

## Technical parameters

### Feature sizes micro via

	Standard
External Pad Dia.	Hole Dia + 300 Microns
Internal Pad Dia	Not Less Than External
Blind Microvia Stop Pad	Hole Dia + 150 Microns

### Drilling Capability

		Development	Reduced Yield	Standard
Minimum drilled hole	Mechanical	0.15 –0.20 mm	0.25 mm	0.30 mm
	Laser	0.07 mm	0.08 mm	0.10 mm
Aspect Ratio	> 0.50 mm	12:1	10:1	8:1
	0.30-0.5 mm	10:1	7:1	6:1
	< 0.30 mm	8:1	7:1	6:1
	Blind Microvia	1.5:1	1.2:1	1:1

### Technology Features

	Development	Reduced Yield	Standard
<b>Conductor Widths</b>			
Print And Etch	0.08 mm	0.10 mm	0.125 mm
Inner & Outer Layers	0.07 mm	0.125 mm	0.150 mm
<b>Conductor Spacing</b>	0.07 mm	0.125 mm	0.150 mm
<b>Pth Board Thickness Minimum</b>	<0.5 mm	<0.8 mm	< 1.6 mm
<b>Pth Board Thickness Maximum</b>	> 5.00 mm	> 5.00 mm	> 3.2 mm
<b>Multilayer</b>			
Layer Count	24 +	18 - 24	4 - 18
Min Thickness	0.30 mm	0.40 mm	0.80 mm

Max Thickness	> 5.00 mm	> 5.00 mm	3.20 mm
<b>Bow &amp; Twist</b>	<0.5%	<0.5%	0.7%
<b>Hole Sizes</b>			
Min Mechanically Drilled	0.15 - 0.20 mm	0.20 - 0.30 mm	0.35 mm
Min Laser Drilled	0.07 mm	0.08 mm	0.10 mm
Npth Size Tol	+/- 0.025 mm	+/- 0.25 mm	+/- 0.05 mm
Pth Size Tol	+/- 0.0375 mm	+/- 0.05 mm	+/- 0.75 mm
Positional Tol	+/- 0.045 mm	+/- 0.05 mm	+/- 0.075 mm
2nd Stage Drill Tol	+/- 0.10 mm	+/- 0.15 mm	+/- 0.175 mm
<b>Plating Down Holes</b>	20um MIN	20um MIN	20um MIN
<b>Controlled Impedance</b>	All types available single ended and differential. All impedance values, 28 $\Omega$ , 50 $\Omega$ , 75 $\Omega$ , 100 $\Omega$ Tolerances Normal 10% Advanced 5% Specials 3%		
<b>Aspect Ratio</b>	> 10 : 1	6 : 1 - 10 : 1	4 : 1 - 6 : 1
<b>Aspect Ratio Blind Microvia</b>	1.5 : 1	1.2 : 1	1 : 1

## Soldermask & Ident

2 Pack Epoxies  
Liquid Photo-Imageable

Standard Colours: Green  
Colour Options: Red, Blue, Yellow, Clear.

## Component References

2 Pack Epoxies Standard Colours: White, Yellow  
Colour Options: Black

Specialist Silk Screen Techniques

Silver Inks  
Via Plugging  
Buried Resistor Formation

Conductive Inks  
Minimum Dam Between Features: 0.005"

**Data Format**

ODB ++

Extended Gerber - RS274X

Standard Gerbers - RS274D

N.B. Other Formats Are Acceptable - Please Enquire

**Netlist Data:** IPC - D - 356 Preferred

**Data Transfer:** E-MAIL