

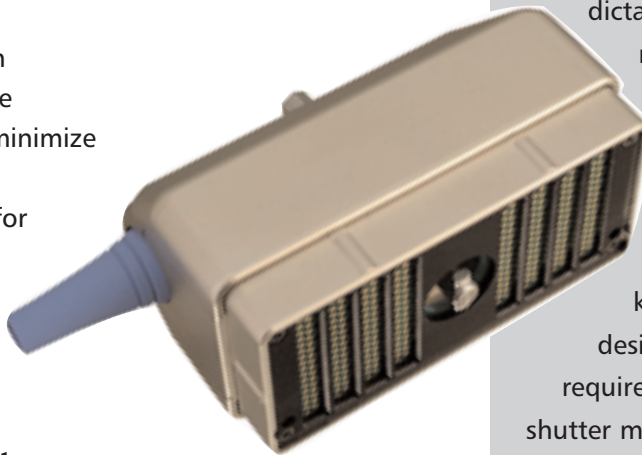
# APPLICATION NOTE

[www.ittcannon.com](http://www.ittcannon.com)
**Cannon DLP**

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## Features

- 408 signal contacts (136, 204, 272 for standard DLP connector w/o the shutter)
- Excellent EMI/RFI shielding
- Press-fit terminals
- Single hand Actuation
- Low contact resistance
- Short signal path to minimize cross-talk
- Plug side PCB allows for additional customer required components



## Benefit to the Customer

- Low per line cost
- Signal integrity for low current applications
- Survives vibration/shock environments
- Eliminates the need for customer supplied EMI/RFI features



## Applications

- Medical Ultrasound equipment
- Multi-rack interconnect
- Test equipment
- Sound equipment

For more information, please refer to the Cannon DLP ZIF Connector Catalog on Channel Partners or [www.ittcannon.com](http://www.ittcannon.com)



## The Challenge

A leading manufacturer of Ultrasound equipment approached ITT to provide an interconnect system that will carry more than 400 signal/ground contacts and meet the IEC requirements within a limited space requirements dictated that the connector meet stringent EMC requirements, withstand rigorous vibration and drop tests, and also be easily mated and unmated over 10,000 times.

## The ITT Solution ...

ITT expanded its landed contact system, known currently as the Cannon DLP, and designed a smaller contact to meet the new space requirements. ITT's connector solution has a locking shutter mechanism that will only open when the mating plug is inserted into the receptacle thus meeting the IEC requirements. When the plug is inserted into the receptacle, grounding contacts surround the plug providing superior EMC performance. Press-fit contacts are used for easy PCB installation. This style connector uses contacts only in the receptacle. Since customers utilize a PCB to house their components for the ultrasound probe, ITT used the bottom portion of this same PCB with landing pads for the receptacle contacts. This design eliminates the need for contacts in the plug or probe side of the connector and reduces the signal length therefore improving cross-talk performance. ITT developed the DLP408 connector to meet the immediate customer's requirement and address future 256 channel ultrasound equipment.

For application assistance, please contact:

AMERICAS

Wayde King, [wayde.king@itt.com](mailto:wayde.king@itt.com), 714.628.8264

ASIA

Teddy Chan, [Teddy.Chan@itt.com](mailto:Teddy.Chan@itt.com), +852 27322720

EUROPE

Achim Raad, [Achim.Raad@de.itt.com](mailto:Achim.Raad@de.itt.com), +49 7151 699 263