



RADWG 3RD - 2013

8TH MAY 2013

G. Spiezia (EN/STI/ECE)

AGENDA

- ❖ Matters arising
- ❖ Update on PS East Area
- ❖ NanoFip test at PSI and plan for the FieldDrive/Field TR batch validation
- ❖ PSI test: amplifiers and voltage reference
- ❖ TIM design

PSI test - Done

Date	Equipment Owner	Test group	DUT
16-17 February	EN/STI-BE/BI	EN/STI, BE/BI	Cypress memory, potentiometer, Samsung, BLM
24-Feb	TE	TE	Switches
16-17 March	BE CO	BE CO	NanoFip
23-24 March	TE/EPC, EN/STI	EN/STI	Voltage reg, Voltage ref, Mux, Amplifier
13-14 April	TE/EPC	TE/EPC, EN/STI	ADC, SRAM for latch-up study

PSI test

Date	Equipment Owner	Test group	DUT
25-26 May	TE/EPC,EN/STI	EN/STI	LM45, Oscillator, Current source
28-29 June	TE/EPC,EN/STI	EN/STI	Analog switch, Mosfets, SRAM
September	EN/STI, TE/EPC	EN/STI	TBC (Radmon prototype, ADC 8bit)
September	BE/BI	BE/BI	components for BPM
October	TE/EPC	TE/EPC	FGC lite
November	EN/STI	EN/STI	LVDT, Thermocouple, LM45, Oscillator
December	TE/EPC	TE/EPC	FGC lite
December	BE/BI	BE/BI	components for BPM
>September	QPS	QPS	
>September	QPS	QPS	
To be defined	PH	PH	Components
To be defined	BE/CO	BE/CO	FieldDrive or other
To be defined	TE/CRG	TE/CRG	Components and board

PSI test

Date	Equipment Owner	Test group	DUT
To be defined	PH	PH	Components
To be defined	BE/CO	BE/CO	FieldDrive or other
To be defined	TE/CRG	TE/CRG	Components and board
To be defined	TE/EPC	TE/EPC, EN/STI	ADC (parasitic)

- ❖ July / August could be used –
(PSI availability to be checked)
- ❖ Combination of tests to consider

CEA – 1 MeV facility

❖ Plan 2013

❖ 29-30 April

- ❖ Components for RadMon

- ❖ Diodes for BLM (up to $3E14$)

❖ 14 May (up to $5E14$)

- ❖ Diode

- ❖ IT beacon

- ❖ LED system EN/EL

- ❖ Components

CEA

Date	Equipment Owner	Test group	DUT
29-30 April	EN/STI	EN/STI	Components, Pin diodes
14-May	BE/BI, IT, EN/EL, PH/ESE	passive	Diode, Beacon, LED, Silicon chip
8-9 September	EN/STI	EN/STI	RADMONV6

- ❖ To be used for Displacement Damage assessment
 - ❖ Optical devices and diodes (not possible to do everything at PSI)
 - ❖ Installation in areas with high 1 MeV neutron fluence (expensive to do at PSI)
 - ❖ Bulky equipment (not feasible at PSI)
- ❖ Request for 2014
 - ❖ Before June 2013
 - ❖ Specify if the test is online or passive and the maximum wished fluence
 - ❖ 1 request from Experiments (February 2014, $7E14$ n/cm²)

Fraunhofer institute - Germany

- ❖ On going test on the web
<http://radwg.web.cern.ch/RadWG/radTests.htm>
- ❖ M. Brugger is organizing a dedicated meeting for each test group with the Fraunhofer team, which will be visiting CERN on 22-23 May.
- ❖ Other requests should be communicated soon

Test reports

- ❖ Share the knowledge of the tested components
 - ❖ Reports are on EDMS
 - ❖ Add your own reports (PSI, CNRAD, H4IRRAD)
 - ❖ Many tested components are useful for other groups
- ❖ Table of the tested components
 - ❖ http://radwg.web.cern.ch/RadWG/Pages/reports/Radiation_report_menu.htm

Passive dosimetry along 2012

- ❖ Used RadFets and BatMons (battery version of the RadMon)
- ❖ Removed from the machines
- ❖ Results given for the following areas
 - ❖ TT83 (requested by Spanggaard)
 - ❖ TT2 (requested by BE/ABP, S. Gilardoni)
 - ❖ PSB Dump (requested by Calviani)
 - ❖ Door 352 (requested by RAMSES, M. Pangallo)
 - ❖ LINAC3 (requested by M. Calviani)
 - ❖ PS (requested by RF, M. Paoluzzi)
 - ❖ SPS (requested by BE/BI, J Gonzalez)
 - ❖ SPS (requested by TE/MPE, P. Dahlen)
 - ❖ ATLAS-LAR (requested by Luis Hervas)



Back-up

Conferences

❖ SEE symposium

❖ http://radhome.gsfc.nasa.gov/radhome/see_mapld/#

❖ NSREC

❖ <http://www.nsrec.com/>

❖ RADECS

❖ <http://www.radecs2013.com/>

CERN facilities

- ❖ CNRAD and H4IRRAD
- ❖ East area



Technical stop