



Test Report of High-speed HDMI 1.4 cable with HEAC

24AWG * 6 Meters

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Report Date:
2010/3/17 10:58

.Test Equipments Information

ID	Product and Serial Number	Description with series number	Manufacture
1	E5071B()	S-parameter Network Analyzer	Agilent
2	DSA8200(B020709)	Time Domain Reflector(TDR)	Tektronix

.Device Under Test(DUT) Information

Part Number of DUT:S001

Length(m)	6	Tested Pairs	4	Pairs
Temperature	20	°C	Humidity	40
Batch Number		Bundle Number		%
Testing following	HDMI 1.4			
Comments	24AWG HDMI CABLE 6 meters			
Technician	System Manager	Test Result	Pass	

.Tested Parameters List

.-HDMI Cat2 TDR IL	Pass
.-HDMI Cat2 TDR FEXT	Pass
.-HDMI Cat2 Cable Absolute Impedance	Pass
.-HDMI Cat2 Transition Area Impedance	Pass
.-HDMI Cat2 Differential Delay	Pass
.-HDMI Cat2 Inter Pair Skew	Pass
.-HDMI Cat2 Intra Pair Skew	Pass

Summary Result

HDMI Cat2 TDR IL summary result.

Start	Stop	Lim From	Lim To	P1	@(MHz)	P2	@(MHz)	P3	@(MHz)	P4	@(MHz)
1	825	-5	-5	-4.98	825	-4.9	825	-4.87	825	-4.97	825
825	2475	-5	-12	-9.89	2475	-9.82	2475	-10.05	2453.61	-9.69	2475
2475	4125	-12	-20	-14.11	3967.29	-13.13	4125	-13.36	3991.7	-13.78	4113.77
4125	5100	-20	-25	-17.84	5090.33	-17.27	5100	-17.65	5065.92	-17.39	5100
MHz	MHz	dB	dB	Pass		Pass		Pass		Pass	

HDMI Cat2 TDR FEXT summary result.

Start	Stop	Lim From	Lim To	P1-P2	@(MHz)	P1-P3	@(MHz)	P1-P4	@(MHz)	P2-P3	@(MHz)
1	5000	-20	-20	-39.31	4943.85	-35.73	2478.03	-39.29	4553.22	-39.58	2648.93
MHz	MHz	dB	dB	Pass		Pass		Pass		Pass	

Start	Stop	Lim From	Lim To	P2-P4	@(MHz)	P3-P4	@(MHz)
1	5000	-20	-20	-39.26	4187.01	-38.7	4895.02
MHz	MHz	dB	dB	Pass		Pass	

HDMI Cat2 Cable Absolute Impedance summary result @ 200 ps, (Low:10 %, High:90 %)

Pair Num	Result	Spc Max	Spc Min	Max value	Min Value	△Value	Avg	Unit
P1	Pass	110	90	99.95	99.34	0.61	99.64	Ohms
P2	Pass	110	90	100.86	100.07	0.79	100.47	Ohms
P3	Pass	110	90	100.51	99.62	0.89	100.06	Ohms
P4	Pass	110	90	99.9	99.5	0.40	99.7	Ohms

HDMI Cat2 Transition Area Impedance summary result @ 200 ps, (Low:10 %, High:90 %)

Pair Num	Result	Spc Max	Spc Min	Max value	Min Value	△Value	Avg	Unit
P1	Pass	125	75	101.74	95.96	5.78	98.85	Ohms
P2	Pass	125	75	102.55	95.82	6.73	99.18	Ohms
P3	Pass	125	75	100.75	93.64	7.11	97.19	Ohms
P4	Pass	125	75	105.08	94.9	10.18	99.99	Ohms

HDMI Cat2 Differential Delay summary result @ 200 ps, (Low:10 %, High:90 %)

Pair Num	Result	Spc Max	Value	Unit
P1	Pass	5.05	4.4326	ns/m
P2	Pass	5.05	4.4504	ns/m
P3	Pass	5.05	4.4362	ns/m
P4	Pass	5.05	4.4372	ns/m

HDMI Cat2 Inter Pair Skew summary result @ 200 ps, (Low:10 %, High:90 %)

Pair Num	Result	Spc Max	Value	Unit
All	Pass	1780	106.14	ps



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Summary Result Continued

HDMI Cat2 Intra Pair Skew summary result @ 200 ps, (Low:10 %, High:90 %)

Pair Num	Result	Spc Max	Value	Unit
P1	Pass	112	6.17	ps
P2	Pass	112	-8.63	ps
P3	Pass	112	27.21	ps
P4	Pass	112	39.2	ps

HDMI Cat2 TDR IL Graphic result

HDMI Cat2 TDR IL P1 -(PASS)



HDMI Cat2 TDR IL P2 -(PASS)



