

## Minutes for AMiBA Engineering Telecon

Meeting Date: 16-December-2004

Participants:

Australia:

USA: M.T., Kyle, Johnson

Taiwan: Patrick, Steven, C.T.

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:

**Kyle** - The calculation of the path length looks OK. We need to make some compensate cables.

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

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

### IV. Miscellaneous Discussions:

MMIC:

**C.T.** - We had received two 21 to 42 GHz doublers packaged by wisewave. The performance is 6dB gain. What we used is 0dB. Steven can test it if he is interested.

Receiver:

**Johnson** - The gap is around 0.5mm maybe Tashun can make some thin films.

**C.T.** - The gap is not the same in all receivers.

**M.T.** - Ask Tashun to discuss with machine shop about the modification.

**Kyle** - make some different "shim" for RF path for test.

LO/IF:

**Kyle** - The IF chain gain is 45 dBm. The output power from hot load receiver is -40 to -45 dBm. We can have -6dBm to the correlator in Rx1. The slop of the spectrum is over compensated by 20dB EQ. Derek suggest we can use the 13dB EQ.

**Steven** - I have the quotation from Wisewave and the amplifiers can push the power to 28dBm. But we still need Professor Chu's verified. We should make sure of the necessary of the attenuators. We might need Johnson's report to decide the installation and mechanical design.

**C.T.** - I will check the IF spectrum.

**Johnson** - We should decide the installation of the 42GHz attenuator.

Calibration System:

**Kyle** - Johnson test the components and the specification is a little better than our requirements. I also need to calculate the cable length.

**M.T.** - You can give the photo detector to Joshua and he will go back to Taipei in few days.

**C.T.** - you can check it by delay. Also we can use the translation stage to check it.

Correlator:

**Kyle** - Turn on the correlator 30 minutes then take data. But it looks strange.

**C.T.** - I had checked out the PCB shielding and ask for the quotation. I might need to do the modification on connecting and wiring. 30 minutes is too short. You might need to turn on a couple hours. You can use only one card for test. Also make sure to turn off the power before plug the card. The interference is still the main problems. I think I need to resolve the EMI problems thann back to Hilo for testing.

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### Platform/Mount:

**M.T.** - We have the dummy ring install to the jet screw. The electrician from Vertex is testing now. Ted is doing the final inspection. They should finish the raw testing today and send me the report. There are some minor parts problems are not about the technical issue. We can handle the contract to treat these minor parts.

### Dish:

**Kyle** - The dish had been sent back.

**M.T.** - Alon should start to make the secondary.

### Site:

**M.T.** -Homin is doing the network.