

HDMI 1.4 A-A

Test Report

for

Locking HDMI

Test Date:

2011/11/04 14:08

Approval:

Tester:

TEL:

Fax:

E-Mail:

Address:

Test Equipment Summary :

Equipment	Manufacture	P/N	S/N	Description
Network Analyzer	Agilent	E5071C	MY46110911	4 Port, 300 kHz to 20 GHz
Time Domain Relfectormetry	Agilent	ENA-TDR	MY46110911	E5071C option TDR
Pattern Generator				

Device Under Test (DUT) & Test Environment Information :

P/N:	HDMI 1.4 A-A	Specifications:	abc
DUT Lot:	1	DUT Bundle:	1
DUT Length(M):	1	Test Pair:	5 Pairs
Temperature(°C):	25	Humidity(%):	50
Remark:			

Test Result Summary:

1	NA Attenuation	Pass
2	NA FEXT	Pass
3	NA HEAC Attenuation	Pass
4	TDR DifferiaIMPZ	Pass
5	TDR ConnectorIMPZ	Pass
6	TDR FE ConnectorIMPZ	Pass
7	TDT DifferiaDelay	Pass
8	TDT IntraPairSkew	Pass
9	TDT InterPairSkew	Pass
10	TDR HEAC SingleEnd IMPZ	Pass
11	TDR HEAC CommonModeIMPZ	Pass
12	TDR HEAC DifferiaIMPZ	Pass
13	TDR HEAC ConnectorIMPZ	Pass
14	TDR HEAC FE ConnectorIMPZ	Pass
15	TDT HEAC IntraPairSkew	Pass
Test Result:		Pass

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NA_Attenuation

Start Freq	End Freq	Spec Max	Spec Min	Pair 1	Pair 2	Pair 3	Pair 4
0.3	0.3	--	-5	-0.050	-0.046	-0.053	-0.059
825	825	--	-5	-2.074	-2.006	-2.022	-1.852
2475	2475	--	-12	-3.740	-4.020	-3.810	-3.810
4125	4125	--	-20	-5.083	-6.528	-5.276	-6.333
5100	5100	--	-25	-5.810	-7.322	-5.728	-6.407
0.3	5100	--	-5~-25	-2.134	-2.006	-2.022	-1.852
MHz	MHz	dB	dB	Pass	Pass	Pass	Pass

NA_FEXT

Start Freq	End Freq	Spec Max	Spec Min	P 1-2	P 2-3	P 3-4
0.3	5000	-20	--	-22.128	-27.259	-25.944
MHz	MHz	dB	dB	Pass	Pass	Pass

NA_HEAC_Attenuation

Start Freq	End Freq	Spec Max	Spec Min	HEAC
1	10	--	-1.6	-0.153
10	100	--	-5	-0.544
100	200	--	-7.1	-0.837
MHz	MHz	dB	dB	Pass

TDR DifferentialIMPZ , Tr= 200 ps (20%-80%)

Pair Name	Spec Max	Spec Min	Max Value	Min Value	Differ.	Average	Status
Pair 1	110	90	101.66	100.85	0.81	101.26	Pass
Pair 2	110	90	101.27	100.94	0.33	101.11	Pass
Pair 3	110	90	101.14	100.59	0.55	100.87	Pass
Pair 4	110	90	101.54	101.05	0.49	101.30	Pass
Unit :	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	--

TDR ConnectorIMPZ , Tr= 200 ps (10%-90%)

Pair Name	Spec Max	Spec Min	Max Value	Min Value	Bulge Length	Differ.	Status
Pair 1	125~115,250	75~85,250	114.24	100.61	0.0	13.63	Pass
Pair 2	125~115,250	75~85,250	114.01	100.53	0.0	13.48	Pass
Pair 3	125~115,250	75~85,250	112.21	99.75	0.0	12.46	Pass
Pair 4	125~115,250	75~85,250	111.38	100.81	0.0	10.57	Pass
Unit :	Ohm,ps	Ohm,ps	Ohm	Ohm	ps	ps	--

TDR FE ConnectorIMPZ , Tr= 200 ps (10%-90%)

Pair Name	Spec Max	Spec Min	Max Value	Min Value	Bulge Length	Differ.	Status
Pair 1	125~115,250	75~85,250	110.59	101.16	0.0	9.43	Pass
Pair 2	125~115,250	75~85,250	109.88	100.95	0.0	8.93	Pass
Pair 3	125~115,250	75~85,250	108.46	100.54	0.0	7.92	Pass
Pair 4	125~115,250	75~85,250	116.26	101	76.4	15.26	Pass
Unit :	Ohm,ps	Ohm,ps	Ohm	Ohm	ps	ps	--

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TDT DifferiaDelay , Tr= 200 ps (10%-90%)

Pair Name	Spec Max	Spec Min	Delay Val	Status
Pair 1	5.5	--	4.863	Pass
Pair 2	5.5	--	4.856	Pass
Pair 3	5.5	--	4.865	Pass
Pair 4	5.5	--	4.856	Pass
Unit :	ns/M	ns/M	ns/M	--

TDT IntraPairSkew , Tr= 200 ps (10%-90%)

Pair Name	Spec Max	Spec Min	Skew Val.	Status
Pair 1	112	--	2.109	Pass
Pair 2	112	--	23.195	Pass
Pair 3	112	--	5.799	Pass
Pair 4	112	--	26.885	Pass
Unit :	ps	ps	ps	--

TDT InterPairSkew , Tr= 200 ps (20%-80%)

Pair Name	Spec Max	Spec Min	Skew Val.	Status
P 2-3	1780	--	9.00	Pass
Unit :	ps	ps	ps	--

TDR HEAC SingleEnd IMPZ , Tr= 1000 ps (10%-90%)

Pair Name	Spec Max	Spec Min	Max Value	Min Value	Differ.	Average	Status
HEAC	74.25	35.75	56.19	55.18	1.01	55.69	Pass
Unit :	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	--

TDR HEAC CommonModelIMPZ , Tr= 1000 ps (10%-90%)

