



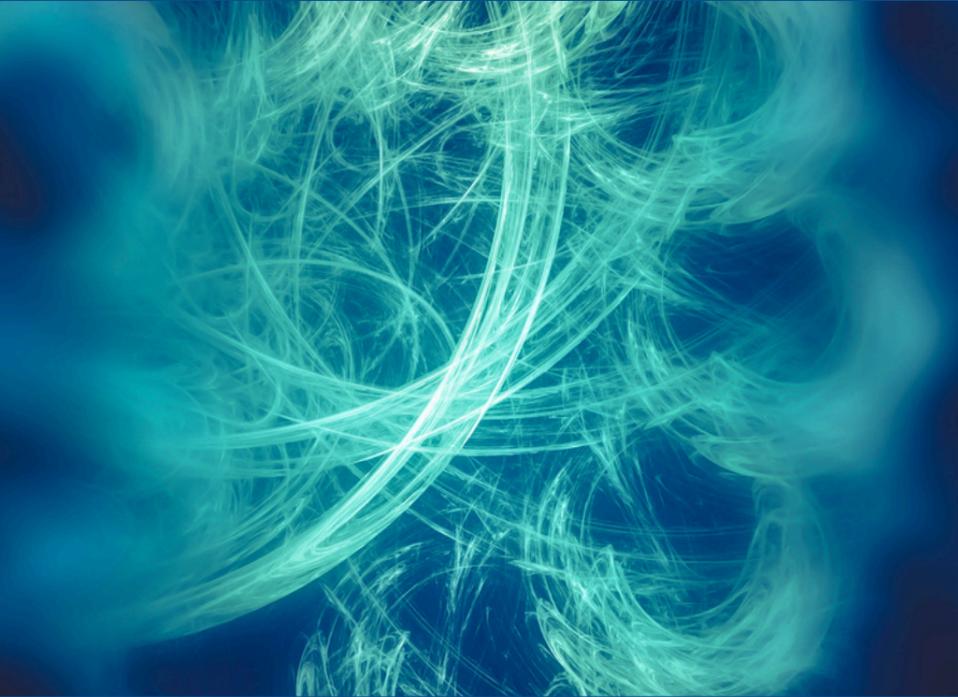
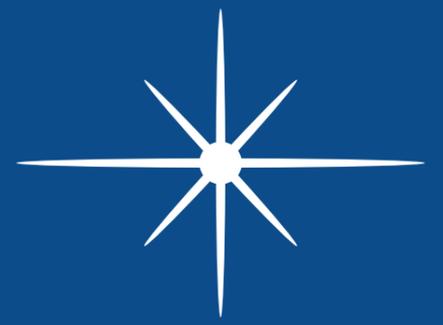
YOUR TRUSTED  
OPTICAL PARTNER

