

TDR writing

- Need to complete the TDR by the Elba meeting (end of May).
- First complete draft of the SVT section for next SVT-TDR meeting (April 13 or April 20).

SVT TDR Writing

~ 20 pages in svn

6 Silicon Vertex Tracker	21		
6.1 Vertex Detector Overview	21	G.Rizzo - 12 pages	
6.2 Backgrounds	21	R.Cenci - 4 pages	
6.3 Detector Performance Studies	21	N.Neri - 6 pages	
6.3.1 Introduction (<i>about 1/2 page</i>)	21		
6.3.2 Impact of Layer0 on detector performances (<i>about 2 pages</i>)	21		
6.3.3 Sensitivity studies for time-dependent analyses (<i>about 2 pages</i>)	21		
6.3.4 Vertexing and Tracking performances (<i>about 1 pages</i>)	21		
6.3.5 Particle Identification (<i>about 1/2 pages</i>)	21		
6.4 Silicon Sensors	21	L. Bosisio - 8 pages	
6.4.1 Requirements	22		
6.4.1.1 Efficiency	22		
6.4.1.2 Resolution	22		
6.4.1.3 Radiation hardness	22		
6.4.2 Sensor design	22		
6.4.2.1 Technology choice	24		
6.4.2.2 Optimization of strip layout	24		
6.4.2.3 Wafer sizes and quantities	24		
6.4.3 Prototyping and tests	24		
6.5 Fanout Circuits	24	L.Vitale - M.Prest4+4 pages	
6.5.1 Fanouts for layer0	25		
6.5.1.1 Requirements	25		
6.5.1.2 Technology	25		
6.5.1.3 Design	25		
6.5.1.4 Prototyping and tests	25		
6.5.2 Fanouts for outer layers	25		
6.5.2.1 Requirements	25		
6.5.2.2 Material and production technique	25		
6.5.2.3 Design	25		
6.5.2.4 Tests and prototyping	25		
6.6 Electronics Readout	26	28 pages	
6.6.1 Readout chips	26	V.Re - 10	
6.6.1.1 Electronic Readout for Strip and Striplet Detectors	26		
6.6.1.2 Readout chips requirements	27		
6.6.1.3 Readout Chip Implementation	29		
6.6.1.4 R&D for strip readout chips	30		
6.6.2 Hybrid Design	31	M.Citterio - 10	
6.6.3 Data Transmission	31	M.Citterio - 10	
6.6.4 Power Supply	31	- 2	
6.7 Mechanical Support & Assembly	31	S.Bettarini/F.Bosi - 14 pages	
6.7.1 I.R. Constraint	31		
6.7.2 Module Assembly	31		
6.7.3 Detector Assembly and Installation	31		
6.7.3.1 Half Detector Assembly	31		
6.7.3.2 Mount L0 on the Be-pipe and L 1-5 on the W Shielding	31		
6.7.3.3 Installation of Complete Assembly into the SuperB Detector	31		
6.7.3.4 Quick Demounting	31		
6.7.4 Detector Placement and Survey	32		
6.7.4.1 Placement accuracy	32		
6.7.4.2 Survey with tracks	32		
6.7.5 Detector Monitoring	32		
6.7.5.1 Position Monitoring System	32		
6.7.5.2 Radiation Monitoring	32		
6.7.6 R&D Program	32		
6.7.6.1 Cables	32		
6.7.6.2 hybrid	32		
6.7.6.3 Inner layer sextant	32		
6.7.6.4 Arch modules	32		
6.7.6.5 Cones and space frame	32		
6.7.6.6 Full-scale model of IR	32		
6.8 Layer0 Upgrade Options	32	G.Rizzo/L.Ratti - 10 pages	
6.8.1 Technology options	32		
6.8.1.1 Hybrid pixels	33		
6.8.1.2 Deep N-well CMOS monolithic sensors	34		
6.8.1.3 Monolithic pixels in CMOS quadruple well technology	35		
6.8.2 R&D activity	35		
6.8.2.1 Front-end electronics for hybrid pixels in planar and 3D CMOS technology	35		
6.8.2.2 The ApseL DNW MAPS series	37		
6.8.2.3 The ApseL4well quadruple well monolithic sensor	39		
6.8.3 Radiation tolerance	39		
6.9 Services, Utilities and E.S. & H issues	40	- 8 pages	
6.9.1 Service and Utilities	40		
6.9.2 ES&H Issue	40		