Ideas on the Slow Control User Interface of the ONSEN system

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Overview

- GUI for the ONSEN system structured in 6 layers

- state overview
  → shows the actual state the ONSEN system is in

- system overview
  → gives a graphical scheme of the whole system divided in carrier board units

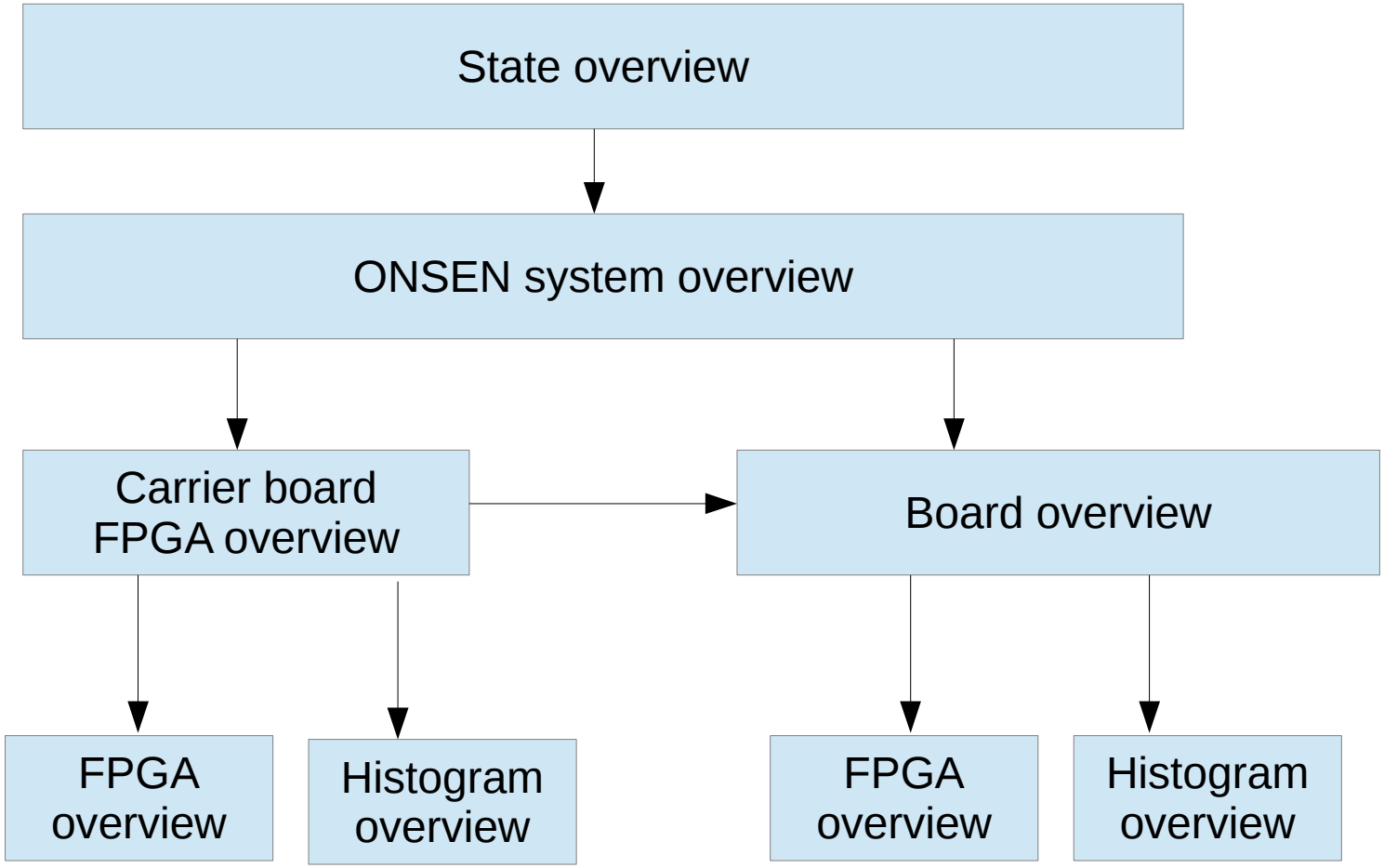
- carrier board FPGA overview
  → show important values of each carrier board FPGA (switch FPGA)