# NEXT-GEN AI CONNECTIVITY

## USI 1.6T OSFP DR8 OPTICAL TRANSCEIVER



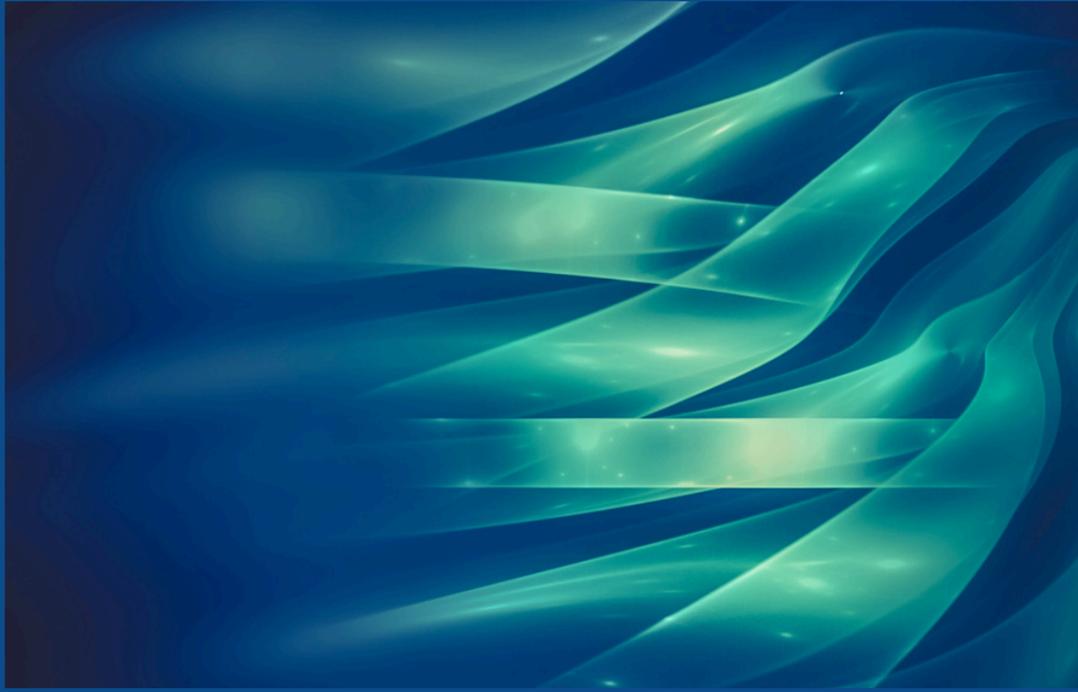
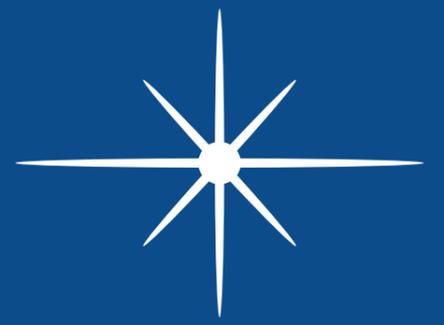
[www.usiglobal.com](http://www.usiglobal.com)



# WHO WE ARE?

## USI

Universal Scientific Industrial (Shanghai) Co., Ltd., is a global leader in electronic design and manufacturing, and a member of ASE Technology Holding—the world's largest semiconductor packaging and testing group. USI operates 30 production and service locations across Asia, Europe, the Americas, and Africa, we deliver uncompromised scale and reliability



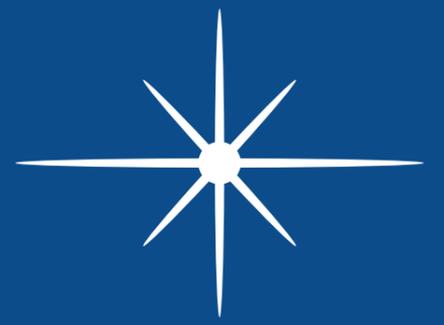
# WHY USI?

Through strategic integration, USI provides end-to-end optoelectronic solutions. From high-speed optical engines to precision optical alignment, we power the next generation of 5G networks and Hyperscale Data Centers.

## THE D(MS)<sup>2</sup> ADVANTAGE

We offer more than just manufacturing. Our unique D(MS)<sup>2</sup> business model delivers comprehensive value:

- Design & Engineering
- Manufacturing
- Miniaturization (SiP Experts)
- Solutions (Hardware & Software)
- Services (Logistics & Lifecycle Management)

