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THE SEARCH IS OVER  
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Our reputation depends on the quality of our suppliers. Using our experience we choose carefully only those manufacturing partners who have a proven track record of delivering our demanding service requirements.

Prestwick GPS are totally focused on supplying the best Printed Circuit Boards at the lowest price.

### Who are Prestwick Global Procurement Solutions?

Prestwick GPS has evolved from Prestwick Circuits manufacturing as an unparalleled best in class Value Add Supplier.

Prestwick GPS has developed extensive experience in Printed Circuit Board technology, gained through multiple PCB manufacturing facilities and through our Worldwide supply chain. We have extensive knowledge and experience of Backplanes, Flexible, Flex-rigid, medical, military, avionics, telecoms, consumer and automotive applications.

Our objective is simple; to strategically manage our supply chain with our focus on supplier development and continuous improvement, which we monitor regularly through supplier audits and benchmarking.

### IPO

We established an Internal Purchasing Office (IPO) in September 2004 which currently operates from two facilities in China, Shenzhen and Suzhou. Through our vast array of PCB experience and local presence, our IPO can assist in leveraging the best possible prices from our supply base for our customers.

A further advantage is that we have tooling engineers and quality engineers that can physically reach all of Prestwick GPS's supply base within two hours.

Through local knowledge we plot local market trends which in turn allows our customers to take full advantage of the PCB supply chain. The unique GPS IPO service enables us to negotiate the best possible prices, provide logistics support to ensure shipments are cost effective and on time and to add real value through the benefit of local knowledge.

### Approvals

When it comes to product and quality compliance, Prestwick GPS are best in class.

Through our TS16949 Lead Auditing Team, we only utilise fully approved and audited suppliers that meet the expectations of our customer and ourselves.

Supplier Approvals Include:  
TS16949  
ISO9000:2000  
ISO14001  
UL Certification

### Material Selection Guide

Prestwick Circuits GPS suppliers offer a full range of standard and advanced base materials suitable for lead-free assemblies, modified epoxies for high temperature and increased reliability applications, high speed/low loss materials for digital applications requiring increased signal integrity, and specialised RF/Microwave dielectric substrates that operate at frequencies over 50 GHz.

All Prestwick Circuit GPS supplier base materials are RoHS compliant.

Description Standard FR4	Lead Free Assembly Compatible	CAF Resistant	Tg (DSC) °C	Dielectric Constant (Dk)		Dissipation Factor (Df) 1 MHz
				1 MHz	1 GHz	
Multifunctional Epoxy	-	-	140	4.3	4.1	0.023
Low CTE Multifunctional Epoxy	Yes	Yes	155	4.3	4	0.018
Low CTE High Tg Multifunctional Epoxy	Yes	Yes	175	4.3	4	0.012
Halogen-Free Epoxy	Yes	Yes	165	4.1	4	0.013
High Performance Materials	-	-	-	1 GHz	10 GHz	10 GHz
High Speed, Low Loss, CAF Resistant System	Yes	Yes	190	3.7	3.6	0.008
High Speed, Low Loss Epoxy	Yes	Yes	210	3.7	3.6	0.008
Microwave Performance, Modified Epoxy	Yes	-	210	-	3.5	0.0065
BT Epoxy	Yes	Yes	185	3.6	3.6	0.014
Polyimide	Yes	-	250	3.8	3.8	0.01
Woven, Glass -Reinforced PTFE	Yes	-	-	-	2.2	0.001
Polyimide Flex - Adhesiveless	Yes	Yes	220	3.4	3.4	0.002
Aluminium (IMS)	Yes	Yes	160	4.3	4.3	0.03

### Summary Capabilities of Suppliers

Max Panel Size (mm)	Min Material Thickness (mm)	Max Material Thickness (mm)	Max Layer Count	Min Hole Size (mm)	Laser Drill Min /Max (mm)	Min Track & Gap (mm) (mechanical)	Max Copper Thickness (oz)	Aspect Ratio	Controlled Impedance (%)
1100x610	0.1mm	10mm	42	0.2mm	0.07 to 0.15	0.075	6	16 to 1	+/- 10

### Capability

Recent Backplane technology has grown in complexity with more active circuitry incorporated in new designs.

### Extreme Backplane Capability

Through our experience and understanding of customer requirements, we have direct access to provide you with the ability to source the manufacture of new designs in an otherwise restricted market place. We have the PCB knowledge and the suppliers who can manufacture the most demanding backplane designs, supporting both prototype and volume quantities.

Extreme capabilities to support the specific backplane requirements:

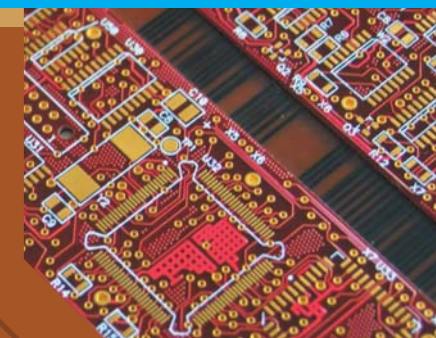
Circuit Size: 1041mm x 559mm  
Circuit Layers: 42 layers  
PCB Thickness: 10mm  
Hole Aspect Ratio: 16:1  
Impedance: +/- 5%  
Materials: Various High Performance

### Flexible Circuits Manufacturing Capability

Our strong technical knowledge of Flexible Circuit design and manufacturing capabilities enables Prestwick GPS to give excellent local support and advice. Aligned with a dedicated 'first class' Flexible Circuit manufacturing facility in Asia we provide a full range of capabilities; flex, flex-rigid, prototypes, QTA, and volume manufacture from one facility.

Summary Capabilities:

- Single Sided through to 30 layers Flex
- Multilayer Flex-Rigid
- Blind and Buried Via
- Impedance Control
- Book Binder



### RoHS Compliance

At Prestwick Circuits GPS we are passionate in protecting our environment and the choice of our manufacturing supply partners reflects this belief. All our suppliers hold the ISO14001 certificate and are actively working to reduce the impact of manufacturing on the environment.

With the approaching WEEE and RoHS directives, Prestwick GPS is ideally placed to support you in your conversion to a lead free finish

**We can supply RoHS compliant boards NOW.**

