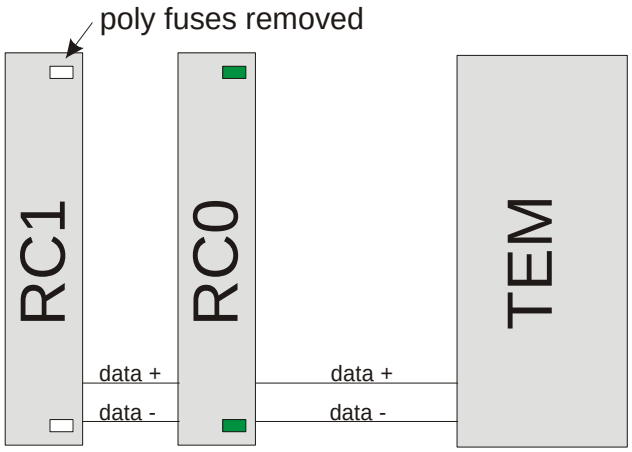
Functionality test of a MCM board with a removed poly fuse

On one MCM board both poly fuses were removed from the DVDD 2.5V line

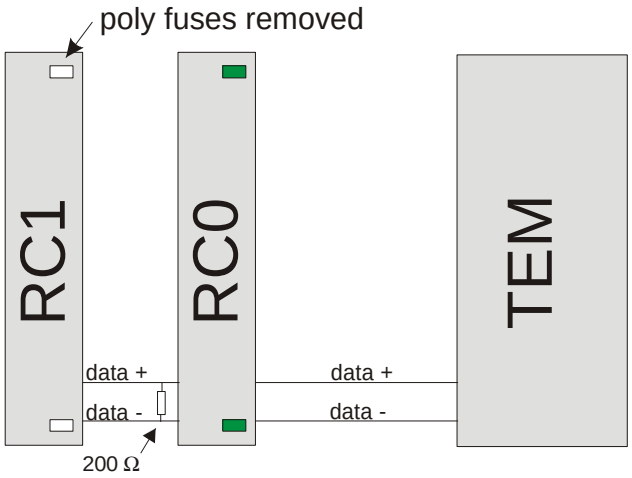


It was now checked, weather the MCM board RC0 could still be read out. Weather the board RC0 could still be read out or not depended on the way, the TEM was shut down after the previous measurement.

Shut down procedure:
Press the "TEM power down" button in Run Control -> Turn the 28V power supply off
Now the board RC0 can't be read out. The levels on the data lines between the MCM boards were as following: data- 840mV, data+ 776mV

Shut down procedure:
Just turn the 28V power supply off
Now the board RC0 can be read out. The levels on the data lines between the MCM boards were al following: data- 760mV, data+ 864mV

Now a 200 Ohm resistor was connected between the data- and data+ line.

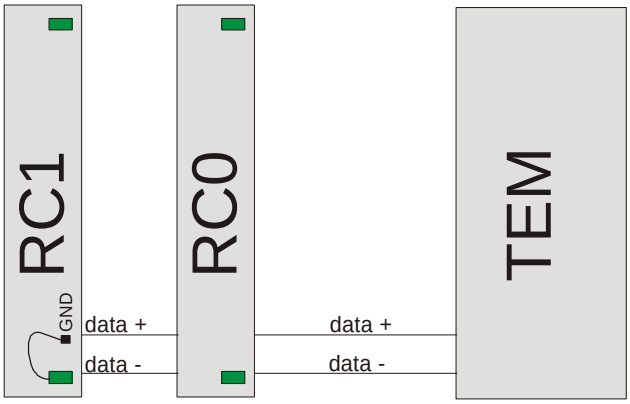


Board RC0 could always be read out, no matter how the TEM was powered down before.

With a DVM the voltage on the DVDD 2.5 line on the MCM board RC1 was measured. This line was now at 1.5V.

Functionality test of a MCM board with a shortened poly fuse

The DVDD 2.5 line of MCM board RC1 was shortened to ground of the MCM board. The poly fuses were soldered back to the MCM board.



Board RC0 could always be read out, no matter how the TEM was powered down before.

When shorting one side of the poly fuse to the ground, the current on the 28V power supply went up from 0.54A to 0.85A. The currents measured by the TEM on the DVDD and AVDD lines went up from 0.25A to 1.8A.