



Teledyne Electronic Technologies Manufacturing Capabilities

Category	Standard Capability	Reduced Produceability (Low Yield)
Minimum conductor width (1 oz copper, inner layer)	0.005	0.004
Minimum conductor space (1 oz copper, inner layer)	0.005	0.004
Minimum conductor width (1/2 oz copper, inner layer)	0.004	0.0035
Minimum conductor space (1/2 oz copper, inner layer)	0.004	0.0035
Minimum conductor width/space (outer layer, 1/2 oz.)	.005/.005	0.005/0.004
Pad Size Calculation (nom finish size + .005 + 2X A/R + 2X mfg allowance)	0.0075	0.006
Minimum drilled hole size (buried vias)	0.010	0.008
Minimum drilled hole size	0.010	0.008
Maximum drilled hole aspect ratio	8:1	10:1
Maximum overall board thickness	0.15	.150 - .270
Minimum tolerance on PTH's	± 0.003	± 0.002
Minimum tolerance on NPTH's	± 0.002	+002/-.001
Positional Tolerance (within rigid section)	.010 DIA	.008 DIA
Maximum layer count	20	>20
Minimum distance of feature to edge	0.015	0.010
Minimum distance of feature to rigid/flex interface	.100	0.050
Minimum flexible dielectric thickness	0.002	0.001
Minimum base copper thickness	1/2 oz.	3/8 oz.
Panel size	18 x 24	24 x 30
Minimum electrical test pitch	0.015	0.010
Impedance tolerance (characteristic)	10%	8%
Impedance tolerance (differential)	12%	10%

Feature	Availability
Surface finishes	HAL Tin/lead Reflow Nickel/Gold (electrolytic & ENIG) Immersion Tin Silver
Materials	Epoxy glass Polyimide glass Kapton
Constructions (Types 1-5, MIL-P-50884) (IPC-6013 - Class 3 standard) (IPC-6012, Class 3)	Adhesiveless Regal I Regal V Kapton/Acrylic Bookbinders Sequential Lamination Hardboards
Electrical Test	Bed of Nails Flying Probe DITMCO
Soldermask	Dry Film LPI
Conformal Coatings	Acrylic Urethane Parylene
Assembly Capabilities (ANSI-J/STD 001 - Class 3 Standard)	Through-Hole Compliant Pin SMT

ALL VALUES NOTED ABOVE ARE DESIGN DEPENDENT. SEE GUIDELINES FOR DETAILS.