ELECTRONIC COMPONENTS & SYSTEMS

Supplier Capability Brief

Electronic components and systems form the backbone of modern defence capability — powering sensors, radar, communications, EW systems, guidance units, onboard computing, power management and more. As defence platforms become increasingly digitalised and electronics-heavy, Primes and OEMs require secure, resilient, high-reliability suppliers across semiconductors, PCB assembly, RF systems, embedded computing, connectors, cabling, power electronics and ruggedised systems.

Core subcategories

- Semiconductors, microelectronics and power devices
- PCB fabrication, assembly and high-reliability PCBA
- RF components, microwave systems and antennas
- Embedded computing, processors and digital control units
- Cables, connectors, harnesses and interconnect systems
- Ruggedised electronics and defence-grade enclosures
- Power management, conversion and distribution systems
- Sensor systems, actuators and electro-mechanical components

Market outlook

Demand for defence-grade electronics is accelerating rapidly as platforms become more connected, autonomous, computationally intensive and reliant on resilient digital architectures.

Overall, electronics and embedded systems represent one of the fastest-growing and most strategically important elements of the defence supply chain.

Key market indicators:

- **Defence electronics market:** ~$105B in 2024 : ~$155B by 2030 (CAGR ~6–7%)
- **Global military communications & C4ISR electronics:** ~$60B in 2024 : ~$90B by 2030
- **RF/microwave components for defence:** ~$8B in 2024, strong demand driven by radar and EW modernisation
- **Power electronics for aerospace/defence:** ~$4.5B in 2024 : ~$7B by 2030 (CAGR ~7%)
- **Ceramics & CMCs:** ~$3.8B in 2024 : ~$6B by 2030 (CAGR ~7–8%)
- **European defence electronics manufacturing expansion driven by semiconductor security and sovereign capability initiatives**

Typical defence applications

- Radar, sonar, EW and electro-optical systems
- Guidance, navigation and control units for missiles and UAVs
- Mission computers, onboard processing and embedded control
- High-reliability PCBA for avionics, munitions and ground systems
- Communications, datalinks, secure networking and encryption hardware
- Power distribution units, conversion modules and energy storage interfaces
- Sensor arrays, actuators, mechatronics and electro-mechanical subsystems

Who should exhibit

- Electronics manufacturers and component suppliers
- PCB and PCBA producers (defence-grade, high-reliability)
- RF, microwave and antenna technology specialists
- Embedded computing and digital systems providers
- Connector, cable and harness manufacturers
- Rugged electronics and enclosure suppliers
- Power electronics and energy-conversion companies
- Sensor, actuator and mechatronic subsystem suppliers

What primes & OEMs are looking for

- Secure, resilient electronics suppliers with European manufacturing capability
- High-reliability components suitable for harsh, mission-critical environments
- Trusted semiconductor and microelectronics sourcing pathways
- Advanced PCBA with rigorous QA, traceability and testing
- RF/microwave expertise for radar, EW and communications programmes
- Embedded computing partners supporting autonomy and digitalisation
- Electronics providers capable of scaling production for rapid defence uplift

Showcase your ELECTRONIC COMPONENTS, SYSTEMS and ADVANCED PCBA CAPABILITIES to defence engineering, procurement and programme teams who are ACTIVELY IDENTIFYING and ONBOARDING new suppliers across Europe.

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