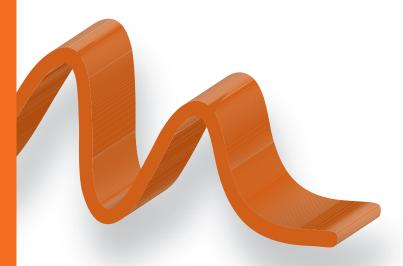
# MUTECH



# **ELECTRONICS**

> Excellence > Design > EMS



## **ABOUTUS**

Mutech is a centre of excellence for Electronic Design and Manufacturing services. Key to our success is clear customer insight and delivering with a "right first time" philosophy.

For over 25 years we have designed and manufactured electronics across a wide variety of industries and technologies. Our people are highly skilled and take a real pride in everything they undertake. We are experts at what we do and sit on several BSI, IEC and Industry committees developing the future standards that products will be assessed to

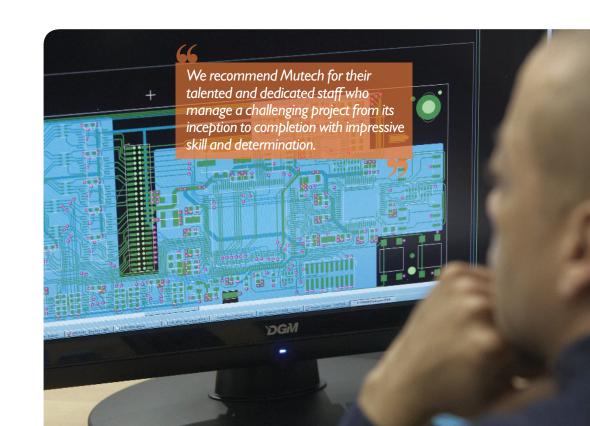
Our client profile includes blue chip OEMs and small privately owned businesses operating globally across a variety of market sectors including mining, industrial processing, safety and consumer electronics.

#### DESIGN

Mutech's innovative electronic design has enabled our customers to stay ahead of their competition with improved product development and rapid market entry.

Our in-house electronics manufacturing facility ensures our designers have a keen understanding of the practical and commercial aspects of design. We have expertise in most electronics areas including:

- > Intrinsically Safe and Functionally Safe designs
- > Consumer electronics
- > Industrial control and sensing
- > Power Supply / SMPS
- > Communications protocols
- > RF
- > Multi-layer PCB Layout
- > Design for manufacture
- > Embedded firmware (including RTOS, C, C++, Assembler across many platforms)
- > PC Application support (including C#, \*.NET, VB, Delphi, Foxpro and many more)



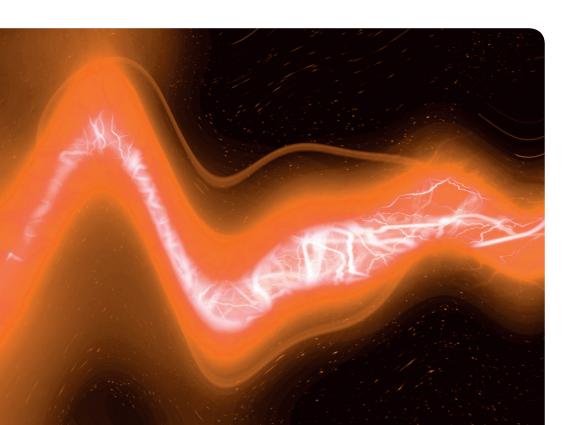
## MANUFACTURING

Mutech provides a range of electronics manufacturing services from our modern and versatile facility. Quality is embedded in our culture and systems. Our people have a broad spectrum of manufacturing knowledge and are always focussed on the customer's needs.

Manufacturing services and facilities include

- > Fast turnaround production
- > Small prototype runs to medium volume production
- > Automated SMT assembly
- > Conventional through-hole assembly
- > Vapour phase reflow
- > Conformal coating
- > Encapsulation
- > ATE in-circuit and functional test
- Purchasing, tooling, CAM preparation, packaging





## INTRINSIC SAFETY

Mutech is one of the leading experts in intrinsic safety and designs for hazardous areas. We have an in depth knowledge of the ATEX and IEC/EN 60079-11 requirements and we are members of the committees that write the standards.

Mutech are renowned for our expertise in Intrinsic Safety and have provided design and consultancy services to a range of industries across the globe. As well as intrinsically safe design, our quality system supports manufacture of intrinsically safe circuits to BS EN ISO/IEC 80079-34:2011 – equipment manufacture for explosive atmospheres.

Genuine safety is always core to our philosophy and our depth of experience enables us to design and assess applications to a higher level than the safety standards demand.



## FUNCTIONAL SAFETY

Legislation and due diligence are requiring that more and more industries design products that meet Functional Safety standards such as IEC 61508. As recognition widens there is a growing demand for electronic products ("elements") which are certified for use in 61508 systems.

Mutech can design both hardware (to 61508-2) and embedded software (to 61508-3) and recognise the CASS scheme as a means of assessment. We are active members of The 61508 Association and participate in the working group for software assessment.

The design requirements within 61508 are very much in line with Mutech's general design processes and so adopting 61508 was a natural progression for us.

## **OUR CUSTOMERS**

Over that last 25 years, Mutech has worked with blue chip OEMs and small privately owned businesses delivering design and manufacturing services.

Some of the reasons our customers cite for repeatedly using Mutech's services include:

- > Recognition of excellence
- > Importance of good communication
- > Commitment to working in partnership
- > Attention to detail
- > Effectiveness of proper specification
- > Tenacious project management

























## **OUR PEOPLE**

Everyone at Mutech is passionate about the work they do and understands the importance of exceeding customer expectation. We have experts in many different fields related to Electronics Design and Manufacture and pride ourselves on our flexibility and responsiveness.

We have recently been awarded the prestigious Investors In People Gold Award – putting Mutech in the top 3% of companies applying nationally.

Dedication to technical excellence starts from the very top. Colin Cameron, Mutech's Managing Director, has over 27 years' experience in electronic and software design, and is a leading technical expert representing the UK at a global level on IEC committees.



## **OUR VALUES**

#### **>** Communications



> Great Results need great communications



Our mission is to be experts in safety electronics

## > Quality



Doing it properly is the fastest, lowest cost route



> Our greatest asset is our team

# Let Mutech help you

#### Mutech Ltd

Unit 9 Wharfside Business Park Irlam Wharf Road Irlam Manchester M44 5PN

T +44 (0)161 872 0400 F +44 (0)161 777 9737

E sales@mutech.co.uk















