

OUR MARKETS CONTINUED

# AUTOMATION & ELECTRIFICATION

**Customers rely on us to help solve their toughest automation and electrification challenges; streamlining their supply chains; increasing their efficiency; and helping them bring smart, new products to market.**

Digitalisation is a megatrend in its own right as it permeates every industry and offers solutions for many of the challenges faced. Industrial automation is the backbone of manufacturing and production processes that support economies and, with increased focus on climate change and natural resources, there is continuing pressure to facilitate higher efficiency and productivity.

We support increased demand for digitalisation through the design and manufacture of connectivity solutions. Given the wide scope of these markets, performance correlates strongly with global economic growth, with key indicators being GDP growth and the Purchasing Managers' Index ("PMI"), but the digitisation and proliferation of electronics and electrification means markets will grow faster than these indicators. The electronics manufacturing market is estimated to have grown by over 5% globally in 2023.

The pandemic significantly disrupted global supply chains, highlighting the importance of digital

technologies, for example the Internet of Things ("IoT"), to ensure operational continuity. While a globally connected industry stimulates competition and innovation, locating production close to markets – known as nearshoring or local-for-local business – makes local economies more resilient and sustainable. This megatrend is described as glocalisation, the success of which is dependent on access to digital technology and its prerequisites of economic freedom, standardisation, a reduction of technical barriers to trade, and government policies that support the digital economy.

Furthermore, the increasing trend of re-shoring manufacturing capability, or moves to regions with less expensive labour, will increase the demand for AI, augmented reality, IoT and other aspects of digitalisation. The enactment of the CHIPS Act in the US has triggered investments in semiconductor manufacturing in the country, with the first plant expected to begin production in 2024.

Our positioning in sub-segments such as electrification and industrial automation are good contributors to growth.

Urbanisation is another megatrend that drives these sectors. Megacities are on the rise. Today, the world has 33 cities with more than 10 million inhabitants and some of those – including Tokyo, Shanghai and New Delhi – are home to more than 20 million people. Forecasts suggest that, by 2030, there will be a total of 43 megacities, with most of the expansion occurring in developing countries.



Growing cities will require smart buildings, hospitals, schools, and communication networks that provide connectivity and edge computing. Software-based optimisation and intelligent hardware technologies will help reduce energy consumption and boost the efficiency of buildings and factories.

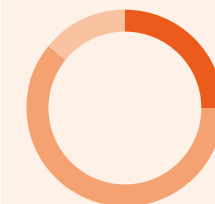
For TT, the opportunity in electrification is our ability to protect and ensure the efficiency of electronic systems. The broad trend of electrification is in turn driving more power and data usage. As electrification prevails, the increasing installed base of electrical equipment will require protection and connection and electrified, digitalised industries and applications will need an increasing number of data centres and connected products. This megatrend has popularly been referred to as the "electrification of everything" spanning the modernisation and decarbonisation of the grid, the expansion of broadband with 5G, and the shift to electric vehicles, among ongoing transitions.

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ESTIMATED GROWTH IN ELECTRONICS MANUFACTURING MARKET IN 2024

**+10%**

REVENUE BY DIVISION



● Power and Connectivity	25%
● Global Manufacturing Solutions	61%
● Sensors and Specialist Components	14%