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Your PCB Problems are our Challenge

At BPC we specialise in manufacturing our primary product: printed circuit boards up to 12 ounce copper. Because we do all processes under one roof, we are able to offer quality boards with first rate service. We have invested in state of the art machinery, which, together with our team of highly experienced engineers, make the Company an obvious first stop for assembly houses.

Standard and Specialist PCBs

As a manufacturer, BPC Eelectronics are committed to providing quick production, on-time deliveries and competitive prices on consistently reliable boards that users can depend on time and time again. Our fabrication facilities are UL94VO+796+ISO 90001 certified, capable of producing standard single sided, double sided, multi layer, as well as a wide range of specialist finishes, such as metal core and metal backed printed circuits.

Offshore Manufacturing

BPC Electronics has wide experience of sourcing quality printed circuit boards from the Far East and maintains a strict policy of supervising and visiting its strategic partners on a regular basis. Customers can be assured that the same rigorous standards are maintained for all BPC products, whether manufactured in the UK or offshore. With a combined production capacity in excess of 10 million square metres per annum, volume production quantities are warmly welcomed.

24-Hour Turnaround on PCB's

Just in time is an often quoted phrase: BPC makes it happen! Just send in your electronic data to us by fax or email and leave the rest to us. Single sided, multilayer and PTH boards can be sent out the next day subject to us receiving your details before 10am on the day prior to despatch. Please contact our sales team for more information.

TECHNOLOGY

- o Alternative finishes
- o PTH copper core
- o IMS
- o High copper weight (12oz)

CORE PRODUCTS

- o Conventional
- o Double and Single sided
- o Plated Through Hole
- o Multi layer 4 to 12 layer
- o IMS Double and Single sided with PTH

e sided o UL

o **AS9100** - planned 2012

APPROVALS

o ISO 9001:2008

o NadCap - planned 2012

KanBan - SUPPLY SOLUTIONS

RESOURSES

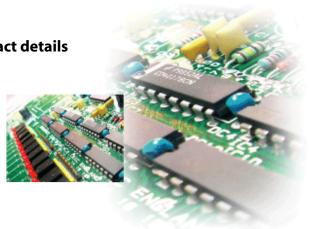
- o Dedicated contract management
- o Computer buffer stock
- o Communications interface
- o Automatic review

DATABASE

- o Customisation
- o Review dates
- o Customer contract details

QUALITY SYSTEMS

- o Advanced Quality Planning (AQP)
- o Statistical Process Control (SPC)
- o Defective Product notification (DPN) 8D Format
- o Initial Sample Inspection Report (ISIR FAIR)
- o Certificate of Conformity with every delivery



TECHNICAL OVERVIEW

DRILLING

- o Auto-load
- o Blind/Buried holes
- o Small holes 0.10mm

PATTERN PLATE

- o Auto-line
- o High aspect ratio
- o Buried via layers

ELECTRICAL TEST

- o Double sided SMT
- o Flying probe

IMPEDANCE CONTROL

LAMINATES

- o High frequency
- o IMS
- o High temperature

SOLDERABLE FINISHES

- o HASL (leaded + Pb free)
- o OSP
- o Silver
- o Tin
- o Nickel/Gold + Universal Finish

SUBSTRATES

With the ever changing demands placed upon the actual technical performance of the bare printed circuit board, it is important for BPC Electronics LLP to offer a full range of substrates to meet these requirements. As the processing of all these materials has been fully integrated into the standard production system, BPC Electronics are able to offer them at competitive prices; the laminates available include:

Rogers, Taconic, Panasonic, Nanya, Ventec, Thermaggon, Berquist, Arlon, Nelco + Many more

ENVIRONMENT PROTECTION POLICY

BPC Electronics LLP recognises its responsibilities to the community and its customers to ensure that it complies with all legislation regarding the protection of water, air and land quality. BPC Electronics will, as far as is reasonably practical, ensure that its activities do not reduce the enjoyment of the community in which it operates. BPC Electronics will provide services that meet a high standard of environmental quality.

