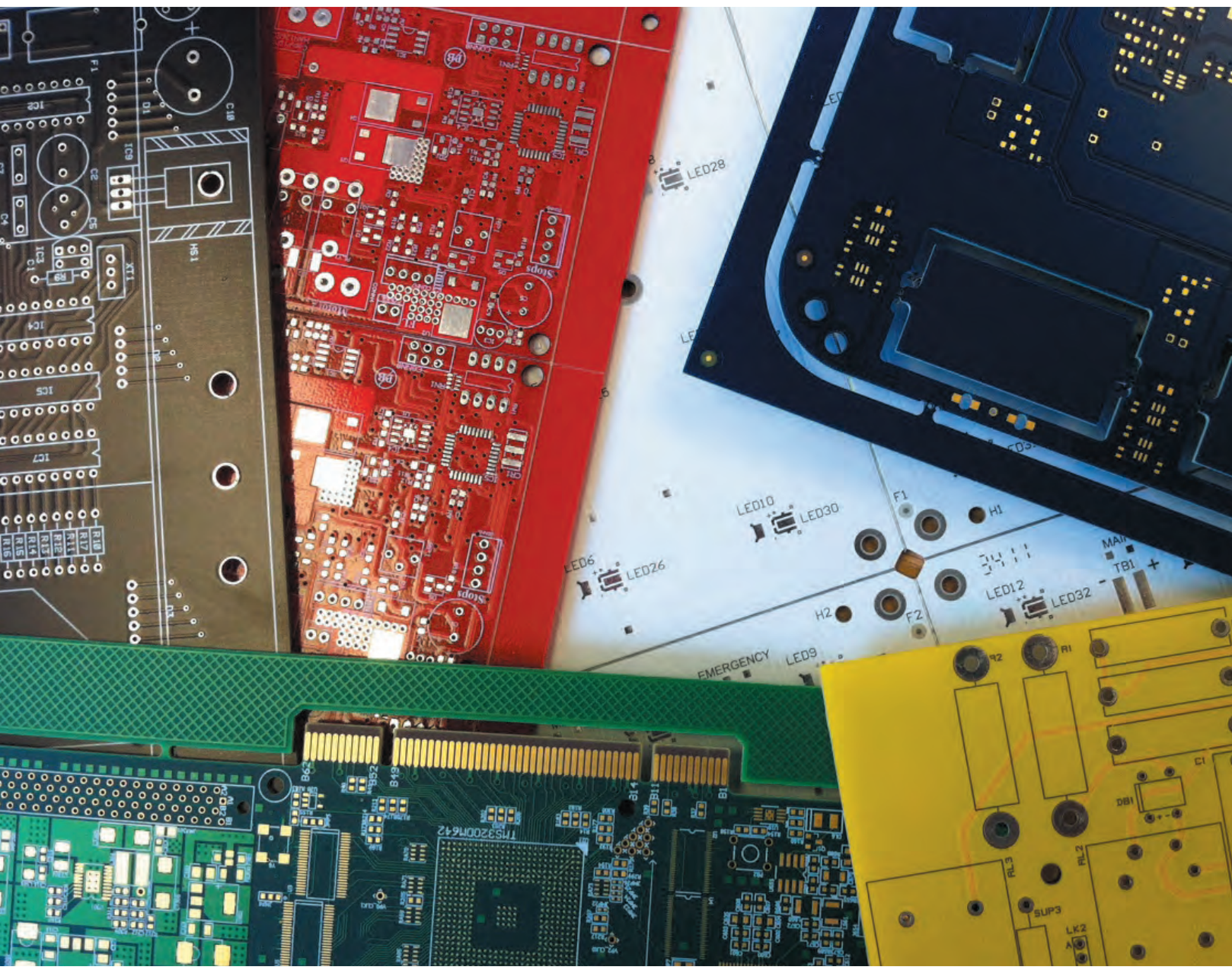
Faraday

PRINTED CIRCUITS

INVESTING IN UK MANUFACTURING



Faraday Printed Circuits Ltd is a UK manufacturer and supplier of Printed Circuit Boards producing Multilayer, PTH double sided, flexible, flex-rigid and conventional PCBs.

