

# Capabilities Detail

## Manufacturing

- Mechanical and electrical assembly
- Automated and manual toroidal winding
- Automated and manual bobbin and coil form winding
- Soldering and termination (J-STD-001, IPC - 610)
- Assembly
- Potting/impregnation
- Coating
- Baking
- Solid wire, litz wire, copper foil
- Coils made from bondable wire
- Tuned RF inductors to tolerance +/-0.5%
- PCA repair test

## Electronic Manufacturing Services

- Process validation, risk assessment and PFMEA
- Rapid prototype services
- Turnkey assembly, validation, and test
- Qualified vendors: cable and harnessing, PCB/PCA, chassis, machined parts, injection molding
- Kanban and inventory management

## Test

- Inductance, capacitance, Q, impedance, phase angle, S11, S12 (60 Hz to 100 MHz)
- Hypot: 100 Volts to 50 kV
- DCR: 0.5 microohms
- Surge testing to 4kV
- Turns ratio/phasing
- Fully automated transformer testing
- Automatic transformer test
- PCA
- All test equipment is calibrated to NIST standards

## Design

- Filters - high power, multichannel, frequency 100 kHz to 100 MHz
- Linear, switching power and RF transformers and inductors
- Frequency: 60Hz to 100 MHz
- Power (to 10 kW): isolation transformers, SMPS transformers, buck/boost inductors, resonant inductors, RE transformers, gate drive transformers, current sense transformers, common mode chokes
- High voltage transformers
- Wireless signal and power transfer magnetics
- UL/CSA/VDE/TUV compliance

## Technology - Intellectual Property

- Multichannel highly parallel notch filter
- Isolated RF power transformer
- Low loss winding - gapped, inductors, SMPS

## Engineering

- 3D modeling – Solidworks
- 2D modeling – Autocad
- Process validation, risk assessment, PEMEA
- Turnkey solution for recognized designs, UL/CSA/VDE/TUV
- Power magnetic device simulation
- Thermal simulation
- Magnetic component modeling
- SPICE models - component and circuit level
- Modeling and simulation
- Load testing from DC to 100 MHz

