TMAS has two working modes:

1) Two CMOS cameras: Neo sCMOS 5.5 Mpx, 6.5 microm/pix. The first option.
http://www.andor.com/scientific_cameras/neo_scmos_camera/
2) 1 CMOS camera and an iXon EMCCD Andor Camera. Model 888. 13 microm/px.
http://www.andor.com/scientific_cameras/ixon_emccd_camera/

The design should consider, if possible, both cases.

Similarities:

Both cases share the same ADC (atmospheric dispersion corrector).
Both cases have two independent cooling systems.
Both cases have two filter wheels.
Both cases have two cameras.

Differences:

In case 1), the cameras are of the same type and manufacturer (CMOS). In case 2) they are different.

In the case 2), the Andor camera will be the same as in the case of Robo-AO. Therefore, the electronic design and mechanical design could be the same, as for instance:
* Ribbon connectors,
* Network power box (Ernest suggests following the same scheme as he did for Robo-AO)
* cabling,
* the cooling system.

Notice in TMAS there is no laser like in Robo-AO, or adaptive optic system. This is done by P3K. This simplifies the electronic scheme for the rack.

Moreover, since Robo-AO has two main cameras: Xeva and Andor, it might be the case that RObo-Ao's design is highly recyclable for TMAS in the two modes described above.

For the CMOS camera:

Connectors for the camera

Cooling system: Cannot be colder tan -40 C.

For the ADC:

Degrees of freedom: horizontal and tilt. To be specified in brief.

Controllers: to be specified in brief. Jack may find the sort we need/are?

For the 2 filter wheels:

The model is:
