



Title: 3M Makes the Connection in Demanding Medical Applications

Medical device OEM's are facing multiple challenges in imaging applications. Demand for lower dose and higher resolution are pushing designs to drive more signals faster than ever before through the entire system. Pair these with increasing mechanical constraints and cost down pressures, and an engineer may not know where to turn for answers.

The Mini Delta Ribbon (MDR) Connector System from 3M has proven to be a reliable solution to the above issues in several medical applications. The ribbon contacts and thumbscrew mounting make for a reliable connection in PET and CT sensor arrays to take the signals from the bore to the data acquisition boards. The variety of 3M cable solutions help with routing and EMI protection for the more susceptible high-speed signals. As the original callout for the National Semiconductor SERTES LVDS chips, and as the only callout for the MachineVision CameraLink standard, MDR also has found a home in X-Ray cameras and the corresponding data cables. MDR has also proven to be a good solution for medical display applications in equipment varying from anesthesia delivery to ultrasound to bedside entertainment.

Once all that data reaches the acquisition and processing systems, manufacturers will likely find that they need increased performance in their system architecture. The Ultra Hard Metric (UHM) Socket Connectors from 3M can help them to leverage their existing designs, reducing engineering time and cost. The UHM connector system is a unique solution that allows designers to drop in a replacement connector for the CompactPCI socket on their daughter cards to increase performance of the existing CompactPCI backplane to up to 7 Gbps. This could enable manufacturers to have a modular design with a common backplane for several products in the modality with daughter card changes to vary the product's performance, reducing the overall modality cost.

For more information on 3M Interconnect Solutions please visit www.3Mconnectors.com.