# Minutes for AMiBA Engineering Telecon

Meeting Date: 30-December-2004

Participants:

<u>Australia:</u>
<u>USA:</u> M.T., Johnson, Pierre, Jeff

Taiwan: Huei, C.T., Ted, Steven, West

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

Minutes Recorder: Steven

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#### I.New Action Items:

#### II.Previous Action Items (still open):

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

# IV. Miscellaneous Discussions:

MMIC:

## Receiver:

Johnson - Rx3 control board is set up and will move out the Rx1. We have three receivers and will send one IF/LO back. We have three different types LO module. I will try to cool down the Rx3 and install the IF/LO #4. The relative phase delay of Rx2 is about 70mm. Rx1 is 5mm and we will check what happens.

 ${\tt M.T.}$  -Each receiver have different path delay in X and Y polarization. We have low DC power problem. The single DC power supply used for correlator and three receivers

#### LO/IF:

Steven - I will send the DRO to Hilo next week. The DRO out put power is about 8 to 9 dBm. We might need one more 21GHz amplifier. 8 to 9 dBm can make LO output more than 12dBm. It will be enough for testing. The mechanical modification would be simple. About the 42GHz attenuator, if it is necessary, I will consider how to put it in. I will also suggest purchase the variable amplifier.

M.T. - How could we put the amplifier into the DRO? The attenuator is real a big one. We have no place to put it. We might consider put the enclosure. Let's have another IF/LO meeting after this meeting.

Johnson -Now we have 14 dBm of DRO power so I think 8 to 9 dBm is not enough. We need the EQ put into the module but it should be the 13dB. We have two 13dB EQ. C.T. - I suggest we don't put any EQ now. We will purchase 13dB EQ next week.

# Calibration System:

Johnson - Kyle just test it. We can use the source to check the flange. We have very long cables.

M.T. - Let's discuss this after Kyle com back.

## Correlator:

C.T. - West had designed some shielding for working shop. Our board is 14HP but they are 2 or 4 HP. We need maybe 3 HP. We have to design by ourselves. The size is also a reason. I try to shield the read out board.

M.T. - Will it be cheaper than buying?

Pierre - Can't you find 3 HP one? The size would be a problem.

## Platform/Mount:

M.T. - We are waiting for the platform shipped out this week or next week. We will have power supply and communication hardware on the dummy ring. We still have some problems on shelter but it is basically functional. We need to confirm the schedule of Vertex engineer. Pierre should prepare the punch list of

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electrical box. We need to prepare the next run of the work. I plan to let Kelvin to go with you to Honululu. We need to set up the schedule.  $\textbf{Ted} - \textbf{I} \text{ will visit them on } 10^{\text{th}} \text{ January. Phillip just finished the analysis of the reinforcement. We will try to finish all things before we go to Hilo.}$ 

#### Dish:

Jeff - We just finished the test and will send back the 1.2m. We send it to Kyle, or Jackie.

Ted - Along should be done the measurement of five 60cm.

#### Site:

**Pierre** - The electrical work is finished. I receive the software. I will look at what's going on next week.

M.T. - About the network, we should discuss with Homin.

#### Note:

#### IF/LO meeting minutes

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#### Action Items:

M.T.: The following work should be followed:

- 1. Attenuators: Send out the mechanical design for reviewing \_ by Steven, West.
- 2. IF amplifier: Check with Miteq and follow the progress  $\_$  by Steven
- 3. DRO amplifier: Find out the other quotation \_ by Steven

# Discussions:

Control signal should be completed in #1. Hilo will have a phase noise analyzer.