Overview

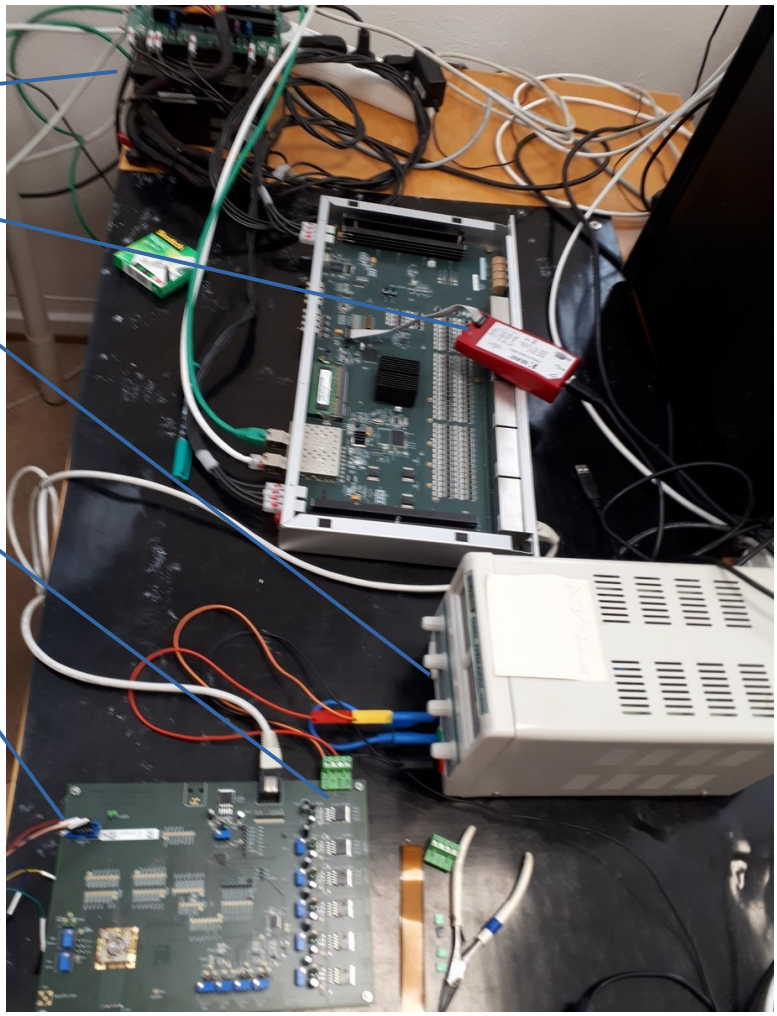
SRU power supply

Xilinx programmer

ProtoMCM power supply

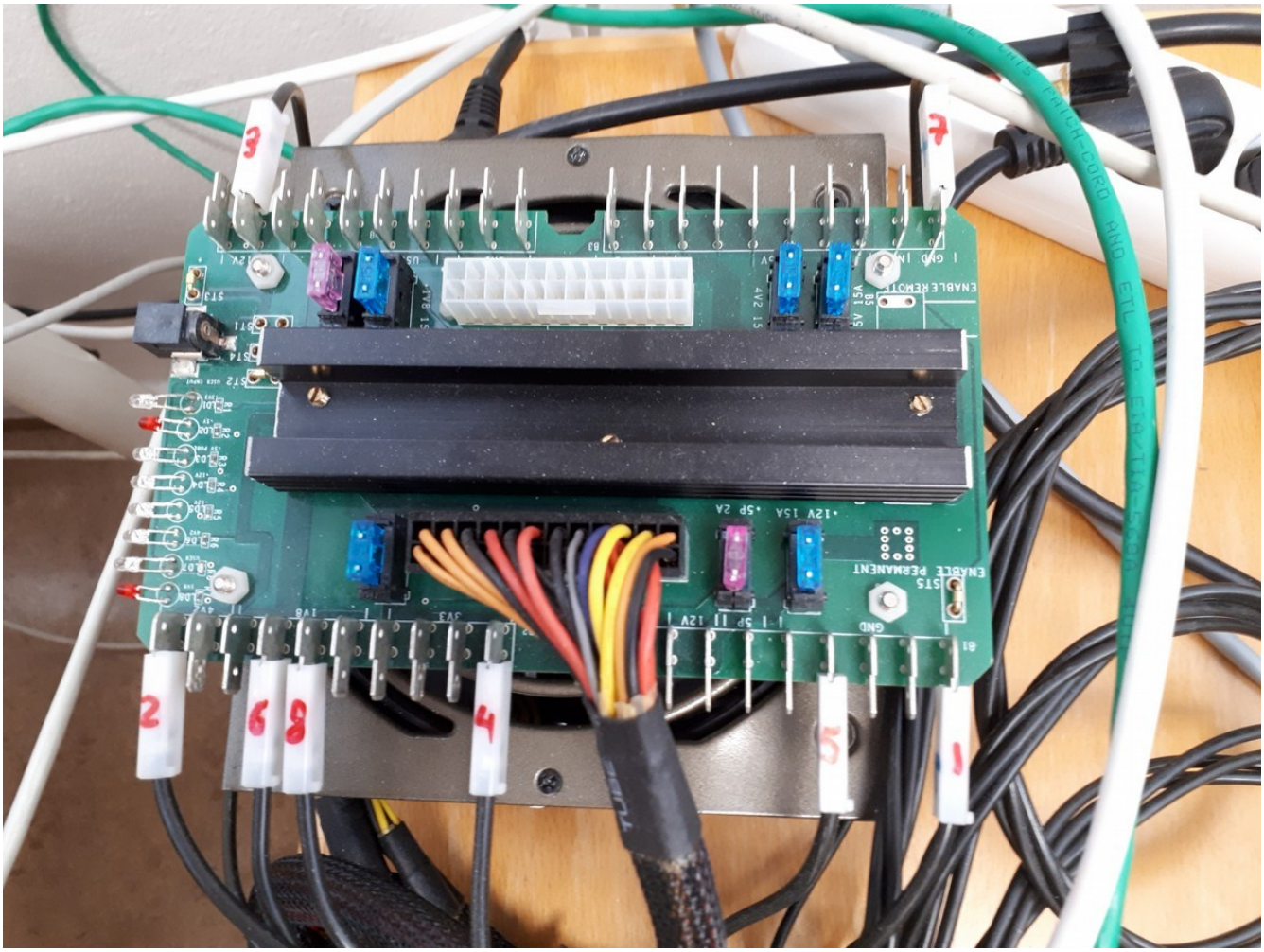
ProtoMCM

CPLD programmer



SRU Power Supply

There are eight power/ground lines as marked on the cabling at the power supply:
1 : GND
2 : 4V2
3 : - 12
4 : 3V3
5 : GND
6 : 1V8
7 : GND
8 : 1V8



