

Excellence, engineered for the world.



# THE EXPERTISE & ATTITUDE TO EXCEL



Kaynes Technology delivers Total Manufacturing Solutions with Integrated Business Verticals to cover the entire bandwidth of Electronic Manufacturing Services starting from Design Services through Prototyping, Sourcing, Turnkey manufacturing and Support Services. The company was established in the year 1988 in Mysore in Southern India. The Corporate Headquarter and its manufacturing plant are co-located at Mysore with its second plant located in Northern India at Parwanoo in Himachal Pradesh.

We are providing End-to-End Solutions to the organised sector in the field of IT Hardware, Industrial Controls, Telecom, Energy, Medical Electronics, etc. Our clientele includes leading Companies such as Analog Devices Inc., USA, Ansaldo Signal Group of companies in USA and Europe, TVS Electronics Ltd., WIPRO, WEP Peripherals, Larsen & Toubro Ltd., and major Corporates in the domestic market.

Kaynes is an ISO 9001/14001/18001 certified company. Our capability in Printed Circuit Board assembly and full box build, combined with skill sets in testing & development parts, ensure a quick turnaround and faster Time to Market. We have a dedicated 100 % Export Oriented Unit for Green Channel, Duty-free Import & Exports and Order Fulfilment direct to users.

Kaynes has an exclusive line for RoHS manufacture. Going beyond the "Lead free" manufacturing of PCBs, our expertise extends to the supply of mechanical parts, finishes, transformers, cable sets, bare boards, heat sink parts, consumables, "Green dot" packaging for supply of complete RoHS compliant product.

Our Quality Policy responds to International Standards, maintaining related laws and regulations while satisfying the expectations of all our stake holders along the complete value chain, in line with our Vision. We believe in the philosophy of process orientation & continual improvements through Best Manufacturing Practices, 5S, SQC & SPC, KAIZEN, TOC, 7 TOOLS and the new tools of QC and Six Sigma practices, leading to customer delight.

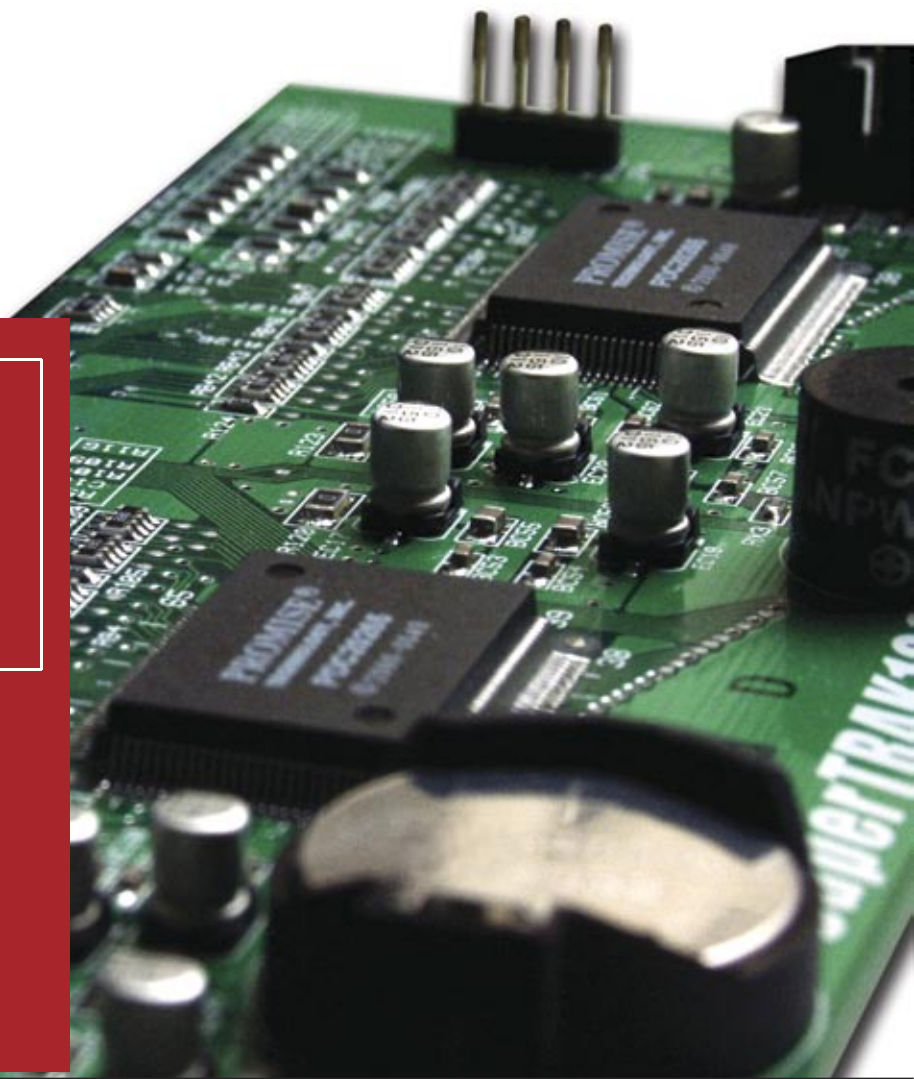
Our strengths in Infrastructure, Systems, Skill Sets and TQM practices enable us to offer High Mix, Low & Medium Volume products along with value added services. Our Flexible manufacturing services allow customers to focus on their core strengths with their Intellectual Property intact.

