

# ADVANCED ELECTRONICS CENTRE

Delivering World-Class Manufacturing Services  
For Mission Critical Applications

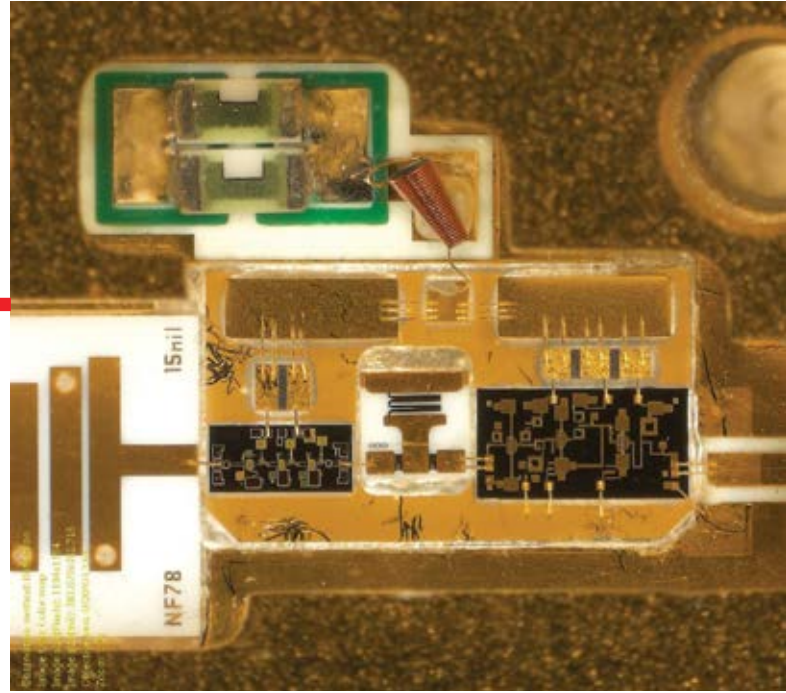


# WINNING THE DIGITAL BATTLEFIELD

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Advanced Electronics Centre specialises in the design, development, assembly and test of mission critical electronics modules and systems. Our advanced defence electronics solutions help warfighters achieve mission success across the full operational spectrum of ground, naval, air, and space.

With over a decade of industry experience serving our partners as their most reliable and trusted defence electronics manufacturer, we pride ourselves in providing the highest quality RF/Microwave subsystems and components for the electronic warfare, radar, communications and other mission critical needs.



# BEST-IN-CLASS PRODUCTION FACILITIES

**Advanced Electronics Centre (AEC) provides electronics manufacturing services that empowers agility, quality and sustainability.**

Based in Singapore, we have two secured production facilities with a combined cleanroom and production space of 2300m<sup>2</sup>. AEC facilities include CLASS 1K and 100K cleanrooms for the production of high quality products that meet demanding requirements.

Our team of highly experienced engineers handle the most complex product designs in our dedicated R&D and testing laboratories.

With over 120+ domain experts, engineers and specialists, we are dedicated to serve clients worldwide to meet their manufacturing and safety needs.



# THE COMPLETE SUPPORT CHAIN

## From Concept to Solution

By providing the full support chain from concept through prototyping to volume production, assembly and testing, AEC delivers what leading brands need.



