



GuangDong ipt Industrial CO.,LTD

Tel: 0769-85240366

Fax: 0769-85240266

Web Site: www.iptoe.com

**Address: NO.77 CuiHu Road,Chigang,Humen,
Dongguan,Guangdong,P.R.China**

SAS4-8X-81X4-1M

Test Report

for

WIPT

Test Date:

2020/09/20 21:59

Approval:

Tester: Eva



Test Equipment List :

Equip.	P/N (s/n)	Description
NA	E5080B (MY59100503)	Freq(50 MHz~18. GHz)/ Point(401)/ IFbw(10 KHz)/ Power(0 dBm)/ 2X_THRU_Cal(On) Z0(50 ohm)/ PortZ(50 ohm)/ Deembed(Off)
TDR EYE	ENA-TDR (MY59100503)	PortZ(50 ohm)/ Deembed(Off)

Device Under Test (DUT) & Test Environment Information :

P/N:	SAS4-8X-81X4-1M	Specifications:
DUT Lot:		DUT Bundle: 5
DUT Length(M):	1	Test Pair: 2 Pairs
Temperature(°C):	30	Humidity(%): 50
Remark:	ipt20200903002	

Test Result Summary:

	Refer to
1 Return Loss SDD11	Pass(1)
2 SCD21-SDD21	Pass(2)
3 Return Loss SDD22	Pass(3)
4 Differential To CommonMod Return Loss SCD22	Pass(4)
5 Differential To CommonMod Return Loss SCD11	Pass(5)
6 Insertion Loss	Pass(6)
7 Differential To CommMod Conversion SCD21	Pass(7)
8 IL Fit	Pass(8)
9 Differential Impedance	Pass(9)
10 Connector Impedance NearEnd	Pass(10)
11 Connector Impedance FarEnd	Pass(11)
12 Differential Delay	Pass(12)
13 IntraPair Skew	Pass(13)

Test Result: Pass

Test Data Summary Page 1 of 3

Return Loss SDD11

Start Freq	End Freq	Spec Max	Spec Min	TX0	TX1
2080	2080	-10.0155	--	-22.957	-23.901
2580	2580	-8.77117	--	-18.201	-18.042
3080	3080	-7.74799	--	-17.153	-19.598
3580	3580	-6.87907	--	-17.117	-17.281
4080	4080	-6.12393	--	-20.131	-16.987
4580	4580	-5.4562	--	-17.311	-22.003
5080	5080	-4.85773	--	-31.237	-25.357
5580	5580	-4.31548	--	-18.542	-19.433
6000	6000	-3.8963	--	-25.229	-23.383
50	2080	-10	--	-14.892	-13.411
2080	6000	-3.90→-10.00	--	-15.958	-14.134
6000	16875	-3.9	--	-7.647	-8.241
MHz	MHz	dB	dB	Pass	Pass

SCD21-SDD21

Start Freq	End Freq	Spec Max	Spec Min	TX0	TX1
50	12890	-10	--	-17.223	-25.626
12890	15700	-6.30→-10.02	--	-21.462	-23.364
15700	16875	-6.3	--	-21.963	-27.065
MHz	MHz	dB	dB	Pass	Pass

Return Loss SDD22

Start Freq	End Freq	Spec Max	Spec Min	TX0	TX1
2080	2080	-10.0155	--	-17.049	-16.986
2580	2580	-8.77117	--	-16.592	-16.557
3080	3080	-7.74799	--	-22.669	-25.614
3580	3580	-6.87907	--	-16.375	-13.538
4080	4080	-6.12393	--	-15.463	-12.890
4580	4580	-5.4562	--	-21.678	-21.925
5080	5080	-4.85773	--	-19.744	-19.844
5580	5580	-4.31548	--	-17.999	-14.588
6000	6000	-3.8963	--	-18.064	-15.519
50	2080	-10	--	-13.984	-12.676
2080	6000	-3.90→-10.00	--	-15.298	-13.637
6000	16875	-3.9	--	-6.428	-6.995
MHz	MHz	dB	dB	Pass	Pass

Test Data Summary Page 2 of 3

Differential To CommonMod Return Loss SCD22

Start Freq	End Freq	Spec Max	Spec Min	TX0	TX1
300	300	-26	--	-45.669	-47.952
800	800	-20.3346	--	-42.614	-38.833
1300	1300	-17.5303	--	-44.072	-37.350
1800	1800	-15.6506	--	-53.807	-39.078
2300	2300	-14.2347	--	-34.984	-35.243
2800	2800	-13.0985	--	-37.941	-45.023
3300	3300	-12.1495	--	-28.294	-27.853
3800	3800	-11.3346	--	-38.854	-40.680
4300	4300	-10.6206	--	-37.266	-30.862
4790	4790	-9.99725	--	-26.133	-33.656
50	300	-26	--	-44.319	-39.882
300	4790	-10.00→-26.00	--	-25.023	-36.554
4790	16875	-10	--	-21.409	-23.672
MHz	MHz	dB	dB	Pass	Pass

