Minutes for AMiBA Engineering Telecon

Meeting Date: 13-January-2005

<u>Participants:</u> <u>Australia:</u> <u>USA:</u> Kyle, Johnson, Ted, Phillip, Michel <u>Taiwan:</u> M.T., Homin, C.T., Patrick, Steven,

USA Dial-in = 1-800-653-5390, 6668081# Outside USA Dial-in = 1 773 843 6301 Minutes Recorder: Steven

I.<u>New Action Items:</u>

II. Previous Action Items (still open):

III. Closed Action Items (as of this meeting):

IV.Miscellaneous Discussions:

MMIC:

Receiver:

Kyle - We can see the 100ms input voltage drops. **Homin** - We have to remove all the capacitors in all receivers. We should check first to see if Rx1 and Rx2 can work. The voltage drops should not happens after we remove all the capacitors.

M.T. - Homin can write it down for checking.

Johnson - As we switch on/off the receivers many times, we can find the core head have noise of DC. Kyle - it looks like digital noise. M.T. - Johnson should isolate the problems to find out the source.

LO/IF:

M.T. - We have some conclusions and Steven is working on that.

Calibration System:

Kyle - I am thinking about what power we should have. The S/N ration of CW is about 50 and 10 data points is needed. If we need calibrate it frequently, we might need to increase the S/N to 1000. CW source can calibrate frequency response but this character might not change very often. We can use broad band noise for quicker phase calibrations. The current setup may have the ability to add few more components for both calibrations. I have enough components to test the noise calibration and I am working on it. I can borrow the low frequency power divider for testing. We need to measure the 21 to 26.5GHz phase shifter.
M.T. - Kyle should work out the CW calibration scheme to show us. Let's just buy the better harmonics mixer.
C.T. - EE have such kind of VNA.

Correlator:

C.T. - We should get the new layout on next week for the revise the XY module. West finished the shielding of circuit board and asked for the quotation. I hope I can get all the stuff before the Chinese new year. Kyle - We now use the channel two of the receiver. We have to use the different data acquisition system to take data. The DC part of the translation stage is not moving.

Platform/Mount:

Ted - Phillip is here and he can tell us about the platform shipment.
Phillip - I call CMA today. They are starting to take apart of the platform
today or tomorrow. I assume it takes 4 weeks to get here.

Minutes for AMiBA Engineering Telecon

M.T. - Any further words form Vertex and Stephen's schedule? Phillip - They will be here on next Monday. M.T. - We just go along with current plan to see what's going on after he arrives. The problem is the hex-pods #4 doesn't move. I don't think it is mechanical problems. Michel - We had control the antenna from jack 5. Homin - the amplifier is no problems. The cables on #5 can work anyway. M.T. -Pierre is going to see what happen. Is it a proper time for Michel coming. Michel - I will arrive on 22 for one week. We should be able to establish the all current's properly. M.T. - Optical telescope and communication box s in Taipei and will ship out. Patrick will be there to instruct it. Homin - I will tell Patrick how to install the software. We should make sure of the hex-pod can move then test the CCD software can work then test my program. Last, we test the communication with the Michel's program step by step. Michel - we should have a person take charge of the software. M.T. - Patrick will work with you all time. Michel - The program is very basics and the advance programs should use the optical telescope. Ted the dummy ring can work with optical telescope. M.T. - I will try to find another extra observer for Michel.

Dish:

Patrick - We are waiting for the components. The shipping has some problems. I am organizing people to test the dish.

Site:

M.T. - Pierre is going up to get the computer data login for various purposes. Joshua are still working on the 48V power distribute and network on the platform. Pierre works on the power distribution of core heads. Another colleague is working on the helium line distribution.