SRU Power

The power connectors as seen from the back of the SRU. Cable connectors are numbered 1-8 as on the power supply.

The corresponding power/ground is is also written below the connectors:

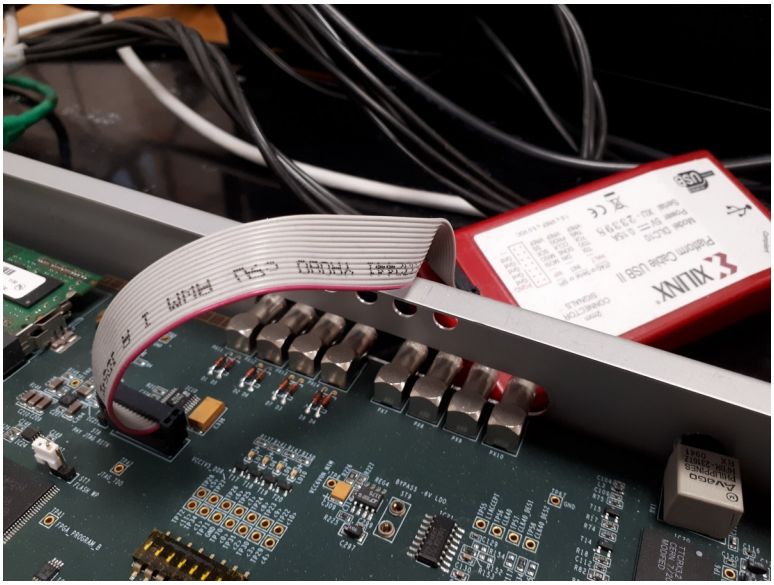
Before power on check that numberings and power/ground are consistent. Have been checked but one never know.

