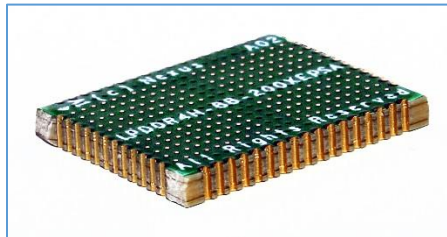


LPDDR4 & LPDDR4x Interposers

LPDDR4/4x 200 Ball XH Series EdgeProbe™ Interposers



Key Features

- LPDDR4/4x
- XH Series Universal Probe Interposer
- 200-ball
- EdgeProbe™ interposer
- High fidelity
- Data rates exceeding 4,267MT/s
- Enables oscilloscope probing
- Patented interposer/probe design

Applications

- LPDDR4/4x
 - Memory validation and debug
 - Monitoring bus traffic
 - Bus traffic measurement
 - Analog insight
- LPDDR4 rates above **LPDDR4-4267**

EdgeProbe™ Interposer Technology



Nexus Technology's patent pending EdgeProbe™ technology enables our interposers to be virtually the same size as the memory

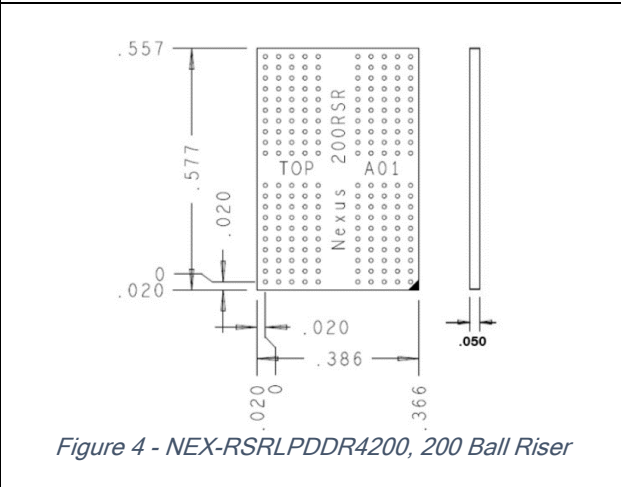
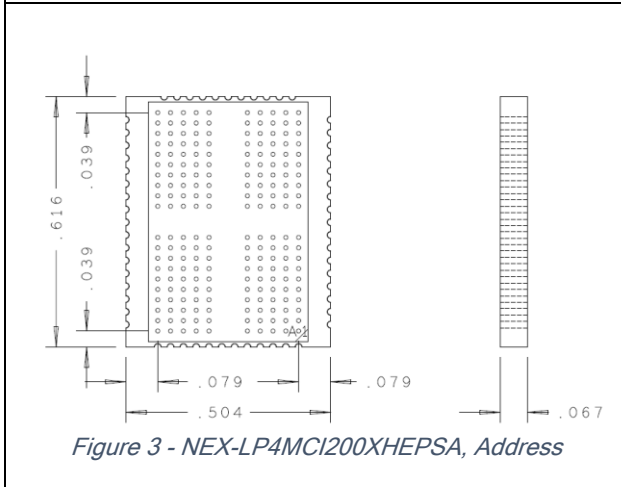
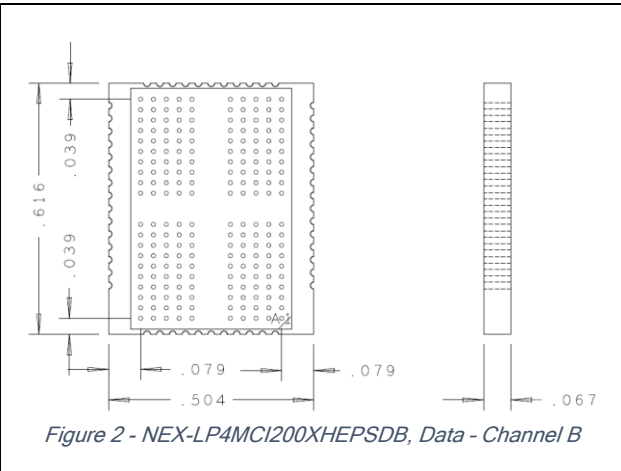
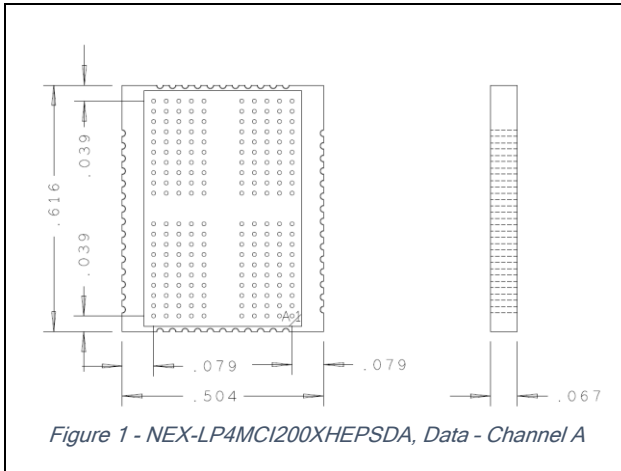
component. This is important because standard direct-attach interposers are significantly larger than the memory component which can potentially cause mechanical clearance problems. In other words, standard direct-attach interposers do not fit in all applications. EdgeProbe™ interposers fit in all applications.

