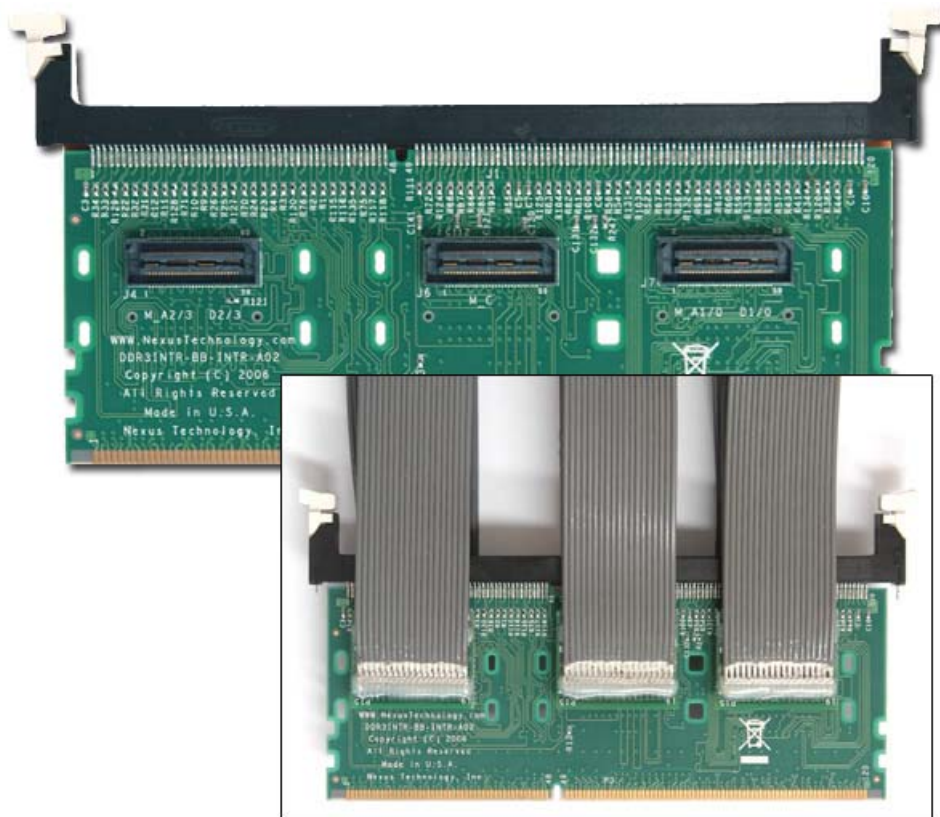


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## NEX-DDR3INTR

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- DDR3 (240 pin) interposer designed to JEDEC standards with Tektronix logic analyzer connections
- Support for a variety of DDR3, 240 pin DIMMs.
  - UDIMMs
  - RDIMMs
  - Different vendors
  - Different memory depths
- Uses Low-Profile probes from Nexus to interface to the logic analyzer for increased signal integrity
- Small size limits added trace widths
- Acquisition of DDR3 Address / Command, Read and Write data
- Selective Clocking – Can filter *Refresh* and *Idle* cycles for improved TLA memory utilization
- Accurate, 8GHz timing analysis on every channel of the TLA
- Correlation with data from other acquisition modules
- Simultaneous state and timing on every channel of the TLA
- No added buffers to conceal system performance
- Bus cycle decode software included
- Software to determine where to set the logic analyzer sample window included

## General Description

NEX-DDR3INTR product allows for the acquisition of Address/Command, Read and Write data of 240-pin, DDR3 DIMMs at 800 MT/s or slower.

**Predefined Symbols** for the following Command Cycles allow for easy trigger setup:

- Read Col Address Read
- Write Col Address Write
- Mode Register Set
- Row Address Strobe
- Precharge
- Precharge Select Bank
- No Operation
- Ignore Command Data
- Burst Stop
- Refresh

**Oscilloscope Connectivity** to any channel without having to re-probe via the TLA's Enhanced iView Analog Mux capability.

## LA Support / Configuration

A TLA7000 equipped with three (3), merged, 450MHz state speed, acquisition modules (TLA7AA4 or TLA7AB4) with four (4) NEX-PRB1X and two (2) NEX-PRB4X probes are required for 800MT/s or slower, Read **and** Write data acquisition.

