



Design Services Capabilities

Microtex OEM/ODM Engineering Services:

Hardware:

- Circuit Design
- Circuit Debugging
- Schematic Capture
- Circuit Emulation
- PCB Layout and Analysis
- Wire RF Design/ Antennas
- Gerber Verification
- RF Design / Wireless IOT
- Analog Engineering
- Digital Design / FPGA/ Chip Design
- Mixed Signal ASICs
- Neo-EOL Component Design
- BOM / Parts Selection
- Component Engineering
- Communications Equipment
- AC/DC, and Switcher Design
- NANO Power Design
- Portable Power and Solar
- Battery and Power Management

Software:

- ASM. Programming*
- ARM Core and multi-core
- MICROCHIP 12,16,24 Series
- 8051, Motorola, FPGA core
- Programming*
- C/C++
- VB.Net
- AI Intergration
- Microchip/ATMEL Embedded
- Real Time OS
- Debugging/ICE*
- Arduino IDE into PB Chips
- Software System Analysis
- Software Design Review
- Hardware Specific (microcode)*
- I2C / SPI
- DAC / ADC
- Serial RS232
- PWM / Direct Drive
- RF / WiFi / Bluetooth / LORA
- Ethernet / Embedded Servers
- Microcode for Mixed-Signal ASIC

Mechanical:

- Mechanical Design
- Solidworks 3D Design
- 3D Models in Solidworks
- 2D Mechanical Drawings
- CAD and machine Format Translations
- Plastics Parts Design
- Injection Mold Design, PC, ABS, HDPE
- Metal Parts Design in various Metals
- CNC Machining, Sheet Metal Forming
- Material Analysis, Failure Analysis
- Optical Engineering, OPTICS
- Electro Mechanical Engineering
- Failure Analysis of Assemblies
- Overmold Cavities/ Overmolding
- Custom Cable Design, Molds
- Embedded Electronics in Cables
- Prototype models
- Proof of concept design
- Mechanical Reliability testing

PCB:

- Design for Reliable PCB's
- PCB layout and Engineering
- High speed / RF layout / Power
- Gerber File generation / DRC

Other:

- Expert Manufacturing Expertise
- International Liaison - Sourcing
- Plastic Parts Production and Analysis
- Metal Parts Production and Analysis
- DROP-IN Replacement Engineering
- Research and Development
- Industrial / Military Grade parts
- Regulatory UL, FCC, CE, FDA, CSA
- Patent Reviews
- Product functionality validation
- Product Packaging, Box Build Analysis
- Embedded Systems Engineering
- Test Fixtures / Product Testers
- Quick Turn Prototypes
- Design for Manufacturability
- Design for Cost
- IOT product Design