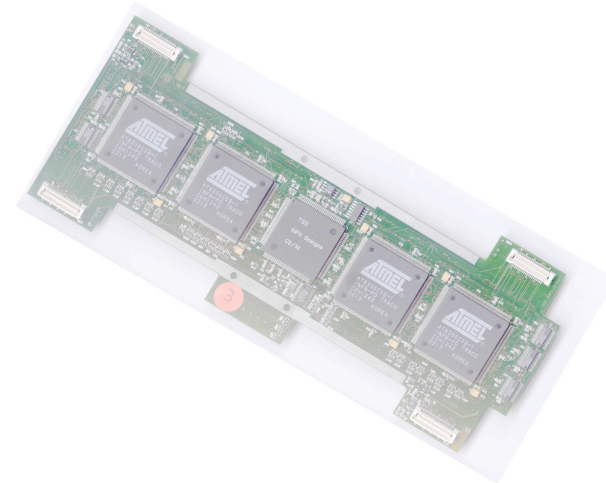
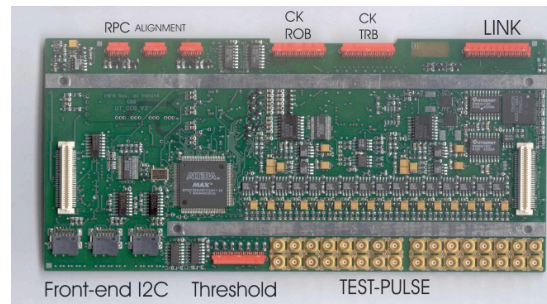
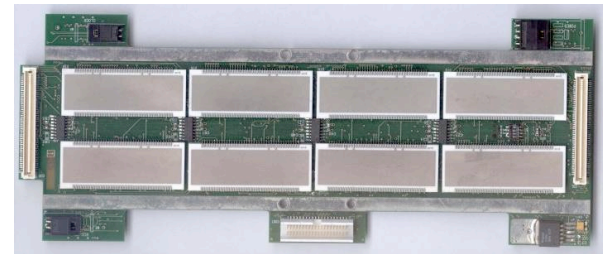
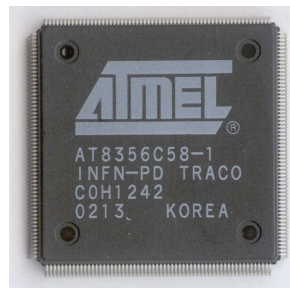
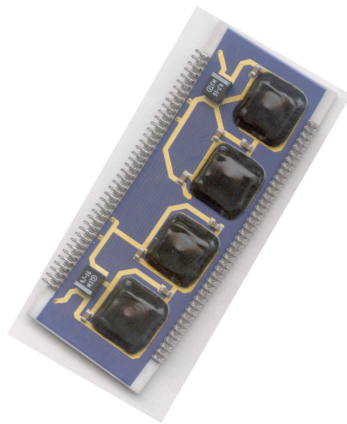
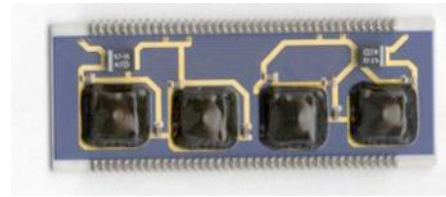


Status of Drift Tubes Local Trigger Electronics



BTIM



Multichip Ceramic Module: 4 BTI per module.

Production in progress by Metallux

- Almost half production done.
 - 1600 modules delivered to Novatel for board production.
 - 4000 modules ready for delivery in stand-by at Metallux

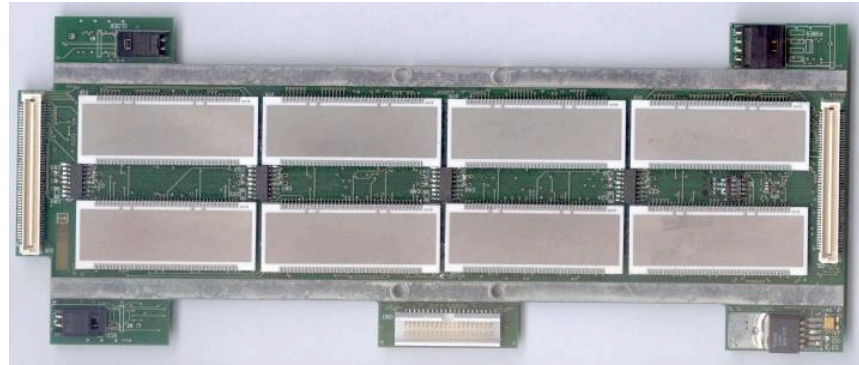
Problems:

- About 6% of BTI chips lost during production setup (of modules and boards), against a spares total amount of ~22%.
- Production stopped due to problems discovered during board production starting up:
 - About 1,5% of modules, nominally tested by Metallux, was discovered not working properly.
 - The epoxy resin used to glob top the chips, although tested with thermal cycling, was not able to survive at the high temperature (~220 °C) of the soldering oven.

Action taken:

- 2500 modules, already delivered by Metallux, was sent back for re-testing.
- R&D started by Metallux for a new resin. At the moment they are investigating two new products; a siliconic glue and a stronger resin. Results will be available very soon.
- The modules already done will be soldered on the TRB by hand.
- Independently we are investigating the possibility of protecting the chips with a plastic cover. This seems technically feasible, but put additional questions: as the seal can't be hermetic, which are the long term effects of humidity and oxygen on aluminum wires and pads?

TRB



Trigger Boards.

Production in progress by Novatel

- First production (50 prototypes) lost for BTIM failure.
- Second prototypes production partially successful (rejection ratio of ~20%)
- A third production is in progress; we will have about 50 TRB-__, 20 TRB-__ and 10 TRB-__-32 at the beginning of April.

CCB CCB link

Control Boards.

Prototypes production in progress
by CAEN

- Production awaiting for QPLL availability.
- 40 prototypes will be available at the beginning of April

