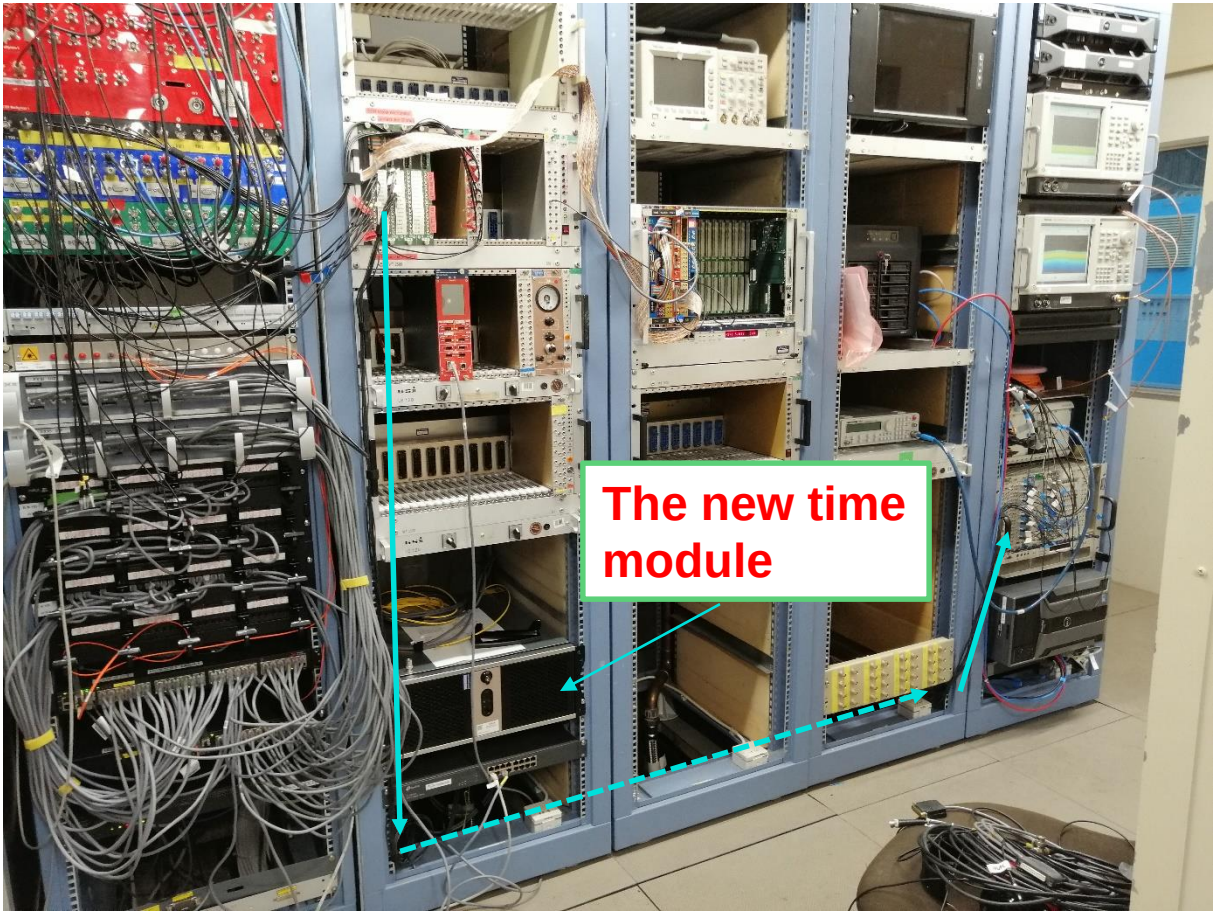
6. Scaler list

Total 8 channels of scaler signal are sent to NTCAP scaler. The table show the signal map of 8 scaler signal.