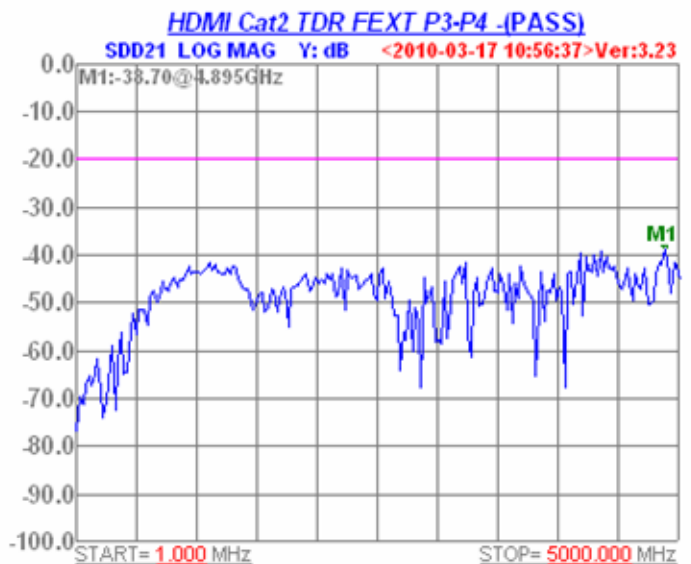
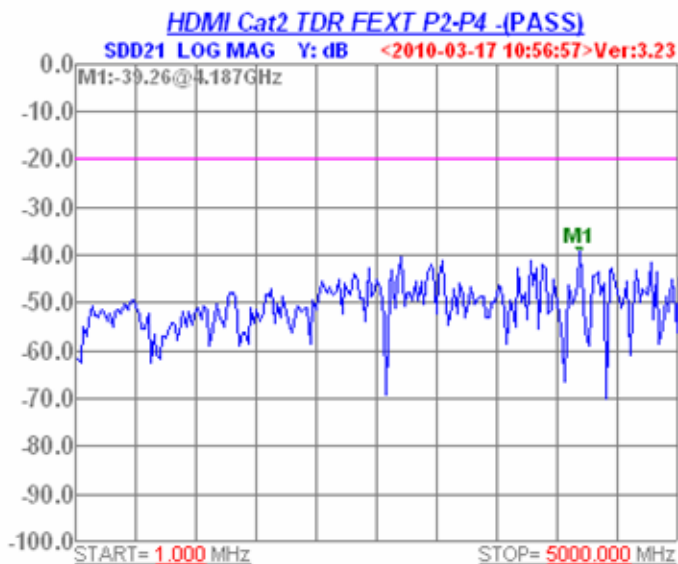
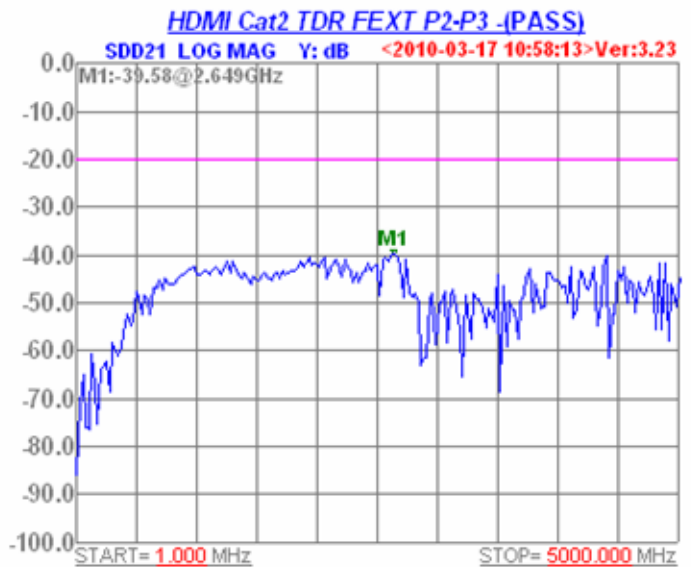
