

**YOUR CHALLENGE
OUR SOLUTION**



ADVANCED OPTOELECTRONIC AND ELECTRONICS SOLUTIONS



OSI OPTOELECTRONICS

OSI OPTOELECTRONICS.COM

ABOUT US

At OSI Optoelectronics, we don't just build components—we engineer the future. Our integrated photonics and electronics solutions empower our customers to achieve mission-critical success.

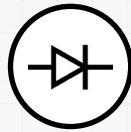
We are the leading global provider of innovative photonics and optoelectronics solutions for leading Aerospace and Defense, Medical and Life Sciences, Industrial and Commercial OEMs that demand high-reliability, high-performance, market-driven technology solutions today.

We offer high-reliability optoelectronic and electronic solutions with ITAR-compliant, NADCAP-certified facilities supporting cleared programs, providing rapid deployment and precision from wafer production to final assembly.

By combining our technical and production expertise, a customer-centric mindset, and strategically positioned facilities, we aim to become a trusted partner in the global electronics manufacturing sector.



MISSION SOLUTIONS



OPTOELECTRONICS & SEMICONDUCTORS

Silicon, III-V Compound
Photodiodes

CdS Photoresistors

GaAs, In-based High Power
Laser Diodes

Radiation-hardened Space-
qualified transistors

Design and Simulation

Fabrication and
Engineering

Photonics Packaging



FLEXIBLE CIRCUITS

Wide temperature, high
radiation, and vacuum
compatibility

High-stress Integrity

Lightweight, miniaturized,
adaptable to tight spaces

Optimized spacecraft
payload and efficiency



**COMPLETE
SOLUTIONS
AND SERVICES
FROM CONCEPT
TO DESIGN TO
PRODUCTION.**



ELECTRONICS MANUFACTURING SOLUTIONS

PCB / Flexible Circuit SMT
lines across global sites

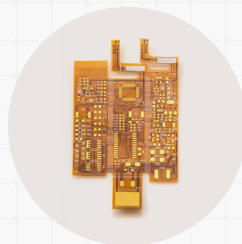
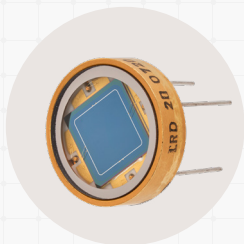
Microelectronics Design &
Manufacturing

Turnkey electro-
mechanical and box
build solutions

Custom harnessing of
complex designs

Custom LCD & TFT module
design and manufacturing

Full product engineering:
mechanical, industrial,
digital, analogue,
PCBA design



WHY OSIO OPTOELECTRONICS?



LEGACY & TRUST

Over 50 years of experience delivering mission-critical photonics and electronics

Proven reliability in aerospace and defense

Trusted by leading defense primes worldwide



CERTIFICATIONS & COMPLIANCE

MIL-Qualified, Radiation-Hardened, Space-Ready Solutions

ITAR, NADCAP, AS9100D, ISO13485:2016, Cleared Facilities



MANUFACTURING EXCELLENCE

Rapid, scalable solutions tailored to your mission needs

Advanced, scalable manufacturing capabilities

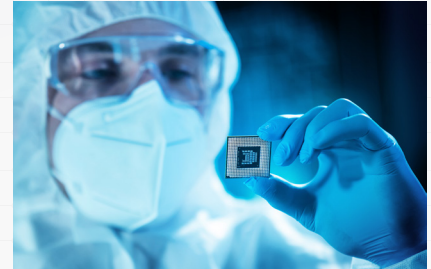
Global footprint, local expertise

TECHNOLOGY & CAPABILITIES

SEMICONDUCTOR DESIGN & MANUFACTURING

- Silicon Photodiodes
- InGaAs photodiodes
- SiC Photodetectors
- CdS Photoresistors
- GaAs, In-based Laser Diodes
- Radiation-hardened transistors

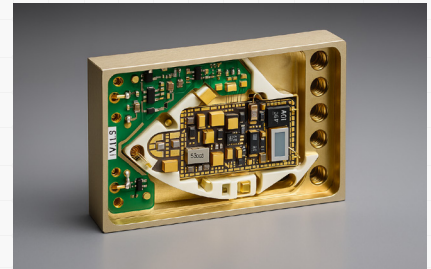
High-performance components engineered for precision and reliability in mission-critical systems.



