Front end Hybrid Industrial Tester

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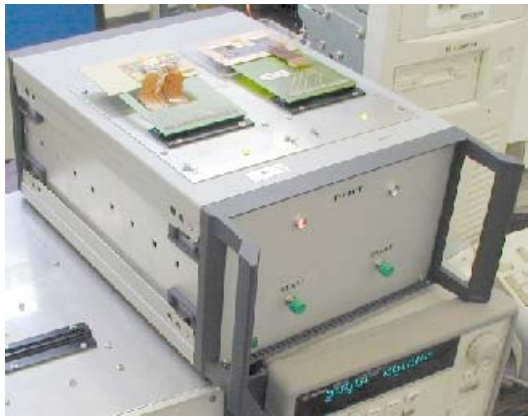


In collaboration with

RWTH Aachen (M. Axer, F. Beissel, T. Franke, J. Mnich)
IRES Strasbourg (JD. Berst, P. Graehling, P.Juillot, C. Maazouzi)

http://www.fynu.ucl.ac.be/themes/he/cms/activities/tracker/hybrids.html

List of problems

rather big ones…

- Current measurements ???

Solved

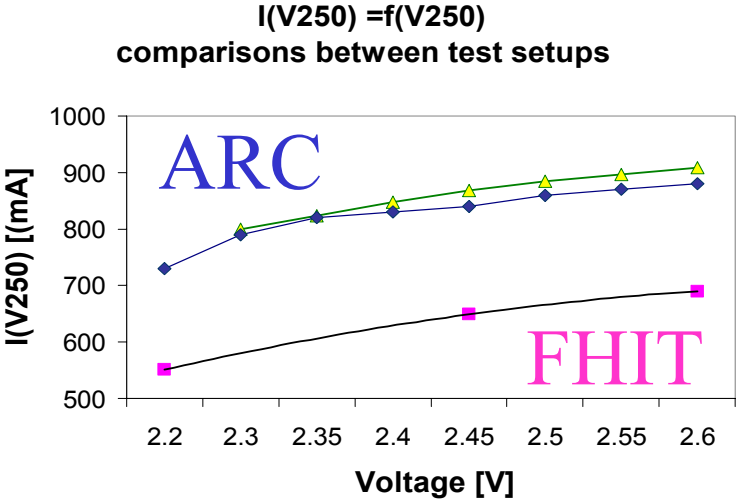
ERNI transition : info needed

Solved

How many FHIT are needed ?

Being solved

Noise test : not reproducible



fairly small ones…

Being solved

…ance intervals (on currents,…)

Being solved

New part numbers (as now TOB ≠ TEC)

Needs in FHIT

Proposal :

CERN	1 mono-FHIT
per Industry	2 dual-FHIT
Strasbourg	1 mono + 1 dual
Aachen	1 mono-FHIT
Other labs	0
+ Louvain + spare FHITs	…

ET : current measurements…

Proposal for acceptation intervals on currents…

(from statistics)

I_{125} one APV biased	V_{min}	[42 ; 78] mA
	V_{nom}	[48 ; 84] mA
	V_{max}	[52 ; 88] mA
I_{250} one APV biased	V_{min}	[220 ; 320] mA
	V_{nom}	[300 ; 400] mA
	V_{max}	[320 ; 420] mA

FROM Statistics on FHIT measurement

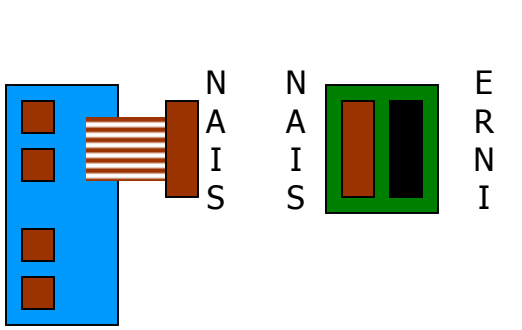
… acceptation intervals

I_{125} all APV biased	V_{min}	[ ] mA
	V_{nom}	[
	V	] mA
I_{250} all APV bia		[ ] mA
	V_{nom}	[ ] mA
	V_{max}	[ ] mA

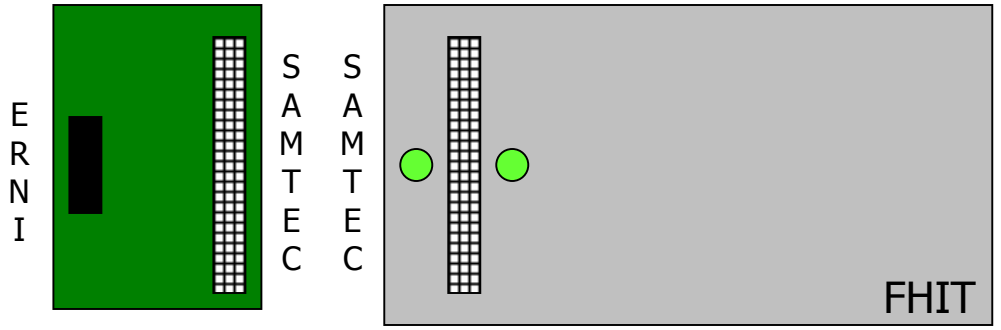
FROM Statistics on FHIT measurement

→ Remind that FHIT measurement on currents are *not the same as the ones from other test stations* (*P Graehling*)

Test procedure



To be tested



Test setup

@ Industry

- Naked hybrids (w/o APVs)
- Hybrids

@ CERN

- Before bonding pitch adapter → LINK to DB (XML)

Next weeks…

Software refinements

(Compatibility with ERNI, new part numbers)

… and FHIT can be sent to industries…

XML translation

Hybrid emulator