Pair Name	Spec Max	Spec Min	Max Value	Min Value	Differ.	Average	Status
HEAC	36	24	31.03	29.92	1.11	30.48	Pass
Unit :	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	--

TDR HEAC DifferiaIMPZ , Tr= 1000 ps (10%-90%)

Pair Name	Spec Max	Spec Min	Max Value	Min Value	Differ.	Average	Status
HEAC	110	90	102.03	101.33	0.70	101.68	Pass
Unit :	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	--

TDR HEAC ConnectorIMPZ , Tr= 1000 ps (10%-90%)

Pair Name	Spec Max	Spec Min	Max Value	Min Value	Bulge Length	Differ.	Status
HEAC	125~115,250	75~85,250	114.29	101.37	0.0	12.92	Pass
Unit :	Ohm,ps	Ohm,ps	Ohm	Ohm	ps	ps	--

TDR HEAC FE ConnectorIMPZ , Tr= 1000 ps (10%-90%)

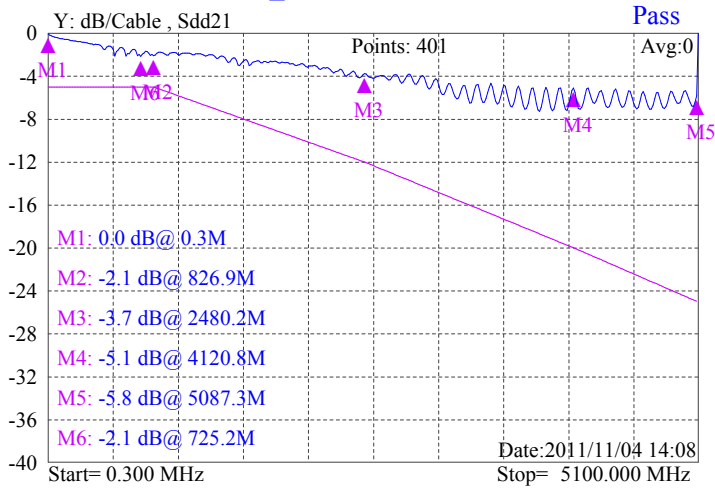
Pair Name	Spec Max	Spec Min	Max Value	Min Value	Bulge Length	Differ.	Status
HEAC	125~115,250	75~85,250	115.09	101.77	95.0	13.32	Pass
Unit :	Ohm,ps	Ohm,ps	Ohm	Ohm	ps	ps	--

TDT HEAC IntraPairSkew , Tr= 1000 ps (10%-90%)

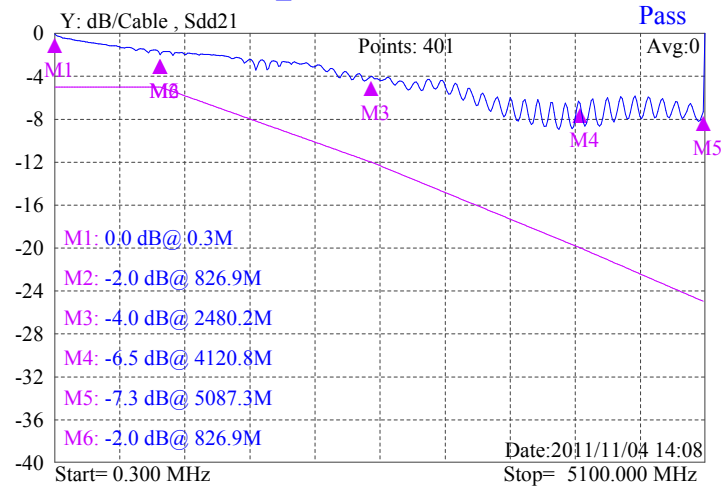
Pair Name	Spec Max	Spec Min	Skew Val.	Status
HEAC	111	--	50.079	Pass
Unit :	ps	ps	ps	--

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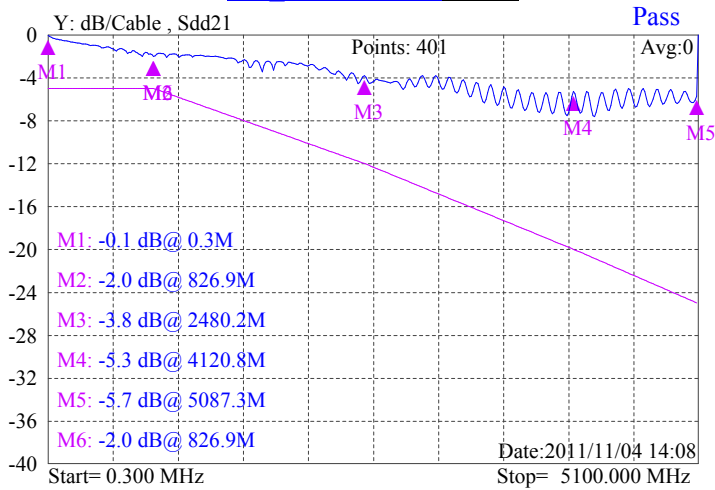
NA Attenuation Pair 1



