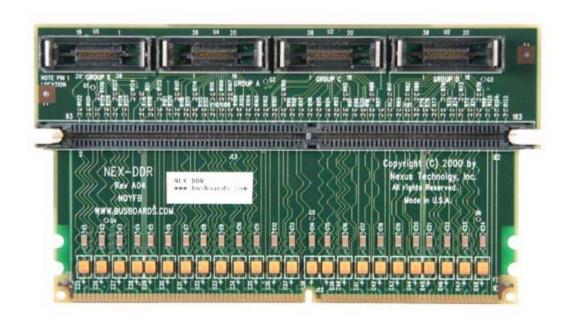


184-pin, 2.5V Double Data Rate (DDR) Bus Analysis Probe & Software

# **NEX-DDR**



- Quick and easy connection between the DDR bus and a Tektronix Logic Analyzer
- Extender design does not require a dedicated slot
- Supports 184-pin, 2.5V DDR SDRAM DIMMs up to 266MHz
- Impedance controlled
- Matched trace lengths
- <55ps skew between any two channels
- No active buffering of the DDR signals
- Accurate 2-8GHz timing analysis (depending on acquisition module(s) used)
- Simultaneous state and timing on every channel of the TLA
- Trigger on setup/hold violations
- Correction with data from other acquisition modules
- Several GND points close to the DDR socket for use with a scope probe
- Use the TLA's Extended iView capabilities to view any channel on an oscilloscope without re-probing (depending on the acquisition module(s) used)
- AMP Mictor Connector part number is 767054-1

#### **General Description**

The NEX-DDR adapter provides clocking, setup, symbolic display of information, and a quick convenient connection to a 2.5 V, 184-pin SDRAM DIMM bus. It is designed as an extender card for the DDR DIMM under test. The socket for the DDR module under test is elevated above adjacent DDR modules for mechanical clearance. Trigger on a Read, Write, Burst, Mode Register Set, etc. for easy problem identification. A TLA600 or TLA700 equipped with a 136-channel 200MHz sync. module provides timing analysis of a DDR200 or DDR266 DIMM. It can also be used to synchronously acquire DDR200 Address, Command and Read or Write Data. A TLA700 configured with two 136-channel 200MHz sync. acquisition cards provides support for DDR200 sync. acquisition of Address, Command, Read Data and Write Data. This configuration can also be used to acquire sync. acquisition of DDR266 Address, Command and Read Data or Write Data. The sync. acquisition requires a data valid window of approximately 1.6ns

**2-8Ghz Timing Analysis** available for all DDRII signals

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**Oscilloscope Connectivity** on any channel without re-probing via the TLA's Enhanced iView Analog Mux capability (depending on acquisition module(s) used)

**No Dedicated Slot Required** – The logic analyzer connects above the normal DIMM height so that there is no interference with adjacent DIMMs.

**Symbol Disassembly** Command types (Read, Write, Refresh, Precharge, Burst, NoOp, Mode Register Set, etc.) are identified for quick analysis of bus activity

**Correlating Bus Activity** While the NEX-DDR package is being used to monitor the DDR bus activity, another acquisition module can be used to monitor activity elsewhere in the system. The results of the two acquisitions can be correlated in time to determine the sequence of actions that occurred. For instance, the system microprocessor could be monitored and correlated with bus activity to verify the proper response to an external interrupt condition.

The following support package(s) are included with this product:

**DDR200** offers the ability to synchronously acquire 200MHz DDR Address and Command signals on every edge of DDR CK0 or CK1. DDR200 read data **or** write data can also be acquired – the acquisition of DDR data requires a valid data window of approximately 1.6ns. This support requires one 136-channel acquisition card (or TLA6X4) with the 200MHz state clocking option.

**DDR200M** requires two merged 136-channel acquisitions cards and is designed to give the user the ability to acquire both Read and Write data at a 200MHz data rate. For this support to work, both merged cards must have the 200MHz state clocking option. The DDR200M support is usable with a TLA7XX-series Logic Analyzer only as two acquisition cards are required for this support.

**DDR266** also requires two merged 136-channel acquisition cards. This support is designed to give the user the ability to acquire either DDR266 Read or Write data. For this support to work, both merged cards must have the 200MHz state clocking option. The DDR266 support is usable with a TLA7XX-series Logic Analyzer only as two acquisition cards are required for this support.

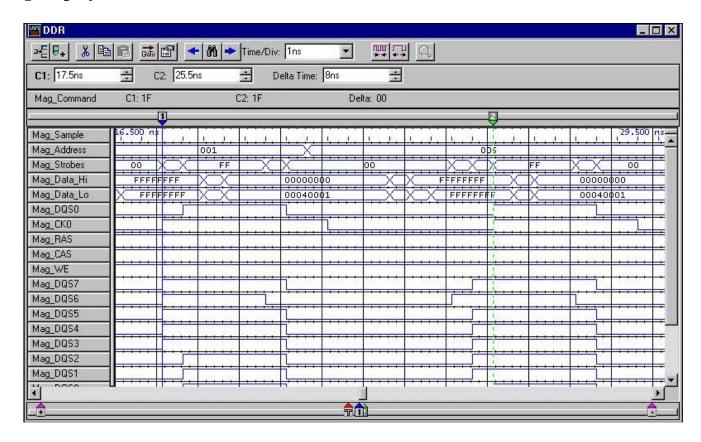
## **LA Support / Configuration**

The NEX-DDR product can support read **and** write data at speeds up to 200MHz. Read **or** write data is supported up to 266MHz. The module(s) required are TLA7L/M/N/P or Q acquisition modules with 136-channels and the 200MHz state speed option.

Acquisition Type	200MHz DDR Bus	266MHz DDR Bus	TLA Required	Module Count	Merged (Welded) Modules?
Timing	X	X	TLA 600/700	1	-
Only					
Read or	X		TLA 600/700	1	-
Write					
Read and	X		TLA700	2	No
Write					
Read or		X	TLA700	2	Yes
Write					
Read and	_	X	**	**	**
Write					

<sup>\*\*</sup> Read **and** Write at 266MHz not available with this product. Please see NEX-DDR266RW or NEX-DDRHS products for Read **and** Write support at 266MHz and greater speeds.

# **Timing Display**



## **Ordering / Contact Information**

#### **Part Number NEX-DDR**

includes NEX-DDR adapter DDR200, DDR200M and DDR266 Support Software Manual

#### **Options** include

NEX-DDRSPA - TLA Software Plug-In for determining optimum Setup & Hold sample points.

**Postal:** Nexus Technology, Inc.

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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.