



**Colonial Electronic
Manufacturers, Inc.**

New England's Leading Electronics Manufacturing Services Company

ISO 9001:2015 Certification



PCB Assembly



RF Assembly & Testing



Rework & ECO Services

Quality and Responsiveness You Can Count On



**Colonial Electronic
Manufacturers, Inc.**

How Can Colonial Electronic Manufacturers Make You Successful?

Simplify Your Life

Simplify your product delivery process. Let us allow you to concentrate on the parts of the process that require your expertise like design, innovation and market requirements. Know that once you engage CEM the sub-assembly or final product will be quality built and delivered on time. CEM prides itself on becoming a value added partner who seamlessly integrates into your process and gives you the market advantage you deserve. Let our professionals and our state-of-the-art technology produce what you need. With over 17 years experience, seasoned employees dedicated to your success, and constant training on the latest technology, we can deliver more efficiently and cost effectively. We value your time and always strive to be extremely responsive to meet your deadlines.

Customer Success is Key

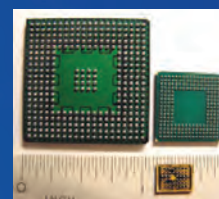
Colonial Electronic Manufacturers is a full service Electronics Manufacturing Services company that provides OEMs with a broad range of services and is always expanding to meet the growing requests of our customers. Some of the industries we serve include defense, industrial control, communications and telecom. Our services include:

- Printed Circuit Board (PCB) Assembly
- Full Turnkey, Consignment or Mixed Material Management
- Radio Frequency (RF) Assembly & Testing
- Leaded and Lead Free Assembly
- Rework Services
- Flexible Consignment Options
- Engineering Change Order (ECO) Services
- Box Build
- Prototypes or Pre-Production Fabrication
- Dock to Stock Program



PCB Assembly

Printed Circuit Board Assembly requires attention to detail from start to finish. We understand you have heavily invested in designing an innovative solution, so we treat each project as a challenge to exceed your expectations as we work with you to make sure all your requirements are clearly understood, your timeframes are met, and the materials needed are on hand to deliver a quality product when you need it.



BGA

We offer services to manufacture Surface Mount Technology (SMT), mixed technology, single or double-sided boards, Ball Grid Array (BGA) or Micro BGA, leaded or lead-free, fine pitch and through hole boards. Whether prototypes or low to medium volume requirements, CEM is ready to make sure that your delivery process remains on time.

"CEM is a valued partner and no matter what challenge we give them, they always deliver. It just makes my job easier to know that I can count on them."

- Wanda Hall, Contract Manufacturing Administrator, Sixnet

"We have been a long time customer of CEM and it simply comes down to the fact that they consistently deliver the best value and service for our needs. They have taken great pains to grow with us, be flexible and are always extremely responsive to our ever changing requirements."

- Cheryl Dexter, Purchasing Manager, Telco Systems

To ensure your success, each board is put through a comprehensive inspection process including X-Ray verification for boards with BGA's. When required, assemblies can also be functional tested. The result is a high quality assembly that meets your specifications and will perform as the engineers intended and your customers expect.



X-Ray Inspection

Speak with our professionals and determine what is right for you: full turnkey, full or partial material consignment, or even dock to stock services.

RF Assembly & Testing



Unlike many contract manufacturers, we offer Radio Frequency Assembly backed by superior testing capability at CEM. We understand the unique nature

of RF and have the right test equipment to ensure the assemblies will operate as designed.

Our test facilities can handle low MHz up to 20 GHz for a wide range of applications using a variety of transmission and modulation schemes. The same care and attention to details goes into manufacturing RF assemblies as any PCB assembly.

Rework & ECO Services

At CEM we are well known for our ability to handle the simple to difficult rework of assemblies due to previous finishing flaws, faulty components or an Engineering Change Order to fix a problem or upgrade a board.

It is difficult enough to deal with these types of issues; wouldn't you rather rely on our expertise to get you a quick rework solution at a price more effective than scrapping and rebuilding? In today's economy, any potential cost saving that can positively affect the bottom line needs to be considered.

One example of our rework included 5000 boards to which we installed a number of cuts and jumpers in order to repair a serious layout error discovered after the boards were completed at an off shore facility. This type of rework is tedious and demanding, yet within weeks we shipped back the functional assemblies, ready to install.



So whether you need through-hole or SMT rework, ECO implementation including cuts and jumpers, or BGA removal and replacement and/or reballing, CEM stands ready to help you.

Building Partnerships that Last!

Give us the opportunity to make your life easier and more successful!
Call us at 603-881-8244 or email: info@ceminc.net

Flexible Choices – Full Turnkey, Consignment Options, Inventory Management

One thing is for sure, we have learned through years of experience and feedback that we can make your life easier by offering a variety of material management choices. If you want a full turnkey solution, just provide the specifications and we will procure the materials, manufacture the assembly, test and deliver products on the agreed upon dates.

If you would rather provide the materials and have us do the assembly that is fine too. In fact, if you prefer, we will manage your inventory at our facility using our MRP system to make sure you know the quantities on hand so replenishment never becomes a problem.

Another option you can choose could be a combination of you supplying the higher price components leveraging your supplier network and have CEM procure the remaining components.

So whether turnkey, consignment, box build or dock to stock we have the experience to handle your needs.

Why let CEM be your vendor of choice?

Being flexible and responsive are key elements of CEM's success in satisfying our customers and we stand committed to delivering you defect free assemblies on time.

In fact, our employees are constantly receiving up to date training from our own in-house IPC certified Class A instructor to ensure quality results. We measure our performance and consistently have an on time delivery score exceeding 98% and a product return score of less than 1%. In addition, CEM has registered its quality system to ISO 9001:2015 and prides itself on its Continuous Improvement program.

If you have any special needs, just ask and we will work with you to find the optimal solution for you.



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"CEM's staff is very friendly and professional from start to finish. We always receive courteous communications, quick responsiveness, excellent planning, and timely delivery of quality product."

- Don Piantaggini, RF Applications Design Assistant, Analog Devices