Differential To CommonMod Return Loss SCD11

Start Freq	End Freq	Spec Max	Spec Min	TX0	TX1
300	300	-26	--	-45.069	-43.820
800	800	-20.3346	--	-49.135	-55.537
1300	1300	-17.5303	--	-40.253	-37.586
1800	1800	-15.6506	--	-45.021	-41.110
2300	2300	-14.2347	--	-40.713	-44.495
2800	2800	-13.0985	--	-46.873	-41.507
3300	3300	-12.1495	--	-36.324	-38.873
3800	3800	-11.3346	--	-35.499	-33.681
4300	4300	-10.6206	--	-42.687	-42.968
4790	4790	-9.99725	--	-35.528	-33.846
50	300	-26	--	-43.256	-40.687
300	4790	-10.00→-26.00	--	-40.687	-40.448
4790	16875	-10	--	-24.827	-25.000
MHz	MHz	ps	ps	Pass	Pass

Insertion Loss

Start Freq	End Freq	Spec Max	Spec Min	TX0	TX1
50	11250	--	-1.14→-30.07	-0.533	-0.594
11250	16875	--	-29.95→-47.32	-29.464	-27.870
MHz	MHz	dB	dB	Pass	Pass

Differential To CommMod Conversion SCD21

Start Freq	End Freq	Spec Max	Spec Min	TX0	TX1
100	16875	-18	--	-25.551	-32.525
MHz	MHz	dB	dB	Pass	Pass

IL Fit

Start Freq	End Freq	Spec Max	Spec Min	TX0	TX1
50	11250	--	-30	-10.805	-10.808
MHz	MHz	dB	dB	Pass	Pass

Test Data Summary Page 3 of 3

Differential Impedance, Tr= 70 ps (20%_80%)

Pair Name	Spec Max	Spec Min	Max Value	Min Value	Differ.	Average	Status
TX0	102	76.5	88.59	86.99	1.60	87.79	Pass
TX1	102	76.5	88.41	87.11	1.30	87.76	Pass
Unit :	Ohm	Ohm	Ohm	--	--	--	--

Connector Impedance NearEnd, Tr= 70 ps (20%_80%)

Pair Name	Spec Max	Spec Min	Max Value	Min Value	Differ.	Average	Status
TX0	105.8	78.2	93.37	86.84	6.53	90.11	Pass
TX1	105.8	78.2	91.62	87.46	4.16	89.54	Pass
Unit :	Ohm	Ohm	Ohm	--	--	--	--

Connector Impedance FarEnd, Tr= 70 ps (20%_80%)

Pair Name	Spec Max	Spec Min	Max Value	Min Value	Differ.	Average	Status
TX0	105.8	78.2	85.60	84.05	1.55	84.83	Pass
TX1	105.8	78.2	87.01	85.32	1.69	86.17	Pass
Unit :	Ohm	Ohm	Ohm	--	--	--	--

Differential Delay, Tr= 70 ps (20%_80%)

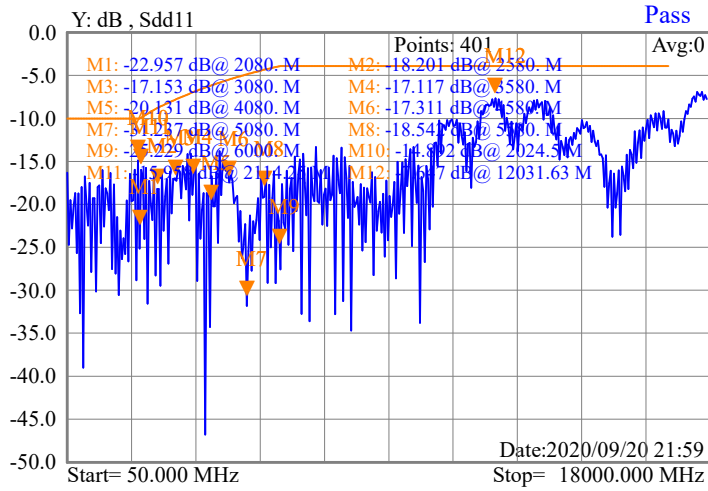
Pair Name	Spec Max	Spec Min	Delay Val	Status
TX0	53	--	4.767	Pass
TX1	53	--	4.775	Pass
Unit :	ns	ns	ns	--

IntraPair Skew, Tr= 70 ps (20%_80%)

