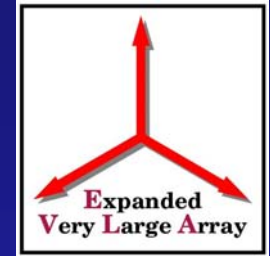


EVLA MONITOR & CONTROL CDR

MIB PC Board Design



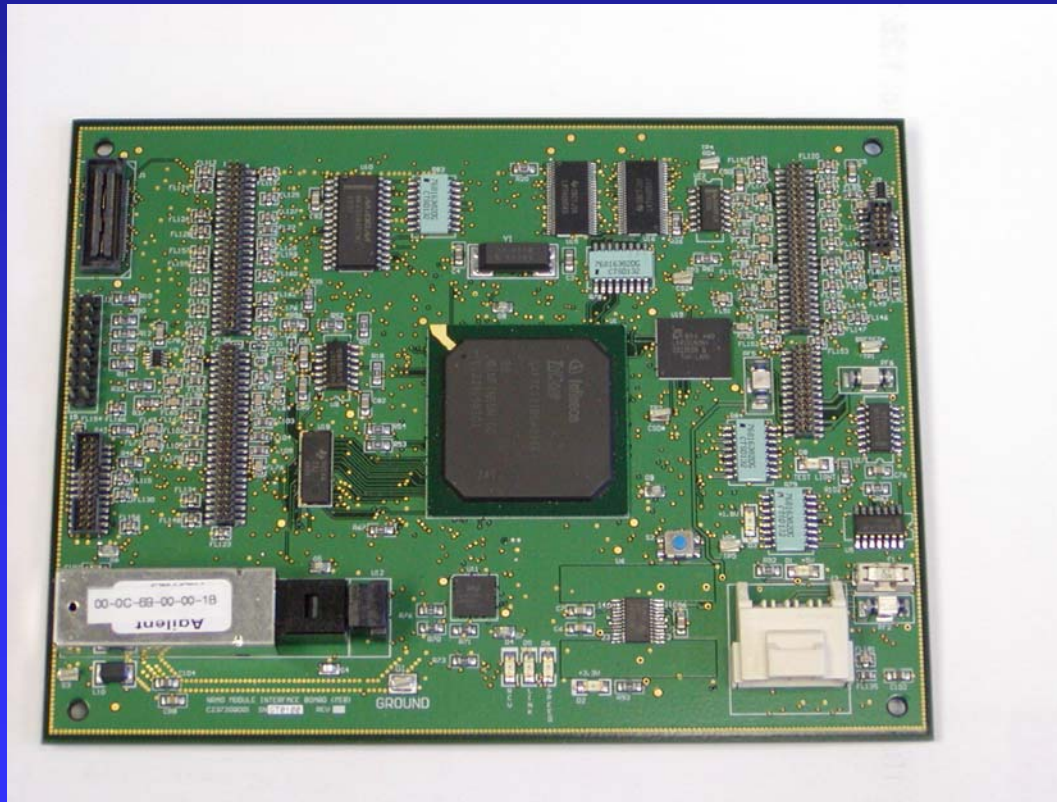
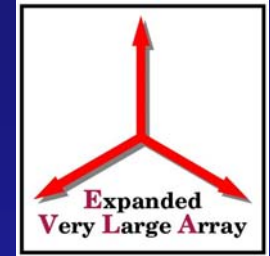
Driving Points Of Design



