

Chip On Board

Product Data Sheet

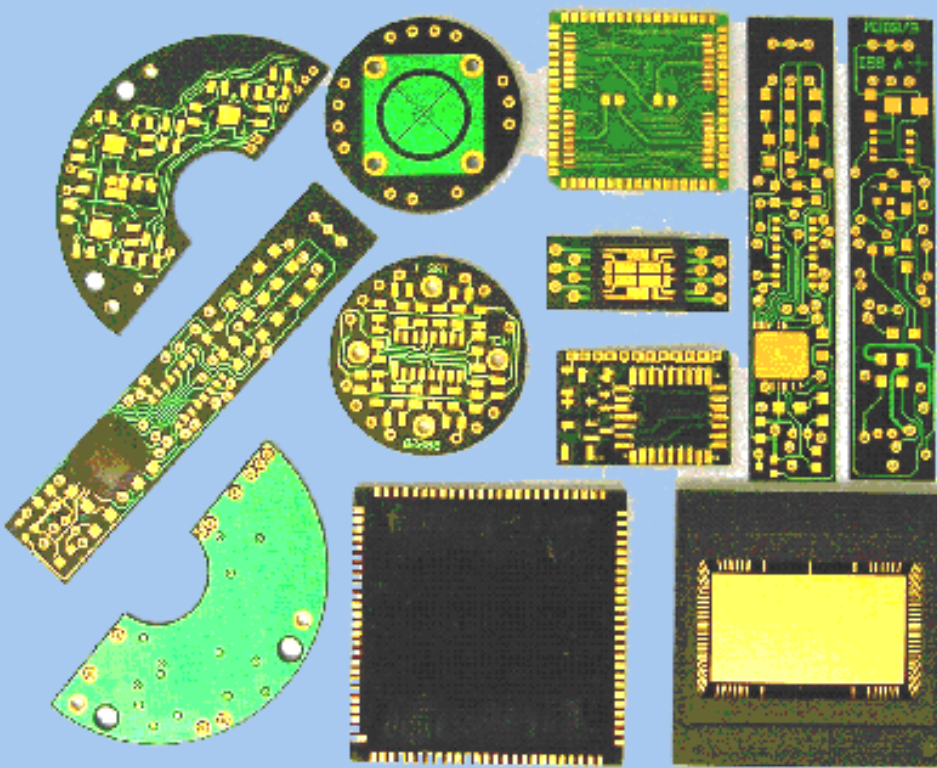
Chip on Board (COB) offers potentially smaller, cheaper and more powerful designs compared to conventional through-hole assembly techniques and surface mount.

BENEFITS & OPTIONS:

- More economical
- Reduced weight
- Flexibility
- Sturdy construction
- Wide range of substrate
- Multilayer metallization available
- Solder mask option available

USAGE:

- Die attach using conductive or non-conductive adhesive
- Gold thermosonic or Aluminium ultrasonic wire bondable finish available
- Chip protection with Epoxy, Silicone Gel or 'B' stage epoxy lid
- Lid seal with pre-screened B stage epoxy, oven cured
- Surface mount - solder attach using IR or vapour phase reflow



SPECIFICATIONS

Base Material	BT	HTBE
Foil Thickness	18µm	18µm
Colour	Brown (Natural)	Black
TG	185°C	160°C
TCE	13-18 ppm/°C	13-16 ppm/°C
Volume Resistivity	3x10 ¹⁴ ohms	3x10 ¹⁴ ohms
Dielectric Constant	3.9	4.2
Mechanical / Dimension Tolerance		
Outside dimensions	±0.05 mm max	±0.05 mm max
Flatness	±0.06 mm/cm max	±0.06 mm/cm max
Hole diameter (non PTH)	±0.05 mm	±0.05 mm
Hole diameter (PTH)	±0.10 mm	±0.10 mm
Plating		
Copper	1.4µm (nominal)	1.4µm (nominal)
Nickel	10µm (nominal)	10µm (nominal)
Gold	0.5µm (nominal)	0.5µm (nominal)
Pattern		
Trace width	0.1 mm min	0.1 mm min
Spacing	0.1 mm min	0.1 mm min
Hole diameter	0.25 mm min at 5:1	0.25 mm min at 5:1
Land diameter (outer layers)	0.45 mm min	0.45 mm min
Land diameter (inner layers)	0.6 mm min	0.6 mm min

Solder mask

Colour	Green
Annular ring (screened)	0.3 mm
Annular ring (photo-imaged)	0.15 mm
Position tolerance (screened)	±0.3 mm
Position tolerance (photo-imaged)	±0.10 mm



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