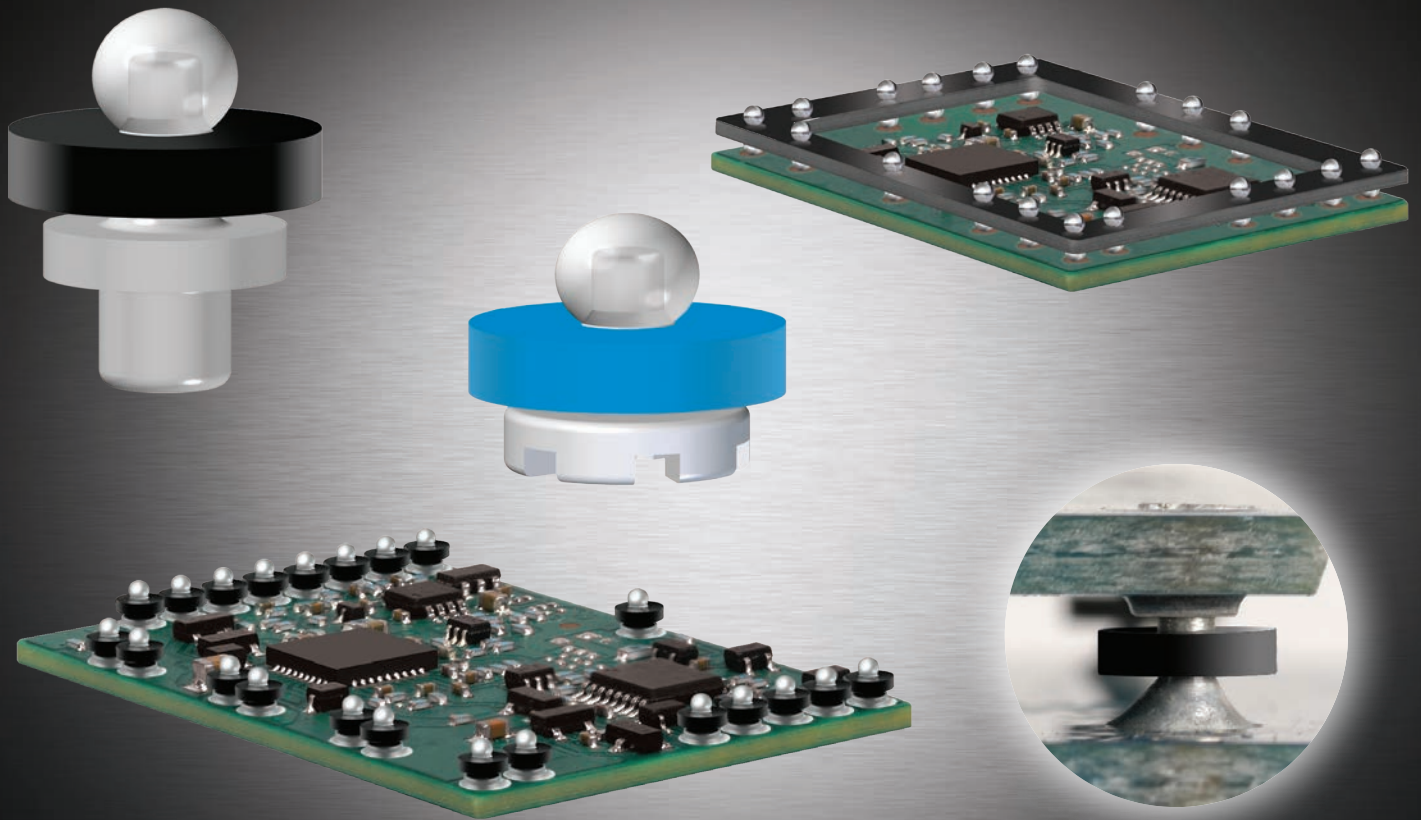


# Solderball Pin™ Technology



*Inspired Global Solutions™*

bulletin #0312sb

**autossplice**®

Innovative Interconnections™



# Solderball Pin™ Technology

Solderball Pin™ Technology is engineered and widely used on POL (point of load) DC/DC Power applications when a PCB mezzanine design is necessary due to real estate limitations, offering additional thermal dissipation capability via the robust mechanical connection.

