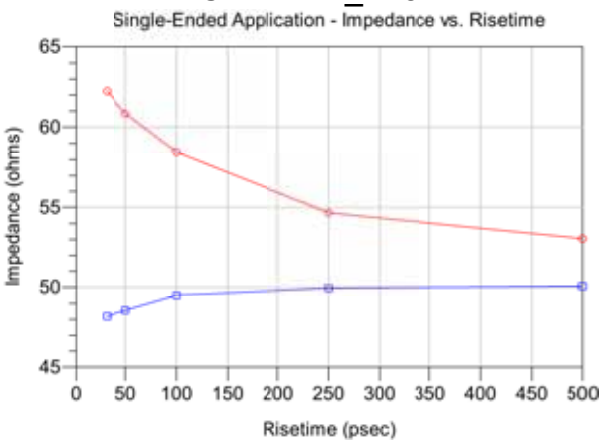
Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

Time Domain Data Summary

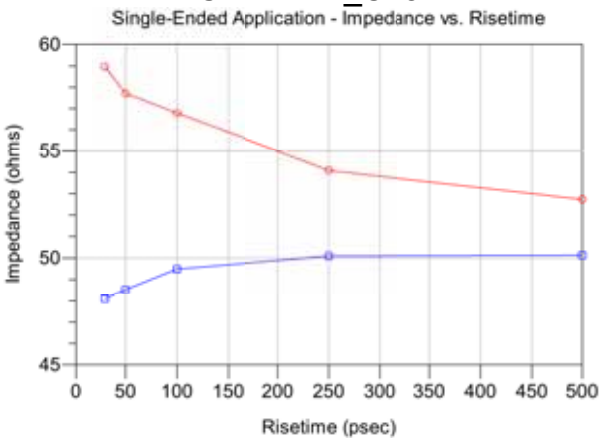
Table 6 – Single-End Impedance (Ω) – 1:1 S/G Pattern						
Driver	**Signal Risetime**	**30 ps**	**50 ps**	**100 ps**	**250 ps**	**500 ps**
SEAM-RA_A18	**Maximum Impedance**	62.23	60.84	58.45	54.65	53.03
	Minimum Impedance	48.18	48.55	49.49	49.94	50.06
SEAM-RA_C18	**Maximum Impedance**	58.95	57.71	56.78	54.08	52.73
	Minimum Impedance	48.10	48.51	49.48	50.09	50.13
SEAM-RA_D15	**Maximum Impedance**	60.50	59.31	58.27	55.49	53.53
	Minimum Impedance	47.79	48.10	49.07	49.40	49.72
SEAM-RA_E12	**Maximum Impedance**	61.15	59.89	58.59	56.06	54.16
	Minimum Impedance	48.17	48.55	49.59	50.03	50.26
SEAM-RA_F13	**Maximum Impedance**	65.07	64.12	63.56	60.55	56.93
	Minimum Impedance	48.02	48.34	49.32	50.20	50.34

Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

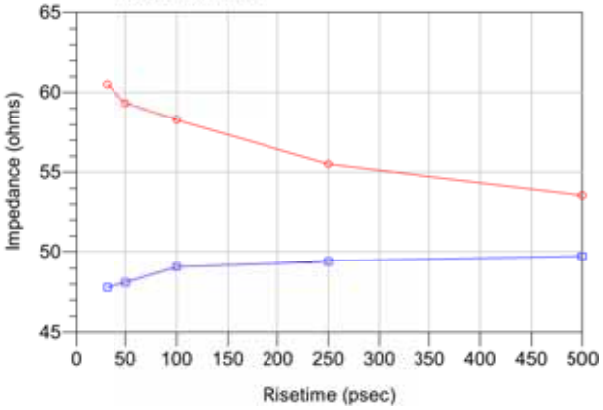
SEAM-RA_A18



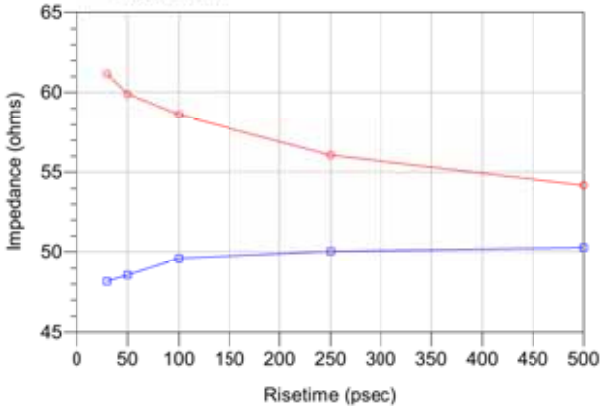
SEAM-RA_C18



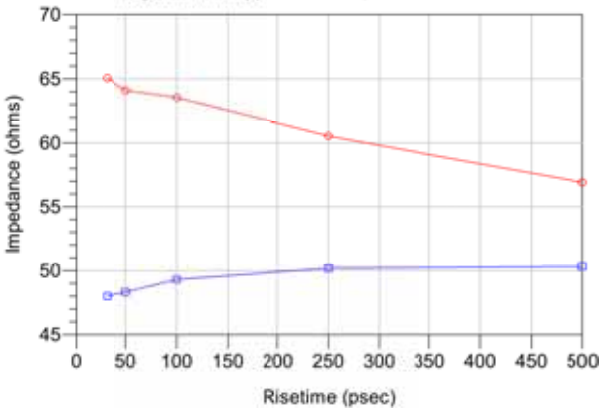
SEAM-RA_D15



SEAM-RA_E12



SEAM-RA_F13



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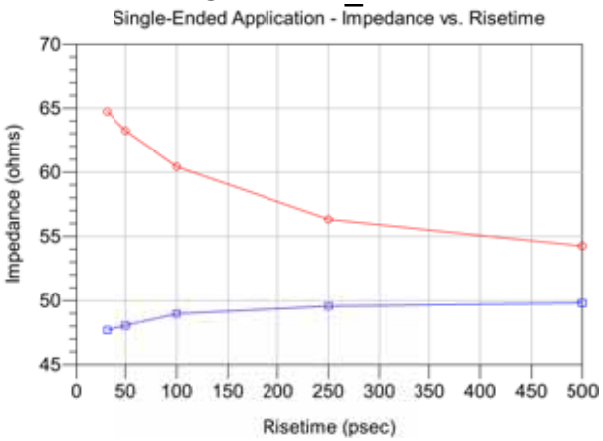
Report Revision: 12/6/2013

Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

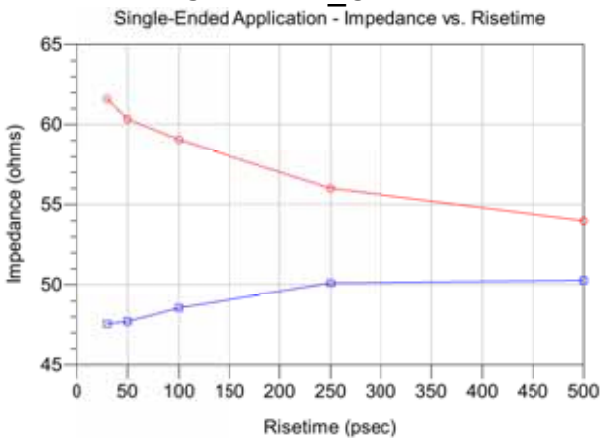
Table 7 – Single-End Impedance (Ω) – 2:1 S/G Pattern						
Driver	**Signal Risetime**	**30 ps**	**50 ps**	**100 ps**	**250 ps**	**500 ps**
SEAM-RA_A14	**Maximum Impedance**	64.75	63.23	60.44	56.33	54.25
	Minimum Impedance	47.69	48.07	48.99	49.58	49.82
SEAM-RA_C17	**Maximum Impedance**	61.60	60.33	59.02	56.00	53.98
	Minimum Impedance	47.54	47.70	48.55	50.10	50.26
SEAM-RA_D17	**Maximum Impedance**	61.92	60.85	60.38	57.36	55.11
	Minimum Impedance	47.93	48.35	49.48	49.98	50.29
SEAM-RA_E10	**Maximum Impedance**	61.81	60.69	59.99	57.87	55.53
	Minimum Impedance	47.70	48.08	49.23	49.96	50.23
SEAM-RA_F11	**Maximum Impedance**	73.45	70.98	67.12	63.85	59.49
	Minimum Impedance	47.97	48.33	49.35	49.88	50.26

Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

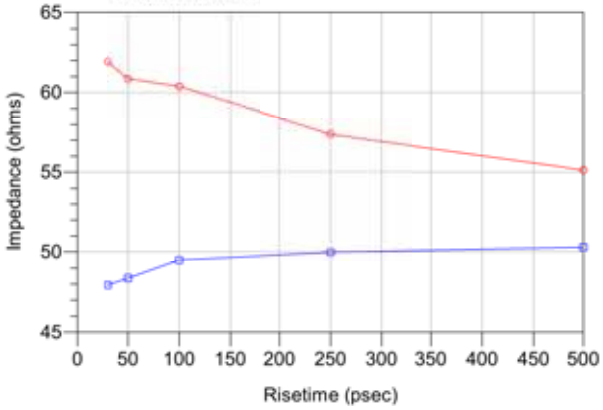
SEAM-RA_A14



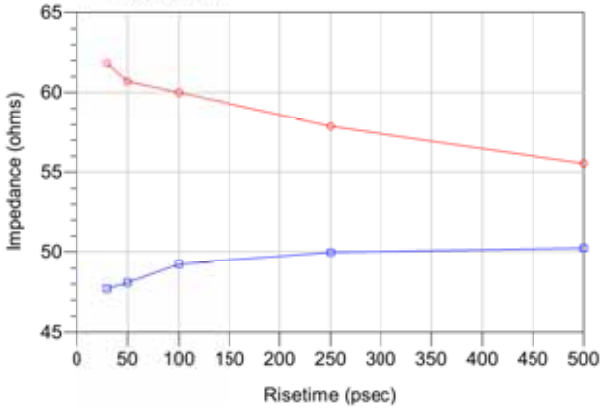
SEAM-RA_C17



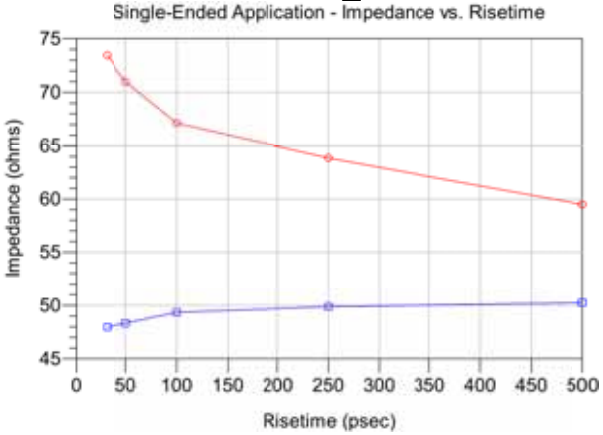
SEAM-RA_D17



SEAM-RA_E10



SEAM-RA_F11

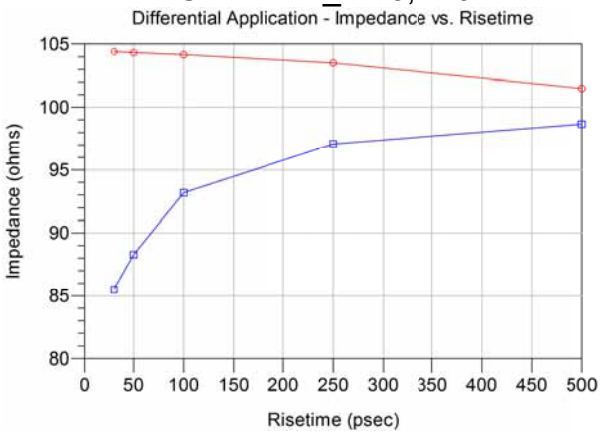


Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

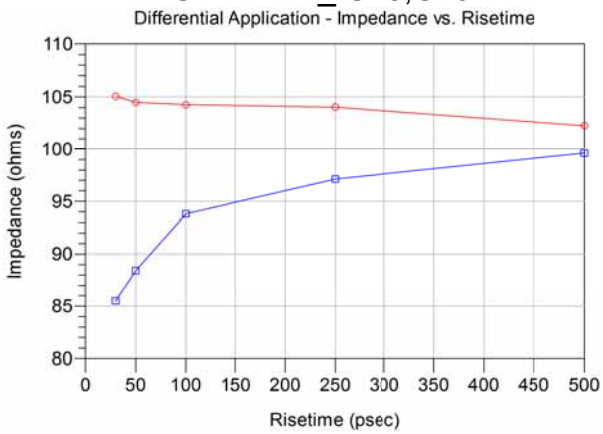
Table 8 – Differential Impedance (Ω) – Optimal Horizontal						
Driver	**Signal Risetime**	**30 ps**	**50 ps**	**100 ps**	**250 ps**	**500 ps**
SEAM-RA_A15,A16	**Maximum Impedance**	104.41	104.33	104.16	103.50	101.50
	Minimum Impedance	85.49	88.28	93.19	97.07	98.66
SEAM-RA_C15,C16	**Maximum Impedance**	105.07	104.49	104.26	104.03	102.25
	Minimum Impedance	85.50	88.42	93.81	97.11	99.61
SEAM-RA_D17,D18	**Maximum Impedance**	106.66	106.56	106.53	105.95	103.60
	Minimum Impedance	85.76	88.59	93.81	97.73	99.60
SEAM-RA_E15,E16	**Maximum Impedance**	104.93	104.84	104.74	103.93	102.34
	Minimum Impedance	85.90	88.90	94.00	97.47	99.23
SEAM-RA_F21,F22	**Maximum Impedance**	109.62	106.88	106.85	106.56	105.01
	Minimum Impedance	86.93	89.34	94.97	98.77	99.48

Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

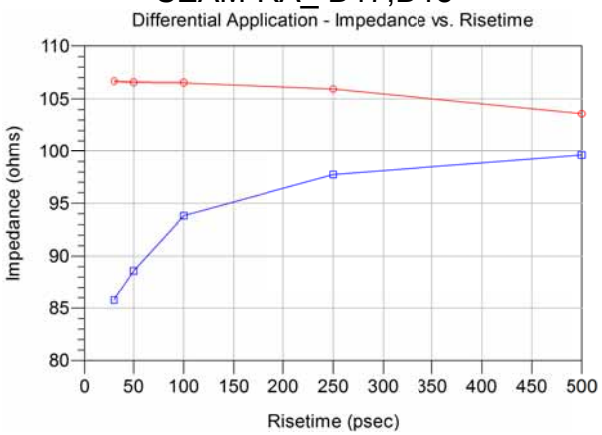
SEAM-RA_ A15,A16



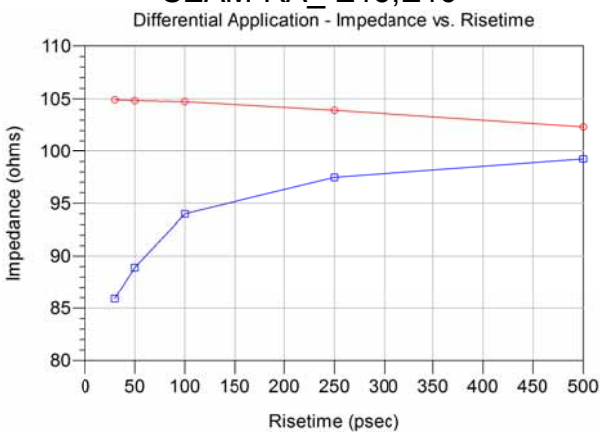
SEAM-RA_ C15,C16



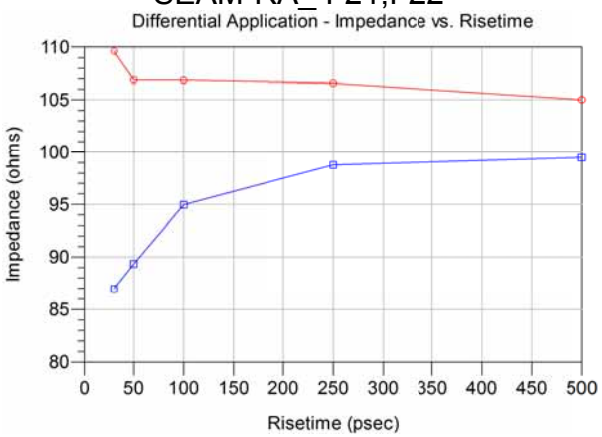
SEAM-RA_ D17,D18



SEAM-RA_ E15,E16



SEAM-RA_ F21,F22

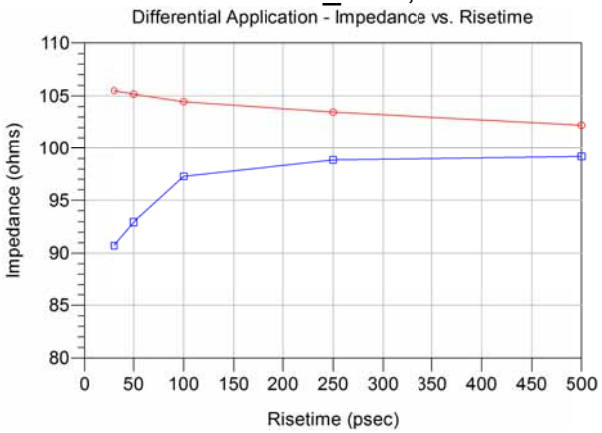


Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

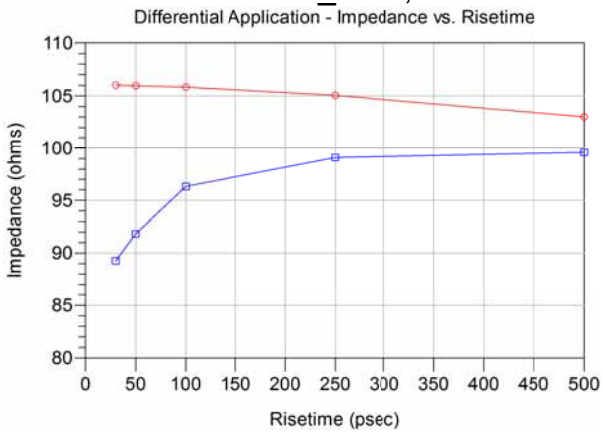
Table 9 – Differential Impedance (Ω) – Optimal Vertical						
Driver	**Signal Risetime**	**30 ps**	**50 ps**	**100 ps**	**250 ps**	**500 ps**
SEAM-RA_A16,B16	**Maximum Impedance**	105.51	105.17	104.44	103.46	102.20
	Minimum Impedance	90.71	92.93	97.28	98.84	99.18
SEAM-RA_C17,D17	**Maximum Impedance**	106.05	105.98	105.84	105.06	103.00
	Minimum Impedance	89.26	91.83	96.32	99.09	99.58
SEAM-RA_E16,F16	**Maximum Impedance**	107.44	105.88	104.23	102.20	101.31
	Minimum Impedance	90.37	92.44	96.52	98.87	99.17

Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

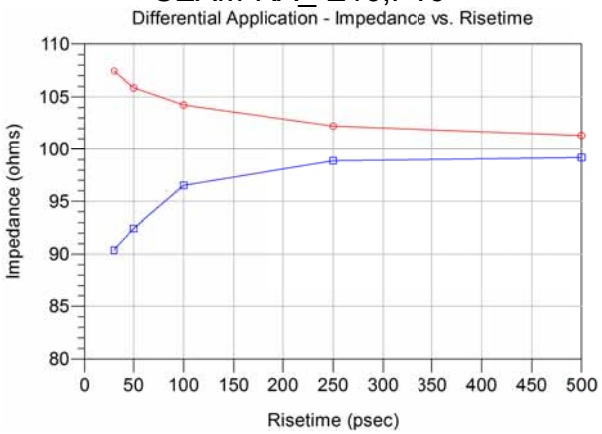
SEAM-RA_ A16,B16



SEAM-RA_ C17,D17



SEAM-RA_ E16,F16

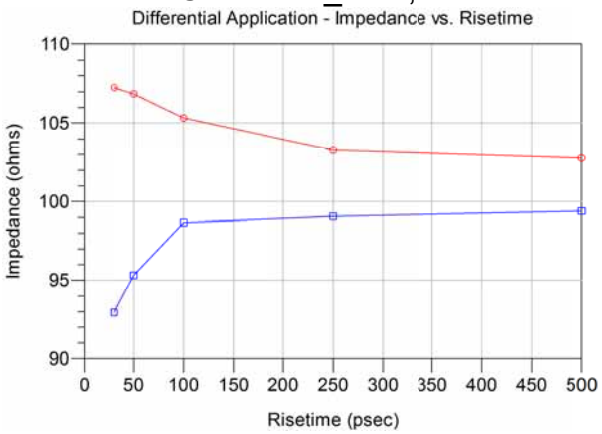


Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

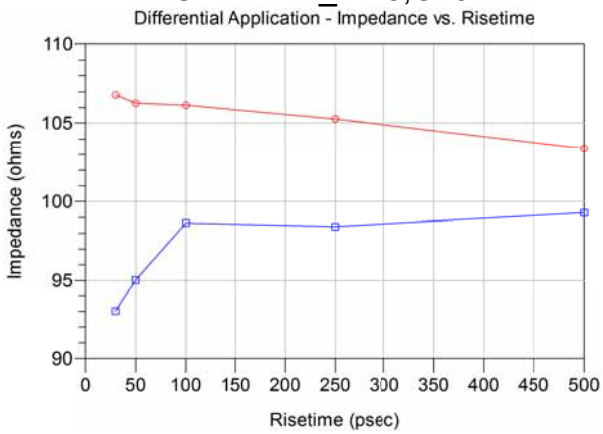
Table 10 – Differential Impedance (Ω) – High Density Vertical						
Driver	**Signal Risetime**	**30 ps**	**50 ps**	**100 ps**	**250 ps**	**500 ps**
SEAM-RA_A14,B14	**Maximum Impedance**	107.26	106.85	105.32	103.26	102.77
	Minimum Impedance	92.93	95.31	98.66	99.05	99.39
SEAM-RA_B15,C15	**Maximum Impedance**	106.80	106.27	106.14	105.26	103.37
	Minimum Impedance	93.00	95.03	98.63	98.40	99.28
SEAM-RA_D16,E16	**Maximum Impedance**	110.10	109.87	109.75	109.18	106.06
	Minimum Impedance	93.05	95.10	98.58	99.54	99.67
SEAM-RA_E17,F17	**Maximum Impedance**	108.79	107.39	104.87	103.33	101.96
	Minimum Impedance	90.37	92.01	94.87	98.18	99.16

Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

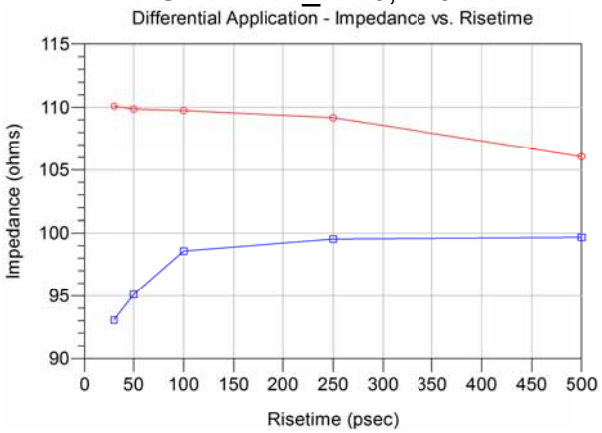
SEAM-RA_ A14,B14



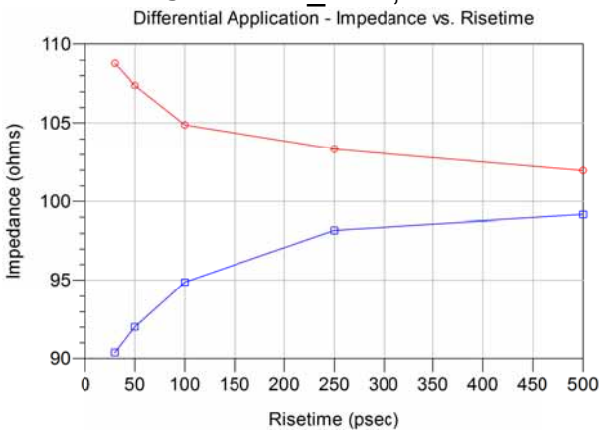
SEAM-RA_ B15,C15



SEAM-RA_ D16,E16



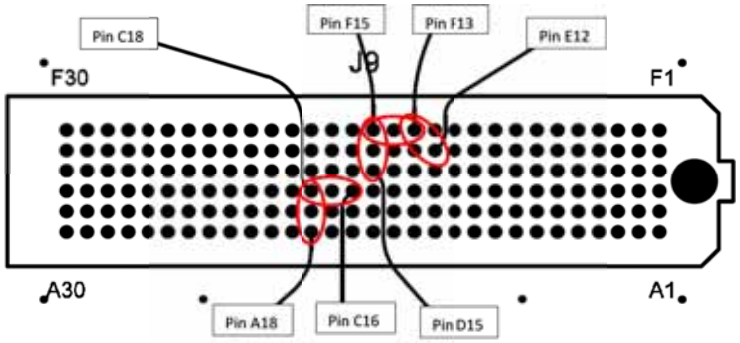
SEAM-RA_ E17,F17



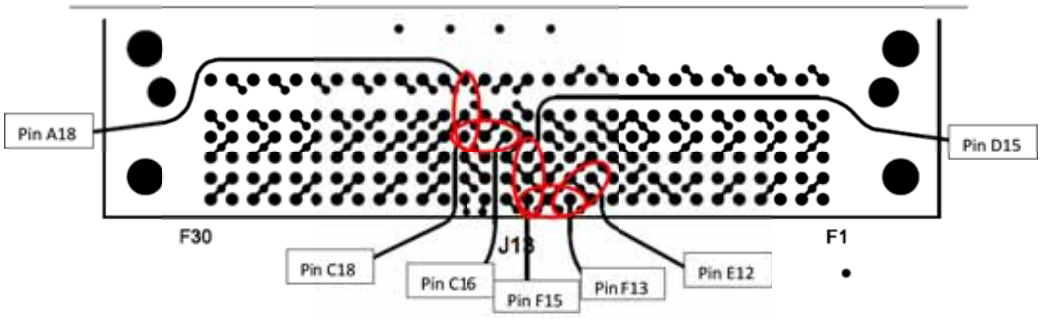
Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

Table 11 - Single-Ended Crosstalk (%) – 1:1 S/G Pattern							
Input(t_r)	Driver	Receiver	30ps	50 ps	100 ps	250 ps	500 ps
NEXT	SEAM-RA_A18	SEAM-RA_C18	0.55	0.46	0.32	0.18	0.10
	SEAM-RA_C16	SEAM-RA_C18	0.82	0.63	0.46	0.29	0.17
	SEAM-RA_D15	SEAM-RA_F15	1.26	0.87	0.42	0.24	0.16
	SEAM-RA_E12	SEAM-RA_F13	2.93	2.73	2.52	2.14	1.37
	SEAM-RA_F13	SEAM-RA_F15	2.21	1.88	1.52	1.23	0.79
FEXT	SEAM-RA_A18	SEAFp_C18	0.43	0.36	0.24	0.14	<0.1
	SEAM-RA_C16	SEAFp_C18	0.90	0.74	0.49	0.26	0.15
	SEAM-RA_D15	SEAFp_F15	0.76	0.49	0.29	0.16	0.11
	SEAM-RA_E12	SEAFp_F13	2.57	1.92	1.15	0.64	0.42
	SEAM-RA_F13	SEAFp_F15	2.91	2.16	1.28	0.66	0.42