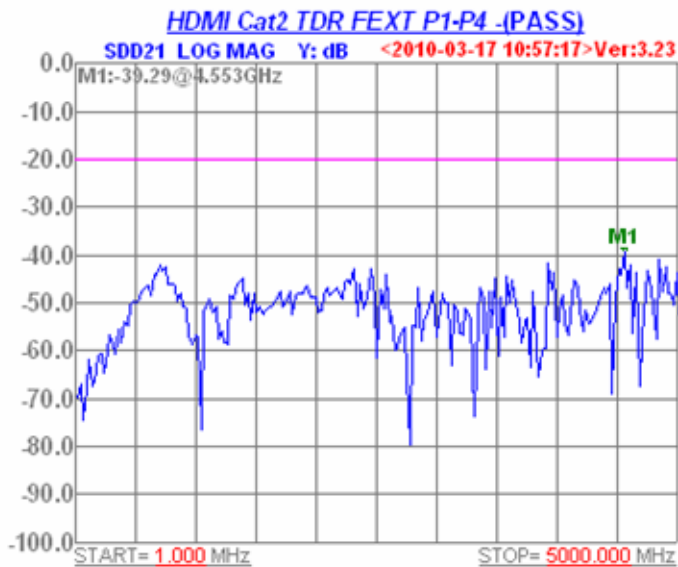
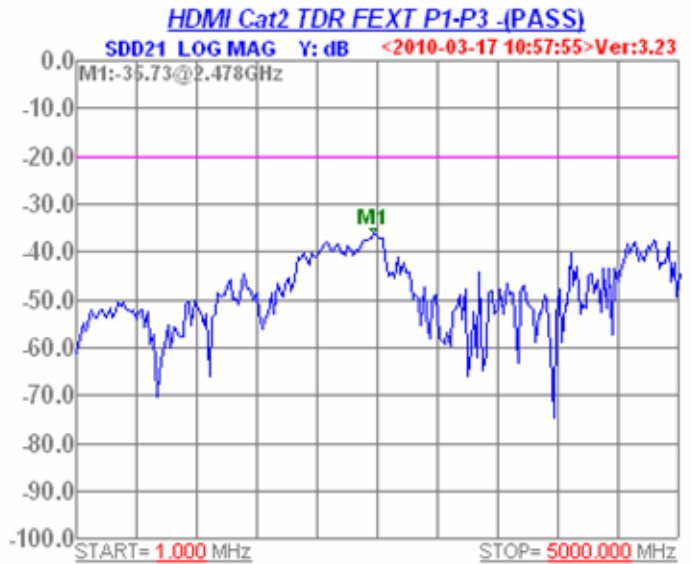
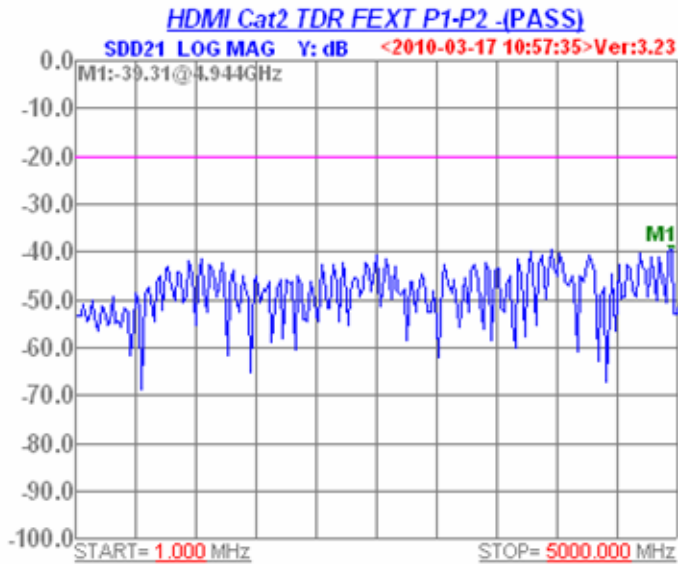
HDMI Cat2 TDR IL P3 -(PASS)