The Solderball Pin™ functionally replace the conventional through-hole pins, traditionally used for interconnecting parallel PCBs, and provide a SMT-compatible solution for mounting the module to the final assembly and the solderball. The internal pin provides a rigid, high conductivity foundation to the module PCB, while the solderball allows a physical adjustment as each solder joint is formed.

Compact configuration and flexibility as a discrete SMT component facilitates adoption into a broad scope of applications, including electronic lighting controls, remote telemetry monitoring, ethernet, fibre channel, storage area networks, automotive, and many other daughter-to-motherboard module-based subassemblies.

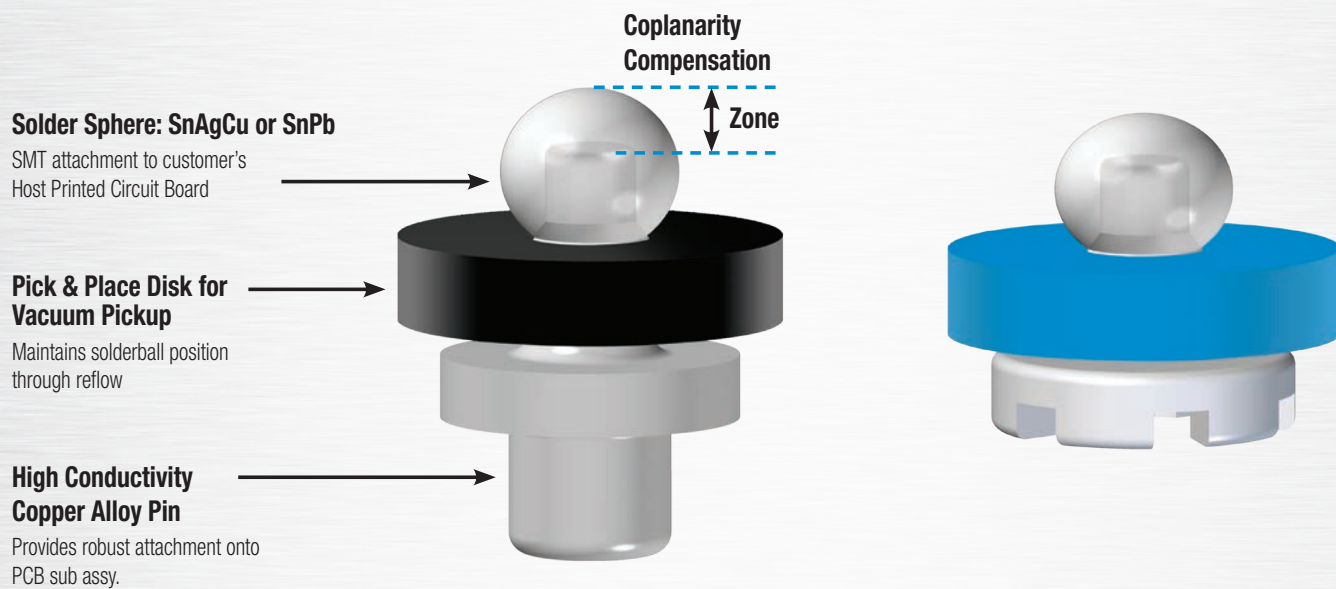
The features and key characteristics are summarized as follows:

**Solder sphere:** Provides the attachment and interconnection with the SMT host PCB and compensates for co-planarity variances.

**Insulator-seal:** Provides a positive location of solder sphere during reflow. It is also the element for vacuum pick-and-place equipment.

**Copper Alloy pin:** Provides a robust plated-through hole attachment with the PCBSA and determines the stack up height between PCBSA and host PCB.