Building relationships, creating success...

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www.faradaypc.co.uk
sales@faradaypc.co.uk

Faraday Express

Our Fast Track Service just got faster!

With 5 Ucam CAD seats at your disposal, Faraday will engineer your raw design data into production data in record time.

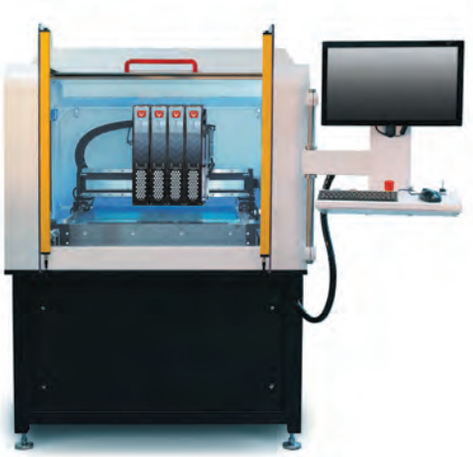
By using Faraday for your quick turn prototypes you will benefit from a fully engineered and design rule checked prototype ready to go in to production.

Our Miva 2050L DI Duo is a state of the art precision direct imaging machine for both track work and complex solder mask exposure.

The first of its type in the UK the system greatly enhances hole to track registration compared to photo tools and achieves accuracy down to +/- 9 microns.

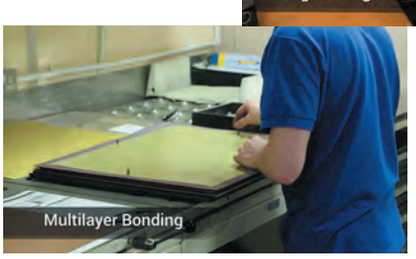
The elimination of photo tools reduces lead time and contributes to achieving turnaround times down to 48 hours in some cases.

In August 2019 we added further investment in our express service with a brand new Lenz DRB 610 1+1 series high speed multifunction drilling machine. This further contributes to our quick turn capability with its auto loading facility and lights out running capability.



If you're not an existing customer and don't yet have an account with us you can make payment by credit card via PayPal so that your order can be processed quickly. Please call us for details.

Standard quick turn, depending on complexity and quantity is 3 to 5 days.



Faraday Quality

IPC

IPC (Institute for interconnecting and packaging electronic circuits) is the leading international standard that unites all sections of the industry (designers, manufactures, assemblers and OEM's). Faraday manufactures its PCBs in accordance with IPC-A-600 ensuring that all of our customers products conform to a proven standard of Quality.

Underwriters Laboratories

UL is an international safety non-profit independent organization that tests material and equipment for safety and flammability status. At Faraday we have accreditation to produce circuit boards using our approved UL material – our file reference is ZPMV2.E173108, flammability recognition 94V-0.

Institute of Circuit Technology

In recognition of their experience and knowledge within the PCB industry a number of key Faraday staff have been elected as members or even fellows of the ICT. The ICT is at the forefront of technical development in the PCB industry organising high level seminars and training programmes.

ISO 9001/14001

Faraday gained their first ISO accreditation in 1999 with the ISO: 9001 Quality system. With regular six monthly assessments carried out by British Standards Institute, Faraday embraced, implemented and strengthened the Quality procedures within the company.

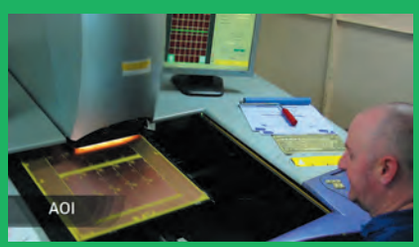
During 2003 we implemented a smooth transition to the ISO 9001: 2000 Quality system and in October 2009 we gained certification to ISO 9001: 2008. Again through a pro-active role and regular BSI assessments, we have evolved this into our Business Management System to ensure that Quality will continuously improve in all areas of the company.