ADVANCED SEMICONDUCTOR & MICROELECTRONICS PACKAGING

- Miniaturized, rugged formats
- Hermetic sealing and hybrid integration
- Custom mold and metallic housings
- Single/double-sided and multilayer Flexible Circuits
- Sculptured flex and high-density interconnects

Packaging technologies tailored for durability, environmental resilience, and system-level integration.



TESTING & QUALIFICATION CAPABILITIES

- MIL-STD-883, MIL-STD-750, MIL-PRF-19500, GR-468-CORE, ESCC-5000, MIL-PRF-35834, NASA EEE-INT-002
- Environmental stress screening (ESS), temperature cycling, vibration

Comprehensive testing protocols ensure compliance, reliability, and readiness for deployment.



Our technologies offer precision, durability, and reliability for the most demanding aerospace and defense, Medical and Life Sciences, Industrial and Commercial applications. We provide high-performance optical sensors and radiation-hardened semiconductors for navigation, targeting, and environmental monitoring, as well as flexible cable solutions that allow for lightweight, space-efficient connections in compact assemblies. Our advanced packaging enables hybrid assemblies, chip-on-board, chip-on-flex, and PCBA formats, safeguarding sensitive components from harsh environments. With vertically integrated facilities, we can quickly prototype and scale production while maintaining consistent quality and traceability.

APPLICATIONS



AEROSPACE & DEFENSE

Missile Guidance & Threat Systems
Laser Range Finders
Flame & Arc Fault Detection
Sun Sensors
Satellite Alignment
Fiber Optic & Ring Laser Gyroscopes
Aircraft Engine Temperatures Sensors



MEDICAL & LIFE SCIENCES

Pulse Oximetry - FDA Approved
Medical Imaging
Optical Coherence Tomography (OCT)
Spectroscopy
DNA Sequencing



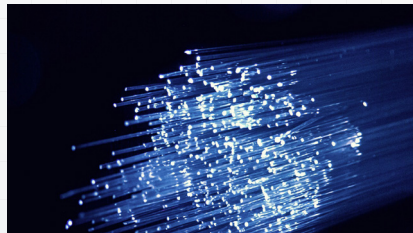
INDUSTRIAL AUTOMATION & MANUFACTURING

Proximity Sensors
LiDAR
Material Processing
Precision Metrology
Flame Detection



AUTOMOTIVE & TRANSPORTATION

Autonomous Navigation (LiDAR)
Smart Infrastructure
Structural Health Monitoring (SHM)
Navigation & Positioning
Precision Cutting and Marking



COMMUNICATIONS & COMPUTING

Optical Switching
Optical Isolators
Optical Communication
Quantum Networking
Optical Computing



CONSUMER, ENVIRONMENTAL & INSTRUMENTATION

Air & Water Quality Monitoring
Barcode Scanners & Printers
Wearable Health Monitors
Ambient Light & Proximity Sensing
Spectroscopy & Material Analysis
Metrology & Distance Measurement

DECADES OF TRUSTED SERVICE

With a legacy of delivering high-performance optoelectronics, OSI Optoelectronics is recognized for reliability and advanced technology in mission-critical applications.

ENGINEERED FOR EXTREME ENVIRONMENTS

Our products are built to perform in the harshest conditions—withstanding shocks, vibrations, outgassing, electrostatic discharge, radiation, and extreme temperature variations.

