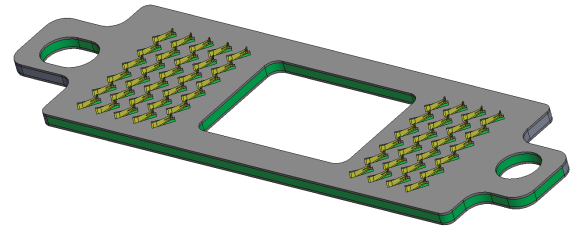


54-Position LGA/LGA PCBeam™ - low height - Connector

Neoconix P/N: BDX0054CMMF4AU01

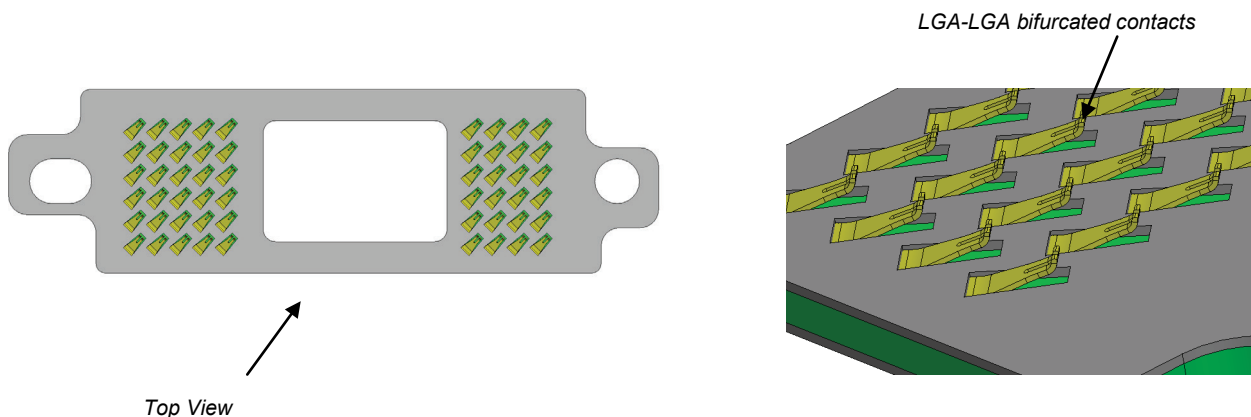
FEATURES

- High density 0.7424mm area-array pitch
- Ultra-Low profile, 0.43mm mated height
- PCBeam™ high reliability LGA spring contacts
- Bifurcated contact tips
- Single piece frame for improved dimensional tolerances
- Hard gold-plated contact interface
- RoHS 2011/65/EU (RoHS2) compliant



OVERVIEW

The PCBeam™ 54 Position Connector is an interconnect solution for the Texas Instruments S246 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. A bifurcated contact design enhances the product reliability by providing an aggressive wiping during assembly.



PCBeam™ Technology

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CROSS REFERENCE INFO:

- TI Interposer Drawing: 2516194
- TI DMD Drawing: 2515699

ORDERING INFORMATION:

- Part Number: BDX0054CMMF4AU01
- Production Packaging: Vacuum formed Low Profile Matrix Trays
- Minimum Production Order Quantity: 3,000
- Lead Time: 8 weeks ARO

SPECIFICATIONS
MECHANICAL

Contact Configuration.....	single-beam, bifurcated tips
Contact Pitch.....	0.7424mm x 0.7424mm
Contact Count.....	54
Target Load / Contact.....	30 ± 10 grams
Contact Deflection.....	0.16 mm typical per side

ELECTRICAL

Current Rating.....	0.5A per position
Resistance.....	< 50mΩ per position
Dielectric Withstanding Voltage.....	100VDC

