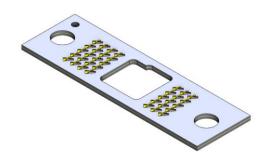


151 -Position LGA/LGA PCBeam™ Connector

Neoconix P/N: BDX0151CMMSXAU00(1.6mm thick) BDX0151CMMSXAU01(0.43mm thick)

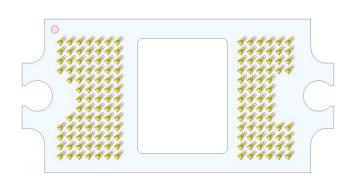
FEATURES

- High density 0.7424 mm area-array pitch
- Low profile BtB application, 1.6mm and 0.43mm mated heights
- PCBeam[™] high reliability LGA/LGA spring contacts
- 15u" Hard gold-plated contact interface
- RoHS 2011/65/EU (RoHS2) compliant

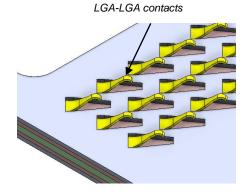


OVERVIEW

The PCBeam™ 151 Position Connector is an interconnect solution for the Texas Instruments S322 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

CROSS REFERENCE INFO:

DOCUMENT NUMBER:	REV. A	151 pin Internacer	AUTHOR:	Page
AS-000087	04/25/2024	151-pin Interposer	FDH	1 of 6





TI Interposer Drawing: 2518808 (1.6mm thk)
 2518817 (0.43mm thk)

• TI DMD Drawing: 2518600

ORDERING INFORMATION:

Product Specification

Part Numbers: BDX0151CMMSXAU00 (1.6mm thk)
 BDX0151CMMSXAU01 (0.43mm thk)

Production Packaging:
 Vacuum formed Low Profile Matrix Trays

Minimum Production Order Quantity: Prototype 100 pcs

Mass Production 3000 pcs

PRODDUCT SPECIFICATIONS

MECHANICAL

ITEM	DESCRIPTION	REQUIREMENT	COMMENT
M1	Contact Pitch	0.7424mm x 0.7424mm	
M2	Contact Count	151 positions	
M3	Target Load per Contact	30 ± 10 grams	
M4	Contact Deflection	0.18mm Typical	
M5	Max Load	143N	Max load evenly distributed within each electrical interface area
M6	Durability Cycles	50 mate / un-mate cycles minimum	
M7	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	Consumer Appliances	
N2	Operating Temperature	-40C to 85C	
N3	Storage Temperature	-40C to 85C	

OTHER ITEMS

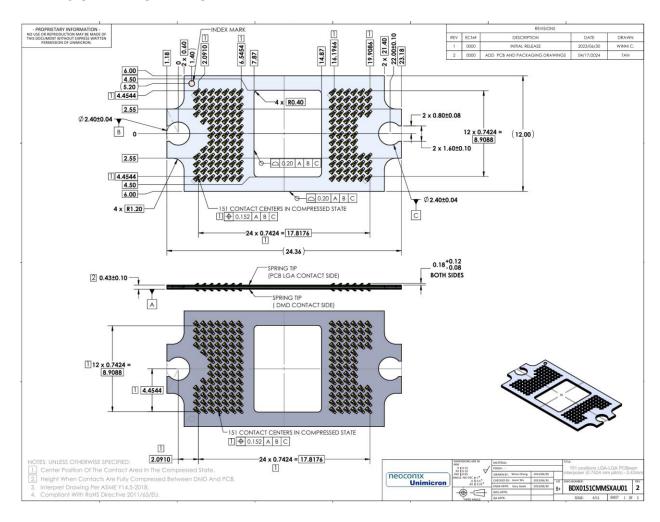
ITEM	DESCRIPTION	REQUIREMENT	COMMENT
1	ROHS Compliant per 2002/92/EC	Required	

NOTE: Specifications are subject to change without notice.

DOCUMENT NUMBER:	REV. A	1F1 min Internacer	AUTHOR:	Page
AS-000087	04/25/2024	151-pin Interposer	FDH	2 of 6



DIMENSIONAL INFORMATION

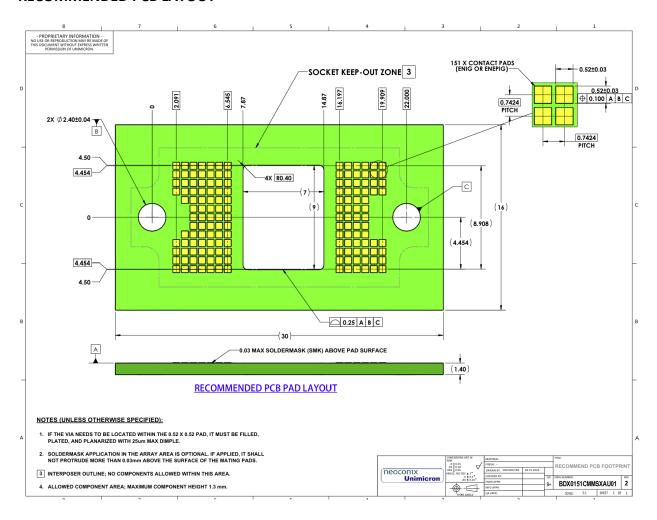


Note: This example is for reference only. Please refer to the product drawing.

DOCUMENT NUMBER:	REV. A	1F1 min Internacer	AUTHOR:	Page
AS-000087	04/25/2024	151-pin Interposer	FDH	3 of 6



RECOMMENDED PCB LAYOUT



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

DOCUMENT NUMBER:	REV. A	151 min Internacer	AUTHOR:	Page
AS-000087	04/25/2024	151-pin Interposer	FDH	4 of 6

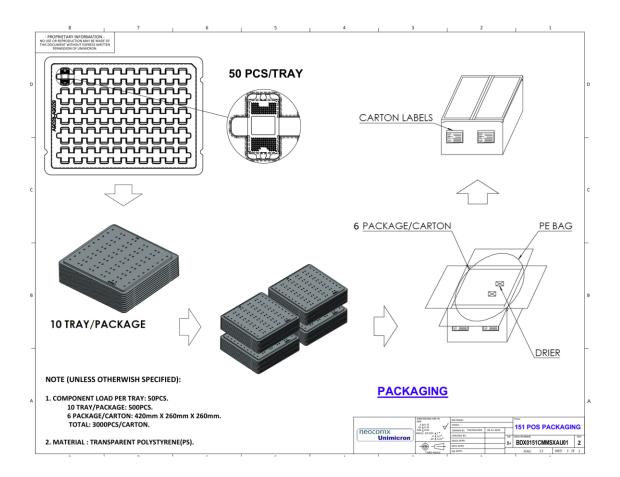


ASSEMBLY & HANDLING GUIDELINES

- 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 60 trays per carton, Total= 3000 pcs/Carton



DOCUMENT NUMBER:	REV. A	151 pin Internacer	AUTHOR:	Page
AS-000087	04/25/2024	151-pin Interposer	FDH	5 of 6

Product Specification

ORDERING INFO

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

Custom interposers and hardware are also available from Neoconix.

Corporate Headquarters:

Neoconix, Inc. 4020 Moorpark Ave., #108

San Jose, CA 95117 USA

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: sales@neoconix.com

REVISION HISTORY

Rev A 04/22/2024 Production Release

DOCUMENT NUMBER:	REV. A	1E1 nin Interneser	AUTHOR:	Page
AS-000087	04/25/2024	151-pin Interposer	FDH	6 of 6