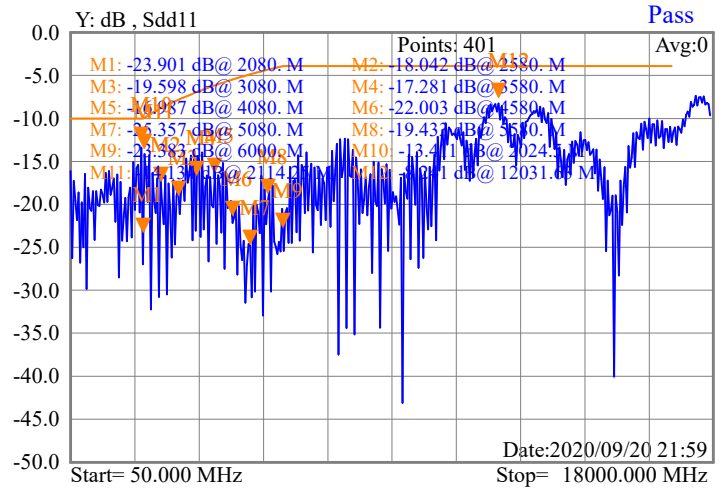
Pair Name	Spec Max	Spec Min	Skew Val.	Status
TX0	50	--	1.803	Pass
TX1	50	--	-1.866	Pass
Unit :	ps	ps	ps	--

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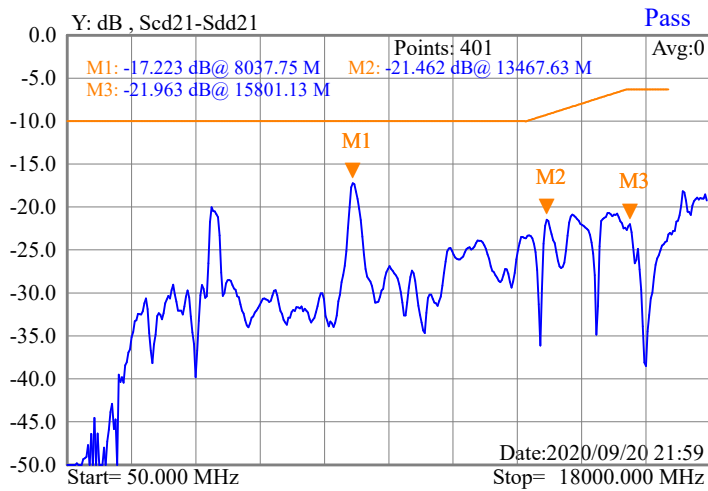
Return Loss SDD11 (TX0)



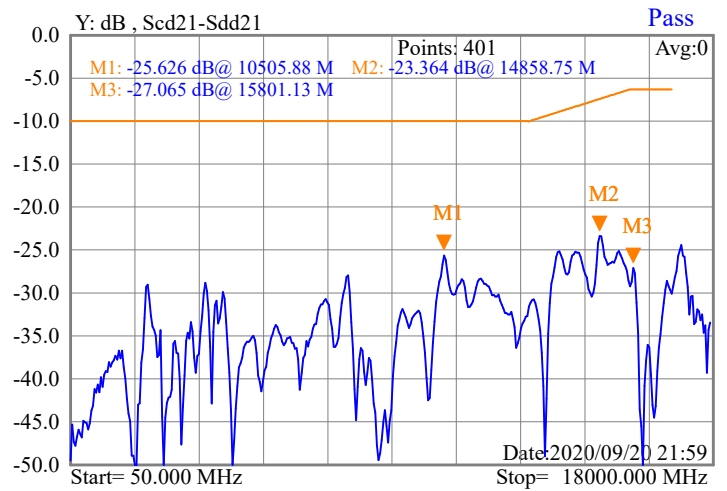
Return Loss SDD11 (TX1)



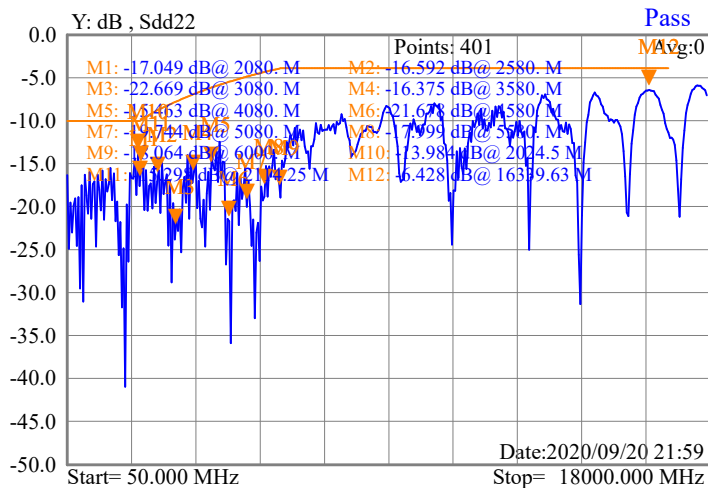
SCD21-SDD21 (TX0)



