

## Minutes for AMiBA Engineering Telecon

Meeting Date: 2-Jan-2003

Participants:

Australia:

USA: B. Martin

Taiwan: Huei Wang, P. Shaw, Kyle Lin, H. Jiang, W. Ho, T. Huang, C.T. Li, Johnson Han

Minutes Recorder: C.T. Li

[comments from this week](#), [previous weeks comments](#)

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### I. New Action Items:

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

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

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### IV. Miscellaneous Discussions:

MMIC: Huei: discussed the export license regarding sending students to JPL with Todd, also the possible alternative way through collaboration with NRAO

Receiver: Rx review meeting in mid Jan. (possibly in telecon format, suggested by Bob)

LO/IF:

Correlator: Chao-Te: see the attached email from Jeff Rapadas for correlator module update; got response from power divider board processing factory, sent them the substrates; work on packaging MMIC and schematic entry of 3<sup>rd</sup> section readout board

DC power distribution: Homing: will adopt linear power supply for 48V DC from control room, then use DC converter + ripple attenuator to provide voltages of the values we need (+/- 15V, +5V), regulator not used that there's no much DC power dissipation; concerns about EMI

Dishes:

Platform/Mount: Ted: work on drawing, need final drawing of interface from Bob Romeo

Site Issues/Network:

Hilo Facilities:

Schedule:

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### V. Other Inputs :

Email from Jeff Rapadas on Dec. 31, 2002 -

I just send another mixer with new diode to Jeff P. He will forward mixer to you. New diode lot has a good performance.

I replace diode on the mixer you returned and still did not work. I did not want to trouble shoot the problem.

I just build a new mixer without the pad from the housing you send back to me.

I did find a problem with the "IF" balun. I had to shorten the series inductance. The "IF" reactance was resonating a 9 GHz. I think the 16 lag prototyp had this problem. Unit has a flatter response than the 16 lag prototyp. The response of the new mixer is same the device tech(mica) mixer.

at -20 dBm input-

Vmax=20mV p-p

Vmin=12mV p-p

2.2 dB

I should have correlator done by Jan 10. I will forward 4 lag proto to Jeff P and Jeff will forward units to you.

Regards,  
Jeffrey Rapadas  
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