



Mission Ready Electronics Manufacturing

Vertically integrated.
Built for defense, aviation and space.





At Advionics, we build electronics for environments where reliability is non negotiable. Our customers operate in defense, aviation and space — sectors where performance must be consistent, predictable and verified at every level. This reality shapes everything we do.

Our operations, investments and long term strategy align with one core mission: providing OEMs with a manufacturing partner they can trust for their most critical systems.

Advionics combines deep engineering expertise with fully vertically integrated production. By bringing machining, PCB assembly, testing and system integration together under one coherent framework, we minimize risk, accelerate development and ensure full traceability from raw material to final assembly.

We are proud to be part of the Intersoft Electronics Group — an ecosystem with decades of experience in radar systems, RF technology and mission critical engineering. This gives our customers access to capabilities that are far beyond traditional manufacturing.

Over the past years, we have proactively expanded our facility and strengthened our organization in response to the rapid growth in the defense market. With our recent 6,000 m² expansion of the already 20,000 m² production floor, and a significant increase in technical talent, we are fully prepared to support larger volumes and long term programs without compromising the quality or discipline our customers expect.

We invite you to discover how our team, our processes and our integrated approach can support your next generation of mission critical electronics.

Joeri Nowé, COO

Thibaud Dauw, CFO

Alexis Van Tornhout, CCO



Who We Are

Advionics is a **European manufacturing center specialized in high reliability electronics**. We support OEMs who require rugged, consistent, fully traceable and long term manufacturable products. Every day, our teams collaborate with customers whose systems operate in the air, on the ground and even in space.

We combine mechanical manufacturing, electronics assembly, testing, screening and final system integration under one roof. This holistic approach ensures short communication lines, predictable quality and full control over every step of production.

Our philosophy is built on three pillars:

- 1 Reliability – because your application demands it.**
- 2 Process control – because quality cannot be inspected into a product; it is built in.**
- 3 Partnership – because successful programs grow over many years.**

Part of the Intersoft Electronics Group

Being part of the Intersoft Electronics Group strengthens Advionics in a way that standalone factories simply cannot match. The group brings together deep technology domains – from radar systems and RF electronics to advanced EMC and environmental laboratories – and this creates **an ecosystem that benefits every OEM** we work with.

Through the group, Advionics has direct access to:

Specialised engineering knowledge in RF, radar, avionics and mission critical electronics

A mature quality and compliance framework developed for demanding international programs

R&D capabilities that accelerate co development with our customers

Cross functional support for testing, system qualification, design updates and lifecycle management

As a customer, you get **a manufacturing partner backed by a full technology group ready to support long term, complex programs.**



Fully Vertically Integrated Manufacturing

Vertical integration is more than a structural advantage. It is a strategic choice. By keeping all essential capabilities in house, we guarantee the consistency, transparency and predictability that mission critical electronics demand.

Our end to end model covers:

- Co-development & early engineering support
- Mechanical engineering & machining
- Electronics design & PCB manufacturing
- Testing, qualification & screening
- System assembly & integration

This end to end approach eliminates unnecessary hand overs, fragmented responsibility and supplier induced variability.

ISO
9001

ISO
14001

EN
9100

Why Vertical Integration Matters for OEMs

For mission critical OEMs, the value of vertical integration goes far beyond logistical convenience. It materially improves program reliability and reduces complexity throughout the entire lifecycle.

With all capabilities in one place:

You gain consistent quality across disciplines – because the same engineering mindset, documentation culture and quality framework drive every stage.

You reduce risk – no dependency on external machinists, coaters, testers or EMS providers who each introduce their own variability, lead times or interpretation of requirements.

You accelerate development – engineering, industrialisation and production teams communicate face to face, enabling faster iteration and fewer surprises.

You improve traceability and accountability – one partner, one chain of custody, one data trail.

You lower program overhead – fewer suppliers to manage, align, audit and coordinate.

You gain predictable outcomes – mechanical and electronic elements are designed and manufactured in sync, avoiding incompatibilities or integration issues.

For OEMs operating in defense, aviation and space, where programs often span years or even decades, this integrated model offers a rare advantage: **one partner who controls the entire reliability chain, from raw material to finished mission ready assembly.**



Co Development & Early Engineering Support

Strong products start with strong collaboration. At Advionics, we frequently engage with OEMs early in the development cycle to ensure that their designs can be manufactured, tested and qualified efficiently.

Our engineering teams support:

- Design for Manufacturing (DfM)
- Design for Test (DfT)
- Component selection and lifecycle analysis
- Prototyping and pilot runs
- Environmental and EMC considerations in the design phase

This joint approach helps customers avoid costly redesigns and ensures a smoother transition into **industrialization**, which is a disciplined process that ensures smooth scaling from prototype to recurring production.

Mechanical Engineering & Machining

Mechanical design plays a crucial role in long term product performance. Our engineers work closely with electronics teams to develop housing and structures that are robust, thermally stable and easy to assemble.

We specialize in:

- Compact, rugged enclosures
- High precision assemblies
- Thermal optimization
- Material selection for harsh environments

Mechanical and electrical engineering are tightly interlinked at Advionics – an essential factor in achieving predictable, repeatable reliability.

CNC Machining & Precision Manufacturing

Our machining department transforms raw aluminum blocks and metal stock into complex, high precision mechanical components. These parts form the backbone of many mission critical systems and must therefore be manufactured with absolute consistency.

Capabilities include:

- Multi axis CNC machining
- Tight tolerance manufacturing
- Clean machining environments
- Traceable materials and batches
- Fast iteration cycles thanks to in house design collaboration

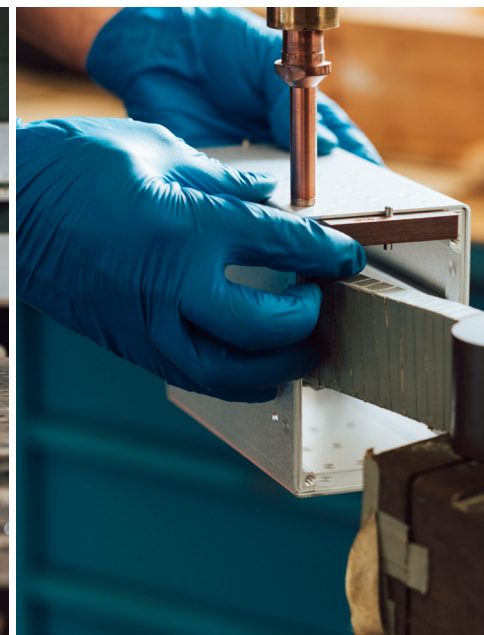
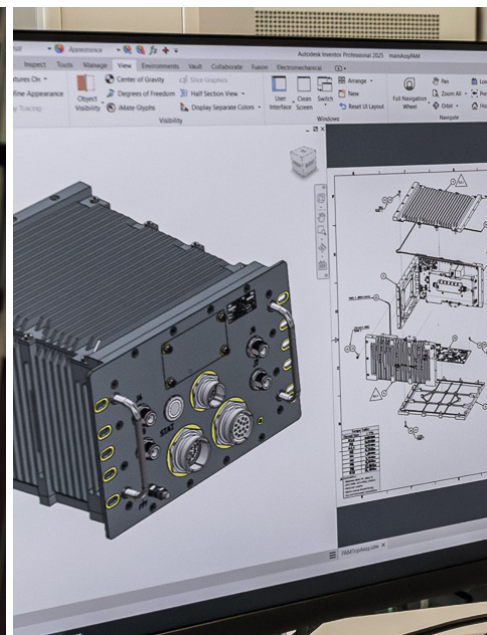
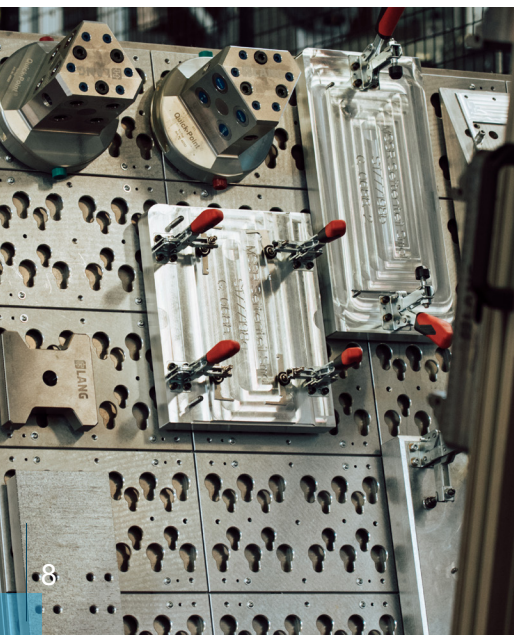
By keeping machining in house, we maintain schedule control and ensure perfect alignment with the assembly and electronics manufacturing stages.

