

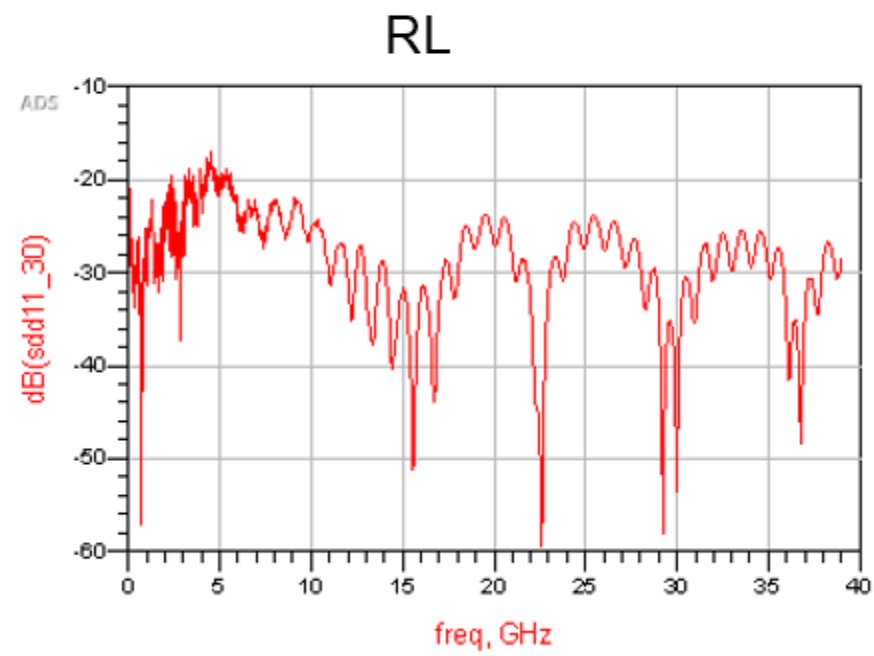
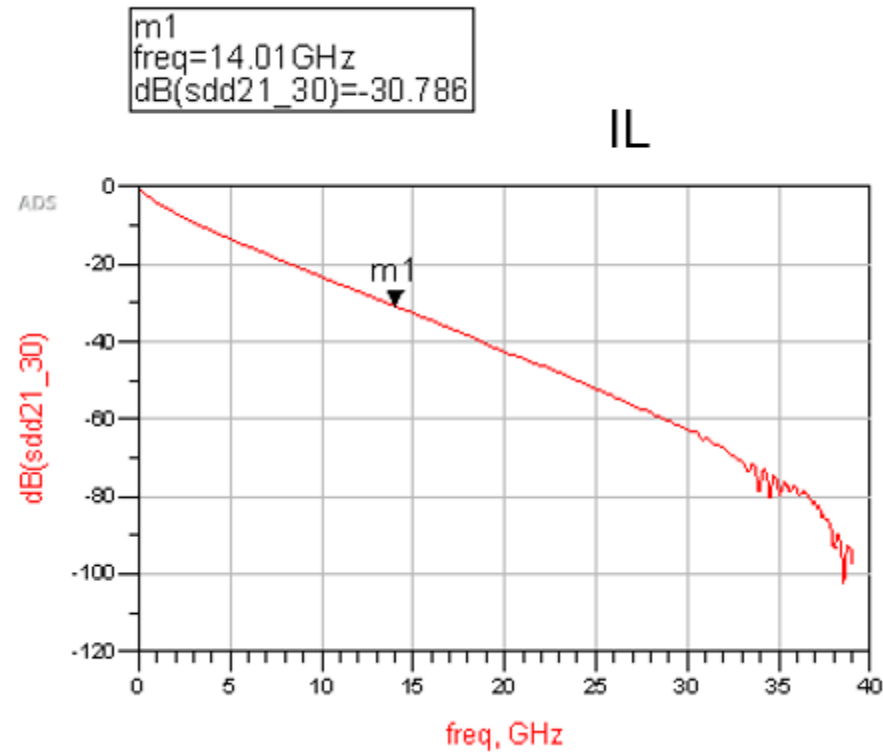


