

CAPABILITY 2017



	Mass Production	Sample Production
GENERAL Capacity (Avg. daily) Current utilization Panel sizes (inches) Panel sizes (cm) Layer counts	10,000 feet ² 80% 12x18, 18x24 and 20x24 30.48x45.72, 45.72x60.96 and 50.80x60.96 2 to 8	10 partnumbers 90% 12x18, 18x24 and 20x24 30.48x45.72, 45.72x60.96 and 50.80x60.96 2 to 14
MATERIALS Laminates Outer layer Inner layer Foil weight Minimum line width Minimum spacing	FR4 (Tg 130, 150, 170) High CTI > 400 up to 3 oz up to 3 oz 127µm 127µm	FR4 (Tg 130, 150, 170) High CTI > 400 up to 4 oz up to 3 oz 100µm 100µm
STANDARD BRD. THICKNESS Max. overall brd. thickness Thickness tolerance Min. dielectric spacing Min. core thickness	1.5mm 3.4mm 10% 0.1mm 0.1mm	0.3mm 3.4mm 10% 0.1mm 0.1mm
DRILLING Min. drilled hole diam. Max. drilled hole diam. Plated hole tolerance Drilled hole diam. tolerance Hole/hole location accuracy Aspect ratio (finished) Other\ Sequential lamination process	0.25mm 6.0mm +/- 0.08mm +/- 0.05mm +/- 0.05mm blind and buried via applications	0.15mm 6.0mm +/- 0.05mm +/- 0.05mm +/- 0.05mm blind and buried via applications
SOLDERMASK Type: Film registration Controlled thickness Registration tolerance Min. soldermask dam Available colors	UV/Thermal Screen printing Automatic CCD camera 0.0015mm +/- 0.05mm 0.1mm White, Yellow, Red, Blue, Black, Green (shiny) and Green (mat)	UV/Thermal Screen printing Automatic CCD camera 0.0015mm +/- 0.05mm 0.1mm White, Yellow, Red, Blue, Black, Green (shiny) and Green (mat)
VIA PLUGGING Max. hole size	Soldermask plugging 0.6mm	Soldermask plugging 0.6mm

	Mass Production	Sample Production
LEGEND PRINTING Cure Available colors Min. reproducible line Location accuracy V-cut Available angle Jump score ROUTING Edge to datum tolerance Conductor to board edge Edge beveling Controlled depth routing	Thermal White, Black, Yellow, Red 0.1mm +/- 0.05mm Automatic 30° Yes +/- 0.05mm +/- 0.1mm Yes Yes	Thermal White, Black, Yellow, Red 0.1mm +/- 0.05mm Automatic 30° Yes +/- 0.05mm +/- 0.1mm Yes Yes
ELECTRICAL TEST Pitch Universal dedicated fixture Flying Probe Test voltage Isolation resistance	0.4mm Yes Yes 250V 10MΩ	0.4mm Yes Yes 250V 10MΩ
SURFACE FINISHING HASL Nickel/gold (tab) fingers ENIG Immersion Ni/Au Immersion tin Carbon Ink Peelable soldermask / Kapton tape	1 - 40µm Ni 3 - 5µm Au 0.25 - 1µm Ni 3 - 5µm Au 0.05 - 0.1µm 0.9 - 1.2µm Yes Yes	1 - 40µm Ni 3 - 5µm Au 0.25 - 1µm Ni 3 - 5µm Au 0.05 - 0.1µm 0.9 - 1.2µm Yes Yes
LABORATORY Microsection Thermal stress Ionic contamination X-ray fluorescence Laser Direct Imaging Yag and CO2 Laser vias	Fully equipped with certified technicians Fully equipped with certified technicians Omegameter OXFORD X-Ray No Subcontracting	Fully equipped with certified technicians Fully equipped with certified technicians Omegameter OXFORD X-Ray No Subcontracting