

# TT electronics plc

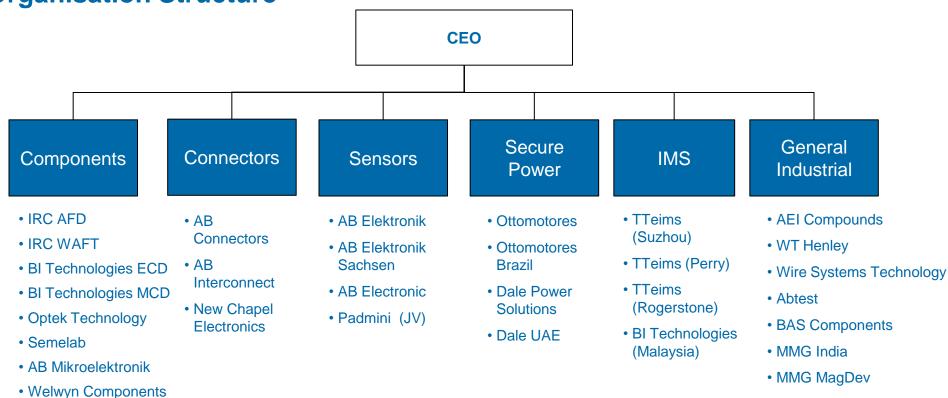
13th October 2010





# **Organisation Structure**

• BI Technologies SMT





# Components

#### UK **Locations BI** Technologies **AB Connectors** Semelab Welwyn Components China Welwyn Components **USA** BI Technologies ECD BI Technologies MCD International Resistive Company (IRC WAFT) Austria International Resistive Company Japan AB Mikroelektronik BI Technologies Japan of Texas (IRC AFD) **Optek Technology** France Mexico TT electronics France Malaysia BI Technologies SA de CV **BI** Malaysia Optron de Mexico Italy TT electronics Italy Singapore TT electronics Singapore **Germany** TT electronics Germany





#### **Vision**

The Components Business is a global supplier of higher-performing, speciality and custom passive component, optoelectronic, microcircuit and semiconductor products and specialist connectors and harnesses

## Solid foundation for growth:

- Innovative solutions to customer design needs
- Broad line supplier to our customer base
- Excellence in customer service

Vertical integration to higher-level assemblies and circuits will remain a constant goal where possible





# **Products: Passive Components**

#### **Fixed Resistors**

- Higher power
- Higher temperature
- Tighter tolerances

#### **Variable Resistors**

- Custom designs
- Fast prototyping
- Long life

# **Magnetic Products**

- Custom designs
- Short lead times



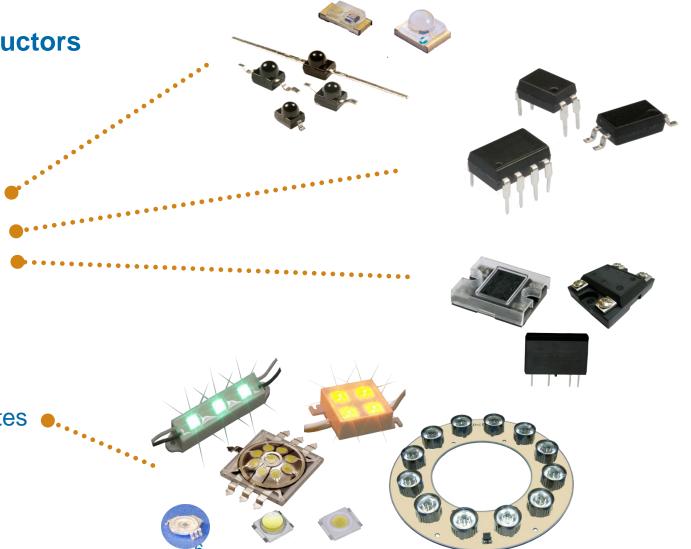




# **Products: Semiconductors**

# **Opto-electronics**

- Infrared
  - High power
  - High performance
  - Custom solutions
- Visible
  - High performance
  - Custom solutions
  - Innovative substrates







#### **Products: Semiconductors**

#### **Power Semiconductors**

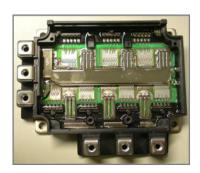
- Custom modules
- Miniaturisation
- High power density
- High ambient temperature

#### **RF Semiconductors**

- Power modules and transistors
- Very rugged
- High linearity

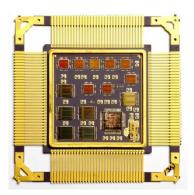
#### **Microcircuits**

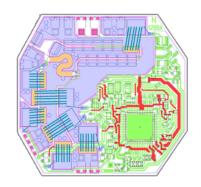
- Experts in packaging and layout solutions
- High temperature performance
- Testing capability















#### **Products: Connectors**

# **US Military Connectors**

- 5 year enabling agreement secured with Unicor Federal Prisons who supply USA military
- Product is supplied to every military vehicle in the US Army

#### 38999

- Launched in Q4 2009 utilising Group's low cost manufacturing footprint in Malaysia
- Provides entry to significant global market

#### **Soldier Connector**

Developed to support soldier applications, GPS, IED protection, radios













#### **Products: Connectors**

#### **Traction Connectors**

- Leading position in design and supply of inter-car coupling
- Supply Bombardier on VLU and SSL London Underground upgrades for 2012 Olympics
- London Underground and SNCF approved connector range for the rail industry
- Each London Underground carriage has £4k - £6k of TT connectors









# **Products: Military & Aerospace Harnesses**

- Leading position in design and supply of harnesses to USA and UK military truck builders
- Strong position in harnessing for radio communications, detection systems and battle-field power management
- Leading supply to UK MoD on role-fit programmes for military fixed and rotary wing aircraft
- Increasing position on harnesses on new aircraft build for main landing gear and test systems









#### **Markets Served**

# Broad End Markets including:

# **Industrial** (including Alternative Energy)

- Power supplies
- Control circuits

## **Aerospace & Defence**

- Aero-engine controls
- Satellites / communications

#### Medical

- Defibrillators
- Diagnostic

## **Automotive** (including Hybrid Vehicles)

- Inverters / electric motor
- Battery management

- Higher power
- Faster switching
- Harsher environments
- Miniaturisation
- Conversion to electronic systems