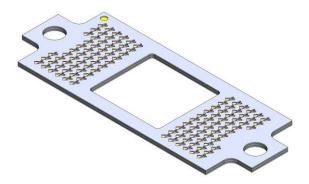


112 Position LGA/LGA PCBeam[™] Connector

Neoconix P/N: BDX0112DMMSXAU01

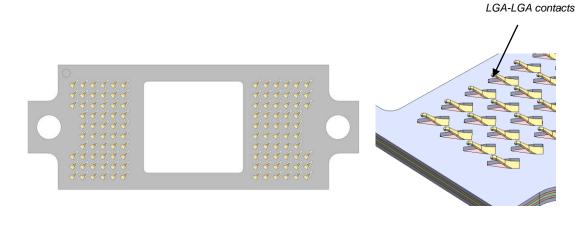
FEATURES

- High density 1.0 mm x 1.0 mm area-array pitch
- Ultra-low profile BtB application, 0.55mm mated height
- PCBeam[™] high reliability LGA/LGA spring contacts
- 15u" Hard gold-plated contact interface
- RoHS 2011/65/EU (RoHS2) compliant



OVERVIEW

The PCBeam[™] 112 Position Connector is an interconnect solution for the Texas Instruments S320 DMD. Featuring Neoconix's patented PCBeam[™] interconnect technology, this product offers high performance and high reliability in an extremely compact form factor, a heat-sink opening, and features for precise alignment of the connector to the DMD and main PC Board.



Top View

PCBeam™ Technology

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Product Specification

CROSS REFERENCE INFO:

- TI Interposer Drawing: 2518370
- TI DMD Drawing: 2518197

Production Packaging:

Minimum Production Order Quantity:

ORDERING INFORMATION:

• Part Number:

BDX0112DMMSXAU01

Vacuum formed Low Profile Matrix Trays 2000

Lead Time:

8 weeks ARO

PRODDUCT SPECIFICATIONS

MECHANICAL

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ITEM	DESCRIPTION	REQUIREMENT	COMMENT
M1	Contact Pitch	1.0 mm x 1.0 mm	
M2	Contact Count	112 positions	
M3	Target Load per Contact	45 ± 15 grams	
M4	Contact Deflection	0.25mm Typical	
M5	Durability Cycles	25 mate / un-mate cycles minimum	
M6	Min Gold Thickness	0.38μm (15 μin)	

ELECTRICAL

ITEM	DESCRIPTION	REQUIREMENT	COMMENT
E1	Resistance Per Position	< 50 mOhm	
E2	Current capacity	0.5A per contact minimum	DC current
E3	Insulation Resistance	100 MOhm	
E4	Dielectric Withstanding Voltage	100 V	
E5	Operating Frequency	< 1 GHz	

ENVIRONMENTAL

ITEM	DESCRIPTION	REQUIREMENT	COMMENT
N1	End Product Environment	DLP, Automotive	
N2	Operating Temperature	-55C to 105C	
N3	Storage Temperature	-40C to 85C	

OTHER ITEMS

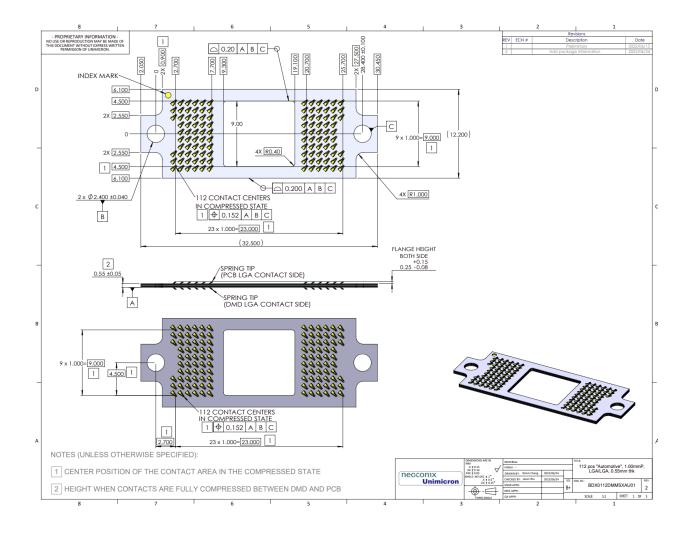
ITEN	DESCRIPTION	REQUIREMENT	COMMENT
1	ROHS Compliant per 2002/92/EC	Required	

NOTE: Specifications are subject to change without notice.

