Natronix Semiconductor Technology

Introduction

- Natronix Semiconductor Technology is member of The Valingro Group. The Group's Vision is "Building businesses that transcend time"
- Natronix is a Semiconductor Packaging & Design company headquartered in Singapore focusing on complex solutions to global Semiconductor companies
- Natronix's India OSAT (Outsourced Semiconductor Assembly & Test) presence is SPEL Semiconductor Limited
- 105 employees worldwide with direct Customer support in US, Europe, Taiwan & India
- Significant presence in QFN & Gull wing packages, with scheduled expansion in BGA, WLCSP, MEMS& 3D packages
- Natronix is looking for prospective investor to support us on funding towards the implementation of BGA packaging technology in India and for Overseas Acquisition of Semiconductor company for the implementation of Wafer level chip scale packaging technology.
- The Overseas Acquisition will assist Natronix for establishing Global footprint and the implementation of New Packaging technology

Vision

To be the Natural Destination for global Customers seeking cost-effective OSAT & Design services.

Values

All Employees are inculcated with the following Values from their joining thru their growth with us. These are the guiding beliefs our Employees follow while dealing with both internal & external worlds. Our Values in turn helps the organization grow further.

1. **Business Ethics : Defines us as a Company**
2. **Professionalism : Defines us as individuals**
3. **Citizenship : Defines our contribution to society**

Our Logo

Natronix's Logo was conceptualized to convey our professionalism and trust worthiness.

Natronix seeks to capitalize on technology of the future by offering advanced Packages that new generation chips require. The Logo demonstrates our strength and confidence in moving to greater heights and achieving our goals to success.

It symbolizes trust, loyalty, wisdom, confidence, intelligence and faith

Mission

Achieve Zero defect, Just-in-time, Cost-effective solutions with Service that is uncompromised.

Our Partners → Customers, Suppliers, Employees & Shareholders are confident in the knowledge that we are consistently meeting and exceeding their expectations.

Corporate Objectives

1. **Profit - Earnings that enable achieving our other 4 objectives**
2. **Customer Satisfaction**
3. **Competence**
4. **Employee satisfaction**
5. **Growth**

OSAT

Natronix is committed to have its presence in India and APAC countries for Semiconductor Manufacturing.

SPEL Semiconductor Limited - an IC Assembly & Test facility in India
OSAT facility acquisitions in APAC

OSAT Snapshot

More than 45 Global Customers

Customers in US & Asia Pacific

OSAT

Prospects in US & Asia Pacific

Emerging interest in Europe & Japan

OSAT - APAC

Natronix has made strategic plans to acquire OSAT facilities in the Asia-Pacific to augment faster growth and technology.

With its existing Manufacturing presence in SMD & QFN Packages, Natronix is looking for facilities with Wafer Level CSP, BGA, MEMS & other complementing Package offerings.

With Global manufacturing locations, diversified Package portfolio & Customer spread, Natronix will be well placed within the OSAT industry, attaining a niche position

Technical Capability

- Minimum die size: 15 Mils square
- Epoxy screen print capability
- Gold & Copper wire bonding (Bare Cu & Pd Coated) – 0.8 mil to 2.0 mil
- Bond Pad Pitch: 55 microns Min
- Low loop bonding: 4 mils Min
- Ultra-Thin packages: 0.4mm Min
- QFN Wettable Flank package – 9 TDFN, 32 QFN, 52 QFN
- Wafer mapping at Die Attach
- Multi-die package assembly
- Sandwich package

Environmental care

Natronix Semiconductor Technology, a leading Semiconductor Assembly & Test facility providing high technology Integrated circuits Assembly & packaging solutions has a sound environment management system in place to protect the mother nature.

The organization constantly reviews the environmental policy, environmental management programs, adheres to various environmental regulations and works toward continual improvement of the Environment Management system in all its manufacturing locations.

The management and employees are committed to prevent and abate pollution and adopt various control measures in conserving energy and all-natural resources.

SPEL's manufacturing location is surrounded by more than 1,000 trees, abundant greenery including plants, lawns, vegetation area for in-house consumption.

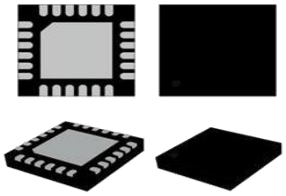
ROHS

ROHS (Restriction of Hazardous Substances) compliance as per EU directive, effective from July 01, 2006.

