

ToroidMeeting-June-26-06

Toroid Electronics Meeting Minutes

June 26, 2006

Analog Electronics Design

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Attendees:

John Dusatko	Mike Browne	Michael Cecere
Steve Smith	Hamid Shoaei	Sheng Peng

Agenda:

1. Analog Electronics

Presentation Materials:

[PPT for meeting, June 19, M. Cecere](#)

[Project Timeline, M. Cecere](#)

Minutes:

- Toroid Manufacture Status
 - Tim says ceramic, brazed toroids should be here next week for testing
 - Toroid coil polarity not resolved yet, will pursue with ISA, with Steve's help
- Will our system be fast enough for IM01, 120Hz Laser Feedback?
 - won't be implemented for a while, first operation at 1 - 30 Hz
- Since using only 4 channels of each 16 channel IP330, may as well drive more signals
 - i.e. PS status (so IOC knows the toroid box is still alive)
 - add another DAC/buffers
- Signal IOC when all 4 channels are ready for IOC ADC to convert
 - this should optimize time performance of system
 - should be trigger line on cable to IP330.
 - drive directly from PIC (with buffer? or just use DAC channel since already buffered)
 - Change IOC connector to SCSI to match other end. (straight-through, John?)
- Analog Circuit Design
 - Bring Signal Straight to Integrating Op-Amp, no buffer
 - Put +/-1 stage immediately after int. op-amp (introduces off-set error, estimate this)
 - add buffer circuitry to schematics
- Calibration Circuit Design seems OK
- Use Vern Smith for intra-rack cabling?
- Will Chuck Yee be able to do this job timely? seek other help?

Action Items:

1. **M. Cecere:** Adjust circuit as described above
2. **M. Cecere:** Need Test Plan
3. **M. Cecere:** Add Mechanical Box design to timeline