

## Global Manufacturing Solutions

We are the Global Manufacturing Solutions group of TT Electronics plc. From design and engineering, to integrated manufacturing of electronic systems, we deliver a full suite of end-to-end solutions to aerospace, defense, medical, industrial and rail enterprises with highly customized, low volume high mix product requirements.

Our global team provides the structure and support mechanisms expected from a large services provider, with the tailored, intimate approach of a specialty group. Our unique model ensures responsive and competitive solutions coupled with a comprehensive suite of services.



## Markets We Serve



#### Aerospace + Defense

TT has created a business committed to the ongoing support of our Aerospace and Defense customers. With our global presence, we have a unique offering in Europe, Asia and North America to support challenging industry requirements, no matter where you need them. With our presence in emerging markets, we support in country demand for the latest developments in the Aerospace community. Our value proposition is a direct complement to the supply chain requirements dictated by the Aerospace and Defense markets.



#### Medical

When it's your vision to improve lives, it's our vision to ensure you succeed. TT delivers when accuracy and dependability are essential. Our global facilities provide the highest quality regulatory and traceability requirements that our Medical customers demand. Our engineering organization is structured to help you maximize product lifecycle while minimizing risks of regualification through a comprehensive product life management process. Our focus on being the market leaders in low volume, high mix electronics manufacturing ensures our commitment to your product over the long haul.



#### Industrial

When being the first to market is a requirement, TT is your ideal business partner. Industrial products have long product lives and a strong dependence on rapid new product introductions. Our engineering and design services, coupled with intense focus on integrated solutions, have made us the perfect fit for Industrial customers for more than 30 years. We strive to build strategic, collaborative partnerships and find the right solutions that ensure high quality and the fastest time to market.



#### Rail

TT is recognized as an International Railway Industry Standard (IRIS) accredited company. This accreditation is the internationally recognized quality standard for the evaluation of railway industry management systems. With local representatives and a global footprint, our manufacturing and engineering support is unmatched. From rail based controlling and signaling systems, wayside equipment, to integrated control systems, we can provide reliable electronics manufacturing services.

# Our values, in alignment with your needs

#### Global footprint. Local fingerprint.

Customers choose us for our global footprint and strong local support. With manufacturing facilities in the Europe, North America and Asia, we are resourceful and effective in driving cost reduction.

#### Brand ambassadors. Yours.

As ambassadors of your brand, it's our responsibility to execute and support your brand promise. We're committed to upholding your highest standards of quality by providing a hands-on approach and the technical skills required to meet your most critical specifications.

#### The right fit matters.

We provide the structure and support mechanisms of a large manufacturer, with the customized, intimate approach of a smaller specialty group. From strategy to manufacturing to distribution, we deliver a full suite of end-to-end solutions..

#### Low volume. High mix. Highly flexible.

We are optimized to create highly engineered and integrated products in a low volume, high mix manufacturing environment. We take a customized and innovative approach to each customer project and adapt quickly to adjust to the unique requirements of each.

### Trust and respect. For real partnerships.

We invest in our customer's long-term success by establishing strong relationships based on trust and respect. We engage early in the design development process and collaborate in every aspect of the relationship, from communication to cost reduction to forecasting.

## The insight and expertise to lead innovation.

We proactively provide industry insight and product design expertise and guide clients toward innovative solutions. We maintain a unique market perspective by leveraging the industry expertise of all TT Electronics divisions.

#### Rely on TT.

We are a reliable partner with the structure and resourcefulness needed to ensure more agile, quick turn manufacturing without compromising a high level of product quality.

## Global Electronics Manufacturing Services

TT Electronics specializes in low volume, high mix electronics manufacturing for the aerospace, defense, industrial, medical and rail industries. With manufacturing locations in North America, Europe and Asia, we provide highly engineered electronics and electromechanical assemblies for regional and global manufacturing companies. With a reputation for innovation and flexibility, we provide every customer with personally tailored business solutions, global sourcing and logistics.

#### Global Footprint / Local Support

Delivering Low Cost Global Production and Local Manufacturing Support

While our locations span three continents, your network of support doesn't have to. With local program management support, TT Electronics can deliver a global solution with the look and feel of a local supplier including in-region prototype and NPI support and distribution logistics.

#### Local Manufacturing Support

We have strategically established engineering and manufacturing facilities in countries that provide us the ability to maintain the successful business partnerships with our customers in the major overseas markets.

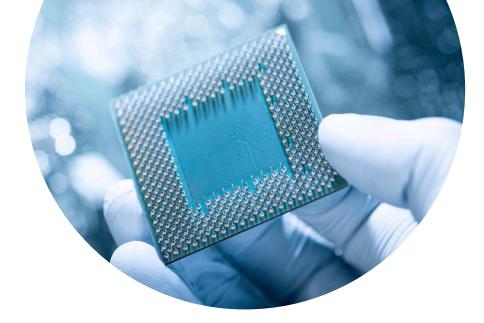
#### Low Cost Global Production

Regardless of our customers' locations, TT is positioned to provide global competitiveness. We help determine where to manufacture, how to best capitalize on quality, low-cost geographies by leveraging in-country sourcing. With our global supply chain, we are able to source quality materials in region that reduce our customers' total cost of ownership.

#### Low Volume, High Mix Electronics

TT Electronics specializes in the production of low volume, high mix electronics. While many companies specialize in high volume production, we have developed an entire global business process founded on the support of low volume, high mix complex devices.





Across our global facilities, TT Electronics manufactures 5,000 different products annually with volumes ranging from one to 100,000 pieces per month.

#### **Integrated Solutions**

TT Electronics provides full systems integration solutions to meet the needs of original equipment manufacturers. From front-end engineering and design solutions to specialized manufacturing capabilities including highly engineered system assemblies and integrations, printed circuit board (PCBA) and specialty wire cable harness assemblies, TT truly delivers end-to-end solutions. Additionally, through a comprehensive lifecycle management system, we maximize product lives and your total cost of ownership. We also provide creative fulfillment and after-market services in order to help manage your logistic needs.

#### Services + Solutions

#### Engineering + Design Solutions:

- Collaborative Design
- Supply Chain Localization
- DfX
- New Product Introduction
- Test Development
- Product Lifecycle Management

#### Electronics Manufacturing + Integration Services

- Printed Circuit Board Assembly (PCBA)
- Cable Harness + Interconnect Assembly
- Systems Assembly + Box Build Services

#### **Specialty Services**

- Cleanroom Manufacturing
- Coatings, Pottings and Encapsulations
- Environmental and Reliability Testing

#### Program Management

Global Supply Chain Management

Fulfillment Services + Logistics

#### After-Market Services

- Depot Repair
- Product Re-Manufacturing

# Why TT Electronics?

#### We are loyal ambassadors of each customer's brand,

intent on forging strong, collaborative relationships built on trust and respect. We provide the intimate support of a niche specialty group, complemented by our global reach and robust supply chain to ensure clients access to the competitive resources they rely on most.

#### We are a forward thinking team,

powered by the deep knowledge and expertise needed to deliver highly customized end-toend solutions in electronics manufacturing and systems integration.

#### We are the right fit

for enterprises seeking a potent combination of thought leadership, flexibility and delivery of high quality, innovative products.



**Americas** Perry, OH, USA Tel: +1 440 352 8961 Europe Rogerstone, South Wales, UK Fairford, England, UK Timisoara, RO Tel: +44 (0)1633 892 345 **Asia** Suzhou City, China Tel: +86 512 66611004 For more information, visit us at www.ttelectronics.com GlobalSales@ttelectronics-ims.com