

New QWAD board (QWAD2)

Features:

New board will be a plug-in replacement that goes in the same Euro-card cage

New board has better grounding

- Better grounding on D-connector
- Cover plates: good electrical contact with ground
- Aluminum bars (w/ tapped holes) replaces standoffs

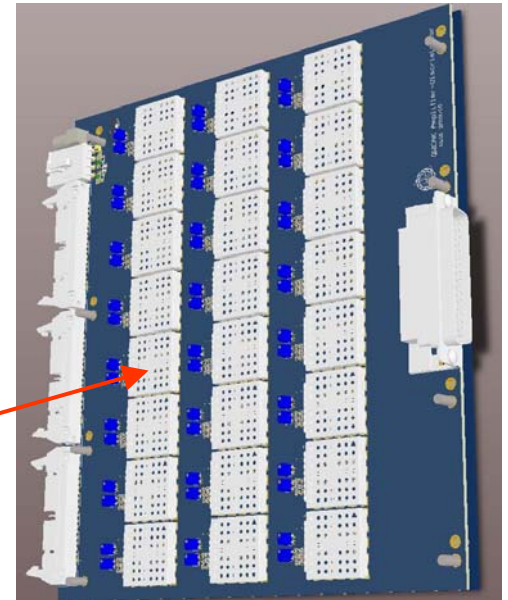
New board has extra layers to isolate amplifier inputs against analog-to-analog & digital-to-analog crosstalk

- new design has 6 layers
- Individual RF shields cover analog part of **each** channel

Discriminator range has been increased (doubled)

Remotely-controlled **global** discriminator adjustment added

Additional capacitors included (on board's power lines) to improve stability against digital noise



New QWAD board: Status

Schedule:

New QWAD board design completed

New layout/design sent to PC board manufacturers

- delivery to TRIUMF early this week

Electrical components on-hand at TRIUMF (except sockets for jumpers)

1st board will be stuffed here at TRIUMF this week

- using automated system: soldering paste printer & “Pick’n Place” robot
- after initial board stuffed and tested → automated system should take less than an hour to stuff each subsequent board later

1st board should be ready for tests later this week (or early next week)

Drawings for the new cover plates submitted to TRIUMF Machine Shop