In July 2010 we began working towards achievement of ISO 14001, the international standard for environmental management. We were certified by BSI in April 2011.

Continuing this commitment our systems were evaluated and updated to ISO 9001:2015 in 2015 and ISO 14001:2015 in 2017.


Plating Line


Etch Inner/Outer Layers


AOI

CNC Scoring


Final Profile Routing


Electrical Test & Final Inspection

Manufacturing Capabilities

Products	High TG Polyimide Multilayers Multilayers up to 24 layers (including blind and buried vias) IMS (LED Applications) Flexibles 1, 2 & 4 Layer, Flex-Rigid (Asia only) High frequency laminates (for RF Power) Plated over Vias
Laminate	FR4 (Glass fibre weave) / (Paper) / CEM1 (Composite) -Thickness: 0.4mm - 6.1mm. Base copper: 17.5µm, 35µm, 70µm & 105µm. Rogers RO4003C, RO4360 and Cu Clad 6700 Bonding Film up to 6 layers (High frequency) - Thickness: 0.51mm, 0.81mm & 1.52mm. Base copper 17.5µm, 35µm & 105µm Insulated Metal Substrate – Al thickness: 1.50mm, 2.00mm & 3.00mm. Insulation thickness: 110µm - 150µm. Base copper: 35µm, 70µm & 105µm. Taconic - TRF41 & TRF35 Thickness: 3.05mm, 3.20mm & 6.10mm. Base Copper: 70µm only. Arlon TC350 & AD410 Multiclad HF - Thickness: 1.60mm. Base Copper: 70µm only. Cirlex 02L - Thickness: 0.20mm, 0.25mm, 0.35mm & 0.8mm. Base Copper: 17µm only. VT901 Polyimide - Thickness: 0.1mm - 3.2mm. Base copper: 17.5µm, 35µm, 70µm & 105µm.
Electronic Drill Data	Seib & Meyer 1000, 3000 or 5000. Excellon
Electronic Image Data	Gerber RS274x
Profiling	CNC Routing CNC Scoring
Hole Sizes	Minimum drill size: 0.20mm (0.15mm plated) Maximum drill size: 6.40mm (above this CNC rout) Minimum slot width: 0.60mm (0.5mm plated)

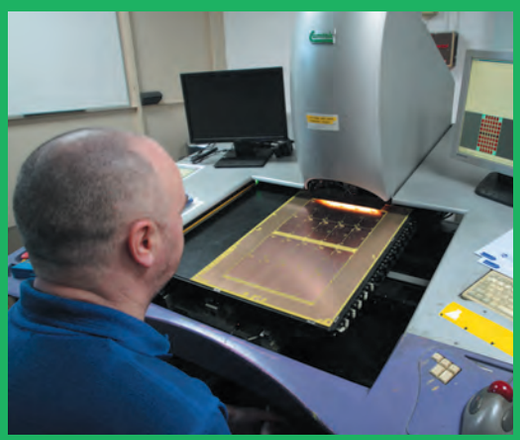
Tolerances	Drill: ± 0.10mm (on stated dimensions unless specified) Routed slot: ± 0.10mm (on stated dimensions unless specified) Routed profile: ± 0.15mm (on stated dimensions unless specified) Scored profile: ± 0.3mm (on stated dimensions unless specified) Secondary drill: ± 0.2mm (on stated dimensions unless specified)
Finishes	Lead-free Hot Air Solder Level (SN100/C) Immersion Silver (Sterling Silver) Electroless Nickel Immersion Gold (ENIG) Electroplated Gold / Nickel Carbon Ink OSP (Organic Surface Protection) Tin/Lead Solder (when specified)
Solder Masks	UV Photo Imaged (Green / Red / Blue / Black / Yellow / White / Orange / LED White / other colours on request) Minimum solder mask dam size: 0.1mm
Ident/Notation	Inkjet (White) / UV Photo Imaged (Yellow / Black / Blue / Green / Red / other colours on request) Minimum Legend Text: Character Height 0.75mm Line Width 0.15mm
Additional Masks	Peelable Resist: maximum hole size coverage 2.50mm. Kapton tape on hole sizes above 2.50mm.
Max Circuit Size	PTH 582mm x 429mm Conventional 582mm x 429mm Multilayer 576mm x 423mm
Min Track & Gap	5 thou (0.005”) or 0.125mm. Annular ring from pad to hole (0.005”)
Bare Board Testing	All aspects including double sided surface mount roving probe. Maximum test area 610mm x 460mm
Approval	UL 796 Component Recognition UL Canada & US Approval BS EN ISO 9001:2015 ISO 14001:2015
IPC	Unless Specified Faraday will manufacture to IPC-A-600 standards (Class 2) IPC3 also available

