



Bhavyabhanu Electronics Pvt. Ltd.
An Astra Microwave Company

Electronic Manufacturing Solutions for Military, Aerospace & Other Industries



Overview

Bhavyabhanu Electronics Private Limited (BEPL) is a fully owned subsidiary of Astra Microwave Products Limited (AMPL). AMPL has 25 years experience in design & production of RF/Microwave Products and has established BEPL for providing reliable, high-volume production of electronic sub-assemblies.

BEPL has established State-of-the-Art manufacturing & test facilities that meet global standards. This combined with experienced man power & stabilized processes ensure that the needs of various industry segments can be met easily.

BEPL is a dependable player with excellent technological capabilities and a long-term commitment to the defense and aerospace industry. Its products are known for ruggedness and reliability and conform to the latest quality standards.

BEPL is a preferred supplier for most Indian defense PSUs and for international defense companies in several critical programs. BEPL can handle both high-mix, low/medium volume products as well as high volume products for our customers.

VISION MISSION VALUES

To be a world class contract manufacturer of Electronic Products through continuous focus on quality, product safety, efficiency, customer satisfaction, employees' welfare and corporate social responsibility.

Create an added value in all that we do, by serving our customers who believe in us.

Trust, Quality, Delivery, Respect, Safety

Accreditations

- ISO9001:2008
- ANSI/ESD S20.20-2007
- IPC-S-816 SMT Process Guidelines Standard
- ISO 14644-1:1999(E) Class 8. Clean rooms and associated controlled environments

Workmanship standards

- IPC J-STD-001E Workmanship Standard
- IPC 620-B Class 2 & 3 Acceptability Standard

Supply chain

Having developed an international network of audited and approved suppliers, BEPL strives to source material that is of high quality, meeting on-time delivery schedules and at a competitive cost. Our passionate SCM team works with the suppliers to increase the effectiveness of the supply chain and improve customer satisfaction throughout the business relationship.

Design to production – Our differentiator

We know, first hand, the challenges of designing a product from scratch. This is the reason we understand the importance of turning a complex design into a product that has to be manufactured in large volume without quality issues.



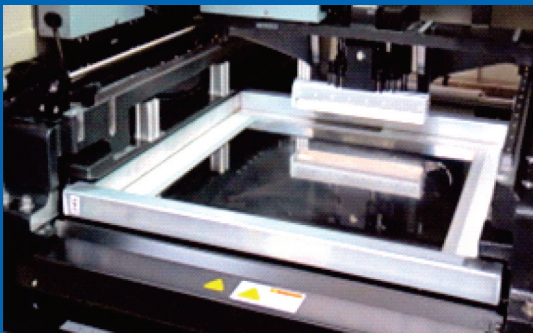
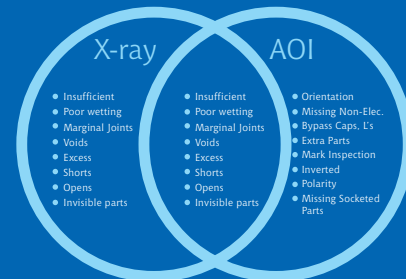
To meet this objective, our team combines their manufacturing experience with the latest technology to bring a complete range of services tailored to customer needs.

- 🌐 PCB design (RF & Digital Application)
- 🌐 Lead free assembly
- 🌐 Prototyping
- 🌐 Mechanical assembly including box build
- 🌐 Turn Key sourcing of components
- 🌐 ESD Packaging
- 🌐 SMT and PTH assembly
- 🌐 BGA Rework
- 🌐 PCBA cleaning by vapour Degreasing Machine

ASSEMBLY FLOW



TESTING



Printing

All of our PCB stencils are laser cut from stainless steel, mechanically printed and framed to fit our automated machinery. An investment in one of our durable, high quality stencils will result in consistent, precise adhesion of the components throughout the production run.

All of our PCBs are screen printed and quality checked for precise finish. We have a SPI machine which is equipped with 3D post print inspection, to automatically check for all solder paste related errors.

Prototyping

At BEPL, we offer a dedicated quick turn PCB prototype assembly service for low volume runs or one-off samples.

“Our resources are experienced in this highly skilled process, and can guarantee on time delivery of quality prototypes”

As part of our service, all prototype builds receive a comprehensive manufacturability feedback report, including observations and recommendations for improvement of both manufacturability and quality.

