Faul Tolerant Local and Monitoring Control Board

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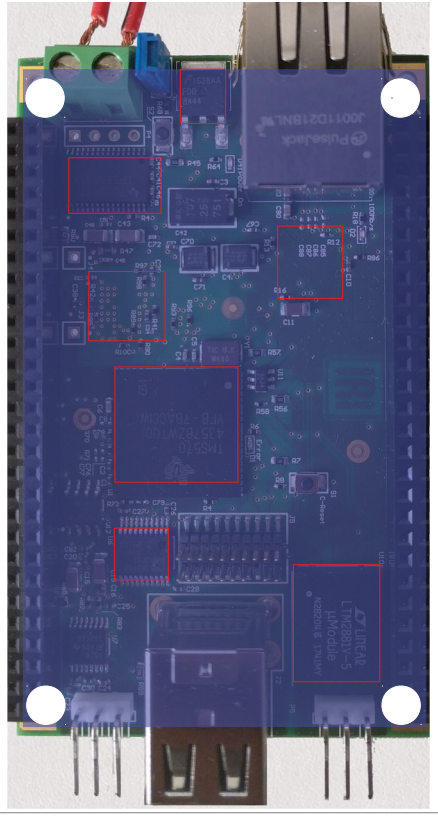
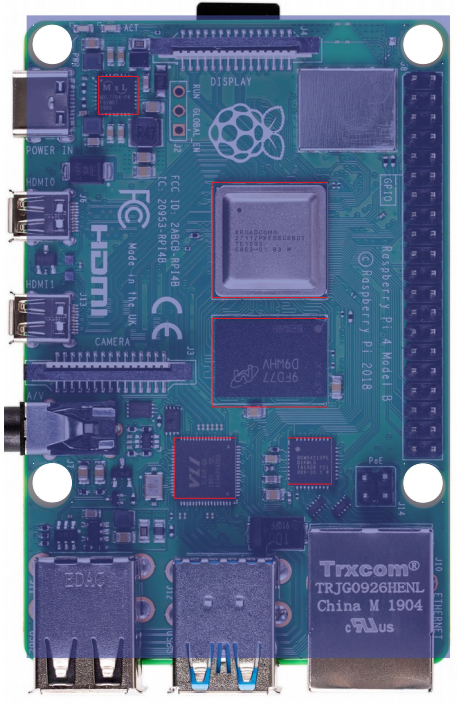
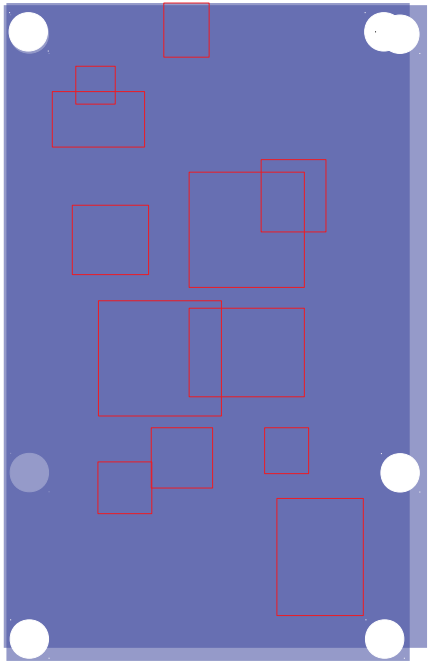
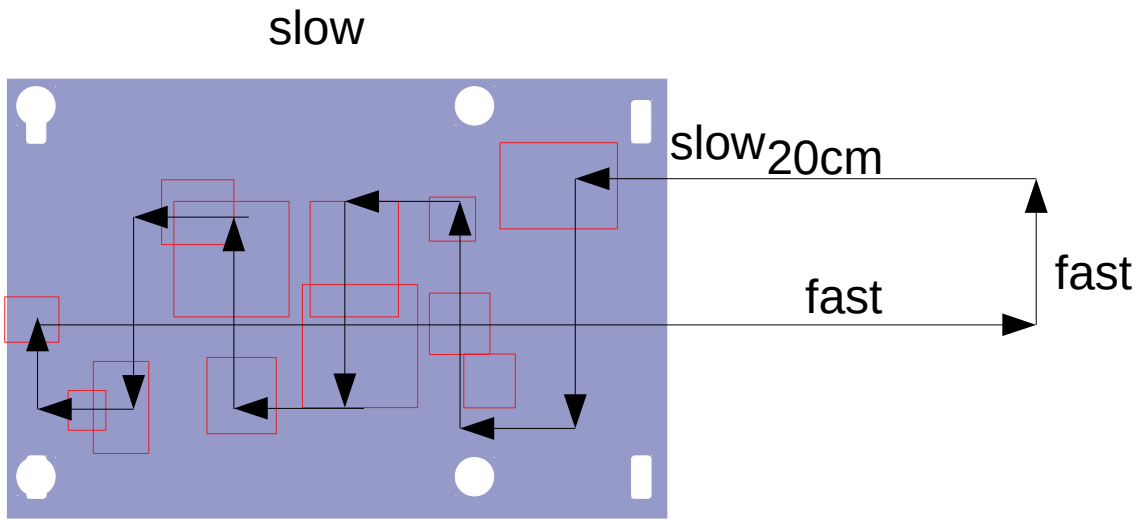
RECAP




