



Module qualification test software status

module test meeting
CERN,
CMS week, 11 June 2002



slow control (1):

Hv :

CAEN SY127 , serial controlled power supplies, dim

Bias current readout:

- By ADC (in principle CIO card but other ADC can also be used)

LV current measurement, module NTC ,readout,

Hardware ready, software integrated (with TSC I2C control)
(has still to be committed to CVS)

adaptation card between TSC and power control not available

Temperature, Humidity

- Tested already with AD590 (+CIO card), TRHX and remote readout



slow control(2):

Cold box ('s)

One Peltier working (already since 2000).

More independent peltiers should work

Vienna cold box (? Torino) small problems to control the power supply correctly. Solved by Torino group.

Other cold plants / cold boxes : a DIM socket implementation is fore seen.

data acquisition :

working fine , optimizing for speed

added back plane pulse test (with TSC)

light test implementation almost finished



Data base

Local data base

root based

keep track of almost all measurements.

analyzing macro's available

standard directory structure on the WWW to share results with others
- names, where to find what, see next page

Central data base interface

The tables (XML files with test results) can be generated directly from the program or generated from the local data base
under test now.

others should also start to use it.

Use it for the pre-production module to become familiar with the data base



calibration / data exchange

Data exchange what is needed !?

all setting files so it can be reproduced 1:1

Also the setup specific configuration files because these can contain important information like additional apv settings. Per module?

date of test , test run number

used macro's

summary files

Calibration

start to exchange the pre-production module . When?



To do

update documentation

user support / installation help

multiplexer for multi module operation. Now "only" multi module with extra FED channels.

Intensively testing with modules to see if the main purpose: "to qualify the modules and detect modules with none conformities" is achieved.

Finalize the draft module test to an official version!

adaptations for CERN cvs release?

hard to support two versions



Conclusion

The software provides the needed functionality for module qualification test and long term test and is already in use.