EdgeProbe™ interposers provide advanced analysis capabilities by integrating the oscilloscope probe in to the interposer itself. In doing so, the probe point moves extremely close to the component pad which is the optimal and least intrusive location.

Simulation and De-Embedding

Oscilloscope de-embedding software filters/removes interposer effects. Please contact Nexus for the appropriate de-embedding software for your interposer.

Mechanical Outline



Probe Point Signal Lists

Pinout NEX-LP4MCI200XHEPSA - Address

TEST Point	Signal	TEST Point	Signal	TEST Point	Signal
1	GROUND	20	CA0_b	39	CK_c_a
2	DQS0_t_a	21	CS1_b	40	GROUND
3	DQS0_c_a	22	CS0_b	41	CA5_a
4	CS2_a	23	GROUND	42	CKE2_a
5	CA1_a	24	CA2_b	43	DQS1_c_a
6	GROUND	25	CA3_b	44	DQS1_t_a
7	CKE0_a	26	CA4_b	45	GROUND
8	CKE1_a	27	DQ8_b	46	GROUND
9	CKE1_b	28	GROUND	47	DQ8_a
10	CKE0_b	29	GROUND	48	CA4_a
11	CS2_b	30	DQS1_t_b	49	CA3_a
12	GROUND	31	DQS1_c_b	50	CA2_a
13	CA1_b	32	RESET_n	51	GROUND
14	ODT_ca_b	33	CA5_b	52	DQ0_a
15	DQS0_c_b	34	CKE2_b	53	CS0_a
16	DQS0_t_b	35	GROUND	54	CS1_a
17	GROUND	36	CK_c_b	55	CA0_a
18	GROUND	37	CK_t_b	56	ODT_ca_a
19	DQ0_b	38	CK_t_a	57	GROUND