## Solderball Pin™ Main Features



Lead Free Available

# Solderball Pin™ Selection Guide

Part Number Description	Qty Per Reel	Tail Configuration	Pin Size Dia Inches/mm	Stack Height Inches/mm	Tail length Inches/mm	Solderball Diameter	RoHs Compliant
<b>Midi Solderball 0.033" [0.84] Diameter Tapered Pin. 0.071" [1.8] Diameter Ball</b>							
9-B13341AATTA	1,600	Tapered	.033" [0.84]	.100" [2.54]	.034" [0.86]	.071" [1.80]	Tin Lead
9-B13341AATTT	1,600	Tapered	.033" [0.84]	.100" [2.54]	.034" [0.86]	.071" [1.80]	Yes
9-B13341BBTTA	1,500	Tapered	.033" [0.84]	.130" [3.30]	.040" [1.02]	.071" [1.80]	Tin Lead
9-B13341BBTTT	1,500	Tapered	.033" [0.84]	.130" [3.30]	.040" [1.02]	.071v [1.80]	Yes
<b>Midi Solderball 0.059" [1.50] Diameter Tapered Pin. 0.071" [1.8] Diameter Ball</b>							
9-B15941AATTA	1,500	Tapered	.059" [1.50]	.100" [2.54]	.034" [0.86]	.071" [1.80]	Tin Lead
9-B15941AATTT	1,800	Tapered	.059" [1.50]	.100" [2.54]	.034" [0.86]	.071" [1.80]	Yes
9-B15941BCTTT	1,500	Tapered	.059" [1.50]	.130" [3.30]	.045" [1.14]	.071" [1.80]	Yes
<b>Midi Solderball 0.033" [0.84] Diameter Straight Pin. 0.071" [1.8] Diameter Ball</b>							
9-B23341ADTTA	1,800	Straight	.033" [0.84]	.100" [2.54]	.055" [1.40]	.071" [1.80]	Tin Lead
* 9-B23341ADTTT	1,800	Straight	.033" [0.84]	.100" [2.54]	.055" [1.40]	.071" [1.80]	Yes
9-B23341BGTTA	1,300	Straight	.033" [0.84]	.130" [3.30]	.065" [1.65]	.071" [1.80]	Tin Lead
* 9-B23341BGTTT	1,300	Straight	.033" [0.84]	.130" [3.30]	.065" [1.65]	.071" [1.80]	Yes
9-B23341CDTTA	1,300	Straight	.033" [0.84]	.150" [3.81]	.055" [1.40]	.071" [1.80]	Tin Lead
9-B23341CDTTT	1,300	Straight	.033" [0.84]	.150" [3.81]	.055" [1.40]	.071" [1.80]	Yes
9-B23341DETTA	1,100	Straight	.033" [0.84]	.170" [4.32]	.083" [2.11]	.071" [1.80]	Tin Lead
* 9-B23341DETTT	1,100	Straight	.033" [0.84]	.170" [4.32]	.083" [2.11]	.071" [1.80]	Yes
<b>Midi Solderball 0.064" [1.62] Diameter Straight Pin. 0.071" [1.8] Diameter Ball</b>							
9-B26441DETTA	1,100	Straight	.064" [1.62]	.170" [4.32]	.083" [2.11]	.071" [1.80]	Tin Lead
9-B26441DETTT	1,100	Straight	.064" [1.62]	.170" [4.32]	.083" [2.11]	.071" [1.80]	Yes
<b>Power Midi SMT to SMT Solderball 0.070" [1.78] Tierd Pin. 0.041" [1.04] Diameter Ball</b>							
9-00-0050-1TTT	1,700	Double Tier	.070" [1.78]	.125" [3.18]	SMT	.071" [1.80]	Yes
<b>Mini Solderball 0.038" [0.96] Diameter Straight Pin. 0.041" [1.04] Diameter Ball</b>							
9-B43841FHHTA	2,000	Straight	.038" [0.96]	.065" [1.65]	.032" [.081]	.041" [1.04]	Tin Lead
* 9-B43841FHHTT	2,000	Straight	.038" [0.96]	.065" [1.65]	.032" [.081]	.041" [1.04]	Yes
9-B43841HHHTA	1,700	Straight	.038" [0.96]	.120" [3.05]	.032" [.081]	.041" [1.04]	Tin Lead
9-B43841HHHTAA	1,700	Straight	.038" [0.96]	.120" [3.05]	.032" [.081]	.041" [1.04]	Tin Lead
9-B43841HHHTTT	1,700	Straight	.038" [0.96]	.120" [3.05]	.032" [.081]	.041" [1.04]	Yes
<b>Power Mini SMT to SMT Solderball 0.070" [1.78] Tierd Pin. 0.041" [1.04] Diameter Ball</b>							
9-B97041H0TTT	1,700	Double Tier	.070" [1.78]	.125" [3.18]	SMT	.041" [1.04]	Yes