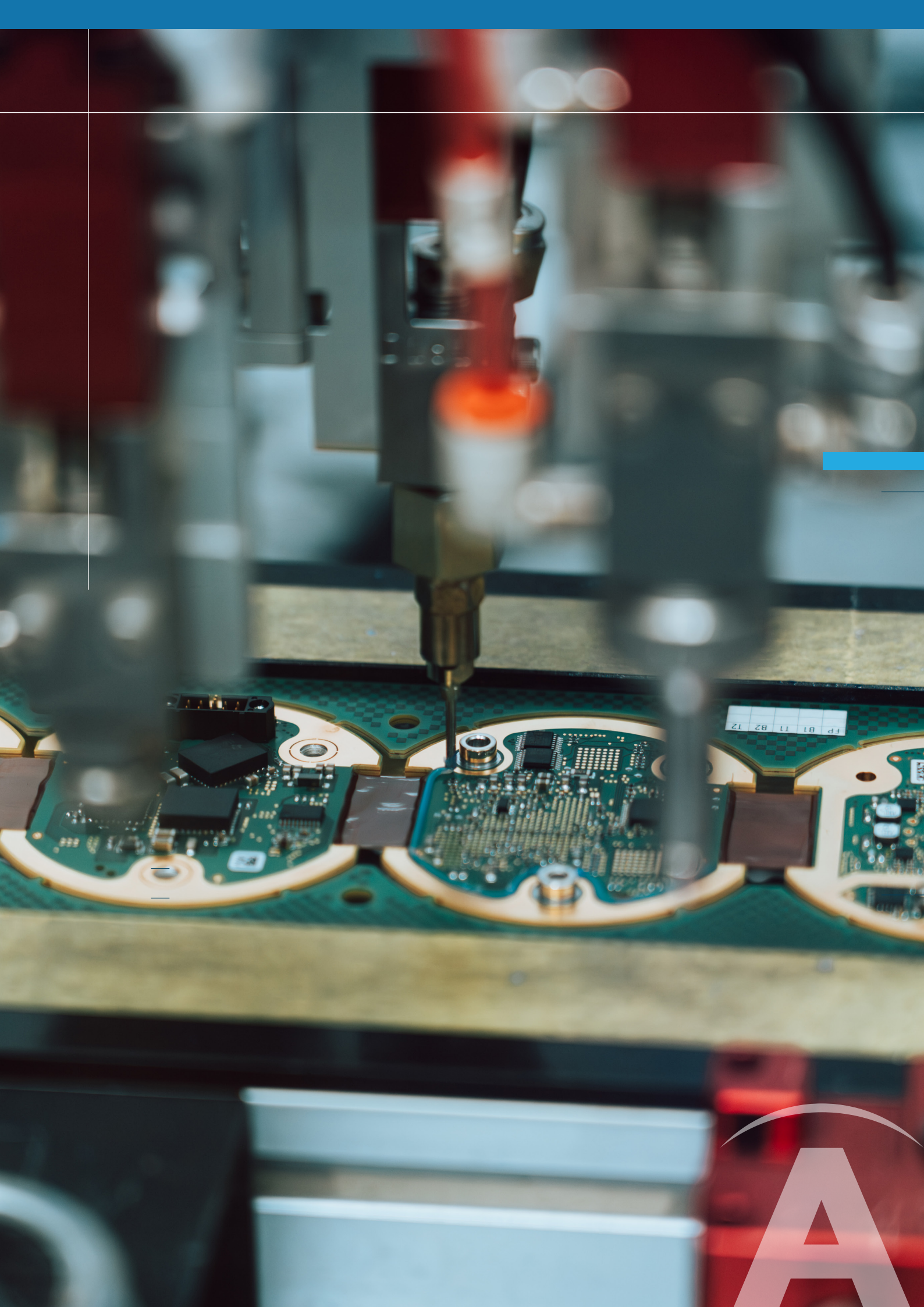
Electronics Design & PCB manufacturing

Our electronics team bridges design and manufacturing. Rather than simply “building what is provided,” we proactively work with customers to ensure that their boards can be produced consistently and tested thoroughly.

This includes:

- PCB manufacturability reviews
- Test strategy development
- Component availability and lifecycle monitoring
- Optimizing layouts for thermal, EMC and mechanical requirements





Welding, Deburring & Surface Treatments

To complete mechanical manufacturing, Advionics performs a full suite of preparation and finishing operations. Every part is prepared for optimal integration and long term stability.