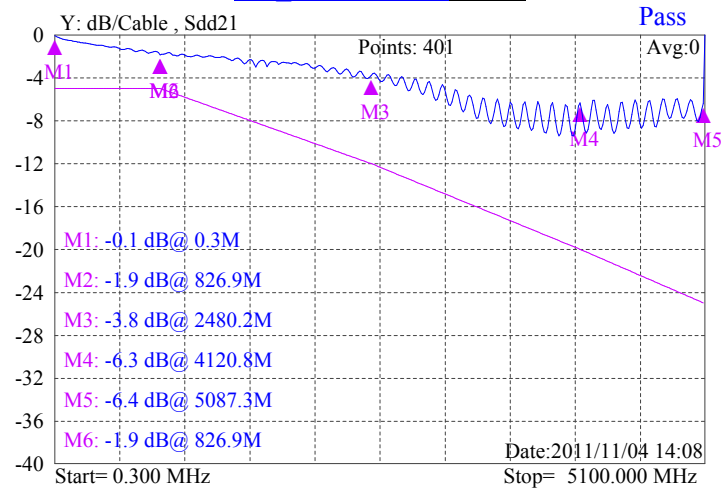
NA Attenuation Pair 2



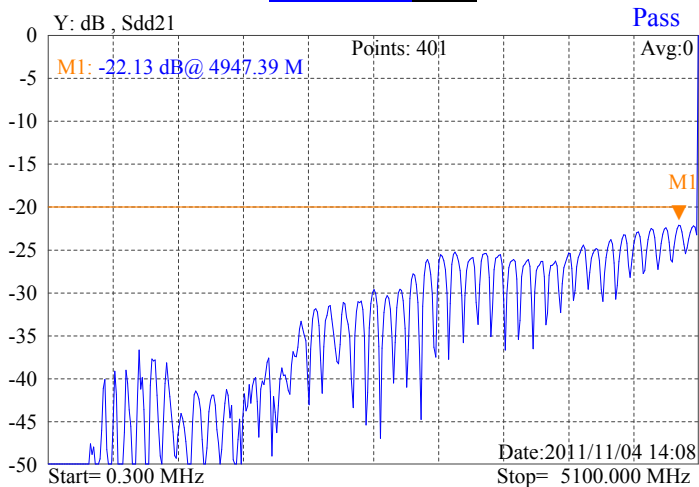
NA Attenuation Pair 3



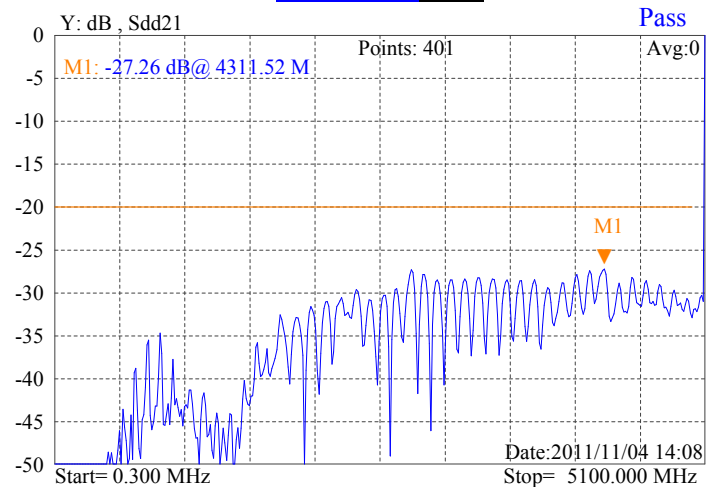
NA Attenuation Pair 4



NA FEXT P 1-2

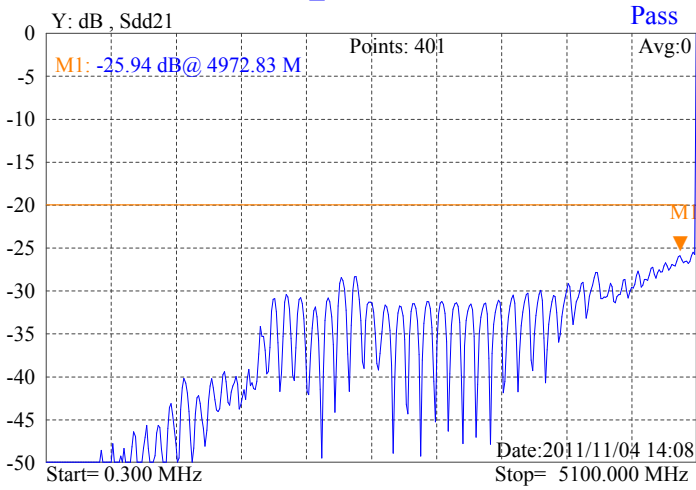


NA FEXT P 2-3

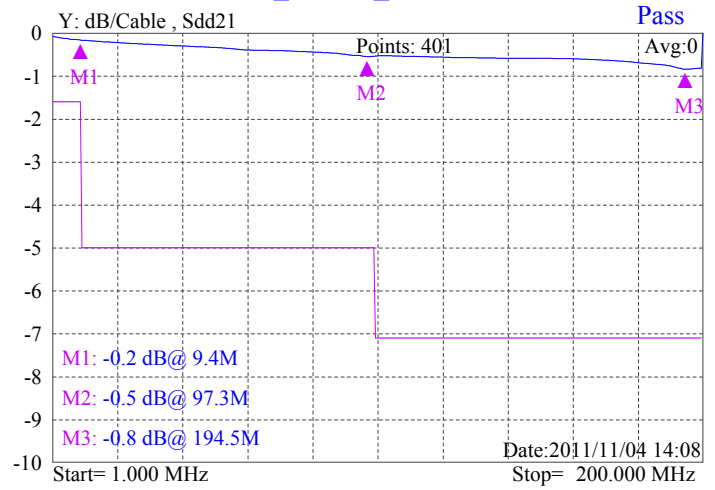


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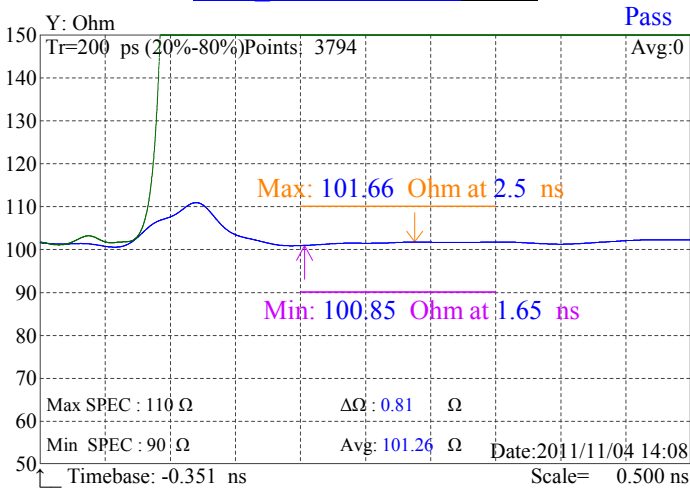
NA FEXT P 3-4



