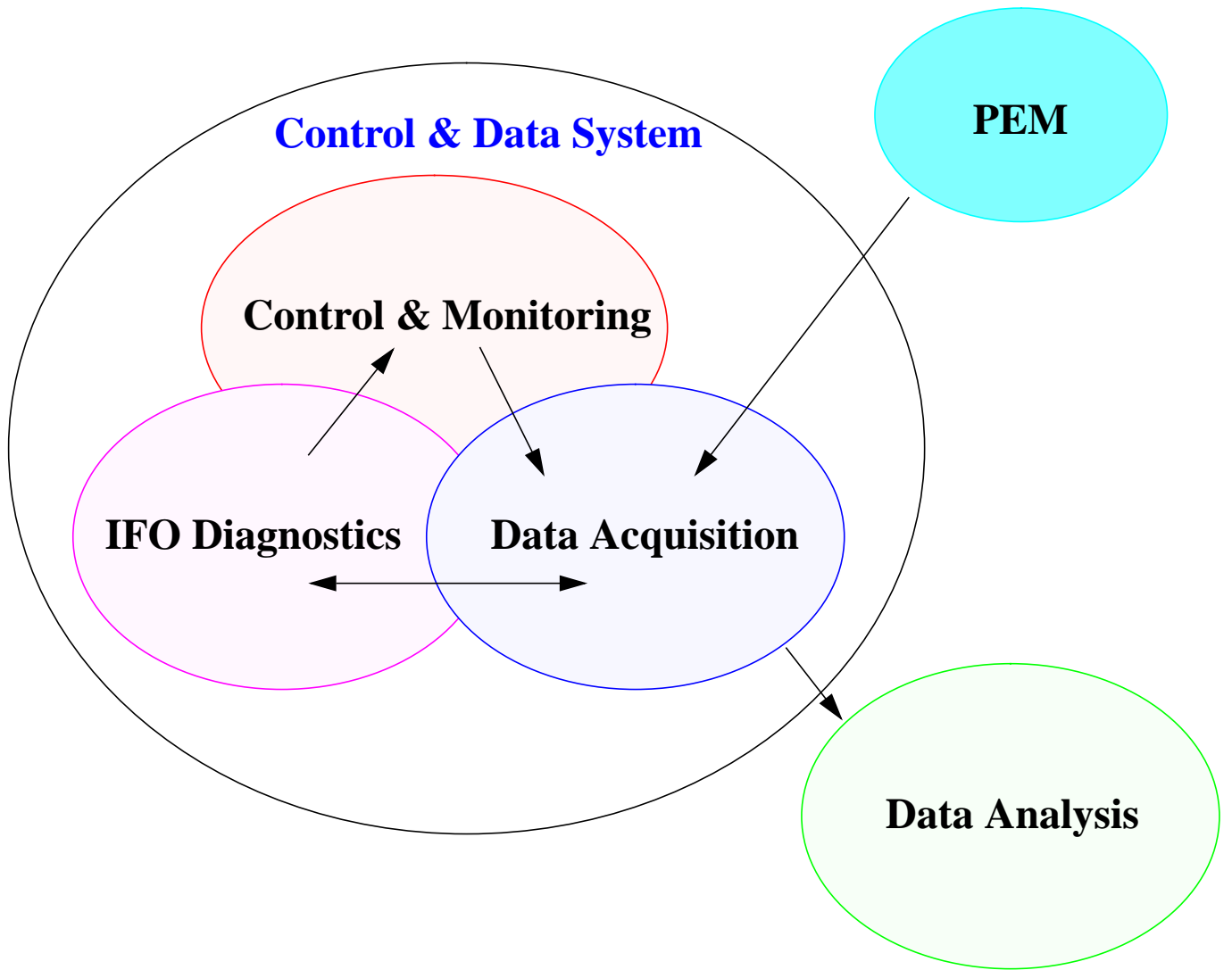

LIGO Data Acquisition System

R. Bork

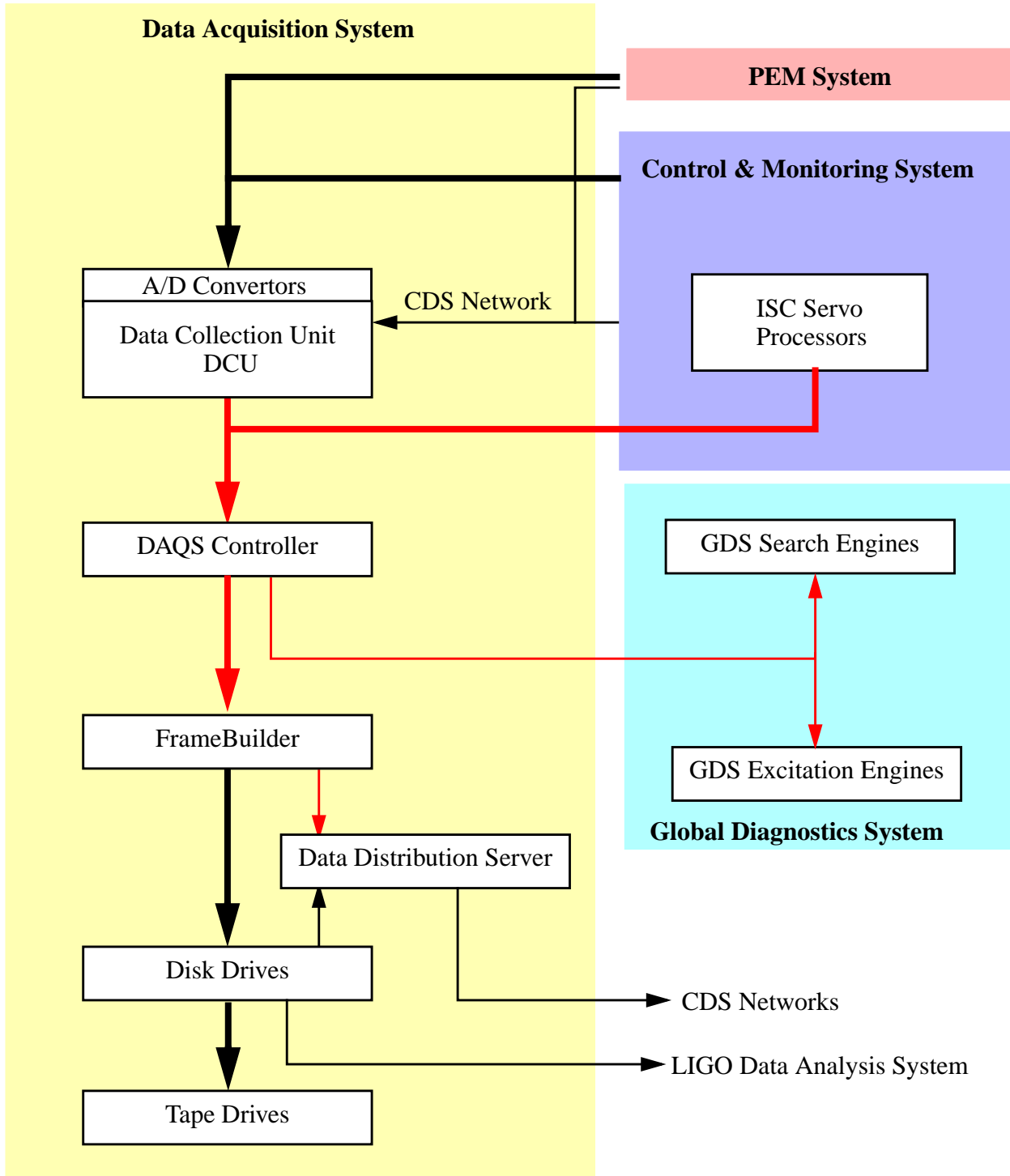




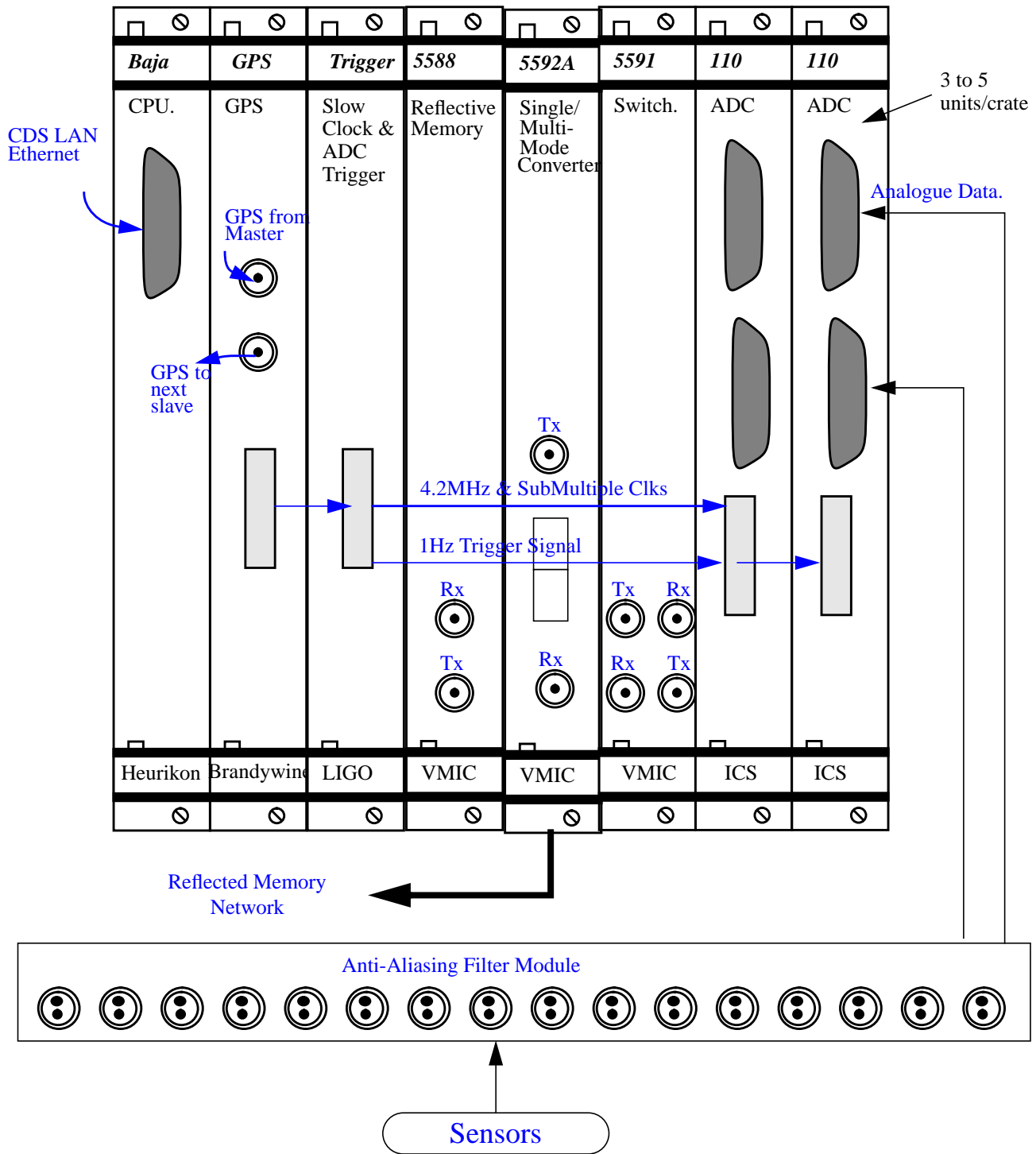
Design Requirements

- Acquire data at up to 16KHz second / channel
- Minimum 16bit accuracy
- Acquire up to 20MByte/sec (Hanford) of data
 - ›› Signal lists / rates in review process
- Format data into LIGO/VIRGO standard frame formats
- Record data to disk (minimum past 16 hours) and archive to tape
 - ›› Approx. 3MByte/sec/Interferometer (under review)
- Provide data to diagnostics at 16Hz
- Provide basic data viewers

