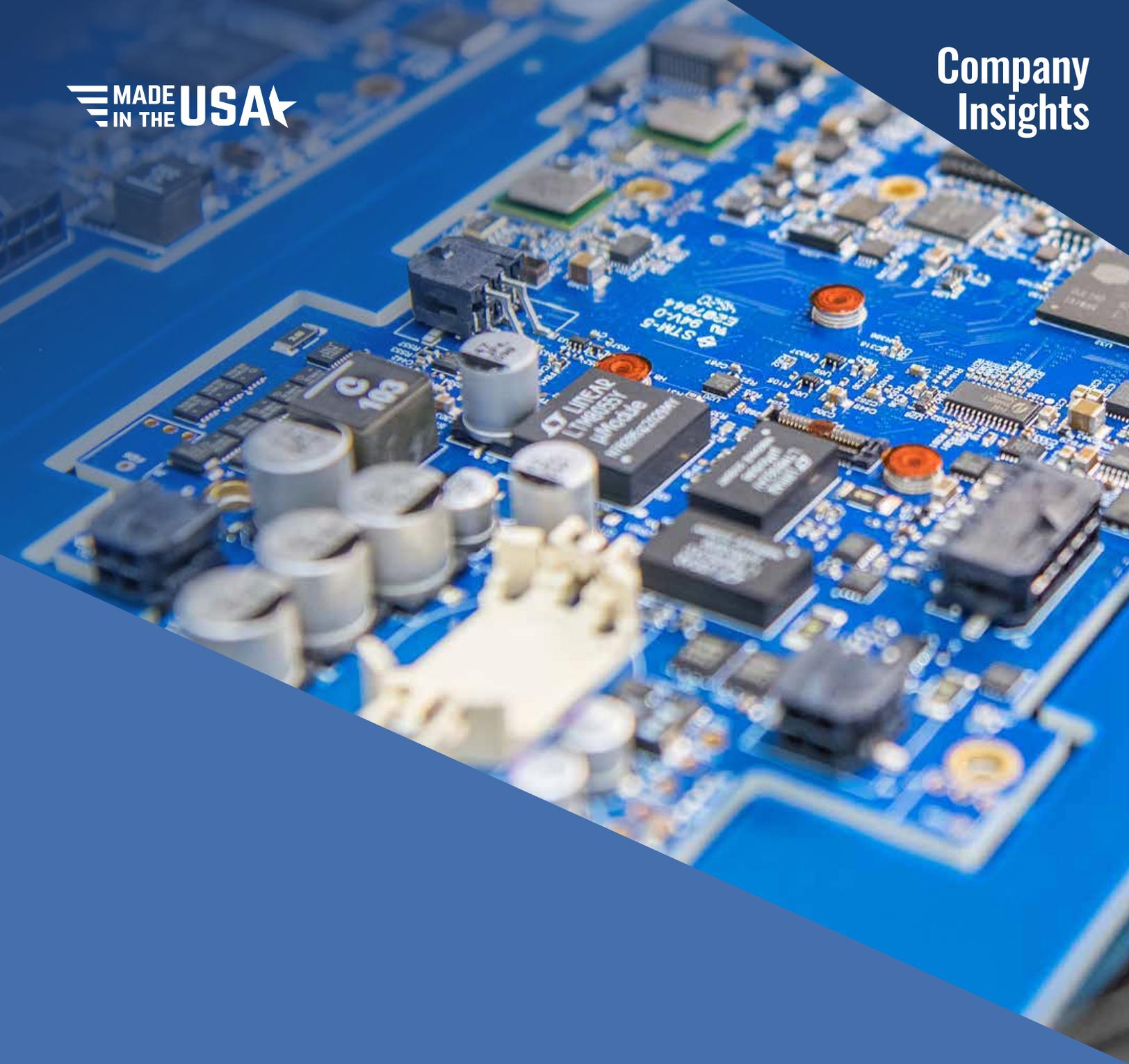


MADE
IN THE USA

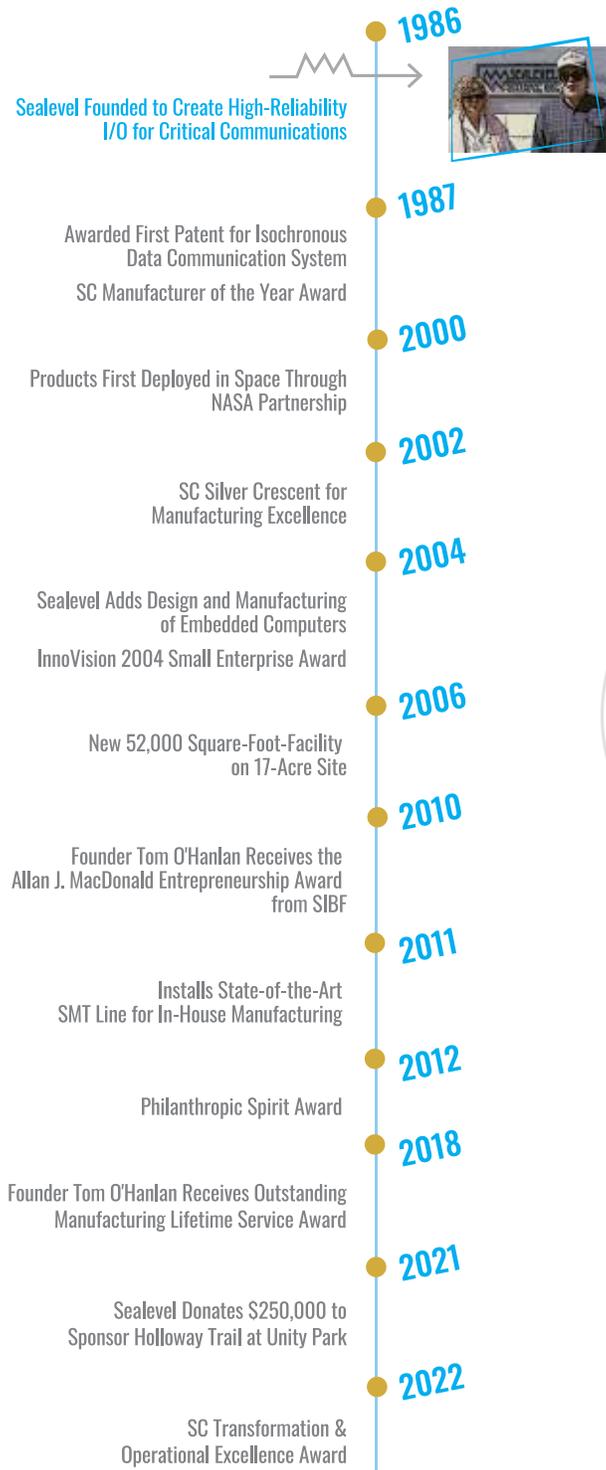
Company