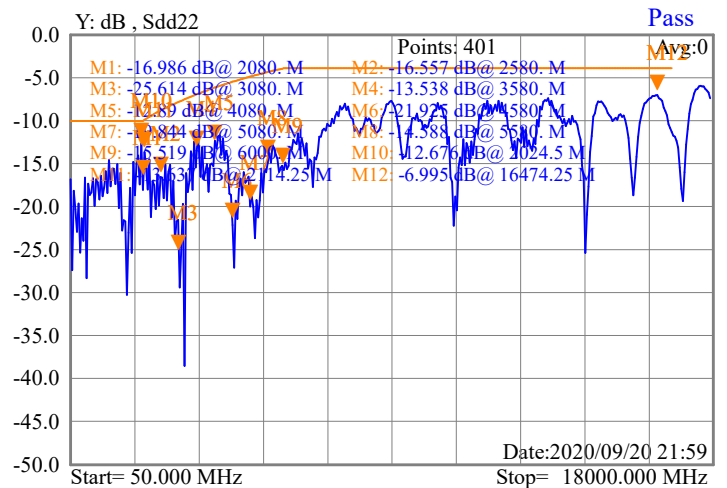
SCD21-SDD21 (TX1)



Return Loss SDD22 (TX0)

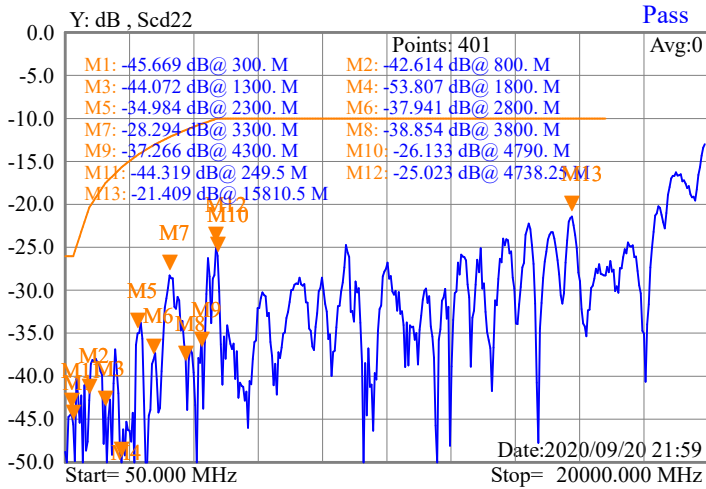


Return Loss SDD22 (TX1)

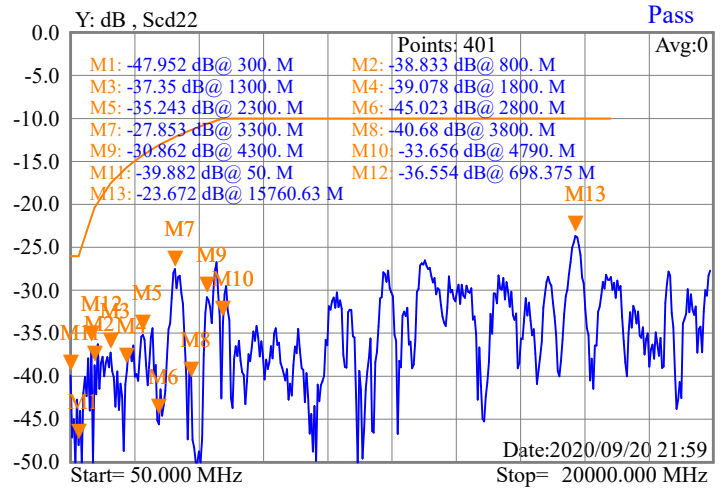


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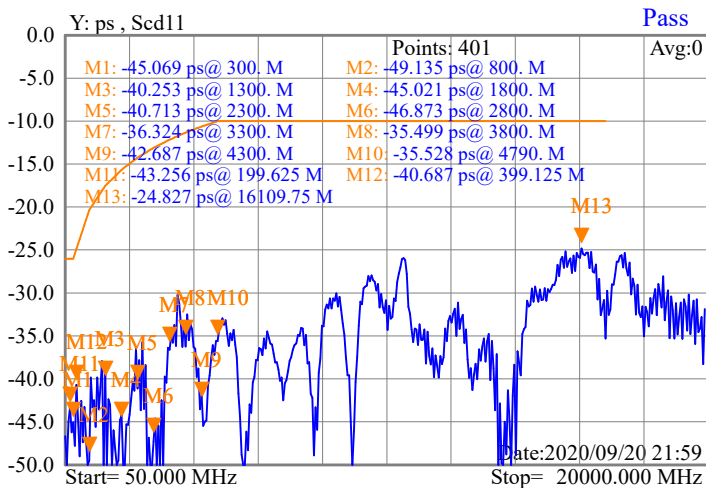
Differential To CommonMod Return Loss SCD22 (TX0)