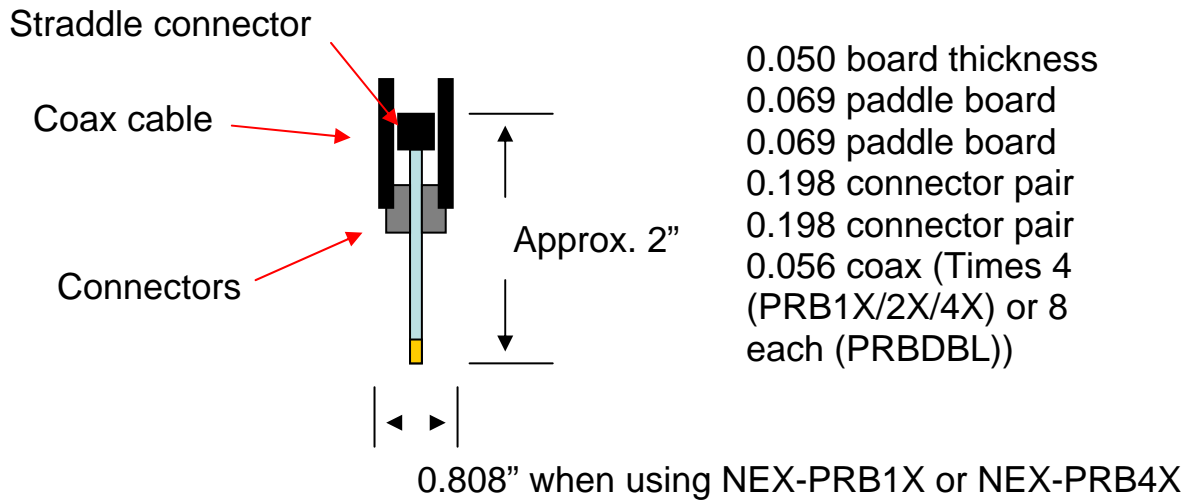
8GHz, MagniVu Timing and Enhanced iView Analog Mux capabilities are available with either configuration.

## Electrical Effects

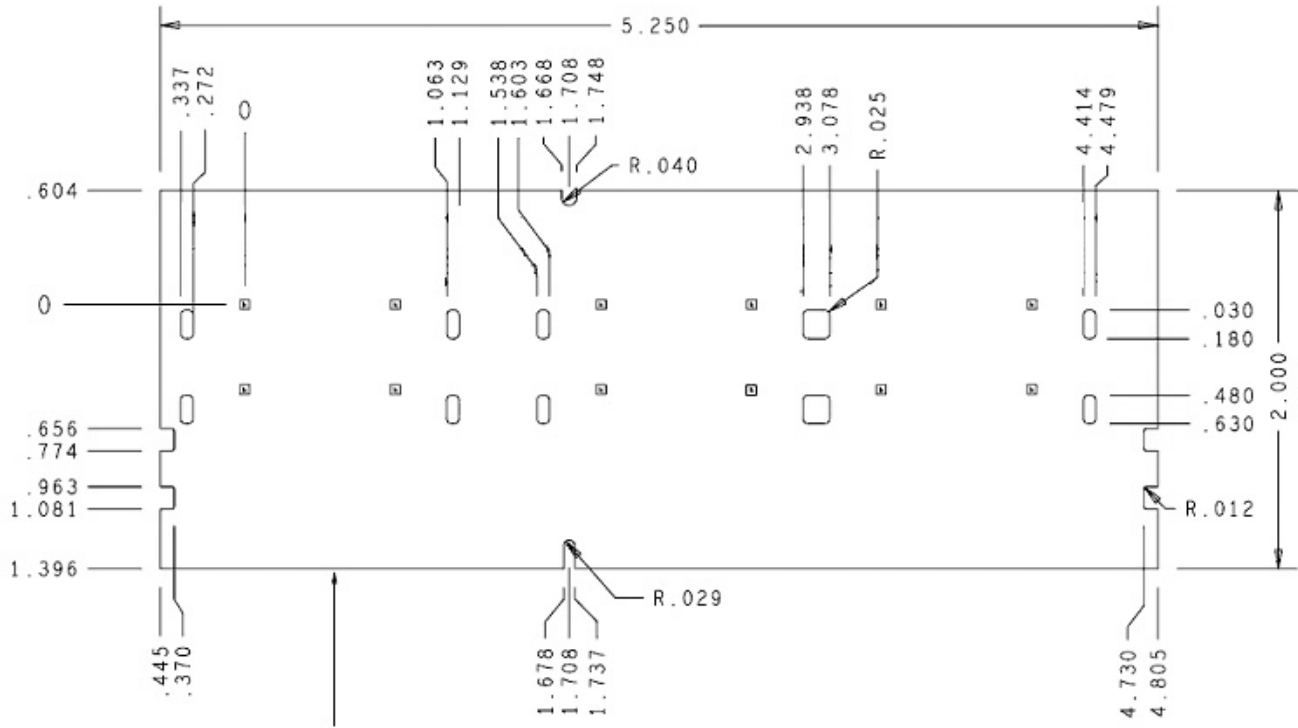
Any interposer design changes the electrical characteristics of the bus and may not work in every DIMM connector of every customer target. Knowing this, Nexus has a 30 day return policy for this product so that customers may try it in their specific application.