Insights



SEALEVEL®

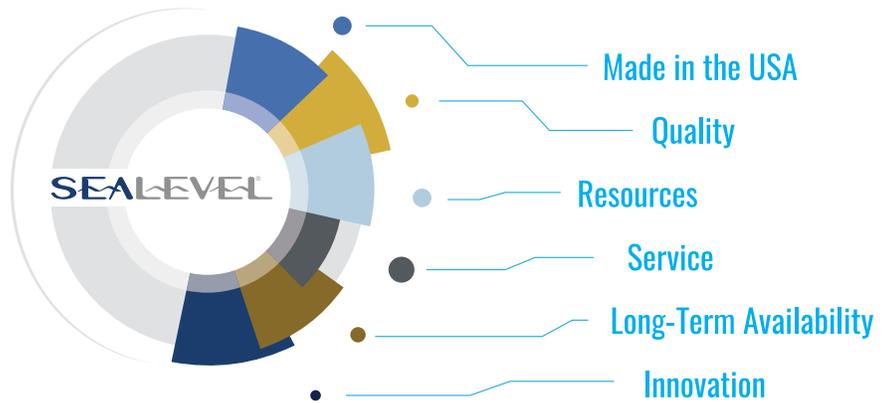
Delivering Design & Manufacturing Excellence Since 1986

