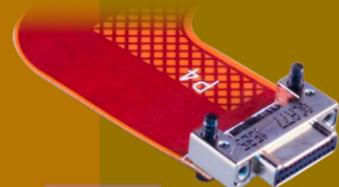


Downhole

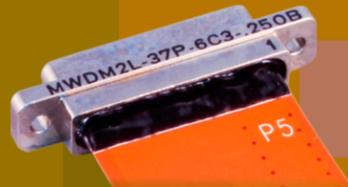
PCB / Flex Circuit Assemblies



Temperature-tolerant micro miniature flex circuit assemblies manufactured by Glenair are ideally suited for use in modular electronic transmission and sensor tools used as aids in directional drilling and geologic formation evaluation. Flex and rigid flex circuit board assemblies terminated with Glenair Micro-D, Nanominiature, and special high-temperature Well-Master Micro-D PCB connectors are applied in applications as diverse as Measurement While Drilling (MWD), Logging While Drilling (LWD), slick line production tools, and other harsh downhole applications.



Glenair Nanominiature PCB connector: ultra high-density .025" contact-to-contact spacing solution



Glenair Micro-D subminiature PCB connector: micro high-density .050" contact-to-contact spacing solution



Glenair Well-Master 260° Micro-D PCB header with unique angled mounting ears and high temperature tolerance

ADVANTAGES OF FLEX CIRCUITRY FOR DOWNHOLE APPLICATIONS:



Optimal Harsh Environment Performance

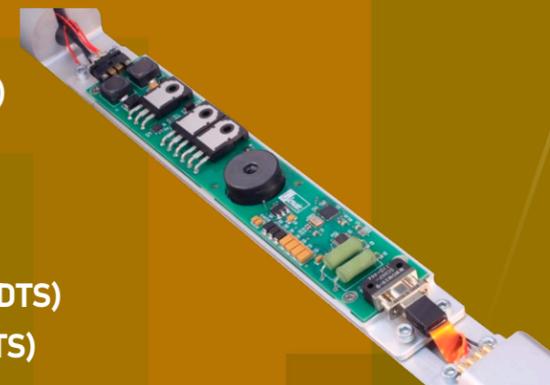
- Withstands high levels of drilling shock and vibration
- Broad temperature tolerance
- Available non-magnetic materials
- Available 260°C low-profile PCB connectors
- Optimized reliability: high-speed, high-temp, high shock
- Ideally suited for double-sided component mounting
- Integration of active componentry

PROVEN PERFORMANCE DOWNHOLE

Connectorized PCB Flex Assembly Designs

Major Tool Types:

- MWD (Measurement While Drilling)
- LWD (Logging While Drilling)
- Wireline Logging
- Slickline Tools - Production
- Distributed Temperature Sensing (DTS)
- Pressure Temperature Sensing (PTS)
- Gamma Sensor



Rigid flex point-to-point jumper with Series 79 Micro-Crimp connectors and a small form-factor hybrid fiber optic tool segment connector



High-speed Glenair cylindrical PCB connector used in a tool segment interconnection flex jumper assembly



Micro-D subminiature hybrid flex jumper with signal and power circuits