Single-Ended 1:1 S/G Pattern Crosstalk Pin Map



SEAFP

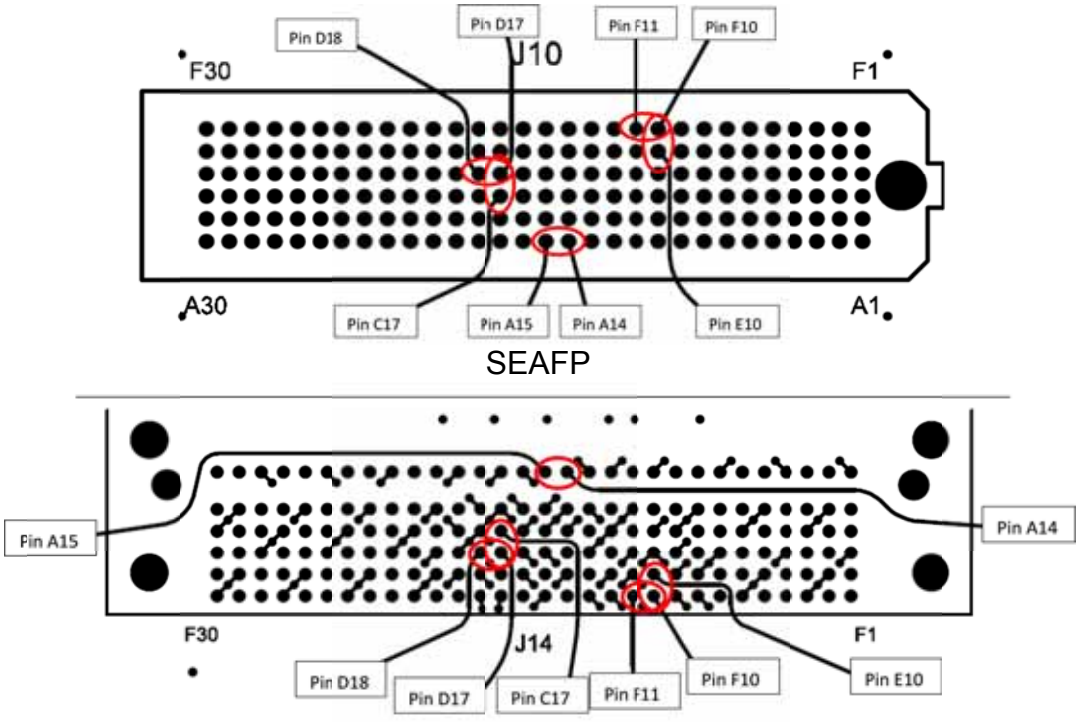


SEAM_RA

Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

Table 12 - Single-Ended Crosstalk (%) – 2:1 S/G Pattern							
Input(t_r)	**Driver**	**Receiver**	**30ps**	**50 ps**	**100 ps**	**250 ps**	**500 ps**
NEXT	SEAM-RA_A14	SEAM-RA_A15	16.16	15.10	13.78	8.77	4.86
	SEAM-RA_C17	SEAM-RA_D17	11.74	10.54	9.32	6.80	4.15
	SEAM-RA_D17	SEAM-RA_D18	13.34	12.14	11.36	8.50	5.12
	SEAM-RA_E10	SEAM-RA_F10	13.67	12.81	11.19	8.67	5.59
	SEAM-RA_F10	SEAM-RA_F11	16.36	15.58	15.09	12.71	8.25
FEXT	SEAM-RA_A14	SEAFp_A15	7.73	6.39	4.49	2.55	1.52
	SEAM-RA_C17	SEAFp_D17	3.81	3.18	2.32	1.33	0.73
	SEAM-RA_D17	SEAFp_D18	3.52	2.87	2.69	2.10	1.30
	SEAM-RA_E10	SEAFp_F10	4.51	3.70	3.27	2.37	1.46
	SEAM-RA_F11	SEAFp_F10	5.92	4.78	4.53	3.82	2.55

Single-Ended 2:1 S/G Pattern Crosstalk Pin Map



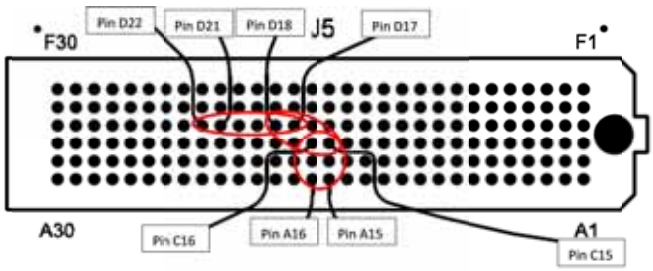
SEAFP

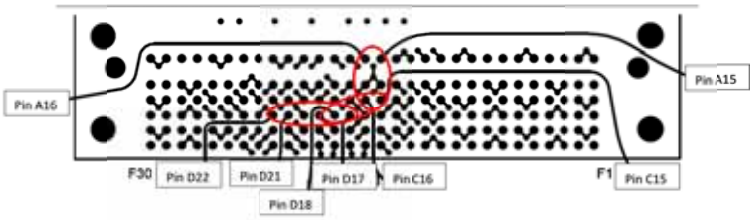
SEAM_RA

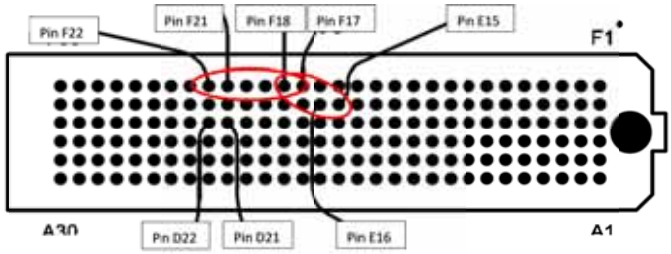
Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