● — Who We Are



Sealevel Systems, Inc. reinvented the industrial I/O and computing industry with the first RS-422/485 communication adapter for the IBM PC. Since 1986, Sealevel has continued to redefine design, engineering, and manufacturing for industrial computers, Ethernet serial servers, USB serial, PCI Express and PCI bus cards, and IoT hardware and software. Today we offer over 350 core products, available in nearly every configuration imaginable. If you need something completely customized to meet your specifications, we have that, too. Our award-winning team of engineers is at your service.

Sealevel's Commitment to Customers



Our Mission

Sealevel Systems, Inc. is committed to **engineering** leading-edge communications solutions, **manufacturing** our products to the highest quality standards, **growing** a creative team of trailblazers, and **sustaining** a legacy of community investment.



SEALEVEL

●— Made in the USA

Stay the course as one of the longest-running, American-made companies in our industry

Control & Quality

Sealevel was founded in Pickens County, at the base of the Blue Ridge Mountains, in 1986. Our leadership remains committed to employing American labor and giving back to the country – and neighbors – that have given so much to us. Unlike competitors, Sealevel has never relocated manufacturing outside of the USA, maintaining our rigorous control and quality standards.

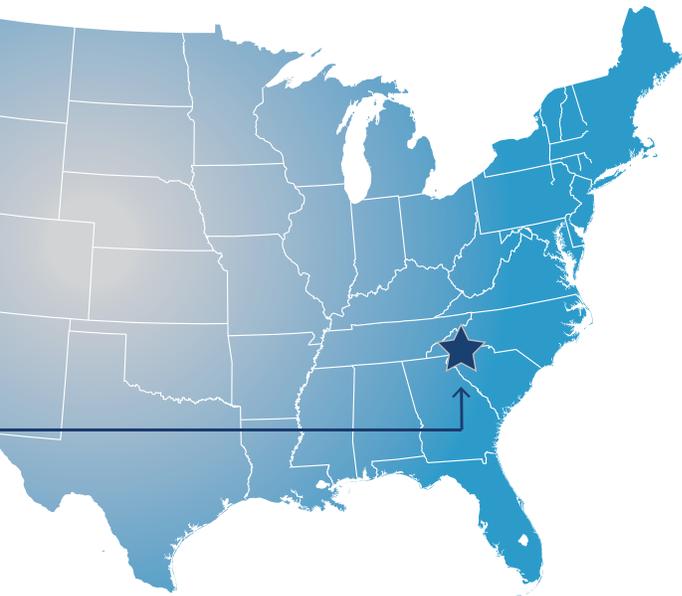
Sealevel Solutions

Sealevel is the leading designer and manufacturer of industrial computers, Ethernet serial servers, USB serial, PCI Express and PCI bus cards, and software for critical communications. We partner with OEMs and industry leaders to meet their specific application needs through our complete standard product line and custom design and manufacturing capabilities. We offer over 350 standard products in a wide variety of configurations and have successfully designed and deployed over 90,000 embedded computers since 2004.



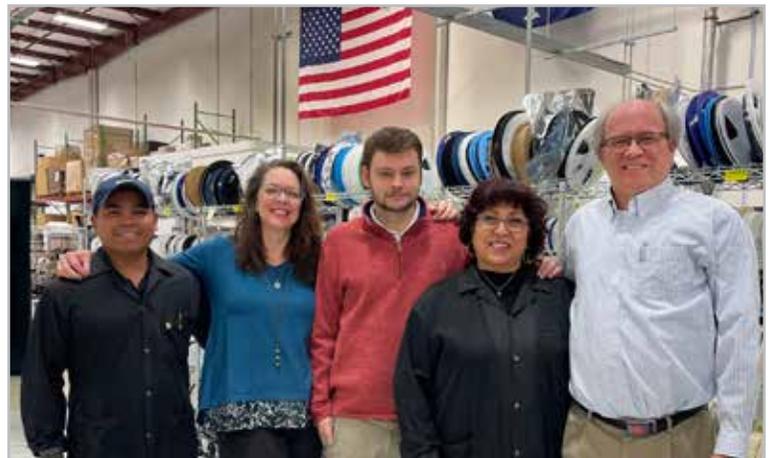
Sealevel Facility

Sealevel's 52,000-square-foot facility sits on a 17-acre site. To protect electronic components during design, assembly, and test, we have installed over 20,000 square feet of ESD tiling spanning our manufacturing, engineering, and tech support departments.



