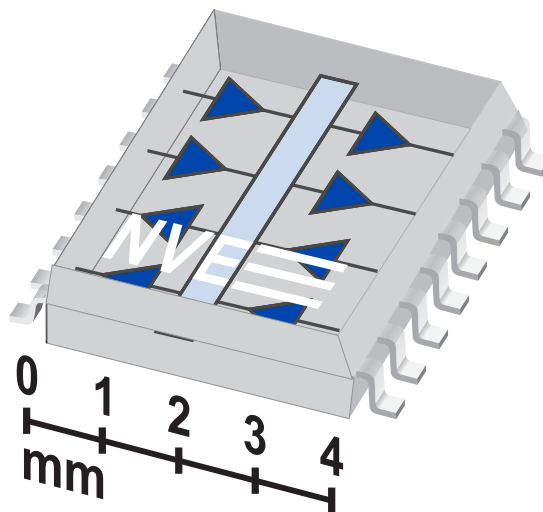
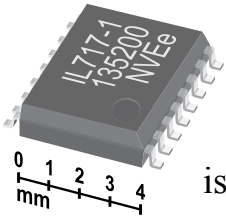


IsoLoop[®] QSOP Isolator Evaluation Board



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
- 2500 V isolation
- -40°C to $+100^{\circ}\text{C}$
- 3 V to 5.5 V operation
- 44000 year barrier life
- True 4 mm creepage

Board Layout Speed Limitations

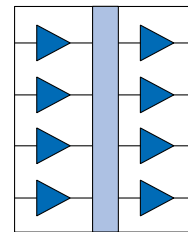
Circuit board traces should be as short as possible and with as few vias as possible for best performance. Since the evaluation board was designed with test points for ease of use, it may not provide maximum speed.

Power Supply Decoupling and Ground Planes

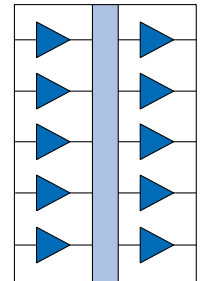
Both isolator power supplies should be decoupled with 47 nF low-ESR ceramic capacitors as close as possible to the V_{DD} pins. GND_1 and GND_2 ground planes are recommended for data rates above 10 Mbps. This evaluation board incorporates those high-speed recommendations.

Maintaining Creepage

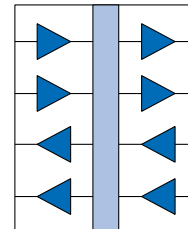
NVE isolator packages have unique creepage specifications. Standard pad libraries often extend under the package, which compromises creepage and clearance. This board uses recommended pad layouts that do not compromise creepage. Recommended pad layouts are included in product datasheets.



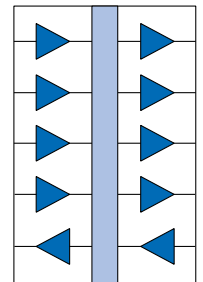
IL715



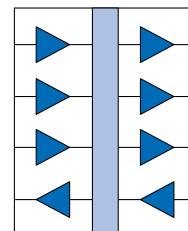
IL260



IL716

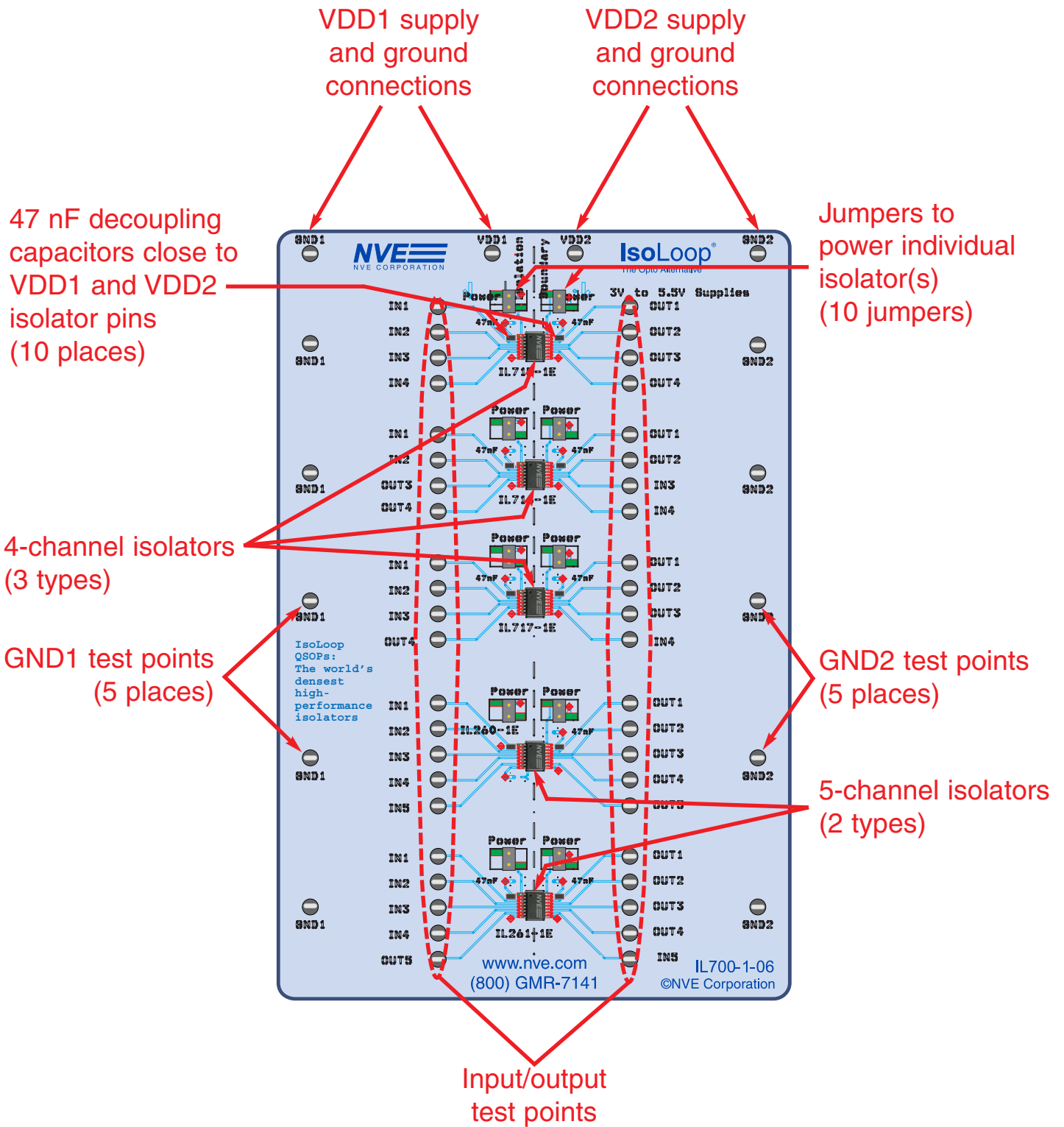


IL261



IL717

Board Layout



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