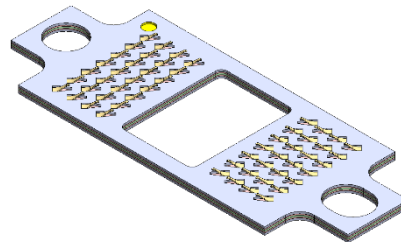


56 Position LGA/LGA PCBeam™ Connector

Neoconix P/N: BDX0056DMMSXAU01

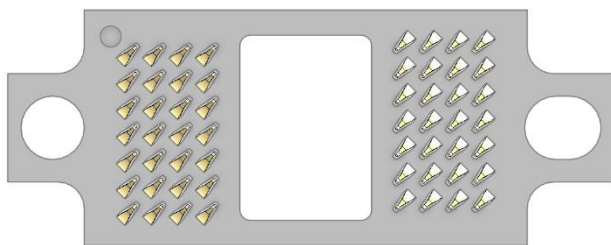
FEATURES

- High density 1.0 mm x 1.0 mm area-array pitch
- 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

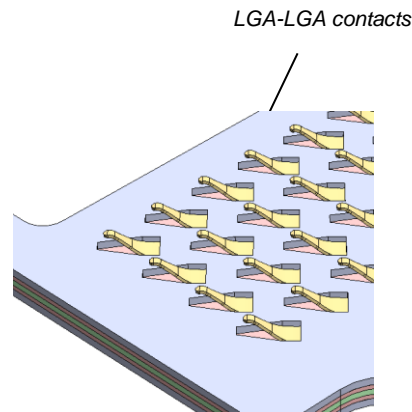


OVERVIEW

The PCBeam™ 56 Position Connector is an interconnect solution for the Texas Instruments S247 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

DOCUMENT NUMBER: AS-000069	REV. B 07/18/2023	56-pin Interposer	AUTHOR: WT	Page 1 of 6
--------------------------------------	-----------------------------	-------------------	----------------------	-----------------------

CROSS REFERENCE INFO:

- TI Interposer Drawing: 2518084
- TI DMD Drawing: 2516674

ORDERING INFORMATION:

- Part Number: BDX0056DMMSXAU01
- Production Packaging: Vacuum formed Low Profile Matrix Trays
- Minimum Production Order Quantity: 3000
- Lead Time: 8 weeks ARO

PRODDUCT SPECIFICATIONS
MECHANICAL

ITEM	DESCRIPTION	REQUIREMENT	COMMENT
M1	Contact Pitch	1.0 mm x 1.0 mm	
M2	Contact Count	56 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	