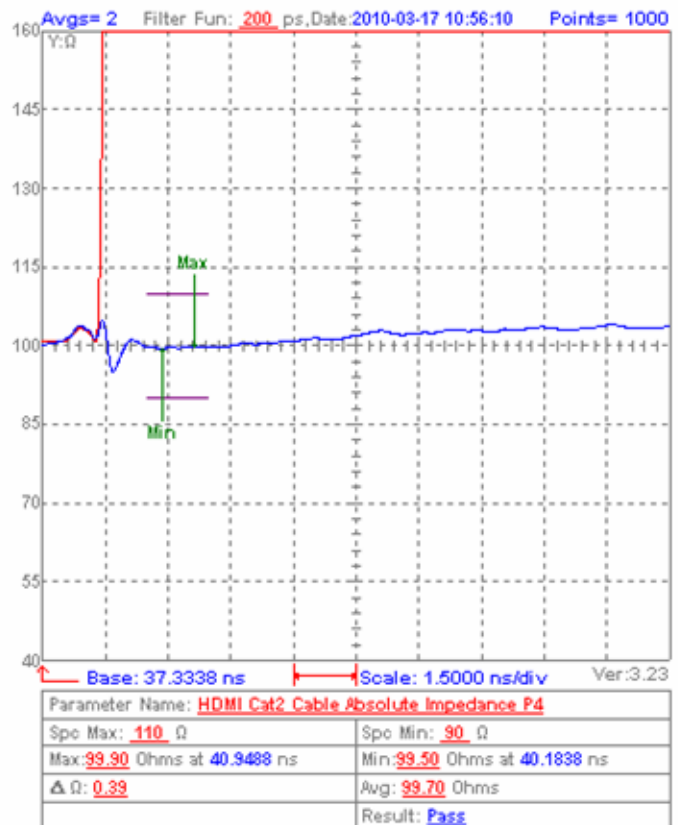
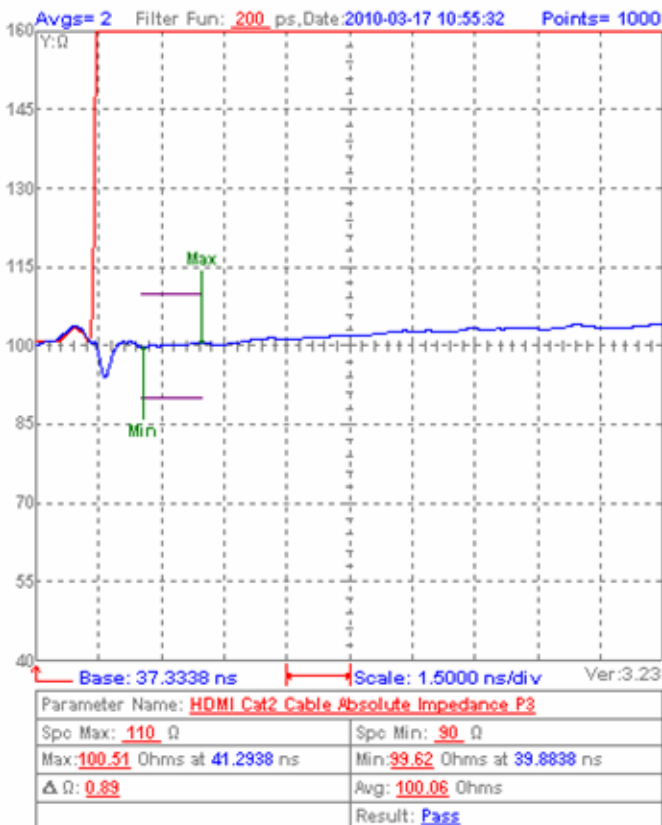
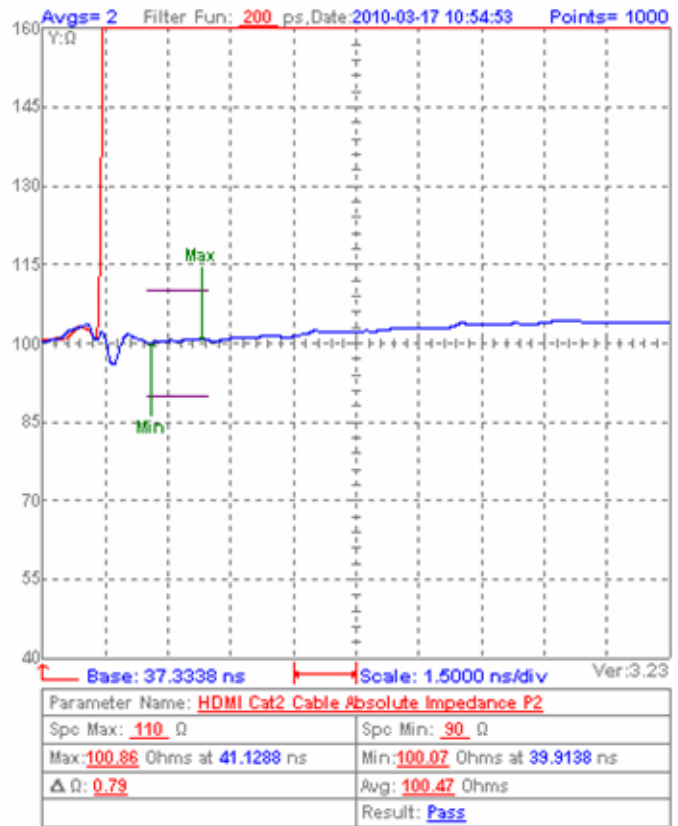
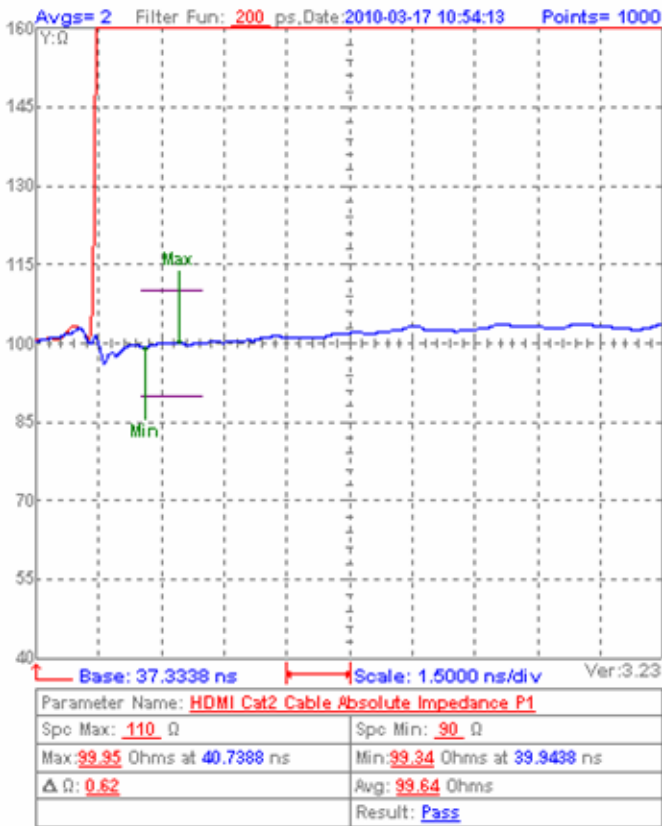
HDMI Cat2 TDR IL P4 -(PASS)