Our processes include:

- TIG and spot welding
- Deburring and precision finishing
- Preparation for in-house anodizing, coating and wet painting
- Dimensional inspection and quality verification

These steps ensure that every mechanical component is delivered clean, accurately and ready for assembly.

SMT & THT Production

Advionics operates high reliability PCB assembly lines configured for complex, high mix products. Every step is performed inside EPA controlled zones, ensuring that sensitive components remain protected.

SMT capabilities include:

- Fine pitch and micro pitch components
- Controlled reflow profiling
- Solder paste inspection
- Multi technology assembly runs

For products requiring additional ruggedness or power management, we supplement these capabilities with expert THT assembly, performed by certified operators.

Inspection & Quality Control

Quality control is not a checkpoint, it is a continuous process. At Advionics, inspection and verification are woven throughout the entire manufacturing chain.

We deploy:

- Automated Optical Inspection (AOI)
- Flying probe testing
- X ray inspection (when required)
- Conformal coating processes
- IPC certified workforce
- Traceable serialization and documentation

Each board is thoroughly verified before moving to testing or assembly, ensuring that quality issues are prevented rather than detected late.



Testing, Qualification & Screening

Electronics for defense, aviation and space require extensive verification. Advionics provides a comprehensive range of testing methods to ensure long term performance under stress.

Our testing capabilities include:

- Functional and parametric testing
- Boundary scan and in circuit testing
- Isolation, leakage and high voltage testing
- Calibration and tuning of final radar subassemblies

For harsher environments, we offer full Environmental Stress Screening (ESS):

- Temperature cycling
- Burn in
- Shock and vibration tests

Our in house EMC chamber enables electromagnetic compatibility testing early and reliably.

ESD Excellence

Electrostatic Discharge is one of the most silent yet dangerous threats in electronics manufacturing – especially for high density and RF components. At Advionics, ESD control is not a formality. It is embedded in every aspect of our production environment.

We maintain certified EPA zones across all relevant areas and continuously monitor equipment, grounding, humidity and operator compliance. Staff undergo regular training, and our tools, materials and packaging are all fully ESD qualified.

System Assembly & Integration

Once individual components pass testing, Advionics integrates them into complete subsystems or finished assemblies. This final stage brings together mechanics, electronics, cabling and environmental protection.

Activities include:

- Cable and harness assembly, and specific RF-cabling specialization
- Multi module integration
- Mechanical assembly and alignment
- Potting or coating when required
- Final verification and documentation

Every system leaves our facility with full traceability and quality certification.

Why this matters:

- It prevents immediate component failures
- It eliminates hidden, latent defects – the most dangerous kind
- It guarantees long term performance in harsh conditions

ESD control at Advionics is part of our reliability culture, not a checklist.

Tailor Made Services for OEM Partners

Manufacturing is only one part of our offering. Advionics supports customers through the entire product lifecycle with a range of tailored services.

We help OEMs with:

- 1

Co Design

Early involvement to reduce risk and optimize manufacturability.
- 2

Industrialization

Defining stable processes, fixtures and test flows for recurring production.
- 3

Supply Chain Management

Proactive sourcing, obsolescence monitoring and controlled storage for sensitive components.
- 4

Program Management

Clear communication, transparent planning and single point of contact coordination.
- 5

Quality & Documentation

Aerospace and defense grade documentation, reporting and controlled change management.
- 6

Lifecycle Services

Long term production support, revision updates and ongoing optimization.

|| **Advionics offers a one-stop shop for the production of mission-critical electronics.** ||

The Challenges OEMs Face and How Advionics Solves Them

OEMs operating in defense, aviation and space programs face increasing pressure to deliver reliable, long life electronics in environments that tolerate no failures. Yet in real world operations, they often encounter structural challenges that slow down development, reduce quality or jeopardize long term reliability. At Advionics, we understand these challenges deeply, and we've shaped our capabilities to solve them.

Quality & Output Consistency

Many OEMs struggle with suppliers who cannot guarantee consistent, repeatable quality from batch to batch. Variations in process control, workmanship or material handling can lead to field failures, rework and unnecessary cost.

- ✓ Advionics counters this with fully integrated processes, strict quality monitoring and end to end traceability.

Long Term Reliability

Mission critical electronics must perform not just today, but for years or even decades. Poor ESD control, environmental weaknesses or marginal manufacturing practices can introduce hidden defects.

- ✓ Our disciplined manufacturing environment is designed specifically to eliminate these risks.

