# VCC

## The PCB Assembly Partner Who'll Never Ask You to Compromise

## Rigid or Flexible, Choose a Solid Nearshore Manufacturing Partner

Whether you need PCB assemblies with surface-mount or through-hole technology, VCC can customize your components with comprehensive PCBA design and production capabilities – right here in North America.

With nearly 30,000 feet of production space and 4 SMT lines, we offer full production and can scale to accommodate runs of any size.

#### **Capabilities include:**

- Custom design
- Electronic schematic creation
- ✓ PCB layout design
- Prototyping
- Finalized BOM
- PCB assembly
- Firmware installation
- QC visual inspection
- Inspection (AOI)
- PCBA wash
- Conformal coating
- Electrical test
- 🗸 Package
- Shipping & delivery

#### Turnkey PCB Assembly Manufacturer + So Much More

Our skilled technicians and engineers can design and produce the right PCB assemblies for your exact specifications.

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#### Box build assembly services

We build the individual components, boards, and wires to deliver the finished PCBA with or without an enclosure.



#### **Turnkey PCB assembly**

VCC handles the entire process, from procuring materials to PCB fabrication and assembly to final shipment.



#### Labor-only assembly

You provide the raw materials and outsource only the PCB assembly manufacturing itself.

Whichever method you choose, we can hit the ground running to procure your materials and quickly move into production.

## Dedicated Manufacturing Space. Dedicated Manufacturing Team.



**Total manufacturing space** 

25,000 SQ/FT

PCBA dedicated manufacturing space

5,000 SQ/FT

## Advanced Equipment Drives Better Outcomes

We combine the latest manual and automated techniques to ensure you get exactly what you need. But our advanced equipment and processes aren't the only reasons to work with us.

- Automated Solder Paste Application
- Automated Pick and Place Machines
- Automatic Dispensing Carts
- 8-Zone SMT Solder Reflow Ovens
- Automatic Wave and Soldering Machine

- Advanced PCB and Stencil Cleaning Machine
- Advanced ESD Control System
- Conformal Coating Equipment
- Visual Scanning Microscopes
- Visual Camera for Quality Check





## **Unmatched Quality and Customer Service**

Here's what you can expect from us, every time:

High-quality production

Consultative approach

- Hands-on support
- On-time shipping and global delivery Technical guidance
  - Front-end planning

Detailed design reviews



## Why choose VCC?

01	09
Proven industry leadership	Comprehensive, lead-free PCB capabilities
02	10
Skills and experience for all your needs	Single point of contact eliminates miscommunication
03	11
Streamlined production and enhanced cost savings	Best on-time shipping record: 95%
04	12
The utmost quality standards	Over 30,000 active customers and counting
05	13
Transparency and collaboration throughout the process	Ability to handle volumes of any size and complexity
06	14
Customer service that's actually of service	Engineers and technicians committed to your success
07 Turnkey management of UL certification process available	15 Consistent processes and quality measures throughout the supply chain
08 North American production means shorter lead times and reduced risk	



## Leading the Way in Lead-Free PCB Assembly Design & Production

We combine manual and automated production processes to meet a wide range of needs. With an automated mounting capacity of 29,000 components per hour, we can quickly assemble your mixed technology PCBA, whether they're single or double-sided.

Our dedicated team and wave soldering system equipment can handle simple or complex PCB assemblies in small or large quantities.

#### PCB Assembly Capabilities & Specs

	SMT Component	Through-hole Component	
Component Size	0201 mm (00804") up to 74mm square and 50mm x 150mm rectangular parts for maximum flexibility	Any through-hole component	
Component Package	Down to 0201mm package	Loose parts Bulk reels Tube and tray cut tape	
Board Types	Any SMT PCB assemblies in a range of materials (e.g. FR4), with boards made up of 2, 4, 6, or 8 layers	FRX: FR1, FR2, FR3, FR4 CEM-X	
Board Dimensions	Dimensions of PCB: Thickness: 0.4mm to 4 mm Footprint: Min. 50 x 50 mm Footprint: Max: 510 x 320	Maximum: (L X W) 289 x 203mm Maximum width: 203 mm Max length: 289mm	
PCBA Wash	Fully automatic PCB cleaning machine designed for removing fluxes, all kinds of solder residues, and micromechanical components.	Fully automatic PCB cleaning machine designed for removing fluxes, all kinds of solder residues and micromechanical components.	
Solder Types	Lead-Free / RoHS Compliant	Lead-Free / RoHS Compliant	
Testing & Quality Inspection	Visual inspection/scanning microscopes AOI inspection In-circuit test Functional testing Conformal coating (silicone)	Functional testing In-Circuit Testing Burn-in Tests Assisted Visual Inspection (to ensure soldering and placement accuracy)	
Component Sourcing	Full turnkey Partial turnkey Kitted	Full turnkey Partial turnkey Kitted	
Additional Services	Conformal coating of final assembly Manual soldering via J-standard-certified process PPAP	Conformal coating of final assembly Manual soldering via J-standard-certified process PPAP	

#### All VCC PCBAs Meet the Following Certifications / Standards

















## Value-added Services that Really Add Up

A streamlined supply chain means reduced costs, fewer delays, and less room for error.

In addition to designing, prototyping and manufacturing your product and assembly, VCC delivers efficiencies in production through value-added services including:

- Cable crimping
- Cutting
- Harnessing
- Final product assembly

Our crimped connection solutions empower OEMs to take advantage of production efficiencies without skimping on quality. Plus, they provide the added flexibility to roll out modifications or upgrades with ease.

#### North American Production Equals Even Greater Value

In addition to streamlining your production through our full-service capabilities, our nearshore location means you can also get a competitive edge with:

- Tariff-free transactions
- Shorter supply chains
- Faster delivery times
- Less risk of disruption or delay
- Reduced transportation and shipping costs
- ✓ Greater control and transparency from start to finish
- Lower labor costs

With VCC, you can have it all. Innovation and impeccable quality, plus comprehensive savings to drive profits and enable growth.





**VCC** 

#### When quality is mission critical, choose VCC.

Our custom PCB assemblies are ideal for:



## Contact Us Today for All Your Electronic Component Needs

#### From custom PCB assembly design and prototyping to manufacturing and installation

Whether you need an SMT or through-hole solution, we've got you covered with high-quality, cost-effective PCBA production. Take advantage of shorter lead times and a stronger supply chain. VCC is the North American PCBA manufacturer with global industry leadership.

1-800-522-5546 vcclite.com



