

FTK Italia attività critiche

Alberto

Italian deliverables 1/2

- VME Infrastructure (Pavia, plus AUTH for DCS)
 - *Deliver full infrastructure by February*
 - Allow time for integration in March
- AM06 production
 - 25 wafers started
 - Substrates started
 - Order of packaging and follow up contacts (Alberto A)
 - *Test of >6000 parts within 1 month (LNF, MI, Paris)*
 - Requires dedicated preparation !

Italian deliverables 2/2

- 48 AMB and 256 LAMBs (+spares) production
 - Remaking LAMBs with slow and fast chips using typical chips from production
 - *To be delivered by April*
 - More checks on boards produced this summer on going
 - Orders in progress
 - AMB production limited by arrival of components
 - Test preparation also important
 - LAMB production limited by ...
 - *delivery of tested AM06*
 - fast logistic and fast assembly
 - Preparation of test procedure and fast test

Commissioning at CERN

- AM board (Pisa)
- Online SW, Infrastructure (Pavia)
- Input Mezzanine (LNF)

LAMB production

- all components ordered **Fri Oct 21st**
- all components received (no AM06) **Jan 21st**
- PCBs ordered **Nov 10th**
- PCB manufacturing started **Nov 10th**
- PCBs received **Jan 10th**
- **AM06 delivered at Microtest Jan 31st**
- **50% AM06 tested (3000 parts) & received at INFN Feb 20th**
 - Most critical step !!!
 - Need to account for (to be expected) troubles
- **100% AM06 tested (+3000 parts) & received Mar 7th**
- **AM06 at assembly house & assembly started Feb 28th**
 - Includes 1 week shipping/handling INFN to assembly house

LAMB testing (very squeezed)

- 1st lot of boards (assume 40 LAMBs)
 - Assembled boards received Mar 20th (3 weeks for assembly)
 - Tested boards Mar 28th (1 week for testing)
 - Delivered to CERN Apr 7th
- 50% of boards (+80 LAMBs)
 - Assembled boards received Mar 30th
 - Tested boards Apr 15th (2 weeks for testing)
 - Delivered to CERN Apr 22th
- 100% of boards (+80 LAMBs)
 - Assembled boards received Apr 7th
 - Tested boards Apr 22th (2 weeks for testing)
 - Delivered to CERN Apr 30th
- 200 LAMBs in total planned above (minimum required)
 - Additional 80 LAMBs in production will follow shortly (2/4 weeks)

AM06 testing

- Need preparation and careful planning
- We will use two copies of the test system at microtest
 - Faster and mitigates effects of 1 system down
- Deploy & validate test system at microtest 1 month in advance
- Check test system 1 week in advance (safety check)
- Have a spare system at home (where?) for replacement
- Be ready to travel to Microtest for debug/repair (who?)
- Include remote connection for easier debugging

Infrastructure

- Order of 7 VME bins to be delivered in Jan
- Build fan trays by Dec
- Build load boards for cooling test by Dec
- Validate SBC (scalability test)
 - Follow up with order of 7 more SBCs (reach 8 + 2 spares)
- At CERN
 - Jan cooling test (validate rack layout)
 - Feb OPM to configure all 4 VME racks
 - March all infrastructure installed and active