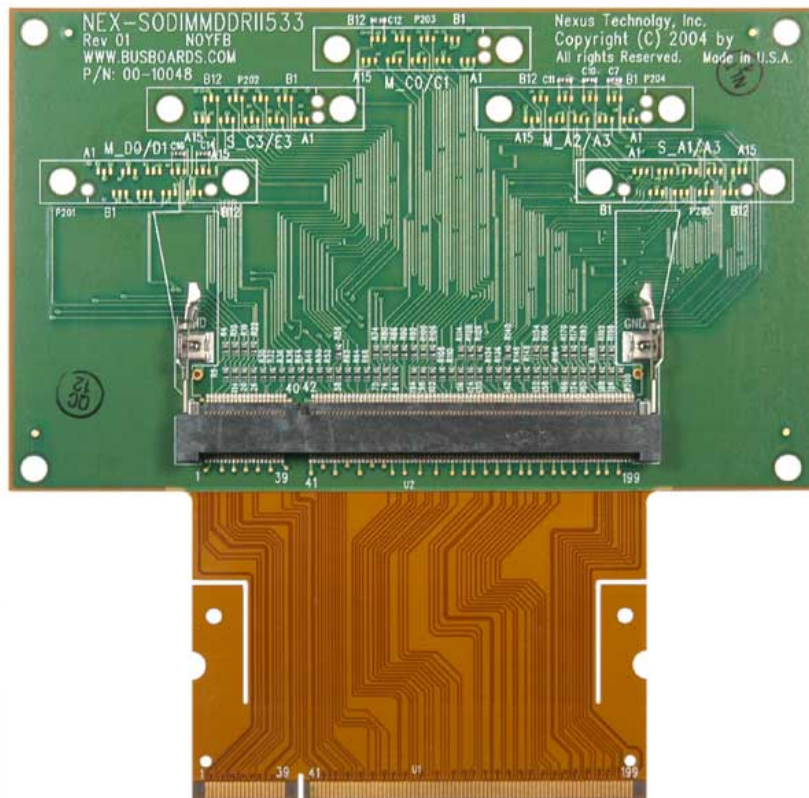


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## NEX-SODIMMDDRII533

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Rigid/Flex/Rigid interposer design provides mechanical clearance for use in standard DDR2 SDRAM SODIMM targets

Acquisition of DDR2-533MT/s Address/Command, Read and Write Data

Quick and easy connection between the SODIMM DDR2 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 8GHz Timing Analysis

Simultaneous State and Timing on every channel of the TLA

Correlation with data acquired from other acquisition modules

All DDR signals brought to Tektronix Compression Footprints for monitoring

## General Description

NEX-SODIMMDDR533 allows for the acquisition of Address/Command, Read and Write Data of 200-pin, unbuffered SODIMM DDR5 DIMMs at 533MT/s or slower.

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

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

**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.

## LA Support / Configuration

Acquisition Type	333 MHz	400 MHz	533 MHz	TLA7xx4 Module Count
Timing Only	X	X	X	2 merged
Read or Write	X	X	X	2 merged
Read and Write	X	X	NA	2 merged
Read and Write	X	X	X	3 merged

A TLA700 equipped with three merged 450MHz state speed acquisition modules (TLA7AA4 or TLA7AB4 cards) with 3 P6860 and 4 P6864 probes is required for 533MT/s or slower Read AND Write Data acquisition.

A TLA700 equipped with two merged 450MHz state speed acquisition modules (TLA7AA4 or TLA7AB4 cards) with 7 P6860 probes is required for 400MT/s Read AND Write Data acquisition.

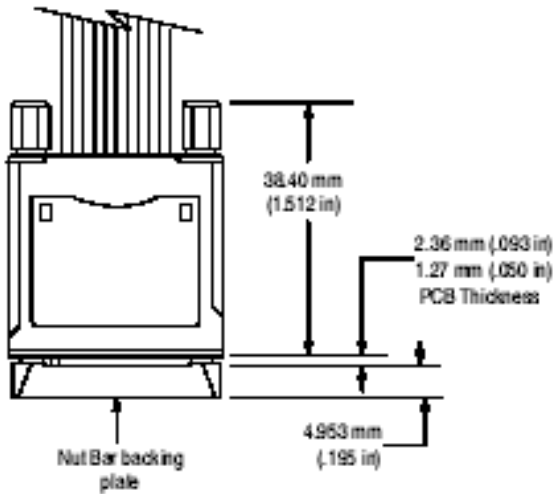
A TLA700 equipped with two merged 450MHz state speed acquisition modules (TLA7AA4 or TLA7AB4 cards) with 7 P6860 probes is required for 533MT/s or slower Read OR Write Data acquisition.

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

## Mechanical Information

Approximately 1.5" of horizontal keep-out is required on each side of the DDRII SODIMM for Tektronix probe attachment. Probes connect to both sides of the adapter simultaneously.

