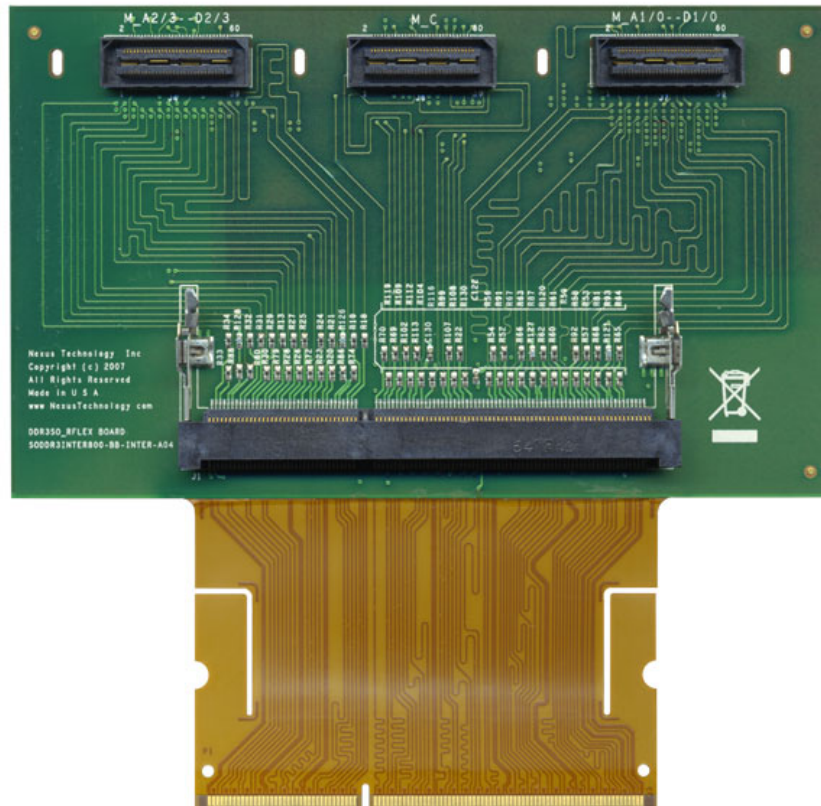

NEX-SODDR3INTRB



- Rigid/Flex/Rigid interposer design provides mechanical clearance for use in standard 204-pin, SODIMM DDR3 targets
- Acquisition of DDR3-1067 Address/Command, Read and Write Data
- Quick and easy connection between the SODIMM DDR3 bus and Tektronix Logic Analyzers
- Extender design does not require a dedicated slot
- Impedance controlled, matched trace length design
- No active buffering of the DDR signals
- Accurate 50 GHz Timing Analysis (available when using TLA7BB4 modules, 8GHz otherwise)
- Simultaneous State and Timing on every channel of the TLA
- Correlation with data acquired from other acquisition modules
- Trigger on setup/hold violations for address and commands
- DDR3 protocol analysis and protocol error checking
- View any channel on an oscilloscope without re-probing using Tektronix' Extended iView

General Description

NEX-SODDR3INTRB allows for the acquisition of Address/Command, Read and Write Data of 204-pin, unbuffered or registered SODIMM DDR3.

Pre-Defined Symbols for the following Command Cycles allow for easy Trigger Setup:

- Read
- Read w/Auto-Precharge
- Write
- Write w/Auto-Precharge
- Refresh
- Precharge Select Bank
- Precharge All
- ZQ Cal.
- No Operation
- Ignore Command

Selective Clocking stores data when commands are present and for thirteen clock cycles after Column Address assertion, resulting in more DDR bus cycle activity and fewer idle cycles being stored in acquisition memory.

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

Nexus Technology has carefully simulated and designed the NEX-SODDR3INTRB to work in your system. Factors that can have a significant effect on the performance of the whole DDR3 system include the target memory controller, the target layout, the DDR3 SODIMM used, and which SODIMM socket the interposer populates. Writes only, reads only, or writes and reads visible in most circumstances.

