

PCB Assembly

Rapid Turnaround

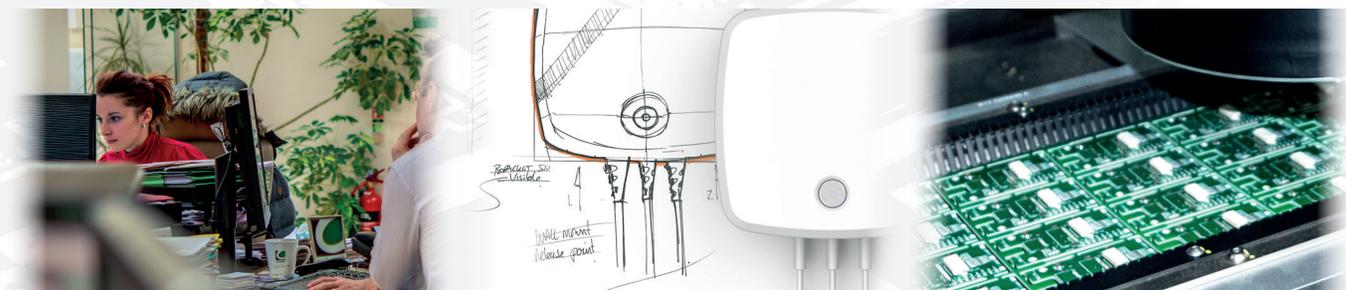
Value Engineering



Global Purchasing

Design & Prototyping

Wire Bonding



Graphic Displays

Wireless

IoT Solutions



**Hardware, Software and IoT Capabilities Under One Roof**



# Welcome to Lascar

Lascar is a family-owned business that has provided **expert electronics design and manufacturing services** for over forty years. With highly-skilled teams of design, product and electronics engineers, and leading-edge manufacturing facilities, Lascar can undertake a large variety of project types for a vast array of industries including defence, aerospace, automotive, gas detection, and fire & security.



United States



United Kingdom



Hong Kong

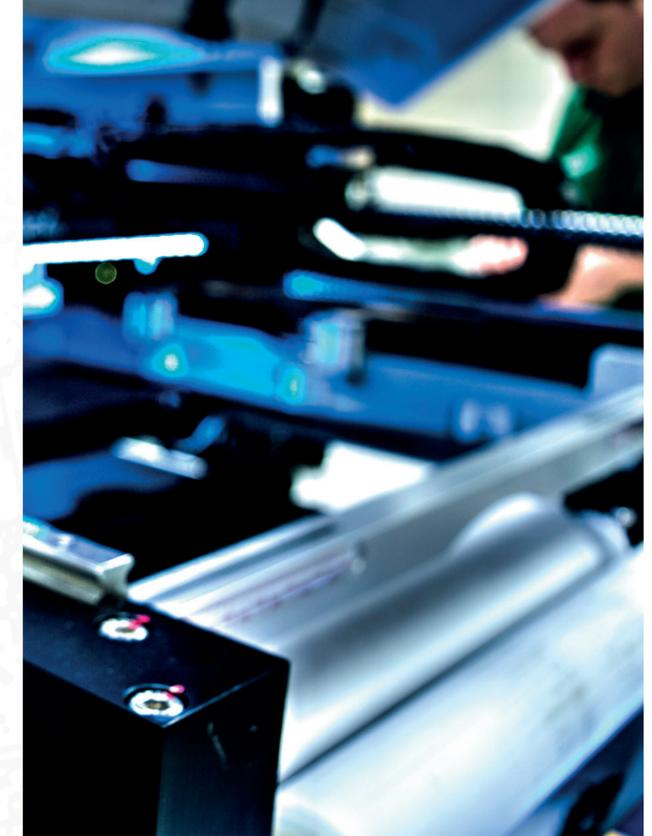
## Facilities & Capabilities

Our capabilities include a wide range of microelectronics, ranging from PCB assembly to full box build, with thick film hybrid technology and wire bonding featuring in our list of unique services.

Manufacturing facilities in both Hampshire, UK and the Far East allow for small scale and large batch production. Both have teams for procurement, design, manufacture and quality assurance. Our US office has both a sales and an engineering team. This global reach offers a notable benefit when purchasing components, ensuring we attain the best prices for fully-traceable components in the market.

