



CT Circuits

Your Total Turnkey Solution for Printed Circuit Board Assemblies

CT Circuits is a flexible, customer focused resource for PCB needs of various volumes, mixes and complexities.

CT Circuits focuses decades of experience on the assembly and verification of printed circuit boards, and is committed to delivering defect-free Printed Circuit Board (PCB) assemblies of various sizes and complexities.

Our Scope of Work

CT Circuits specializes in the production of thru-hole (PTH), double-sided surface mount (SMT) and mixed technology boards using the selective wave process. Using redundant, networked assembly lines, CT Circuits produces high quality assemblies using both a lead based soldering process and a lead-free, RoHS compliant process, depending on each customer requirement.

CT Circuits has expertise in 0402 component placement, as well as very dense RF communication modules and complex PCB assemblies, including BGA's and micro BGA's. We process CAD data, create in-circuit programs, generate placement machine programs and develop test fixtures and procedures to validate the quality and functionality of all PCBs in accordance with our customers' expectations.

To assure the highest quality, CT Circuits provides X-ray, Automated Optical Inspection (AOI), and In-Circuit Testing (ICT) services. Our production associates are highly skilled, well trained and assemble to IPC-610 standards.

Eliminate Costly Re-spins

CT Circuits is engineering and process focused with an adherence to the J-Standard. We have incorporated the use of critical checks such as signal integrity, thermal limits, power consistency, DFF and DFA analysis into our procedures. We remain focused on managing our customers' entire suite of PCB assembly and engineering needs.

Reliable Rework

Even with automation, BGA rework remains a mixture of art and science requiring a high degree of skill. CT Circuits has a number of BGA-focused technicians with a broad range of skills, including component removal; replacement and salvage; x-ray inspection; circuit modifications; repair of BGA pads and repair of solder mask at BGA sites.

Additional Capabilities

CT Circuits provide the following PCB related services:

- PCB layout
- Schematic design and simulation
- Capture translation & simulation
- PCB artwork generation
- Rapid Prototyping
- Materials Declaration Management
- Fine pitch placement to 15mils
- Chip placement down to 0402
- BGA and CBGA down to .8mm
- Automated fine pitch connector placement
- Aqueous and no-clean processes
- GenRad, AOI, X-ray, In-circuit and functional test

Contact CT Circuits

To schedule a tour and overview of our PCB services, please call Nora Leonard at 508.929.4619 or Email: noraleonard@columbiatech.com

Flexibility, Integrity, and Trust for more than 120 Years

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