



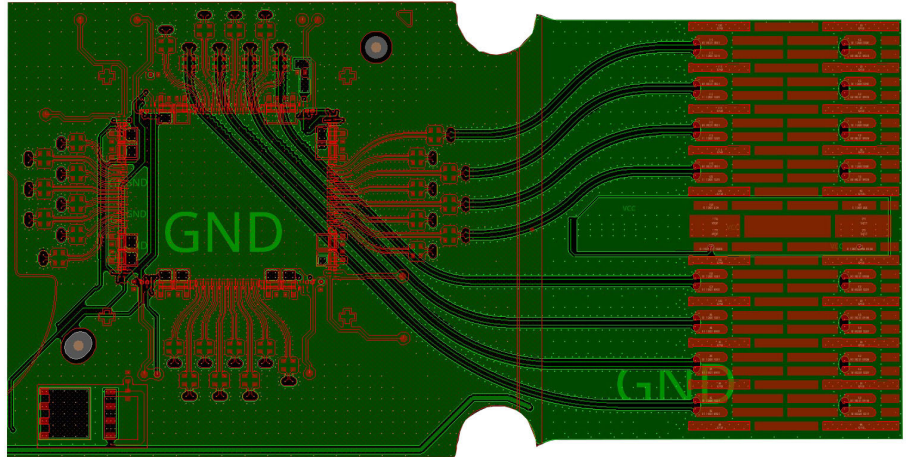
Engineering Design and Early-Stage Production for Optical Communications

80 km Tethered Drone



NDA Compliant

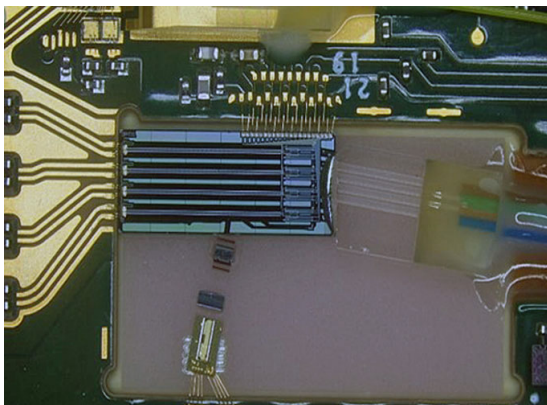
1.6 Tb/s OSFP-XD Layout and Module Design



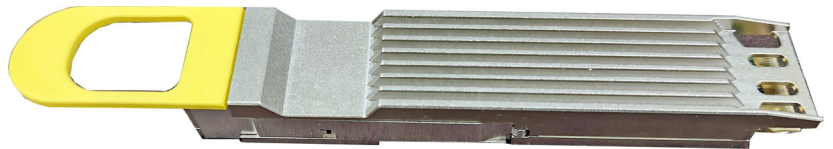
Engineering Design and Custom Manufacturing Capabilities

- High-Speed RF
- Signal Integrity Analysis
- Power Integrity Analysis
- Digital, DSP
- Custom MPO/MTP Cables
- PCB Layout
- Optical, Si-Pho
- Firmware, CMIS
- Software, GUI
- 1U to 4U Chassis
- 3D EM Modeling
- Mechanical
- Thermal Analysis
- Top Level Assembly
- Environmental Qual

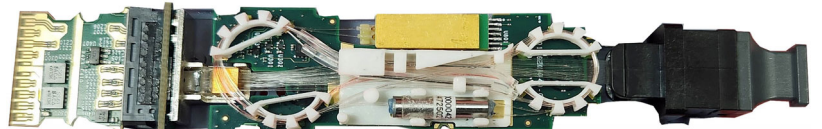
400 Gb/s PCB with Die Attach on AIN and Wire Bonds



800 Gb/s OSFP PCB and Module



Fiber Splicing within OSFP Module



About SCP

Space Coast Photonics is a U.S.-owned, ITAR-registered engineering design company specializing in custom optical and electronic solutions for high-speed fiber optic communications. Located on Florida's Space Coast, we are trusted by commercial, aerospace, and defense clients for our cutting-edge expertise.

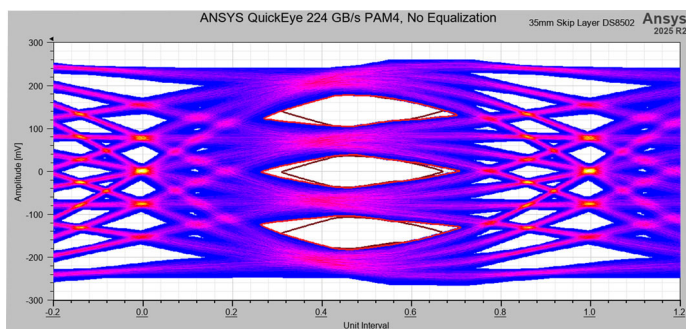
With 20+ years of experience, our engineering team develops pluggable modules, custom optical systems, and advanced electronics using state-of-the-art tools and technology. We offer turnkey design services, from concept and prototyping to pilot production and volume manufacturing transition. Our design expertise and advanced tools allow rapid development and high-performance solutions that meet the most demanding industry challenges.



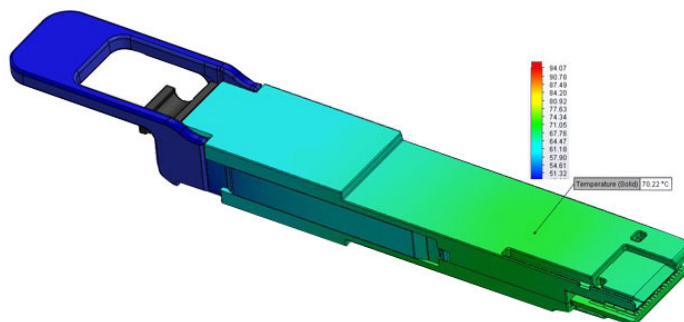
- ✓ 1.6 Tb/s OSFP-XD using 16L mSAP PCB
- ✓ 1.6 Tb/s (8 x 200G) Active Copper Cable
- ✓ 800 Gb/s OSFP with integrated Flex PCBs
- ✓ 400 Gb/s QSFP-DD with Marvell DSP
- ✓ 400 Gb/s BERT with TEC temperature control
- ✓ 800G (4 x 200G) DSP evaluation card



Examples of Deliverables



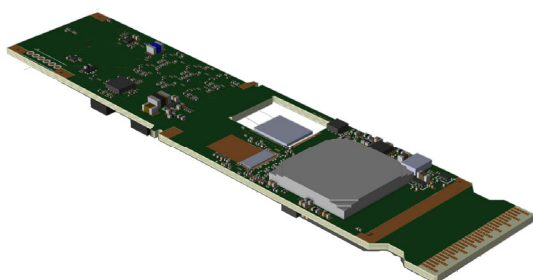
Signal Integrity analysis for up to 224 Gb/s PAM4 per channel



Thermal analysis for PCBs and pluggable modules up to 1.6 Tb/s



Flex PCB allowing JTAG connections while module is operational



800 Gb/s DR8 OSFP 10 Layer PCB with cutout for AIN insert



1U chassis with multiple custom PCBs installed and Ethernet control interface



Custom fiber splicing for any type of fiber