

PACKAGING FACILITY: KEY EQUIPMENTS & TOOLS

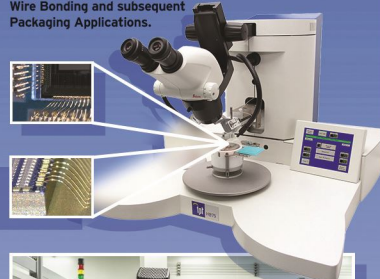
OUR LAB PROVIDES ALL THE INFRASTRUCTURE REQUIRED TO BUILD A PACKAGED DEVICE USING A FULLY PROCESSED MEMS WAFER

PACKAGING AND SYSTEMS FACILITY (PASF)



SEMI AUTOMATIC WIRE BONDER

Au, Cu, Al Ball and Wedge Wire Bonder with Bond Pad Size of 200x200 um and Pitch of 300 um. For Sensor Die Wire Bonding and subsequent Packaging Applications.



THERMAL CHAMBER: TEMPERATURE CYCLING

Used for Temperature Tests of Electronic Assemblies. With a range of -40°C to 180°C and Ramp Rate of 4K/Min.



FLIP CHIP BONDER

High Density Interconnects Offering Advanced Packaging Solutions for High Performance Complex Die Interconnects.



PACKAGING AND SYSTEMS FACILITY (PASF)



AUTOMATIC WAFER DICING MACHINE

Dices 4" 6" Wafers-Materials Silicon, Quartz, Silicon Carbide, Glass, Bonded Wafer and thickness up to 1.2 mm. Min Die Size 1.2x1.2 mm.



PLASMA CLEANER

- Removes impurities and contaminants from surfaces using an Energetic Plasma or Dielectric Barrier Discharge (DBD) Plasma, created from gaseous species.
- Activates and cleans Wafer, removes Photoresist, Oxide Reduction on Bond Pads.

PARYLENE C DEPOSITION

A Chemical Vapor Deposition Process in which a thin coating of Parylene is vaporized in a 3 Stage Process. This Process offers ultra thin coating on Semiconductor providing Dielectric, Moisture Protection and one of the Best Conformal Coating Methods in the Industry.

LASER WELDING MACHINE

Used for Spot & Seam Welding of Metals and Alloys such as SS, Kovar, Invar with a min Spot Size of 0.7 mm.



CONTACT US:

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PACKAGING AND SYSTEMS FACILITY (PASF) OFFERS:

TESTING SERVICES

Pressure Sensor Calibration and Test Services of various types & ranges including Reliability Testing using Thermal Chamber, Shock Test based on Customized fixture for High Reliability Applications.

SEMICONDUCTOR PACKAGING SERVICES

Wafer Dicing, Wire Bonding, Die Attach, Die Inspection, Parylene Coating, Plasma Cleaning, Flip Chip Bonding, Laser Welding and many more.

DESIGN SERVICES

Embedded Hardware & Firmware, Mechanical Design & Modelling, Prototype Hardware Assembly & Testing.

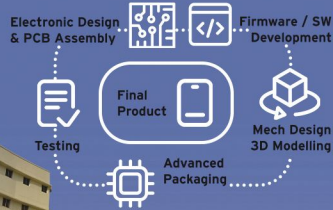
KEY EQUIPMENTS AND TOOLS

Wafer Dicing Machine | Semi Automatic Wire Bonder
Flip Chip Bonder | Laser Welding | Sensor Testing & -
Calibration | Thermal Chambers for Reliability Testing |
3D Printing including Carbon Fibre Filament

OVERVIEW

Packaging & Systems Facility (PASF) is a National Facility open to Public & Private Academic Institutes, Private Industries, Public Sector undertaking and Indian Strategic Sector.

Spanning over an area of 2500 ft² with 1000 ft² Semiclean Room of class 10K providing embedded Design Services, Advanced Semiconductor Packaging Facility such as Wirebonding, Wafer Dicing, Flip Chip Bonding and Testing Facility to the Users.



DESIGN SERVICES

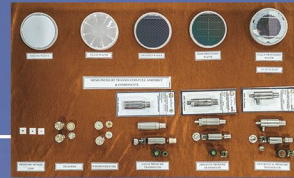
Design of Hardware and Embedded Systems with Firmware Development and Testing. In addition Mechanical Design, Modelling and 3D Printing for Prototypes or Proof of Concept for Research and Technology development.



PRESSURE SENSOR Product Portfolio



WAFER TO PRODUCT Complete Technology



GAS SENSOR TECHNOLOGY Wafer to Product

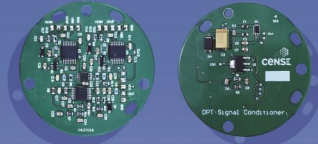


PRESSURE SENSOR TEST BENCH Calibration and Testing Facility



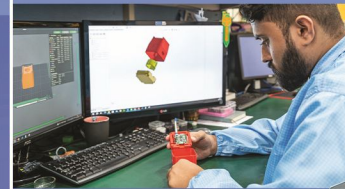
ADDITIONAL SERVICES

- FINE PITCH PCB DESIGN, ASSEMBLY AND SOLDERING



- FIRMWARE DESIGN, DEVELOPMENT & TESTING C Programme on many platforms.

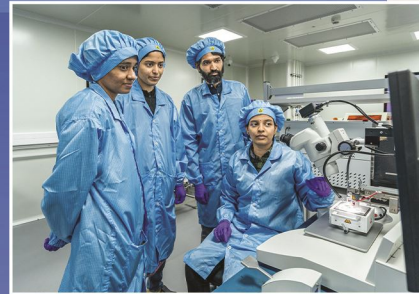
- MECHANICAL DESIGN USING SOLID WORKS AND 3D MODELLING
Prototype design and Printing of Housing For Electronic Assemblies.



- TRAINING Students and Users



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