

# Microelectronics Enablement Services

**PROMEX** INDUSTRIES INC.  
**MICROELECTRONICS ASSEMBLY TECHNOLOGIES**

Medical & Bioscience | Semiconductor | Defense



## Microelectronics Assembly | IC & Advanced Packaging | SMT / PCBA

### Full Assembly Flows

- Wafer thinning & sawing
- Automatic die attach
- Wire bonding
- Plastic over molding
- Integrated SMT / CoB
- Mixed assembly
- Ball grid array
- Class 100 clean room
- Class 1000 clean room

### Product Enablement

- Product & package design & layout
- Stack-up & selection: materials, geometry, design rules, BoM
- Characterization & simulation
- Thermal & mechanical analysis
- Concept to production

### Process Development

- Materials-centric packaging
- Custom assembly processes
- Design for manufacturability
- New product introductions
- Manufacturing scale up
- IQ, OQ, PQ verification & validations (Medical) using pFMEA methodology

### Onshore Production

- ISO 13485:2003 certified
- ISO 9001:2008 certified
- ITAR registered
- IPC-A-610 Class 3 assembly
- Full turnkey materials
- Supply chain management
- Certified operator training
- Statistical process controls
- Test



[www.promex-ind.com](http://www.promex-ind.com)

# Knowledge, Experience, Quality, Partnership

## **PROMEX** INDUSTRIES INC. **MICROELECTRONICS ASSEMBLY TECHNOLOGIES**

Medical & Bioscience | Semiconductor | Defense

### Market Focus

- **Medical & Bioscience**
- **Commercial Semiconductor**
- **Military & Defense (ITAR)**

### Partnership Value

Promex is located in Silicon Valley.

We can provide immediate **onshore volume production**, or alternatively the **sequential turnkey** steps of **product design, characterization, simulation, custom process development, prototyping, new product introduction, scale-up, volume assembly and test.**

Our renowned technical and engineering staff includes several Ph.D's with materials science expertise to leverage our **broad process capabilities**. Consider our exceptional technical staff **your product development & new product acceleration partner.**

### Quality Systems

ISO compliant quality systems provide assurance of rigorous product master records and process documentation.

**Medical** customers can rely upon our experience with **IQ, OQ, PQ verification and validations** incorporating pFMEA methodology and our **FDA Title 21 Part 820 CFR compliance.**

### Complete Process Flows

Promex **simplifies your supply chain** while simultaneously providing **full process flow responsibility** from materials receipt through **test**. Our use of statistical process controls and our certified operator training means you can trust your assembly is done right each and every time.

**Turnkey materials** and supply chain management available.



Class 100 clean room  
automated die attach



Class 1000 clean room  
automated wire bonding

### Microelectronics Assembly & Advanced Packaging

- Image sensors
- Microfluidic devices
- MEMS
- Class III medical and implantable devices
- System-in-package
- Mixed assembly (2.1 – 3D; multi-chip packaging)
- Flip chip

### Semiconductor Packaging

- QFN's – over molded and open cavity versions
- Legacy leaded packages
- Ceramic package assembly
- Complex multiple die builds
- Ball grid array (wire bond & flip chip)
- Production & quick turns

### SMT/PCBA

- Chip-on-substrate
- High reliability SMT
- High mix / low volume
- RoHS optimized lines