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DIMENSIONAL INFORMATION

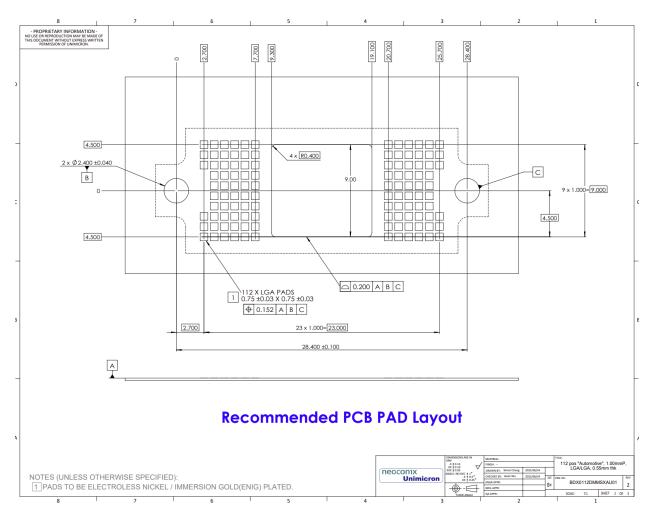


Note: This example is for reference only. Please refer to the product drawing.

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RECOMMENDED PCB LAYOUT



Note: This example is for reference only. Please refer to the product drawing.

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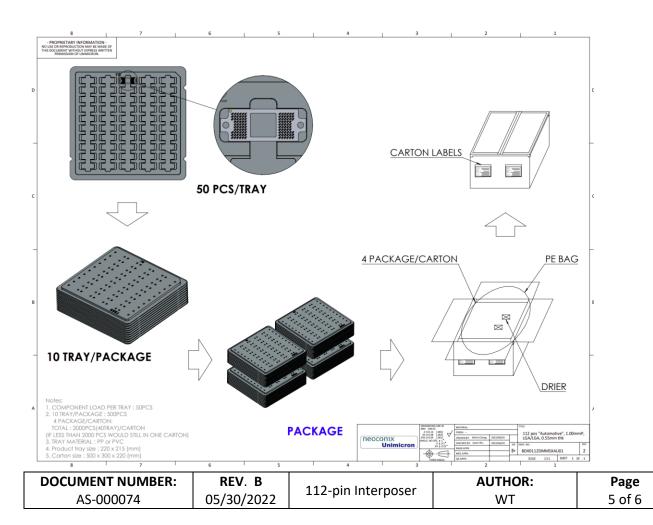
Product Specification

ASSEMBLY & HANDLING GUIDELINES

- The use of latex gloves is recommended when handling interposers. As with any normal force connector, avoid touching contact tips and handle the product only by its edges.
- When clamping the module, PCB, or FPC onto the connector, please ensure that the force is applied uniformly. Force should be applied vertically through the z-axis and not in an angled direction.
- Cleaning is typically not needed if the product is kept in original packaging. When necessary, cleaning can
 be employed with the use of compressed air. Direct the flow of air in the direction that the contact
 elements are pointing. Cleaning can also be performed with an ultrasonic bath of isopropyl alcohol (IPA).
 A 5 minute soak can be followed by a 10 minute bake at 65°C.
- When not in use, please keep product stored in original packaging.

PACKAGING INFO

Production parts are provided in low profile vacuum formed trays. Each tray holds 50 pcs at 40 trays per carton, Total= 2000 pcs/Carton





Product Specification

ORDERING INFO

To obtain a quotation, please contact the Neoconix sales office at <u>sales@neoconix.com</u> or 408-530-9393. Please include the part number(s) of interest.

Custom interposers and hardware are also available from Neoconix.

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 Phone: +1 (408) 530-9393

 Fax:
 +1 (408) 530-9383

 Email:
 sales@neoconix.com

 UR:
 http://www.neoconix.com

China Contact: David Chen Phone: +1 (408) 768-4135 Email: <u>sales@neoconix.com</u>

REVISION HISTORY

Rev A	06/27/2022	Production Release
Rev B	05/30/2023	Updated target load per contact from 55grams to 45grams

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