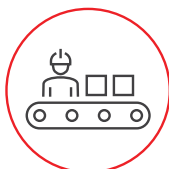
Concept and Design



Prototyping



Volume Production



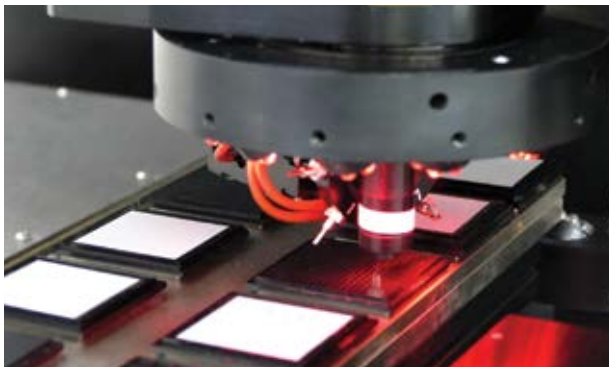
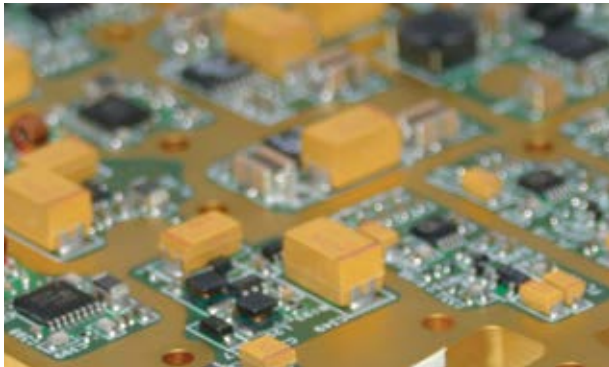
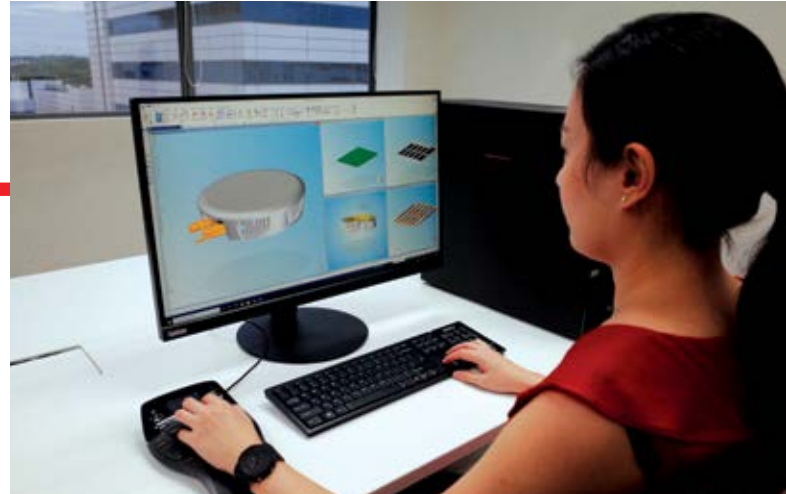
Assembly and Testing



# OUR CAPABILITIES

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- Product Design and Development
- Product Prototyping Services
- Design-for-Manufacturability (DFM)
- Build-to-Print Manufacturing and Assembly
- Design Testing and Qualification Services



## Delivering Mission Critical Electronics Modules and Systems

### Microelectronic Assembly

- Hybrid Microcircuit Production

### Printed Circuit Board (PCB) Assembly

- Surface Mount Technology (SMT) assemble of PCBAs
- Reflow, Wave and Vapor Phase soldering
- Manual Soldering (according to J-STD-001 & IPC-A-610)

### Cables & Harnesses Assembly

- Cable and Harnesses Assembly (according to IPC-WHMA-A-620)

### Modules and System Assembly

- Assembly of PCBAs, Cables and Harnesses and various parts into chassis
- Hermetic Sealing & Leakage Testing to MIL-STD-883

### Automatic Test Equipment (ATE) Station Design, Programming and Setup

### System Integration & Test

- Integrating submodules into systems and test according to specifications

To meet the most demanding and critical applications of our customers' requirements, our in-house manufacturing facilities are equipped with advanced assembly, inspection and testing equipment, allowing for exclusivity, flexibility and fast delivery times.

# IN-HOUSE EQUIPMENT & FACILITIES

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We have a comprehensive range of in-house assembly equipment and inspection technologies that allows us to put together an extensive variety of components for the production of complex electronic modules.

- Automatic Die Bonding Machine
- Automatic Wire Bonding Machine
- Ribbon Bonding Machine
- Bond-Pull Tester
- Auto Epoxy Dispenser
- Plasma Cleaner
- Surface Mount Technology (SMT) Line
- Wave Soldering Machine
- Vapor Phase Oven
- BGA Rework Machine
- Auto Optical Inspection Machine
- High-Magnification Scopes
- 3D X-Ray inspection
- Degreaser Machine
- Hermetic Laser Sealing Machine
- Gross and Fine Leak Testing Facilities
- Auto Conformal Coating Machine
- Shock and Vibration Testing System
- Highly Accelerated Stress Screening (HASS) Chamber
- Environmental Stress Screening (ESS) Chamber
- Laser Engraving
- ATEs with Temperature Chambers
- Specialised System Test Equipment
- Off-the-shelf Test Equipment
  - Spectrum Analyzer
  - Network Analyzer
  - Oscilloscopes
  - Signal Generators
  - Arbitrary Waveform Generators
  - Phase Noise Measurement System etc

## CERTIFICATIONS

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- ISO 9001
- ISO 14001
- AS9100
- IPC/J-STD-001
- IPC-A-600
- IPC-A-610
- IPC-WHMA-A-620
- MIL-STD-883H
- ANSI/ESD 20.20
- IPC-7711
- IPC-7721

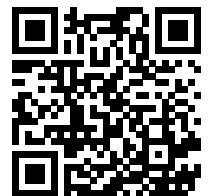
We are committed to the timely delivery and responsive support of products that remain safe and reliable for their intended use and the provision of services that meet regulatory standards and satisfy our customers' requirements.



Each and every customers' success reinforces our commitment to constantly innovate to, protect and advance what matters. We build long term strategic partnership with our customers to constantly ensure our value proposition enhances their market competitiveness.

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