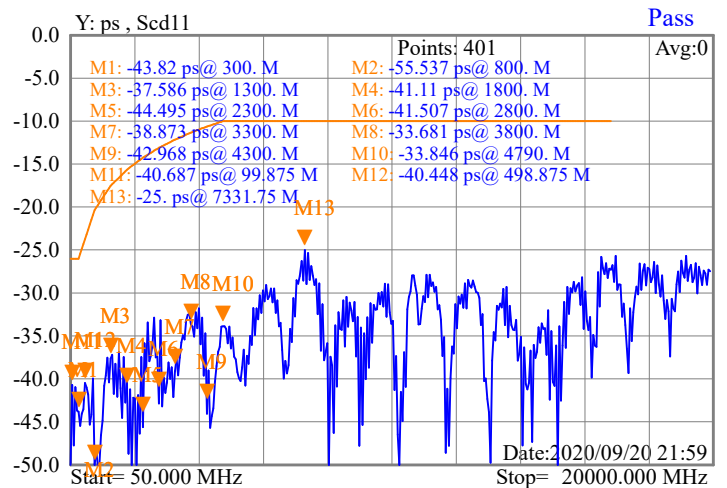
Differential To CommonMod Return Loss SCD22 (TX1)



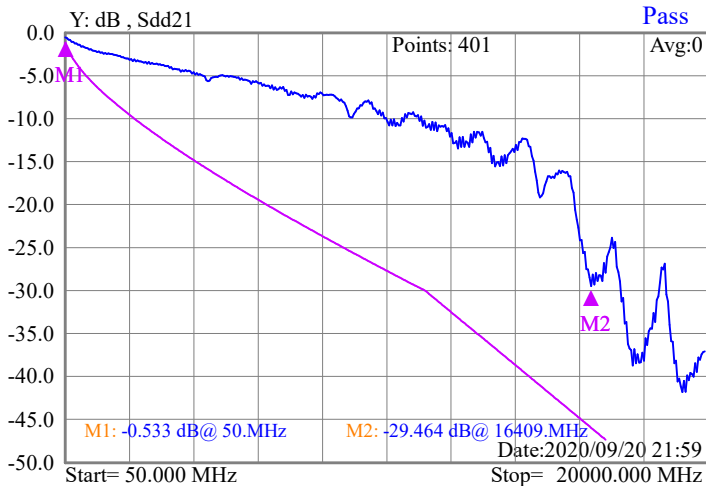
Differential To CommonMod Return Loss SCD11 (TX0)



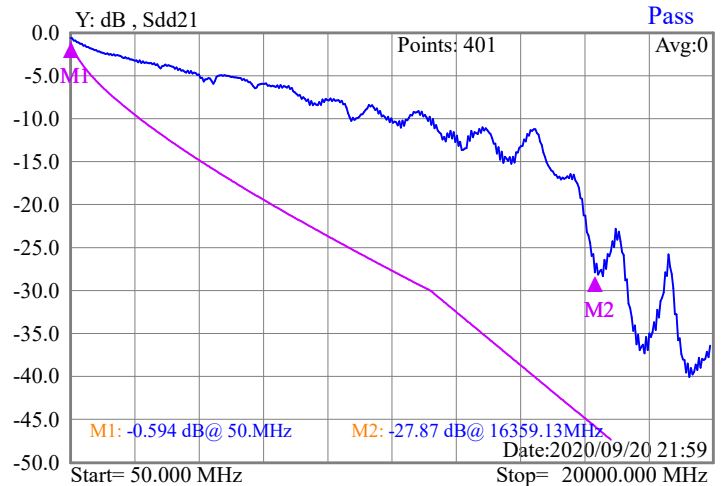
Differential To CommonMod Return Loss SCD11 (TX1)



Insertion Loss (TX0)

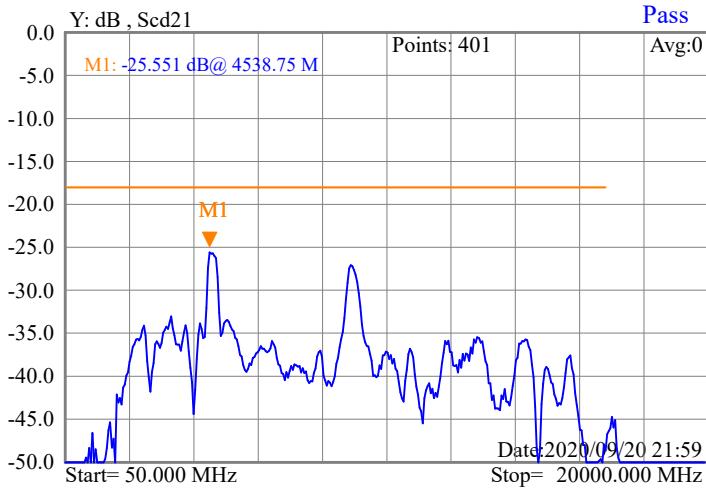


Insertion Loss (TX1)