Component Availability & Obsolescence Management

Component lifecycle risks can halt production unexpectedly.

- ✓ Our supply chain teams monitor obsolescence, propose alternatives and maintain tightly controlled inventories to ensure continuity.

Unified Quality Framework

OEMs often rely on separate partners for machining, electronics, coating, testing and assembly. Every interface introduces risk.

- ✓ Because Advionics is fully vertically integrated, we eliminate hand overs, simplify communication and ensure that all process steps follow a unified quality framework.

Capacity and Scalability

OEM programs fluctuate in production volume, and many suppliers cannot scale without compromising quality or lead times.

- ✓ By expanding proactively in response to rising defense demand, Advionics is now ready to handle increased volumes from day one.

Design for Manufacturing & Testing

Even strong engineering teams sometimes create solutions that don't translate easily into manufacturing. The result? Bottlenecks, redesigns, cost increases and delays.

- ✓ Advionics solves this through early co development, DfM/DfT support and joint engineering reviews.

Testing & Screening Capabilities

Many suppliers lack advanced testing infrastructure, causing OEMs to take on this burden themselves.

- ✓ Advionics offers extensive testing: functional, parametric, in circuit, boundary scan, isolation, EMC and full ESS – all in house.

Mission Critical Mindset

Many suppliers simply are not used to working in defense, avionics or space environments.

- ✓ Our teams operate with the required discipline, documentation culture and long term mindset these sectors demand.





Markets We Serve

Our capabilities are engineered for businesses operating in environments where reliability cannot be compromised.

DEFENCE

Electronics for radar, communications, command and control and rugged field systems.

AVIATION

Avionics modules, sensors, control systems and power electronics for airborne platforms.

SPACE

Manufacturing for ground based space systems, delivering the precision, traceability and engineering discipline required for mission critical space operations.

HIGH END INDUSTRIAL

Reliable electronics for security, automation and critical infrastructure.

Trusted Partnerships & Programs

We have built long term relationships with OEMs who rely on us for consistency, confidentiality and continuous improvement. Our structured approach to quality and process control ensures stable production, even in highly demanding environments.



|| **Our strength lies in being a partner, not just a supplier.** ||



Why OEMs Choose Advionics - What Truly Sets Us Apart

In defense, aviation and space manufacturing, many suppliers meet the basic expectations: ESD control, IPC certified operators, traceability, proper documentation and stable production processes. These fundamentals are essential, but they don't help OEMs move forward. For customers, they offer no competitive edge, no added value and no reduction in programming risk. They are simply the minimum requirements to participate in this industry.

At Advionics, we go far beyond these industry standards.
The real difference lies in how we combine capabilities, culture and long term commitment.

Vertical Integration With Real Engineering Synergy

Unlike traditional Electronics Manufacturing Services (EMS) providers, Advionics unites machining, electronics manufacturing, coating, testing, screening and system integration under one roof, managed through a single, coherent quality framework. Our engineering teams work alongside production, enabling faster industrialization, shorter learning cycles and fewer risks for OEMs.

Strengthened by the Intersoft Electronics Group

Our capabilities are amplified by the Intersoft Electronics Group, which brings decades of experience in radar systems, RF electronics, EMC testing and mission critical engineering. This ecosystem gives our customers access to domain expertise that cannot be outsourced or replicated easily.



A Genuine Mission Critical Mindset

Our culture is shaped by the sectors we serve. As a NATO SECRET cleared organization, we operate under the security, compliance and confidentiality standards required for sensitive and classified programs. Every team works with the rigor, documentation discipline and reliability focus that defense and aviation programs demand. This mindset reduces surprises, strengthens communication and ensures predictable outcomes.

High Mix, Low Volume Excellence

Where many EMS providers pursue scale and repetition, Advionics specializes in complexity. We handle high mix, engineering heavy products, prototypes, pilot builds and long term recurring production – exactly the profile of mission critical electronics used in modern defense, avionics and space platforms.

Built for the Future

Advionics is investing heavily to support the next generation of mission critical programs. Our 6,000 m² facility expansion early 2026 and more than 60 new technical roles reinforce our capacity, flexibility and long term stability. For OEMs working with products that must remain available and reliable for many years, this provides confidence that their manufacturing partner will be able to scale, adapt and support them throughout the full lifecycle of their systems.



Let's build mission ready electronics together.

We invite you to contact us for a discussion
about your next program or to schedule a visit to our facility.

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