**NCR Number**
NCR/FM/INFN/RM2/7

<table>
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<th>Classification</th>
<th>Item name</th>
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<td>major</td>
<td>Top Tray Assembly with Payload</td>
<td>08/09/2004 7:00:49 PM</td>
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**Part number**
LAT-DS-00764 (rev2)

**Serial number**
001

**Issued**
Marcello Marchetti

**Short NCR description**
Bias circuit delamination

**Approved by**
Alessandro Brez

**Detected**
Test

**Cause**
manufacturing mistake

**NCR description**
Bias circuits delamination found after the thermo-vacuum test. See annex 1.

**Action**
Refer MRB
disposition

**disposition ID:** 1

A) Send to Plyform for rework of the Kapton and INFN-Pisa suggest to perform further investigation in order to verify the cause of the NCR.
B) Verify rework with standard flow of tests (dimensional test-flatness, New TVAC test)
C) Refer to MRB

**Finding**

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<th>due date (mm/dd/yyyy)</th>
<th>closed</th>
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<td>Alessandro Brez</td>
<td>08/30/2004</td>
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MRB

**disposition ID:** 1

Waiting for disposition (08/10/2004)

**Finding**

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Approval

Signatur

Customer approval date

NCR status  open
### Annex

<table>
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<tr>
<th>annex N°</th>
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<td>Defects image</td>
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The top tray 001 was equipped with Tungsten plates and kapton bias circuits during the first week of August. On Friday of the same week, at 2 p.m it was put in the RomaII thermo-vacuum chamber and left at 55°C 5 hours to complete the 3M2216 curing. At 7 p.m. the chamber was depressurised. The thermal stress before, and the thermo-vacuum stress after, caused large de-bonding of the kapton bias circuit and the de-bonding of some tungsten tiles.

The failure of the test is due to two factors:

- Not perfect curing of the 3M2216
- Not perfect adhesion of the 3M2216 to the tungsten tiles (see NCR tray MID-047).