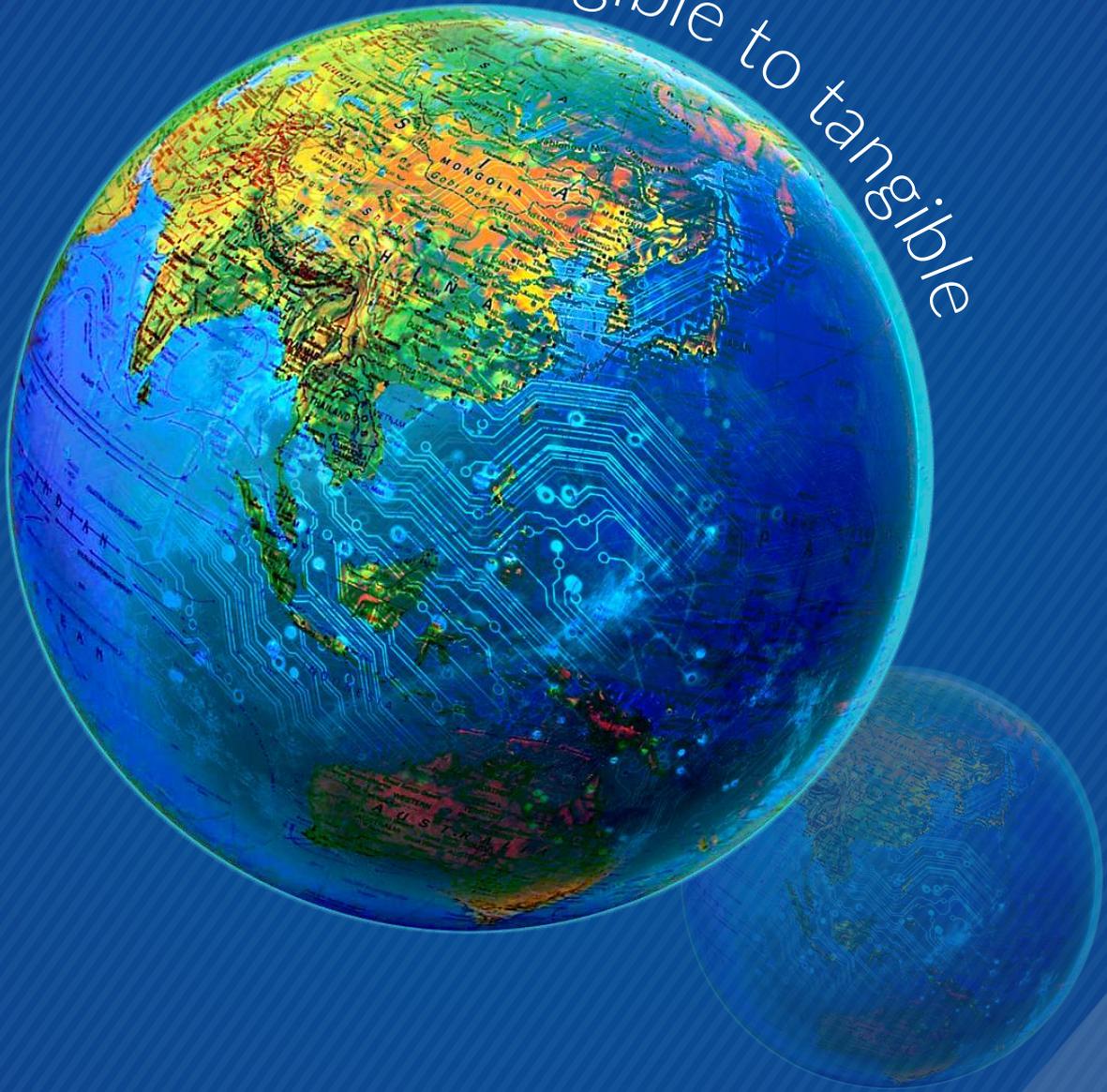


# CORPORATE PROFILE

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intangible to tangible



## About Rhombus

Rhomus is an ODM (Original Design Manufacturing) division of MASIBUS which provides complete product solutions to global customers. For over 43 years, Masibus has successfully gained global recognition for its quality, innovation and outstanding customer satisfaction. As a valuable & reliable industrial service provider, we are devoted to producing state-of-the-art solutions that support users in achieving success. We take pride and ownership in what we do through our commitment to excellence.

