

Padova

## **STATUS OF BMUON CHAMBERS TRIGGER AND CONTROL ELECTRONICS**

### **ASICS:**

<b>- BTI</b>	<u>Bunch and Track Identifier</u>	
	full performance chip	DONE
	5 tested prototypes in PLCC68 ceramic package	TESTED
	200 tested pcs in TQFP64 plastic package	TESTED
	200 tested dies	ARRIVED
	Neutron irradiation and reliability tests	06/99-12/00
	54000 kgd (tender+production)	09/00-03/02
<b>- TRACO</b>	<u>Track Correlator</u>	
	full performance chip	DONE
	50 tested prototypes in QFP240 plastic package	ARRIVED
	full performance chip IInd submission	09/00
	50 tested prototypes in QFP240 plastic package	12/00
	5100 tested pcs in QFP240 (tender+production)	03/01-03/02

### **PCBs and Modules:**

<b>- BTIM</b>	<u>BTI multichip module</u>	
	I prototype: 4 BTIs in plastic package 66mm x 24mm	
	on FR4 substrate 100pins SMT type; 25 pcs	DONE
	test	
	simulated tracks	DONE
	irradiation in gamma cell 5krad and 10krad	DONE
	Steady-State Life test (2000h at 125°C)	
	MIL-STD-883E Method 1005.8	DONE
	neutron irradiations	DONE
	II prototype: 4 BTI dies on LTCC substrate 50mm x 22mm	
	80pins SMT type, full performance; 40 pcs	ARRIVED
	test	
	simulated tracks	GOING
	irradiation and reliability	12/99-9/00
	12000 pcs (tender+production)	12/00-6/03

<b>- CB</b>	<u>Control Board</u>	
	I prototype with test pulse, clock distribution, monitoring and JTAG controller; 1 piece	DONE
	I prototype test	DONE
	II prototype for chamber control during production and irradiation tests	DONE
	Slow Control optical link test	DONE
	irradiation tests (neutrons)	05/99-09/00
	full performance board tests	GOING 12/00-3/01
	260 pcs (tender+production)	03/01-09/02
<b>- PHITRB128</b>	<u>128 channels phi view Trigger Board</u>	
	full performance with 5V/3.3V mixed power supply test	DONE
	simulated tracks	GOING
	irradiation and reliability	07-10/00
	1000 pcs (tender+production)	03/01-09/03
<b>- PHITRB32</b>	<u>32 channels phi view Trigger Board</u>	
	full performance	09/00
	tests	09/00-3/01
	90 pcs (tender+production)	03/01-09/03
<b>- THETATRB</b>	<u>128 channels theta side Trigger Board</u>	
	full performance	GOING
	tests	09/00-3/01
	350 pcs (tender+production)	03/01-09/03
<b>- SB</b>	<u>Server Board</u>	
	I prototype: for TRB test (BO group)	6/00
	II prototype: full performance board	09/00
	tests	12/00-3/01
	240 pcs (tender+production)	03/01-06/02

- SCB	<u>Sector Collector Board</u> Ist prototype of Trigger optical link (PAROLI) IInd prototype of Trigger optical link full performance board tests 65 pcs (tender+production)	DONE 06/00 09/00 12/00-3/01 03/01-03/02
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- SCM	<u>Slow Control Master</u> full performance Receiver Board tests 20 pcs (tender+production)	09/00 12-03/01 01/02-12/02
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### ***Mechanical parts***

- Minicrate	aluminum profile extrusion cooling tests (Trigger and Readout) First minicrate assembly Tender+production	DONE 06-09/00 3/01 09/01-12/03
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