Specializing in:

- Mid-to-high complexity, mixed technology (SMT+Plated-Through Hole) PCBAs
- PCBAs incorporating components not suited for automated assembly processes
- Design for Manufacturability

www.redcomems.com
REDCOM EMS offers Electronics Manufacturing Services (EMS), and contract manufacturing to OEMs. We have more than 40 years of experience with the manufacture of Printed Circuit Board Assemblies (PCBAs), cable assemblies, wiring harnesses, power supplies, and complete products.

A partner you can trust
At REDCOM EMS, it’s never just about boards or boxes. It’s about your product. We have a dedicated team of experienced engineers, technicians, assemblers, and project managers who are committed to building and maintaining close relationships with our customers throughout the design and manufacturing processes.

A Commitment to Quality
REDCOM EMS follows stringent quality policies, procedures, and processes, and is up-to-date with the latest ISO 9001:2015 certification. As part of our Total Quality Management (TQM) program, we involve every manufacturing operator in regular training. They are certified to several standards, including IPC-A-610, IPC/WHMA-A-620, J-STD-001, and IPC-7711A/7721A.

In parallel with conformance to institutional quality standards, REDCOM EMS implements several procedures and controls within our TQM program, including ESD damage prevention, ECO controls, barcode serialization of all assemblies, X-ray inspections, and annual equipment calibration.

Our Core Strengths
Flexibility. Assembly and inspection stations are on casters or otherwise easily moved, enabling REDCOM EMS to configure the most efficient workflow based on job-dictated assembly and test operations. All personnel are cross-trained in assembly, inspection, and test functions.

Reliability. All operations are performed by REDCOM employees using REDCOM-owned equipment, so vulnerability to schedule slips caused by third-party provider failure is greatly reduced. A back-up generator is capable of keeping the entire plant running for several days if the power grid goes down.

Responsiveness. Operational and logistic flexibility help us respond quickly to changes in your product’s configuration or demand forecast. But service is of equal importance, and responsiveness is the essence of great service. We strive to answer your questions and address concerns without delay.

Control. Entrusting your project to an EMS provider can be daunting. There is always the concern that you care more about it than the provider does. It’s an uncomfortable feeling that you don’t understand how the provider manages your work. Will the job ship on time? Will the quality be good?

The reliability, flexibility, and responsiveness of REDCOM EMS combine to afford you maximum control over the electronics manufacturing outsourcing experience. We don’t put up barriers between your team and ours. We are all one team.
Schematic Capture
We can start with your schematic, layout of your board, and deliver prototype populated boards (PCBAs), enabling timely confirmation of your design.

PCB Layout
Prototype boards frequently need to be changed for a variety of reasons. REDCOM EMS has the capability to suggest modifications to existing layouts and get the next Rev level board ready for assembly post haste.

Determine Bill of Materials (BOM)
REDCOM maintains key contacts throughout the global electronics supply chain. We leverage these relationships to help make your product at lower cost, with maximum functional value. Our component engineering team is ready to help with questions related to the BOM.

Final Assembly
The flexible modular layout of our assembly area enables us to implement the most efficient final assembly process. We use jigs, fixtures, and automation to increase assembly efficiency and quality.

Inventory, Pack & Ship
We are experienced in the management of Finished Goods. From inventory management through packing and shipping, we are a complete solution.

ITAR-Registered Manufacturing
The United States, like many countries, has export control laws. Depending on the product and the ultimate destination, a federal export license may be required to export your product. REDCOM knows how the export control laws work and can help you determine what is appropriate for your situation.

Cable Assemblies
REDCOM can assemble a wide variety of cable types from discrete wire harnesses to individual jumpers to round jacketed cables of various lengths. We are experienced in the use of both commercial and military style connectors, and all connection technologies including solder cup, IDC, and crimping. We have assembled cables used in the following applications:

- Military
- Industrial robotics
- Servo motor control
- Telecommunications switching
- Medical

Advanced Testing & Troubleshooting
- Flying Probe
- Bed of Nails
- LabView Fixture Design

Turnkey Box Build
At REDCOM EMS, our capabilities go beyond printed circuit boards and cable assemblies. Our vertically-integrated portfolio of services includes complete product build, system test, EMI testing, and warranty and repair. By leveraging our expertise, you can reduce the number of steps needed to get your product assembled, qualified, and out the door to your customers.

Other Services
- Environmental test chamber
- EMI test
- Hardware/software engineering services
- Order fulfillment
- Warranty/repair
- Conformal coating

American Sourcing and Manufacturing
REDCOM EMS adds quality and value as a leader in reshoring and US manufacturing efforts.
We strive to keep manufacturing at home. Consistent with our operating principles, and to the fullest extent possible, we use local, regional, and US suppliers for all raw materials, components, expendables, and services necessary to the operation of our business.
Reduce lead times and Total Cost of Acquisition. Source in the USA with REDCOM EMS.

www.redcomems.com
Universal Fuzion® High Speed SMT Pick and Place
- 48k line cph real throughput
- Rapid changeover with full feeder bank exchange, family setups
- 480+ 8mm inputs, 40 random access tray inputs, track feeder support
- Large PCB size range: up to 508 x 635mm (20”x 25”) w/ 40” Length Option
- Increased multifunction and odd-form capacity (25mm tall, 5kg force capable)
- Extensive component range

Vi Technology Automatic Optical Inspection (AOI)
- Inspects boards up to 21” x 24”
- High-performance systems with state-of-the-art accuracy and repeatability
- Linear motors with optical encoders
- Customized authentic telecentric lens
- 500,000 components per hour
- Algorithm-based for greater accuracy means fewer false failures

Ace KISS-104 Automated Selective Soldering Machine
- A completely automated in-line selective soldering system
- Couples high throughput with precise process controls
- Programmable features provide the tools to set all process parameters, including immersion depths, pre-heat dwells, travel distances and speeds, solder temperature and wave height
- Out-produces 6+ operators soldering with an iron while significantly increasing the solder joint quality and to a predictable schedule

Air-Vac Engineering ONYX 29 Advanced SMT Rework
- 7-axis rework robot
- Fully automated non-contact site cleaning, force-controlled auto placement and motorized vision/zoom
- Pick & Prep station provides automatic component pick up and preparation including flux dipping, paste on device and solder paste dipping
- Applications include Lead-Free, 0201, Flip Chip, Micro BGA/CSP, MEMS, Optoelectronics, Microwave, MLF’s and other devices.

Vitronics Soltec XPM3i Reflow Soldering System
- Autoset profile/recipe generator
- 350°C maximum setpoint temperature
- Flux Flow Control™ flux evacuation system
- Active forced convection top and bottom cooling cells

FactoryLogix® Manufacturing Execution Software (MES)
- Simple, fast, guided, and monitored NPI process from CAD and BOM through a complete work package
- Real-time monitoring of quality
- Tracks the serial numbers of every board at every state of the process and for the life of the product