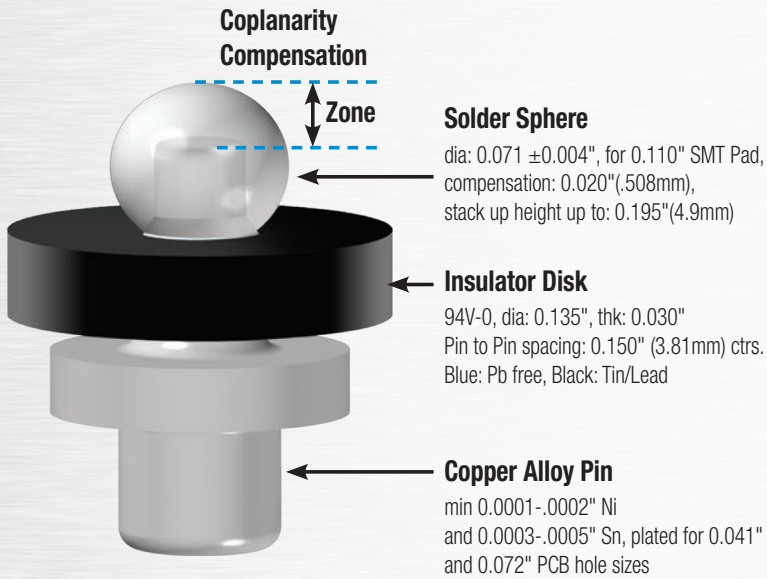
\* Stocked by Distributors.

Consult Factory for other sizes.

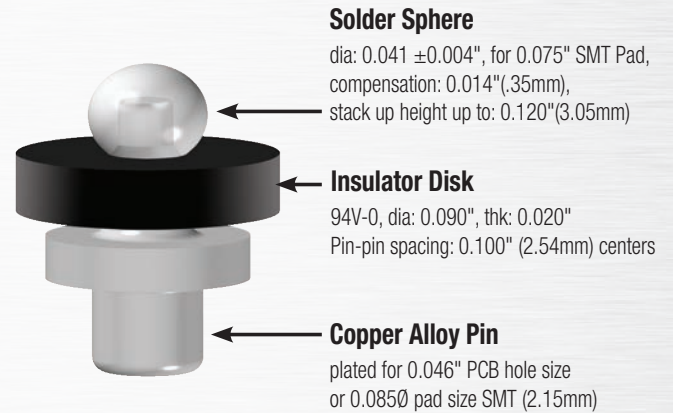


# Engineered for Form, Fit & Function

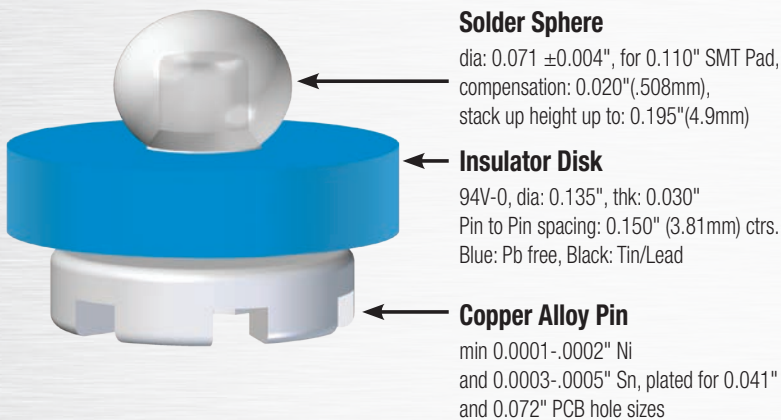
## Midi Solderball Pin™



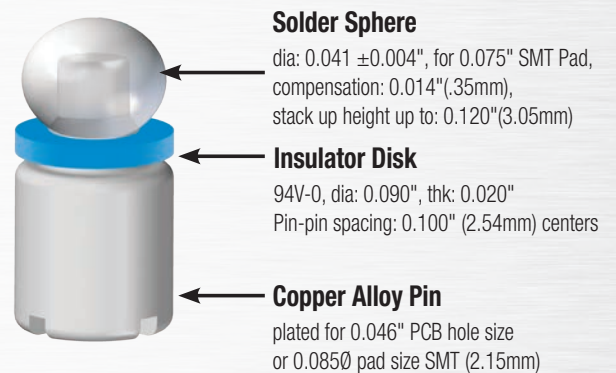
## Mini Solderball Pin™



## Midi Power Solderball Pin™



## Mini Power Solderball Pin™



## Mechanical Specifications:

Pin Terminal :	High Conductivity Copper Alloy
Solder Sphere:	RoHs Compliant SAC Alloy or Tin/Lead
Packaging:	STD 16mm Tape & Reel per Spec EIA-481
Pick & Place:	Pin Trough Paste Via Standard SMT Equipment
Configurations:	email: solderballpin@autosplice.com



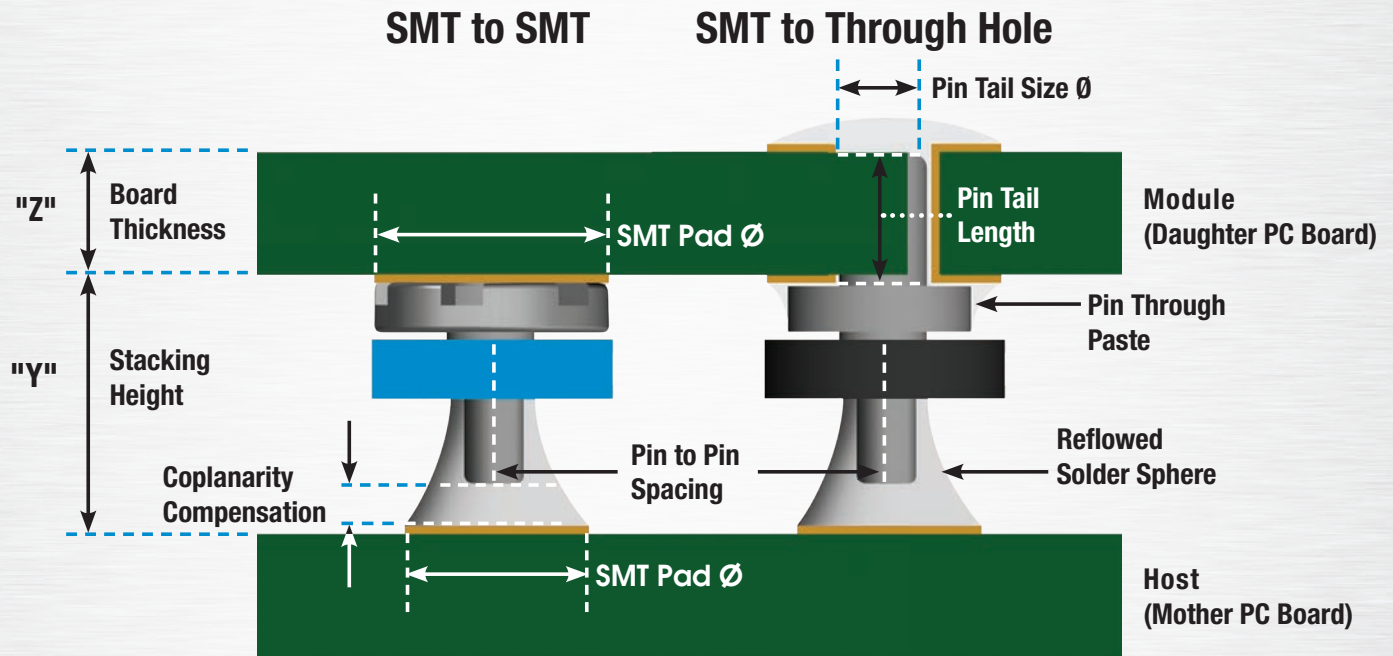
Lead Free Available

\* Consult Factory for Specific Product Performance and Engineering Characteristics.