- Minimize RFI
- Ethernet Capability
- Size
- Compatibility With Other Boards

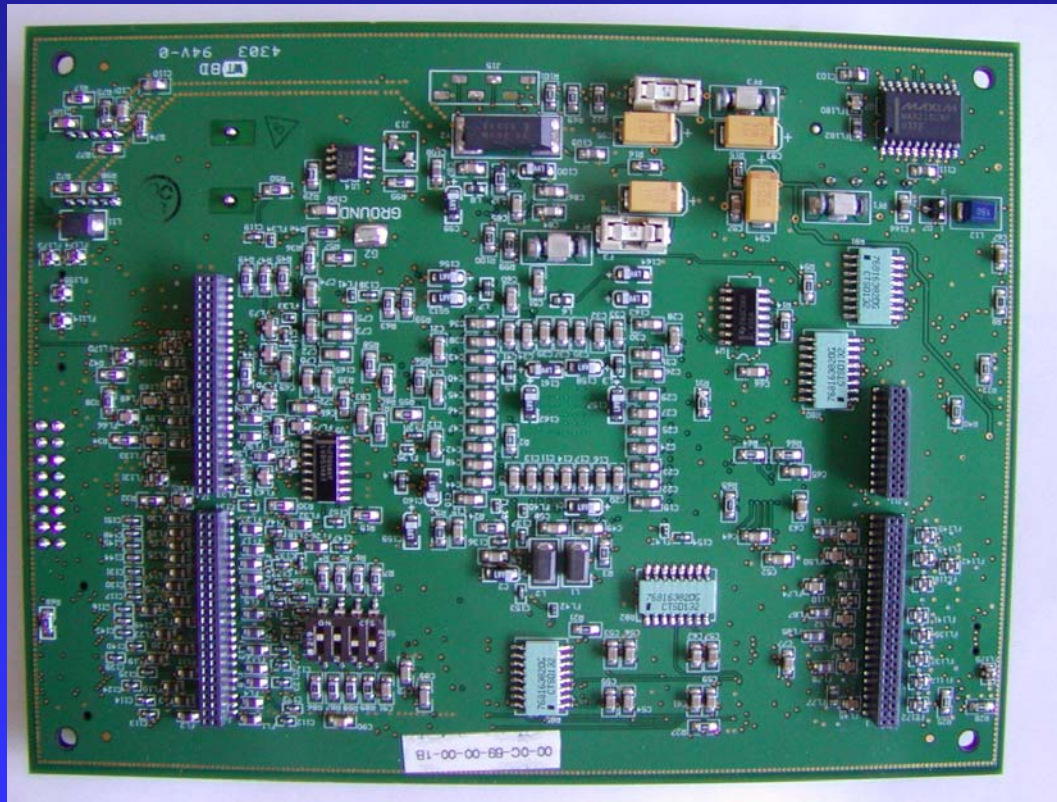
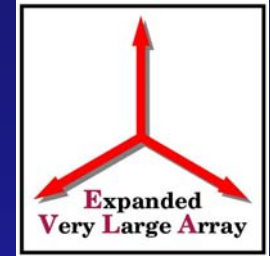


Top Side Of MIB



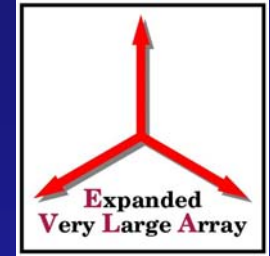


Bottom Side Of MIB





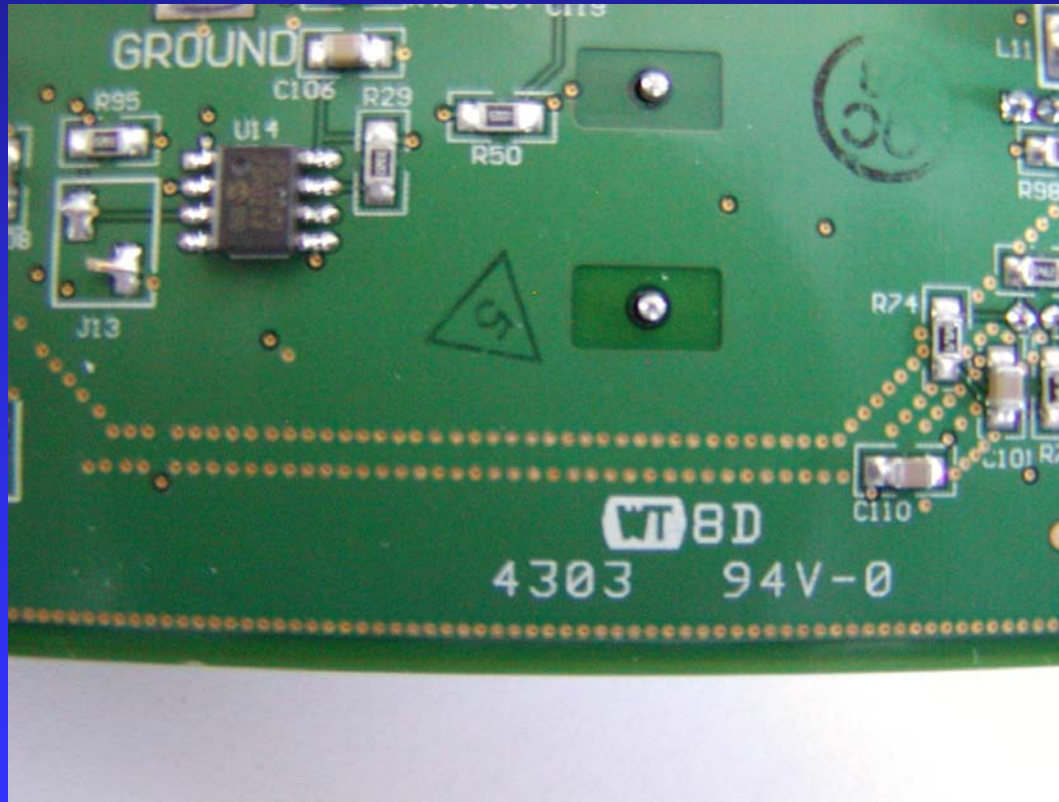
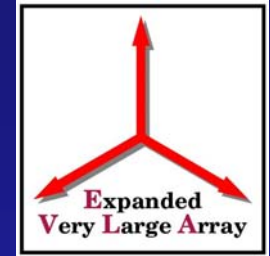
RFI Considerations