## Keep-Out Information

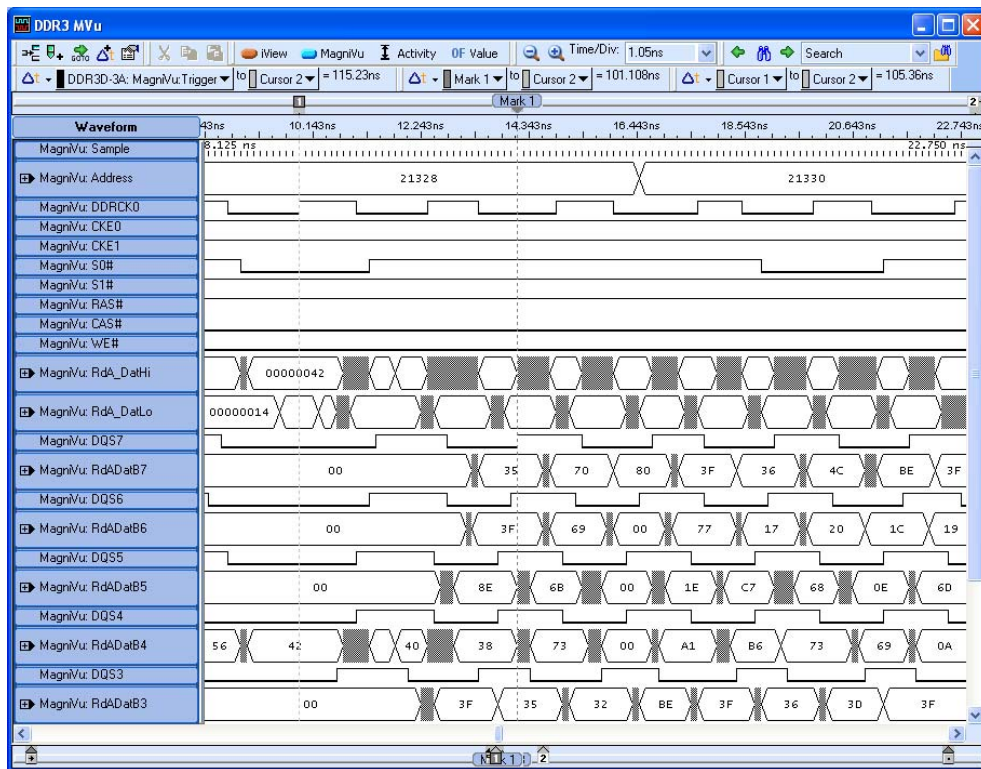
Below are the width dimensions of the NEX-DDR3INTR support with probes attached.



