



Project Status - Silicon

- SVX4 chip
 - ⇒ Submitted
 - ⇒ On schedule for delivery May 28th
 - ⇒ post processing = 2 weeks
 - ⇒ evaluation begins June 12th
 - ⇒ ready for hybrids **July 10th**
 - ⇒ test boards already in hand
- Hybrids
 - ⇒ Submitted
 - ⇒ Delivery expected beginning of July
 - ⇒ ready for chips **July 10th**
 - ⇒ test boards already in hand
- Bus cable submitted
 - ⇒ will have in hand by end May
 - ⇒ will use extra cables for lamination study



Project Status cont.

- Sensors
 - ⇒ axial sensors ordered, on schedule for delivery in **early July**
 - ⇒ Small angle stereo ordered, delivery expected by end July
 - ⇒ **Production contract plan in place with quotation from HPK**
- MiniPort card and wing cable submitted
 - ⇒ expect delivery by end June
 - ⇒ ready to use by end July
 - ⇒ Pigtail cables and test cards will be submitted next week (2wk delivery)
- prototype Junction PC in hand (from BTeV development)
- Full DAQ teststand is setup and tested with “copper” DOIM
- Tests of noise induced by bus cable indicate that noise is acceptable
- **When hybrids with SVX4 chips arrive we are ready to test with full DAQ!**



Project Status cont.

- Mechanical Staves
 - ⇒ Have produced bent flattened tubes with no creases!
 - ⇒ leak checking in progress (common effort with D0)
 - ⇒ Parts in hand to build ~20 mechanical staves
 - ⇒ Should have one with “final” parts by end of this week, will build ~ 5 staves for tests:
 - cooling tests (match FEA?, pressure drop, flow rate, heat trans)
 - structural tests (match FEA)
 - deformation during cooling
 - ⇒ Also making small sections for testing wirebonding between sensors



Project Status cont.

- Will have mechanical staves available in early July, in time for electrical stave prototype construction in Aug. and Sept.
- Fixtures for prototype module and stave production
 - ⇒ Have Si-Si gluing fixtures in hand and tested
 - results are great, no movement during curing
 - faster than expected, can remove Si from fixture for curing and reuse main fixture
 - ⇒ Fixtures for hybrid and module gluing ready to order
 - ⇒ Storage holders and test boxes ordered
 - ⇒ Stave construction fixture will be started next week, may make simplifications for prototype electrical stave production



Project Status cont.

- Bulkhead design
 - ⇒ prototypes made and measured
 - look good, not difficult to machine
 - ⇒ 1st FEAs done and will be compared to prototypes
- Layout and strain relief for tubes and cables at end of barrels is in progress
- Beampipe – tests scheduled for end of May
 - ⇒ drop ball bearings on different material (drilled vs rolled) from increasing heights.
 - ⇒ Ready to order upon completion of tests.



Project Status cont.

- L0
 - ⇒ reuse same sensors as L00
 - ⇒ L0 not supported by beampipe but rather by outer bulkheads
 - ⇒ L0 layout almost finished
 - investigating making CF structure at UWash (D0!)
 - ⇒ fine pitch cables designed
 - ⇒ new prototype cables (L00 design) received in March
 - general characteristics are good (few shorts and opens)
 - need to improve bondability of the cable (improve gold deposition quality)