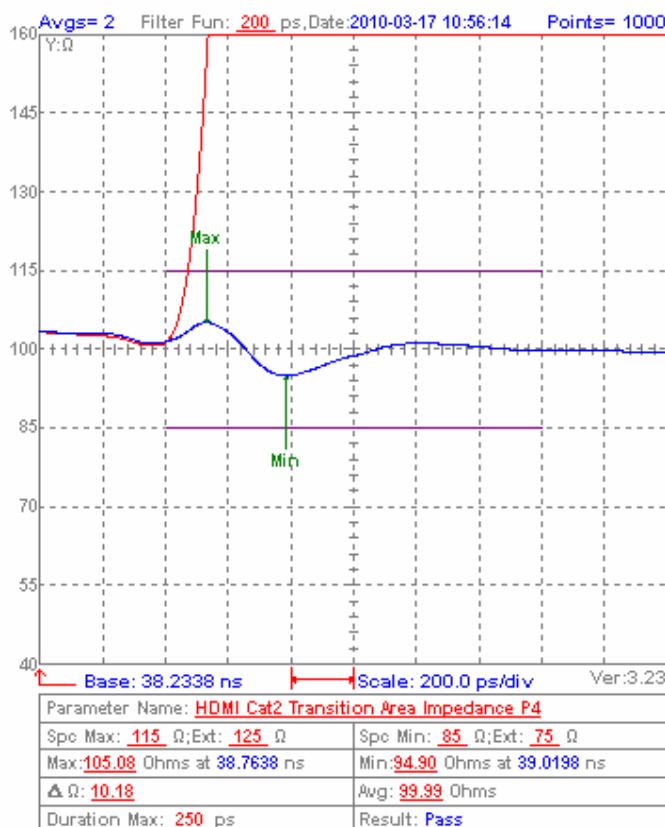
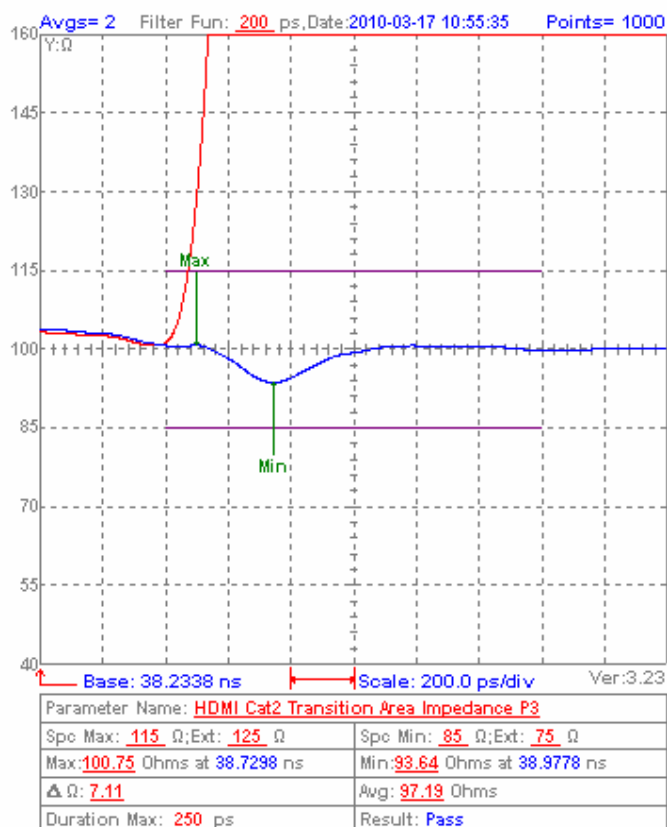
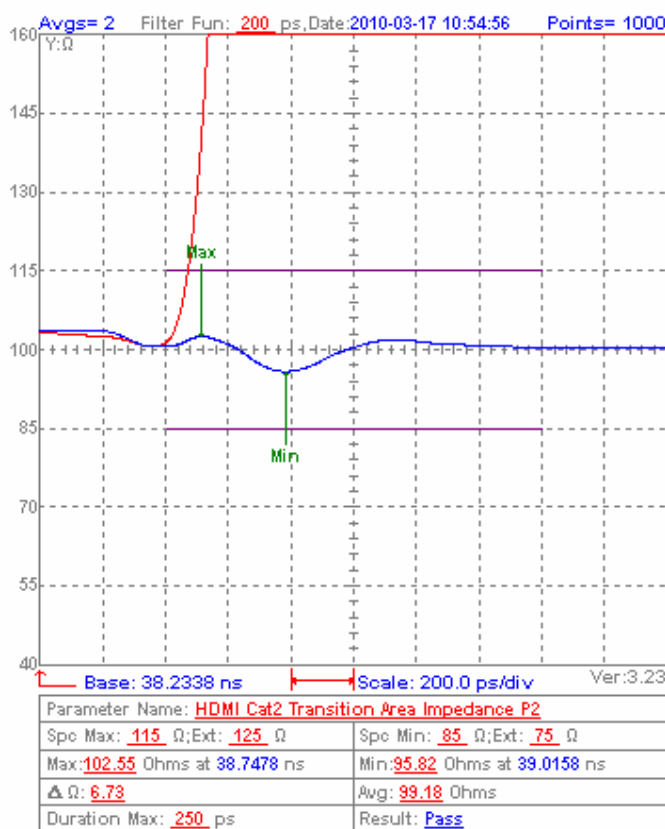
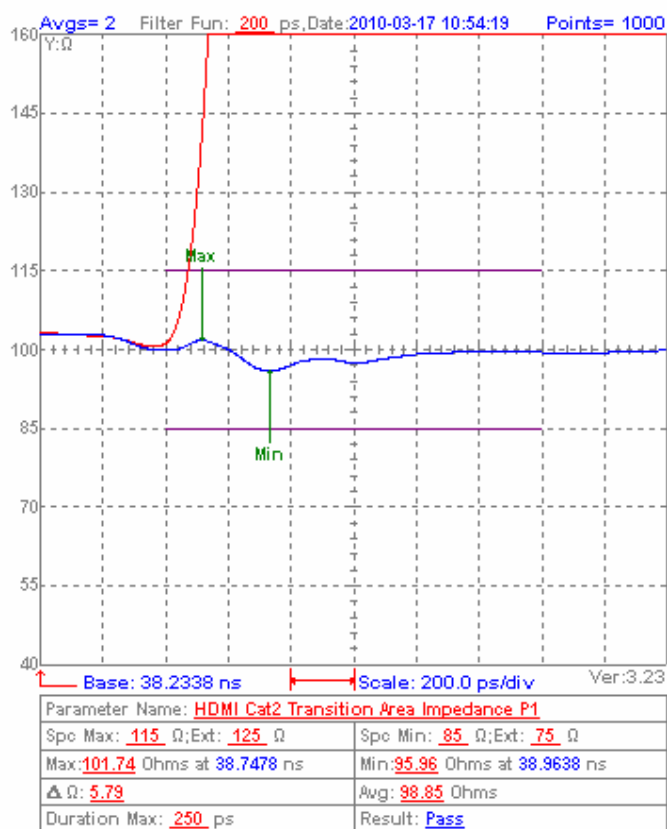
HDMI Cat2 TDR FEXT Graphic result



