PCB Design

PCB Design Services

- PCB Layout
  - Rules Driven Designs (Design Constraints)
  - Digital, Analog, RF, low noise, high voltage
  - Controlled Impedance/Length Matching
  - .35mm uBGA to 2200+ pin BGAs
  - Laser, Stacked, Buried vias, via-in-pad, back-drill stub-reduction
  - High speed (XAUI, PCIe, SerDes, LVDS, Fiber Channel, Gig-E, etc.)
  - DDR2, DDR3, DDR4 memory
  - Flex and Rigid-Flex Circuits
  - Power Supplies, Heavy Copper
  - FPGA/CPLD pin swaps, via minimization
  - Stack-up development and verification
  - Documentation and build packages preferred by Fab Houses and CMs
  - Designed for use from prototype to high volume production
  - Sub-panel array optimization
  - Schematic Capture
  - Comprehensive Checking – design improvement feedback to get it right on the first REV
- PCB Library Development
  - Optimized IPC PCB Footprints
  - Schematic Symbols
- DFX Analysis (DFM, DFA, DFT, etc.)
- Schematic and PCB Translations
  - Altium Designer to OrCAD /Allegro
  - OrCAD/Allegro to Altium Designer
  - Design Reviews

Development Tools

- PCB Layout Tools
  - Cadence Allegro/orCAD PCB Designer
  - Mentor Xpedition
  - Altium Designer
- Netlist inputs from most front-end tools
- Output Formats
  - IPC-2581
  - ODB++
  - Fabmaster
  - IDF 3-D Mechanical Interface
  - DXF
  - Gerber RS274X
- Schematic Capture
  - OrCAD Capture
  - Altium Designer
  - Cadence ConceptHDL
- GoToMeeting screen-sharing ensures rapid responses to questions and real time assistance with Design Review milestones
- Core Source maintains licenses for multiple versions of common PCB design tools. Let us know your preferences.