



## Assembly

FORCE TECHNOLOGIES offers complete control of, hermetic, high-reliability assembly including all quality testing for MIL-STD-883 and MIL-PRF-38535 requirements. Specific materials, processes and capabilities are:

### Die Attach

- **Silver Glass:** (conductive)
  - For Glass sealed packages such as CDIP, CERQUAD, PGA, etc.
  - For Gold Tin sealed packages such as LCC, LLCC, CQFP, PGA, Ceramic SOIC, etc.
- **Silver Filled Cyanate Ester:** JM 7000 & QMI 301 (conductive)
  - For co-fired packages only such as LCC, LLCC, CQFP, PGA, Ceramic SOIC, etc.
- **Other Adhesives:**
  - Silver filled epoxy
  - Electrically Insulating epoxy
- **Eutectic:**
  - 2% Silicon / 98% Gold pre-form
  - 80% Gold / 20% Tin pre-form

### Die Attach Process

- Our DESC or QMI Approved assembly houses use state of the art Die Bonding equipment for **Silver GLASS** material in order to optimise die planarity and maintain consistent Bond Line Thickness on every unit processed.

### Sealing and Encapsulation

- Solder Sealing (Gold-Tin Eutectic) and Glass Sealing techniques with a residual gas of less than 5000 ppm moisture.
- Resistance Welding for Metal Cans such as TO-3, TO-5, TO-8, TO-100, +custom can