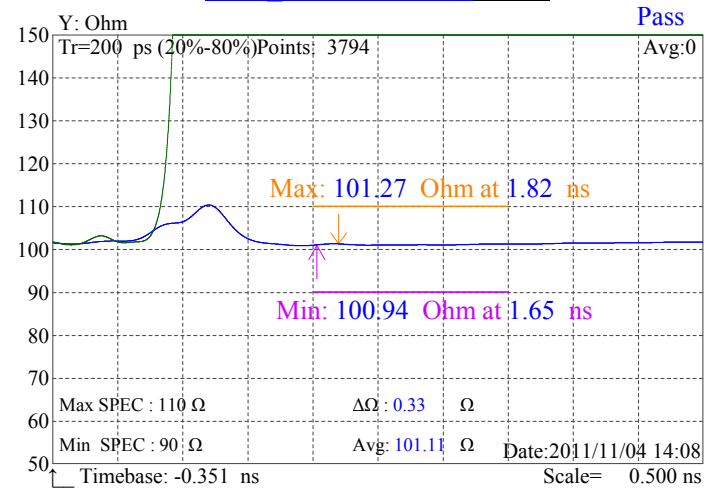
NA HEAC Attenuation



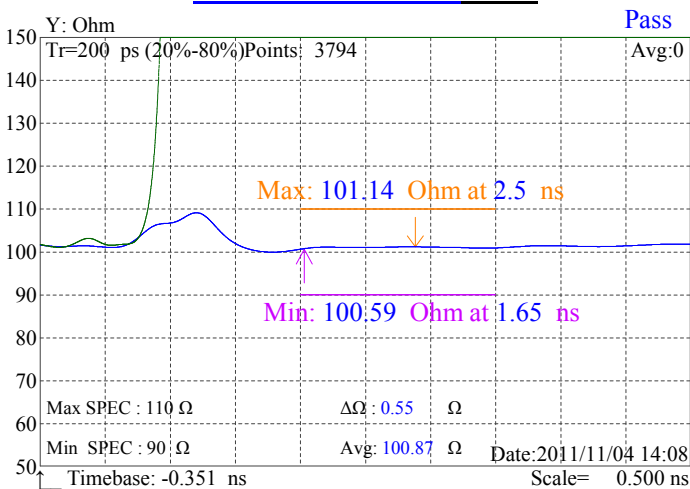
TDR DifferentialIMPZ Pair 1



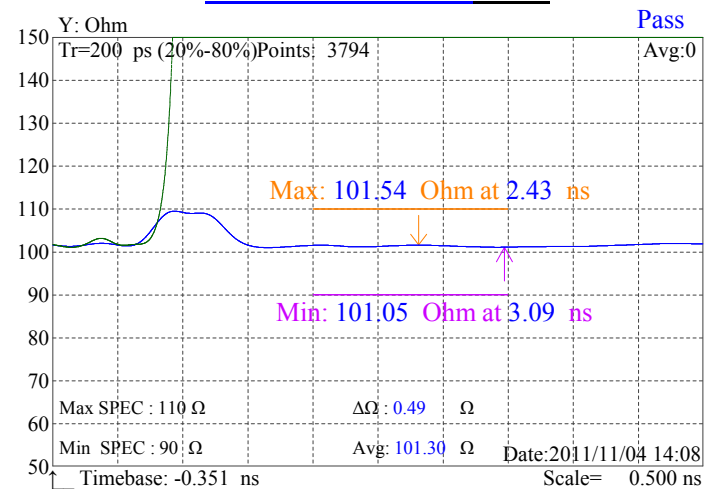
TDR DifferentialIMPZ Pair 2



TDR DifferentialIMPZ Pair 3

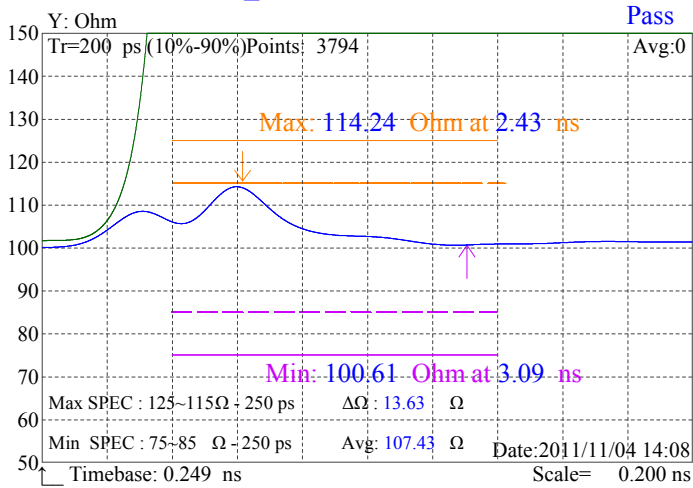


TDR DifferentialIMPZ Pair 4

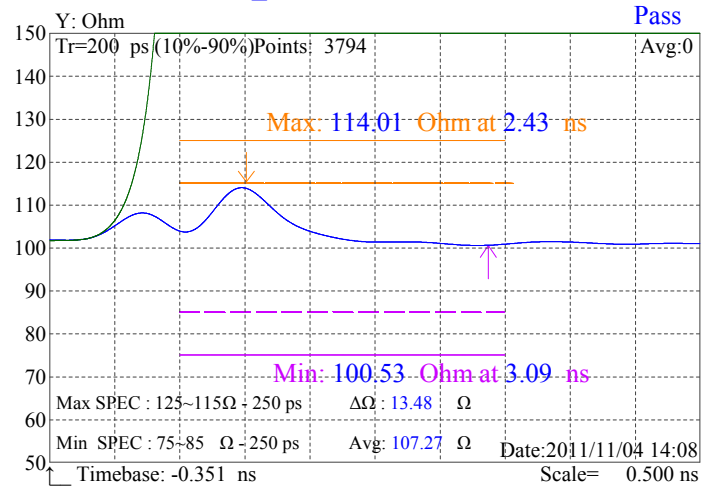


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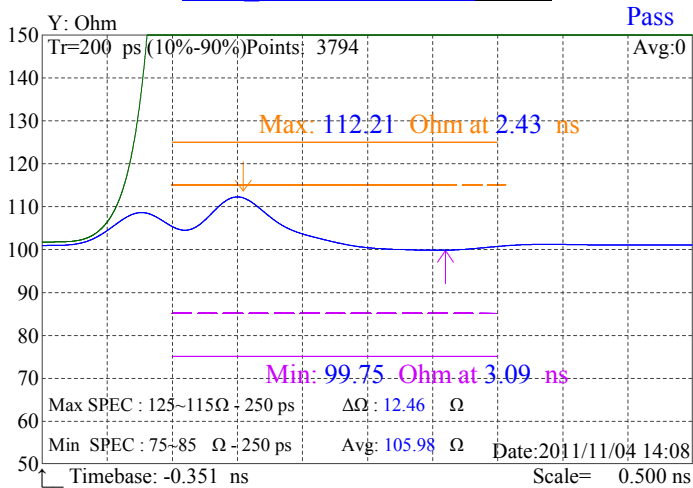
TDR ConnectorIMPZ Pair 1



