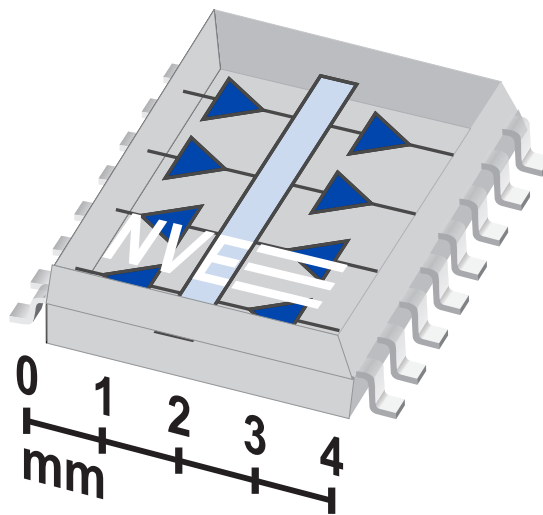
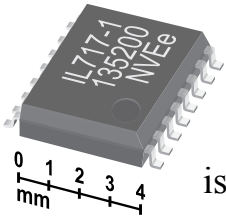


IsoLoop[®] QSOP Isolator Evaluation Board



Board No.: IL700-1-01

About This Board



Isolation reduces noise, eliminates ground loops, and improves safety. This evaluation board lets you try the world's densest high-performance isolators. But miniaturization doesn't mean performance compromises. These QSOP isolators are rated at a full 110 Mbps and 2500 V isolation.

The board includes five high-performance QSOP isolators:

- IL715-1E: 4-Channel (all same direction)
- IL716-1E: 4-Channel (2 each direction)
- IL717-1E: 4-Channel (3 transmit, 1 receive)
- IL260-1E: 5-Channel (all same direction)
- IL261-1E: 5-Channel (4 transmit, 1 receive)

QSOP Isolator Highlights

- Four and five channel versions
- 110 Mbps
- -40°C to +100°C
- 3 V to 5.5 V operation
- 30 kV/ μ s min. transient immunity
- 44000 year barrier life
- True 4 mm creepage
- 600 WV per VDE 0884
- 2500 V isolation voltage per UL1577

Board Layout Speed Limitations

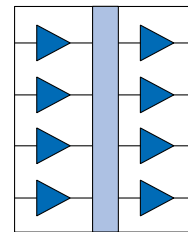
Circuit board traces should be as short as possible with as few vias as possible for best performance. Since the evaluation board was designed for ease of use and with test points, it may not provide maximum speed.

Power Supply Decoupling and Ground Planes

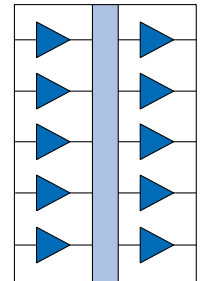
As shown on this board, both isolator power supplies should be decoupled with 47 nF low-ESR ceramic capacitors as close as possible to the V_{DD} pins. Ground planes for both GND_1 and GND_2 are recommended for data rates above 10 Mbps.

Maintaining Creepage

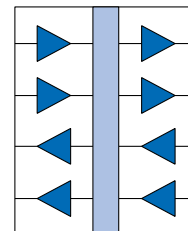
In addition to meeting JEDEC standards, NVE isolator packages have unique creepage specifications. Standard pad libraries often extend under the package, compromising creepage and clearance. Recommended pad layouts are included in the datasheets.