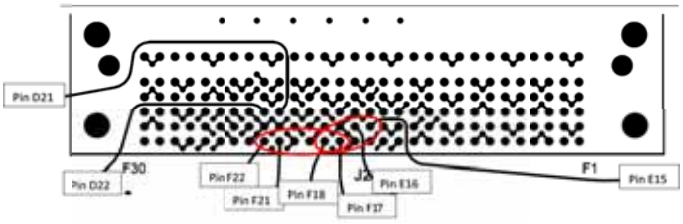
Table 13 - Differential Crosstalk (%) – Optimal Horizontal							
Input(tr)	**Driver**	**Receiver**	**30ps**	**50 ps**	**100 ps**	**250 ps**	**500 ps**
NEXT	SEAM-RA_A15,A16	SEAM-RA_C15,C16	0.22	0.12	<0.1	<0.1	<0.1
	SEAM-RA_C15,C16	SEAM-RA_D17,D18	0.98	0.85	0.79	0.57	0.33
	SEAM-RA_D17,D18	SEAM-RA_D21,D22	0.10	<0.1	<0.1	<0.1	<0.1
	SEAM-RA_E15,E16	SEAM-RA_F17,F18	1.00	0.95	0.84	0.69	0.43
	SEAM-RA_F17, F18	SEAM-RA_F21,F22	0.16	0.11	<0.1	<0.1	<0.1
FEXT	SEAM-RA_A15,A16	SEAFp_C15,C16	0.42	0.32	0.19	0.10	<0.1
	SEAM-RA_C15,C16	SEAFp_D17,D18	0.29	0.23	0.12	<0.1	<0.1
	SEAM-RA_D17,D18	SEAFp_D21,D22	0.24	0.20	0.12	<0.1	<0.1
	SEAM-RA_E15,E16	SEAFp_F17,F18	0.36	0.25	0.12	<0.1	<0.1
	SEAM-RA_F17, F18	SEAFp_F21,F22	0.27	0.19	0.10	<0.1	<0.1

Differential Optimal Horizontal Crosstalk Pin Map







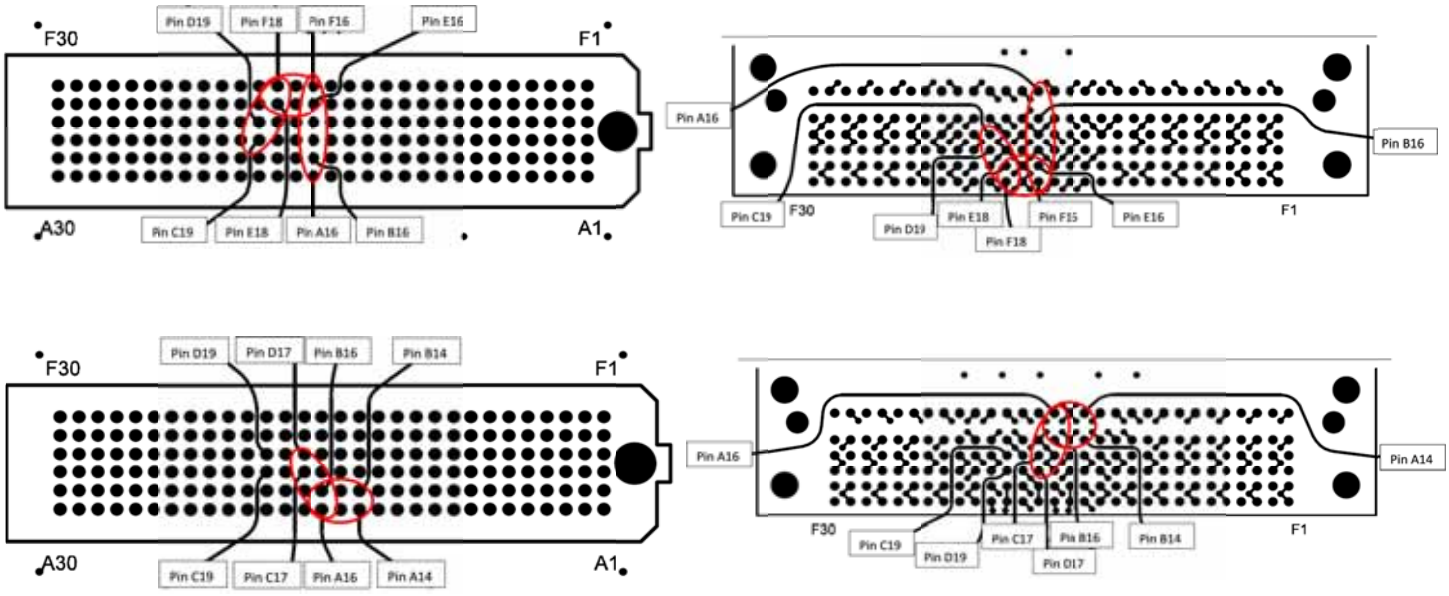


SEAFP SEAM_RA

Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

Table 14 - Differential Crosstalk (%) – Optimal Vertical							
Input(tr)	**Driver**	**Receiver**	**30ps**	**50 ps**	**100 ps**	**250 ps**	**500 ps**
NEXT	SEAM-RA_A14,B14	SEAM-RA_A16, B16	0.90	0.77	0.60	0.38	0.23
	SEAM-RA_A16,B16	SEAM-RA_C17, D17	1.14	1.00	0.94	0.60	0.32
	SEAM-RA_A16,B16	SEAM-RA_E16, F16	<0.1	<0.1	<0.1	<0.1	<0.1
	SEAM-RA_C19,D19	SEAM-RA_E18, F18	1.12	1.01	0.92	0.70	0.40
	SEAM-RA_E16,F16	SEAM-RA_E18, F18	1.30	0.91	0.62	0.49	0.31
FEXT	SEAM-RA_A14,B14	SEAFp_A16, B16	1.82	1.39	0.77	0.31	0.17
	SEAM-RA_A16,B16	SEAFp_C17, D17	1.51	0.20	0.15	<0.1	<0.1
	SEAM-RA_A16,B16	SEAFp_E16, F16	<0.1	<0.1	<0.1	<0.1	<0.1
	SEAM-RA_C19,D19	SEAFp_E18, F18	0.22	0.16	<0.1	<0.1	<0.1
	SEAM-RA_E16,F16	SEAFp_E18, F18	1.36	1.00	0.54	0.24	0.13