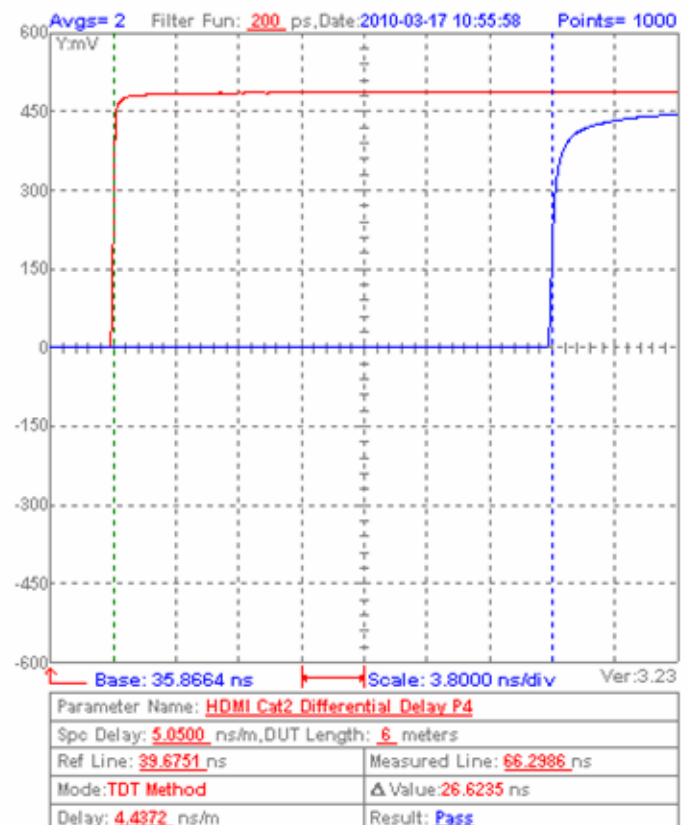
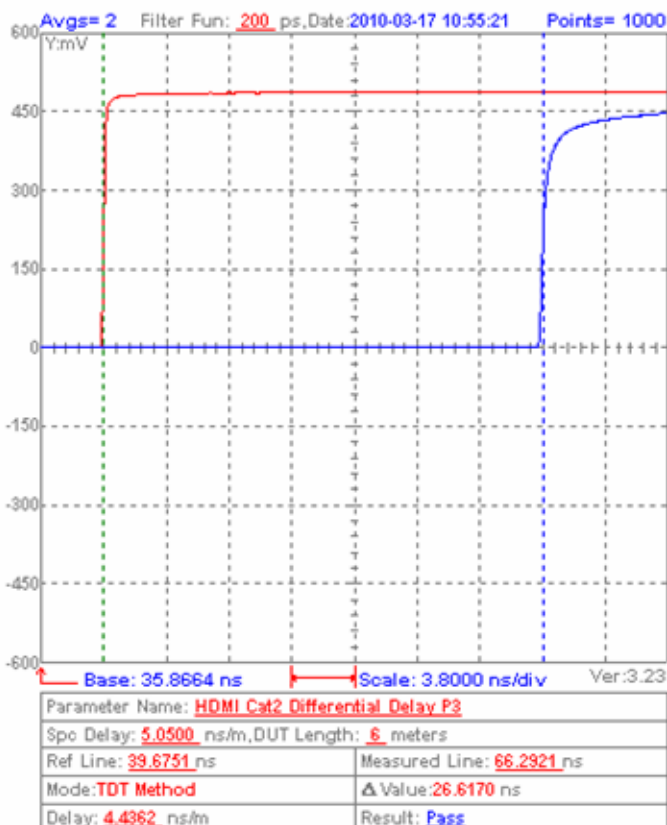
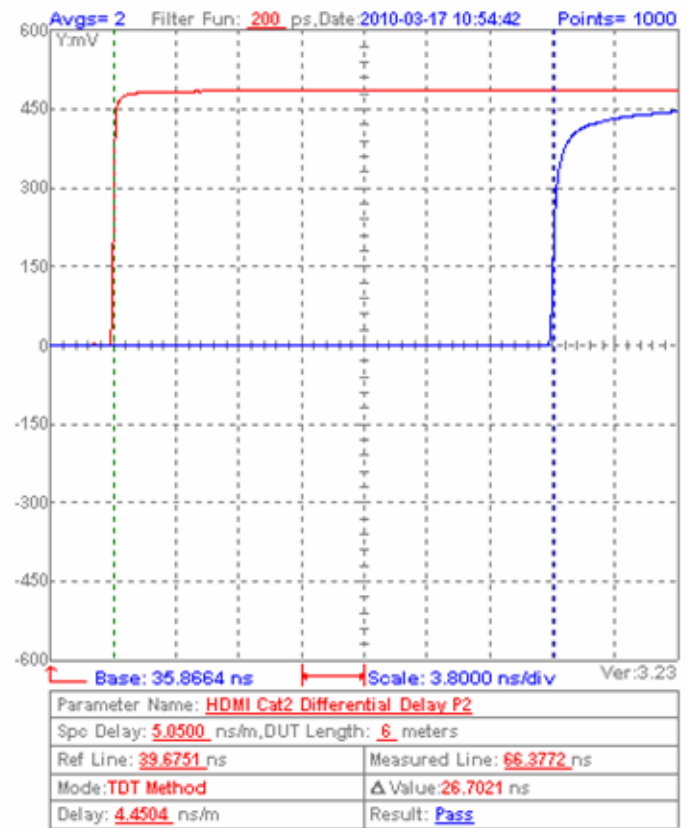
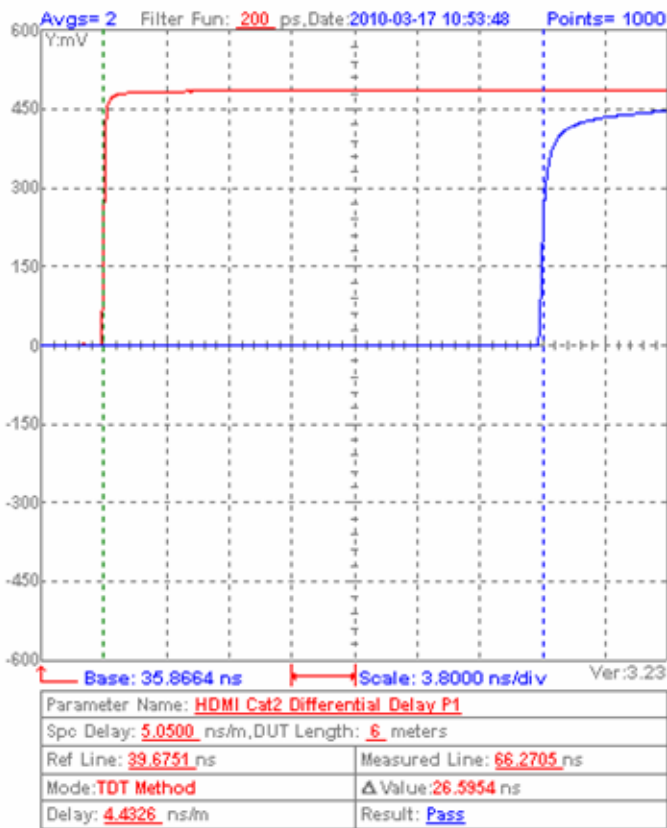
HDMI Cat2 Cable Absolute Impedance Graphic result