## OUR VISION

To be globally competitive in the business we are in and achieve excellence through build up of strength in facility, system and skill sets resulting in satisfaction of our customers, suppliers and employees.

## OUR MISSION

We at Kaynes shall create a niche in the Global Market and do value addition to our services year by year and provide service to our customers with integrity and continual improvement in the manufacturing technology.





## THE EXPERTISE TO CUSTOMISE

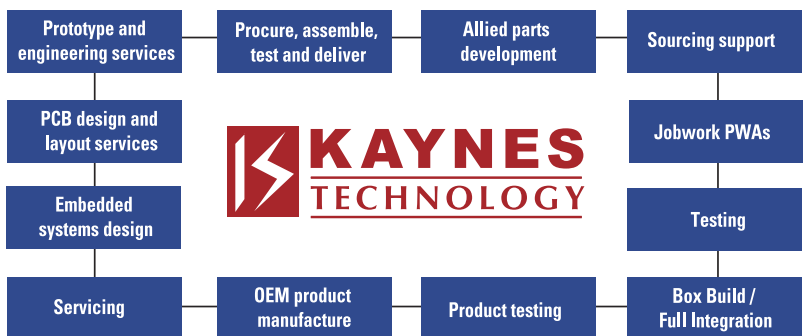
Kaynes recognises customer needs and provides value added services in **Design & Engineering** as a part of integrated business verticals.

### DESIGN AND ENGINEERING

Our services include PCB design layout services, generating Gerber data & output files required for manufacturing Bare Boards. We use advanced tools such as Cadence, PCAD, & Cad Star to suit customer requirements. Our capability includes designing multilayer PCBs up to 30 layers with 4 mil trace/ width as well as Blind & Buried VIA and BGA Footprint designs with 0.5 mm pitch. Design capabilities exist for RF designs with Impedance Control and Signal Integrity.

Kaynes provides customized designs for products based on GPS/GSM designs, Microprocessors , I/O Interface and Industry automation/ controls, etc. Our experienced technical team enables us to offer highly effective value added Engineering Services supports with process definition, DFM/ DFT/DFS review and support for ESS/EMI/EMC/HALT/HASS testing of products.

Design support services are also available in the area of component re-engineering for obsolescence, upgradation of designs, reliability engineering and making products more rugged to sustain extreme environment conditions and CE, UL, TUV approvals.



## THE EXPERTISE TO STAY AHEAD

The high degree of success we have achieved in turnkey **prototyping solutions** is rooted in our emphasis on excellence.

### PROTOTYPING

Our prototyping services provide customers with the benefits of reduced time to market through several innovative measures. We adapt concurrent Engineering programs & Quality processes to ensure smooth transition from protos to bulk production. We provide testing, mechanical boxing/ demo package designs and with a 'Ship to Bill to' arrangement the product is delivered directly to the end user.

Kaynes has the capability to manufacture prototypes in small quantity ( 2 to 10 Nos.) with expertise in handling the latest SMT Technology based Boards, BGAs (0.5 mm pitch), LGAs/ QFNs, QFPs of 12 mil pitch, 0402/0201 and even chip bonding.

We provide complete testing with basic and advanced measurements including JTAG based testing for DSP designs.

# THE EXPERTISE TO DELIVER

Kaynes provides end-to-end  
**Turn Key Manufacturing Solutions**  
for PCB assemblies and box  
building including OEM / ODM  
manufacturing models.

