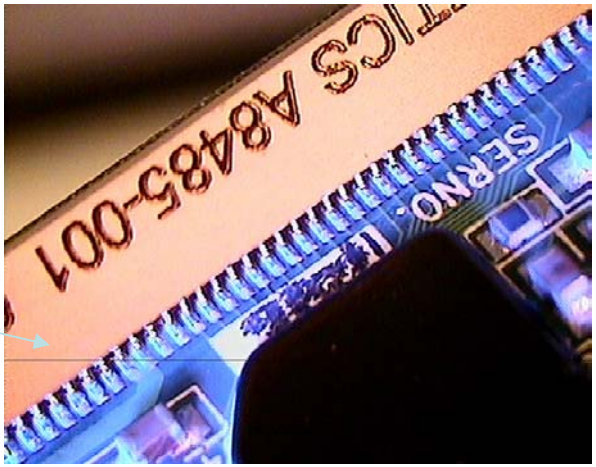
TMCM J1 J2 Connector Conformal Coat Flow Analysis

- This presentation illustrates an effort pursued by the TMCM Quality team at GLAST/SLAC to find cause of conformal coat flow and contamination into the mating surfaces of the J1 J2 connectors.
- P/N LAT-DS-00898, S/N SN11016, a non-flight unit, was inspected for evidence of conformal coating flow beneath connector bodies and selected because it exhibits what has become a typical reject trend observed while performing incoming inspection, as received from vendor.
- The J1 J2 connector body were destruct lifted from the surface of the PWB, solder joints left intact, for this investigation.
- For the purpose of this report, when referring to J1 J2 connectors, the term ‘front side’ is used when viewing the connector from the circuit side. ‘Backside’ is used when viewing from the connector saver (hookup) side.

TMCM J1 J2 Connector Conformal Coat Flow Investigation

- J1 PWB SMT (front side) view
- *Purple luminescence is caused by the use of UV light*

- J1 PWB SMT view2



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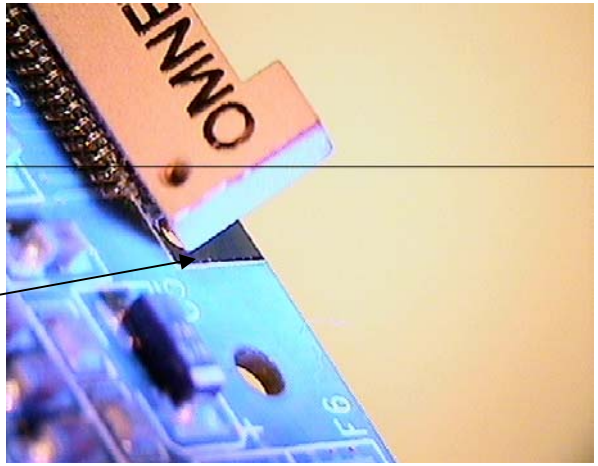
- J1E PWB SMT view
- Note flow of conformal coat and where it stopped.



(SMTs are shadowed by connector body)

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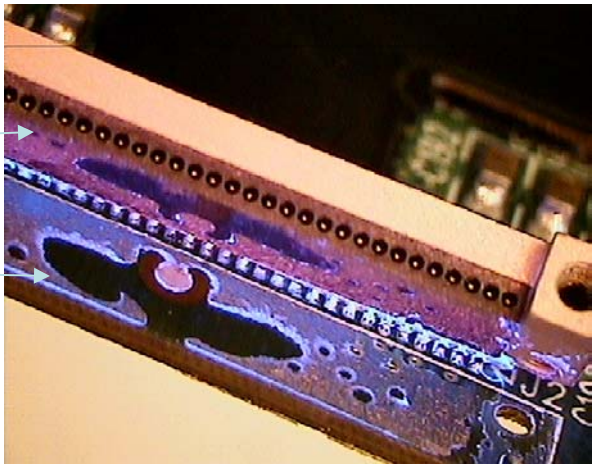
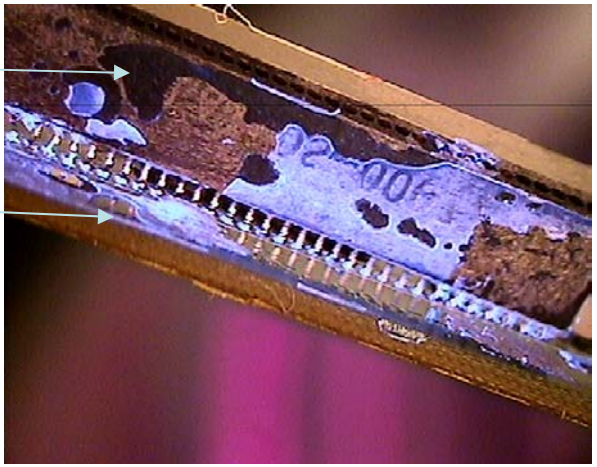
- J2 edge beneath connector body