LA Support / Configuration

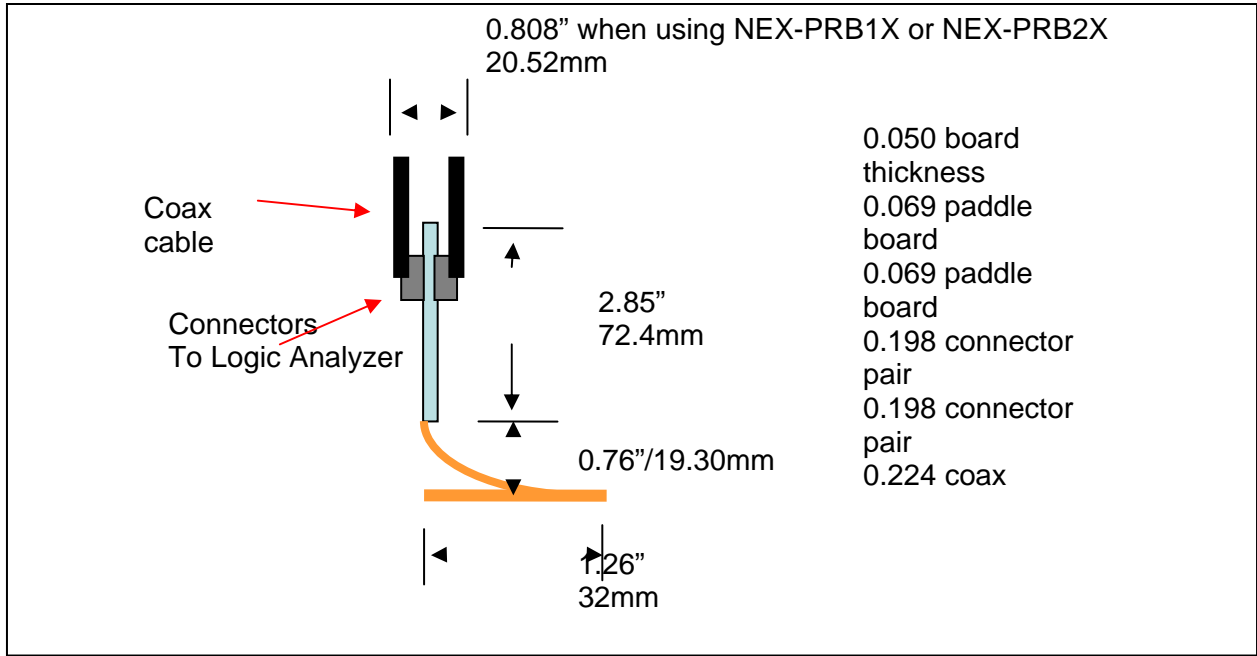
DDR3-1067 (or slower) Read and Write Acquisition Requires

- TLA7000 series logic analyzer
 - **Two**, merged, 750MHz state speed TLA7BB4 modules
 - Three NEX-PRB1X probes (sold separately)
 - Two NEX-PRB2X probes (sold separately)

TLA7Ax4 DDR3-800 Read and Write Acquisition Requires

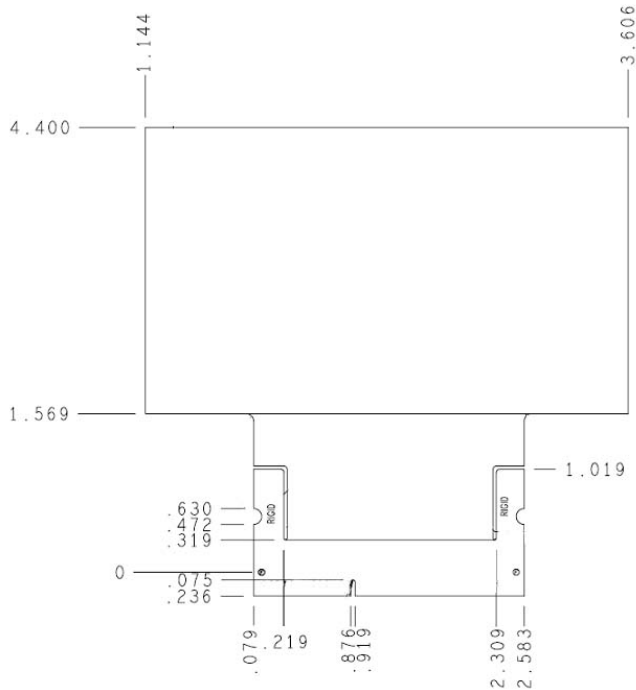
- **Three**, merged, 450MHz state speed TLA7Ax4 modules
 - Three NEX-PRB1X probes (sold separately)
 - Two NEX-PRB4X probes (sold separately)