## Exceeding Expectations

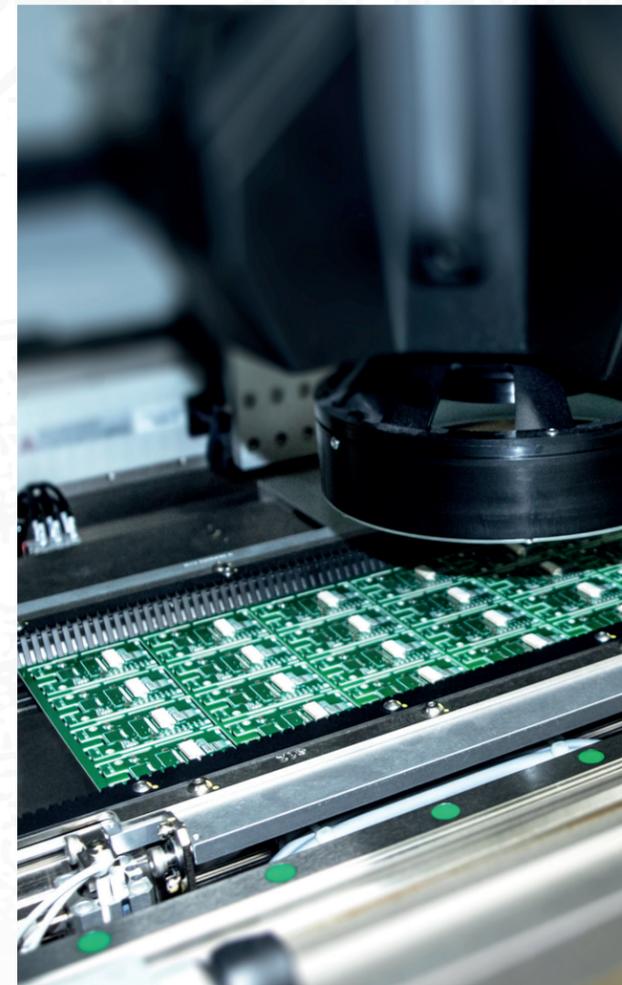
At Lascar we pride ourselves on exceeding expectations. Recognizing that all of our customers' projects have different requirements, we like to remain flexible and adapt our services accordingly. Our friendly project team aims to build close and effective working relationships with our customers, providing the understanding, communication and support needed to ensure the highest level of customer service.



## Quality Control

Quality is of paramount importance at Lascar and we proudly deliver products in accordance with our **ISO9001** accreditations. Our quality processes ensure that we are able to identify potential issues at the earliest opportunity, allowing efficient action to be taken. Our goal is to provide high-quality products, **on-time-in-full**.

Our state-of-the-art **Automated Optical Inspection** machinery and trained experts meticulously examine components and finished products. All products are manufactured to **J-STD-001** workmanship standards and inspected in accordance with **IPC-A-610** quality classifications.



**We welcome you for a visit to see for yourself how we operate as a business, and to discuss your project with our skilled engineers and project management team.**

# From Design to Despatch

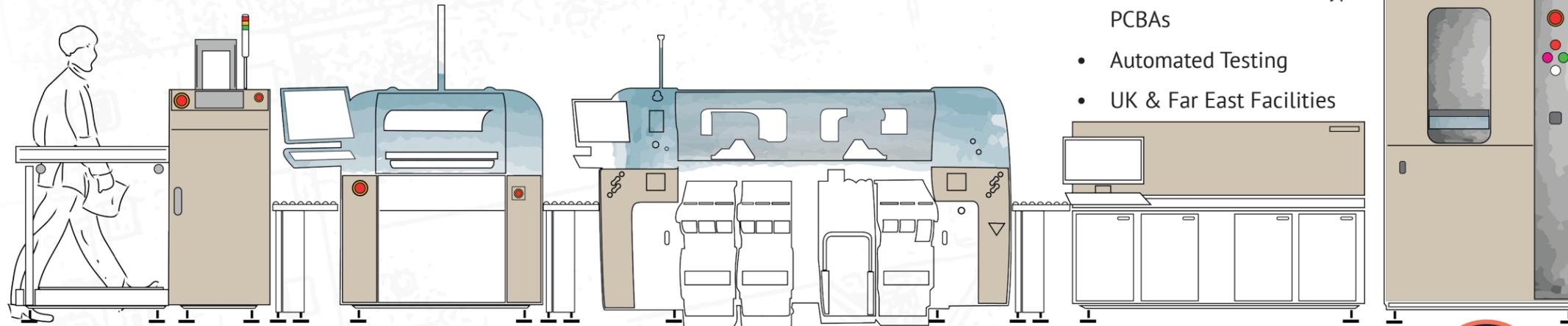
## 1. Design

Lascar has a team of experienced engineers specializing in different aspects of electronics design, able to provide peer reviews of existing designs, full product designs, or assistance with any stage in between. With graphic and product designers in-house, we also have the ability to provide customers with concept visualization and even packaging design.



### Design capabilities include:

- Analog & Digital Circuit Design
- PCB Layout
- Software & Firmware Development
- App Development
- GUI & Graphic Design
- Custom Display Technology
- Wireless & IoT Solutions
- 3D CAD
- 3D Printing
- Design for Manufacture
- Concept Visualization & Product Design



## 2. Procurement

Bills of Materials are meticulously reviewed by our team of procurement specialists. With over 40 years' experience and our global reach, **fully-traceable** components can be sourced at the **best price available**. Lascar only deals with franchised distributors and component manufacturers directly, offering a fully-traceable purchasing system.