NTCAP scaler	
ch.	**value**
0	External pulse clock
1	DC trafo
2	injection
3	U-cooler
4	I-cooler
5	P-Gun
6	100kHz internal clock
7	20MHz internal clock
8	P-Coll
9	Jet S1
10	Jet S2
11	injection(from time module)
12	
13	
14	100kHz internal clock
15	20MHz internal clock

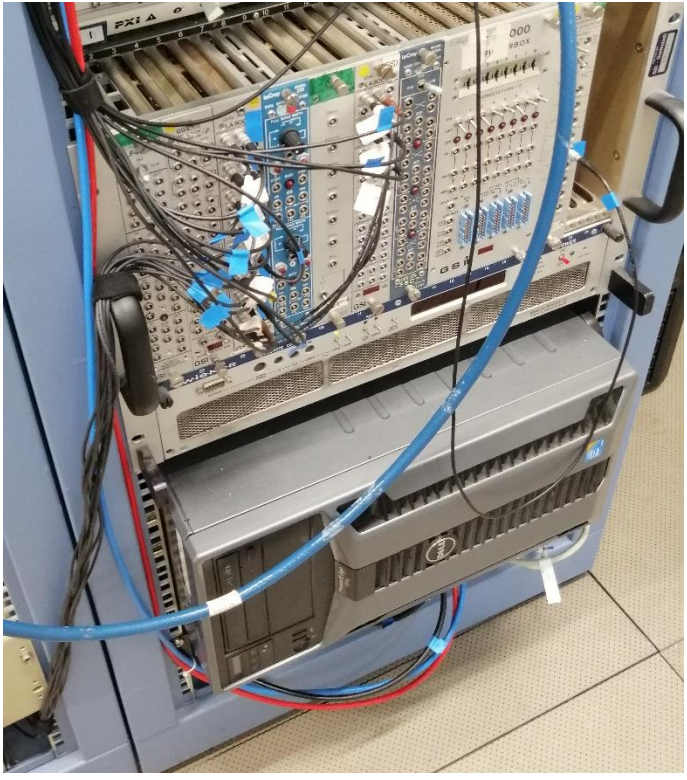
The new injection signal is from the time module at ESR. The new time module provide precise time of the kicker signal.