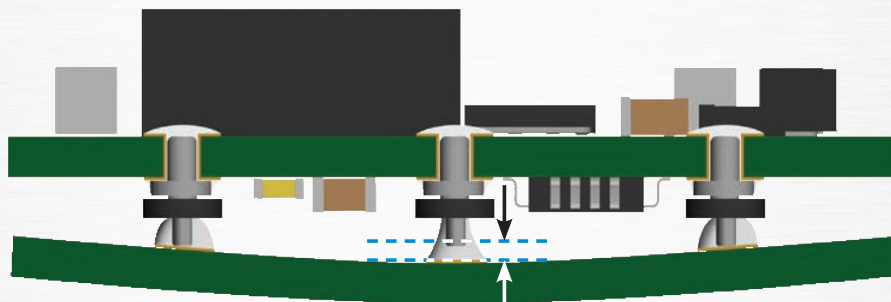
# Solderball Pin™ Design Guide

## Application View



## SMT Solution to Coplanarity Interconnection

for Power Modules and PCB-based Subassemblies



SMT Board to Board Coplanarity Variation

Solderball Pin™ Technology employs a highly conductive copper pin that incorporates a solder ball on the end that interfaces to the host PCB, providing additional solder to compensate for coplanarity variation on SMT board to board interconnection.

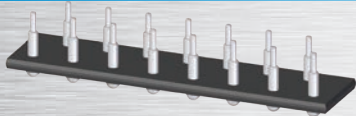
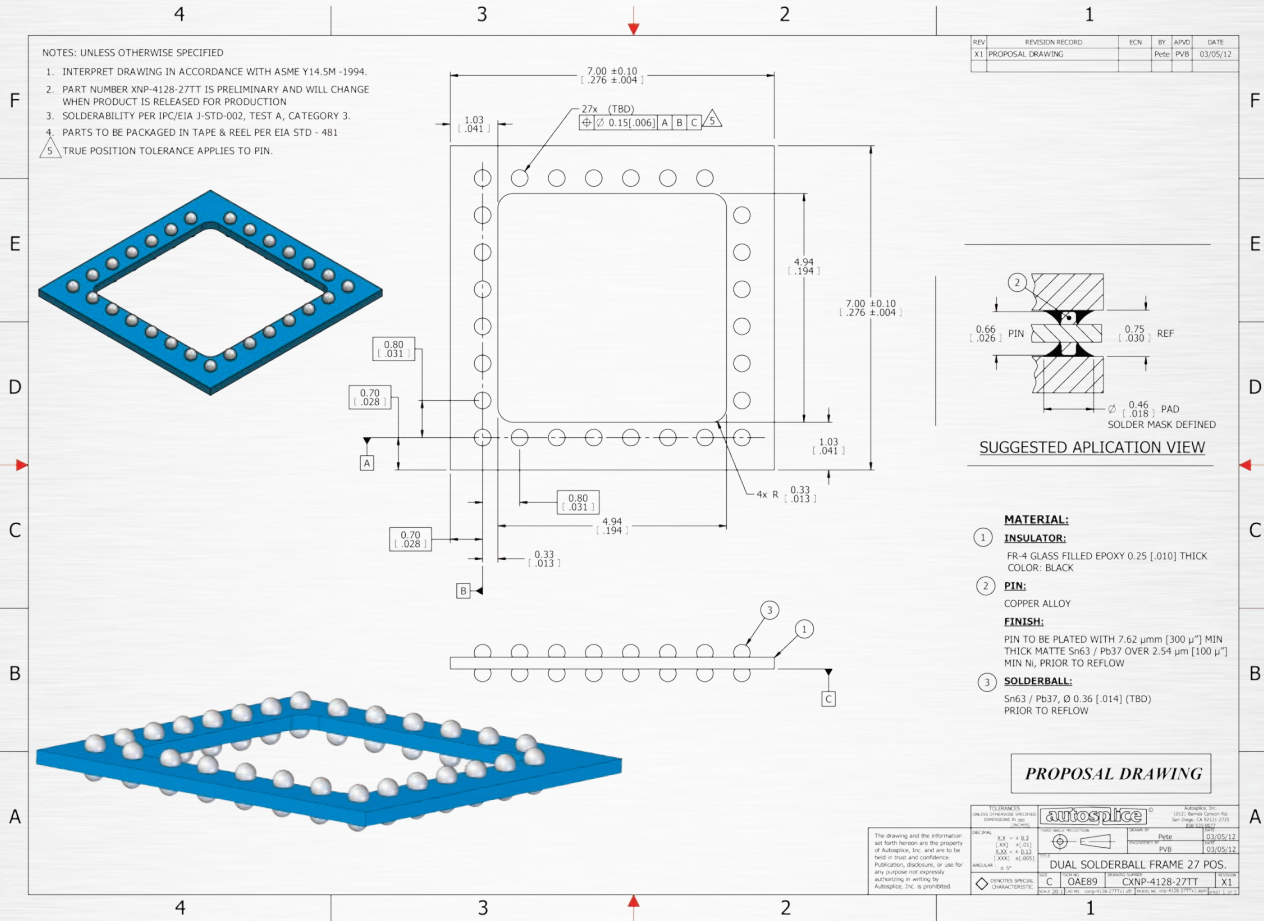
### Features and Benefits:

- Automatic coplanarity compensation\*: 0.020"
- High current carrying capability\*: 20 amp DC
- Converts through hole device into SMT
- Conducts heat from device to Host PCB





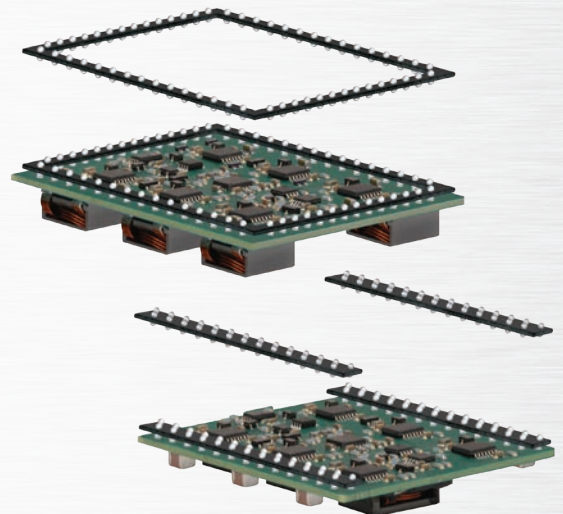
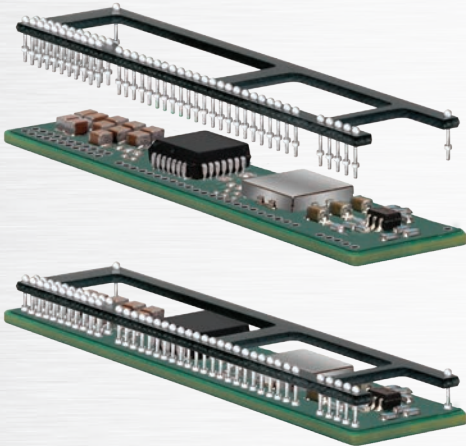
# Custom Headers - Solderball Technology