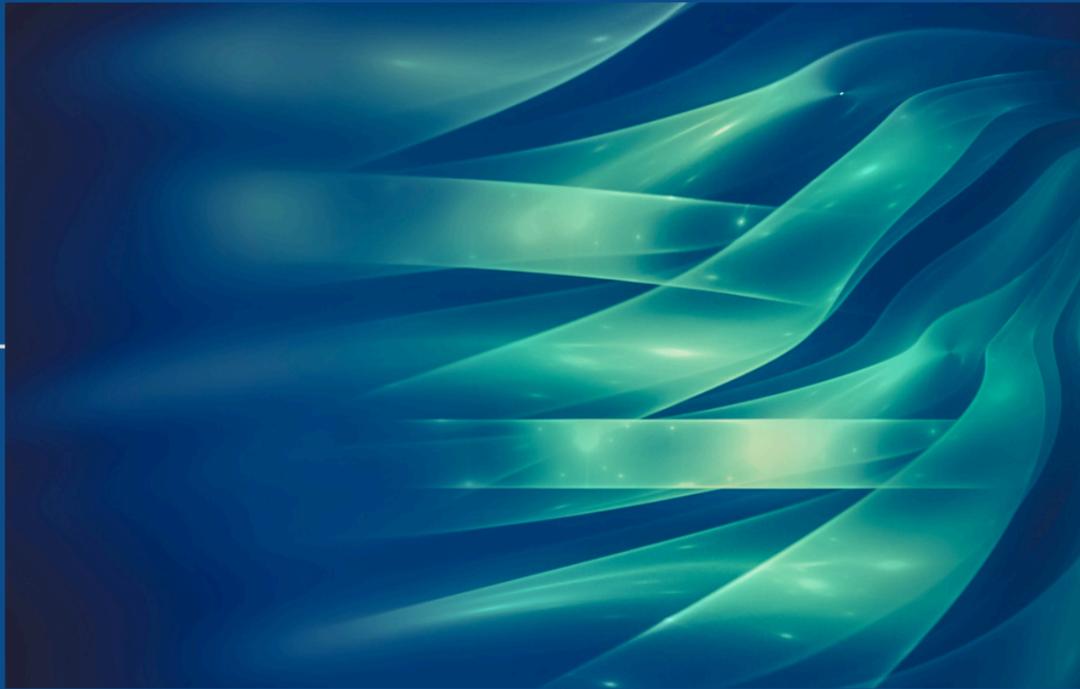
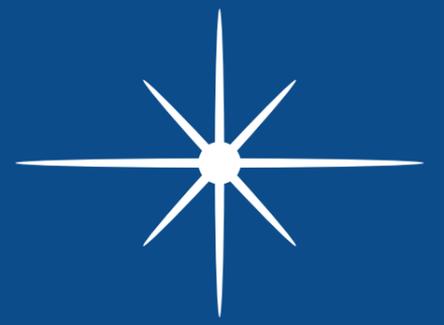


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USI 1.6T OSFP DR8, a next-generation optical transceiver designed specifically for hyperscale AI interconnects. Powered by industry-leading 3nm DSP and built on a robust SiPh-based transmitter platform, it delivers uncompromised 8x200G performance.



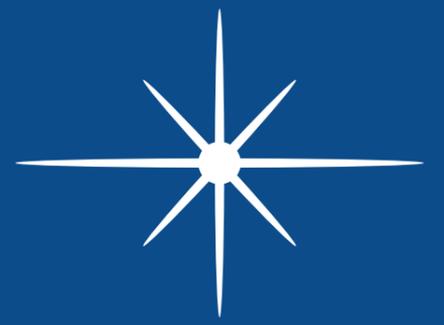
# OUR SOLUTIONS



# BUILT FOR THE IEEE 802.3DJ ERA

## KEY SPECIFICATIONS

- Data Rate: 1.6 Terabits per second (1.6TbE)
- Form Factor: OSFP (116 x 22.58 x 13 mm)
- Wavelength: 1311nm (Typical)
- Optical Interface: Dual MPO-12 Connector
- Electrical Interface: 8 x 212.5 Gbps (PAM4)
- Optical Data Rate: 8 x 212.5 Gbps (PAM4)
- Technology: SiPh-based Transmitter + PIN PD-based Receiver
- Compliance: IEEE 802.3dj\_D2, OSFP MSA, CMIS 5.2 or later



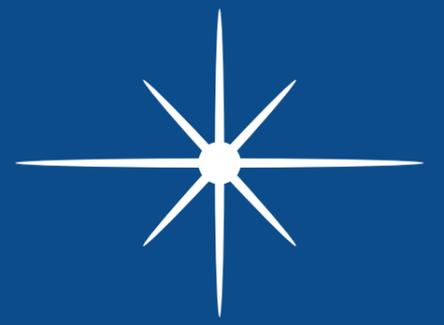
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## PERFORMANCE BENEFIT

The 8x212.5G PAM4 architecture eliminates the need for legacy gearboxes, directly mapping to next-gen 102.4T Switch SerDes for the lowest possible latency and optimized power efficiency.

