

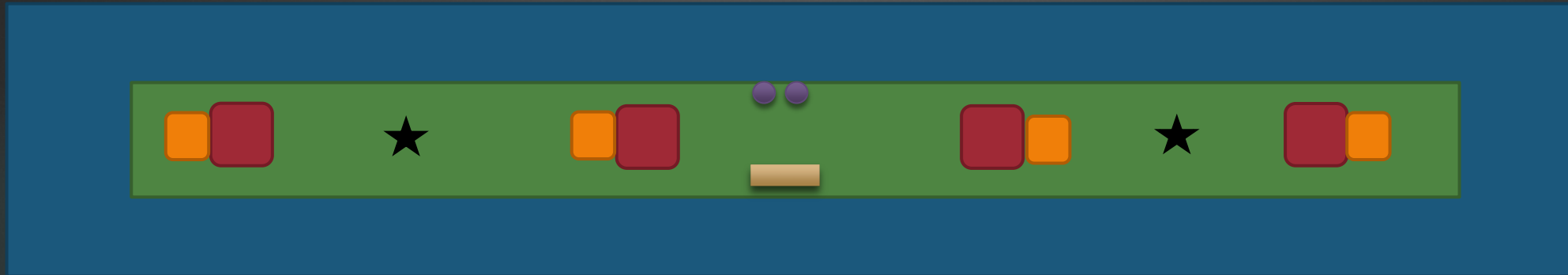
■ 4 SiPM Hamamatsu S14160-3050HS (3.0x3.0mm² – 50umcell) Low Z – TSV Technology - HV 40-41V

■ 4 SiPM Hamamatsu S14160-1315PE (1.3x1.3 mm² – 15um cell) High Z - HV 42-43V

● 2 LED for calibration

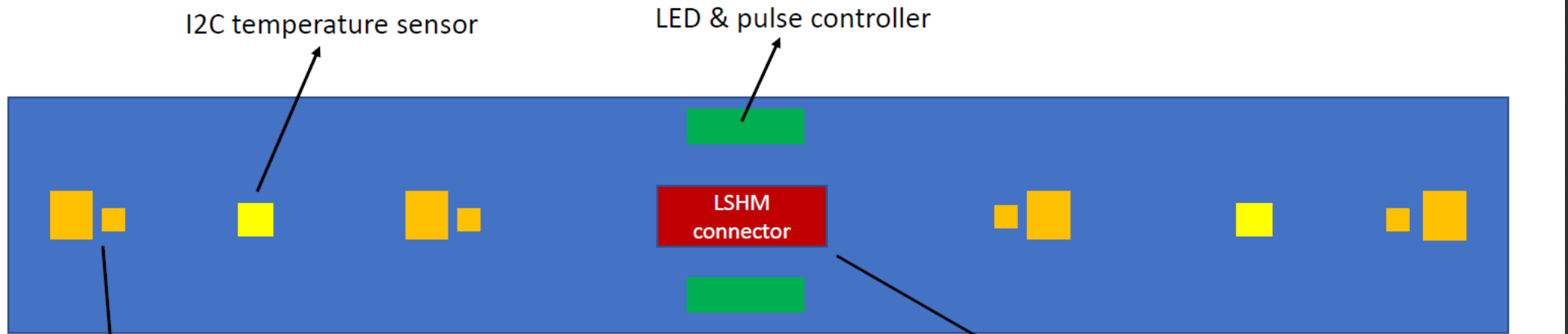
★ 2 Temperature sensors

■ [LSHM-S](#) SAMTEC Connector (20 coaxial cables)



The two LEDs should be controlled by the FEB for calibration and functionality checks
The two temperature sensors will provide a digital signal as they will be fed into the FPGA on the FEB for active control of HV Power Supply

SiPM Board



SiPM couple:

- 3 mm x 3 mm
- 1 mm x 1 mm

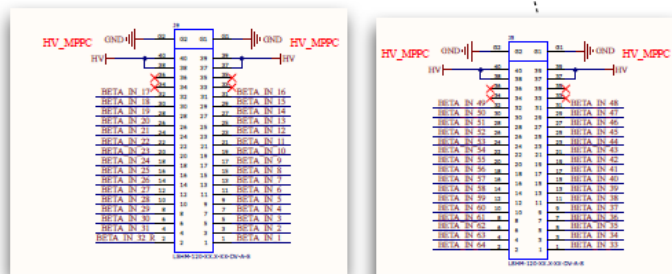
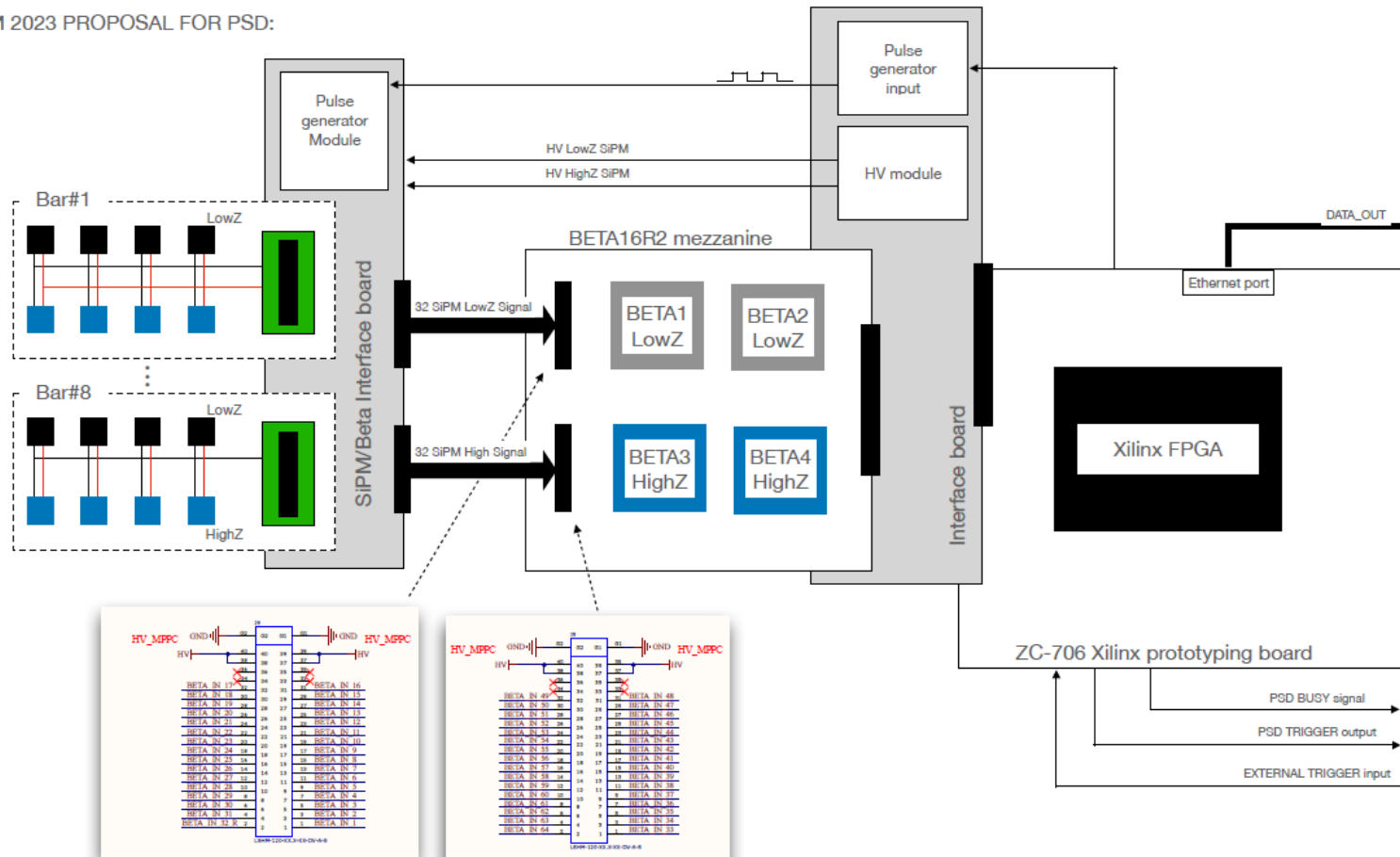
LSHM signals:

- I2C bus: SDA & SCL
- LED pulse controller
 - LVDS couple for LED1
 - LVDS couple for LED2
 - VREF1 & VREF2
- SiPM
 - 8 SiPM outputs
 - 2 HV: HV1 & HV2
- VDD for powering

LSHM connector to interface board 01

INFN Bari – F.Licciulli

TEST BEAM 2023 PROPOSAL FOR PSD:

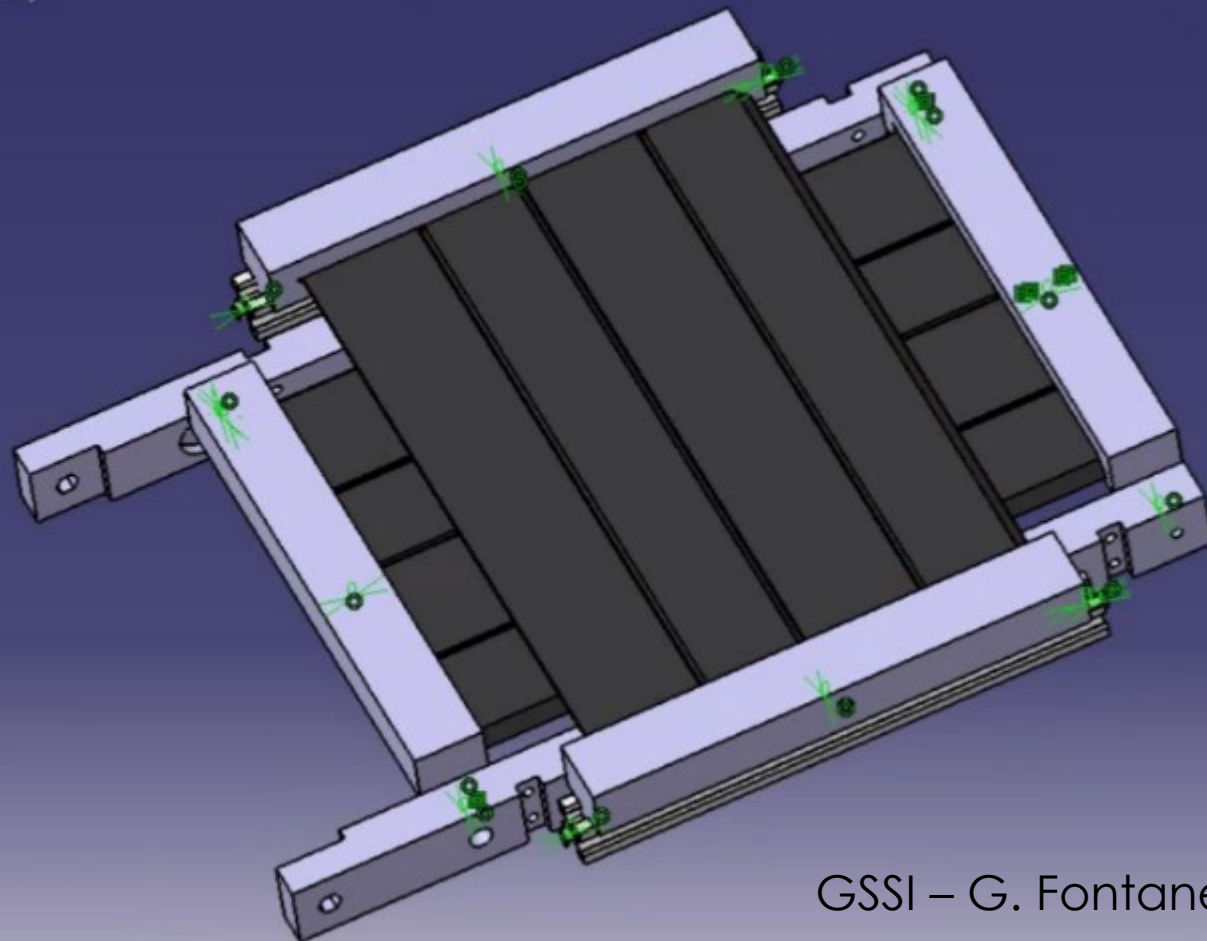


BETA16R2 mezzanine connectors pinout

IFAE

Struttura-profilato-staffe

- Struttura doppio alloggiamento (Struttura doppio alloggiamento .1)
- Profilato (Profilato.1)
- Profilato (Profilato.2)
- Profilato (Profilato.3)
- Profilato (Profilato.4)
- Staffa (Staffa.1)
- Staffa (Staffa.2)
- DIN 912 - M4 x 16 (DIN 912 - M4 x 16.1)
- DIN 912 - M4 x 16 (DIN 912 - M4 x 16.2)
- DIN 912 - M4 x 16 (DIN 912 - M4 x 16.3)
- DIN 912 - M4 x 16 (DIN 912 - M4 x 16.4)
- DIN 912 - M4 x 16 (DIN 912 - M4 x 16.5)
- DIN 912 - M4 x 16 (DIN 912 - M4 x 16.6)
- DIN 912 - M4 x 16 (DIN 912 - M4 x 16.7)
- DIN 912 - M4 x 16 (DIN 912 - M4 x 16.8)
- Vincoli
- Applicazioni



GSSI – G. Fontanella