



# Loranger Burn-In, Characterization and Test Sockets

## QFN Sockets

- 0.25mm Pitch and Greater
- Dual Row QFN Socket Options Available
- Non-Magnetic Socket Options Available
- Accurate, Tightly-controlled Package Fit
- Optional Heat Sink and Case Contacts
- PTH or Compression Mount Contacts
- Optional "Heat Pipe" to Printed Circuit Board
- Zero-insertion-force
- ClamShell and Open Top Socket Designs

## QFN Sockets

**QFN** Socket with Center Plunger Contact



## BGA Sockets

- 0.25mm Pitch and Greater
- Accommodates Package Height Variations
- Non-Magnetic Socket Options Available
- Accurate, Tightly-controlled Package Fit
- Contacts Connect Solder ball to Board Pad
- Optional Heat Sink
- Low Profile and Small Footprint
- Zero-insertion-force
- Surface Mount Design / Solder-Free

## BGA Sockets

**BGA/CSP** Sockets with Compression Mount Contacts



## Gull Wing Sockets

- Kelvin, Double Duty Kelvin, and Non Kelvin
- Zero Insertion Force Clam Shell Design
- Non-Magnetic Socket Options Available
- Accurate, Tightly-controlled Package Fit
- Optional Case Contacts
- Optional Heat Sinking
- Fine Pitches
- Contact Wiping Action for Reliable Connection

## Gull Wing Sockets

**Gull Wing** Socket with Optional Kelvin Contacts



## TO Sockets

- Top-Loading and Clam Shell Designs
- Kelvin and Single-Sided Contacts
- Small Size Offers Maximum Board Density
- Package Standoffs Aid Package Removal
- Wide Funnel Entry Guides Package Leads
- Positive Contact Wiping Action
- Low Profile and Small Footprint
- ClamShell Socket Design

## TO Sockets

**Transistor Outline** Sockets with Kelvin Contacts



## Surface Mount Device Sockets

- Top Loading and Clam Shell Designs
- Kelvin and Single-Sided Contacts
- Zero Insertion Force Clamshell Designs
- Low Insertion Force Open Top Designs
- Optional Multiple Devices per Socket
- 0.25 mm pitches and Greater
- Distance Between Package Sides with Leads is Defined as the Package Width Dimension

## SMD Sockets

**SMD** Sockets for Surface Mount Devices



## LCC Sockets

- Easy Loading and Unloading
- Positive Contact Wiping Action
- Open Top and Clam Shell Designs
- 0.25 mm and Greater Pitches
- Dual Height Contact Options
- Live or Dead Bug Loading Options
- Low Profile and Small Footprint
- Open Top Designs Independent of Package Height

## LCC Sockets

**LCC** Sockets with Open Top Design

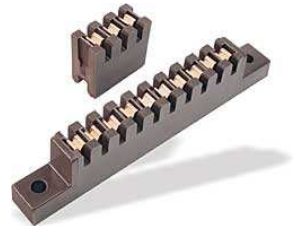


## Axial and Radial Sockets

- Kelvin and Non Kelvin Contacts
- Building Block Strip Sockets
- Accepts Various Lead Diameters
- Contact Wiping Action on Lead Diameter
- Optional Mounting Ears for Screw Mounting
- Modifications Available
- Various Pitches Available

## Axial Sockets

**Axial / Radial** Leaded Device Sockets with Kelvin Contacts

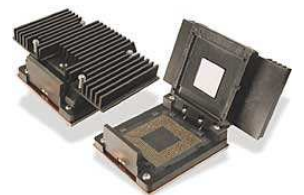


## LGA Sockets

- 0.25mm Pitch and Greater
- Accommodates Package Height Variations
- Non-Magnetic Socket Options Available
- Accurate, Tightly-controlled Package Fit
- Contacts Connect Land pad to Board Pad
- Optional Heat Sink
- Low Profile and Small Footprint
- Zero-insertion-force
- Surface Mount Design / Solder-Free

## LGA Sockets

**LGA** Sockets with Compression Mount Contacts



## Microwave Sockets

- Standard and Custom Designs
- For Microwave Packages
- For Custom Module Packages
- Optional 50 Ohm Impedance Designs with Matching Board Layouts
- Optional Heat Sinks
- Optional Direct Contact of Device Leads onto Board Traces

## Microwave Sockets

**Microwave and Hybrid** Package Sockets



## Connectors

- Independent Contacts
- Pitches of 0.100", 0.150" and 0.156"
- Heavy Duty for Long Life
- V Slot Guides Insertion of Board
- For Board Thickness of 0.054" to 0.070"
- Optional Mounting Ears
- Non-Bifurcated Contacts for Increased Current
- Positive Wiping Action for Reliable Contact

## Connectors

**Edge Connector** with Mounting Ears



## SIP (Single Inline Package) Sockets

- Kelvin and Non Kelvin
- Top Loading
- For In-line TO and SIP Packages
- Modified and Custom Sockets Available
- May Accommodate More than One Package
- Fit is Independent of Package Body L, W and H
- Various Pitches Available

## SIP Sockets

**SIP Socket** Sockets with Optional Mounting Ears



## Zig Zag Sockets

- Top-Loading and Clam Shell Designs
- Kelvin and Single-Sided Contacts
- Modified and Custom Sockets Available
- Variety of Pitches and Package Lead Sizes
- For In-line and Zig-Zag Packages
- Positive Contact Wiping Action
- Optional Zero-Insertion Force

## Zig Zag Sockets

**ZigZag** Sockets with Low and Zero Insertion Force



## DIP (Dual Inline Package) Sockets

- Top Loading Designs
- High Side Contacts Help Align Package Leads
- Positive Contact Wiping Action
- Low Insertion Force
- Bottom Socket Standoffs Help Board Cleaning
- Various Sizes and I/O
- Unloading Tool Also Available

## DIP Sockets

**DIP Socket**



## Optical Transceiver Sockets

- Contact Pitches of 0.25 mm and Greater
- Openings for Fiber Optic Connector
- Clamshell Cover
- Custom Designs Available
- Floating Cover Design
- Compression Mount / Solder-Free Design

## Optical Transceiver Sockets

Compression Mount Sockets for



- BGA and LGA Styles

## Optical Transceiver Packages

## Flat Pack Sockets

- Open Top and Clam Shell Designs
- Accommodate Standard Carriers
- Rugged Construction
- Wire-Formed Contacts
- Solid Clamping of Device Carrier
- Various Sizes and I/O Available

## Flat Pack Sockets

**Flat Pack** Socket for Package in Carrier



## PGA Sockets

- Zero Insertion Force
- Small Footprint
- Multi - Point Wiping Contact Action
- Reliable, Normally Closed Contacts

## PGA Sockets

**PGA Socket**



## Socket Accessories

- Kelvin Alligator Clips
- Up to 175 C Use
- Optional Attached Wiring
- Reliable, Normally Closed Contacts
- Torque Wrench Kits Available for Socket Assembly
- Fixed and Variable Torque Wrench Kits

## Socket Accessories

Torque Wrench Kit and Kelvin Alligator Clips



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