SRU network connectors

Tow connectors are used:
SFP1 : 1 Gps trigger/control, IP number 192.168.4.4 (answer on ping)
SFP3 : 1 Gps Read out (data), IP number 192.168.4.5 (do not answer on ping)

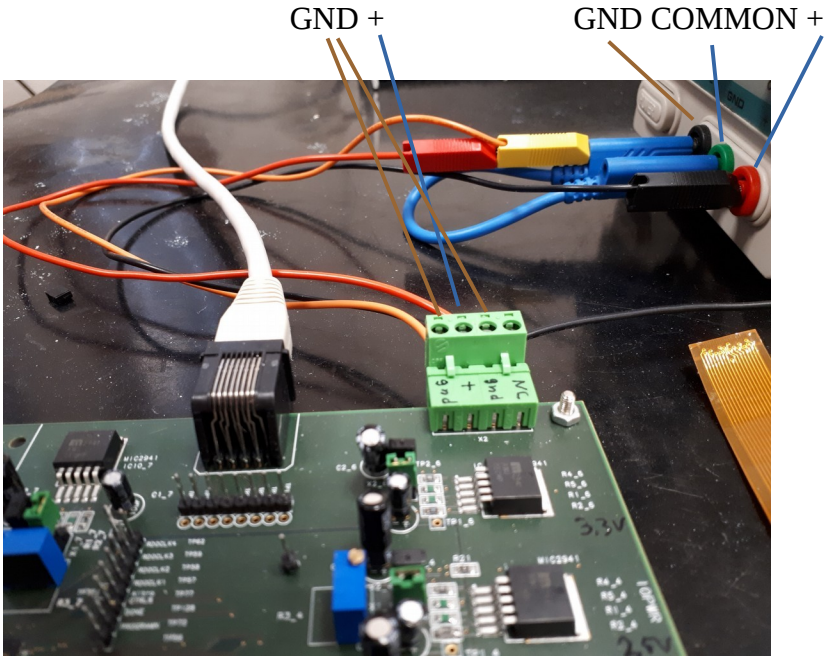
SRU Xlininx programmer

We have: Platform Cable USB II. Model DLC10. Power 5V 0.15 A. Serial number XU 23398.



