



AN ISO 9001:2008 COMPANY

Oriole Electronics Pvt. Ltd.

We're here to help make your life easier!

An Introduction...

- An OEM for all your electronic hardware and embedded software products, solutions and interfaces.
- Oriole products are associated with a brand image of the highest quality, innovation, reliability, trustworthiness & cost effectiveness.
- We nurture a work culture that aims at “Total Customer Satisfaction” with integrity and transparency in working as our core values.

Introduction cont...

- Over 35 years of Product development, design and manufacturing experience in the Indian electronics industry
- An ISO certified company focusing on total customer satisfaction and on-time deliveries
- Pioneers of LCD Technology in India
 - Oriole is India's oldest and largest LCD manufacturer
- Leaders in microcontroller based hand-held terminals & solutions
- Strong development and production backing for LED Drivers
- All our design wins are robust & reliable, released after thorough and prolonged field trials.
- In-house experienced ESS team
- All India presence through regional offices and a dealership network.
- Highly ethical company promoted by a strong management with experience in supporting the complex Indian laws

Our Business Model

A one stop destination for customers needing electronics product support in design & manufacturing

- Trading - Import of components & products from Principals and sale through:
 - Head Office at Mumbai
 - Regional Sales at Delhi & Bangalore

- Manufacturing support for:
 - Oriole Products like LCDs, HHTs, HHCs & LED Drivers
 - Specific customer orders like Industrial Computers, Data Acquisition Systems
 - Sub contract job work for leading industries like BARC, BEL, L&T etc.

- Design – Electronic design, including PCBs & embedded software solutions for customized industrial applications like:
 - Oil dispensing System
 - Display drive units for fighter tank and airplane radars
 - Elevator control & indication units



AN ISO 9001:2008 COMPANY

Manufactured Products

A brief introduction...

Liquid Crystal Displays

- Alphanumeric LCD Displays



- Graphical LCD Displays



- Numeric LCD Displays

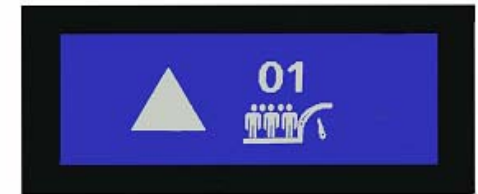


Advantage Oriole

- Why buy an Oriole Display?
 - India's oldest LCD manufacturer
 - Unmatched product range
 - RoHS compliant LCDs
 - CACT & C-DOT approved
 - Free replacement warranty against all manufacturing defects
 - 100% product support
 - Product customization to suit individual requirements

Lift Indicator

A sleek modern looking LCD display used inside the lift and on landing floors to display the floor number, status, company name and logo, advertisements, temperature, date, time & any other special messages.



Hand Held Terminals

- Hand Held Terminal for On-line Data Entry
- Hand Held Terminal for Programming and as a Diagnostic tool for PLCs
- Hand Held Terminal for Remote Data Collection and Communication
- Table Top Terminal for Weigh Bridge Applications
- Hand Held Terminal as a CNC Data Code Loader
- Hand Held Terminal for ticketing application
- Hand Held Terminal with MODBUS interface for Circuit Breakers
- Hand Held Terminal as a Monitoring Device
- Hand Held terminal as a collections tool for banks



NEW



NEW

LED Driver



Advantage LED:

- Energy efficient- LED's use up to 90% less energy
- Long life
- Vivid colors and focused light
- Environment friendly



Oriole supports customers with **Supertex** LED Driver ICs for use in their circuits. Alternatively we also provide OEMs with a complete solution for constant current LED drivers with designs ratified by US based LED driver IC manufacturer, **Supertex**.

Our LED Drivers range from 1 watt to 30+watts and are used in general lighting, street lighting, solar lights etc



Electronic Beeper

Oriole is an industry standard for 35mm beepers having a *minimum* db level of 85db. We have been supplying these to OEMs and to the elevator industry with an almost zero% rejection rate



Manufacturing Infrastructure

- Sufficient production space
- Good knowledge & experience in manufacturing activities related to electronic goods
- Conformance to quality production processes like traceability, assembling, testing, packaging etc.
- Availability of test equipments like oscilloscopes, insulation testers, high voltage testers, LCR meters, ultrasonic cleaners, incubator etc
- Skill Sets
 - Sound knowledge of electronic multi-layered PCB manufacturing & repairing, techniques like SMD soldering, wiring, testing
 - Expertise in digital & power electronics
 - Good domain knowledge of dot-matrix, alphanumeric and graphical LCDs



AN ISO 9001:2008 COMPANY

Traded Products

Our Principals...

