Rockwell Collins **Printed Circuits**

Capabilities

Data Exchange	FTP, Format IPC350, Gerber 274x, Valor ODB++, Barco DPG, DXF
Laminate	Nelco N4000-2, N4000-6, N4000-11, N4000-13, N4000-29, N5000; Rogers RO3003, RO3006, RO3010, RO5880, RO6002, RO6006, RO6010, RO6010LM; Taconic TMS 30, TLY, TLX, TLT, RF35, RF60
Core Thickness	0.004” (0.025mm) minimum
Copper Thickness	I/L 0.0007”-0.003” (0.0178mm-0.076mm) O/L 0.0007”-0.021” (0.0178mm-0.533mm)
Conductor Width	I/L 0.003”(0.076mm) ± 0.0005”(0.0125mm) [1-oz max] O/L 0.004”(0.102mm) ± 0.001”(0.025mm) [1-oz max]
Conductor Spacing	I/L 0.003”(0.076mm) ± 0.001”(0.025mm) [1/2-oz max] O/L 0.004”(0.102mm) ± 0.001”(0.025mm) [1/2-oz max]
Annular Ring	Drill Dia. + 0.012”(0.254mm) Minimum pad size for Class 3
Layer Count	Up to 20-layers standard production
Board Thickness	Minimum 0.005”(0.127mm); Maximum 0.250” (6.35mm)
Aspect Ratio	12:1 (0.010” diameter minimum); PCBs <0.125” 10:1 (0.022” diameter minimum); PCBs >0.125”
Surface Finish	Hot Air Level (HAL); Fused Solder; Fused Selective Solder; Bare Copper; Nickel/Hard Gold; Nickel/Soft Gold; Immersion Tin; Immersion Silver; ENIG
Solder Mask	
Type	Liquid Photo Imageable; Coates SV501T-4 LDI L2220 Dynachem KM4 0.004” Dryfilm
Webbing/Clearing	0.004”(0.102mm) web on 0.020” (0.508mm) pitch
Minimum hole size For ClearedVias	0.018” (0.457mm) drilled on 0.062”(1.575mm) thickness
Electrical Test	
Type	Schematic or Gerber net list preferred
Pitch	0.004” (0.102mm)
Continuity Resistance	5 ohms
Voltage	Up to 1000 volts
Isolation Resistance	100 megaohms
Impedance	Single-ended (characteristic) 10% Differential edge coupled 10% Differential Broadside 10%
Panel Sizes	12”x18” (305mm x 457mm) 18”x24” (457mm x 610mm)
Additional Capabilities	Embedded RF; blind and buried vias; controlled depth drill; controlled depth milling; sequential lamination; filled vias (conductive and non-conductive); heat sink lamination; INVAR®; Heavy Copper
Accreditation	MIL-PRF-55110 QPL Product Assurance Level for GI, GF, GM, GY material: ISO 9001:2000 Certification