Adapter Egress / Keep-Out Area

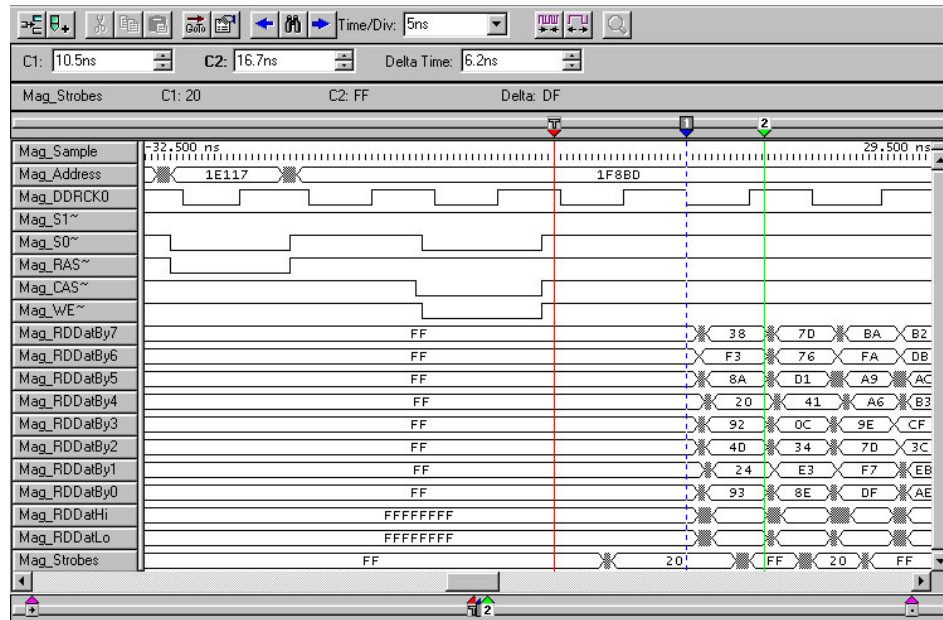


Keep-Out Area

Mechanical Outline



Timing Display



State Display

Sample	DDR3UA3A Address	DDR3UA3A Mnemonics	DDR3UA3A DataHi	DDR3UA3A DataLo	DDR3UA3A DataMasks	Timestamp
0	5A9E8	WR - WRITE BANK: 5				0 ps
1		DESL - IGNORE COMMAND				2.500 ns
2		DESL - IGNORE COMMAND				2.500 ns
3		DESL - IGNORE COMMAND				2.625 ns
4	29198	WR - WRITE BANK: 2				2.375 ns
5		WRITE DATA	0000FF00	00FF0000	00	2.500 ns
6		WRITE DATA	0000FF00	00FF0000	00	2.500 ns
7		WRITE DATA	00000000	FFFFFF00	00	2.500 ns
8		WRITE DATA	00000000	FFFFFF00	00	2.500 ns
8	08128	WR - WRITE BANK: 0				2.500 ns
9		WRITE DATA	FF000000	00FFFFFF	00	2.500 ns
10		WRITE DATA	FFFFFF00	00FF0000	00	2.500 ns
10	689A6	PRE - PRECHARGE BANK: 6				2.625 ns
11		WRITE DATA	FF000000	000000FF	00	2.375 ns
12		WRITE DATA	000000FF	FF000000	00	2.500 ns
12	18929	PRE - PRECHARGE BANK: 1				2.500 ns
13		WRITE DATA	FF000000	00FF0000	00	2.625 ns
14		WRITE DATA	00000000	00FF0000	00	2.500 ns
15		WRITE DATA	FF000000	FFFFFF00	00	2.500 ns
16		WRITE DATA	00FF0000	FF000000	00	2.500 ns
17		WRITE DATA	00000000	00000000	00	2.500 ns
17		DESL - IGNORE COMMAND				2.500 ns
18		DESL - IGNORE COMMAND				2.500 ns
19		DESL - IGNORE COMMAND				2.500 ns
20	18D29	ACT - ACTIVATE BANK: 1				2.500 ns
21		DESL - IGNORE COMMAND				2.500 ns
22		DESL - IGNORE COMMAND				2.500 ns
23	08846	PRE - PRECHARGE BANK: 0				2.500 ns
24		DESL - IGNORE COMMAND				2.500 ns
25		DESL - IGNORE COMMAND				2.500 ns
26		DESL - IGNORE COMMAND				2.500 ns
27		DESL - IGNORE COMMAND				2.500 ns
28		DESL - IGNORE COMMAND				2.500 ns
28	1E026	RD - READ BANK: 1				2.500 ns
29		DESL - IGNORE COMMAND				2.500 ns
30		DESL - IGNORE COMMAND				2.500 ns
31	08C46	ACT - ACTIVATE BANK: 0				2.500 ns

Ordering / Contact Information

Part Number NEX-SODDR3INTRB

Includes: NEX-SODDR3INTRB Bus Adapter
SODIMM Analysis Software
DDR3 Protocol Analysis Software
SPA Data Eye Finder Software
Manual

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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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