



# OptoSigma Corporation

Photonics North

# OptoSigma Corporate Overview



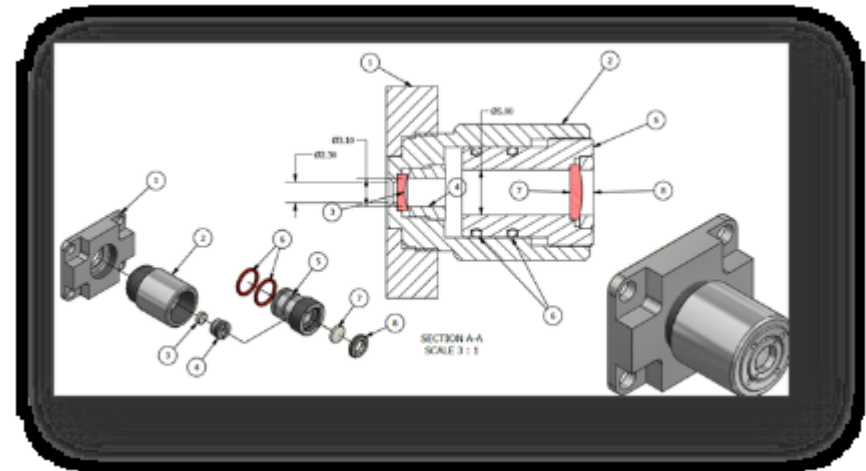
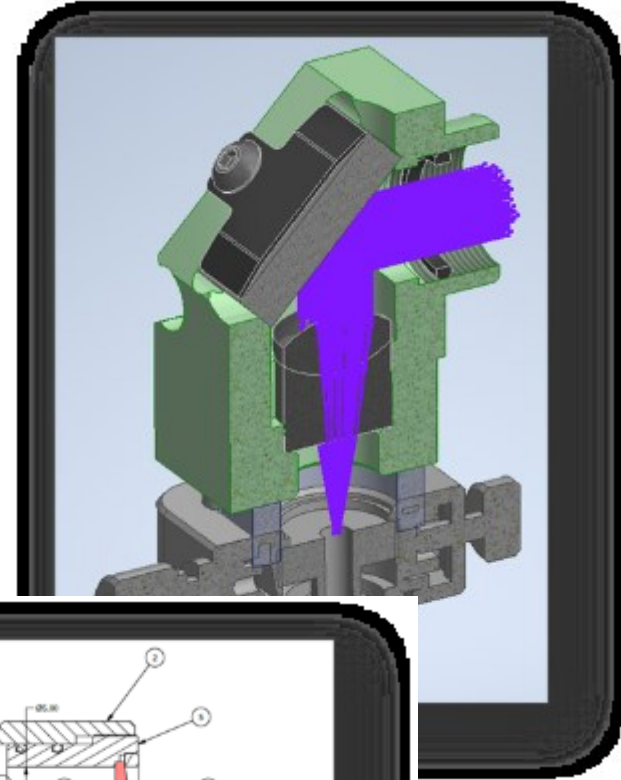
- Sigma Koki [Parent Company] (Japan) : 1977
- OptoSigma Corporation (USA) : 1995
- OptoSigma Europe (France) : 2014
- OptoSigma South East Asia (Singapore) : 2019

We manufacture off the shelf & custom optics & optomechanical components, assemblies, optical coatings, manual & motion control stages, and offer a variety of complimentary Photonics products!

- Parent Company in Japan
- Technical Facilities & Offices Worldwide
- 700+ Employees Worldwide
- Turnover > \$100 M

# Assembly & Integration

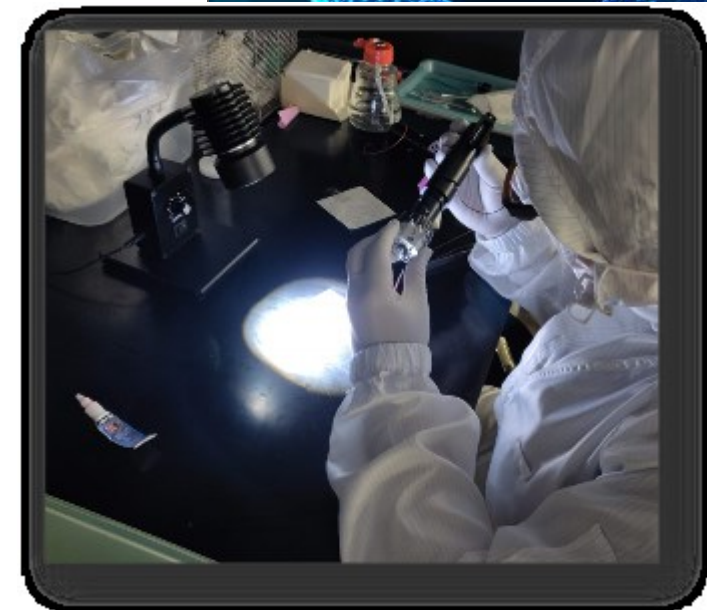
- Optical Alignment
  - Breadboard Manufacturing & Test Stations
  - Optical Sub-Assemblies
- Multi-element Lens Assemblies
- Multi-element Optical Bonding
- OptoMechanical Assembly
  
- Key Equipment
  - OATI (Optical Alignment & Test Inc. Station)
  - CMM (Coordinate Measuring Machine)
  - Zygo Interferometer
  - CNC Machining for Rapid Prototyping & Jigging
  - 3-D Printer
  - Laser Marking
  - Pet-G Clamshell Packaging
  - Thermal test & optical power measurement



# Quality Assurance

“Its more than just ISO!”

- Production Control
  - Personnel Training & Certification
  - Lot Quarantining & Validation Process
  - Prioritization (urgency/bundling/efficiency)
- Work & Process Instructions
- Product “Traceability” (MES)
  - Component Lot Control & Tracking
  - Product Serialization & “Lotting”
  - In Process Data
  - Shipping & Disposition (Delivery tracking/PO linking...)



# Operational Infrastructure & QA

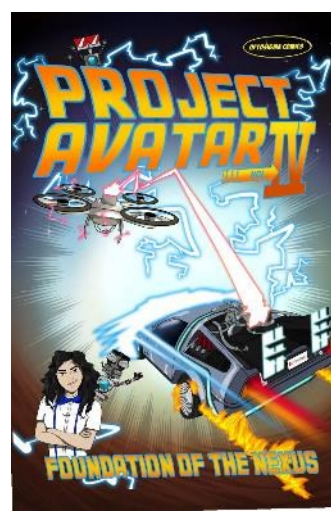
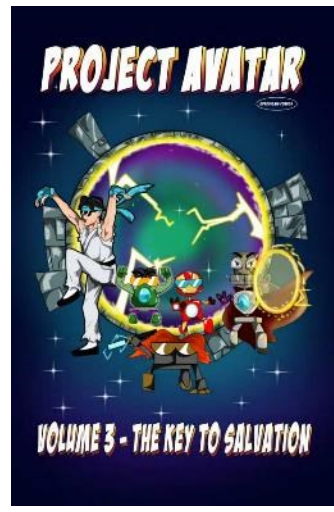
## Focus on “Traceability” !!!

- Manufacturing Execution System (MES)
  - BOM based product flow with embedded work instructions
  - Tracks who touched each part, what lot it was, what chamber it was coated in, what coating run #, what day it was assembled, where it shipped, against which PO...
  - Captures testing data for each part at various points in the assembly process
- Benefits:
  - Reduces possibility of “operator” build/assembly error
  - Enables lot tracking within the building (provides insight into product flow and delivery date)
  - Allows for easy ID of root cause of failure & identifies RMA risk/exposure
  - Rapid trace of customer RMA issues
  - Facilitates CPK and Yield analysis for product improvement and cost reduction
  - Conduct “time studies” for accurate costing and to improve manufacturing efficiencies





- Project Avatar is a STEM based comic OptoSigma created as a fun platform used to promote new technologies in the Optics and Photonics community!
  - Each volume features a different technology
  - Volume 4 launch – Laser World of Photonics in Munich



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# Thank you for your time!

Please contact [marketing@optosigma.com](mailto:marketing@optosigma.com) to apply to have your research or technology featured in a future volume of Project Avatar!