- board overview
  → display important values and plots for each board

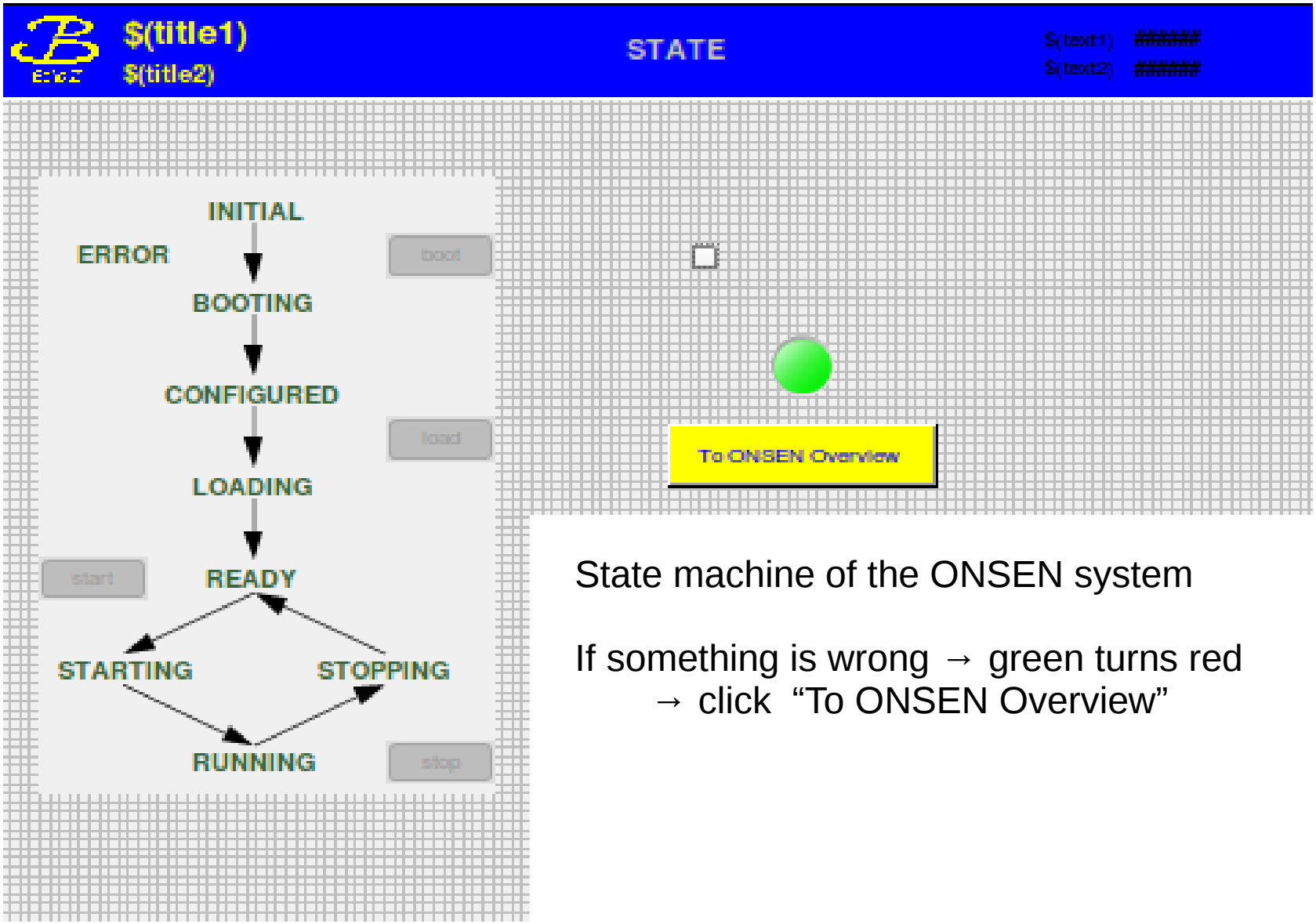
- histogram overview
  → here the histograms of the boards will be shown