Distributors for/Representing...

Supertex inc.

- Supertex, Inc. is a technology-based producer of high voltage analog and mixed signal semiconductor components, primarily to interface between low voltage computer signals and high voltage applications in the real analog world. These ICs are used in key products for use in the telecom, networking systems, flat panel displays, medical and industrial electronics industries.

OPTREX

- World Leaders in the Design and Manufacture of OEM Flat Panel Displays, Optrex is an ideal supplier for your flat panel display requirements due to the breadth of product & technology offerings, product availability, and product reliability.

PRINTREX

- Printrex is the world's leading producer of printers/plotters for oil and gas well logging. These sturdy & rugged printers are used in medical, industrial and mobile applications.



AN ISO 9001:2008 COMPANY

Development Projects

A glance at the diversity of projects
undertaken...

Some Embedded Software Solutions

- RFID based Oil Dispensing system with master slave configuration for Ingersoll Rand
- Temperature monitoring and logging of graphite processing in a reactor
- Carbon Potential & Temperature controller for furnaces
- Soil parameter & analysis system for ONGC
- Control & display unit for Fighter Tank for ECIL
- Z-line petrol pump interface
- Display & control unit for RCIP for BEL, Ghaziabad
- RCIP Simulator for BEL, Ghaziabad
- Weight analysis system for IPCL, Nagothane



...ESS solutions cont.

- Plasma Display Unit Replacement for IAF Radar – a BEL Project
- Micro controller FTU & MIMIC for BPCL
- Interface Simulator for Indian Navy (for MIL-STD-1553, RS 232, RS 422A, NMEA, ATM, ARINC, Synchro to Digital Interface Protocols)
- Porting of software in RTOS environment for Defense
- DAAS (Data Acquisition and Analysis System) for a missile tracking system for Indian Navy (Delhi Class ships)
- Emulator & Simulator Device of Navigation Sensors & Weapon Systems for Indian Naval Ships
- Decision Making Software Support System for Gas Turbines maintenance for Indian Navy.



ESS Team's Skill Sets

- Strong in Analog & Digital Designs
- Experience in developing software in C, Assembly, Turbo C, Visual Basic, VHDL, Verilog and SCADA
- Good knowledge base in smart card, FPGA, PLCs, PLAs, logic devices like FPSLIC, CPLD, AVR (micro controllers)
- Developed customized solutions in memory replacements on VME backplanes, point to point communication using RS 232/422/485 protocols, high speed data acquisition system using PC-104 bus based Intel 386
- Adequate experience in development tools like emulators, simulators like STK 500/501, JTAG ICE, Universal Device Programmer, JTAG Programmer
- Sound expertise in uploading/downloading embedded code from Flash devices like Atmel AT29/49/45 series of memories, disk-on-chip (M-systems)

ESS Designs Infrastructure

- Adequate floor space
- Availability of tools like simulators, emulators, device programmers, compilers
- Well equipped lab with latest software and hardware support
- Ready availability of OEM support from principals like Atmel, Supertex, ICP Das
- Periodic training of engineers by Atmel/Supertex in India and abroad
- Instituting of quality processes conforming to SEI-CMM with emphasis on Requirements Specifications Definition, Project Management & Acceptance Test Plan

Process Focus

- Systems and procedures conforming to
 - ISO 9001:2008
 - SEI-CMM Level III
- With emphasis on
 - Structured and scheduled reviews at all stages of development
 - Robust, reliable and scalable design approach
 - Definition of test plans to meet requirement specifications and design
 - Rigorous testing at unit, module and system integration levels
 - Validation testing to include live conditions preferably at the actual point of application
 - Configuration management, reusable inventory management and back up storage
 - Structured documentation

Contact Information

■ MUMBAI - Head-Office

4 Kurla Industrial Estate,
Narayan Nagar,
Ghatkopar (W), Mumbai - 400 086
Tel. : 91-22 2509 4241-46
Fax : 91-22 2511 5810
sales@orioleindia.com;

■ Regional Sales Offices:

BANGALORE (Branch)
2nd Floor, 34, Renuka Complex, New
Tippasandra Main Road, Bangalore - 560 075
Tel. : 91-80 2520 2816; 09845125390
Fax : 91-80 2529 1433
oriolebangalore@orioleindia.com

NEW DELHI (Branch)
116, Vardhaman Towers,
Preet Vihar Community Centre,
New Delhi - 110 092
Tel. : 91-11 2245 4525; 09868392308
Fax : 91-11 2245 8352
delhi@orioleindia.com

[:www.orioleindia.com:](http://www.orioleindia.com)