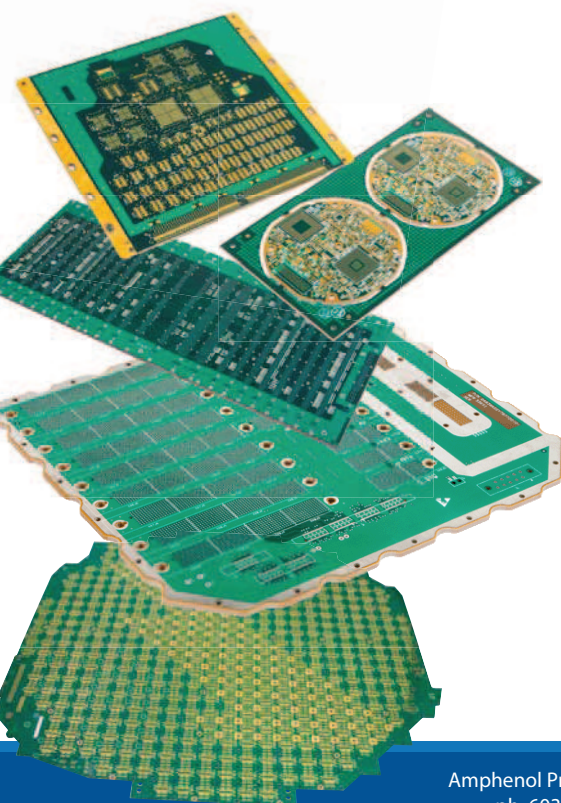




Printed Circuit Board Capabilities

Amphenol Printed Circuits' (APC) capabilities are among the world's broadest and most advanced, delivering consistent quality and reliability for demanding high bandwidth systems and mission critical applications for more than 25 years. Proven engineering and manufacturing expertise eliminates printed circuit board design obstacles.

APC's North America printed circuit board operation provides tightly controlled processes from prototype through production printed circuit board volumes. The 214,000 square foot New Hampshire facility features state-of-the-art PCB manufacturing equipment and optimized material handling to ensure the highest quality and consistency.



DESIGN FORMATS	Mentor PADS	Cadence Zuken	Design Services
MANUFACTURING FORMATS	ODB++ (preferred) DXF Gerber 274X	Autoplot Excellon HPGL	DPF Gerber 274D IPC D 356
MAXIMUM PANEL SIZE	24" x 54" (609.5mm x 1371.5mm) 30" x 44" (762.0mm x 1117.5mm) 36" x 42" (914.4mm x 1066.8mm)		
MAXIMUM PANEL THICKNESS	.500" (12.7mm)		
LAYER COUNT	Up To 64		
INTERCONNECT FORMATION TYPES	Back Drilled Dual Diameter Thru Hole	Blind (laser & mechanical) Electrically Isolated Via Fill Conductive Via Fill Non-Conductive	Buried SMT
ASPECT RATIO - DRILLED SIZE	Compliant Holes ≥ 0.225 Via Holes < 0.22	17:1 13:1	
FINISHED HOLE SIZE	Compliant Pinned Via (A/R dependent) Buried Vias Microvias (Up To 3 Electrical Layers)	0.0147" (0.373mm) 0.0080" (0.203mm) 0.0060" (0.152mm) 0.0040" (0.101mm)	
BLIND VIA ASPECT RATIO	1.25:1		
INTERNAL FEATURES	Lines Spacing Buried Resistors Buried Capacitance Minimum Core Thickness	0.003" (0.0762mm) 0.003" (0.0762mm) Yes No 0.001" (0.0254mm)	.5 oz. copper .5 oz. copper
EXTERNAL FEATURES	Lines Spacing	0.004" (0.1016mm) 0.004" (0.1016mm)	.5 oz. copper .5 oz. copper
MATERIALS	Low Tg FR4 (including phenolic cure) Rogers 3000 Rogers 4000 Rogers 6000 Rogers LCP	High Tg FR4 (including phenolic cure) Polyimide Megtron 6 Nelco 4000-13 EP Nelco 4000-13 SI & EP	Please contact Applications Engineering for the availability of additional materials - Hybrid Constructions Available
COPPER PROCESSING	1/4 oz. - 10 oz. copper (U/L 7 oz.)		
IMPEDANCE SINGLE & DIFFERENTIAL	$\pm 10\%$ $\pm 7.5\%$ $\pm 5.0\%$		
SURFACE FINISHES	Electrolytic Ni/Au (Hard & Soft) HASL Immersion Tin Reflowed Tin/Lead	ENIG ENIPIG Immersion Silver OSP	
CERTIFICATIONS	IPC A 600 Class I, II, and III AS 9100-B / ISO 9001:2008 ITAR Registration	IPC-6012 Class I, II, and III Mil-PRF-31032/1b/2a/3/4 Mil-P-55110	