DISPLAY
POWER IN
HDMI0
HDMI1
CAMERA
Trxcom®
TRJG0926HENL
China M 1904



Beamtime Positioning frame



Beamtime Positioning frame

- Fast: ~7.8 mm/s vertical, ~11.7mm/s horizontal
- Slow: ~0.13 mm/s vertical, ~0.2 mm/s horizontal

```
hetSIGNAL_t vSequence[]={slow, slow, fast, slow, fast, fast, slow, fast, fast, slow };
int hormm[] =           {-24,     0,  -16,    0,    6,    0,    0,  -23,    0,   0};
int vermm[] =           {  0,    24,    0,  -24,    0,   -5,  -24,    0,   18,   24};
```

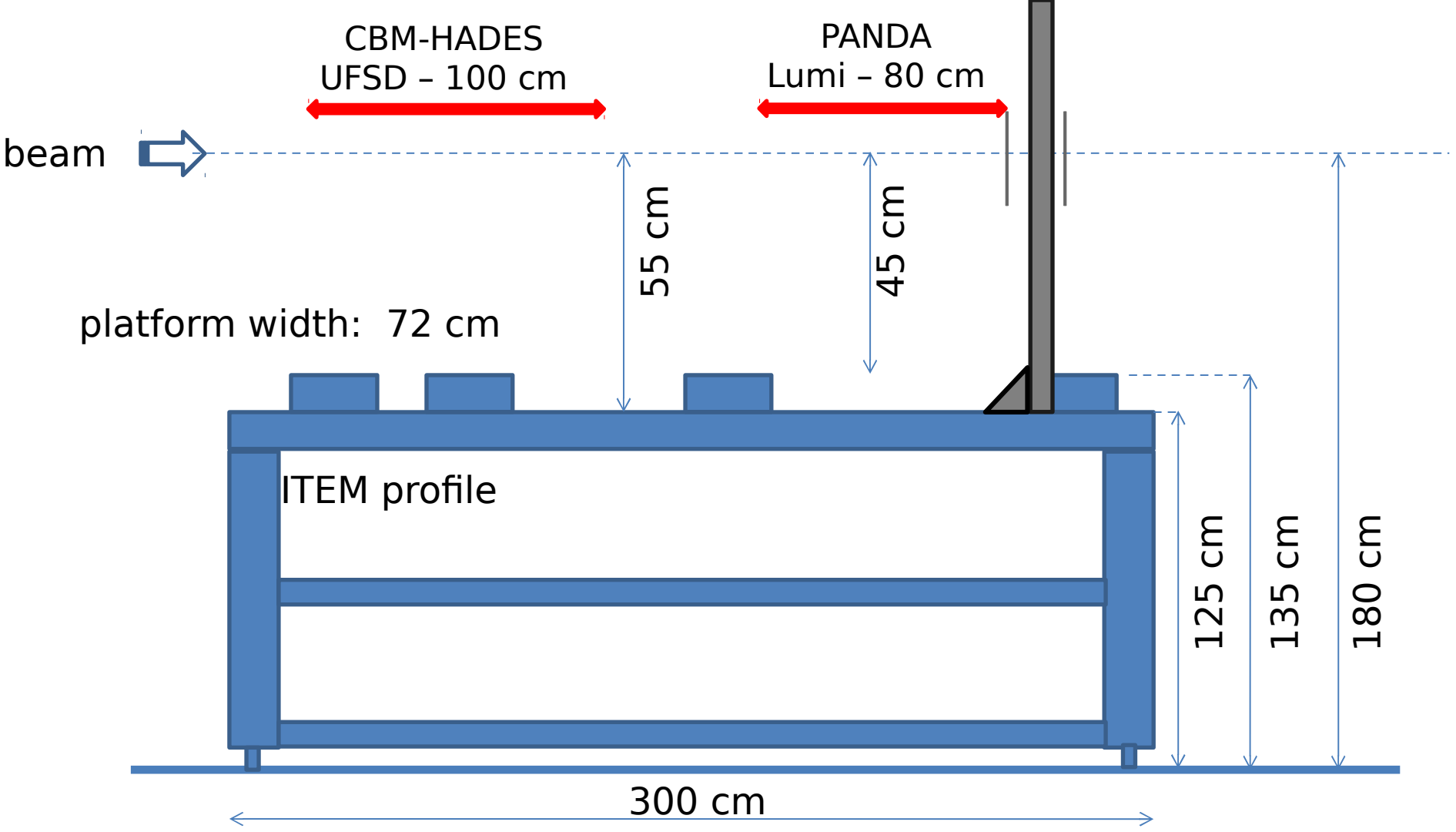
- Controlled by a non-DUT FTLMC far from beam
  - Not EPICS, should be integrated with sequencer to know exact position
- Watch demo video