### Procurement capabilities include:

- Low-Cost Sourcing
- Full Traceability
- Obsolescence Management



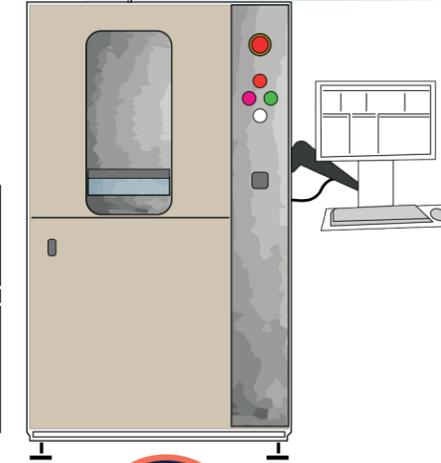
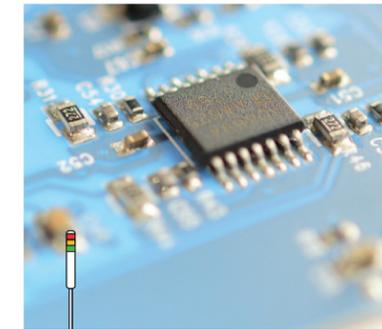
## 3. Production

Our pride and dedication to work is proven by continual investment in leading-edge manufacturing equipment. This allows us to manufacture the latest designs with fast turnaround and to the highest quality levels. With facilities in both the UK and the Far East, we can offer both small scale and large batch production.



### Production capabilities include:

- Surface Mount & Conventional PCB Assembly
- Chip-On-Board Wire Bonding
- Thick Film Hybrids
- Laser Trimming
- Conformal Coating
- Plastic Injection Mould Tooling
- Box Build Assembly
- Fast Turnaround Prototype PCBAs
- Automated Testing
- UK & Far East Facilities



## 5. Stock Control & Despatch

We aim to be as flexible as possible to our customers' needs. Our UK and Far East facilities enable us to offer a variety of stock-holding solutions.

Every customer is appointed a personal account manager, who will continuously collaborate with them to ensure that we are best tailoring our services to their unique requirements.

### Stock Control capabilities include:

- Kanban
- Just-In-Time
- Spot Orders



## 4. Quality Control

Our analysis experts conduct visual inspections and use the latest **Automated Optical Inspection** machinery to intricately examine every electronic assembly that goes through production. All processes are carried out in accordance with our ISO9001 accreditations to achieve world-class quality. All assemblies are inspected to IPC-A-610 Class 3 to ensure consistency of the highest quality levels achievable.

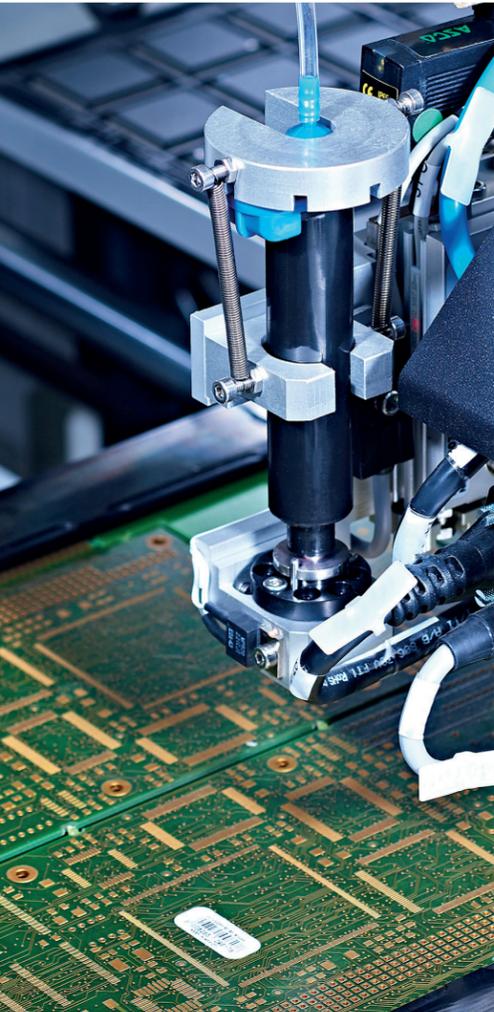


### Quality Control capabilities include:

- J-STD-001
- IPC-A-610
- ISO 9001
- Automated Optical Inspection (AOI)



# Core Capabilities in Further Detail



## PCB Assembly

We use both conventional PCB assembly and Surface Mount Technology (SMT) component placement systems at Lascar. We take pride in our products and therefore understand the importance of continual investment in the latest machinery.

