Toward Firmware for ICEBERG

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Short-term Schedule

- Need prototype ICEBERG (COLDATA) firmware in ~2 months
- Need "complete" firmware early 2020 (latest is March)
- Need CRYO-capable firmware ~April

Short-term Schedule

1. Identifying changes needed for COLDATA (now---Rivera talk)
2. Porting Altera IPs to Xilinx/ZYNQ (now until early October)
3. Simple tests on Xilinx (early-mid October)
4. Start of firmware modifications (mid-October)
5. Tests on ICEBERG WIB (mid-October)
6. Firmware for ICEBERG tests ready February---March

I think this is very aggressive, but fortunately most of firmware doesn't need to be changed

Assumptions/Needs

1. Can do tests on ultrascale+ evaluation board (might be 4-core)
   - Will have to purchase this
2. ICEBERG WIB available mid-October
   - Could stuff WIB at Penn if it helped
   - Could do initial tests of WIB at Penn if it helped
   - Either way will need updated documentation
3. CRYO interface IP written by SLAC?
4. Short-term resources
   - Firmware Rivera and Sensenig, supported by Bill Ashmanskis
   - Ben Land arriving at Penn in ~1 week; could help after ramp-up