



MANUFACTURERS OF QUALITY PRINTED CIRCUIT BOARDS

**1735 Mitchell Blvd.
Schaumburg, IL 60193
(847) 891-5800**

PROCESS CAPABILITIES

Shop Tolerance:	Standard	Advanced
Minimum Outer Line Width	.004"	.0025"
Minimum Inner Line Width	.004"	.0025"
Minimum Outer Space, Trace/Trace	.004"	.0025"
Minimum Inner Space, Trace/Trace	.004"	.0025"
Minimum Space, PCB Edge to Conductor	.010"	.005"
Layer-to-Layer Registration	+/- .003"	+/- .002"
Maximum Finished PCB Thickness	.250"	.400"
Minimum Board Thickness Tolerance	+/- 10%	+/- 4%
Dimensions-Fab O.D.	.005"	.003"
Fabrication Radius	+/-5 deg.	+/-5 deg.
Warpage (inch per inch)(flatness of finished board)	.007"/inch	.003"/inch
Minimum Component Pitch	.008"	.004"
Minimum Dielectric Thickness	.0025"	.0015"
Maximum Number of Layers	20	32
Impedance Control	+/- 10%	+/- 5%

Pad to Hole Size:	Standard	Advance
Tolerance—Plated Hole Size	+/- .003"	+/- .0015"
Minimum Plated Hole Size	.006"	.004"
Plane Relief Diameter over drilled hole	.018"	.010"
Minimum Outer Non-Plated Hole to Trace Spacing	.009"	.005"
Minimum Inner Non-Plated	.008"	.005"

Drilling:	Standard	Advance
Minimum Drill Size	.008"	.006"
Maximum Drill Size (Above .200 is routed)	.312"	.312"
Maximum Aspect Ratio	10:1	16:1

Testing Capabilities:	Standard	Advance
Minimum Component Pitch	.008"	.004"
Test Parameters	100 Volt 10 ohm resist 10 meg ohm iso	250 Volt 50 ohm resist 50 meg ohm iso

Solder Mask Criteria:	Standard	Advance
Solder mask clearances	.003"/side	.002"/side
Line coverage	.004"	.002"
SMT Minimum Pad Spacing	.010"	.007"
Minimum Solder mask Dam	.004"	.002"

Surface Finishes Available:	Standard	Advanced
HASL Thickness	40~400u"	40~400u"
Immersion Silver Thickness	6~18u"	6~18u"
Entek Organic Coating (OSP)	Coverage	Coverage
Immersion Ni/Au Thickness	100~200u" Ni 2~4u" Au	201~300u" Ni 2~4u" Au
Lead Free HASL Thickness	80~300u"	80~300u"
Hard Gold Thickness	5~60u"	61~80u"
Soft Gold Thickness	5~100u"	5~100u"

Other Capabilities:	Standard	Advanced
Via Fill	Non-conductive	Conductive
Blind/Buried Vias	3 sets	4 and above
Rigid Flex	4~6 layers	8~12 layers
Edge Castellations (plated edges)	Any Edges	Any Edges
Aluminum Core	1~2 layers	4 and above