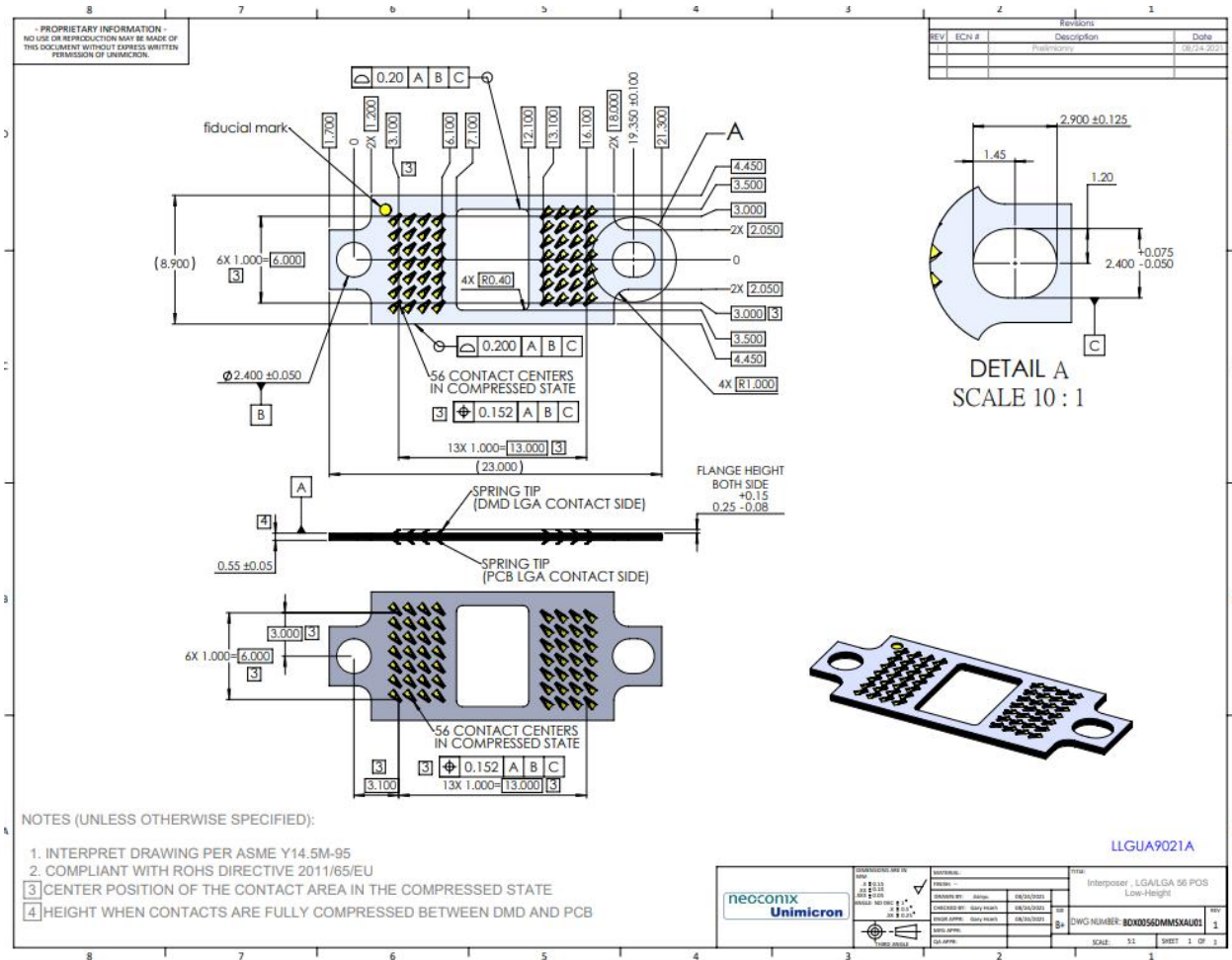
OTHER ITEMS

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

NOTE: Specifications are subject to change without notice.

DOCUMENT NUMBER: AS-000069	REV. B 07/18/2023	56-pin Interposer	AUTHOR: WT	Page 2 of 6
--------------------------------------	-----------------------------	-------------------	----------------------	-----------------------