Sealevel Team

Sealevel's team of over 90 employees spans our engineering, manufacturing, and business departments.



● — Quality

Deliver the highest quality hardware and software products on time, every time

Assembly & Test

All board-level assembly and testing take place at Sealevel's headquarters using our state-of-the-art surface mount manufacturing line. All products are visually screened using Automated Optical Inspection (AOI) and 100% of the functionality is tested before shipment. Other equipment to assist in new product design and testing includes multi-angle transmissive x-ray, a vibration table, and multiple environmental chambers. Our on-site testing capabilities extend to:

- Thermal Shock
- Environmental Stress
- Radiation Emissions
- Endurance Testing
- Impact Resistance
- Ingress Protection

Compliance & Certification

Sealevel's team of engineers and manufacturing technicians has experience designing and manufacturing for various military and commercial standards including:

- ATEX
- CE
- CID1 and CID2
- CSA
- EFT
- EMC (FCC, CE)
- FCC
- IECEx
- IP
- MIL-STD-1472
- MIL-STD-167-1
- MIL-STD-461
- MIL-STD-464
- MIL-STD-810
- MIL-STD-901
- NEMA
- UL



Design – and Manufacture – for Certification

We are committed to the design and manufacturing of quality critical communications hardware and software, dedicated to providing reliable products, exceptional service, and on-time delivery. Our commitment is further demonstrated by our ISO 9001:2015 certification and extensive on-site testing capabilities. Every Sealevel product is American-made and tested to exceed requirements.





Automated Screen Printer with 2D Inspection



60-Spindle High Speed SMT (60,000 CPH Placement)



30-Spindle High Speed SMT (34,500 CPH Placement)



7-Spindle High Speed SMT (16,500 CPH Placement)



7-Spindle High Speed SMT (16,500 CPH Placement)



5-Camera Automated Optical Inspection



Ten Zone Forced Convection Reflow Oven



Automated Conformal Coating



Thermal Walk-In Chamber



Multi-Angle Transmissive X-Ray

●— Resources

Provide dedicated engineering resources for the fastest possible delivery of all projects

Electrical

Sealevel's team of electrical engineers has amassed an extensive library of computing and I/O board designs, allowing new products to be developed reliably and quickly. Focusing on functional density, our engineers use advanced electrical schematic capture, layout and routing, and modeling tools. Using Field Programmable Gate Arrays (FPGAs) and IP enables us to accelerate the design cycle, increase product longevity, and produce rapidly extensible hardware platforms.

Mechanical

Sealevel's mechanical and electrical engineers collaborate to design integrated enclosures to meet the most demanding electrical and physical requirements, while ensuring high-reliability communication. Using advanced software, every aspect of the design is modeled, including board, component, and connector placements.

Compliance & Test

Sealevel's team of compliance and test engineers completes exhaustive in-house compliance evaluations to meet environmental, safety, and security requirements. Sealevel's design for certification approach enables us to manage the entire product development process as our engineers guide hardware solutions through regulatory procedures and official certification.



Setting the Standard for Manufacturability, Optimization, and Reliability

Sealevel's on-site team of I/O and computer engineers includes hardware, software, mechanical, layout, compliance, and test departments. From concept to prototypes to final delivery, our engineering team capitalizes on over 35 years of IP and proven experience in developing robust industrial I/O and embedded computing solutions.



Software

Sealevel's software team includes software engineers, computer engineers, and computer scientists for a team adept at solving the most complex embedded software challenges. The Sealevel software team has developed custom BSPs, microcontroller firmware, drivers, Windows and Linux APIs, and utilities. For standard I/O and computing hardware, the team is also responsible for developing sample code to support our complete product line.

