



RADWG 2011- OBJECTIVES AND ORGANIZATION

G. Spiezia (EN/STI/ECE)

RADWGW 2011 - Objectives

I. Provide support for radiation tests

- Facility

- CNRAD, H4IRRAD
 - TE/EPC, QPS, Cryo?, EN/EL?, LED, FIP repeater, NanoFIP?
 - Are others groups interested??? Inform us as soon as possible to verify your needs
- PSI – protons 60-250 MeV (special agreement for 1 year)
- CEA - 1 MeV neutrons for Displacement Damage
- TRIGA reactor or Prague facility for thermal neutrons test
- IONISOS – Total dose test for material

RADWVG 2011 - Objectives

II. Radiation tests - Component testing in 2011

- Useful for TE/EPC and others
- 'Generic' components (AmpliOP, Buffers, transistors)
 - EN/STI and TE/EPC
- More complex components
 - High resolution ADCs
 - Buffer for ADCs
 - DACs
 - EN/STI and TE/EPC
- Power components
 - TE/EPC
- RADWVG will be a forum to discuss on
 - Planning and guidelines for the test
 - Test results

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III. Build a 'Simple Database'

- We need reports ... (missing 2009 and 2010)
- A template for report exists!
- It is Simple and Effective (Thanks to DANIEL and your feedbacks)
- → will be easier to build the DB
- It will be a DB of COTS; it is true but ...
- Useful for everyone to start a new design
- Access can be limited only to CERN users

RADWLG 2011 - Objectives

IV. Knowledge exchange

- Forum within accelerator sector
- Invite PH/ESE expert
- Course on radiation damage given by Remi Gaillard – next date in March April 2011
- A mail will be sent to have the list of participants and their specific interests

V. Report from LHC monitoring

- FLUKA simulations
- RADMON (and others...) measurement data
- Continuous work on monitoring calibration

RADWIG 2011 - Objectives

VI. Link to R2E

- Strategy and priorities
- Concerns for the RADWIG members

VII. Reporting of failures

- Not easy to isolate radiation effects
- Effort to be done to react soon to the problem
- 'Patch solutions' are required ...
 - Equipment based on custom design
 - Commercial parts (PLC, or Ethernet switches)

RADWVG 2011 - Organization

- Chairman: G. Spiezia
- Scientific secretary: J. Mekki
- <http://radwg.web.cern.ch/RadVVG/> (Thanks Daniel!!!)
- Tests
 - CNRAD:
 - Organization: D. Kramer, J. Mekki, G. Spiezia
 - Technical infrastructure: J. Lendaro
 - H4IRRAD:
 - Organization: M. Calviani
 - Outside CERN- PSI, CEA or others:
 - Organization: G. Spiezia
 - Test preparation for PC design:
 - Shared effort TE/EPC and EN/STI
- Link to MCWG: M. Calviani
- Link to R2E: M. Brugger
- Update on failures: M. Brugger, M. Calviani, J. Mekki, G. Spiezia (through LHC 8h30 meeting), and yourselves ...

Coming soon ...

- PSI tests on February
 - Amplifiers (MAX9617 MAX410 ADA4899 LMH6551)
 - Memories calibration
- Test for March at PSI: NanoFIP?? TE/EPC??
- Tentative Agenda for next meeting
 - Date: February 15th
 - CNRAD preparation and further needs (mail to Daniel, Giovanni, and Julien Mekki)
 - Report on Fire detectors test at CNRAD
 - PSI reports