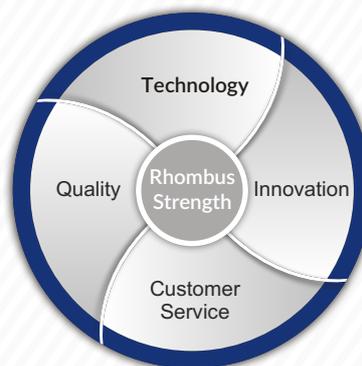
Our endeavor is to serve the clients with a perfect blend of:

- Expertise of highly talented engineers
- The economical costs benefit from production & engineering in India
- Manufacturing experience of over 4 decades



## Rhombus Strength

Innovation in product design and development, using the latest technologies available, compliance to global quality standards and supporting it with excellent customer service is what we strive to achieve at Rhombus and all our activities are geared towards these ideals.



## Rhombus At a Glance

### Competence

- Complete ODM capabilities
- 200+ employee strength
- Two manufacturing facilities in India

### Experience

- More than 20 years experience in products across industries
- Designed 70+ automation and instrumentation products
- In-house R & D team of hardware and software engineers
- In-house lab for validation and calibration
- Headed by technocrats with 40+ years of experience

## Values

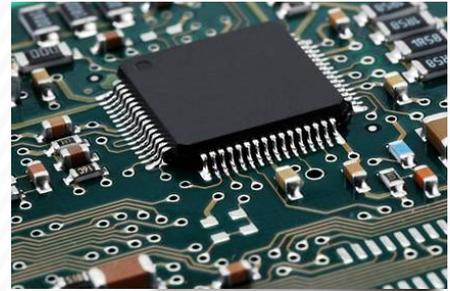
- **Passion:** We are passionate about our vision, our goals and our commitment to serve our employees and customers
- **Integrity:** We earn your trust through transparent, legal and ethical business practices
- **Innovation:** Our focus is on developing new products using the most advanced technologies and customer-based experiences
- **Diversity:** Facilitating continuous improvement of technical & leadership skills in our people
- **Leadership:** Our goal is always to be the leader in our targeted markets & take end-to-end ownership of projects
- **Partnership:** We commit to long term mutual success with customers, employees and stakeholders

# Technology

## Processor Platform Experience & Expertise

- 8, 16 and 32 bit microprocessors & microcontrollers
- ARM Cortex-A8
- ARM Cortex-M3
- ARM + DSP SoC
- ARM 9/ ARM 7
- TI DSP 2400, 6000, 5000 series
- ATMEL AVR and ARM based controllers
- Microchip PIC 16F,18F and PIC32 series
- Texas instruments - OMAP2/ 3/ 4/ 5, AM335, DSP, MSP430
- Analog devices ADUC series
- 8051 and derivative micro-controllers

**Capability:** Any platform/ processor of your choice & requirement



## RTOS

- Embedded Linux (Kernel 3.2)
- Linux on ARM
- RT Linux
- ECOS

**Capability:** Any RTOS of your choice & requirement

## PCB Designing Tools

- Orcad 16.0
- Cadence Allegro
- Protel
- Circuit maker

**Capability:** Any PCB designing tool of your choice & requirement

## Software Languages

- Assembly language – 32-bit, 16-bit, 8-bit
- Embedded C
- C++
- Labview
- VisualC++
- Visual basic

**Capability:** Any software language of your choice & requirement

## Software Development Tools

- Green hills multi
- Code composer studio (TI)
- Tasking compiler EDE
- AVR studio (Atmel)
- MPLab
- Keil uVision 3.0
- RealView (ARM)

**Capability:** Any tools of your choice & requirement

## Interfaces and Protocols

### Interfaces

- ETHERNET
- SPI
- I2C
- Parallel Bus
- USB
- RS-232/ RS-485/ RS-422
- GSM/ GPRS/ GPS
- ADC (24 Bits) / DAC (20 Bits)
- LCD - Alphanumeric/ Graphic
- Cap – Sense key technology
- Zig bee, Wi-Fi, Bluetooth

### Protocols

- PROFIBUS
- NTP
- CAN
- MODNET
- HART
- TCP
- MODBUS
- HTTP
- DHCP
- SNMP
- Telnet
- FTP
- SMTP

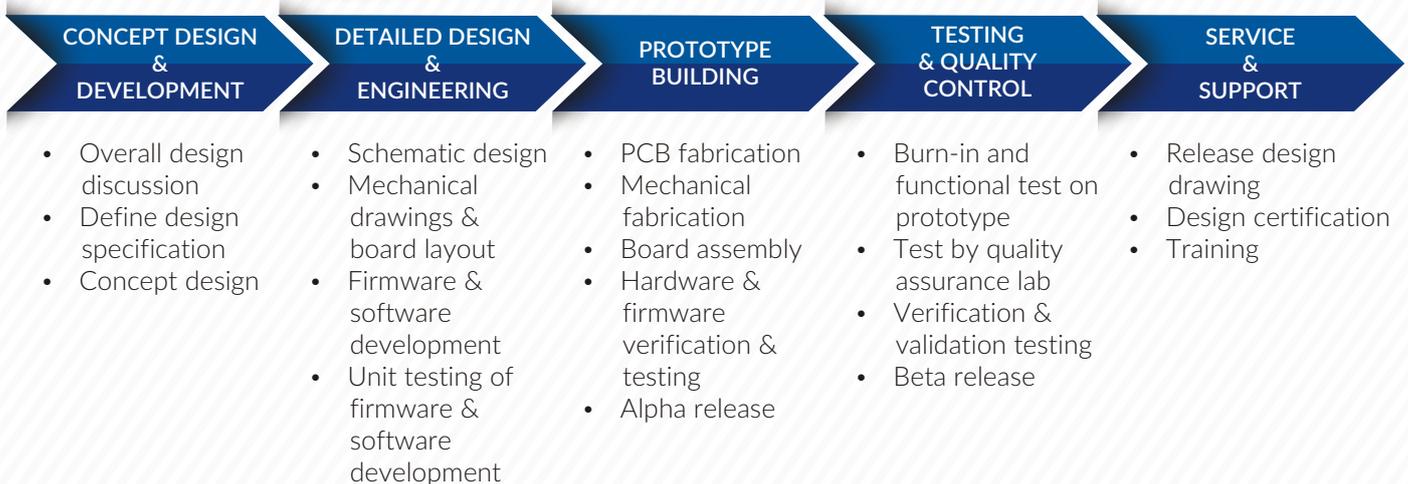
# Services

## Product Design Services

Rhombus takes up complete product design starting from concept Stage to delivery of fully tested prototypes ready to go for production. This can be within Rhombus premises or can be setup as an extension facility on BOT (Build-Operate-Transfer) model.

- Innovative design solutions based on field experience
- Focus on cost effective designs
- Exhaustive feasibility and alternative evaluation
- Exposure and relationship with major semiconductor players

## Design & Development Methodology



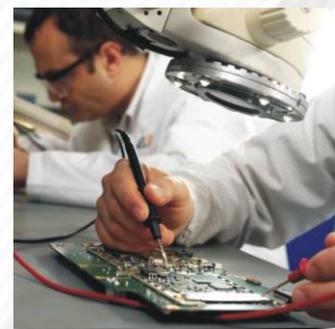
## Testing: Verification & Validation

### Our Capabilities

- Manual and automated testing
- Test strategy
- Test design
- Product compliance testing
- Test process improvement and tool evaluation
- Test reporting

### Services Offering

- Compliance testing for industry standards
- Unit testing/ Integration testing/ System testing
- Interoperability testing
- Functionality testing
- Load testing
- Regression testing
- Development testing
- Development of test cases



