

Meeting DATE: 11/04/11
Present: Ernest Croner and Sergi R Hildebrandt.
Regrets: Richard Dekany.
REPORT WRITTEN (Sergi): 11/14/11.
PREVIOUS MEETING: 10/28/11

References: Andor iXon 888 specifications (please take a look to pages: 4&5. I is attached in the twiki)

Issues to be clarified:

- 1) Interface of the sCMOS camera: is the connector HD 15? Otherwise: which one?
- 2) Which card does it use to be controlled by the PC? Which software?
Requirements -any special for the PC, see later?

Richard Dekany may ask Gregg Hallinan about it.

- 3) Filter wheel: Please, just check in the basement. They are in a plastic box in the box cabinet under the bench table for TMAS. Jack should be able to find them.

- 4) Controllers for the filter wheels: please, let Richard know what is necessary to purchase if not available at the lab.

- 5) ADC: The design will be similar to the Robo-AO one. However, please let Jack meet with Richard for some details regarding dimensions of prisms. It may require some additional mechanical work.

Clarifications with respect last meeting:

It may be helpful to take a look to the spec documents of the sCMOS camera and the iXon 888 camera (attached in the twiki) since the dimensions are clearly specified, besides other relevant characteristics. We have the iXon camera in the Lab in Robo-AO, though we should avoid removing it from Robo-AO, unless really necessary. In that case, Christoph Baranec is the PI of RObo-AO and the contact person. The sCMOS are not here till 2012.

- 6) Water cycle cooling. Both cameras: sCMOS and iXon 888 are susceptible to be cooled down and we have to leave that option. The cooling system is a closed water cycle. The equipment is mainly provided by the vendor (ANDOR).

6.1) Please take a look to pages 22 & 23 of the iXon manual (attached in the wiki). The fan is not an option due to the vibrations it produces. I think the water cycle is

good enough and easy to implement. For next meeting, we have to decide if use the water cooling system. An alternative would be a Peltier cooling if water gives any trouble.

7) ADC: We will use a similar ADC system as in the project Robo-AO. The control software will be the same but the connector will be a USB connection (see later).

8) Camera: iXon888: the CCI24, PCI-E card is going to be used.

9) Specs for the PC/or alternative disposition (Ernest's compact architecture proposal?)

There will be a further check on the points below, but I guess it is quite close to final specs.

9.1) OS: Windows for the SOLIS software of the iXon 888 camera AND Linux for the DSK software of the iXon camera. To be confirmed, as mentioned above, what is the case with the sCMOS, but likely to be similar.

9.2) Hard Disks: 2 internal units, each of 250 Gb. 2 external units of 500 Gb.

9.3) USB ports: 2 for the Hard Disks, 1 for the ADC + 1 (redundant)

9.4) If possible Dual core, 1.6GHz or higher.

9.5) Memory RAM: at least 4 Gb.

9.6) Ethernet cable to communicate with the control room for purposes of controlling the camera remotely.

Finally, we will need another computer in the control room, but this can even be a laptop. So I do not consider it here.