Voltage Surveillance

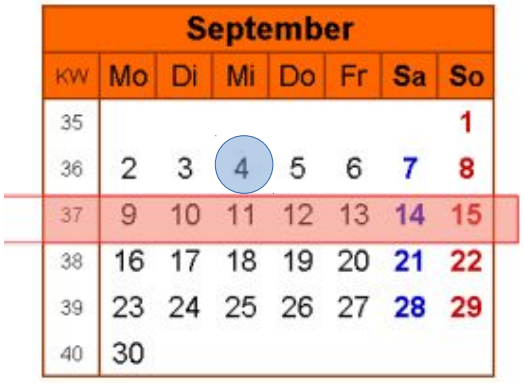
- Use the 5 ADC available on a non DUT FTLMC (0-5V)
  - 2 for Raspberry 5V and 3.3V
  - 3 for FTLMC: 5V,3.3V and 1.2V
- 0-5V, Vref(-) is an input (DUTs GND), vref(+) is at local 5V
- Use an EPICS Analog input record for each
- Scan period: 1 Second
- Already implemented and tested

Other interfaces test

- RS485,RS232 to send continuous strings (to be done)
- Ethernet send continuous TCP binary data (to be done)


CBM-HADES
UFSD – 100 cm
PANDA
Lumi – 80 cm
beam
55 cm
45 cm
platform width: 72 cm
ITEM profile
125 cm
135 cm
180 cm
300 cm

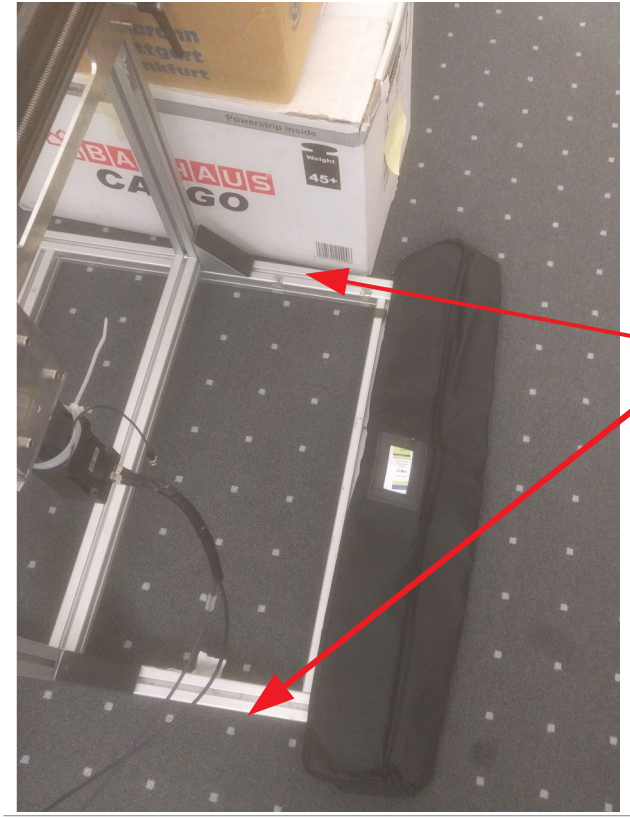
Notes on beam-time



September							
KW	Mo	Di	Mi	Do	Fr	Sa	So
35							1
36	2	3	4	5	6	7	8
37	9	10	11	12	13	14	15
38	16	17	18	19	20	21	22
39	23	24	25	26	27	28	29
40	30						