- FPGA connection overview of the cores on each node

structure


State overview
ONSEN system overview
Carrier board
FPGA overview
Board overview
FPGA
overview
Histogram
overview
FPGA
overview
Histogram
overview

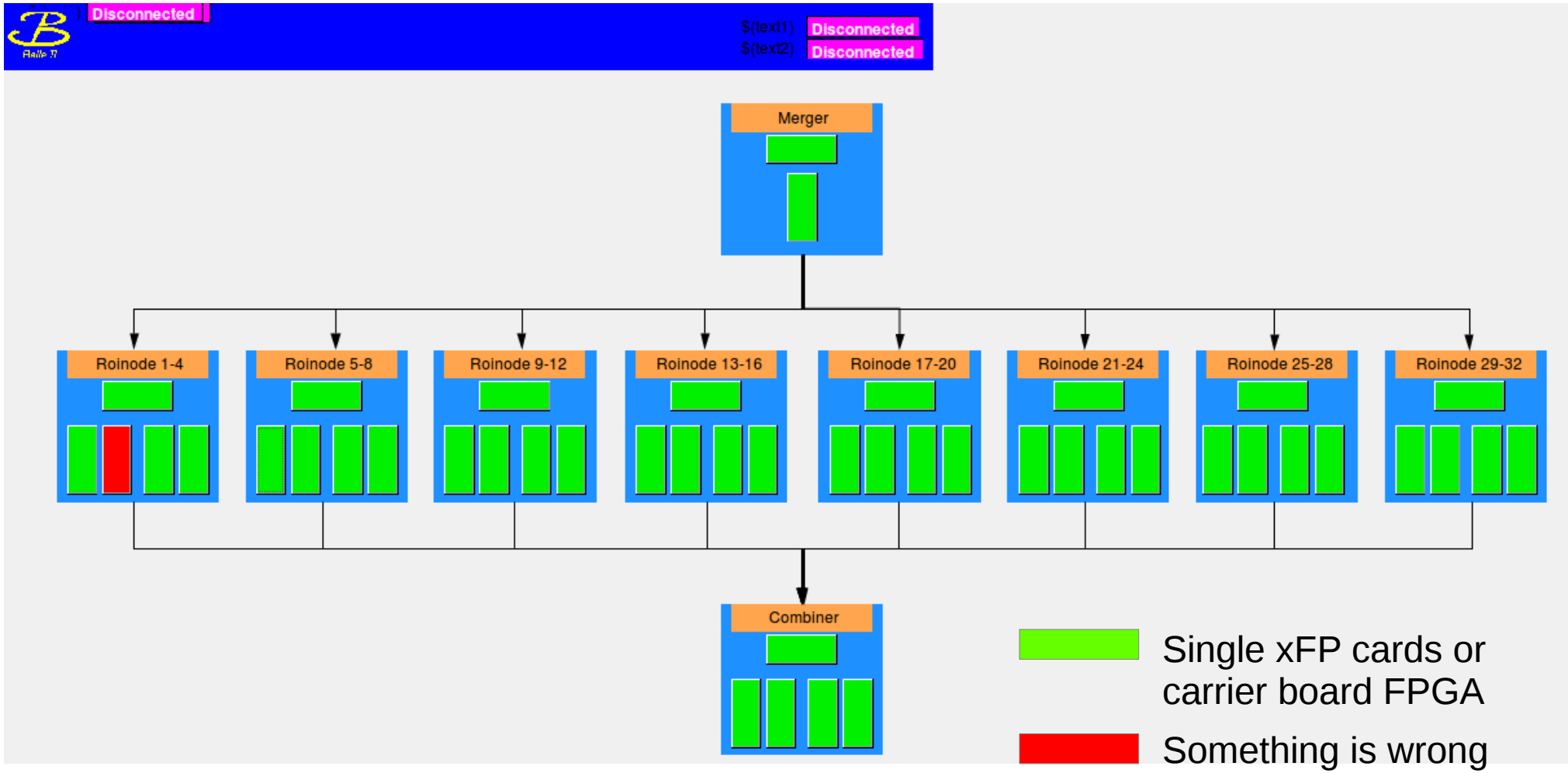
State overview



State machine of the ONSEN system

If something is wrong → green turns red
→ click “To ONSEN Overview”