Areas of Expertise

- COM Baseboard Design
- RISC Single Board Computer Design
- PCIe/104
- Microcontroller-Based CPUs
- Asynchronous & Synchronous Serial I/O
- 10 Gigabit Ethernet
- USB 3.2, 2.0, 1.1, 1.0
- High Density/BGA
- PCB Layout
- Embedded Logic
- Simulation
- Thermal Modeling
- Heat Sinking
- Device Drivers
- Embedded Firmware
- Cloud Software



●—Service

Maintain attentive project management and best-in-class customer support

Project Management

Sealevel's hardware design and manufacturing process begins with the assignment of a dedicated project manager. **Project managers** work closely with our **engineering, manufacturing, and master planning** teams throughout each phase of the product development cycle. We begin by defining product, certification, compliance, and software specifications.

Our **procurement** team also works alongside our **program management** team to ensure component availability and navigate supply chains. A **quality control** manager assesses each project to define any specific security, parts traceability, or other requirements beyond Sealevel's standard policies and procedures.

Branding & Fulfillment

Sealevel's **marketing, shipping, and logistics** experts deliver branding, packaging, and fulfillment processes.

Our **marketing** department and artists provide graphic guidance and oversight to ensure finished products reflect desired branding and conform to the overall vision.

Following prototype approval, our **shipping** team evaluates products to determine the best packaging materials to ensure hardware maintains its integrity throughout the delivery process. Our dedicated warehouse space also allows for product storage depending on **logistics** needs.



Our project and program management approach relies on:

- Master Planning
- Product Lifecycle Strategies
- Parts Traceability
- Resource Management
- Risk Management



Product Development Lifecycle



Research

Cost Optimization
Technology Roadmap
Project Planning



Alpha Development

Architecture
DFM
Schematic Capture
Board Layout Prototyping
Compliance & Design Reviews



Verification & Validation Alpha Test

Design Tests
Full Requirements Coverage
Test Scope & Coverage

Post-Purchase Support

Our on-site **applications engineers** are dedicated to customer support throughout the lifecycle of your relationship with Sealevel. These professionals have first-hand experience with all Sealevel hardware and software solutions – custom and standard – to provide complete advice as you integrate peripherals and assess product modification needs.



Our **project managers** work directly with our **technical support specialists** to address any modifications or future improvements. Our **procurement** team also maintains direct interaction following product launch to ensure ongoing access to components and cultivate vendor relationships for preferred priority.

Relationship & Product Lifecycle Support

We are committed to developing the relationship required to make your critical communications project a success. From the earliest engineering concept to manufacturing and support beyond shipment, the Sealevel team is on standby.



Initial Approval

- Results Review
- Test Acceptance
- Formal Acceptance



Beta Development

- Design Modification
- DRM
- Schematic Capture
- Board Layout
- Prototyping
- Design Reviews



Verification & Validation Beta Test

- Design Tests
- Full Requirements Coverage
- Test Scope & Coverage



Pre-Production Approval

- Test Specifications
- Production Fixtures & Software
- Manufacturing Launch Plan
- Procurement Plan
- Quality Control Plan



Production Launch

- Process Adherence Check
- Revise DFM
- Production Approval

● — Long-Term Availability

Guarantee long-term availability and awareness to avoid unforeseen challenges

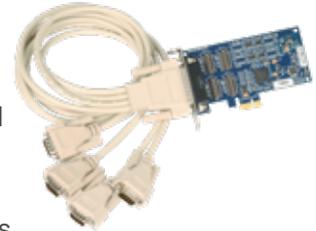
Embedded Computing

Designed for I/O intensive applications, our industrial computers, touch panel PCs, and COM Express solutions combine unmatched computing power with versatile configurability.



Serial I/O

Sealevel asynchronous and synchronous serial I/O interfaces are designed for high-speed applications and support RS-232, RS-422, RS-485, and RS-530 electrical interface standards.



