

About Us

Established in August 1985, Thanehall specialises in the bespoke design, development and integration of hardware, software and provision of documentation for all types of test requirements. We provide solutions for various industries including major aerospace, telecommunications and defence companies throughout Europe.

The synergy of expertise among Thanehall personnel in the electronics, software and mechanical engineering disciplines, coupled with experience, modern ideas and a pragmatic approach, ensures that customers are provided with solutions designed, implemented and tested to the highest standards, all at an affordable price.

Comprehensive product life cycle coverage is important to us; we are experienced in all aspects ranging from requirement analysis through to product support.

We take great pride in the quality of all our work and are ISO 9001:2015 accredited.

Operating from our secure site in Norwich, we are able to provide both on and off-site support to customers as required.

Software

Programming Languages and Environments

The technical background and experience of our engineers combined with a flexible approach means that we can support most programming languages and environments including:-

- LabVIEW™, LabWindows / CVI™
- C, C++, C#
- React®
- C / ATLAS
- Python™
- Amazon Web Services (AWS)™ / Microsoft Azure™
- SQL

Applications

Thanehall specialises in developing bespoke applications tailored to diverse requirements, including test engineering and industry-specific solutions. Our expertise spans:-

- Acceptance Testing – Ensuring compliance with specifications and standards
- Factory Testing – Verifying product performance in production environments
- Standard Serviceability Tests and Diagnostics – Facilitating maintenance and fault detection
- Electronic Stress Screening – Identifying latent defects through rigorous testing
- Functional Qualification – Validating system functionality against defined criteria
- Laboratory Testing – Supporting research and validation in controlled environments
- Shop Floor Control Systems – Streamlining manufacturing operations and workflows
- ERP and MRP Solutions – Including functionality for Bill of Materials (BOM) management
- Test Results Analysis and Gauge R&R – Providing insights into process reliability and measurement accuracy

LabWindows/CVI and LabVIEW™ are trademarks of National Instruments Corporation, Python® is a registered trademark of the Python Software Foundation, React™ is a trademark of Meta Platforms, Inc, Amazon Web Services (AWS)™ is a trademark of Amazon Technologies, Inc, Microsoft Azure™ is a trademark of Microsoft Corporation. Thanehall Technical Services is a trading name of Thanehall Ltd.



Hardware

Test Systems

The range of bespoke test systems we have developed to meet customer specific requirements includes 19" racks with internal and external test fixtures, bench-top, bed-of-nails, and portable test equipment.

We are always developing our universal products for AC distribution, signal switching and signal conditioning which we incorporate as appropriate in new systems or retail as standalone items.

Specialist System Knowledge

Many years of experience in test equipment has provided us with a detailed knowledge of systems including:-

- Radar (IFF, Surveillance and Tracking)
- Avionics including Flight Control
- Data Management including Cryptographic capabilities
- Communications
- Distributed Antenna Systems (DAS)

Design

Specialist Thanehall engineers use the latest tools including CAD to layout and simulate the design.

Reviews are carried out throughout the process to ensure that all requirements are met and products are of the highest quality.

Construction and Integration

We specialise in the manufacturing, assembly, and testing of a wide range of equipment, whether based on our proprietary designs or provided designs as part of a Build-to-Print contract.

All systems, subsystems, and cables are meticulously assembled by hand, utilising advanced soldering and crimping techniques to meet the highest quality standards.

Our skilled integration team offers seamless hardware and software integration services, tailored to client needs, either on-site or off-site.

Documentation

Our engineering expertise combined with many years of experience makes us the ideal partner for the provision of all types of documentation.

Technical Writing

We work for a wide range of clientele encompassing both commercial and military specifications, our customers include manufacturers in the telecommunications, aerospace and defence industries.

We are experienced in producing a variety of technical documentation including requirements analyses and traceability; verification, validation and qualification reports; and user manuals.

With nearly 40 years of experience in technical publications you can trust us to produce high quality technical data for:-

- Requirements Analysis & Traceability
- Verification, Validation & Qualification Reports
- Maintenance, Repair and Fault Diagnosis Documentation
- IPC / IPL
- ISO 9001 Quality Procedures and Audits