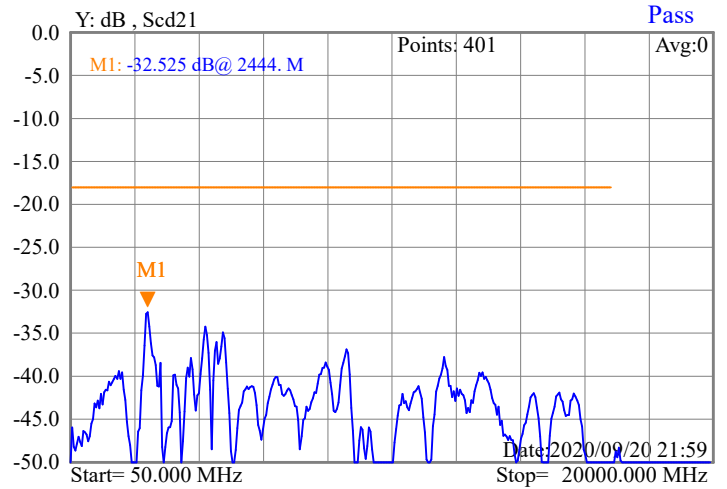


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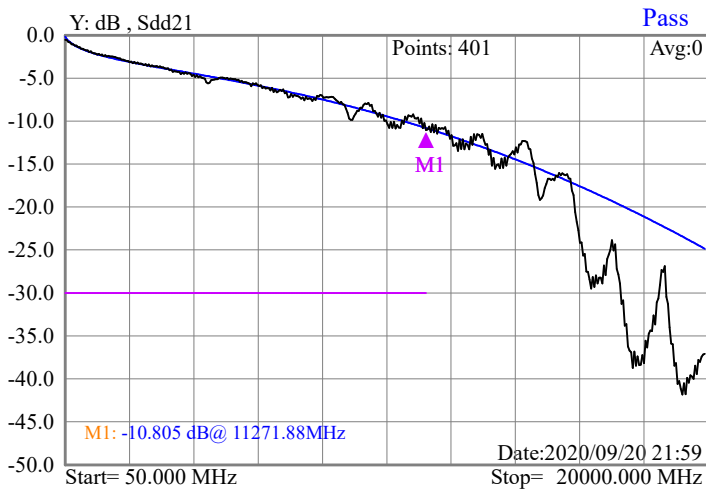
Differential To CommMod Conversion SCD21 (TX0)



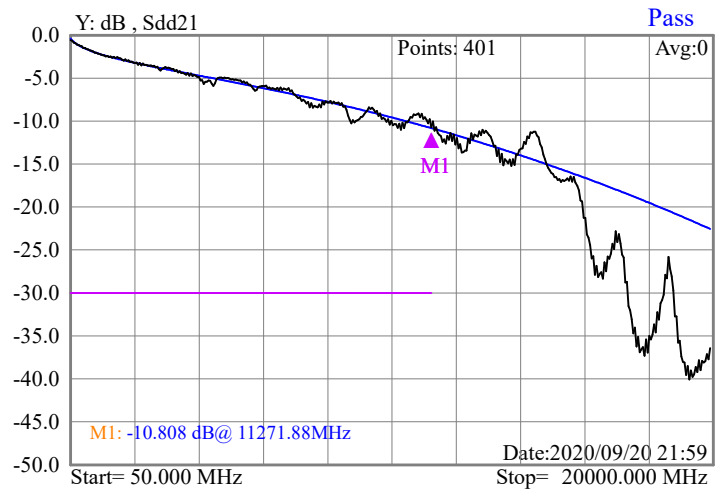
Differential To CommMod Conversion SCD21 (TX1)



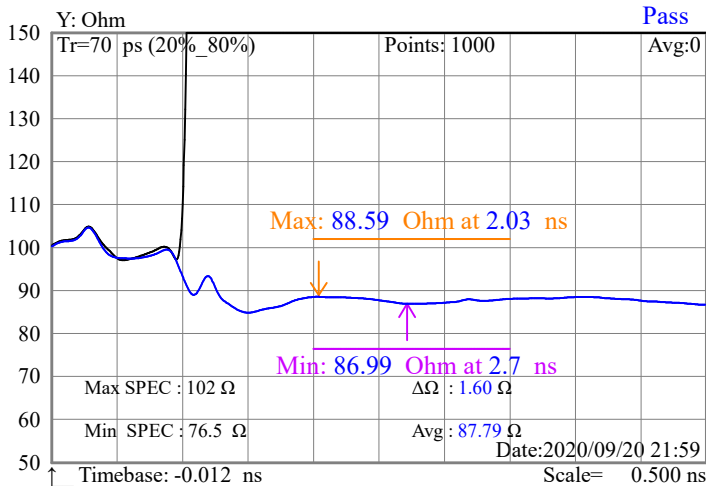
IL Fit (TX0)



