Meeting Notes September 12, 2013

Attendees: Stephen Kaye, Pravin Chordia, Mahesh Burse

**Minutes**

* Discussed new clock driver circuit
* The analog switch can’t match the DAC voltage range. A fast enough switch which can pass +/-5 hasn’t been found
* According to data sheet analog switch can handle a 5V input, but maximum output is 3.1V
* The driver op-amp replaced by LM6171. Can drive 130mA.
* Caltech believes this will be enough drive current for the clocks and suggests the the buffer amplifier Buf634 is unnecessary
* If the buffer is not used, the capacitive load on the LM6171 op-amp is not used.
* Reason for capacitive load on LM6171 is to reduce crosstalk noise by creating a single pole filter
* Question was asked why the frequency compensation topology was not used. Answer previous clock driver circuit did not use frequency compensation and had no problems.
* Resistor between switch and LM6171 op-amp is there for separating the switch from the op-amp during testing, if desired.
* Guider/focus CCD data sheet was received by Pravin. No questions yet, but will send any questions by email during the week.
* Hardware is nearly ready for October demo. There is some software in development now.

**Action Items**

**IUCAA**

* + Send OrCad schematic of clock driver
	+ Send SPICE netlist of clock driver
	+ Will send video chain schematics by next week

 **Caltech**

* + Review LM6171 datasheets and email more questions about clock driver circuit
	+ Read and digest IUCAA’s waveform generation scheme
	+ Import clock driver schematic into Altium
	+ Import SPICE netlist into MultiSim software