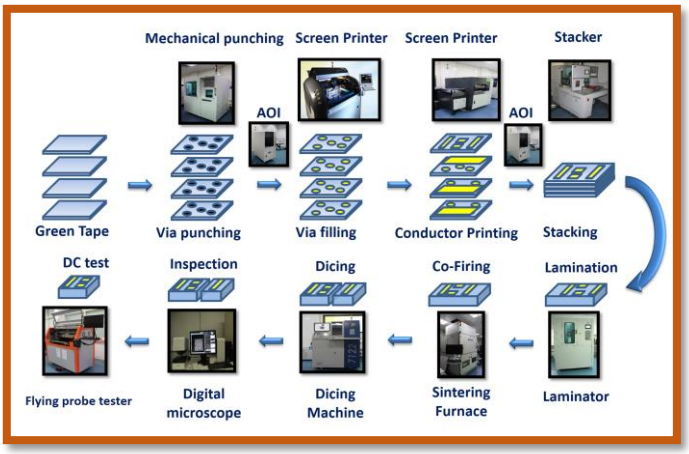
LOW TEMPERATURE CO-FIRED CERAMIC (LTCC) MULTI-CHIP-MODULE TECHNOLOGY



Space Applications Centre (SAC) of Indian Space Research Organisation (ISRO) has developed Low Temperature Co-fired Ceramics (LTCC) Multi Chip Module (MCM) and package fabrication technology. SAC's LTCC foundry process is qualified for space use. Its Design Rule Check (DRC) and Process Design Kit (PDK) features are unique for any LTCC foundry, globally.

Materials

- Ferro A6ME based all Gold system
- DuPont 951 based all Gold system

Salient Features

- Multi-layer heterogeneous integration platform
- Embedded passives
- Compatibility to eutectic and epoxy based bare die attach, wire bonding, SMD component soldering, brazing of metal parts
- Automated Design Rule Check (DRC) available for standard RF design software
- Copyrighted Process Design Kit (PDK) available for standard RF design software

Technical Specifications

Tile size	8" X 8 " (unfired)
Layer thickness	10 mil (unfired)
No. of layers	20 (max.)
Conductor width	75 micron ±10% (min.)
Via dimension	200 micron ± 10% (unfired)
Via separation	2.5 X via-diameter (min.)
Type of Cavities	Stepped, blind, through
Min. cavity size	1 mm X 1 mm
Module size	50 mm X 50 mm (max.)

Technology Transfer

SAC/ISRO offers to transfer LTCC technology to industries in India with adequate experience and facilities. Enterprises interested in obtaining knowhow may register and submit their proposal to IN-SPACe, Ahmedabad at www.inspace.gov.in

For more details, contact:

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