



Rev.2 Hybrids

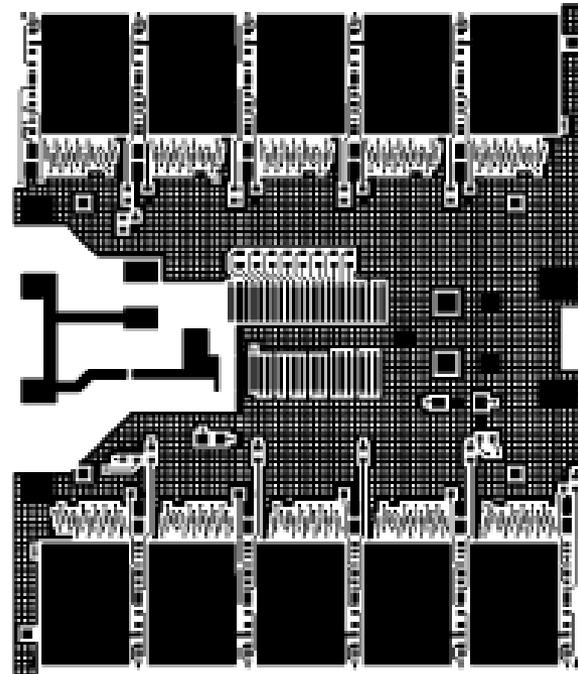
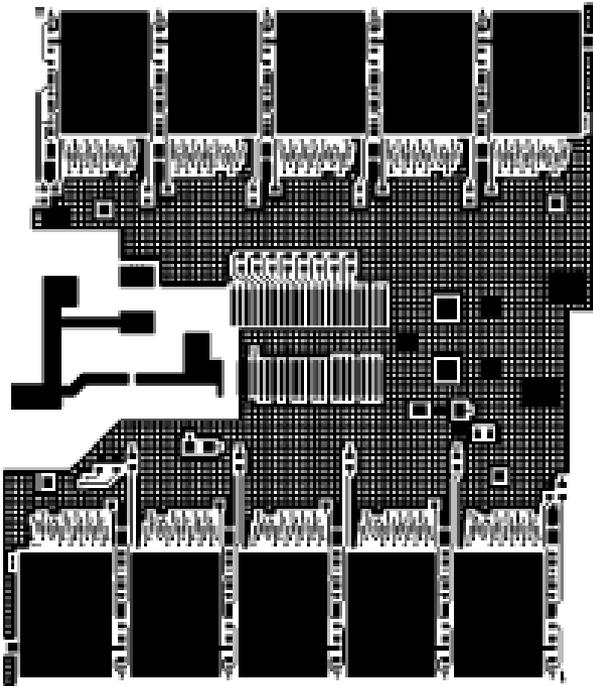
Andrei Nomerotski, 7/14/2003

- Changes with respect to Rev.1
 - ◆ AVDD/DVDD shorted
 - ▲ One 10 uF bypass cap
 - ◆ New grounding scheme
 - ◆ No BIAS cap
 - ◆ VCAL schematics
 - ◆ Cleaned up dimensions/locations issues
- Identified two new vendors
 - ◆ Scrantom
 - ◆ Halcyon
 - ▲ Both in CA, LA region
- Order placed in mid June
 - ◆ 25 L2A with CPT, Scrantom, Halcyon
 - ◆ 25 L2S with Amitron



L2A & L2S hybrids

- Layout done by G.Wolf
- Top metal layers of L2A and L2S





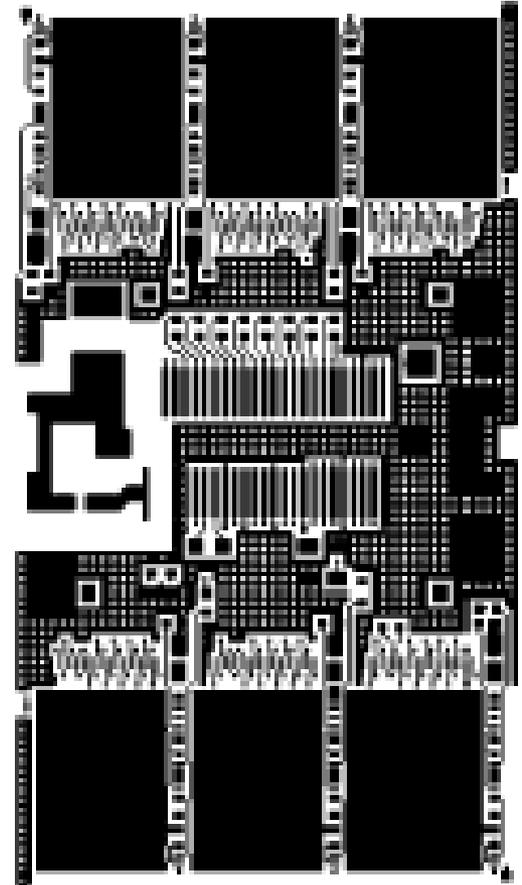
L2A & L2S hybrids

- Had to iterate with vendors on the edge treatment
 - ◆ Different design rules for different vendors
 - ▲ CPT, Scrantom, Halcyon need each metal layer backed up by 3-5 mil from the previous one on the edge
 - ▲ Amitron needs ~5 mils total distance between the cut edge and metal layers
 - ◆ Matter resolved with all 4 vendors
 - ▲ Scrantom & Halcyon will use files modified by G.Wolf
 - ▲ CPT made the changes in house
 - ▲ Amitron made the changes in house
 - ◆ Deliveries expected mid August-mid September
 - ◆ Vendor visits (Scranton/Halcyon) in the beginning of August



L1 hybrid

- Final L1 layout was waiting for L2A and L2S
 - ◆ First iteration made in May
 - ◆ Assembly Has flex circuit for grounding
 - ▲ Uses one GND pad on hybrid





L0 hybrid

- Layout done by T.Wesson at Fermilab
 - ◆ Has vias in Be substrate to connect to GNG strip on the back of hybrid
- Order for old L0 hybrids stopped at Amitron and substituted by the new design
- Top metal

