

DDR3 Mixed Signal Oscilloscope (MSO) SODIMM Interposer

For use with Tektronix MSO (Mixed Signal Oscilloscope)

- Provides quick and easy interface between MSO digital channels and DDR3 SODIMM Slot
- Complete solution provides high fidelity analysis of the DDR3 bus while triggering on specific Address/Commands
- Trigger on digital channels and probe/correlate specific channels with oscilloscope inputs
- Combine with Nexus Oscilloscope Component Interposers for ultra high fidelity analog analysis
- Designed for DDR3-2133+

Nexus Technology recommends DDR3 slot interposers for applications where the customer must have the greatest flexibility in the probing of different DDR3 SODIMMs.

This interposer is an extender design and does not require a dedicated SODIMM slot. The flex design provides mechanical clearance around adjacent SODIMM slots.

This is a passive interposer with no added buffers to conceal system performance.

Interposer Design

A Mixed Signal Oscilloscope (MSO) is a unique combination of an oscilloscope and digital channels similar to those found on a Logic Analyzer. The digital channels provide the ability to look at a wide bus such as a Memory, Address, or Command bus and trigger on specific commands or addresses. Once triggered, the digital channels are correlated with the oscilloscope channels providing high speed oscilloscope data acquired at the Command/Address trigger point.

The DDR3 MSO SODIMM Interposer provides a quick and easy interface between the MSO digital channels and a DDR3 SODIMM slot. The intended use of this interposer is to provide DDR3 bus visibility and DDR3 bus triggering of the DDR3 Address/Command bus.

Bus Triggering and Visibility

In general, the DDR3 MSO SODIMM Interposer can be used to acquire the Address/Command bus using the MSO digital channels. When used for bus visibility, this quick and easy interface facilitates bus acquisition focused on areas of interest using the MSO digital trigger capability.

Triggering the digital channels on specific Address/Commands is very powerful for visibility of the bus transactions. To accurately analyze the characteristics of a signal, it is recommended that you probe at the memory component. An easy interface to the memory components is provided with Nexus Technology's DDR3 Memory Component Interposers.

[HTTP://WWW.NEXUSTECHNOLOGY.COM/PRODUCTS/COMPINTR/](http://www.nexustechology.com/products/compintr/). This enables analog analysis using the oscilloscope channels of the MSO.



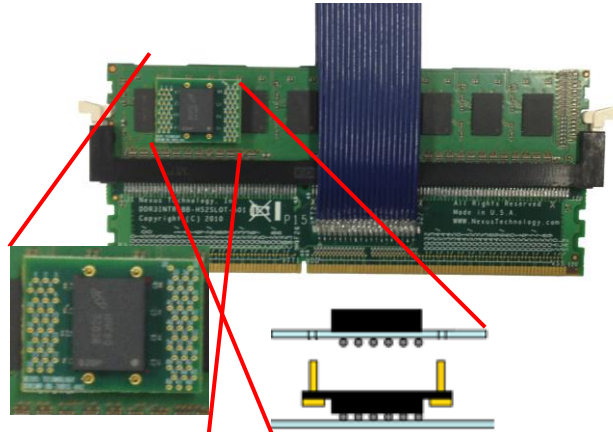
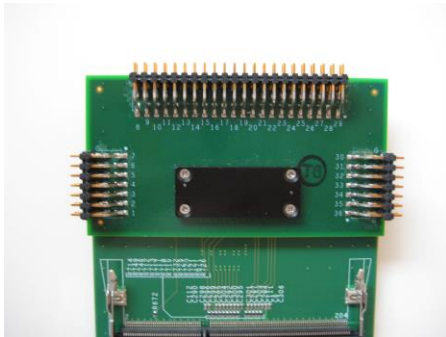
If a SODIMM instrumented with an Oscilloscope Component Interposer is not available, an alternative is to use the probe points provided on the reverse side of the DDR3 MSO SODIMM Interposer.

Digital Triggering with Analog Acquisitions at the Memory Component

This uniquely powerful application is achieved by:

1) MSO Digital inputs are connected to the DDR3 MSO SODIMM Interposer via quick and easy Digital Channel Interconnects.

2) Access to oscilloscope probe points where high fidelity measurements can be made at the memory component. (DDR3 MSO DIMM Interposer shown for reference)



Performance you can see

You can trigger on a specific Address/Command and view the analog characteristics of DDR3 signals of interest using the MSO high speed oscilloscope channels. The DDR3 MSO SODIMM Interposer easy interconnect and bus event triggered analysis combined with Nexus Technology's Memory Component Interposers enables concentrated debug that was not previously possible.

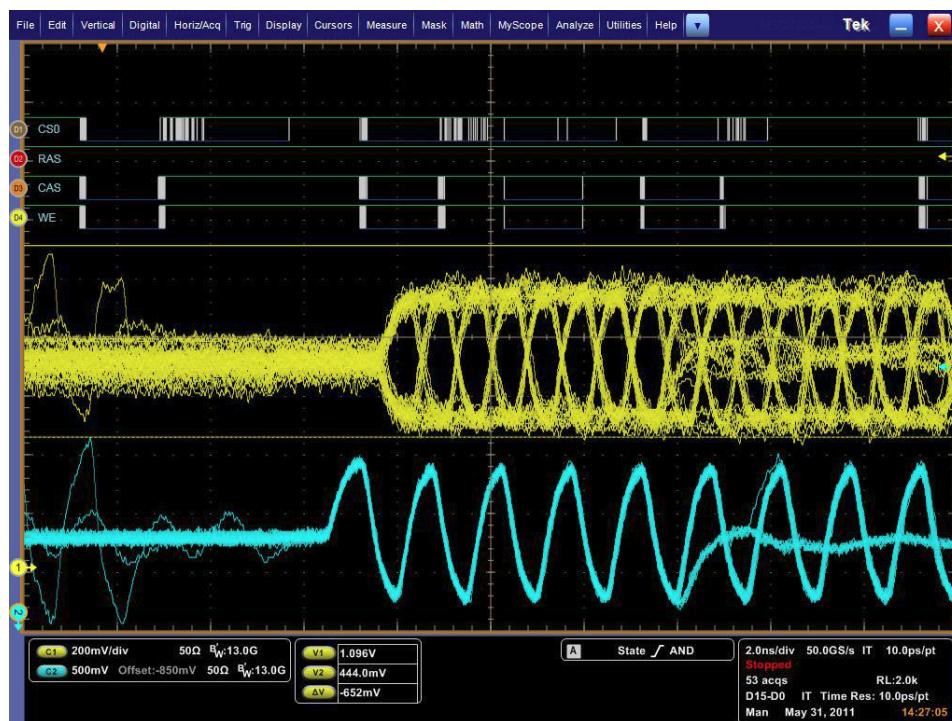


Figure 1 - MSO Display of the Analog/Oscilloscope DQ and DQS signals triggered on a write command using the digital probing provided by the DDR3 MSO SODIMM Interposer

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Product Configuration

Nomenclature	Description
NEX-SODDR3INTR-MSO	DDR3 MSO SODimm Interposer

Product Support

Product Support is critical to your success. Our engineering staff can provide expert training and support tailored to your specific needs. Please contact us by telephone, email or mail as listed below. Normal business hours are 9:00 – 5:00 EDT/EST.

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