

# Optical Manufacturing Solutions (OMS) Contract Manufacturing

## **Solutions**



By partnering with Corning Cable Systems at the design stage, Corning Cable Systems' history of optical expertise reduces customers' time to market while providing significant cost advantages.



Corning Cable Systems provides global optical contract manufacturing from product concept through production. Corning Cable Systems also offers significant cost advantages due to our vertically integrated manufacturing and our extensive internal and external optical supply chain.

### Support Services

Corning Cable Systems offers product change maintenance, re-qualification capabilities and product repair and warranty service to protect your ongoing commitment to your customer.

# **Manufactured Products**

#### **Direct Connectorization**

Active and Passive connectorization in an ESD environment: <0.1 dB Capability,</li>
 Advanced Multifiber Connectorization, Backplane Board Integration

## Active/Passive Component Manufacturing

• Variable Optical Attenuators, Collimators, and Various Active/Passive Components

## Electro-Optical Module Integration

Assembly and Testing of Coupler Modules, DWDM Modules and Shelves, Integration
of Multi-Optical Components into Shelves, Board Level Assembly of Hybrid
MUX/DeMUX Boards, Service Channel Monitoring Boards, Laser Pump Cards and
Other Passive/Active Module Integration

# **Technical Leadership**

## Corning Cable Systems Optical Products

- Optical Connectorization and Assemblies
- · Fusion Splicing
- Integrated Fiber Optic Hardware
- · Cables and Fiber
- Optical Components











## **Optical Capabilities**

- Optical Design: Customer Design Optimization, Optical Specification Development, Component Selection and Test
- · Packaging: Full range of Materials and Testing capabilities
  - High Precision Plastics, Adhesives, Silicones, Shrinks Wraps, Metals and all Combinations
  - Aging, Mechanical, Stability and Durability
- Precision Alignment: Submicron alignment, up to 40 fibers, 6 axes,
   Fiber Selection Geometry Optimization
- Optical Characterization: Equipment and Component Selection, Procedure and Documentation Support, Equipment Optimization and Assembly Software Development

## Test Capabilities

- Automated Test Station Design
- Documented Test Procedures
- Full Measurement Capabilities: C & L Band, Insertion Loss, Isolation/Crosstalk, Return Loss, Directivity, Ripple, Bandpass, Polarization Dependent Loss and Wavelength, Chromatic Dispersion, and Polarization Mode Dispersion (PMD).

# **Manufacturing Expertise**



#### Mechanical and Eletro-Optical Assembly

- · Production and Design Modification
- · Fiber Management: Micro and Macro
- Vertical Integration with Corning & Non-Corning Products
- Fusion Splicing: Low loss, High Strength, Dissimilar Fibers and Attenuation
- Soldering
- Connectorization: Manual and Automated, all types of Connectors including Multifiber and Backplane
- Mechanical, Optical and Custom Testing



### Vertical Integration

- High Precision, Tight Tolerance Molding
- Metal Fabrication, Milling and Turning Capabilities
- Finishing: Powder Coating, Silk Screening, and Labeling

#### Manufacturing Execution System

- · Serial Number Traceability
- · Electronically Transferable Test Results
- · Online Review of Test Data

#### **Environmental Controls**

- ESD Controls
- Class 10,000 Clean Room
- Temperature and Humidity Control