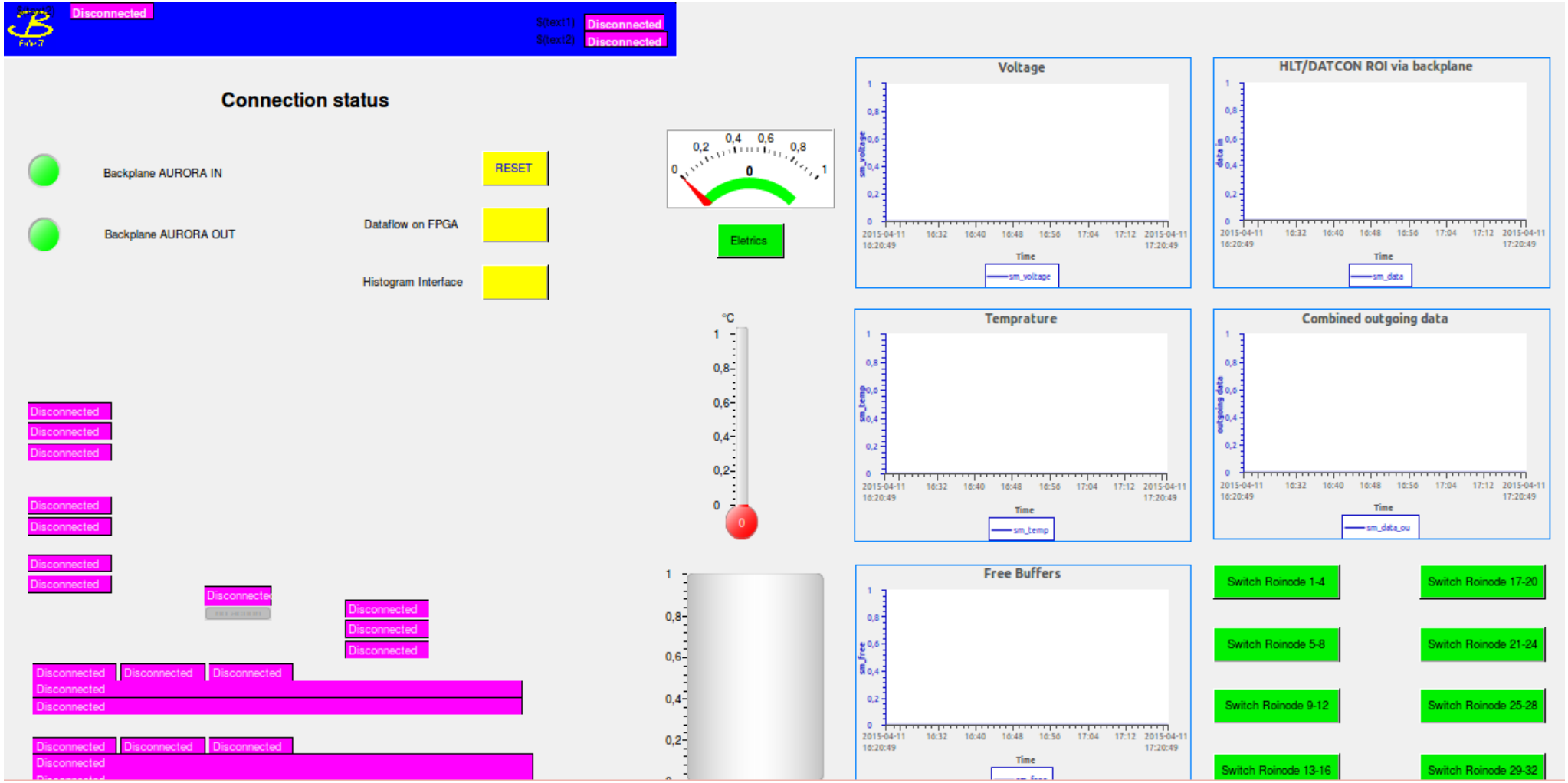
ONSEN system overview



All green, red and light orange boxes are action buttons

→ click to zoom in for a detailed view of each component