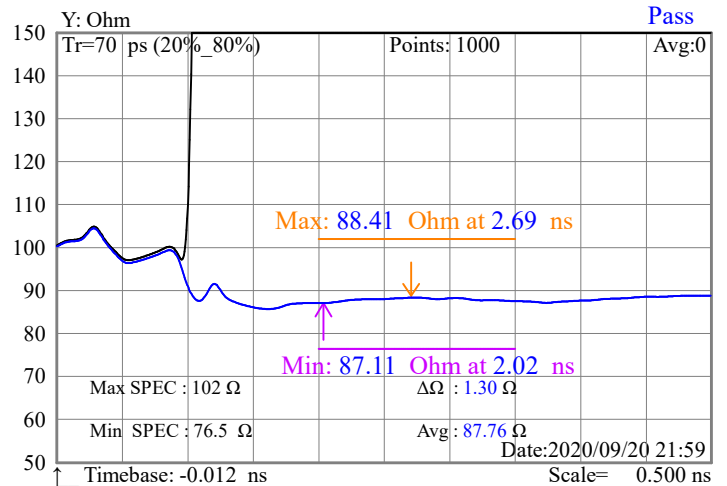
IL Fit (TX1)



Differential Impedance (TX0)

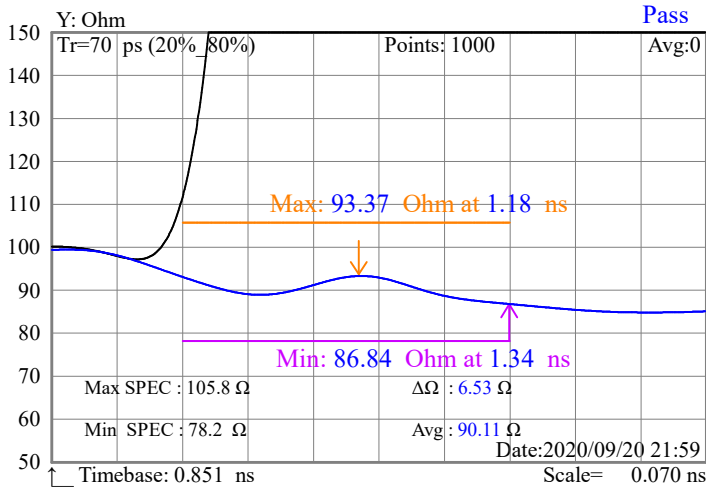


Differential Impedance (TX1)

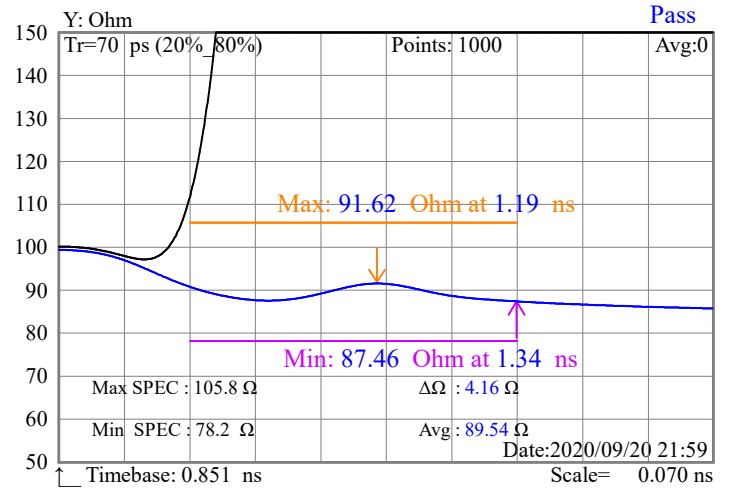


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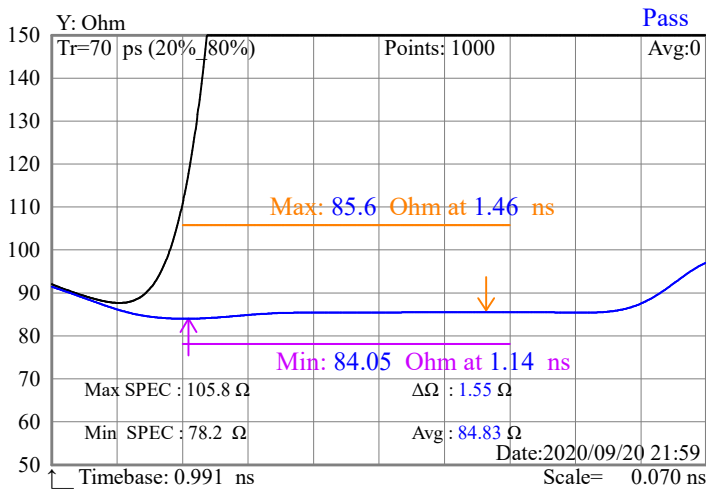
Connector Impedance NearEnd (TX0)



