



Status of Tracker Power supply electronics

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Summary

- DC-DC converters
 - Linear regulator boards (TBS and TPSFE)
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Tracker, TRD and others I

- 9 samples S9048
 - 40 samples S9051
 - 22 samples S9053
 - 4 samples S9053U
 - 10 samples S9054
 - 20 samples S9055
 - 11 samples S9056
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Tracker, TRD and others II

Converter type	Total number	ESS test passed	Passed functional (no ESS)	Broken not fixed	Broken, fixed and passed ESS	NCR
S9048	9	8	0	1	1	1+2
S9051	40	10	25	5	1	6
S9053	22	17	0	5	0	5
S9053U	4	4	0	0	0	0
S9054	10	8	0	2	0	2
S9055	20	0	19	1	1	1+2
S9056	11	10	1	0	1	1
Total	116	57	45	14	4	20

Tracker, TRD and others III

- Errors
 - Error in documents: 2
 - Broken components: 6
 - Wrong mounting: 4
 - Mechanical and electrical failures: 2
 - Unknown: 7
 - 3 boards (2 S9053, 1 S9051) returned from CAEN.
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Overall situation

- TBS

Overall situation

■ TBS

- 20 / 20 boards are waiting to be re-worked: New Actels need to be burned and *mounted on board*.

■ TPSFE

- 28 / 40 boards are waiting to be reworked:
 - New Actels need to be burned and *mounted on board*.
 - C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16 must be *replaced and mounted up/down*.
 - 12 / 40 boards need to be assembled from scratch: *It is needed to take into account i) and ii)*
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Forthcoming steps

- Presently the EMI/EMC tests is performed in Terni on the QM2 electronics (TPD+T-crate)
 - New Actels will be burned at CERN and sent to CSIST
 - New capacitors (about 350) TSMD CWR11 2.2UF 10V 10% SIZE A need to be sent to CSIST
 - CSIST will go ahead with FM/FS production once the material will arrive to them
 - After all the PCAs on the 40 TPSFE + 20 TBS will be finished, functional tests will be performed by Lucio at board level
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