  PWB



- J2 connector body bottomside

  to PWB



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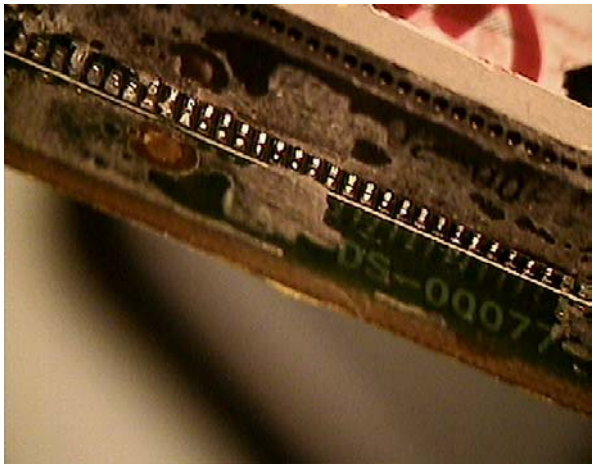
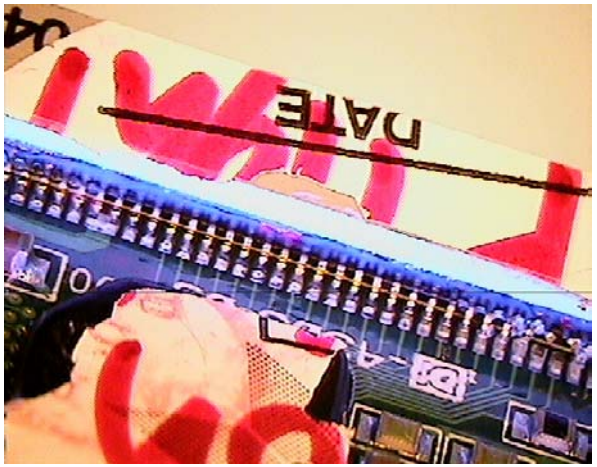
- J2 bottomside to PWB (no UV)



- J2 PWB SMT view



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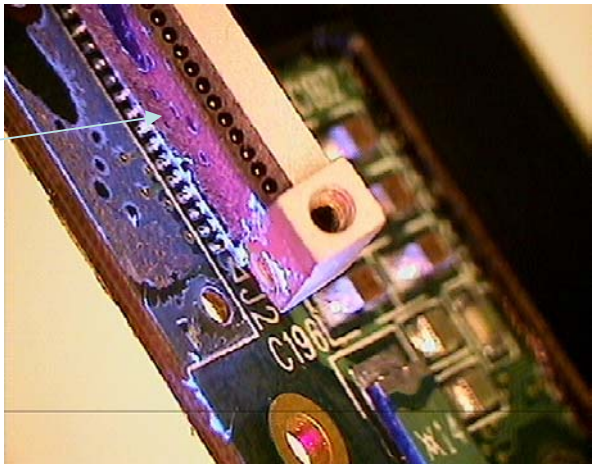
- J2E backside beneath connector body



- J2W backside beneath connector body