

Your One-Stop Electronic Product Design and Assembly Shop!

Where there's a problem, we're your solution.

Our experts are working with the world's most innovative companies on their toughest challenges. The result: a world that's smarter, safer, and more connected. Read more to see how our team is ready to advance your next idea and then contact us to experience the **Caltronics difference**.



Electronic Design

Our in-house team of design engineers have extensive experience providing dependable turnkey solutions across a wide range of industries, technologies and applications.

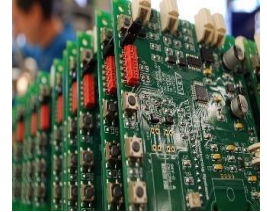


- Electronic Circuit Design
- Printed Circuit Board (PCB) Layout
- Mechanical / Package / Chassis Design
- Programmable Logic Devices (CPLDs, PLDs)
- Programming



Manufacturing & Assembly

Bringing your design to life has never been easier. Rely on our team's experience and discover solutions for all facets of your electro-mechanical product manufacturing needs.



- PCB Assembly
- Electrical Panel Assembly
- Full Electrical & Mechanical Product Assembly
- Encapsulation & Conformal Coating
- Cable Assemblies
- BGA Removal & Replacement



Quick-Turn PCB Prototyping

Have you designed a circuit board and want to make sure it is fully evaluated? Our experts will work with you to make sure it does what it's supposed to do!



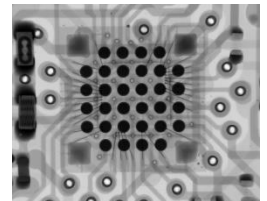
Starting from scratch to develop a solution to meet your specific needs? Work with our team of creative engineers to develop a layout.

We work with you to develop your PCB prototype and ensure that you can flawlessly replicate it.



Testing & X-Ray Inspection

Our certified technicians apply detailed manual inspection and functional testing using cutting edge inspection technology to the products we assemble.



- 3D, color Automated Optical PCB Inspection (AOI)
- Multi-Angle X-Ray Inspection for BGA solder joints and to find internal circuit board defects
- Environmental chamber testing from -35 to 110°C
- Functional & Product Testing to UL, FCC, FDA, CE other standards

How can we help you?

Take advantage of Caltronics' expertise and reputable experience in PCB design, electronic assembly, turnkey solutions, box builds and more. Our top-to-bottom design strategy gives you an unrivaled attention to quality, matched with industry leading services and processes that ensure your product reaches its full potential.

No matter which stage your project is at, **let's work together to find the solutions you need.**

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Select Equipment Capabilities

Mycronic MY700 Solder Jet Printer

- Rated speed: 720,000DPH
- Minimum dot diameter: 0.0082"
- Maximum dot volume: 35 nanoliters
- Solder type: Lead-free (RoHS) or Leaded
- Maximum board size: 20" x 22"
- Maximum dot diameter: 0.022"
- Minimum chip size: 0.0129"
- Board thickness: 0.016" to 0.24"
- Minimum dot volume: 1.9 nanoliters
- Minimum IC pitch: 0.019"

Mycronic MY100DXe14 Surface Mount Technology (SMT)

- Rated speed: 40,000 components per hour
- Maximum board size: 22.6" x 20"
- Board thickness: 0.016" to 0.24"

Precision mount head

- Component range: Chip from 01005, SOIC, PLCC, TSOP, QFP, Flip Chip, odd-shape, surface-mount connectors, through-hole components, CSP, CCGA, DPAK, Alcap, Tantalum
- Component specification: Min: 0.016" x 0.008", Max: 2.20" x 2.20", Max: Component weight 140 grams

High speed mount head

- Component range: Chip from 0201, SO28, SOT223, SOJ20, PLCC32, MELF, SOD, TSOP
- Component Specification: Min: 0.020" x 0.010", Max: 0.73" x 0.73"

Electrical verification

- The first 3 components on each reel or cut tape strip are tested on the fly.
- Resistor, Capacitor, Unipolar Capacitor, Diode (forward voltage, reverse current, including LEDs), Zener diode (voltage drop)

BTU Pyramax 100A Reflow Oven

- Conveyor speed: 10 to 60 inches / minute
- Processing width: 24"
- Heated length: 100"
- 8 heat zones top and bottom
- Maximum temperature: 350° C

Mirtec MV-6e OMNI AOI (Automated Optical Inspection)

- 15 Megapixel main camera with 10µm resolution
- Four 10 Megapixel side viewer cameras
- Board thickness: 0.016" to 0.24"
- 3D capability w/ Digital Multi-Frequency Quad Moiré Technology
- Maximum board size: 18.1" x 18.1"

Yxlon Microfocus X-Ray Inspection System Y.Cheetah

- High resolution digital flat panel detector with 1004² 127 µm pixels, 30 frames per second, field of view 127mm²
- Maximum geometric magnification: 2,000x
- +/- 70° (140°) Oblique viewing angle
- 25 to 165 kV, 0.01 to 10W Target Power
- Total maximum magnification: 17,000x
- 360° Rotational viewing
- Maximum sample size: 31" x 19"
- Detail detectability: < 1 µm
- Maximum inspection area: 18" x 16"

Company Data

- MN Corporation Founded in 1995
- NAICS Codes: 334418 & 541330
- CAGE Code: 66QE8
- Woman-owned Business
- DUNS # 94-547-9319
- Fed ID # 41-1819106
- ISO 9001 Certified
- ITAR Registered
- SAM Registered