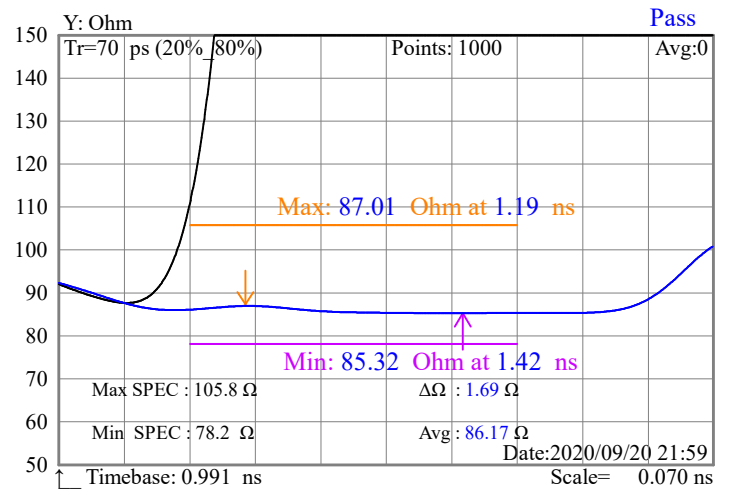
Connector Impedance NearEnd (TX1)



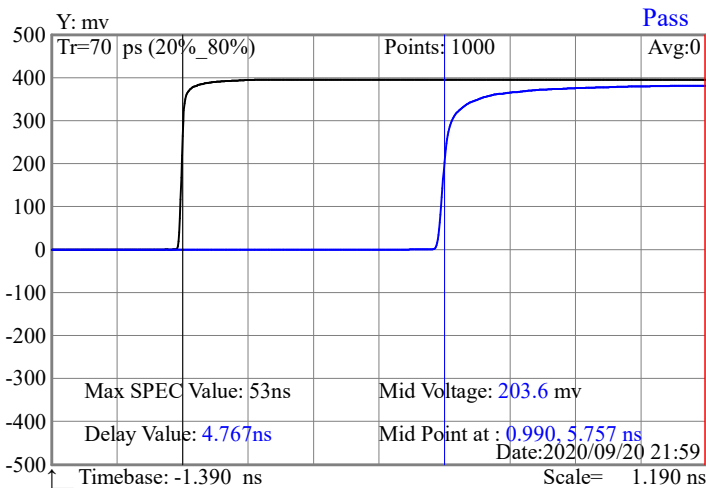
Connector Impedance FarEnd (TX0)



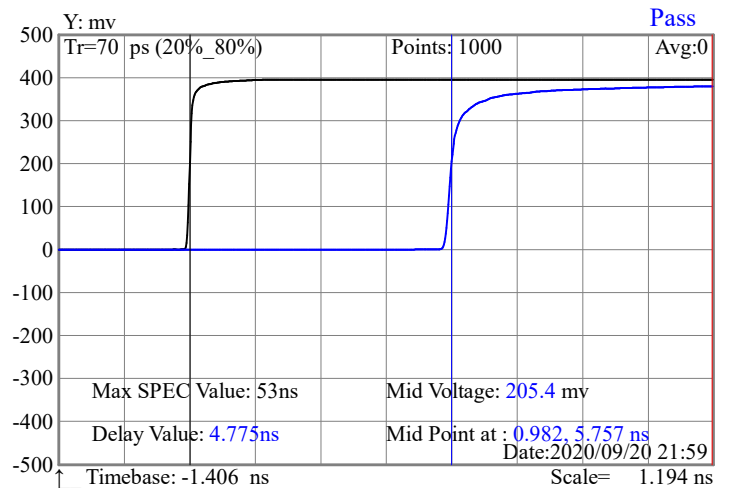
Connector Impedance FarEnd (TX1)



Differential Delay (TX0)

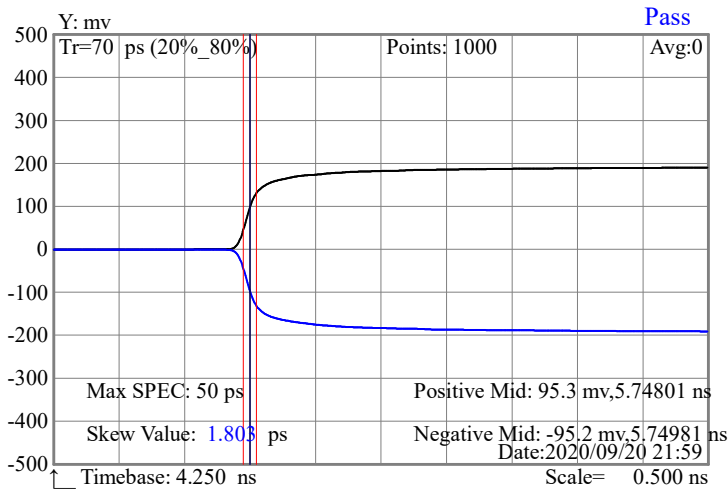


Differential Delay (TX1)



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IntraPair Skew (TX0)



IntraPair Skew (TX1)

