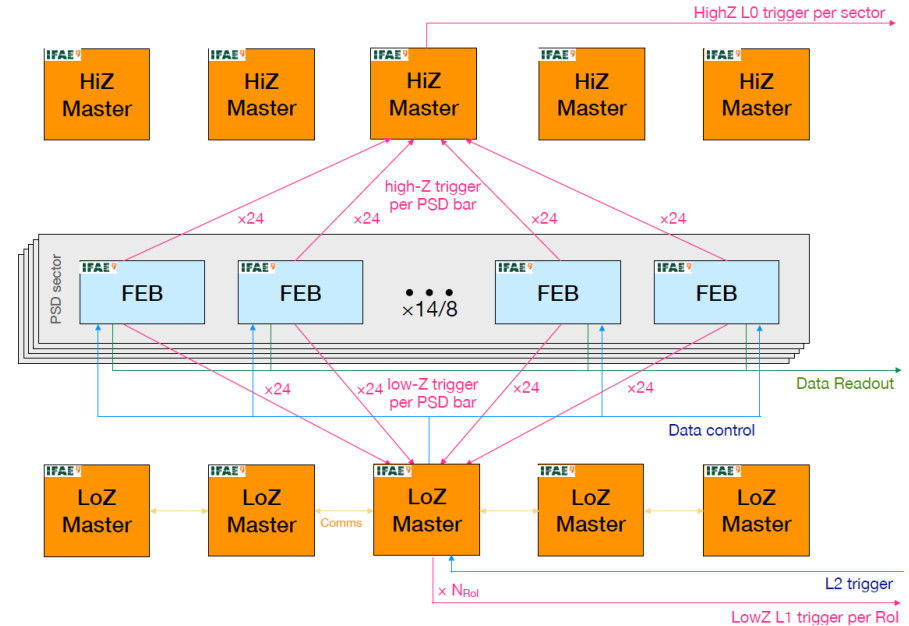


FEB proposal. Next Iteration
30/01/2024

What we want

PSD

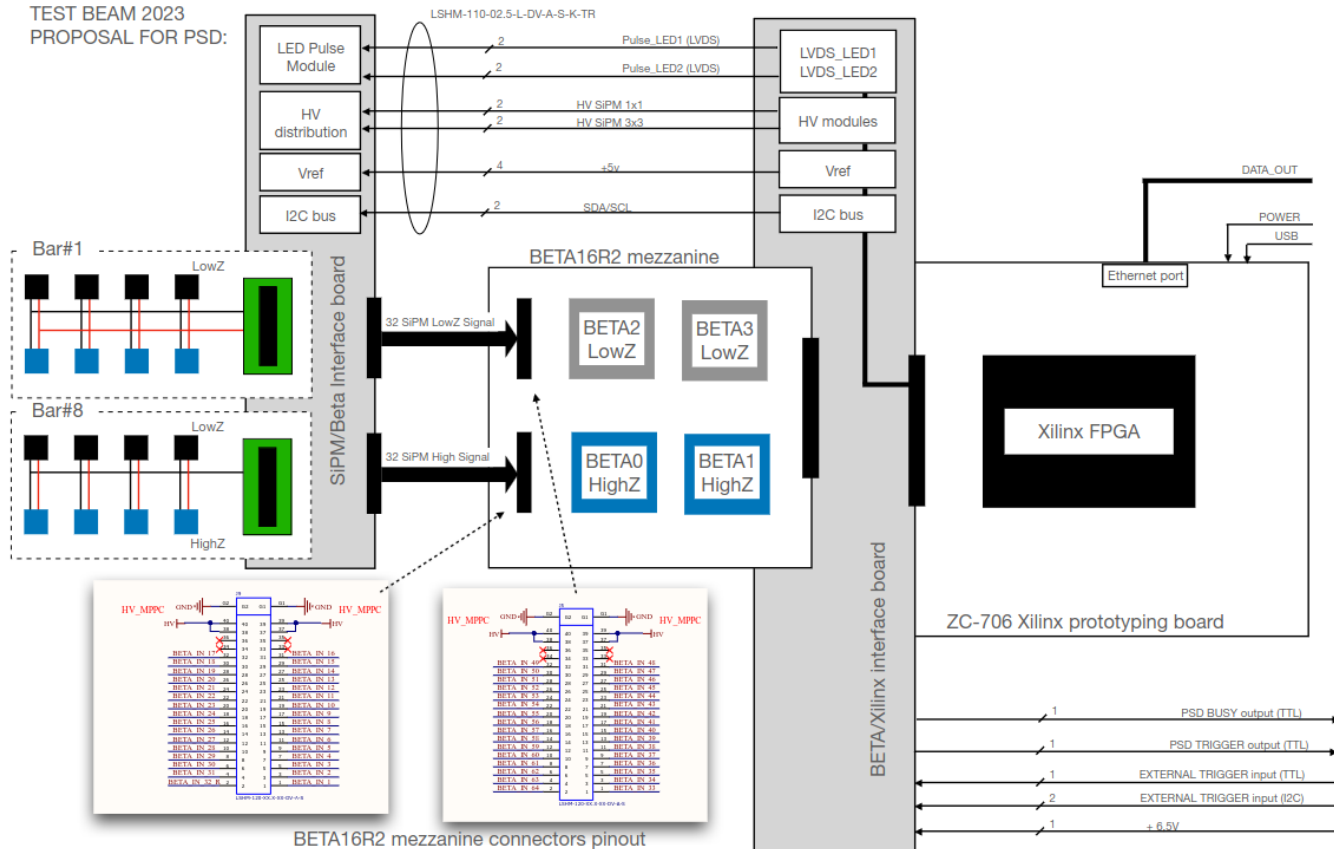
| Sector/Plane | bars | SiPM | BETA | FEB boards | LoZ Master boards | HiZ Master boards |
|--------------------------|------|------|------|-------------|-------------------|-------------------|
| TOP | 324 | 2592 | 162 | 13.5 | 1 (or 2) | 1 (or 2) |
| LAT | 180 | 1440 | 90 | 7.5 | 1 | 1 |
| Total [TOP+4*LAT] | 1044 | 8352 | 522 | 43.5 | 5 (or 6) | 5 (or 6) |



