

## Meritec MSI (Multi-Signal Interconnect) Cable Assemblies

For over 25 years, The Meritec MSI Cable Assemblies have been synonymous with rugged and reliable in flight applications and harsh, demanding environments throughout the world.

Developed as a robust replacement for the .100 Double Row, IDC Ribbon Cable Assembly, The Meritec MSI Assemblies mate with all standard shrouded terminal strips and latch and eject headers. MSI Assemblies have an identical footprint to all Industry Standard Connectors form 10 to 72-positions--that is where the similarity stops. Meritec's unique contacts are produced internally and feature a gold inlay in the mating area for unequaled reliability.

Meritec's proprietary production process of terminating these contacts to Teflon®-jacketed ribbon cable is achieved in part by programmed lasering of precise locations in relation to the contact positions.

When the cable preparation is complete, contacts are inserted into Liquid Crystal Polymer (LCP) Connector housings that are extremely inert, and highly resistant to fire. After the contacts are loaded, the next step is termination of the contacts to the cable. This is accomplished by the unique process of induction soldering that ensures the consistent and uniform application of solder to each connection.

Once the termination process is complete, the cable assemblies are transferred to the Molding Division where the connectors are over-molded. This operation encapsulates the connections in Liquid Crystal Polymer that creates a rigid strain relief and barrier protection from harsh environments. Meritec's vertical integration and proprietary processes ensure builds meet or exceed stringent COTS' Standards.

The final step is complete inspection and 100% electrical testing of the assembly. These tests utilize state-of-the-art, programmable test equipment in Meritec's Signal Integrity Labs to assure products meet hipot, resistance, continuity and leakage parameters.

Meritec MSI Products are utilized globally throughout many industries and preferred for their dependability, durability and longevity. Meritec offers a wide variety of options including connector orientation, keying, wire gauges and impedance, to name a few.

Whether your performance demand is high heat, vibration, harsh environment, or limited access, MSI is your flexible solution. Visit *The Xtreme High-Speed Xperts* at **AUSA in Washington, D.C., October 12-14, 2015**.

For more information about Meritec's superior MSI Ribbon Cable Products, please contact Meritec's Customer Service: 888-Meritec (637-4832), MSI@meritec.com, or a Meritec Sales Rep in your corner of the world – MERITEC.com

Contributors: Lynn Waller is a Business Development Manager at Meritec's Painesville, Ohio location, responsible for MSI Product Line and other high-performance cabling solutions. He has more than 15 years' experience in the design, manufacture, and marketing of interconnect systems, and available for problem solving at lwaller@meritec.com. For other rapid design, quick turn, standard Insert, Liquid Silicone/Modular Molding and Tooling, MDR/CHG Harnesses and over molds, contact Russ Herbert, formerly of Mold-Tech and Connectors Unlimited, now merged with Meritec. With more than a decade in sales, Russ is Industrial Sales Representative, and may be contacted at rherbert@meritec.com. Zane Daggett, VP Mil/Aero – zdaggett@meritec.com  
Photos courtesy of Bill Dutchman, Senior Engineer, Special Projects Manager at Meritec.