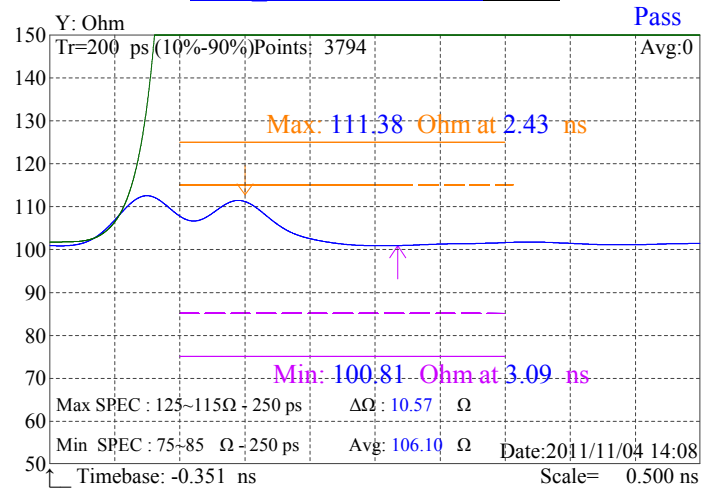
TDR ConnectorIMPZ Pair 2



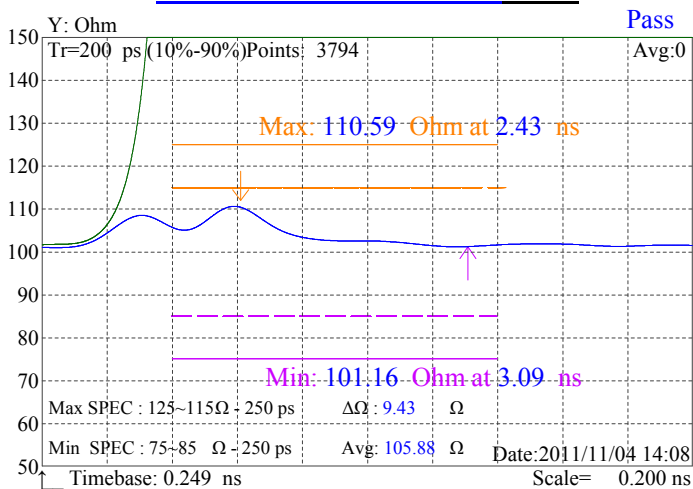
TDR ConnectorIMPZ Pair 3



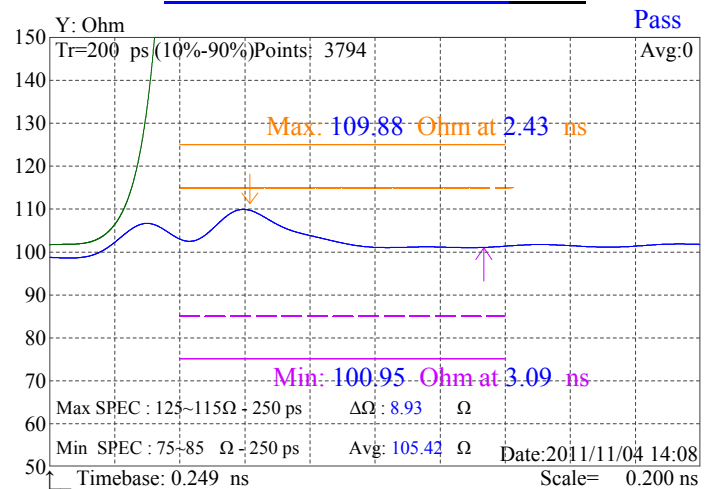
TDR ConnectorIMPZ Pair 4



TDR FE ConnectorIMPZ Pair 1

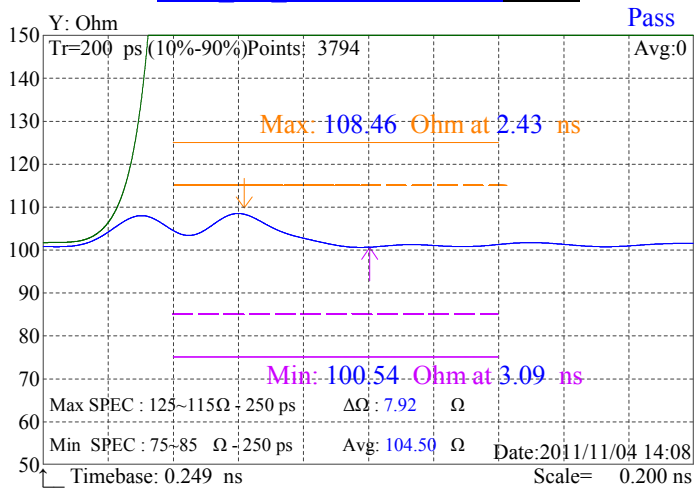


TDR FE ConnectorIMPZ Pair 2

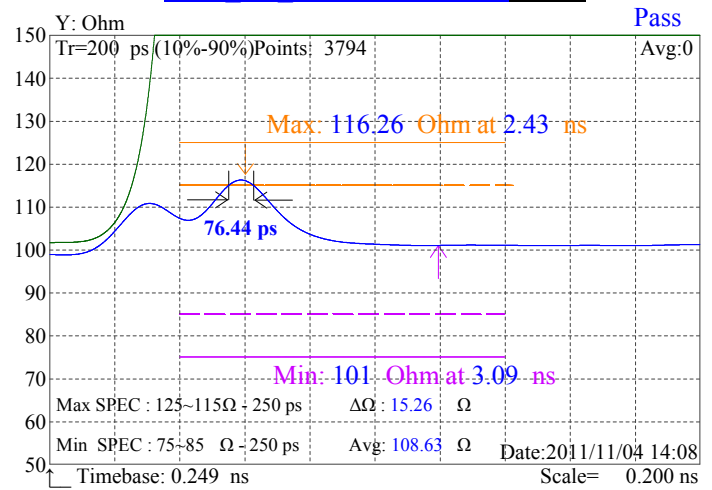


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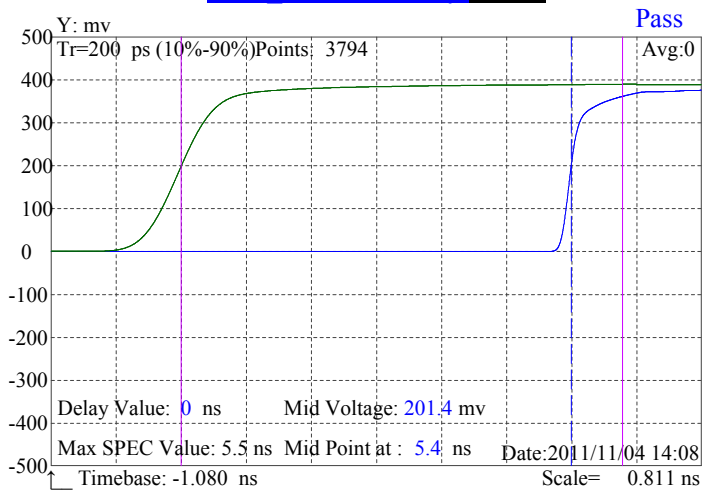
TDR FE ConnectorIMPZ Pair 3