Digital & Analog I/O

Sealevel digital and analog I/O products enable you to monitor — and control — real-world signals. From single inputs to entire networks, our expandable solutions are fully configurable.



Industrial IoT

Sealevel's Industrial IoT (Internet of Things) hardware and software products are changing and improving industries through remote data monitoring, predictive analysis, and real-world automation.



USB Hubs & Isolators

Sealevel industrial-grade hubs add four or seven USB ports to a host computer. And for medical-grade isolation of your connected USB devices, look no further than Sealevel's SealSO USB isolators.



Accessories

From high-retention ports and locking cables to mounting brackets and power supplies, Sealevel has the rugged peripherals to complete your installation and deployment.





Embedded Computing & I/O Solutions

One of Sealevel's earliest products was a rugged, two-port serial card developed to link computers to textile looms. Our commitment to delivering rugged, reliable hardware and software solutions hasn't wavered. Our team begins with the end in mind, carefully evaluating the applications for our products across industries to ensure we meet all I/O, processing, environmental, safety, and security requirements. As our products are often designed into larger systems, we have a unique understanding that long-term availability can't mean five years, ten years, or even fifteen years. That's why we stand by our long-term availability guarantee: if we can't build an identical solution, we'll provide a form-fit-function replacement.



ACC-188 Adapters

Our complete line of ACC-188 synchronous serial radio adapters are interoperable among various tactical radio brands and models used by the defense community.



MIL-STD 1553

Sealevel's MIL-STD-1553 board-level products, IP cores, and custom computer designs are specifically engineered for military, avionics, and aerospace applications.



●— Innovation

Design and manufacture the cutting-edge solutions that sustain our customers' leadership in their respective industries

● Meeting & Exceeding Expectations

Since 1986, Sealevel has consistently exceed customer expectations, providing innovative hardware and software products to wide-reaching industry leaders and every major military contractor.



Medical

In collaboration with **hospitals, healthcare system integrators,** and **OEMs,** Sealevel is committed to providing solutions for **complete reliability** within medical operations. Our customers confidently **expand legacy systems** and **embrace new technology** across the industry.



Energy

Sealevel's engineering experts successfully leverage our extensive **COM Express** and **I/O experience** to deliver rugged, voltage-tolerant systems across the energy industry: **oil and gas, electrical, solar, and wind.**



Military & Aerospace

From complex laptop docking stations to **high-speed communication** adapters to **SwaP-C² optimized** embedded computers, Sealevel's electrical and mechanical design expertise delivers performance while meeting stringent MIL-STDs.



Automation & Control

Sealevel's serial, digital, and analog interfaces are specifically designed to succeed in **industrial environments** by providing PCIe, PCI, Ethernet, USB, and wireless connections for **process automation.**



Monitoring

Sealevel's industrial **computers, data acquisition modules, and IoT hardware and software** solutions **enable continual connectivity and control**, providing **real-time data** and actionable information for **predictive maintenance**.



Transportation

Our high-reliability I/O solutions are incorporated in **test and measurement** applications while our embedded computers serve as controllers in **manufacturing and deployment** processes – from **automotive test systems** to **passenger analytics** to **vehicle charge stations**.



Public Safety

Sealevel's industrial computers and data acquisition modules are used across distributed networks for **emergency call centers**, firefighting control stations, and **security communications** to support **disaster relief** as well as **day-to-day operations**.



Autonomous & Unmanned

By incorporating future-proof **embedded computing design**, Sealevel's products support **autonomous** detection and inspection systems. To meet the requirements for **unmanned vehicles, drones, and aircraft**, our expertise in I/O is unmatched.



Smart Cities

Sealevel's standard and custom products offer all-inclusive solutions that successfully enhance existing systems – enabling **municipalities** and **companies** to operate more efficiently and realize new **revenue streams**.

● — Sealevel Products Start in Liberty, SC

After that, not even the sky is the limit. Our solutions are found across industries – defense, public safety, energy, monitoring, automation – and around the world. And yes, even in space.