## TURN KEY MANUFACTURING SOLUTIONS

With our Domain expertise, our focus on High Mix, High Tech, Low And Medium Volume production, combined with Value Added Services provide definitive benefits to the customer in the area of professional/ industrial electronics products for the Telecommunication, Power Electronics, GPS, Medical & Automotive Electronics Sectors.

Kaynes has the technological capability to manufacture SMD & THD boards with the latest packaging of QFPs, BGAs, LGAs / QFNs, and 0402/0201 chips. Our expertise extends to handling all types of Boards of RF, Power electronics, Discrete logic boards from 100% SMD's to 100% THD population.

Our Testing Facility for PCB Assembly and products include a high-precision Voltmeter, Frequency Controls, Digital Oscilloscopes, Spectrum Analysers, Signal Generators, Customer Specific Test Jigs & Automated Testing Services using IEE 488 Instrumentation.

## OEM / BOX BUILD

We have customized lines for Box building, Integration and Testing, with facilities for manufacturing Cable forms & harnesses as well as a Burn In / Soak test facility. Our OEM products are directly shipped to the warehouse of customers.

Our effective Global Supply Chain management enables us to offer Turnkey Solutions -- from sourcing of all parts including MIL Grade, through development of mechanical parts, transformers, manufacture of PCB Assemblies/ Integration, testing right up to shipping (with Inco terms like DDP, DDU, etc.) to the end market, anywhere in the world.

We also provide exclusive servicing facilities at the board level, with over 100 man years of Servicing Skill Sets and advanced testing instrumentation.

Our exclusive Customer Oriented Strategies in Sourcing & Manufacturing drastically reduce the lead-time of order fulfilment to a mere 3-4 weeks, irrespective of the lead-time of component parts.

## ELECTRONIC & ALLIED PARTS DEVELOPMENT

Kaynes expertise include the Design & Development of Transformers, Inductors, and Coils of all types - ranging from power transformers to HF switching transformers, POT Cores/E Series Ferrite/Drum Cores - for use in Power Supply, Receivers & Transmitters and other HF control devices, with automated CNC winding machines & Test Facilities. Cable forms and harnesses can be designed to customer specifications using MIL grade connectors, PTFE/ETFE cables, using developed punch & die sets on semi automated toggle press.



## MECHANICAL PARTS & PLASTIC PARTS

We develop and supply Sheet Metal forming of Stainless Steel, Aluminium, Carbon Steel, and Non Ferrous metals. Metal parts are powder coated/ anodised/ special plated to withstand 1000 hrs of the Salt Spray Test as per ASTM B117, as also the Extruded Heat sink and CNC machined parts.

We can design tools for plastic parts and supply moulded parts of all types, to UL 94 V Ø specifications, in thermo plastics and thermo setting plastics as also allied parts like screen printed labels, overlays, key pads, etc.

We use high tech design tools like Auto CAD, PRO E, Solid Works & Simulation Packages for 2D/3D Modelling & E-Drawings

## THE EXPERTISE TO BE GREEN

Since our inception, Kaynes has demonstrated a concern for the environment through **Green Processes**



Today, toxic e-waste has become a growing problem that the EU seeks to solve through the introduction of the RoHS directive effective since July 1, 2006. As an electronics product supplier, you are under increasing pressures to supply products that are RoHS compliant.

Kaynes has set up an exclusive “Lead free” manufacturing line for PCB assemblies. Having deployed over 10 man years of expertise through DoE, Process Validation, Resource evaluation & Exclusive system design exercises, we have established the skill sets, the trained manpower and the infrastructure to produce highly effective RoHS compliant products, supported with visual control management, exclusive procedure and work instruction sets and an isolated manufacturing area. We can also take up projects to convert existing lines of products to RoHS.

### PARTNER WITH KAYNES TO GO THE RoHS WAY AND REALIZE TANGIBLE BENEFITS LIKE:

- Supply to EU community and others, a safe product complying with RoHS.
- Plan a compliance strategy for existing products throughout the life cycle of the products.
- Re-engineering products for your PCB assemblies and sub assemblies to RoHS Compliance.
- Effective Asset Management, exclusive to RoHS.
- Optimise your resources to comply with RoHS.
- Manufacturing and supply of PCBs with fully trained manpower and Lead free process.
- Supply RoHS compliant parts apart from PCB assemblies like transformers, mechanical parts, etc.

FOR REPAIR /  
REFURBISHING OR  
RECYCLING AS PER  
WEEE, CONTACT US.  
IT IS REGULATORY AND  
REQUIRES STATUTORY  
CLEARANCES AT  
VARIOUS LEVELS.