ENVIRONMENTAL

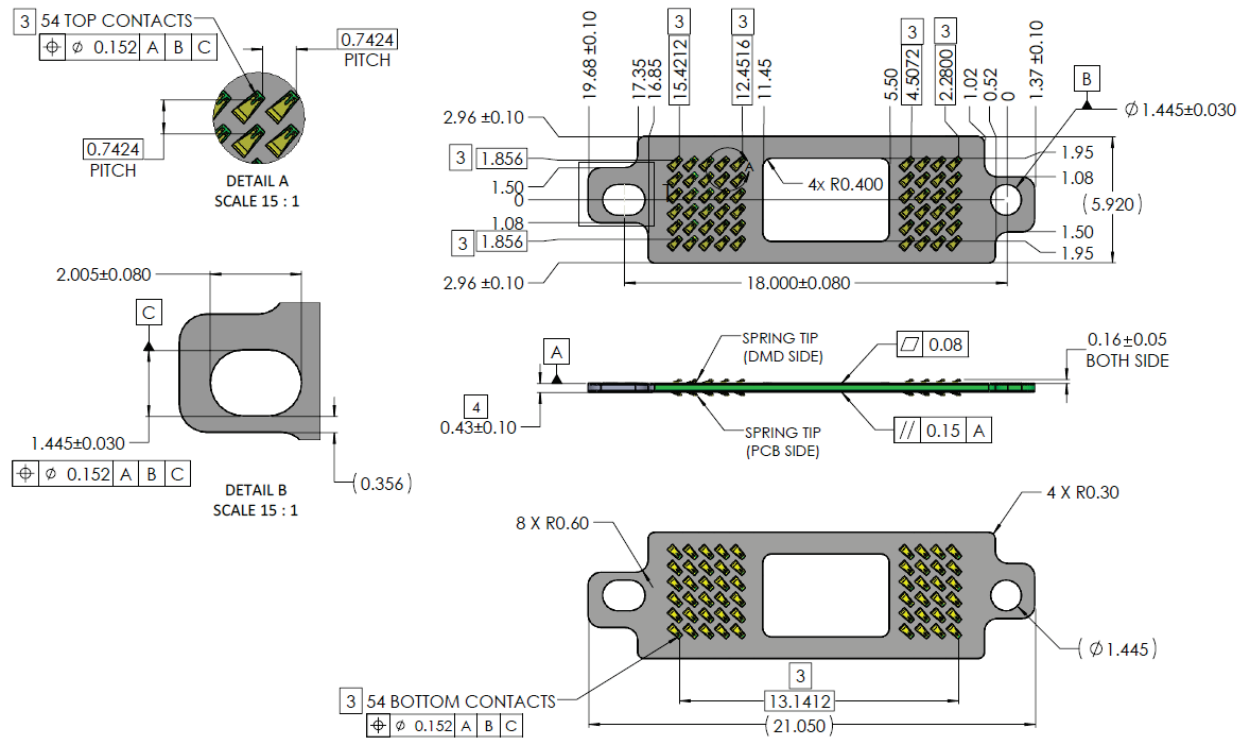
Operating Temperature.....	-20°C to 85°C
Storage Temperature.....	-40°C to 85°C
Heat aging.....	85°C, 96hrs,
High temperature Humidity.....	96 hrs, 90% RH, 60°C
Low temperature/ Ambient Humidity	96 hrs, -25 °C
Temperature Cycling	32 cycles, -25°C to 60°C
Thermal Shock.....	32 cycles, -25°C to 60°C
Salt Spray.....	48hrs, 5% mist
Random Vibration.....	10-55Hz rms, 3 axes, 2hrs/axis
Insertions.....	50 mating cycles

MATERIALS

Core Dielectric.....	FR4
Contact Elements.....	Copper alloy
Contact Plating.....	hard Au over Ni
Surface Insulator.....	polyimide

NOTE: Specifications are subject to change without notice.

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DIMENSIONAL INFORMATION


NOTES:(UNLESS OTHERWISE SPECIFIED)

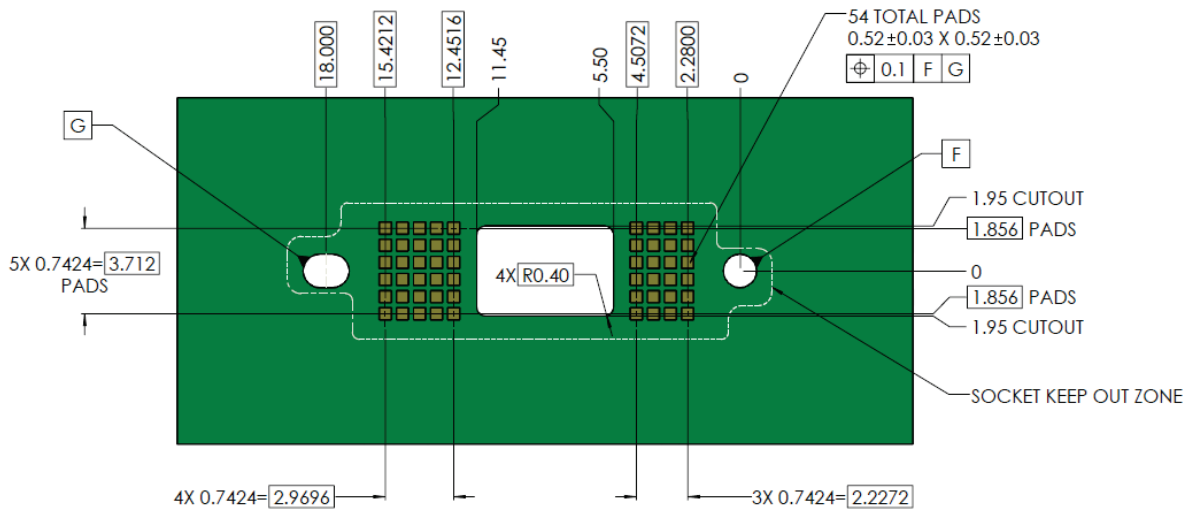
- 1.INTERPRET DRAWING PER ASME Y14.5-94.
- 2.COMPLIANT WITH RoHS DIRECTIVE 2011/65/EU
- 3** .CENTER MARKS OF CONTACT POSITIONS ARE FOR COMPRESSED
- 4** .HEIGHT AT FULLY COMPRESSED CONTACTS