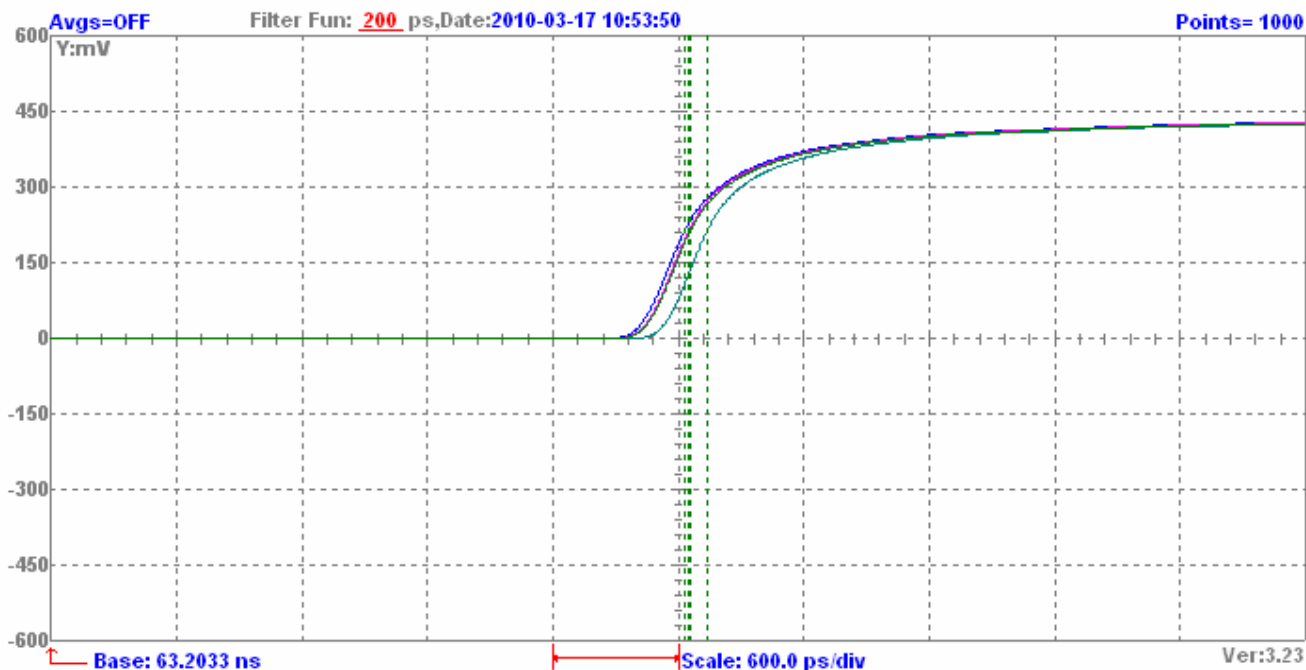
HDMI Cat2 Transition Area Impedance Graphic result