Through Hole To Surface Mount

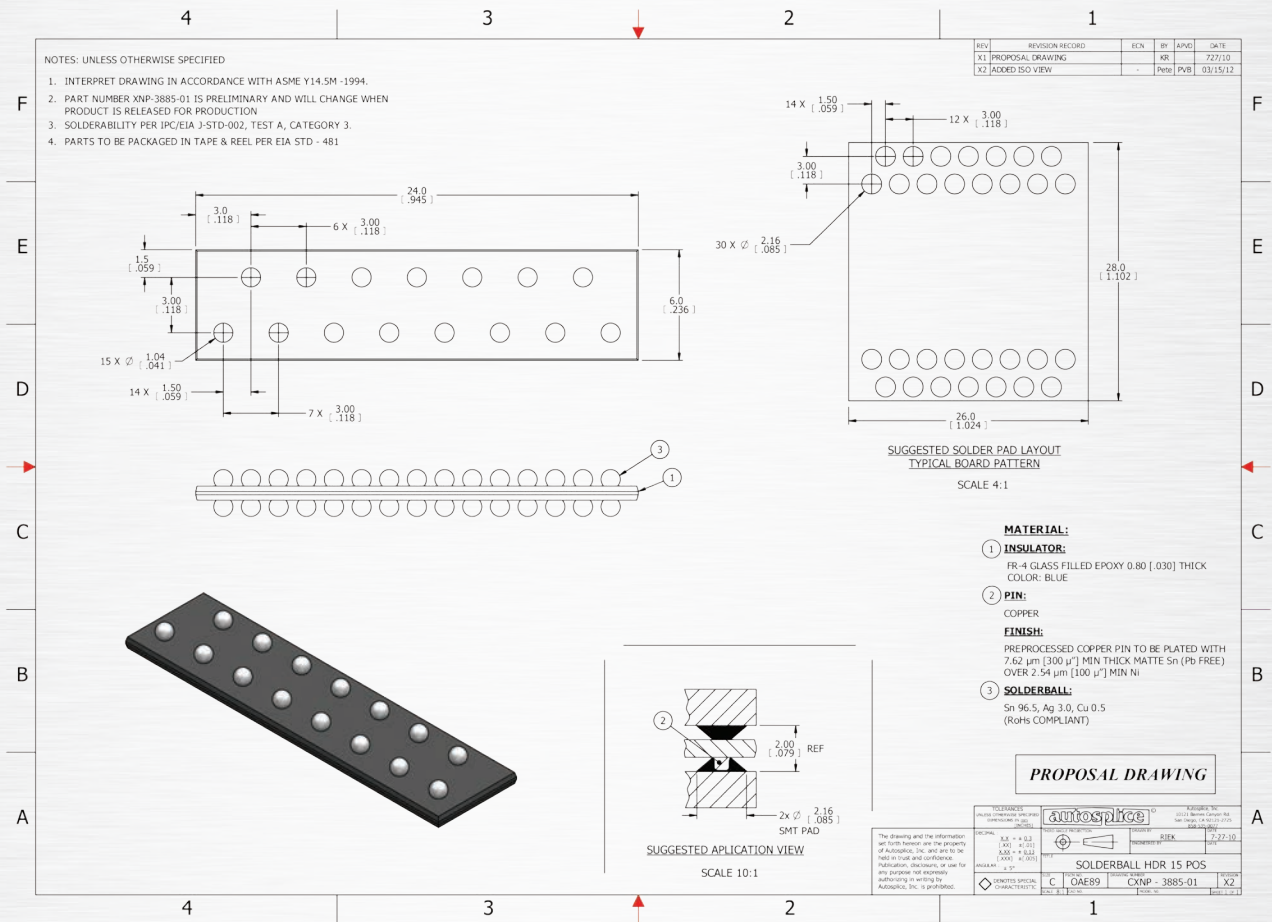


Surface Mount To Surface Mount

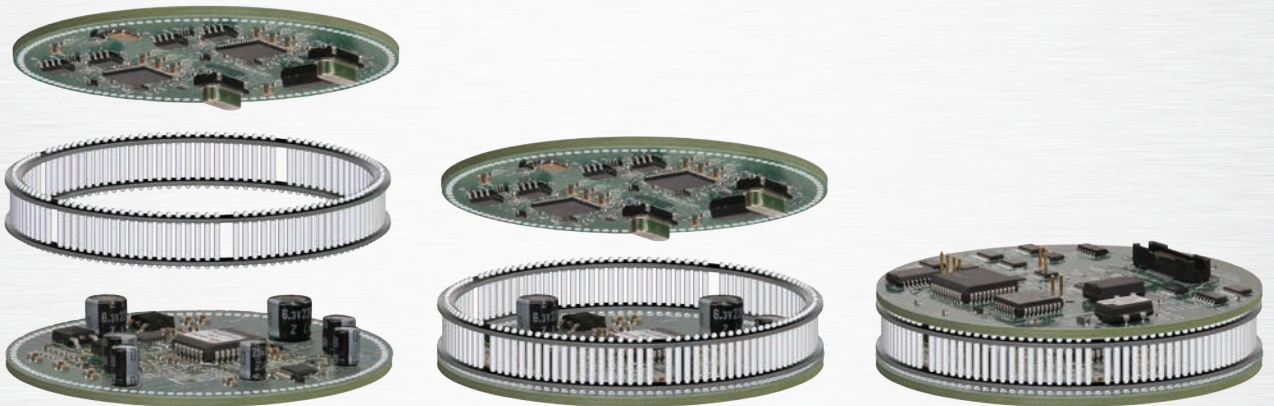




# Custom Solutions To Co-Planarity Issues



# Customer Specific Configuration



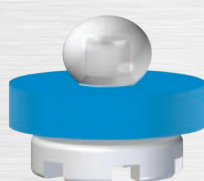


# Solderball Pin™ Technology

**MIDI**



**MIDI**



**MINI**



**MINI**



**SMT / Through Hole**

**SMT to SMT**

**SMT / Through Hole**

**SMT to SMT**

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To obtain a sample kit contact us at:  
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