

# Hardware for P-ONE

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# Disclaimer

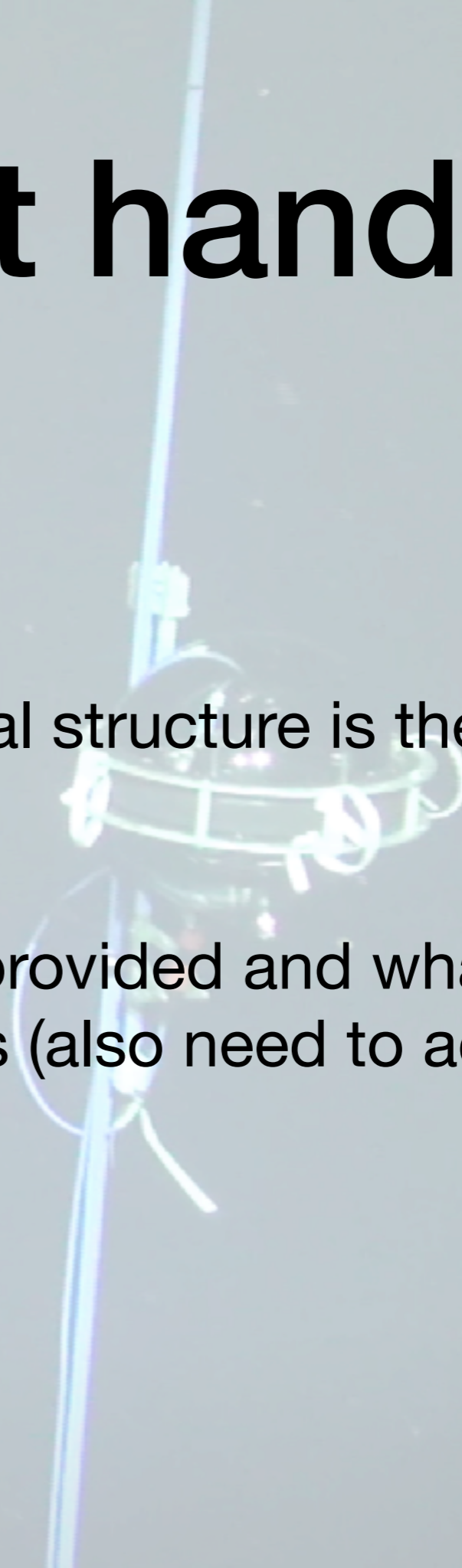
- I can't claim expertise on any of this - this is why I wanted it on the agenda: I normally operate by knowing details about hardware.

# Power/Bandwidth Budget

- We need to come up with a design document for the power and bandwidth limits to have hard numbers for a P-ONE ten string module
- This implies that we need targets for the reduction factor delivered by the trigger system

# Hardware “at hand”

- Anchor, buoy, cable and mechanical structure is there (with room for improvement)
- The junction box - look at what is provided and what we will need to do for the larger strings (also need to add trigger related HW)

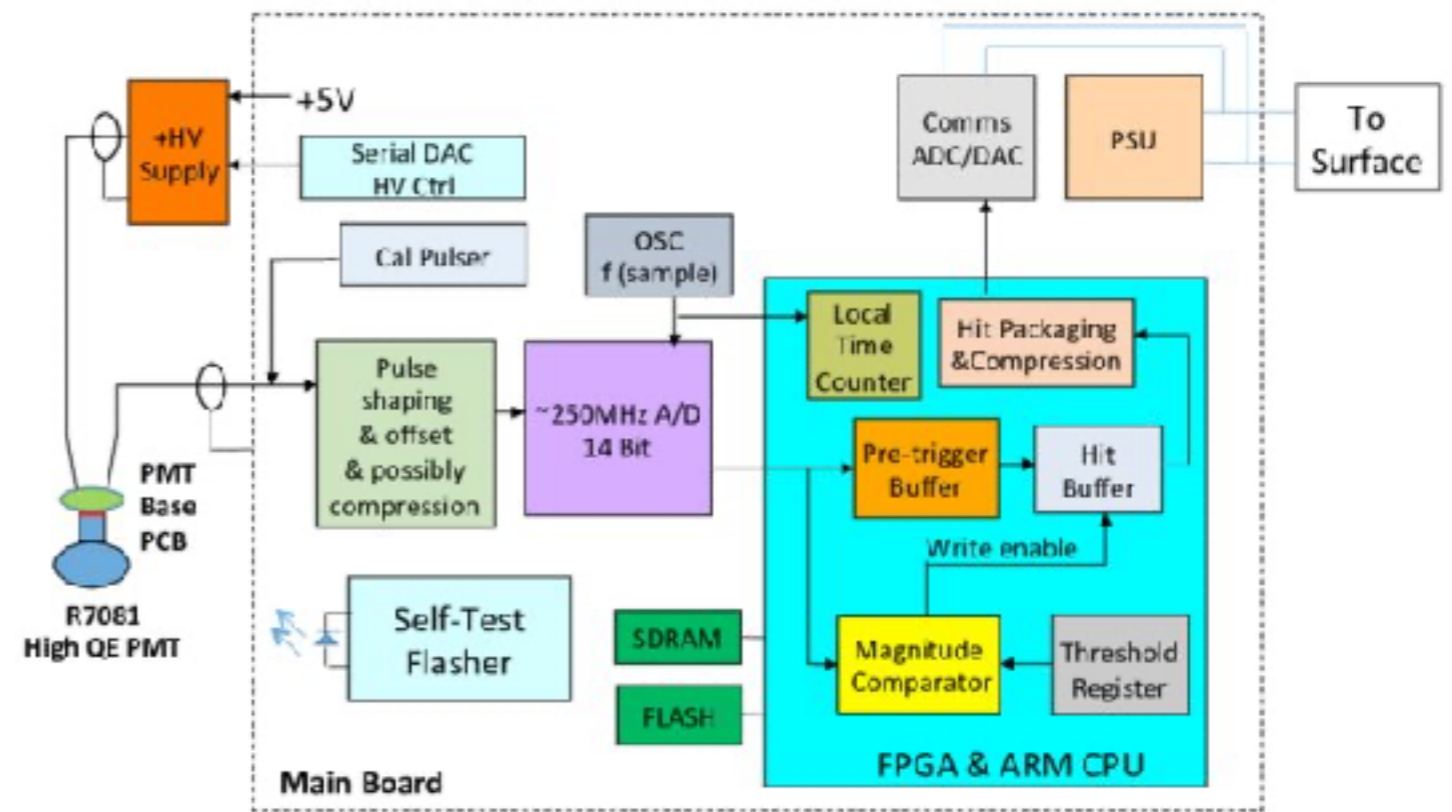






# Elements needed for DOM

- DOM electronics
  - FPGA & digitizers
  - Preamp/shaper
  - HV generator
  - Calibration circuits
  - Optical transceivers
  - Power control/regulators



IceCube Gen2 DOM (from 2015...)

**Who?**

# DOM hardware

- Glass housing
- Connector
- Heat dissipation
- Physical support
- Reflectors
- Magnetic shielding?
- Optical calibration fibres?
- Gel and injection process

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