



Long Life Reliability
does not cost the earth

Lighting Systems

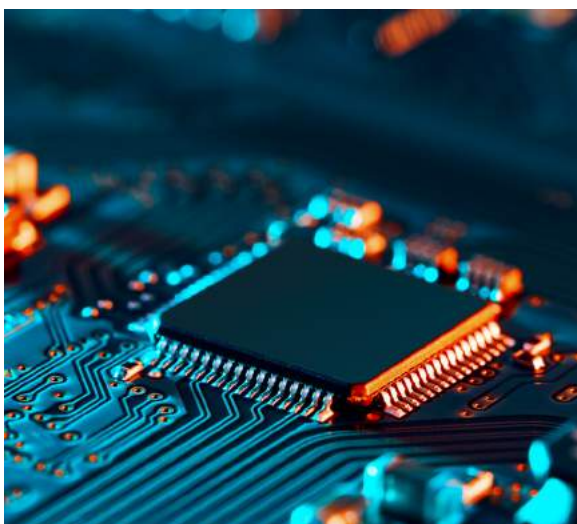
Rail Electronics Solutions

High performance on-board electronics solutions for railway rolling stock

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Innovative product design

Product prototyping

IRIS certified

In house product manufacture & integration

40+ years rail experience

High reliability design & components

Bespoke rail interior solutions



FM 702666 EMS 709322



LPA's manufacturing capabilities and services

We offer End-to-End solutions, from hardware to software, and from concept design through to manufacture of the finished product.

With 40+ years working in the rail sector, we use our electronics, mechanical and software design expertise to develop analogue, digital & electronic solutions for rail rolling stock applications.

With a comprehensive knowledge of rolling stock standards, compliance and reliability is embedded into our products.

Renowned for our long life, high reliability product development ethos, we also offer maintenance, repair and overhaul services.



Typical rail applications

- Printed circuit boards
- Power supply units
- Touch screen control panels – DMI / HMI
- Cabin access badge readers
- Current imbalance detectors
- Cab audible systems
- Seat electronics
- Charging solutions
- Brake monitoring & control systems
- Door lock systems
- Vigilance units
- Low voltage detection units
- Energy metering such as AC & DC meters
- Data acquisition & recording

Electronics manufacturing facility

Our manufacturing facilities are equipped with fully automated surface mount assembly lines, allowing for high-quality and efficient production.

Utilising automatic component pick and place, and multi zone reflow ovens allow for a constant and efficient flow of production.

Laser guided conventional components insertion equipment.

By using automatic test equipment (ATE), manufacturing defects analysis (MDA) and advanced 3D camera optical inspection we ensure all our components and products are manufactured to the highest standard and 100% tested.

Standards compliance

EN 61373:2010	Rolling stock equipment. Shock and vibration
EN 50121-3-2:2016/A1:2019	Rolling stock equipment. Electromagnetic compatibility
EN 50155:2021	Electronic equipment used on rolling stock
BRB/LUL RIA12	Surge and transient requirements
EN 45545-2:2020+A1:2023 (HL1/2 & 3)	Fire protection on railway vehicles
EN 50716:2023	Railway applications – requirements for software development
EN 50128:2011	Railway applications – communication, signalling and processing systems – software for railway control and protection systems
EN 50657:2017	Railway applications – rolling stock applications – software on board rolling stock
REACH	Regulation on the registration, evaluation, authorisation and restriction of chemicals



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