SMT Assembly

Our Modern Manufacturing Facilities include 2 SMT lines with State-of-Art machineries to cater the needs of global customers.

As part of our commitment to high quality SMT, all our technicians are well trained by various OEMs to handle all type of issues.



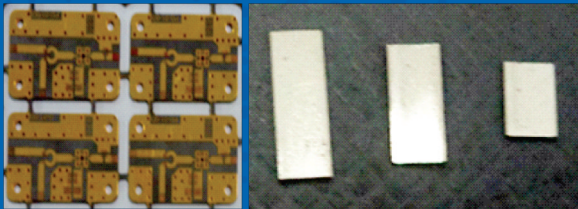
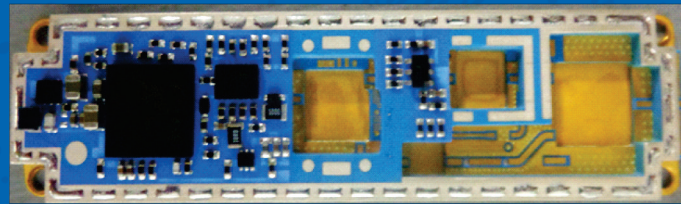
Mechanical Assembly

We use a team of highly skilled and competent operators. We also employ a process engineer to ensure that the processes used are efficient and are optimized to reduce human error. By performing this complete process we support our customers values and also achieve greater continuity throughout the QC process.

Achievements

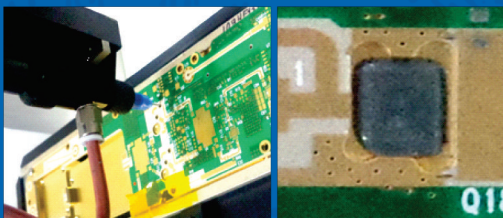
Ceramic/Silver Coating & Multilayer PCB

Amongst the earliest companies in India to build such PCBA's whose layers were designed in a complicated manner.

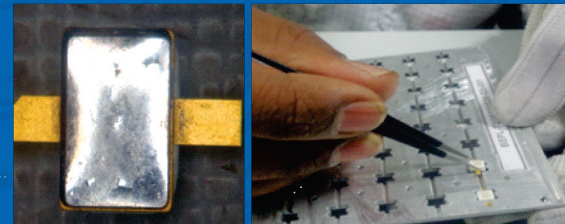


RT Duroid/Die attachment PCB
Shim cutting by Jig's developed in-house

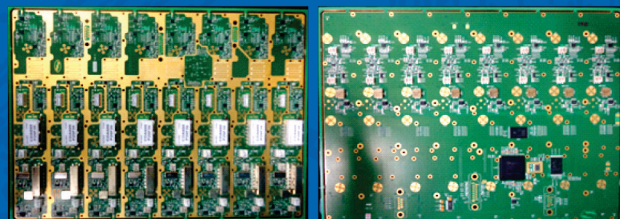
Degolding of Power Transistor by Selective soldering machine



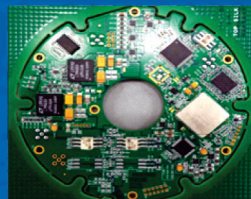
High BOM Qty/Multi Type PCB



Paste Dispensing for Cavity PCBA



Different Shape PCBA



Quality Control

At BEPL, we take a comprehensive approach to ensuring quality. The team members have completed mandatory ESD training and carry out work in accordance with IPC610E standard quality procedures.

Our QC process covers everything that we do, starting from purchasing, incoming inspections, through to PCB manufacturing and testing:

- 🌐 Schematic and layout checks
- 🌐 Pre-production unit quality checklist of key inspection points
- 🌐 Screen printing precision checks using magnifying cameras
- 🌐 Component orientation and placement checks (SMT and Manual Soldering)
- 🌐 Solder condition checks for both SMT and manual soldering
- 🌐 Extensive checking of the first output unit against the sample
- 🌐 Complete assembly cosmetic checks and final QC inspection



Bhavyabhanu Electronics Pvt. Ltd.

West Block, G Floor, Plot No. 18 to 21, Imarath Kancha Hardware Park
Raviryala Village, Maheswaram Mandal, Ranga Reddy District, Telangana 500005

+91-40-30618000 office | +91-40-30614950 works | +91-40-30618048 fax

