Rework of Backplane V3.0

Homin Jiang

Last revised 2005-Jan-12

Revised History
2005-Jan-15, 1st version

PURPOSE:
The reason of this rework is due to the communication interface between Receiver box and IF/LO box will be changed to differential signal.

SUMMARY

1. The definition of pinout of J4 is:
   1. IF1PwrCon+
   2. IF1PwrCon-
   3. IF1PwrAlm-
   4. IF1PwrAlm+
   5. IF2PwrCon+
   6. IF2PwrCon-
   7. IF2PwrAlm-
   8. IF2PwrAlm+
   9. SwitchPwrCon+
   10. SwitchPwrCon-
   11. SwitchPwrAlm-
   12. SwitchPwrAlm+
   13. Db1rPwrCon+
   14. Db1rPwrCon-
   15. Db1rPwrAlm-
   16. Db1rPwrAlm+
   17. 42GPwrCon+
   18. 42GPwrCon-
   19. 42GPwrAlm-
   20. 42GPwrAlm+

2. Rework on the PCB as:
   1. Lift the pins of U1-6,7,14,15; U3-6,7,14,15;U5-6,7.
   2. Cut U5-7 to U5-6
   3. Connect U5-1 to J4-3
   4. Cut J4-6 to U1-9
5. Connect U1-9 to J4-7
6. Cut right next at U1-1
7. Connect U1-1 to J4-11
8. Cut right next at J4-11
9. Connect U3-9 to J4-15
10. Cut right next at U2-13
11. Cut J4-18 to R10
12. Connect U2-13 to J4-18
13. Connect U3-1 to J4-19
15.

3 Location of the cutting as:
Note:
1. All connectors' housing to ground.
2. Euro card (90mm high) and VME card (122.5mm high), 2 options, 190mm wide. Ground plan connect to all the holes.
3. JP1, Power connector at the right hand side of PCB.
4. Fuse, SI1, SI2, and SI3 at the solder side. Size same as 1/4 W resistor. Employ Littlefuse's 3425L150DR, resettable PTC fuse, 1.5A.
5. P1, temperature connector, at component side, at right hand side of board.
6. Bias connector, P2, at component side, at right hand side of board.
8. 26LS31 and 26LS32, 16 pins SOIC.
9. Label: "AMiBA Re Backplane V3.0, ASIAA"
10. Boards from left to right as: F30, F30, F83, F82, F36, F38.
11. Minimize the routes on the solder side.
12. 4 layers PCB. One layer for grounding, preferable at solder layer.

<table>
<thead>
<tr>
<th>PCB layer order</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Grounding</td>
</tr>
<tr>
<td>2</td>
<td>Component</td>
</tr>
<tr>
<td>3</td>
<td>Solder</td>
</tr>
<tr>
<td>4</td>
<td>Power</td>
</tr>
</tbody>
</table>

**Date: Sheet**