

# Fiber Optic Capabilities

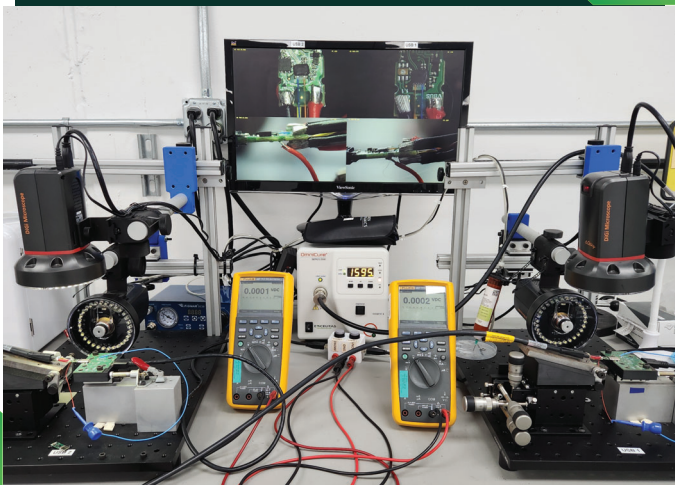


## Engineering Capabilities

- Full assembly design services
- Reengineer copper systems to leverage fiber optic benefits
- Component engineering with global reach
- Design ruggedization
- Test development

## Component and Processing Capabilities

- Cleanroom manufacturing
- Multimode fiber optics
- Distribution, breakout and tactical grades of fiber
- Passive and active fiber optic assemblies
- PC (Physical Contact)
- UPC (Ultra Physical Contact)
- APC (Angled Physical Contact)
- Ball lens expanded beam
- Graded index (GRIN) lens expanded beam
- All standard inline and backplane connector form factors (e.g., LC, ST, FC, D38999, ARINC, etc.)
- MT/MPO/MPT with US Conec
- Hybrid arrangements of fiber and copper
- Fully automated fiber cut, strip and prep equipment
- Laser cleaving
- Mechanical cleaving



*Active optical tuning station*

## Assembly Level Capabilities

- Upjacketing cable
- Ribbonizing cable
- Patch cables
- Breakout harnesses
- Fusion splicing
- Fiber optic taps (closed loop tuning)
- Custom backshells
- Non-magnetic solutions
- Ingress protection
- High mate cycle interfaces
- High pull strength connectors
- Wide variety of molding techniques & compounds
- Assembly ruggedization design & manufacture

## Testing Capabilities

- Encircled flux insertion loss
- Reflective power
- Endface geometries
- Qualification plan development
- Environmental/mechanical stress testing



## Leveraging Fiber Optics in Advanced Solutions

- 1.** Data transmission inside hybrid cables with integrated E-O/O-E transmitters and receivers in custom active optical solutions.
- 2.** Integrate diagnostics to generate real-time performance and stress data on cable and/or system health.
- 3.** Combine fiber optics with copper in hybrid cables to provide EMI-immune high-speed data over fiber optic channels, low-speed signals and power delivery over copper, all-in-one.