 DIMENSIONS ARE IN mm
 TOLERANCES (unless otherwise specified):

 ANGULAR: ± 2 degree
 LINEAR: .X ± 0.15 [0.06]
 .XX ± 0.10 [0.04]
 .XXX ± 0.05 [0.02]

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

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RECOMMENDED PCB LAYOUT

NOTES (UNLESS OTHERWISE SPECIFIED):

1. PADS TO BE ELECTROLESS NICKEL/IMMERSION GOLD (ENIG) PLATED
2. VIAS IN PAD AREAS MUST BE FILLED
3. INTERPOSER OUTLINE; NO COMPONENTS ALLOWED WITHIN THIS AREA
4. ALLOWED COMPONENT AREA; MAXIMUM COMPONENT HEIGHT 1.3 mm
5. IF SOLDERMASK IS APPLIED IN THE ARRAY AREA, IT SHALL NOT PROTRUDE ABOVE THE PLANE OF THE CONTACT PAD SURFACE

**DIMENSIONS ARE IN
 MM [INCH]**

- .X \pm 0.13 [.005]
 .XX \pm 0.08 [.003]
 .XXX \pm 0.025 [.001]
 ANGLE: NO DEC \pm 1°
 .X \pm 0.5°
 .XX \pm 0.25°



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

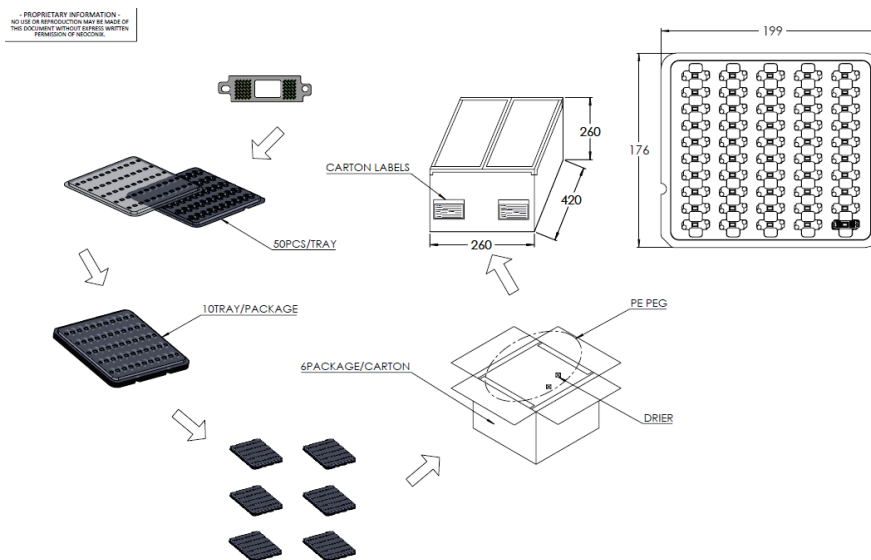
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ASSEMBLY & HANDLING GUIDELINES

- 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= 3000PCS/Carton



NOTE(UNLESS OTHERWISE SPECIFIED):
 1.COMPOONENT LOAD PER TRAY : 50PCS
 10 TRAY/PACKAGE:500PCS
 6PACKAGE/CARTON: 420mm X 260mm X 260mm.
 TOTAL: 3000PCS/CARTON
 2.MATERIAL:TRANSPARENT POLYSTYRENE(PS).

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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	05/14/2018	Production Release
Rev B	08/24/2018	Update interposer drawing No.

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