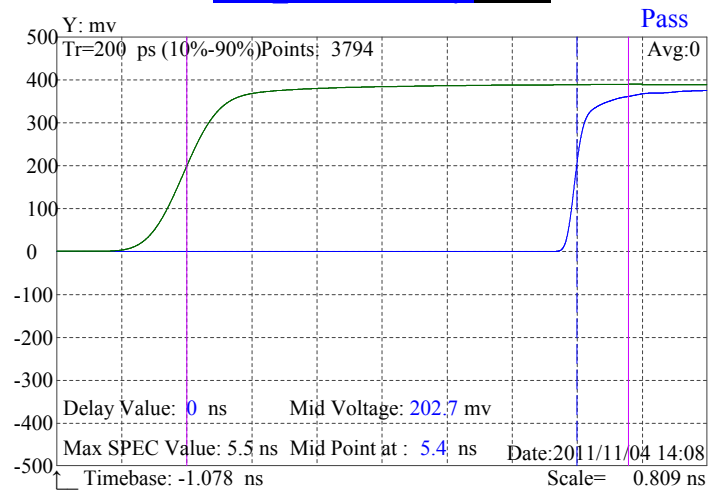
TDR FE ConnectorIMPZ Pair 4



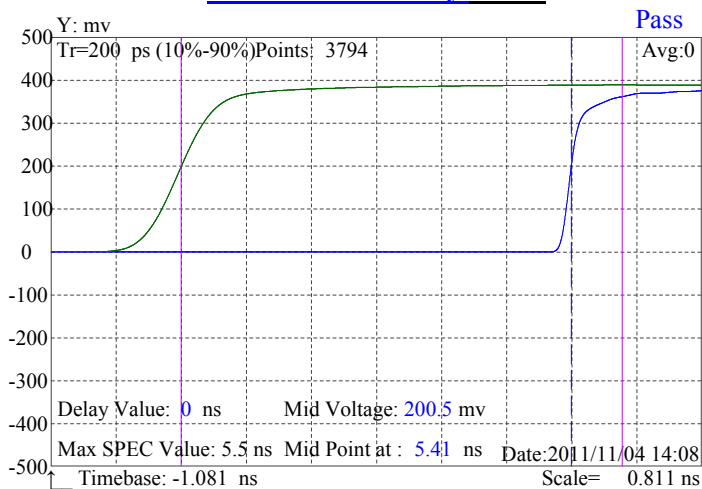
TDT DifferiaDelay Pair 1



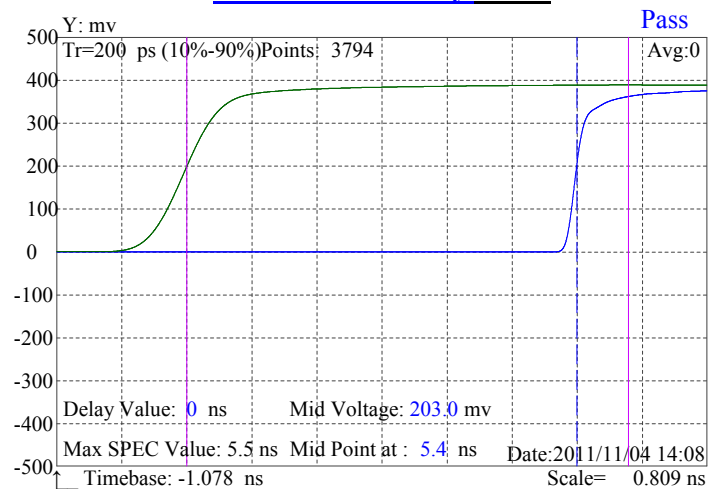
TDT DifferiaDelay Pair 2



TDT DifferiaDelay Pair 3



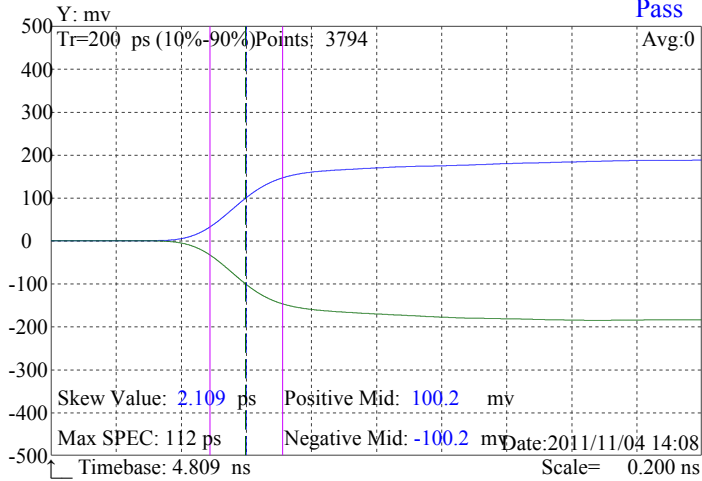
TDT DifferiaDelay Pair 4



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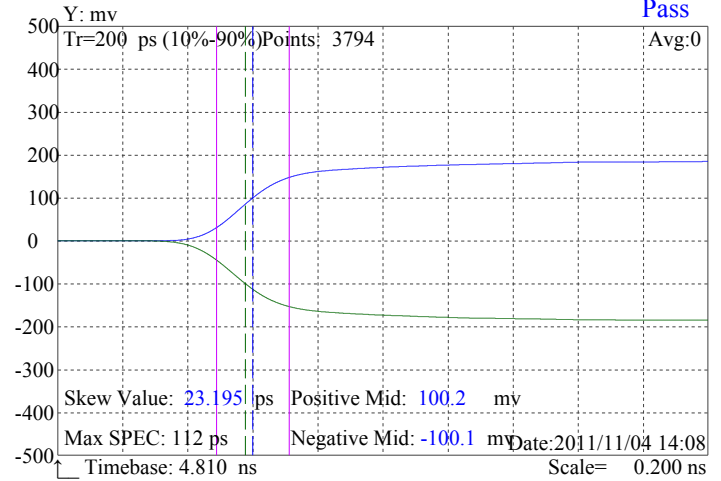
TDT IntraPairSkew Pair 1

