kontron

AEROSPACE & DEFENCE · ELECTRONICS MANUFACTURING SERVICES

EMS CAPABILITY BRIEF

80 years of high-reliability electronics manufacturing, entirely within Europe. Lifecycle-secured. Mission-critical. Backed by the Kontron AG Group.

80+	**AS/EN 9100**	**22-layer**	**100%**
Years EMS experience	Certified European production sites	PCB capability 6,500+ components	European supply chain traceability

ABOUT KONTRON SLOVENIA EMS

PART OF THE KONTRON AG GROUP I EUROPEAN ELECTRONICS MANUFACTURING SINCE 1946

Kontron Slovenia (formerly Iskra) has been manufacturing electronics in Kranj, Slovenia for over 80 years — including 20 years as a joint venture with Siemens AG. Today, as part of the Kontron AG Group, we operate as a European electronics manufacturing services (EMS) and original design manufacturing (ODM) partner for customers in aerospace, defence, industrial, medical, and test & measurement sectors.

Our facility in Kranj handles the full production lifecycle: from complex multi-layer PCB assembly (up to 22 layers, 6,500+ components) through final integration, programming, testing, and logistics. We combine automated SMT and THT production lines with in-house development engineering — meaning we can take a product from concept and requirement specification through to series manufacturing under one roof.

Kontron AG Group network

Slovenia — Kranj	>	EMS headquarters. SMT, THT, final assembly, testing, development engineering. AS/EN 9100 certified.
Germany — Augsburg & Deggendorf	>	Kontron AG headquarters. Embedded computing, IoT, and board-level manufacturing.
France — Toulon	>	EMS production site. AS/EN 9100 certified. Serves French A&D market.

Kontron AG Group network

- AS/EN 9100 — Aerospace quality management
- ISO 9001:2015 — Quality management
- ISO 14001:2015 — Environmental management
- ISO/IEC 27001:2022 — Information security management
- IPC-A-610 Class 3 — Electronics assembly (highest reliability)
- IPC J-STD-001 — Soldering standard

Production capabilities at a glance

PCB assembly	>	Up to 22 layers, 01005 components, BGA, QFN, fine-pitch
Component capacity	>	6,500+ components per board, high-mix / low-to-mid volume
SMT lines	>	Fully automated placement, SPI, reflow soldering
THT capability	>	Wave soldering, selective soldering, manual insertion
Testing	>	AOI, X-ray, ICT, functional test, boundary scan, burn-in
Final assembly	>	Box-build, cable assembly, system integration
Programming	>	In-circuit, standalone, and production programming
Prototyping	>	NPI support, DFM review, first article inspection

AEROSPACE & DEFENCE EMS

WHAT MAKES OUR A&D ELECTRONICS MANUFACTURING DIFFERENT

01 European supply chain sovereignty

Every assembly we produce is manufactured within Europe — across our facilities in Slovenia, France, Germany, Austria, and Hungary. Full origin traceability is maintained from raw component to finished assembly. For programmes where supply chain provenance is a contractual or regulatory requirement, our European-only manufacturing chain provides the documentation and assurance your programme office needs.

- Full BOM traceability to component origin
- No non-European manufacturing dependencies
- Kontron AG Group redundancy across 5 countries

02 Lifecycle-secured production

Defence and aerospace programmes run for decades. The components they were designed with often don't. Our lifecycle management approach includes proactive obsolescence monitoring, redesign and re-engineering when components reach end-of-life, and production continuity guarantees across the full programme lifespan. We don't wait for a component to become unavailable — we identify the risk early and plan the transition.

- Proactive obsolescence monitoring across active BOMs
- In-house redesign capability for end-of-life components
- Production continuity guarantees for programme duration

03 Zero-defect quality and traceability

Our production processes are designed for the most demanding qualification environments in A&D. Every assembly passes through a multi-stage inspection chain: solder paste inspection (SPI), automated optical inspection (AOI), X-ray inspection for hidden joints, in-circuit test (ICT), and functional testing. Full traceability records are generated at every stage and structured for programme qualification documentation.

- SPI > AOI > X-ray > ICT > functional test chain
- IPC Class 3 workmanship as standard
- Programme-ready qualification documentation

04 Full-stack development + EMS

Unlike most EMS providers, we don't just manufacture what you design — we also develop. Our engineering team covers concept, requirement specification, schematic design, PCB layout, prototyping, design validation, and handover to series production. For customers who need a single accountable partner from circuit design to certified assembly, this eliminates the coordination risk of managing separate development and manufacturing suppliers.

- Concept to series production under one roof
- DFM and DFT built into the design from day one
- Single chain of responsibility for the full product lifecycle

HOW WE WORK

FROM FIRST CONVERSATION TO SERIES PRODUCTION

Step 1 Initial consultation 20 minutes

We review your production context, programme requirements, and current EMS setup.
No commitment — this is a focused conversation to determine whether there's a genuine fit.

Step 2 Technical assessment 1–2 weeks

If there's a fit, our engineering team reviews your documentation package — Gerber files, BOM, assembly drawings, test specifications. We identify any DFM concerns, component sourcing risks, and testing requirements.

Step 3 Quotation & programme planning 1–2 weeks

We provide a detailed quotation covering NRE, unit pricing at volume tiers, lead times, and a proposed NPI timeline. For lifecycle-critical programmes, we include an obsolescence risk assessment and mitigation plan.

Step 4 NPI & first article 6–12 weeks typical

We build the first production run, conduct first article inspection (FAI), and generate the full qualification documentation package. Any process refinements are implemented before series release.

Step 5 Series production Ongoing

We build the first production run, conduct first article inspection (FAI), and generate the full qualification documentation package. Any process refinements are implemented before series release.

Step 6 Lifecycle support Programme duration

Proactive obsolescence management, redesign when required, production continuity guarantees, and responsive technical support throughout the programme lifecycle.

READY TO START?

The first step is a 20-minute consultation with one of our EMS specialists. No commitment. We prepare in advance so the conversation is specific to your situation.

A&D ELECTRONICS WE MANUFACTURE

REPRESENTATIVE PRODUCT CATEGORIES AND APPLICATION AREAS

Avionics & flight electronics

- Flight control computer assemblies
- Navigation and guidance electronics
- Communication system boards (HF, VHF, UHF, SATCOM)
- Data acquisition and signal processing units
- Power conditioning and distribution electronics (PCDUs)

Defence systems electronics

- Radar and sensor processing assemblies
- Electronic warfare (EW) subsystem electronics
- Fire control system boards
- C4ISR platform electronics
- Missile guidance and seeker electronics

Test & measurement (A&D applications)

- Automated test equipment (ATE) boards
- Data logger and recorder electronics
- Environmental monitoring system assemblies
- Calibration instrument electronics
- Ground support equipment (GSE) boards

Space & satellite electronics

- Satellite onboard computer assemblies
- Payload processing electronics
- Attitude and orbit control system (AOCS) boards
- Telemetry and telecommand electronics
- Power management unit assemblies

Engagement models

Full outsourcing
We handle the complete manufacturing lifecycle — from component sourcing through assembly, test, and delivery. You focus on design and programme management.

Overflow & capacity support
Your internal production handles the baseline. We absorb volume peaks, new product introductions, or specific product lines that exceed your in-house capacity.

Development + manufacturing (ODM)
We co-develop or fully develop the electronics — then manufacture it. One partner from schematic to series production, with full design-for-manufacture integration.

NEXT STEP

TALK TO AN EMS SPECIALIST.

20 minutes. No commitment.
We prepare in advance so the conversation is specific to your programme.

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