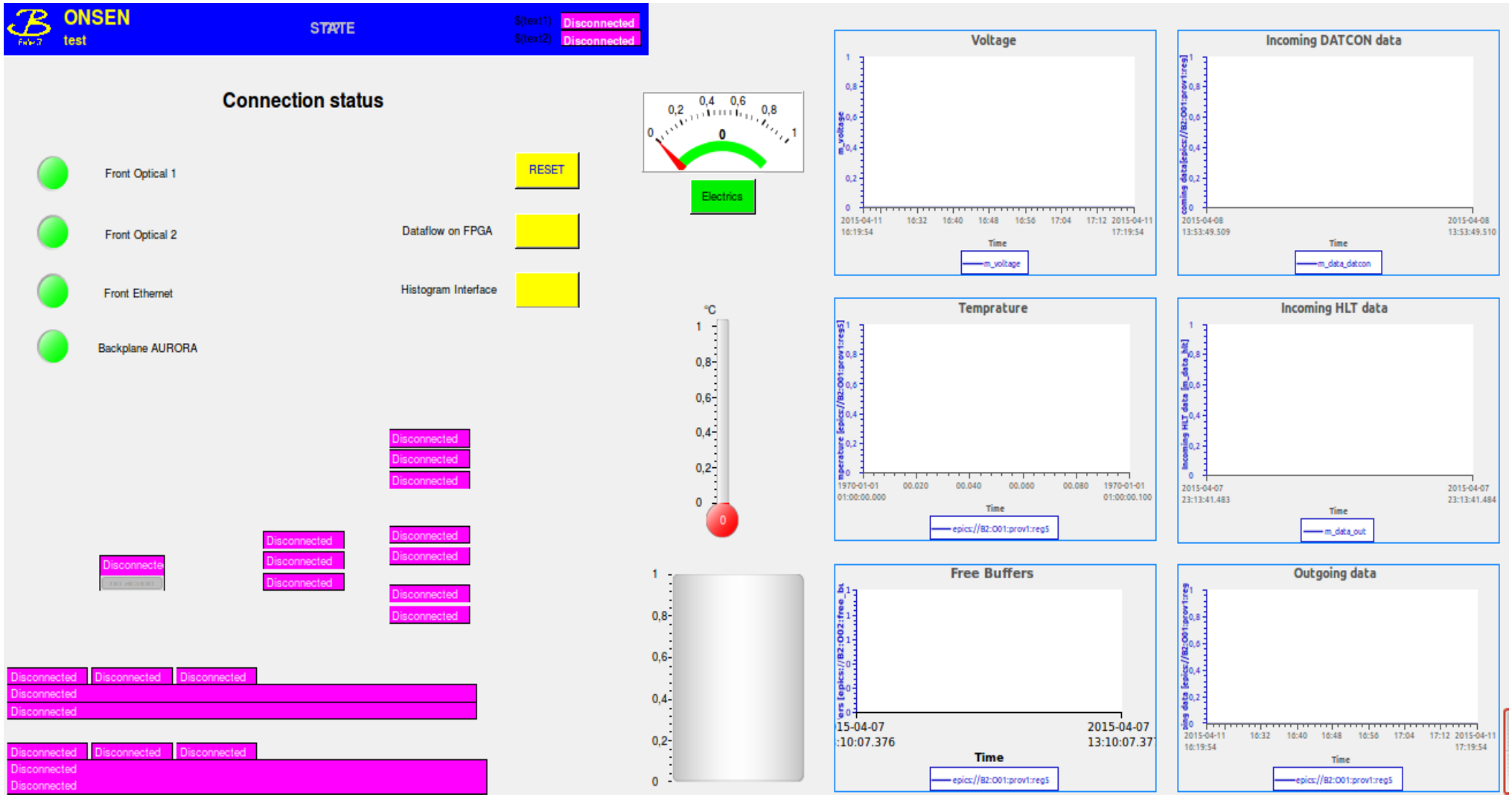
Carrier board FPGA (merger)



Green rectangles on the right show the connection status of each roinode-carrier pipe.