Pass



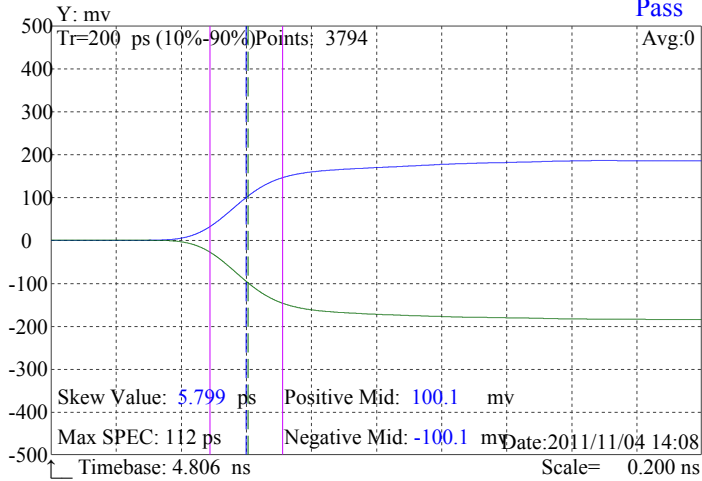
TDT IntraPairSkew Pair 2

Pass



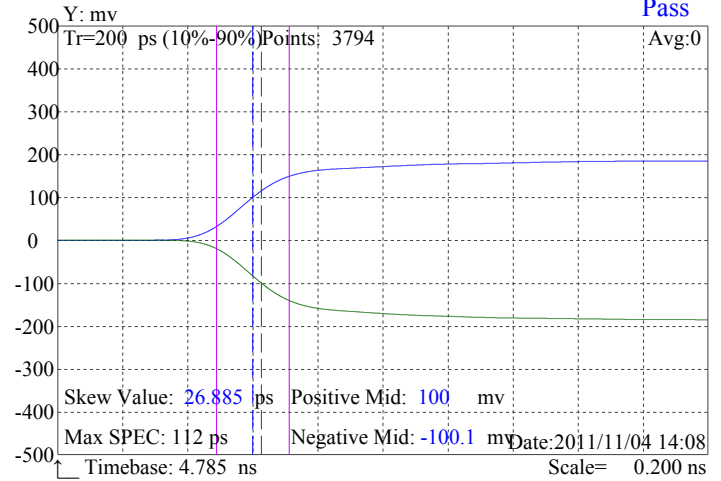
TDT IntraPairSkew Pair 3

Pass



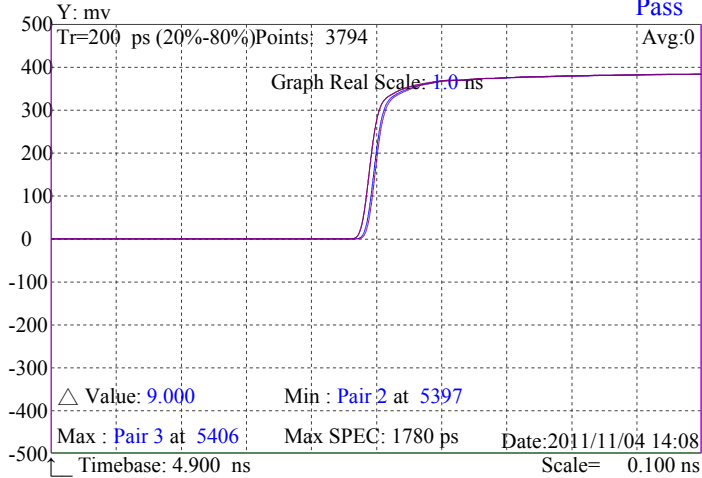
TDT IntraPairSkew Pair 4

Pass



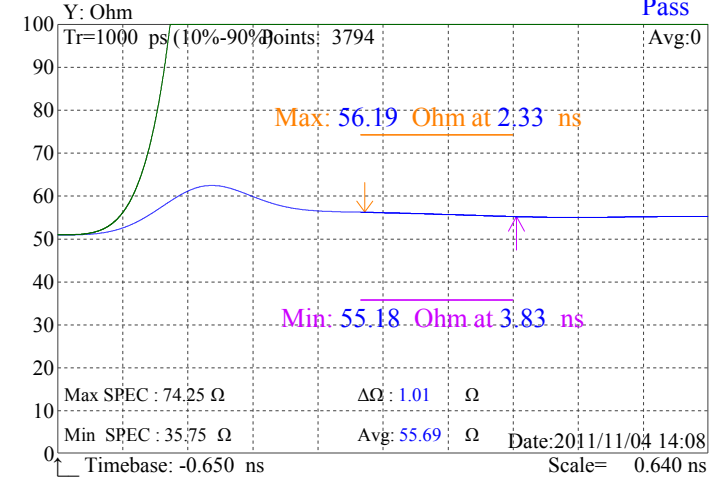
TDT InterPairSkew P 2 - 3

Pass



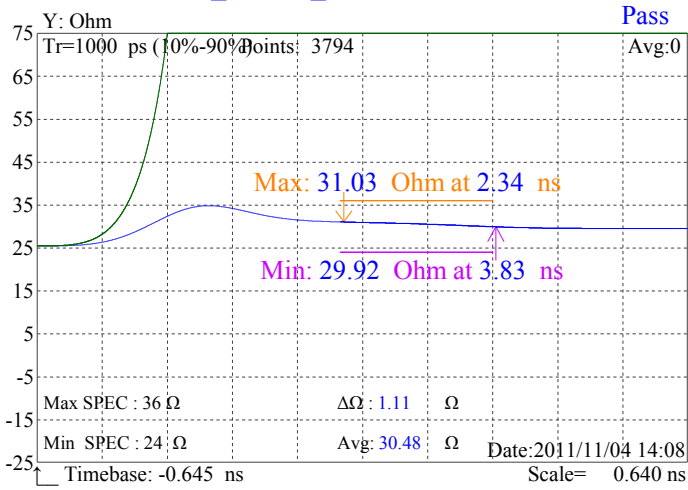