HDMI Cat2 Differential Delay Graphic result

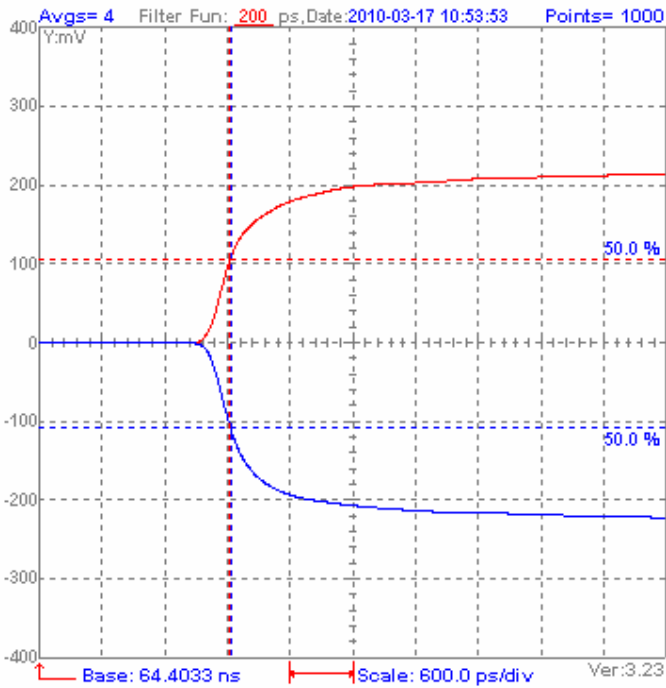


HDMI Cat2 Inter Pair Skew Graphic result

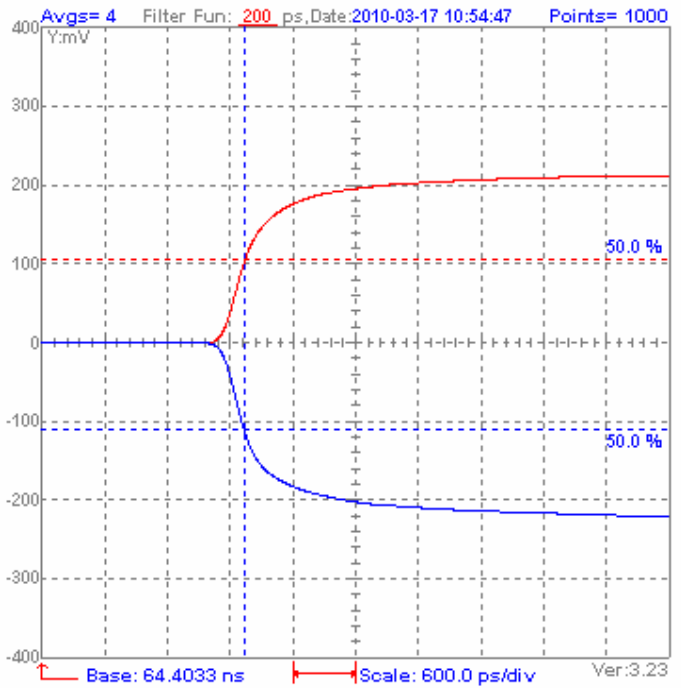


Parameter Name: HDMI Cat2 Inter Pair Skew	
Spk Inter Skew: 1780.00 ps, DUT Length: 6 meters	
Max Line: 66.3398 ns	Min Line: 66.2337 ns
Mode: TDT Method	Δ Value: 0.1061 ns
Skew: 106.14 ps	Result: Pass

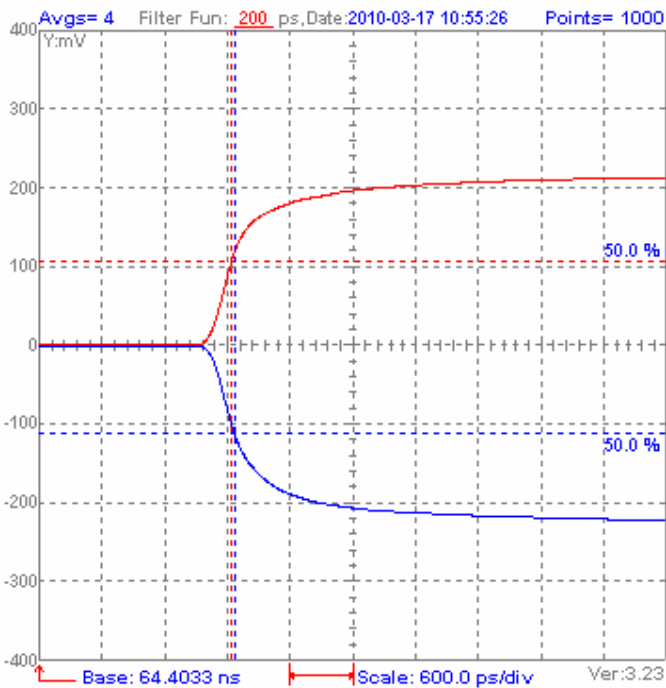
HDMI Cat2 Intra Pair Skew Graphic result



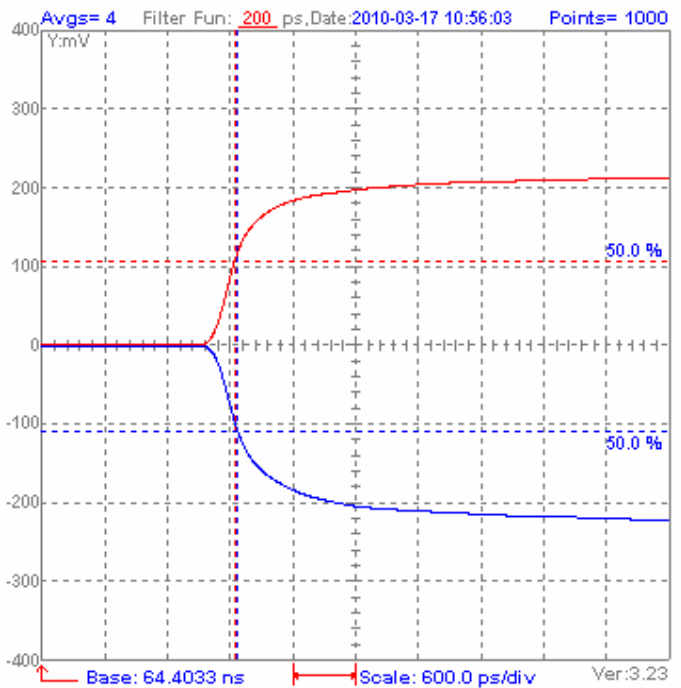
Parameter Name: HDMI Cat2 Intra Pair Skew P1	
Spc Skew: 112.0 ps, DUT Length: 6 meters	
Mode: TDT Method, Relative: 50%	
Δ Value: 6.17 ps	Skew: 6.2 ps
Result: Pass	



Parameter Name: HDMI Cat2 Intra Pair Skew P2	
Spc Skew: 112.0 ps, DUT Length: 6 meters	
Mode: TDT Method, Relative: 50%	
Δ Value: -8.63 ps	Skew: -8.6 ps
Result: Pass	



Parameter Name: HDMI Cat2 Intra Pair Skew P3	
Spc Skew: 112.0 ps, DUT Length: 6 meters	
Mode: TDT Method, Relative: 50%	
Δ Value: 27.21 ps	Skew: 27.2 ps
Result: Pass	



Parameter Name: HDMI Cat2 Intra Pair Skew P4	
Spc Skew: 112.0 ps, DUT Length: 6 meters	
Mode: TDT Method, Relative: 50%	
Δ Value: 39.20 ps	Skew: 39.2 ps
Result: Pass	