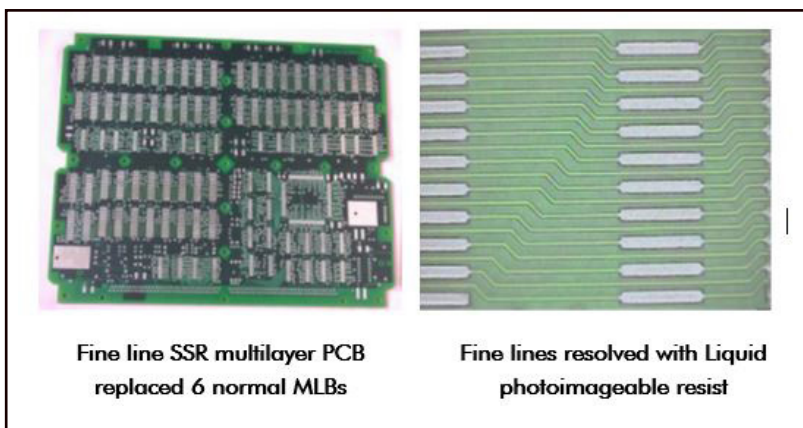


Fine line PCB Technology for Fine-pitch surface Mount Devices

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has develop and qualify the technology for PCBs with fine conductor features of 5 mil trace width and 4 mil spacing to cater for various fine pitch surface mount devices in the Solid State Recorder (SSR) packages of high resolution imaging LEO Satellites.



Salient Features & Major Specifications

- ✦ Laminate material : High-Tg FR4
- ✦ Total PCB Thickness : 2.25 mm ± 0.15 mm
- ✦ Minimum through hole size : 0.40 mm (16 mils) finished
- ✦ Minimum drilled hole size : 0.50 mm diameter
- ✦ Standard through hole size : 0.80 mm (32 mils) finished
- ✦ Minimum pad diameter : 1.0 mm (40 mils) by design
- ✦ Standard hole pad diameter : 1.5 mm (60 mils) by design
- ✦ Minimum Trace width : 0.125 mm (5 mils) by design
- ✦ Minimum spacing : 0.100 mm (4 mils) by design
- ✦ Minimum Dielectric separation : 100 μm (4 mils)
- ✦ Outer layer basic copper : ½ oz (17.5 microns)
- ✦ Outer layer Copper thickness : 52.5 (± 10) μm (External) finished

- ✦ Inner layers Copper thickness : 30 (\pm 05) μ m, Internal
- ✦ Multilayer Construction : Laminate type construction
- ✦ Fabrication Technique : Subtractive type, Electroless Copper, SMOBC
- ✦ Solder mask material : Electra EMP110, Carapace
- ✦ Surface finish : Eutectic Solder (Sn-63 / Pb-37)

Technology Transfer

URSC/ISRO offers to transfer this technology of Fine line PCB Technology for Fine-pitch surface Mount Devices to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

Technology Transfer & Industry Coordination Division (TTID),
Programme Planning and Evaluation Group (PPEG),

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