# Mechanical Specification



# Timing Display



MagniVu Timing Display

# State Display

Sample	DDR3D-3A Address	DDR3D-3A Mnemonics	DDR3D-3A DataHi	DDR3D-3A DataLo	DDR3D-3A DataMasks	Timestamp
262133	-----	READ DATA	00000031	00000031	-----	7.625 ns
	-----	READ DATA	0000003E	00000029	-----	
	-----	READ DATA	00000014	0000003D	-----	
262134	-----	READ DATA	00000040	0000003F	-----	2.750 ns
	-----	READ DATA	00000026	00000025	-----	
262135	40968	RD - READ (S0#) Bank: 4	-----	-----	-----	2.500 ns
	-----	READ DATA	00000041	00000039	-----	
	-----	READ DATA	0000002A	0000002A	-----	
	-----	READ DATA	00000037	00000041	-----	
	-----	READ DATA	00000014	0000003F	-----	
262141	-----	READ DATA	1020203E	00000000	-----	12.875 ns
	-----	READ DATA	00000015	00000010	-----	
262142	-----	READ DATA	00000010	00000015	-----	2.500 ns
	-----	READ DATA	00000043	0000000F	-----	
262143	21318	WR - WRITE (S0#) Bank: 2	-----	-----	-----	2.500 ns
	-----	READ DATA	00000014	00000042	-----	
	-----	READ DATA	00000040	0000003D	-----	
	-----	READ DATA	00000040	00000014	-----	
	-----	READ DATA	00000014	00000043	-----	
262144	-----	WR - WRITE (S0#) Bank: 2	-----	-----	-----	2.500 ns
262147	21328	WR - WRITE (S0#) Bank: 2	-----	-----	-----	7.375 ns
262149	-----	WRITE DATA	70696B73	35DE170F	00	5.000 ns
	-----	WRITE DATA	80000000	329E0E07	00	
262150	-----	WRITE DATA	3F771EA1	BE85AF39	00	2.750 ns
	-----	WRITE DATA	3617C7B6	3F77C39E	00	
262151	21330	WR - WRITE (S0#) Bank: 2	-----	-----	-----	2.250 ns
	-----	WRITE DATA	4C206873	36143776	00	
	-----	WRITE DATA	BE1C0E69	3D657EB3	00	
262152	-----	WRITE DATA	3F196D0A	3F48ABA6	00	2.750 ns
	-----	WRITE DATA	364302FB	3F77C3AB	00	
262153	-----	WRITE DATA	6873656D	3589CD25	00	2.250 ns
	-----	WRITE DATA	BE82B984	3F194ABE	00	
262154	-----	WRITE DATA	3EB09D5D	3F2D1C38	00	2.750 ns
	-----	WRITE DATA	BFA9F4D9	BDA32DB8	00	
262155	21300	WR - WRITE (S0#) Bank: 2	-----	-----	-----	2.250 ns
	-----	WRITE DATA	6C665F47	3F8D80DE	00	
	-----	WRITE DATA	AEDBE6FF	318600C3	00	
262156	-----	WRITE DATA	3F7F08D8	BDB1B26F	00	2.500 ns
	-----	WRITE DATA	B52138EB	3FA45F04	00	
262157	-----	WRITE DATA	656D5F6B	3607947D	00	2.500 ns
	-----	WRITE DATA	30C06A1F	2EDBE6FF	00	

State Display – Software Mode, Address, Data and Command Cycles Only

## Ordering / Contact Information

**Part Number** NEX-DDR3INTR

**Includes:** Manual  
Interposer  
Datasheet  
Bus cycle decode software  
SPA data eye finder software

Additional required products:

4ea. 1X Low Profile Logic Analyzer interface probes (NEX-PRB1X)  
2ea. 4X Low Profile Logic Analyzer interface probes (NEX-PRB4X)

**Postal:** Nexus Technology, Inc.  
78 Northeastern Blvd. #2  
Nashua, NH 03062

**Telephone:** 877-595-8116

**Fax:** 877-595-8118

**Email:** Technical Support [techsupport@nexustechnology.com](mailto:techsupport@nexustechnology.com)  
General Support [support@nexustechnology.com](mailto:support@nexustechnology.com)  
Quote Requests [quotes@nexustechnology.com](mailto:quotes@nexustechnology.com)

**Website:** [www.nexustechnology.com](http://www.nexustechnology.com)

### Placing an Order

Credit Card orders can be placed directly at 877-595-8116.  
Purchase orders can be faxed to 877-595-8118.

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