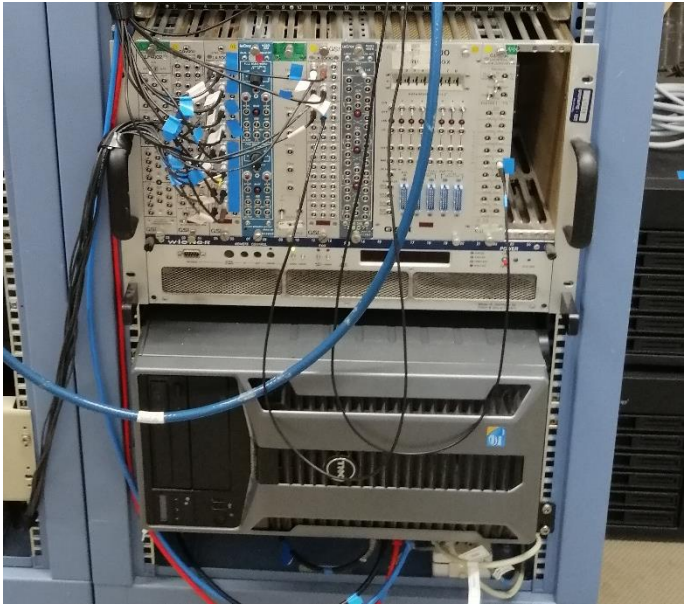
6. Scaler list



6. Scaler list

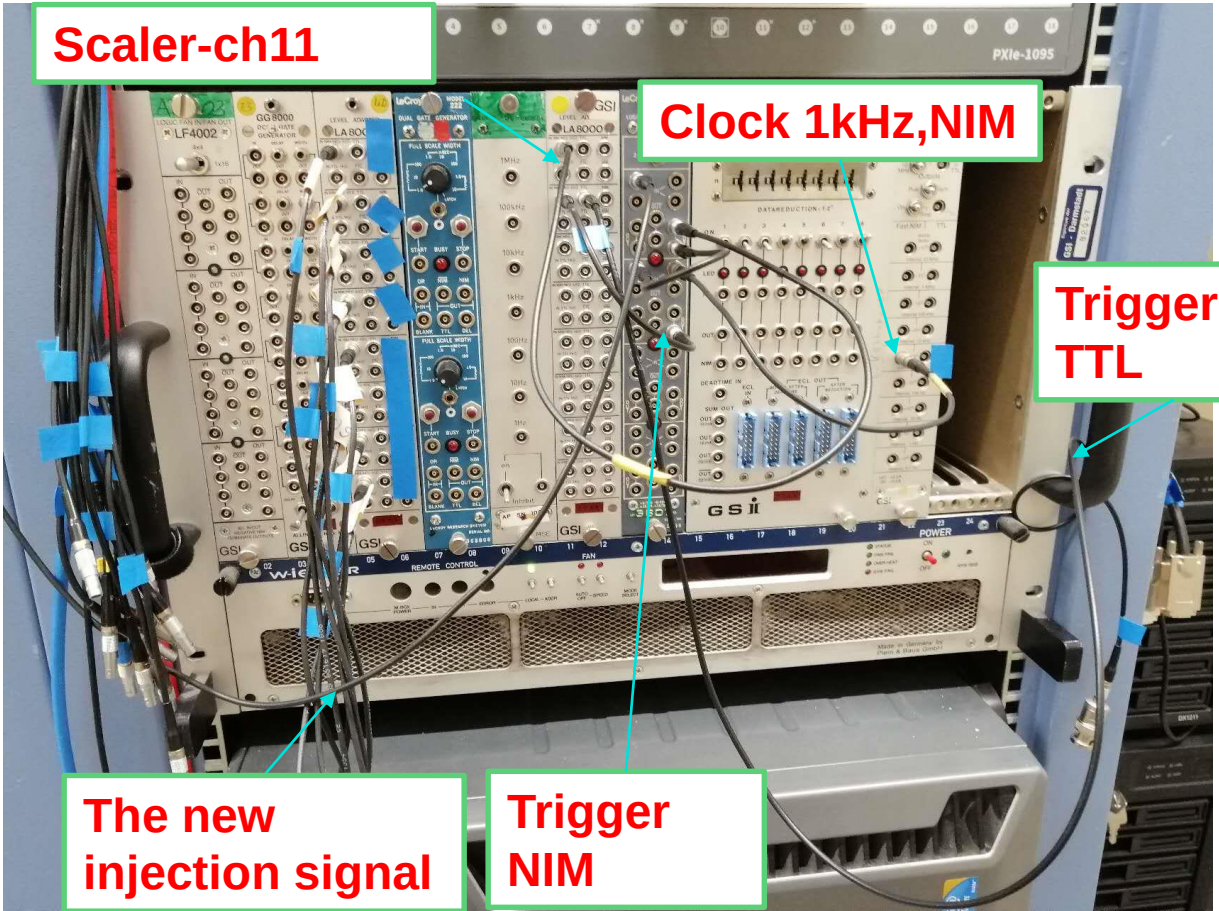
Photos before NTCAP power supply was damaged.





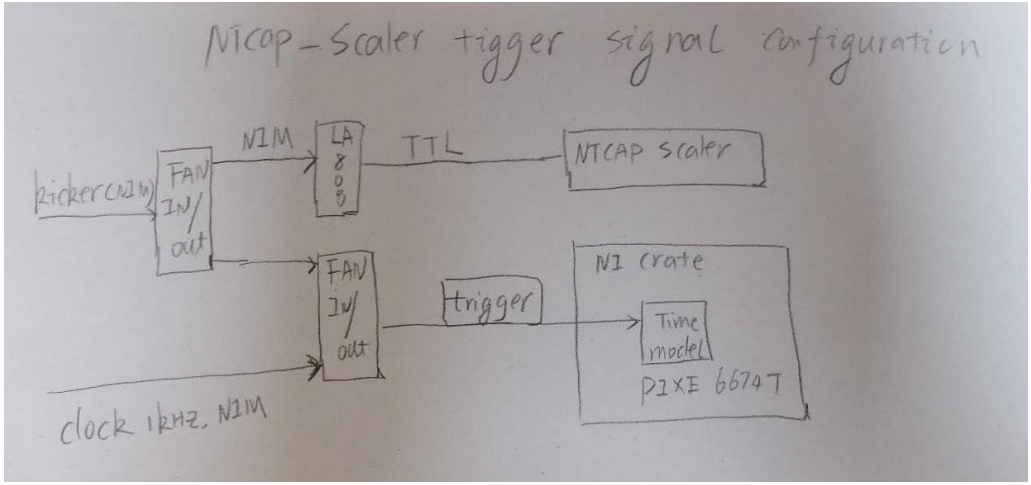
6. Scaler tirgger configuration

Photos after NTCAP power supply was damaged.



6. Scaler tirgger configuration

Photos after NTCAP power supply was damaged.



Scaler trigger configuration. We use the precise kicker signal generated by the new timing module. We split this signal into two paths: one is directly sent to the scaler channel 11 of NTCAP. The other path is combined with the Clock signal using a logical OR operation, then converted into a TTL signal, and sent to the trigger channel of the NTCAP.