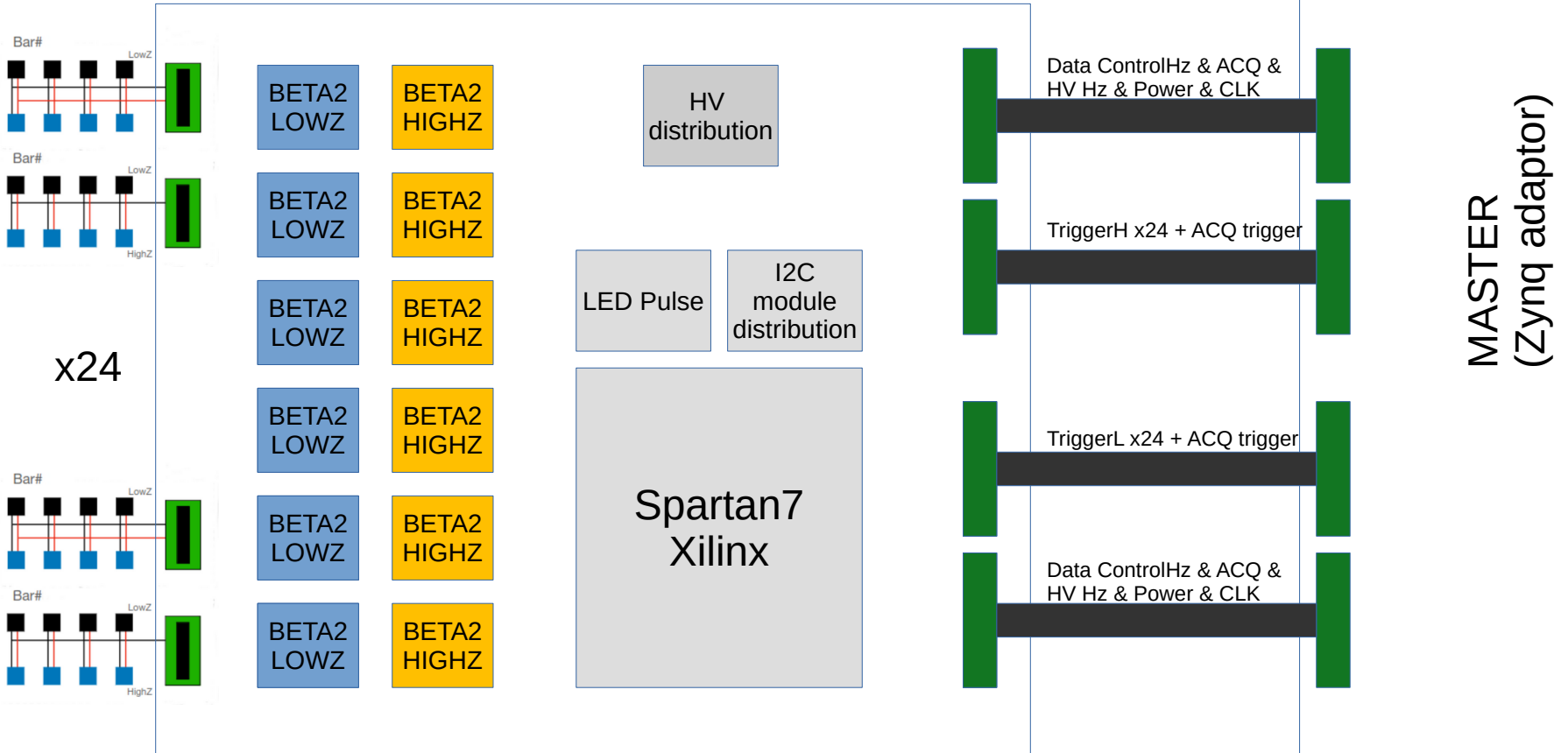
To decide at the moment of design master:

- One master for high and low or one master for high, one for low
- Data through master or individual FEB

What we have. TestBeam 2023



FEB proposal



Summary

- 12 Beta controlled (6 High Z + 6 Low Z)
- 192 channels: 48 SiPM boards, 24 High Z bars, 24 Low Z bars
- FEB schematic started
 - Almost finished (expected next week).
 - Integrated electronics for bar LED pulse generation
 - Integrate I2C distribution for Beta and all telemetry peripherals
 - HV not integrated. Distributed from Master
- Physical dimension to be clarified before start routing.
- Master will be simulated with ZYNQ board with adaptor.
- For May could be ready. If not, we will use actual version

Backup Slides

Backup slide. Future Scenario