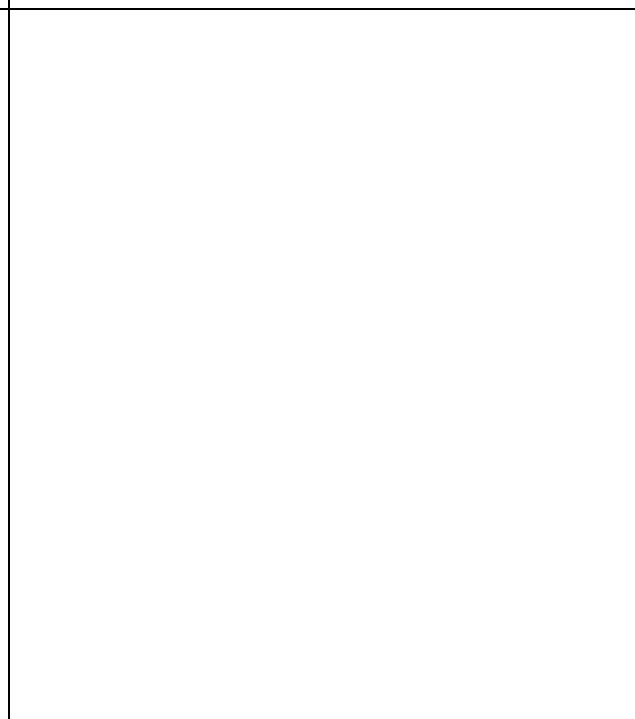
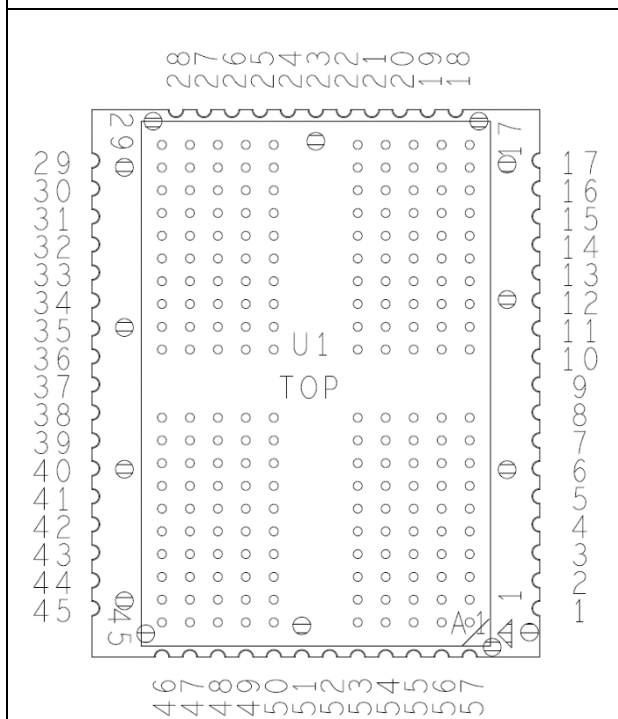
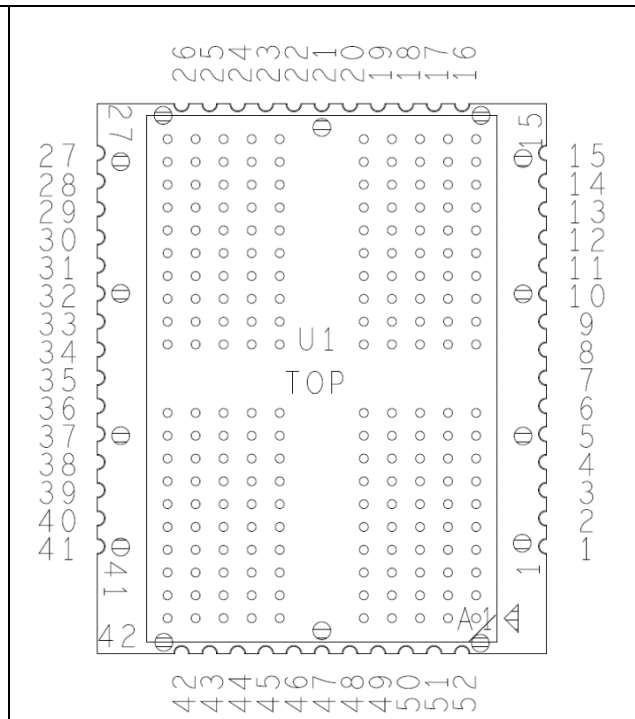
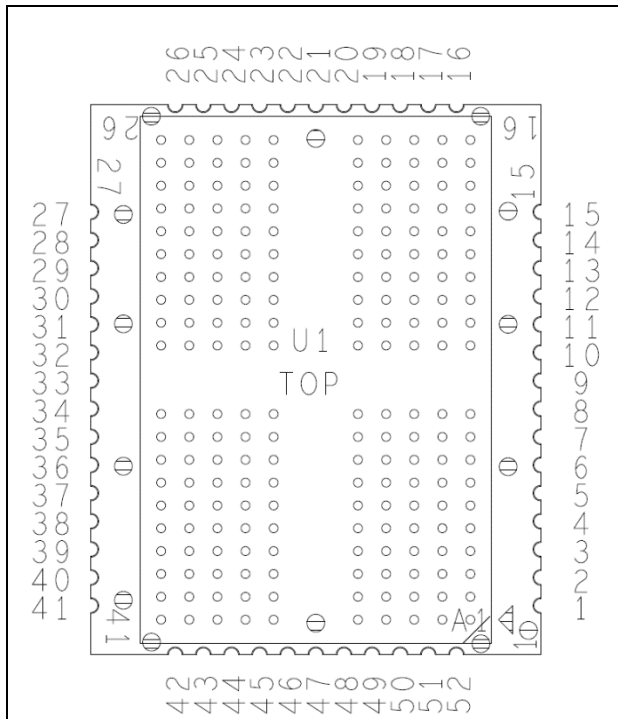
Pinout NEX-LP4MCI200XHEPSDA (Data - Channel A)

