

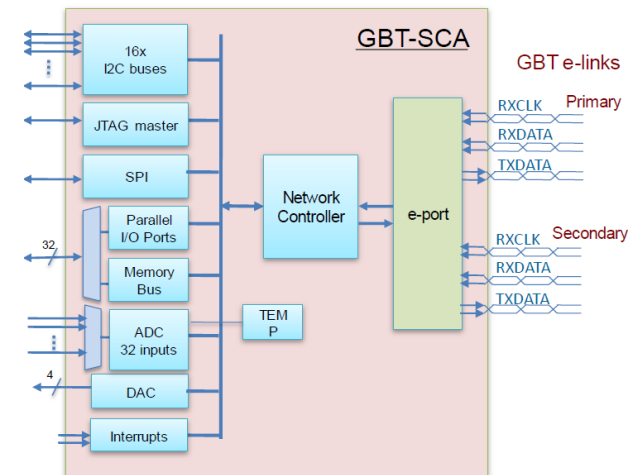
# ECS (GBT)

Most of components of the present CALO ECS is based on SPECS bus. The SPECS slave mezzanine provides, in particular, the following functionality:

- One long distance point to point differential SPECS interface (coming from the SPECS master)
- One unipolar SPECS local interface for multi-load bus applications
- One local and one long distance I2C bus
- One JTAG bus
- One parallel bus offering 16 data bits and 8 address bits
- One decoder for the channel B of the TTCrx
- One DCU chip with 6 ADC channels of 12 bit resolution and 1 temperature channel

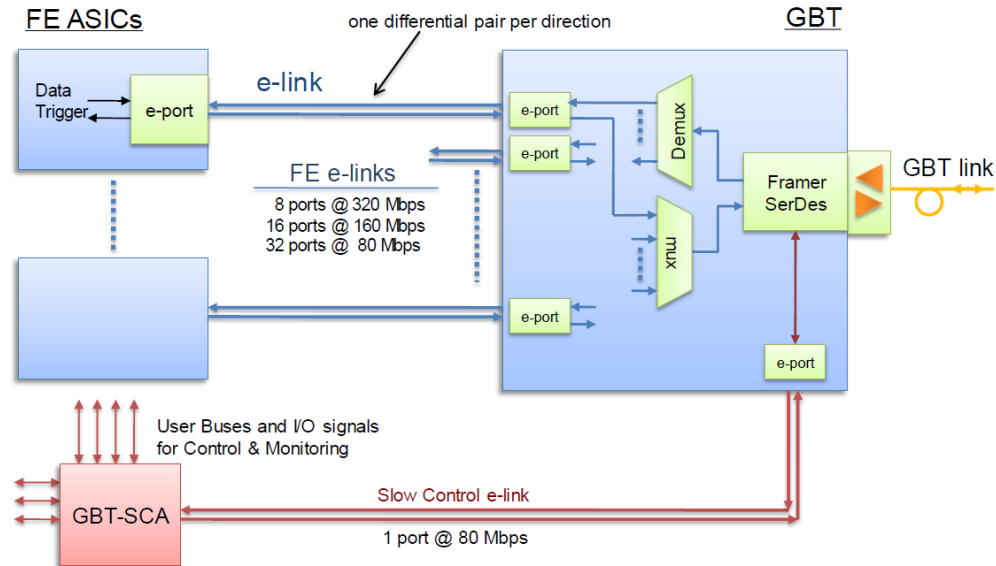
Total of ~60 SPECS slave mezzanines are used

For upgrade ECS, one can use the GBT-SCA circuit, which provides similar (and richer) functionality:



It is proposed to develop a SCA mezzanine with the same form factor as the SPECS mezzanines, and make replacement on all the ECS components (HV-LED boards, integrator boards, LEDTSB)

# ECS (GBT)



With SPECS, one can chain mezzanines: one SPECS line serves several devices.  
It is not clear for the moment whether we should provide an individual GBTX and optical link for each GBT-SCA.