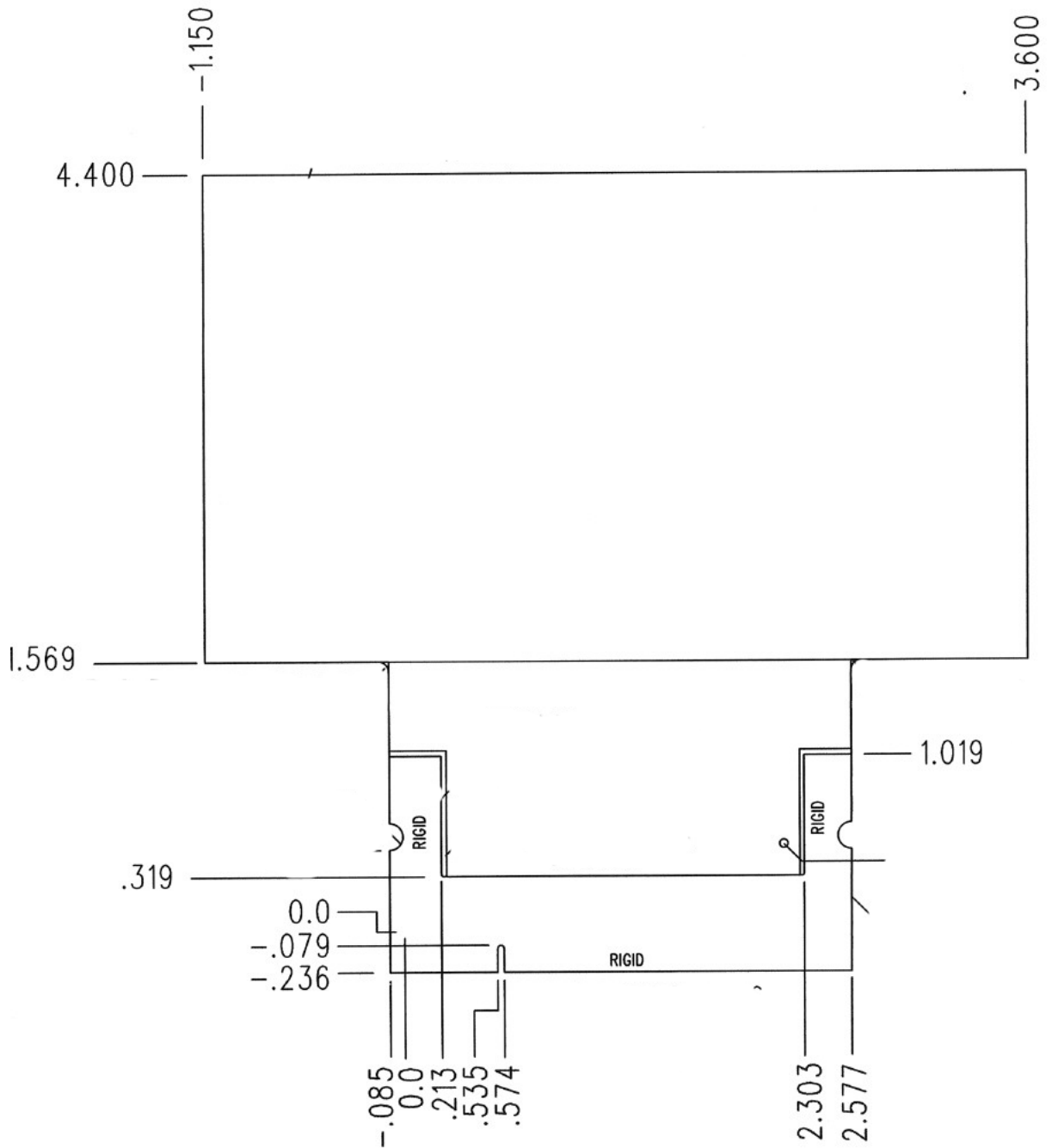
Installed P6860 and P6864 probes will look similar to the picture below. All probes will have an opposite probe on the reverse side. All probes must have the gray elastomer holder installed.