### The latest additions to our production facility include:

- Solder Paste Printer – Europlacer SP710avi
- Pick-and-Place Machine – Europlacer iineo 1. QR coded smart reel system
- Selective Soldering Machine - Ersas SmartFlow 2020
- Reflow Oven – TSM 70-i71 8 zones (7 heating, 1 cooling)
- 3D AOI System - CyberOptics SQ3000
- Conformal Coating System - PVA Delta 6

### PCB Assembly capabilities:

- Pick and place of surface mount components down to 01005 and uBGAs
- Gold and aluminum wire bonding
- Conventional through hole soldering
- FR4, T-clad, steel and ceramic substrates
- Serialization and bar coding
- Conformal coating and encapsulation

## Electronic Design & Engineering

Lascar's electronic product design, development, and prototyping service enables customers to transform a product idea, from initial concept, to production-ready design. We are happy to support with specific stages of your design process, or alternatively we can provide end-to-end design support.

Many of our customers have already started their design journey and, by coming to meet our engineers face-to-face to discuss existing plans as part of a peer review, designs are finalized and ready for successful manufacture.

Product and graphic designers are also available in-house to assist with conceptual work. Continual input from electronics and production engineers ensures that work remains realistically achievable from design to production. All of our manufacturing and design processes conform to the strict quality levels required by our quality management system.



## Display Technology

Performance and efficiency remain critical areas in touchscreen and display interface solutions for many industries. Lascar Electronics offers a wide range of TFT-LCD, LED, Monochrome, E-paper, and OLED display solutions for a variety of applications. With low-power and sunlight readability options available, we can provide affordable solutions that meet your evolving needs as your application requirements change.

We offer graphic rich display solutions as well. The PanelPilot range of displays utilizes a suite of software to create custom touchscreen interface without writing a single line of code. The suite of tools available in the software makes the PanelPilot range a great option for critical applications that require a tailored solution with the most modern looking interfaces.

Our standard and custom solutions enable our clients to quickly and profitably fulfill their internal and external needs. Whether you need to upgrade your existing product line or need a custom solution altogether, Lascar can support you in all phases of the project – from design, prototype, procurement, and manufacturing. For more info go to [lascarelectronics.com/panelpilot](http://lascarelectronics.com/panelpilot)

## Wireless Technology Solutions

Next-generation products across industries rely on data sharing. From connected medical devices to industrial equipment – these devices depend on capturing and processing real-time data. The most efficient way to do this is by adding or upgrading your wireless module.

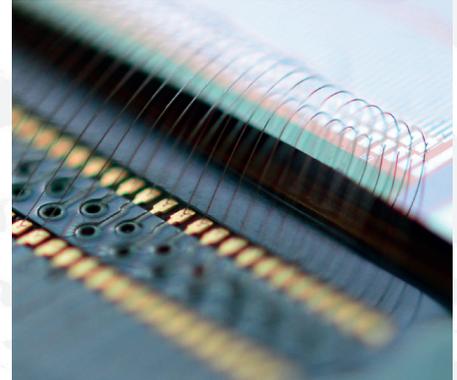
Lascar Electronics offers a wide range of wireless solutions – from WiFi, Bluetooth, NFC, cellular and other technologies – that can be added to your existing or future product. For less than \$2.00 per unit, your product can be streaming data to other devices or your custom cloud servers. By automating procedures through data collection and management, you can solve issues regarding preventative maintenance.



# Customer Testimonials

*"Excellence, Listening and Integrity. Lascar met this challenge and has allowed us to come to market with a robust solution to meet the needs of our demanding customers." - Todd Clifton, ECD*

*"Over the years, Lascar has proved to be a reliable business partner; one who consistently delivers a high quality product and excellent customer service." - David Johnston, Onicon Inc.*



## What's Next?

If you are looking for a partner for a new project, have an existing project you are currently making in-house, or wish to move from your existing subcontractor to a lower-cost / higher-quality offer, Lascar should be your next strategic partner.

The first step is to contact us at Lascar to start the discussions. We can begin this process by phone or email but almost all projects would require some level of face-to-face meeting to either refine the specification or to review our offer. We are always happy to visit at any point but would welcome a visit to one of our sites. Most meetings would include both technical and commercial staff and often members of our management team.

Contact Lascar now to discuss your Design or Manufacturing projects...



### Contact Us

#### United States

#### Sales & General Enquiries

+1 (814) 835-0621

us-sales@lascarelectronics.com

#### United Kingdom

#### Sales & General Enquiries

+44 (0) 1794 884567

sales@lascar.co.uk

#### Hong Kong

#### Sales & General Enquiries

+852 2389 6502

sales@lascar.com.hk

[www.lascarelectronics.com](http://www.lascarelectronics.com)