

### **BOURNS®**

# Specialty Engineering & Manufacturing Services

Electronic Packaging | Engineering | Manufacturing



## Specialty Engineering & Ma

#### **Bourns Core Technology Benefits Enable:**

- ▶ Enhanced functionality
- Quantifiable results
- Customized solutions
- Improved performance formulations without changing footprints
- Value-added features
- ▶ Reduced overall cost

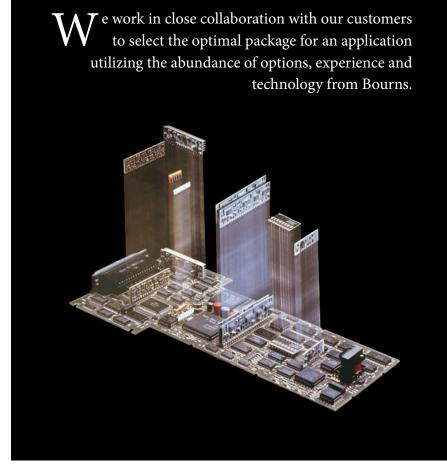






# Proven Technical Resources Providing Flexible, Cost-effective Application Solutions to Achieve Faster Time to Market

Bourns' demonstrated expertise in technology integration, assembly processes, packaging technology and product launch control results in faster time to market. Knowledgeable Bourns engineers provide a valuable, cost-effective resource across multiple environments and a broad range of applications that ensure enhanced functionality and compatibility from the design stage through manufacturing.



The Bourns Quality Systems are certified to ISO 9001:2000, TS 16949 and ISO 14001. Additional testing and compliance to other standards such as MIL-STD-883, TELCORDIA GR-1089 and UL/CSA are also available.

## nufacturing Services

#### **Bourns' Packaging Solutions**

Whether it's a quickturn prototype or high-volume manufacturing design, Bourns delivers:

- Design compatibility
- Miniaturization
- ▶ RF performance
- Precision assembly
- ▶ High reliability
- ▶ Cost-effective design
- ▶ Thermal management
- ▶ Environmental protection

#### Packages Available:

- Single in-line
- Dual in-line
- COB interposer
- BGA
- System in package
- Custom

#### Features:

- High density thick film
- RF substrate materials
- Chip & wire
- Flip chip
- Stud bump bonding
- RF packaging
- Fine pitch SMT

#### **Product Launch Control:**

I magine seamlessly transferring from product design and prototyping to volume production. Bourns services simplify this process by making it possible to transfer your design and prototype from the USA to our China facility to meet your production goals.





Plexibility is vital in electronic design.
Parts change, packages shrink, and
environmental requirements become more
stringent. Look to Bourns Engineering &
Manufacturing Services to provide:

- Custom lead frames for specific applications
- ▶ Available in-house thick film production
- ▶ PCBA SMD on all substrates
- ▶ Coatings and lid seals
- Engineering through design, layout, process development, and test support
- ICT & functional test
- Extensive analytical lab capability
- ► AOI & X-ray inspection
- ▶ Evaluation and environmental testing
- ▶ Help in meeting regulatory requirements

### Product Solution Experience by Market

#### **Communications**

Line protection modules, SLIC modules, line feed resistors, optical modules 10 to 40 Gb, GPS, WiFi, Bluetooth modules

#### **Automotive**

Throttle pedal sensors, steering angle sensors, LED lighting, marine engine trim sensors, fuel sending units

#### Industrial

Motor controls, power controls, PLC modules, DC/DC converters

#### Medical

Radiation dosimeters, blood analysis modules, wireless inhaler dosage trackers, hearing aid subassemblies

#### Aerospace

Aircraft lighting control, PLL modules

#### Commercial

UV light starters, semiconductor packages: high voltage isolator & interposers



#### **Product Launch Control:**

Seamless transfer from product design and prototyping in the USA to volume production in Bourns' China facility

#### **Engineering & Prototyping Center**



Bourns, Inc. Riverside, California U.S. Headquarters

#### **Production Center**



Bourns, Ltd. Xiamen, China

#### **Worldwide Sales Offices**

Worldwide Sales Office		
Country	Phone	Fax
Benelux:	+41 (0)41 768 5555	+41 (0)41 768 5510
Brazil:	+55 11 5505 0601	+55 11 5505 4370
China:	+86 21 64821250	+86 21 64821249
France:	+33 (0)2 5473 5151	+33 (0)2 5473 5156
Italy:	+41 (0)41 768 5555	+41 (0)41 768 5510
Japan:	+81 49 269 3204	+81 49 269 3297
Singapore:	+65 6348 7227	+65 6348 1272
Switzerland:	+41 (0)41 768 5555	+41 (0)41 768 5510
Taiwan:	+886 2 25624117	+886 2 25624116
UK/Ireland:	+41 (0)41 768 5555	+44 (0)41 768 5510
USA:	+1-951-781-5500	+1-951-781-500
Non-Listed European		
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**Countries:** +41 (0)41 768 5555 +41 (0)41 768 5510

#### **Technical Assistance**

Region	Phone	Fax
Asia-Pacific:	+886 2 25624117	+886 2 25624116
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Bourns® products are available through an extensive network of manufacturer's representatives, agents and distributors. To obtain technical applications assistance, a quotation, or to place an order, contact a Bourns representative in your area.

Specifications subject to change without notice. Actual performance in specific customer applications may differ due to the influence of other variables. Customers should verify actual device performance in their specific applications.

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