These are our standard capabilities. If your requirement is different to the above please speak to sales and let them know your requirements

Faraday Values

- *Customer Focus*
- *Product Quality*
- *Technical Excellence*

... Through teamwork and professionalism



Sales Service

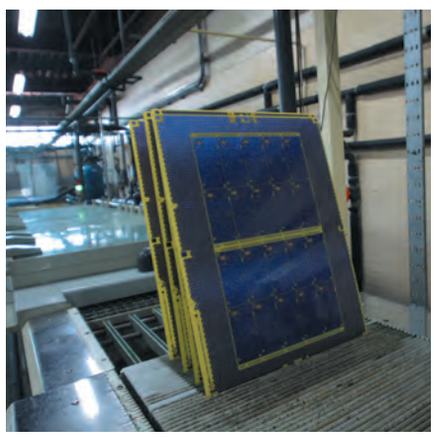
Faraday Printed Circuits has long since established itself as a major player within the UK PCB Industry, with a well deserved reputation for providing a close friendly business relationship, together with state of the art facilities and a highly motivated, well trained workforce. Utilising 'Softwires' PCP 2000 and the Ucamco I8 system our sales personnel can generate quotations within minutes of receiving your design data.

Customer Support

Our engineers can liaise closely with your design staff in the early stages of manufacture. Using the latest software, our engineers perform Design Rule Checks (DRC) to ensure all PCB layouts meet our standard manufacturing capabilities. Our ability to carry out customer approved Design For Manufacture (DFM) editing ensures that designs are optimised for our production processes, resulting in high quality product and improved manufacturing yields. During production PCP2000 enables accurate tracking of your order through the system.

In-House Knowledge and Experience

With some 700 years of PCB manufacturing experience embodied within our staff, you can be confident that the manufacture of your product is in the right hands. Key Senior staff each has 20+ years experience in the PCB fabrication industry.



E173108(M) 94V-0

FM 45835

EMS 568345

Faraday History

Founded in Washington, Tyne & Wear in 1987, Faraday Printed Circuits Ltd has been supplying high quality printed circuit boards (PCBs) to the electronics industry for over 30 years.

The company has grown steadily over the years, keeping pace with the increasing demand for ever more technically complex designs.

Occupying premises of just 4000 sq ft in 1987, Faraday now operates out of a manufacturing plant of over 22,300 sq ft on the Washington site. Over 25 years ago, in response to rapid globalization of the electronics manufacturing industry, Faraday set in place measures which have resulted in the formation of strategic partnerships with a number of key Asian PCB fabricators. This arrangement ensures we can provide our customers with a tailor-made solution to their PCB sourcing requirements, whether it be for fast turn around prototypes and medium volume product from our UK plant, or higher volumes taking advantage of the reduced production costs of our Far Eastern partners.

Faraday received accreditation to British Standards EN ISO 9001 in 1999, and has continued to evolve and update the system ever since. We added ISO 14001 in 2011.

Currently, the Company employs over 50 staff, mostly resident in the Washington area, with over 700 years of PCB manufacturing experience between them. This fact coupled with the vast resources of our Asian partners makes Faraday ideally placed to provide our customers with the world class service they both expect and deserve.

Address

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Contact Faraday

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