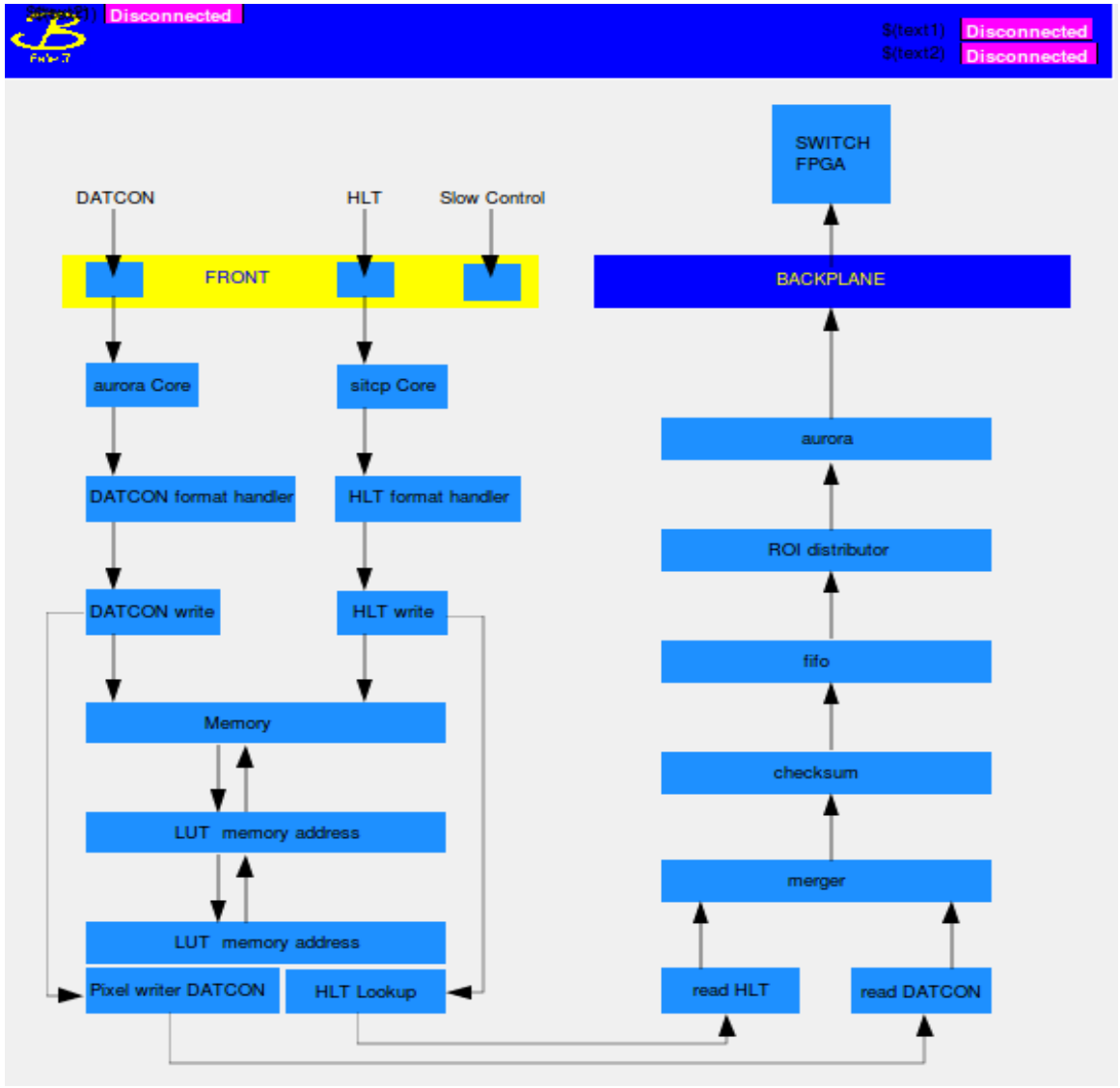
→ if something is wrong it gets red

Board overview (merger)



Some important plots and parameters of each board are displayed.

FPGA overview (merger)



Shows the data flow on each FPGA.

Histogram overview (merger switch)

Histograms of the switcher FPGA on merger carrier board.