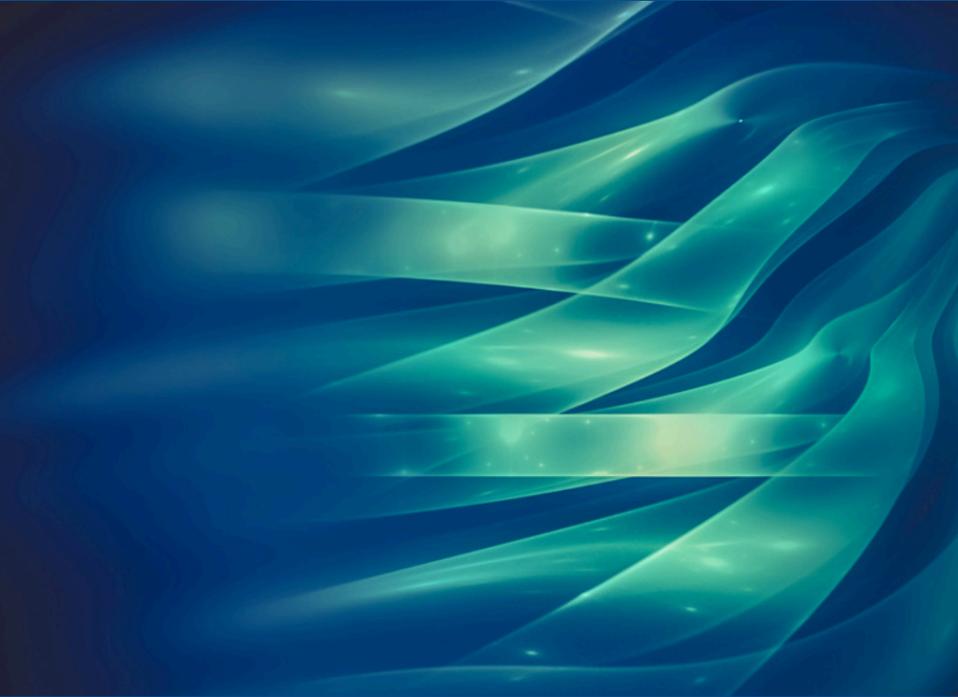


# BUILT FOR THE IEEE 802.3DJ ERA



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# YOUR ODM/JDM PARTNER

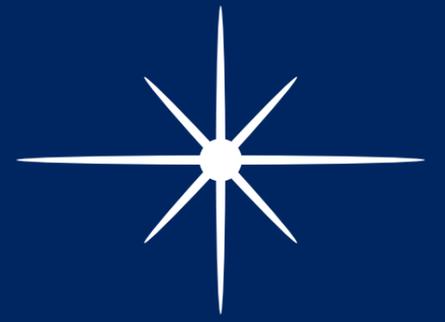


## MORE THAN JUST A MANUFACTURER

USI goes beyond standard transceivers. We offer comprehensive Value-Added Services to tailor the optical engine to your specific AI fabric needs.

## OUR SERVICE PORTFOLIO

- **Module Assembly:** High-precision SMT and optical alignment leveraging our global factories.
- **PCB Assembly:** Advanced substrate and board-level manufacturing.
- **Engineering & Design:** Co-design optical engines for specific thermal and mechanical environments.
- **Box Build & System Integration:** From module to full-system assembly, testing, and validation.
- **Value Added Services:** Global logistics, compliance testing, and lifecycle management.



# ACCELERATE YOUR AI INFRASTRUCTURE WITH USI



Contact Our Experts Today.  
[tw@usiglobal.com](mailto:tw@usiglobal.com)

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