# THE EXPERTISE TO SURPASS OURSELVES

Our **Quality Management System** & strategies include ESD audits, System audits, Small Group Activities for work place improvement, customer feedback and CAPA as well as audits and feedback from Process experts.

We apply the principles of TQM, Kaizen and the PDCA cycle, constantly moving forward from the high standards that earned us ISO 9000 certification over a decade ago.

Our management values are based on integrity and respect for all individuals, independent of hierarchy, thus maintaining an environment where manpower has

developed into domain skill sets. Management activities include on-going training, scheduled audits (both internal and external) and regular quality reviews. We believe in sustaining excellence through training our manpower in HR skills, International Process Standards, Manufacturing technology, Quality, Environmental safety management, and in RoHS and Lead free processes.

We leverage all feedback – from employees, suppliers and customers – to positively assist our intention to progress. Our policy of continual improvement in products and processes has earned our facility, approval by the Defence sector in India as well as by two US-based companies and one French company.

Our Processes are guided completely by IPC standards. This translates into configuring PCB assembly to IPC 610D, using materials in line with the J standard 001, 004, 005 etc., cable assemblies to IPC WHMA 620, IQC of Bare boards to IPC 600E and ESS testing to MIL 810E standards. We have IPC trained professionals developing processes for new products & AWS certified professionals to satisfy customer needs for system mechanicals .



## OUR SERVICES INCLUDE

PROTOTYPING

DESIGN & ENGINEERING

TURN KEY MANUFACTURING

SOURCING & DEVELOPMENT

VALUE ADDED SERVICES

## THE EXPERTISE TO BE PROGRESSIVE

Continuous Strategic Capacity building has placed our infrastructure at the forefront of electronic manufacture. At Kaynes, we believe in bringing customers the benefits of the most up-to-date technology to provide time-oriented electronic manufacturing of outstanding quality.

We have nearly 100,000 sq.ft. of greenery and a built up area of 30,000 sq. ft. housing SMD and THD manufacturing with a completely ESD free environment. With state-of-the-art machinery, the capability of placing in excess of 400 million components a year and Strategic Spare Capacity of over 30%, Kaynes provides an unsurpassed comfort level for the customer.

Our integrated Management Systems, certified to match ISO Standards Certification as well as the Self Certified status of many customers, delivers value for money. Our infrastructure combined with Value Added Services, Sound Resource Management practices and our Excellent labour relations result in several points of differentiation deriving benefits for our elite clientele.





## THE EXPERTISE TO PARTNER

Our commitment to high quality manufacture and timely delivery has, over the years, built successful relationships with an elite global clientele. For over 18 years we have partnered with leading Indian & Overseas companies, growing from strength to strength.

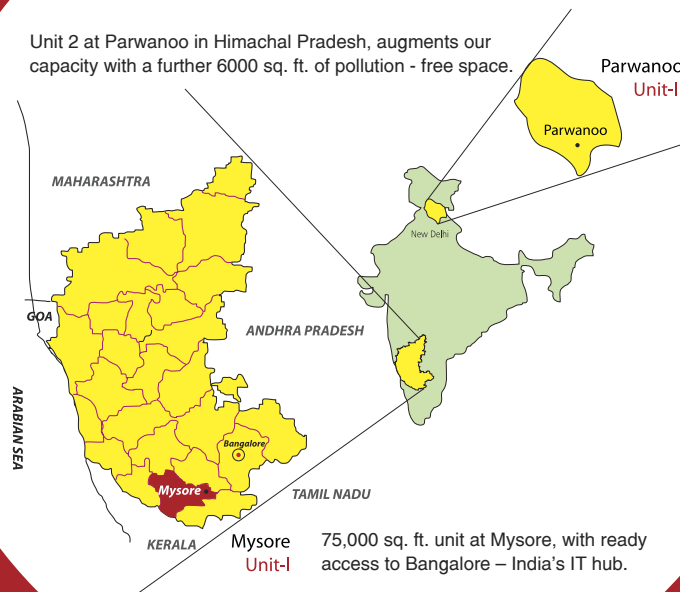


## Our Processes Shape Perfection.

Come, discover our global expertise.  
Partner with the right experts in EMS.



Unit 2 at Parwanoo in Himachal Pradesh, augments our capacity with a further 6000 sq. ft. of pollution - free space.



Mysore 75,000 sq. ft. unit at Mysore, with ready access to Bangalore – India's IT hub.

# KAYNES TECHNOLOGY

**INNOVATING WITH QUALITY AND VALUE, FOREVER**

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