TDR HEAC SingleEnd IMPZ

Pass

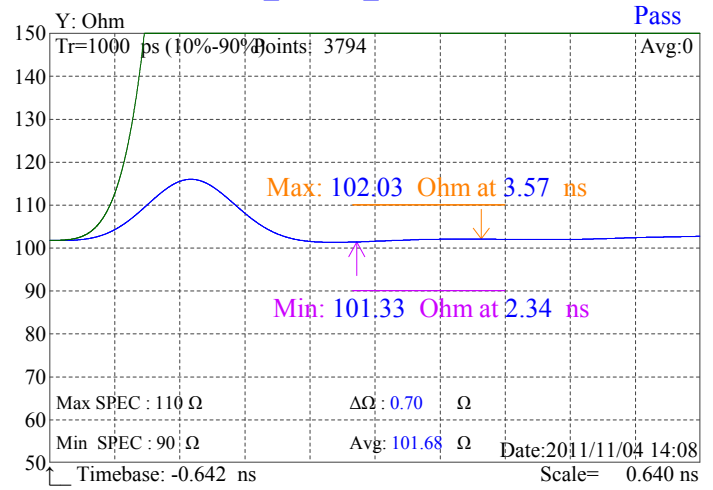


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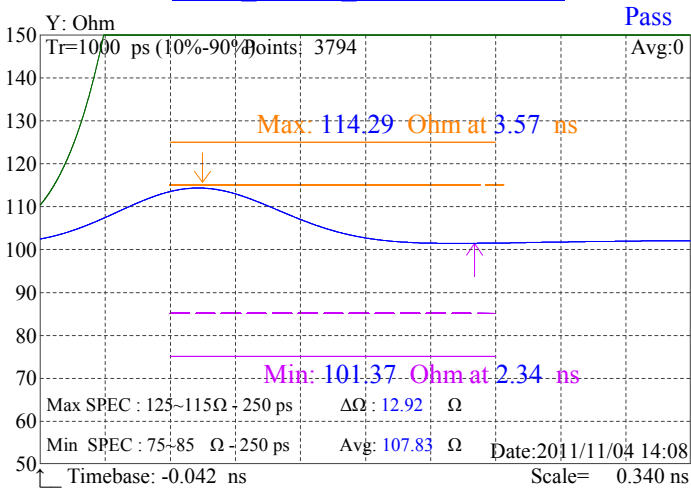
TDR HEAC CommonModeIMPZ



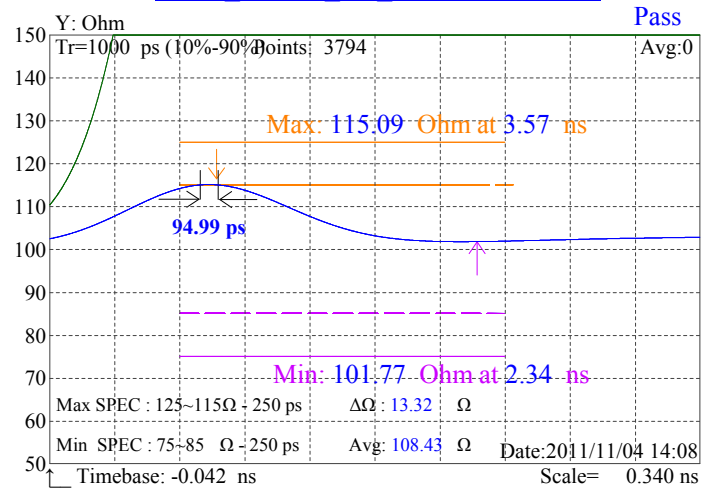
TDR HEAC DifferentialIMPZ



TDR HEAC ConnectorIMPZ



TDR HEAC FE ConnectorIMPZ



TDT HEAC IntraPairSkew

