

Fast Facts

ASIC (Application Specific Integrated Circuit) Capability

TT Electronics - Power Electronics recently acquired the Hybrid and ASIC business from GE Newmarket and has now fully integrated the operations in to our state-of-the-art assembly facility in Bedlington, formally Welwyn Microcircuits.

TT Electronics can offer custom design services for ASIC's and also then assemble the unit on a hybrid to give greater flexibility, hence offering a full turn-key solution for the most demanding of systems. We can also offer standard communication such as ARINC and 1553 RT protocols.

Currently we are producing digital ASIC's from 980 nm to 3 μ m. Other more demanding requirements can be met with the use of both partner design houses and fabs, delivering additional expertise for example in either radiation tolerance or encryption protocols. Our Bedlington facility can also offer full conversions from obsolete FPGA to ASIC as well as offering in depth packaging knowledge, be it in fully hermetic or lower cost cots solutions.

For added test capability we have added two state-of-the-art Teradyne ETS-600 automatic testers. This enables us to be able to test up to 224 digital pin / Channel with 4Mb vector depth at a 66 Mhz vector rate and up to 32 analogue channels. These very capable ATE machines incorporate waveform digitisation and arbitrary waveform generation, enough to simulate the operation of the most demanding of application. This can enable us to test both at die and packaged level components.



PACKAGING DESIGN

- Metal and metal-ceramic hermetic
- Bespoke plastic
- Plastic over-mould
- Full micro-hybrid or MCM integration and layout

ASSEMBLY AND TEST

- Low to high volume
- Support for all packaging options
- Complete range of screening options
- 250+ pin electrical test system (ETS-600)