- oThe Company will, as far as is reasonably practical, provide such resources as are necessary to ensure its activities do not harm the environment.
- oThe Company will, as far as is reasonably practical, reduce its environment impact by the implementation of waste reduction policies. The Company will comply with the Montreal Protocol.
- oThe Company will, as far as is reasonably practical, implement a consumable recycling policy.
- oThe Company will, as far as is reasonably practical, monitor the impact of its operations by measuring air and water quality at its manufacturing sites.
- oThe Company will, as far as is reasonably practical, ensure its trades with Companies operating in an environmentally acceptable manner.
- oThe Company will review the operation of its policies as environmental standards change.
- oThe Company will, as far as is reasonably practical, encourage its customers to support its aims to supply its products in returnable packages.
- oThe Company will subject itself to an audit that ensures it complies with its declared objectives & policies.
- oThe Company is committed to continual improvement and prevention of pollution. and WEEE.



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STANDARD MANUFACTURING CAPABILITY 1

LAMINATES

FR4 (inc. Hi Tg, FR5, Polyimide, BT, Arlon, Rogers, Taconic, GE, Metal cored, Metal backed)

Maximum active board size: 584mm x 482mm

DRILLING Minimum Drill 1.6mm board 2.4-3.2mm board >3.2mm board Buried/Blind via Maximum Drill Size: 6.40mm Aspect Ratio PTH Diameter Tolerance +/-	9.0:1 0.35mm 0.50mm 0.70mm 0.35mm	ADVANCED 0.20mm 0.35mm 0.40mm 0.20mm 12.0:1 0.025mm
BOARD CONSTRUCTION Maximum Layer Count Maximum Thickness Tolerances +/- 1.6mm 2.4mm 3.2mm >3.2mm Minimum Core thickness Buried/Blind Via	5TANDARD 12 4.7mm 0.20mm 0.20mm 0.30mm 0.30mm 0.01mm	ADVANCED 24 6.0mm 0.10mm 0.10mm 0.15mm 0.15mm 0.005mm
INNER LAYERS Minimum Annular ring (assuming no breakout) Minimum Track/Gap v. Copper Weight: 0.50oz 1.00oz 2.00oz 3.00oz Copper Weights available	0.006" 0.004" 0.005" 0.008" 0.012" 0.5, 1, 2	ADVANCED 0.004" 0.003" 0.004" 0.006" 0.008" 3, 4, 6, 10
OUTER LAYERS Minimum Annular ring (assuming no breakout) Minimum Track/Gap v. Copper Weight: 0.25oz 0.50oz 1.00oz 2.00oz Copper Weights available	STANDARD 0.005" 0.004" 0.004" 0.005" 0.008" 0.5, 1, 2	ADVANCED 0.003" 0.003" 0.004" 0.006" 3, 4, 5, 6, 10+
SCREEN PRINT Minimum Text width	STANDARD 0.008"	ADVANCED 0.006"



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STANDARD MANUFACTURING CAPABILITY 2

TEST CAPABILITIESSTANDARDADVANCEDMinimum SMD Width0.015"0.008"Minimum SMD Pitch0.020"0.012"

RESIST/LEGEND STANDARD ADVANCED

Resist Types

Photo imageable

OPSR Red, Blue, Green, Black, White

Lackwerke Peters Red, Blue, Green, Black, White, Yellow

Technic LED White

Minimum Diam 0.006" 0.004" Registration tolerance +/- 0.002" 0.001"

Legend

Peters, Technic colours: White/Yellow/Blue/Black/Red

Peelable

Peters All Types

FINISHES

Organic finishes

HASL

Pb Free HAL Immersion Gold Electrolytic Gold Immersion Tin Carbon Ink

Immersion Silver

Combination of above

ROUTSTANDARDADVANCEDRout0.15mm0.10mmScoring0.15mm0.15mm

Bevelling C/sink C/bore

Internal Cut-outs/Slots (Plated/ Unplated)

Depth Milling

Minimum Router Diameter 0.8mm 0.6mm

IMS

Dielectric Types Thermaggon T-Preg, Ventec, VT4A1

Dielectric Thickness 0.004", 0.006", 0.010", 0.012"

Metal Substrates Copper, Aluminium

Metal Substrates Thickness 0.8, 1.0, 1.55, 2.0, 3.0 (also metal cored with PTH)



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