- Item24 Profiles: Allows us to use only ~ 40 cm of z axis space
- motor mobility:
  - Y: 10cm, fixed height frame adjustable
  - X: 58cm.

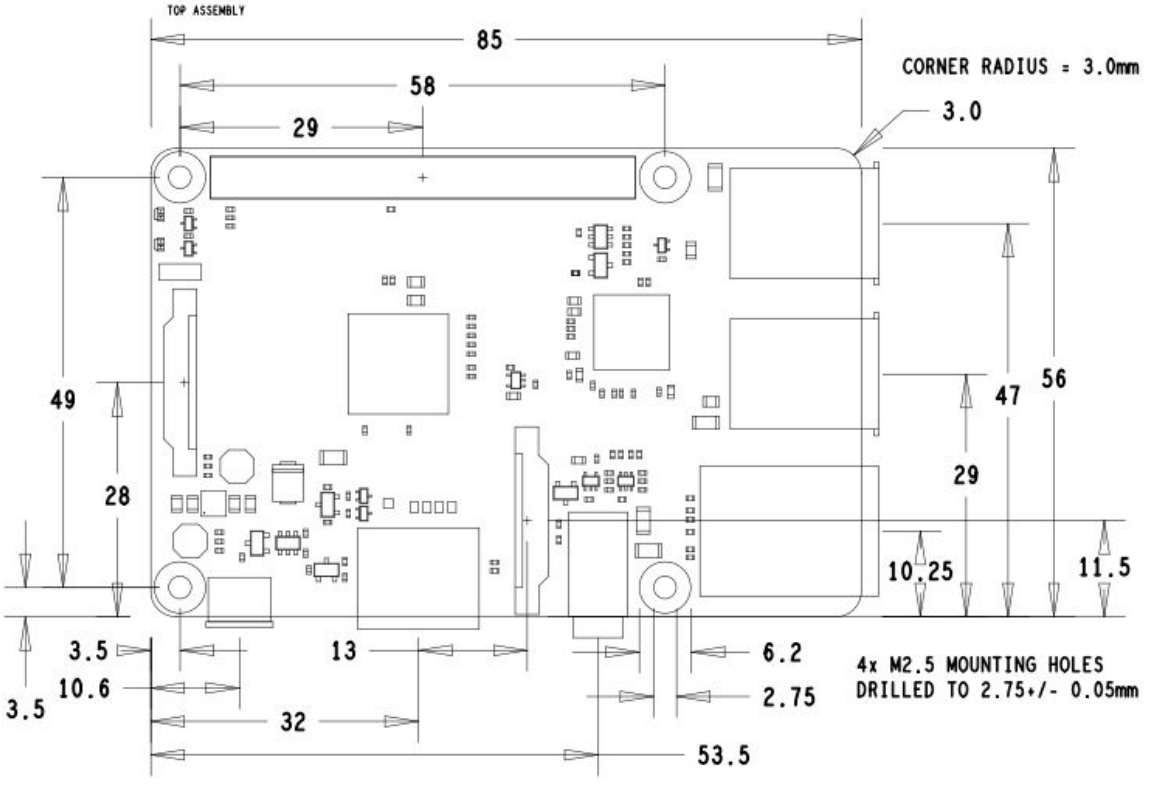
Notes on beam-time



- Height poles too long >1m
- Platform- Beam distance sketch 55cm
- Take only the base (longest, 72 cm)
- Use two of them as height poles
- Fits in the bag pictured
- Sufficient for beam height

Thank you!

Thank you!


TOP ASSEMBLY
85
58
29
CORNER RADIUS = 3.0mm
3.0
49
28
47
56
29
10.25
11.5
3.5
10.6
3.5
13
6.2
2.75
32
53.5
4x M2.5 MOUNTING HOLES
DRILLED TO 2.75+/- 0.05mm