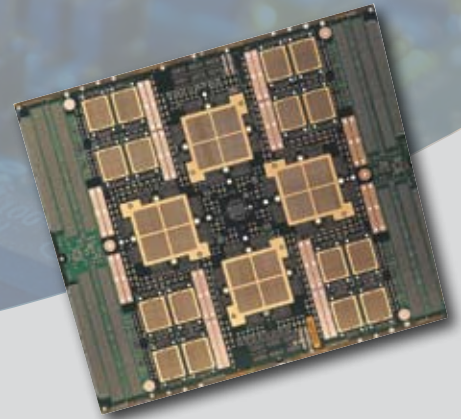
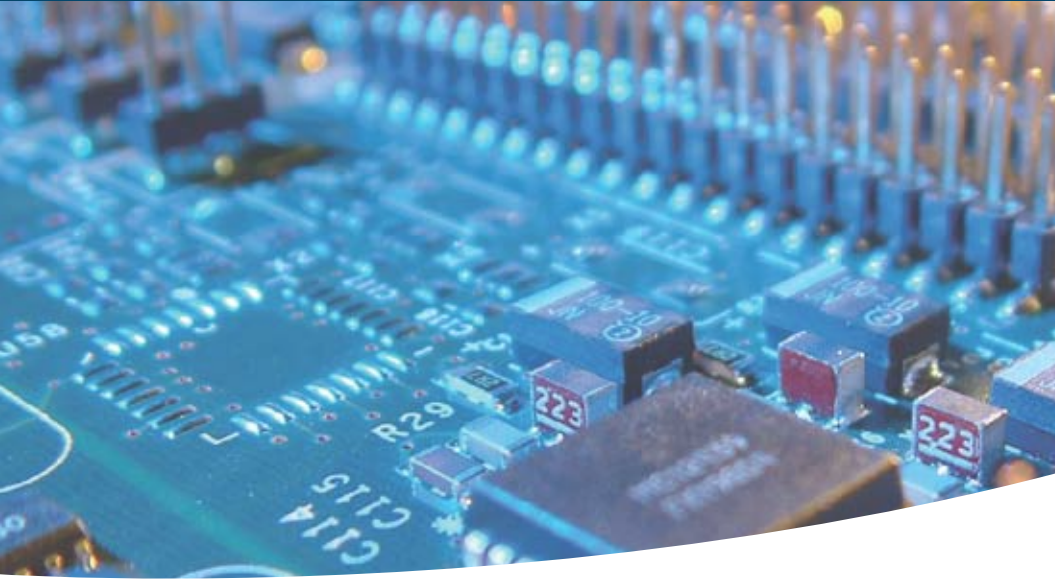


# Printed Circuit Boards



## High quality, high density, high reliability

At the forefront of printed circuit board development and manufacturing for more than 40 years, EI delivers high quality, high density, high layer count PCBs that provide long term performance.

We offer a total solution for your PCB fabrication needs, with physical design and modeling, technology development, applications engineering, quality engineering, field reliability simulation and analysis and after-sales support all under one roof. We can help you achieve shorter time-to-market cycles on new products, superior product performance and the competitive edge you need.

Our cost effective PCBs are a great solution for mission critical and high performance applications found in information technology, wired communications, defense/aerospace, instrumentation and test systems, homeland security and medical industries. We produce PCBs found in active and logic applications as well as passive backplanes.

## Features

Large PCBs (up to 24"x32") with high I/O and dense BGA footprints using High Tg FR4, polyimide and low loss (low Df/low Dk)/high performance materials

High density wireability options using a wide variety of materials from High Tg FR4 to PTFE

A wide variety of surface finishes from OSPs to multiple metal surface finishes (including SnPb, Pd, NiAu and Ag)

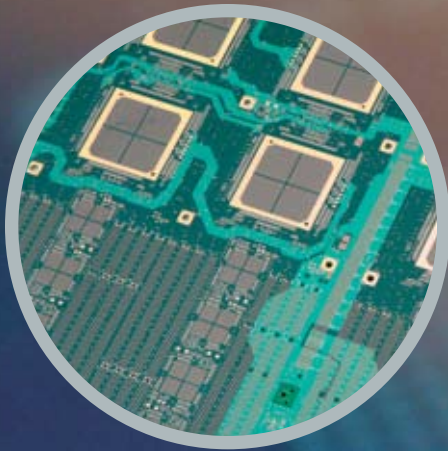
Precision layer to layer registration

Plating aspect ratios up to 20:1 (10 mil drilled via)

Design assistance available from application engineers specializing in PCB solutions

Industry standard testing combined with extended testing and advanced techniques for high reliability

# PCB Product Attributes



## Specifications

	Typical Volume Products	Advanced Technology Products
	IPC Classes 2 and 3, Mil PRF 31032, ITAR compliant, RoHS compliant, AS9100 compliant	Same
Panel Size	610mm x 711mm (24"x28")	610mm x 813mm (24"x32")
Materials	High Tg FR4, N4000-13, Polyimide, Megtron 6	N4000-13 SI, PTFE, filled High Tg FR4 ( for Pb free assembly), other Low Loss
Layer Count	8-38	40+
Thickness	1.55mm-6.35mm (0.061"-0.250")	1.55mm-6.35mm (0.061"-0.250")
Minimum Core Thickness	0.1mm (0.004") including Cu foil	Same
Single Ply Core	Yes, with high yield process	Same
Registration (drill to pad)	0.125mm (0.005") min	0.0875mm (0.0034")
Aspect Ratio	14:1	20:1
Minimum Drilled Via	0.25mm (0.010") min	0.20mm (0.008")
Blind Via	0.85:1 (mechanical and laser)	1:1+
Finished Buried Via	0.125mm (0.005") min	0.075mm (0.003")
Minimum Lines/ Spaces External	0.1mm/0.1mm (0.004"/0.004")	0.075mm/0.075mm (0.003"/0.003")
Minimum Lines/ Spaces Internal	0.075mm/0.0875mm (0.003"/0.0034")	0.05mm/0.075mm (0.002"/0.003")
Impedance Tolerance	+/- 10%	+/- 5% or better
Cu Weights	0.5oz.-3oz.	4oz.-6oz.
BGA Pad Pitch	0.80mm (0.032")	0.50mm (0.020")
Via Plug, Fill, Tenting	Yes	Same
Edge Plating	Yes	Same
Soldermasks	LPI and dry film	Same
Surface Finish	OSP, ENIG, Hard Au, Soft Au, HASL, Sn/Pb	I Ag, I Pd, I Sn

For more detailed information about printed circuit board fabrication services, call us today at 866-820-4820. Our application engineers are ready to assist you with detailed information for successful design and fabrication. You can also visit our website at [www.endicottinterconnect.com](http://www.endicottinterconnect.com)



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