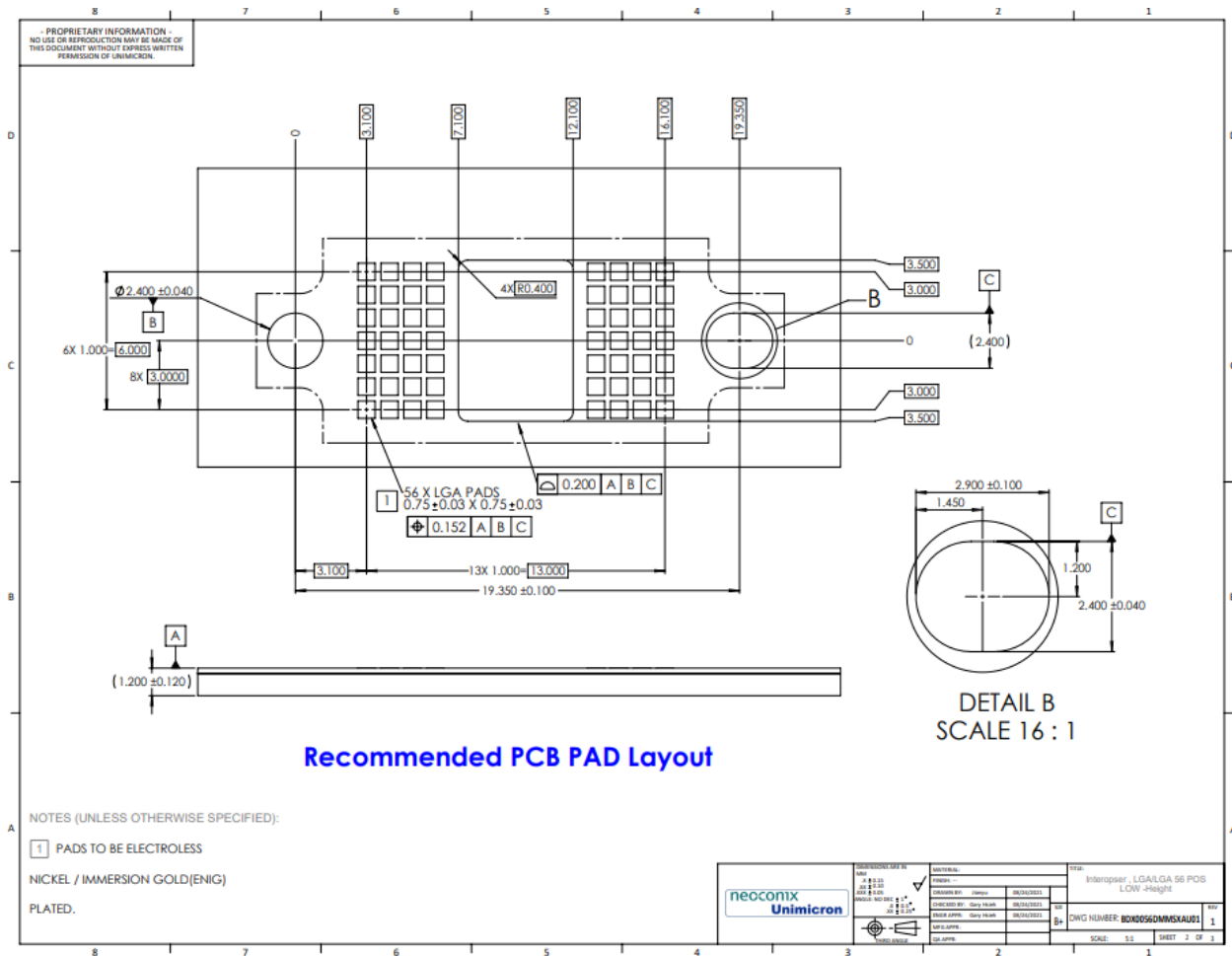
DIMENSIONAL INFORMATION



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

DOCUMENT NUMBER: AS-000069	REV. B 07/18/2023	56-pin Interposer	AUTHOR: WT	Page 3 of 6
--------------------------------------	-----------------------------	-------------------	----------------------	-----------------------

RECOMMENDED PCB LAYOUT



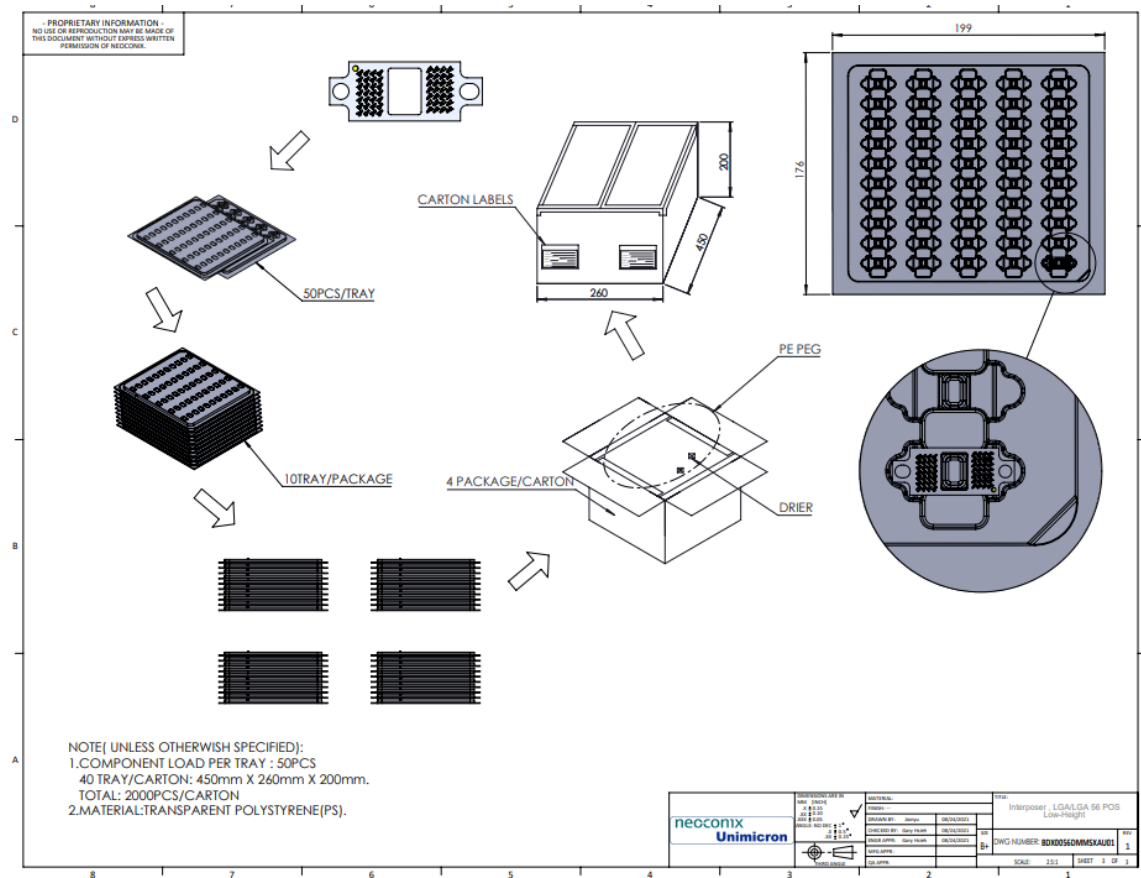
Note: This example is for reference only. Please refer to the product drawing.

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



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	03/03/2022	Production Release
Rev B	07/13/2023	Updated target load per contact from 55 grams to 45grams

DOCUMENT NUMBER: AS-000069	REV. B 07/18/2023	56-pin Interposer	AUTHOR: WT	Page 6 of 6
--------------------------------------	-----------------------------	-------------------	----------------------	-----------------------