- Molding - using Green Compounds
- Plating of Terminals - 100% Pb-Free matte Sn plating or NiPdAu finish

Turnkey Services

- Self-Clearance of wafers from airport customs
- Die bank storage at Nitrogen atmosphere
- Assembly Services
- Final Electrical Test Services
- Tube / Tape & Reel / Tray packing
- Custom packing / labeling
- Finished goods store
- Drop-shipment to end-Customers
- Quickest cycle time



Quality

Quality at Natronix is to provide 100% services to meet the Customer’s expectations. Natronix’s Quality Team works closely with Customers and its OSAT facilities to establish the greater confidence in the Quality Management System. It supports to build the long term relationships by providing the innovative solutions to achieve the zero defect quality in their process. It’s this emphasis on quality, innovative technology and complete end-to-end manufacturing solutions that drives our business and provides our Customers with significant competitive advantages in the global market place.

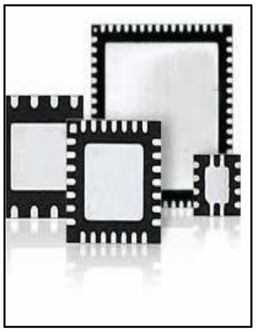
Corporate Quality Philosophy

- Getting it Right the First Time
- Defect-Free Products and Services
- Continuous Improvement
- Regulatory Compliance
- Common Systems and Processes

Quality control at Natronix is a process of maintaining standards and not creating them.

Package Portfolio

QFN Capability



Process	Package Thickess	Body Size in mm	Lead-Pitch	Lead-Count
Saw Singulated QFN / DFN	0.40 mm 0.50 mm 0.75 mm 0.90 mm	0.6 x 1 to 12 x 12	0.40 mm 0.50 mm 0.65 mm	2~ 100 pins

Leaded

PACKAGE	LEAD COUNT	JEDEC STANDARD
150 MIL ; 300 MIL SOIC	7/8/14/16; 16/20	MS-012 ; MS-013
150 MIL QSOP ; VSOP	16/20/24/28; 40/48	MS-137 ; MS-154
173 MIL TSSOP	8/20/24/38	MO-153
150 MIL MILLIPAQ	80	MO-154
300 MIL PDIP	8/14/16	MS-001
225 MIL SIP	8	NA

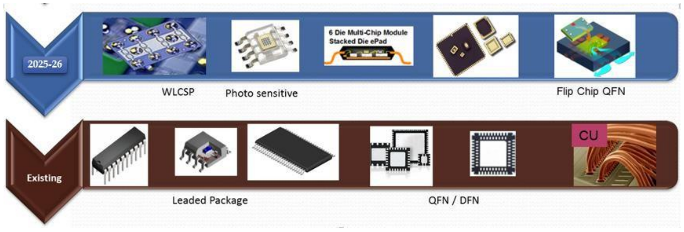
Value Added Services

- Specifications creation support
- Design support at the module & FSM level
- Interaction with your Team
- Availability of our Team at all times
- Free designs / services
- Post-project support without additional cost

Package Roadmap

Consumer needs using electronic technology is rapidly changing with the drive towards getting smarter, faster, smaller & cheaper systems with improved functionality. Semiconductors play a prominent role in achieving this with their higher integration potential. ***SPEL's package roadmap encompasses the increasingly complex packaging requirements to support virtually most of the packaging needs of the semiconductor industry.***

Our road map includes investment on growth packages like BGA, WLCSP, Flip chip packaging, System in Package, MEMS and new emerging packaging technologies like 3D packaging & WLCSP. These packaging technologies are adopted in wide range of devices such as smartphones, gaming, Automotive, Entertainment & handheld intelligent systems



S-E-C (Socio Economic Contribution)

Understanding human behavior and tuning it towards self-disciplined citizens underlines the concept of S-E-C implemented in Natronix Employees are given to comprehend their roles as an individual and their responsibility to bring up fellow citizens.

Natronix appreciates its Employees commitment and complements them by assisting their growth to become future leaders.

Our Growth Paths

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Singapore
Mrs. R Yogeshwari
3101 Cecil Street, 23-12 Tong
Eng Building, Singapore 069533
eMail : sales-sg@natronix.net

USA
Mr. N J Chandrasekar
California, USA
eMail : sales-us@natronix.net

Europe
Mr. G.Natarajan
eMail : sales-eu@natronix.net

India
Mrs. V.Sivaramalakshmi
5 CMDA Industrial Estate
Maraimalai Nagar, Chennai 603 209
eMail : sales-in@natronix.net