**Tektronix P68x0 mechanical requirements**

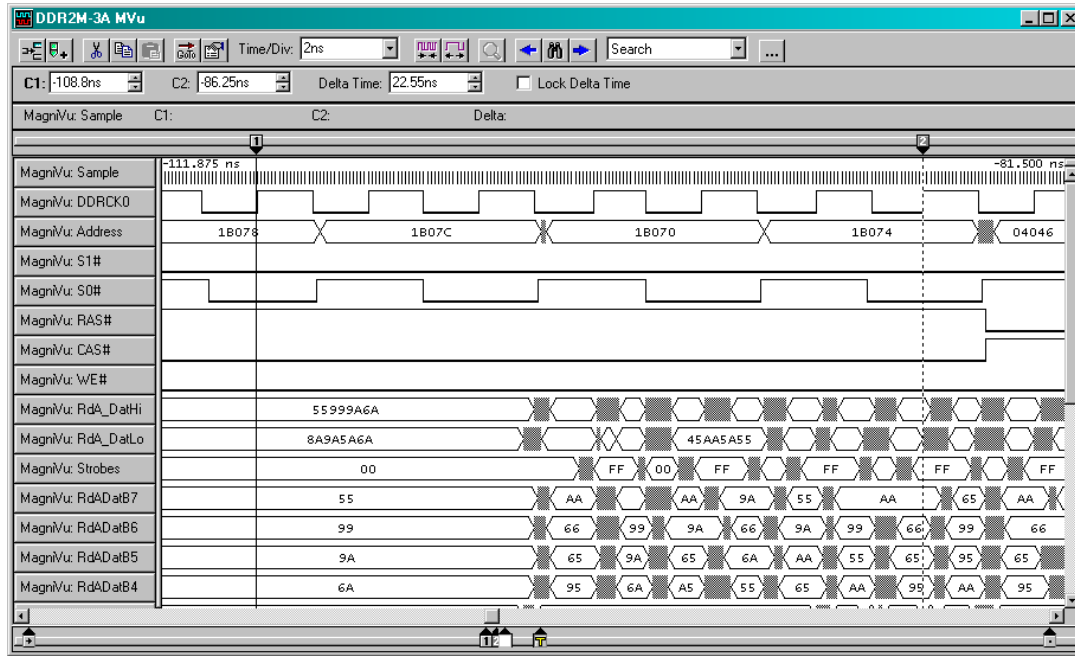


**Back-to-back probing of SODIMM DDRII**



**NEX-SODIMDDR11533 Mechanical Outline**

# Timing Display



SODIMM DDRII 533 Timing Display

# State Display

Sample	DDR2M-3A Address	Cmd	DDR2M-3A Mnemonics	DDR2M-3A DataHi	DDR2M-3A DataLo	DDR2M-3A ChekBits	DDR2M-3A DataMasks	Timestamp
42	04047	1A3	ACTV - ROW ADDRESS STROBE (S0#)					3.750 ns
43		1AC	DESL - IGNORE COMMAND					3.750 ns
44		1AC	DESL - IGNORE COMMAND					3.750 ns
45		1AC	DESL - IGNORE COMMAND					3.750 ns
46	04A18	1A4	WRITE - COL ADDR WRITE (S0#)					3.750 ns
47		1AC	DESL - IGNORE COMMAND					3.750 ns
48	04A1C	1A4	WRITE - COL ADDR WRITE (S0#)					3.750 ns
			WRITE DATA	9A995A6A	8A65A595	40	00	
			WRITE DATA	9A995A6A	8A65A595	40	00	
49		1AA	WRITE DATA	659995AA	8AA5A555	40	00	3.750 ns
			WRITE DATA	659995AA	8AA5A555	40	00	
50		1AA	WRITE DATA	5566AA55	45AA5A55	80	00	3.750 ns
			WRITE DATA	5566AA55	45AA5A55	80	00	
51		1AA	WRITE DATA	9A9A6A65	45AA5A55	80	00	3.750 ns
			WRITE DATA	9A9A6A65	45AA5A55	80	00	
52		1AA	DESL - IGNORE COMMAND					3.750 ns
53		1AA	DESL - IGNORE COMMAND					3.750 ns
54		1AA	DESL - IGNORE COMMAND					3.750 ns
55		1AA	DESL - IGNORE COMMAND					3.750 ns
56		1AA	DESL - IGNORE COMMAND					3.750 ns
57	04247	1A2	PRE - PRECHARGE SELECT BANK (S0#)					3.750 ns
58		1AB	DESL - IGNORE COMMAND					3.750 ns
59		1AB	DESL - IGNORE COMMAND					3.750 ns
60		1AB	DESL - IGNORE COMMAND					3.750 ns
61	04247	1A3	ACTV - ROW ADDRESS STROBE (S0#)					3.750 ns
62		1AD	DESL - IGNORE COMMAND					3.750 ns
63		1AD	DESL - IGNORE COMMAND					3.750 ns
64		1AD	DESL - IGNORE COMMAND					3.750 ns
65	1495F	1A5	READ - COL ADDR READ (S0#)					3.750 ns
66		1AD	DESL - IGNORE COMMAND					3.750 ns
67	1495B	1A5	READ - COL ADDR READ (S0#)					3.750 ns
68		1AD	READ DATA	00000180	00000002	00		3.750 ns
			READ DATA	00000180	00000022	00		
69	14950	1A5	READ - COL ADDR READ (S0#)					3.750 ns
			READ DATA	659995AA	45AA5A55	90		
			READ DATA	659995AA	45AA5A55	90		
70		1AD	READ DATA	55999A6A	4565A595	90		3.750 ns
			READ DATA	55999A6A	4565A595	90		

SODIMM DDRII 533 State Display – Software Mode, Address, Data and Command Cycles Only

## Ordering / Contact Information

**Part Number** NEX-SODIMMDDR533

**Includes:** NEX-SODIMM DDR533 Bus Adapter & Analysis Software  
Back-to-Back Probing Hardware  
Contains all hardware necessary to easily connect to Tektronix Compression Adapters.  
Manual

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

**Telephone:** 877-595-8116

**Fax:** 877-595-8118

**Email:** support@nexustechnology.com  
quotes@nexustechnology.com  
techsupport@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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