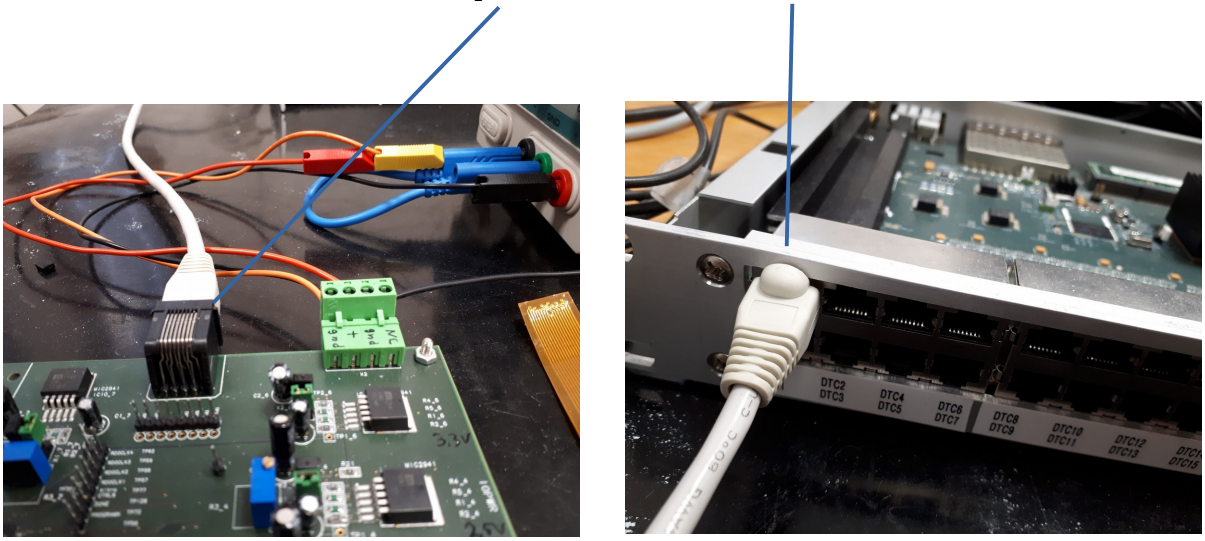
ProtoMCM power

It needs 4.0V on power supply. Regulators will it bring it down to proper voltages on the card. The current when everything is setup at 20Mhz sampling frequency: 0.47A. After power up not yet configured from SRU will it be roughly 0.3A depending in the state it starts up.



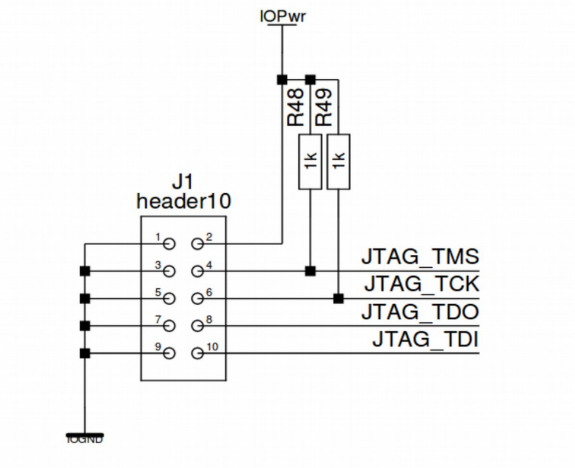
DTC (Data Trigger Control) Connection between SRU and protoMCM

Network cable between connector on protoMCM and slot DTC0 on SRU.

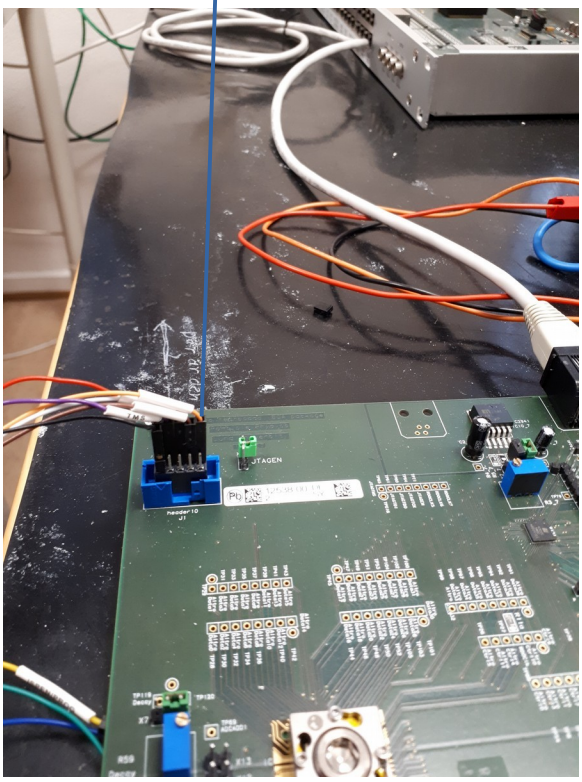


CPLD programmer

JTAG programmer: Lattice HW-USB2N-2A
The connector on the protoMCM has the numbering:

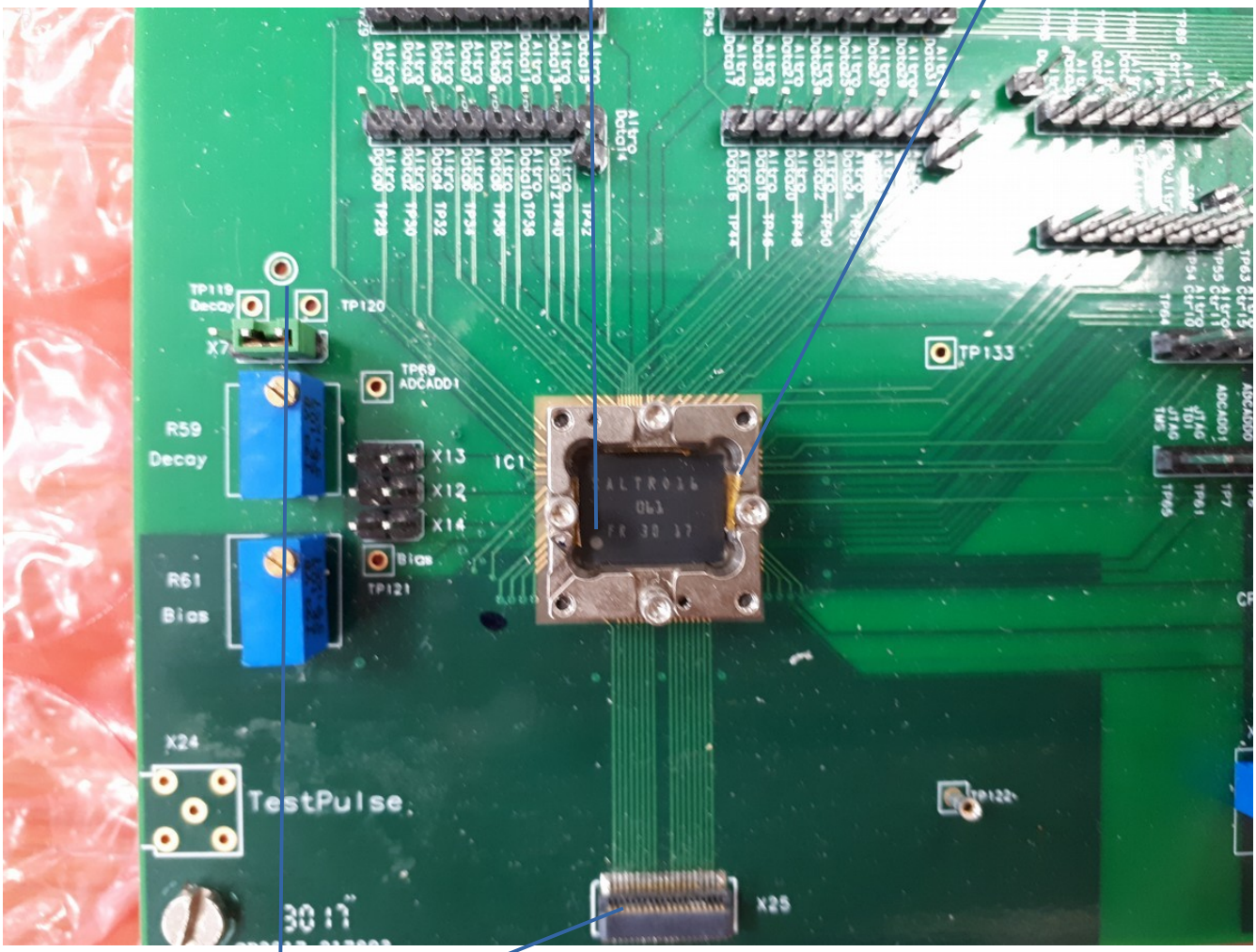


To the card do we have a connector onto which the individual signals are connectedfor the ease of insterting/removing the the individual cables: (each individual cable is labled).



Chip insertion

The chip is to be inserted in the testsocket as shown in the picture below. The capton tapes are there for the chip to better fit in the socket.



One can check that there is connection by measuring the protection diode on the input to the preamplifier, connector X25. Use a multimeter with diodemeasure function, with common ('-') to the input and V ('+') to ground. This should give a value of 0.8.
The card is delivered with chip 62 in the testsocket. One extra chip (nr 61, 30 17) is shipped in a bag.