Engineering ●

Manufacturing ●

Sales ●

Accounting ●

Marketing ●

Program Management ●

Procurement ●

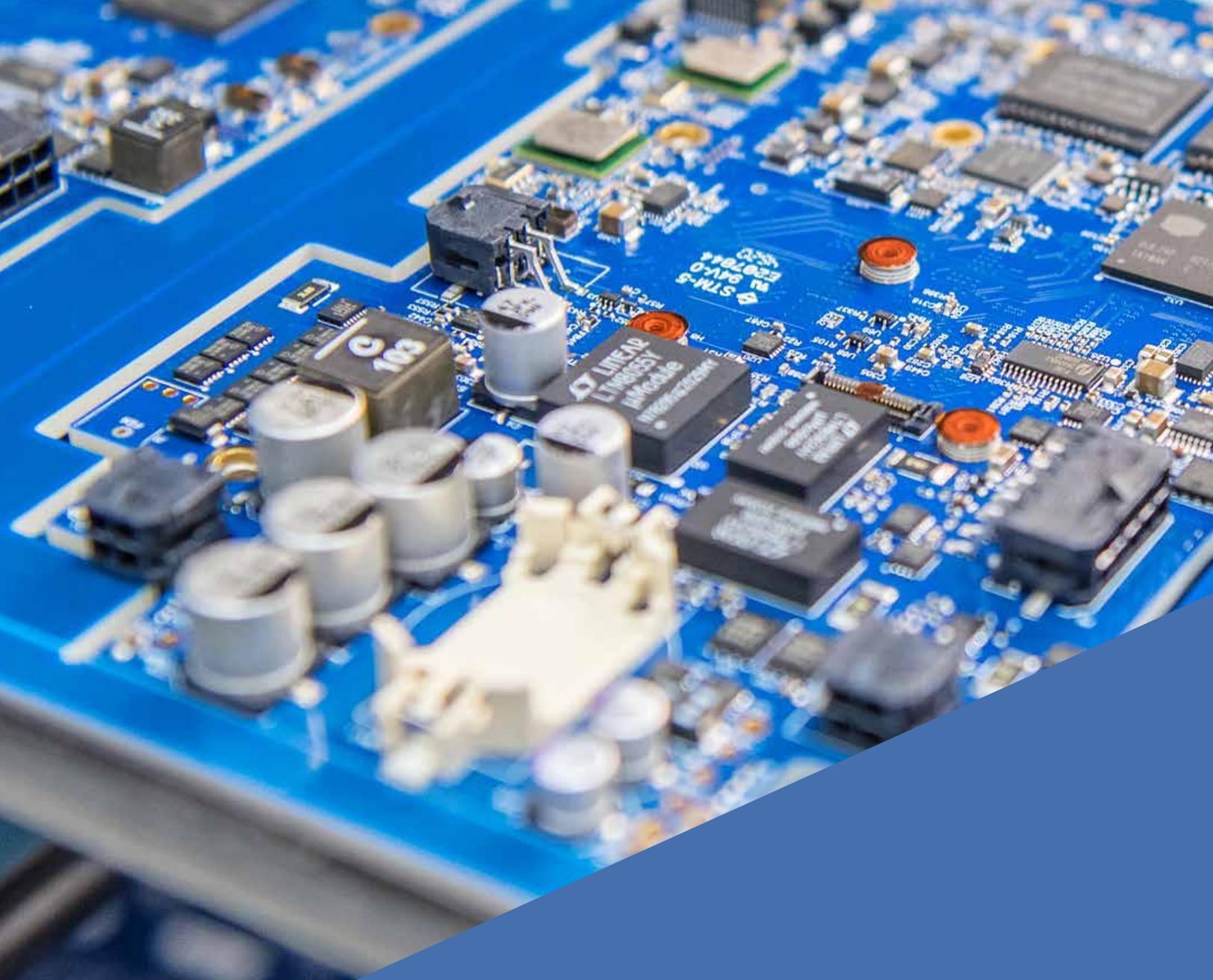
Quality Control ●

Shipping ●

Technical Support ●







SEALEVEL®

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