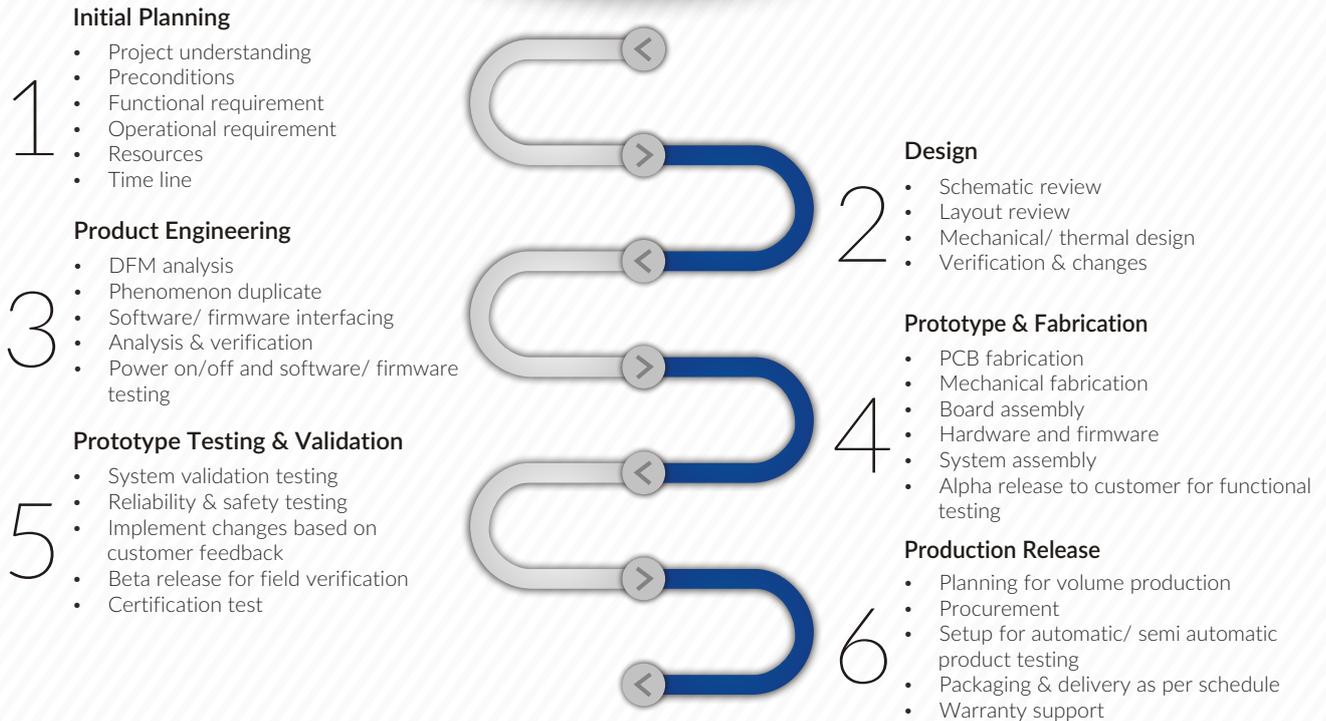
# Manufacturing Services

Companies specializing in innovative technologies often look for a partner to outsource the manufacturing and logistics of products designed by them, either owing to limited capital or capacity.

Rhombus takes up such manufacturing services based on customer designs.



## Our services include:



# Logistics and Support Services

Rhombus can take up post delivery support and logistics management for delivering products in various geographies. Dedicated team of engineers can be assigned for support and repairs of the returned product with fixed annual charges to keep the support costs predictable & sustainable for the customers

## Logistics

### Distribution & SMI

- Product fulfillment
- Suppliers & inventory management
- Inbound freight management
- Enterprise WMS connectivity

### Product Transformation

- Build/ configure to order
- Auto quote software for configuration
- Product postponement
- Supply chain design
- Flexible ERP solutions

## Support

### RMA Logistics & Repair Product Fulfillment

- RMA (Return Material Authorization) logistics
- Exchange fulfillment
- Unit repair
- Recovery & recycling

### Service Parts Logistics

- Simplified order management
- Optimized warranty recovery
- Procurement execution
- Centralized planning
- Integrated IT solution

## Our Experience

We are focused on driving innovation and adopting solutions in line with technological trends. Rhombus leadership team members have several years of experience in various industries like automation, networking, security & surveillance, automotive, defense etc.

We have a dedicated team of skilled individuals with technical background and domain experience in each of our vertical with a focus on evolving technologies. These teams follow a structure to apply innovation and solutions to develop process and delivery functions to identify the key concerns of our customers and generate solutions, ideas and concepts to address the concerns.

We have a proven track record of product innovation to meet the needs of our customers, changing industry trends, evolving technology and emerging competition.

## Applications



### Automation

- Comprehensive process control & monitoring module
- GPS Time synchronization server
- WI-FI based LAN switch
- Field interface module
- Substation monitoring solution
- Remote monitoring unit with GSM
- Wireless current & voltage measurement data logger
- EMS (Energy Management System)



### Security and Surveillance

- Biometric authentication and access control products: Wall mounted and handheld
- Smart surveillance cameras for consumer, retail, homeland security and defense applications
- Hybrid video recorders for recording inputs from Analog and IP cameras



### Power electronics

- AC/DC & DC/DC Power supply
- Energy metering and remote monitoring
- Motion control device
- Battery backup management
- Power RTU (Remote Terminal Unit)



### Industrial & Automotive

- Navigation system – GPS based marine and automotive navigation system
- Signal conditioning modules – Isolated analog and digital signal conditioning modules
- Microprocessor based textile equipment: print the name selvedge on cloth
- Drive through order processing system
- Locomotive system monitoring and analytics
- Street light controlling

# Why Rhombus

The manufacturing experience and brand name of Masibus provides flexible business model that caters both small and big enterprises. We have well developed infrastructure, in-house testing facilities and a complete technical exposure which works for techno-commercial benefits of customer. These are some of the many reasons why Rhombus should be your preferred partner for new product design and development.

## Customer Benefits

- New concept product introduction
- Re-engineering
- Retrofitting
- Sustaining existing products
- Support & services
- One stop solution - Design + Manufacturing

## Our Differentiators

### Technical Differentiators

- Micro controllers knowledge
- Real world interfacing & interoperability
- In-house layout team
- Low cost small size designs

### Execution Differentiators

- Complete product life cycle
- Quality certification-ISO 9001
- Re-engineering of products
- Field support experience
- Testing facilities

### Corporate Differentiators

- 43 Years of operation
- Design and manufacturing
- Sales network in India & UAE
- Brand reputation
- Financial strength, credit ratings

## Our Business Models

### Engagement Models

- Product design and manufacturing
- Dedicated design and marketing operation
- Support and logistics

### Design Ownership

- Product design owned by customer
- Product design owned by Rhombus
- Product design co-owned by customer and Rhombus

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