Differential Optimal Vertical Crosstalk Pin Map

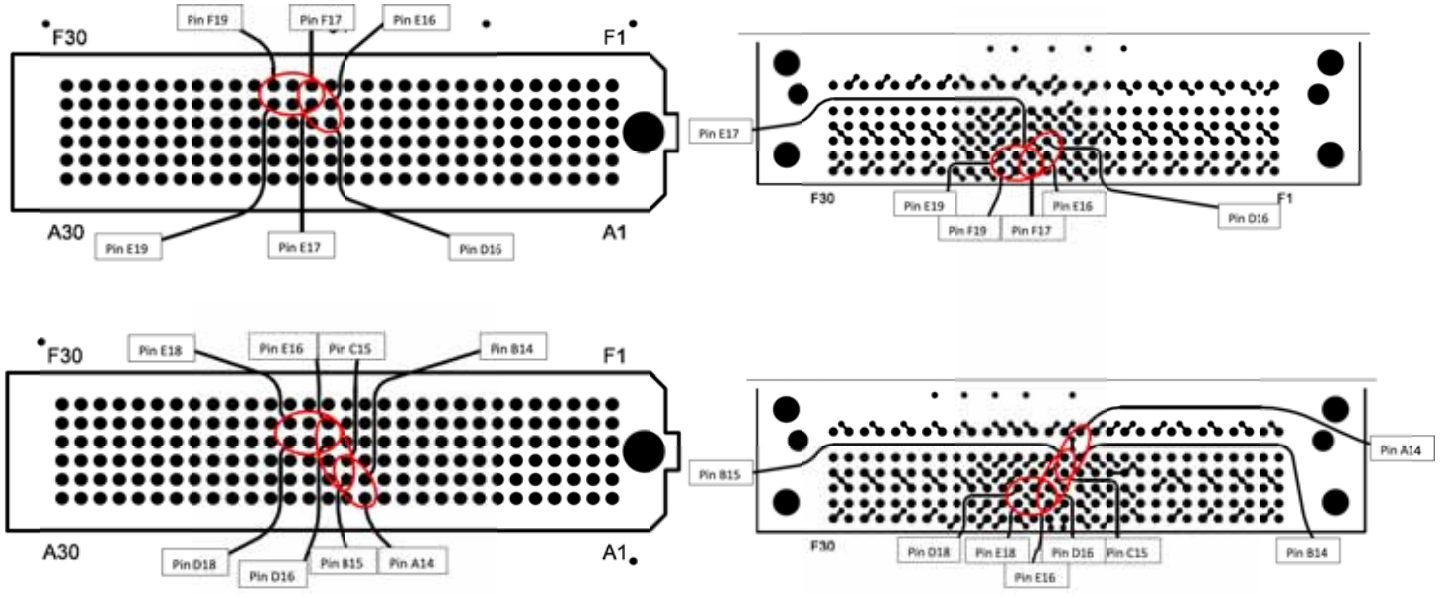


SEAFP SEAM_RA

Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

Table 15 - Differential Crosstalk (%) – High Density Vertical							
Input(t_r)	**Driver**	**Receiver**	**30ps**	**50 ps**	**100 ps**	**250 ps**	**500 ps**
NEXT	SEAM-RA_A14,B14	SEAM-RA_B15,C15	3.73	2.89	2.71	1.60	0.85
	SEAM-RA_B15,C15	SEAM-RA_D16,E16	2.05	1.67	0.96	0.53	0.22
	SEAM-RA_D16,E16	SEAM-RA_D18,E18	2.06	1.76	1.22	0.71	0.45
	SEAM-RA_D16,E16	SEAM-RA_E17,F17	3.35	2.85	2.58	1.81	0.95
	SEAM-RA_E17, F17	SEAM-RA_E19, F19	3.06	2.44	1.65	1.02	0.65
FEXT	SEAM-RA_A14,B14	SEAFp_B15,C15	4.43	3.43	1.91	0.78	0.35
	SEAM-RA_B15,C15	SEAFp_D16,E16	1.20	1.00	0.77	0.35	0.21
	SEAM-RA_D16,E16	SEAFp_D18,E18	3.80	2.65	1.39	0.66	0.42
	SEAM-RA_D16,E16	SEAFp_E17,F17	4.09	2.99	1.52	0.51	0.24
	SEAM-RA_E17, F17	SEAFp_E19, F19	4.73	3.71	2.04	0.89	0.51

Differential High Density Vertical Crosstalk Pin Map



SEAFP SEAM_RA

Series: SEAFP/SEAM_RA Array Series
Description: 1.27mm x 1.27mm grid interconnect system, Vertical Array to Right Angle

Table 16 - Propagation Delay (Mated Connector)	
Single-Ended: 1:1 S/G, rowA	101 ps
Single-Ended: 1:1 S/G, rowC	130 ps
Single-Ended: 1:1 S/G, rowD	143 ps
Single-Ended: 1:1 S/G, rowE	155 ps
Single-Ended: 1:1 S/G, rowF	169 ps
Single-Ended: 2:1 S/G, rowA	104 ps
Single-Ended: 2:1 S/G, rowC	132 ps
Single-Ended: 2:1 S/G, rowD	146 ps
Single-Ended: 2:1 S/G, rowE	161 ps
Single-Ended: 2:1 S/G, rowF	173 ps
Differential: Optimal Horizontal, rowA	95 ps
Differential: Optimal Horizontal, rowC	125 ps
Differential: Optimal Horizontal, rowD	139 ps
Differential: Optimal Horizontal, rowE	153 ps
Differential: Optimal Horizontal, rowF	154 ps
Differential: Optimal Vertical, rowA,B	106 ps
Differential: Optimal Vertical, rowC,D	133 ps
Differential: Optimal Vertical, rowE,F	161 ps
Differential: High Density Vertical, rowA,B	109 ps
Differential: High Density Vertical, rowB,C	120 ps
Differential: High Density Vertical, rowD,E	148 ps
Differential: High Density Vertical, rowE,F	169 ps