TEST Point	Signal	TEST Point	Signal	TEST Point	Signal
1	GROUND	19	CKE1_a	37	DQ13_a
2	DMI0_a	20	CS2_a	38	DQ10_a
3	DQ0_a	21	GROUND	39	DQ8_a
4	DQ1_a	22	CKE2_a	40	DMI1_a
5	DQ5_a	23	CA2_a	41	GROUND
6	GROUND	24	CA3_a	42	GROUND
7	DQ2_a	25	CA4_a	43	DQS1_t_a
8	DQ3_a	26	GROUND	44	DQS1_c_a
9	DQ4_a	27	GROUND	45	DQ15_a
10	ODT_ca_a	28	RESET_n	46	DQ14_a
11	GROUND	29	CA5_a	47	GROUND
12	CS1_a	30	DQ11_a	48	DQ6_a
13	CS0_a	31	GROUND	49	DQ7_a
14	CA1_a	32	DQ9_a	50	DQS0_c_a
15	GROUND	33	CK_t_a	51	DQS0_t_a
16	GROUND	34	CK_c_a	52	GROUND
17	CA0_a	35	DQ12_a		
18	CKE0_a	36	GROUND		

Pinout NEX-LP4MCI200XHEPSDB (Data - Channel B)

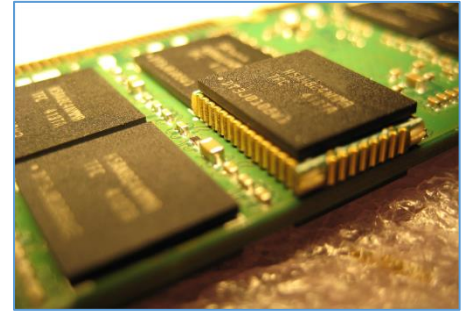
TEST Point	Signal	TEST Point	Signal	TEST Point	Signal
1	GROUND	19	DQ7_b	37	GROUND
2	CKE1_b	20	DQ6_b	38	CK_c_b
3	CKE0_b	21	GROUND	39	CK_t_b
4	CA1_b	22	DQ14_b	40	CA5_b
5	GROUND	23	DQ15_b	41	GROUND
6	ODT_ca_b	24	DQS1_c_b	42	GROUND
7	DQ4_b	25	DQS1_t_b	43	CA4_b
8	DQ3_b	26	GROUND	44	CA3_b
9	DQ5_b	27	GROUND	45	CA2_b
10	GROUND	28	DMI1_b	46	CKE2_b
11	DQ2_b	29	DQ8_b	47	GROUND
12	DQ1_b	30	DQ9_b	48	CS2_b
13	DQ0_b	31	DQ13_b	49	CS0_b
14	DMI0_b	32	GROUND	50	CS1_b
15	GROUND	33	DQ10_b	51	CA0_b
16	GROUND	34	DQ11_b	52	GROUND
17	DQS0_t_b	35	DQ12_b		
18	DQS0_c_b	36	RESET_n		

Probe Point Locations



Attachment Service

Nexus Technology's expert attachment service provides a ready-to-go test solution customized to your application. We will attach the interposer and any additional accessories to your application's target. We can also power-on and test your application to confirm functionality. Please contact us for more information.



Product Configuration Table

Nomenclature	Interposer Type	Quantity Included
NEX-LP4MCI200XHEPSA	Address	1
NEX-LP4MCI200XHEPSDA	Data - Channel A	1
NEX-LP4MCI200XHEPSDB	Data - Channel B	1

Available Accessories

Type	Desc.	Quantity	Nomenclature
Riser	LPDDR4 200-Ball Riser elevates interposer 0.050"	1	NEX-RSRLPDDR4200 ¹

¹ P/N NEX-RSRLPDDR4200 includes solderballs.

Attachment Service Options

Attachment Service Level	Description
Attachment Service	Contact us for more information

Contact Information

For more information, please contact us by telephone, email or mail as listed below. Normal business hours are 9:00 - 5:00 EDT/EST.

Web	www.nexustechnology.com
Telephone	877.595.8116
International	603.329.3083
Fax	877.595.8118
Address	78 Northeastern Blvd. Unit 2 Nashua, NH 03062
Email	support@nexustechnology.com