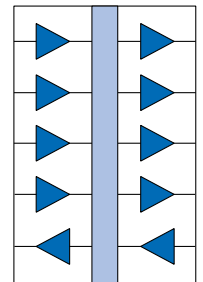
IL715



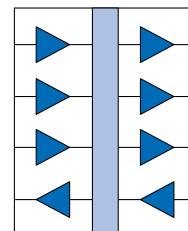
IL260



IL716

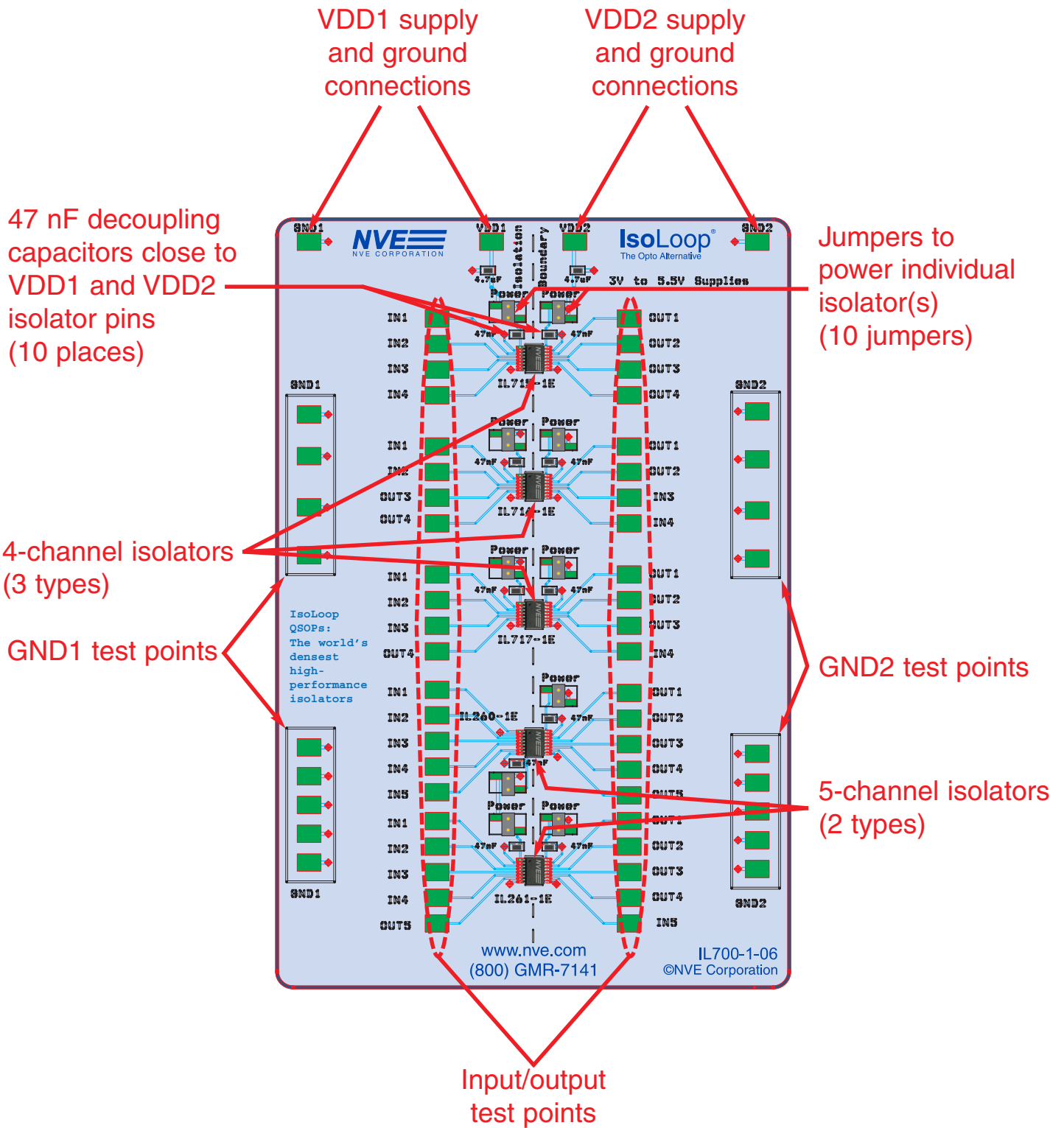


IL261



IL717

Board Layout



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