



# ENGINEERING SERVICES



## SERVICES:

- Extensive RF/Analog and Digital Design Experience
- Broad experience with designing of FM, Audio, CDMA, OFDM, Spread Spectrum, Zigbee, BT, GPS, WiFi, Power Amplifiers, GSM/UMTS Base Stations, Phased Arrays, High Speed ADC, FPGA, TDOA, and AOA Systems.
- System Architecture Design and System Simulation of RF, Digital, DC Power, and Audio
- Complex FPGA Design Capability
- SW and FW Architecture, Code Development and Debug
- Embedded Software Development of 8- 32 bit ARM, Microchip and Atmel Processors
- Windows, WinCE, and Linux Networking SW Development
- ASIC's and Custom ICs System Design
- Complex Designs for DoD Customers
- Turn Key Design Capability (from System Specs to Hardware, SW, and System Validation)
- Design for High Volume Production (10 Mil/month)
- Schematic Capture and Printed Circuit Board Layout
- Test Fixture Design
- Test Systems Development (Hardware)
- Third Party Design Evaluation Analysis for DFT and DFM
- EMI and EMC Third Party Support

## TECHNOLOGIES:

- Antennas
- Phased Arrays
- GSM, UMTS, WCDMA
- OFDM, MIMO, Quadrature Multiplexing
- SatCom
- FM/ RDS
- EDAC
- High Power RF PA's

## RECENT PROJECTS:

- Satellite Receiver System
- Quad High Performance Digitizer
- GPS Timing Device
- Custom WiFi System
- 800MHz Receivers
- Spread Spectrum RX System
- Small WiFi Motion Sensor
- CDMA 450MHz RX/TX System
- UMTS Band 1 and 4 RX/TX System
- RDS Receiver
- APCO P25 IC System Design

## FACILITIES:

- RF test lab
- Screen room
- RF test equipment
- VSA/Spec A/Network A
- Shielded boxes
- Production RF test
- Antenna Testing Range