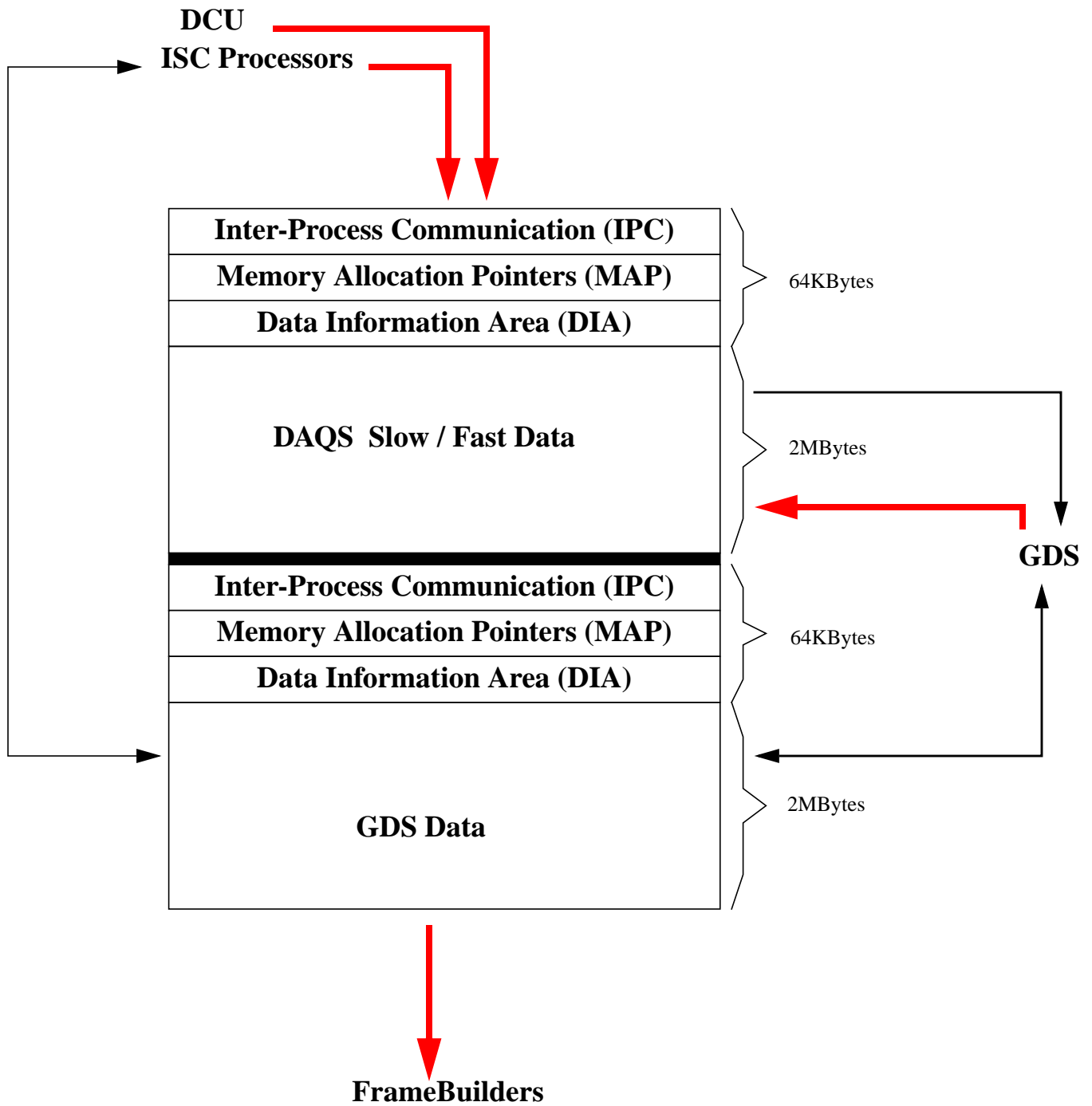
DAQS Overview



Data Collection Unit (DCU)



Reflected Memory



DAQS FrameBuilder

- Sun UltraSparc 60 (2)
- PCI Reflected Memory Interface
- ATM Network Interface