- Filtered IO Lines
- Many Ground Planes
- Ground Pour Over Each Signal Layer
- Buried High Speed Lines
- Ground Planes Connected By Stitched Vias
- Power Lines Filtered

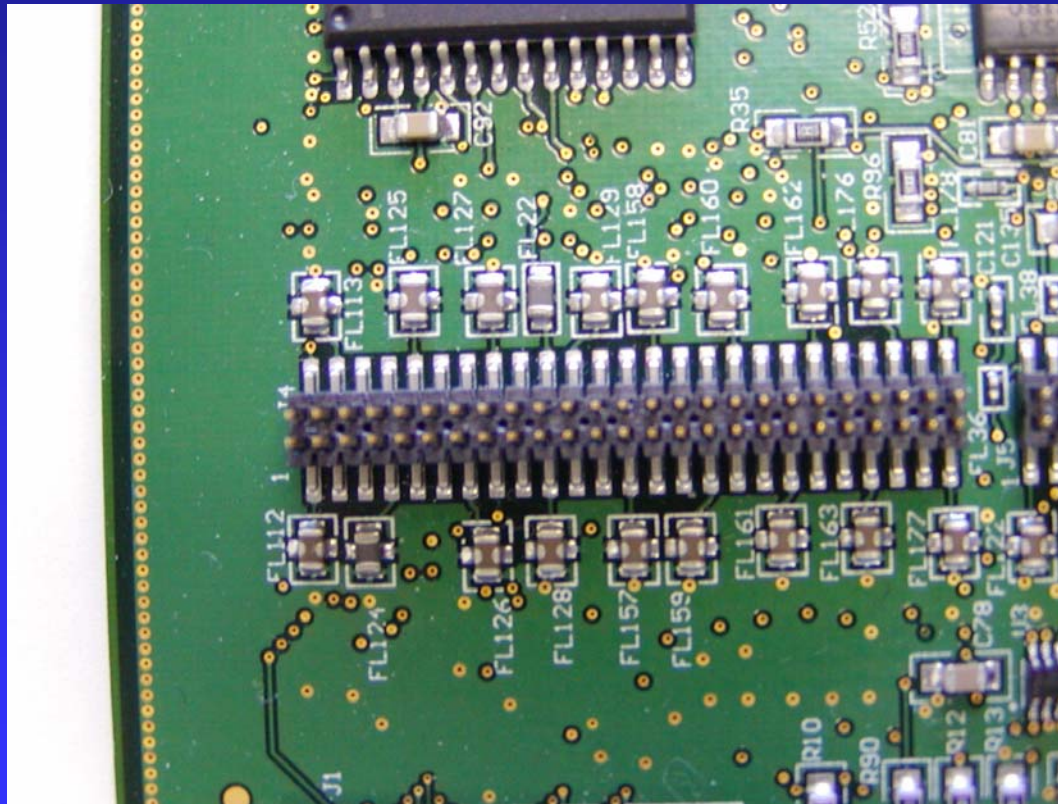
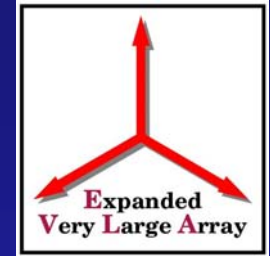


Buried High Speed Lines



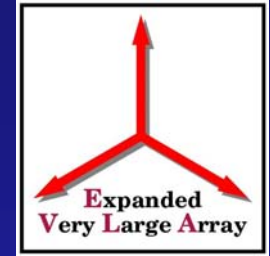


Filtered IO Lines

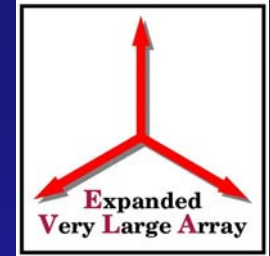




Ethernet Capability

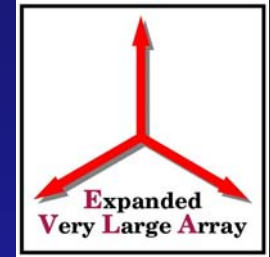


- Ethernet Controller On TC11IB – fewer traces required on board
- 25 MBPS Traces Buried From TC11IB To PHY
- 100 MBPS Traces Buried From PHY To Transceiver





Size Considerations



-
- Board Dimensions 4.5" X 6"
 - Fits Vertically Or Horizontally In Module
 - Leaves Space For Other Boards In Module