STANDARDS & COMPLIANCE

We meet the most rigorous military and aerospace standards:

MIL-STD-883 & MIL-STD-750: Electro-Optical & Environmental Testing

MIL-PRF-19500: Semiconductor Qualification

MIL-PRF-35834: Hybrid Devices

NASA EEE-INT-002: Electrical, Electronics, & Electromechanical Screening

ESCC-5000: Space Component Qualification

CUSTOMER COMMITMENT

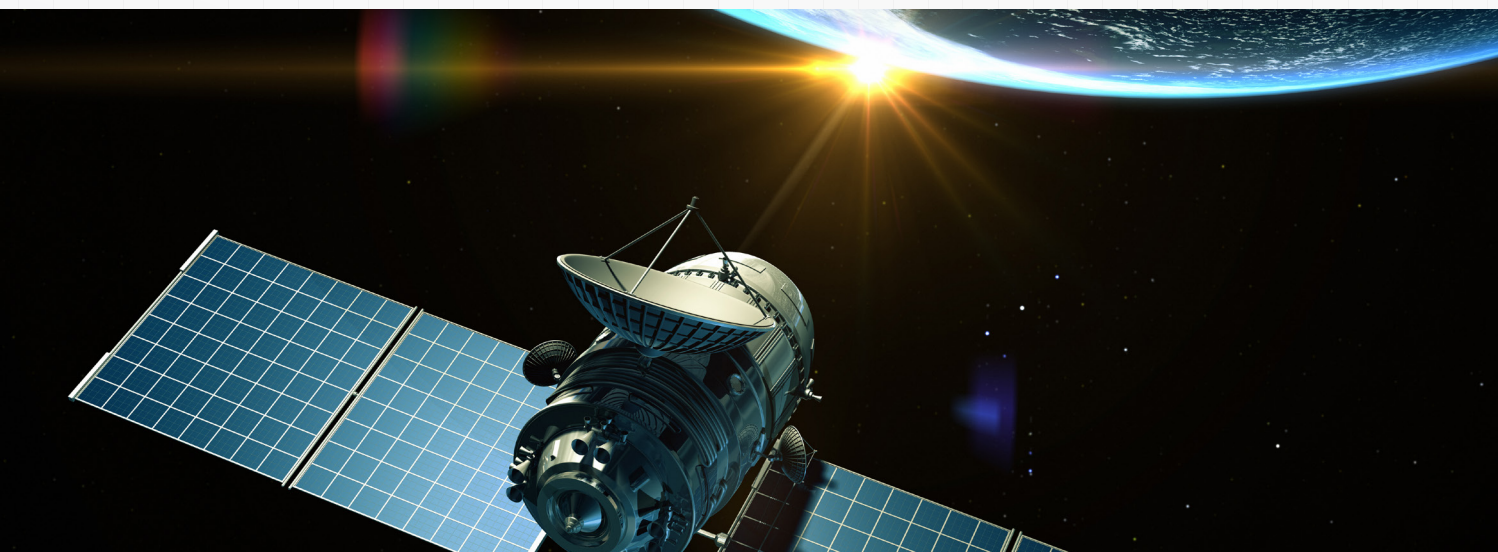
We build lasting partnerships through responsive sales and technical support, ensuring every customer's needs are met.

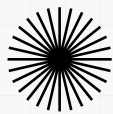
CERTIFIED QUALITY

Our certifications—AS9100, ISO 9001:2015, ISO13485:2016—demonstrate our commitment to quality and industry standards for aerospace and defense.

ITAR REGISTRATION AND COMPLIANCE

OSI Optoelectronics is ITAR registered and fully compliant, demonstrating our commitment to safeguarding sensitive technologies and adhering to rigorous export control regulations.





OSI OPTOELECTRONICS

NORTH AMERICA

Hawthorne, CA
Camarillo, CA
Edison, NJ
Santa Clara, CA
Tecate, Mexico
Ontario, Canada

EUROPE

Cambridgeshire, UK

ASIA PACIFIC

Batam, Indonesia
Johor Bahru, Malaysia
Singapore
Hyderabad, India

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