Cavium Channels

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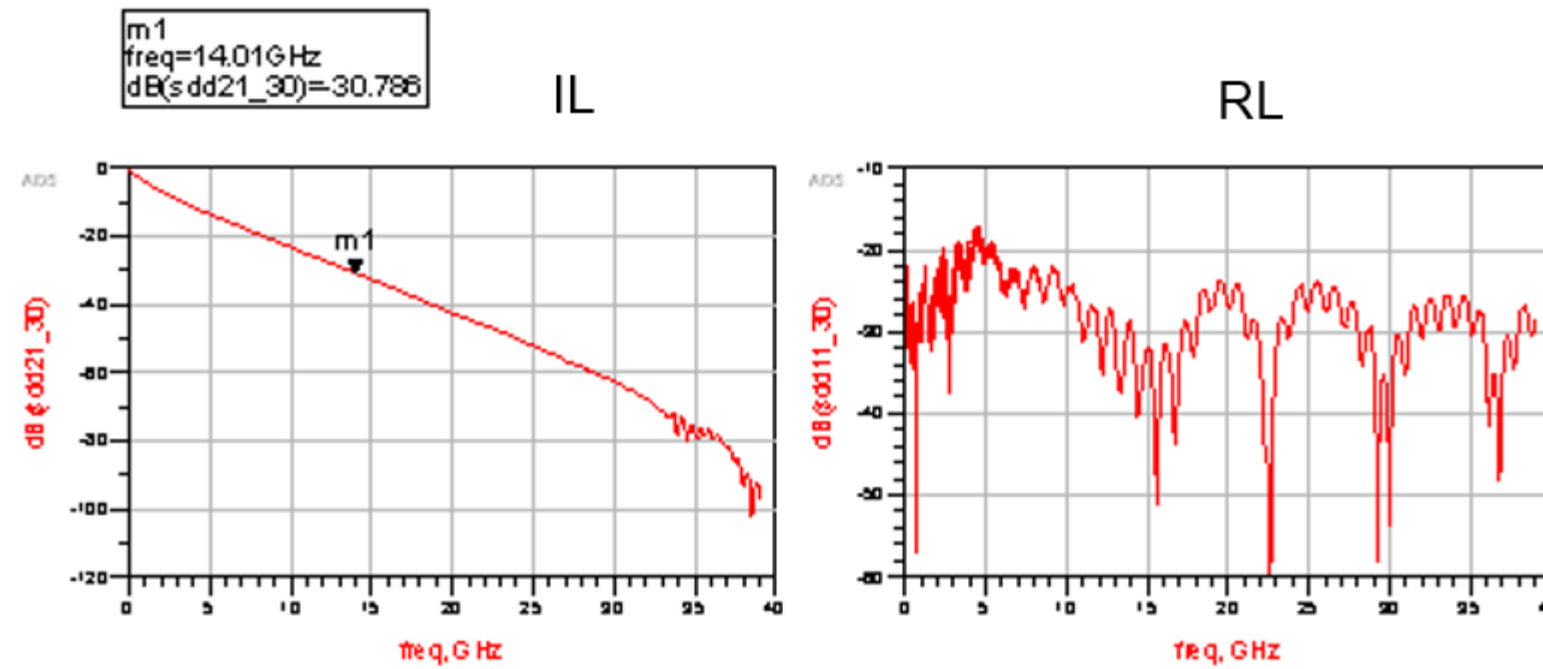
30dB_HighZ Cavium Channel



Port order

1 2
3 4

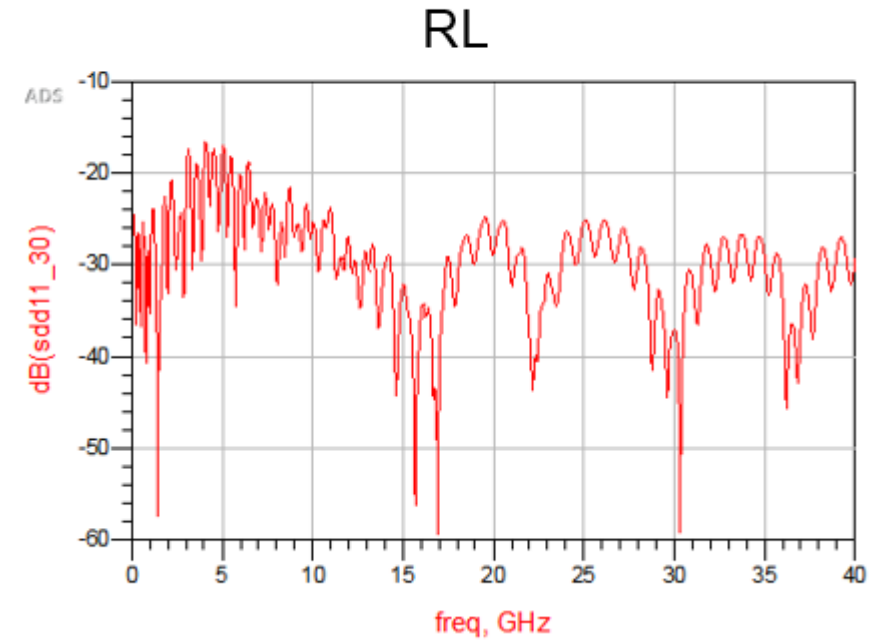
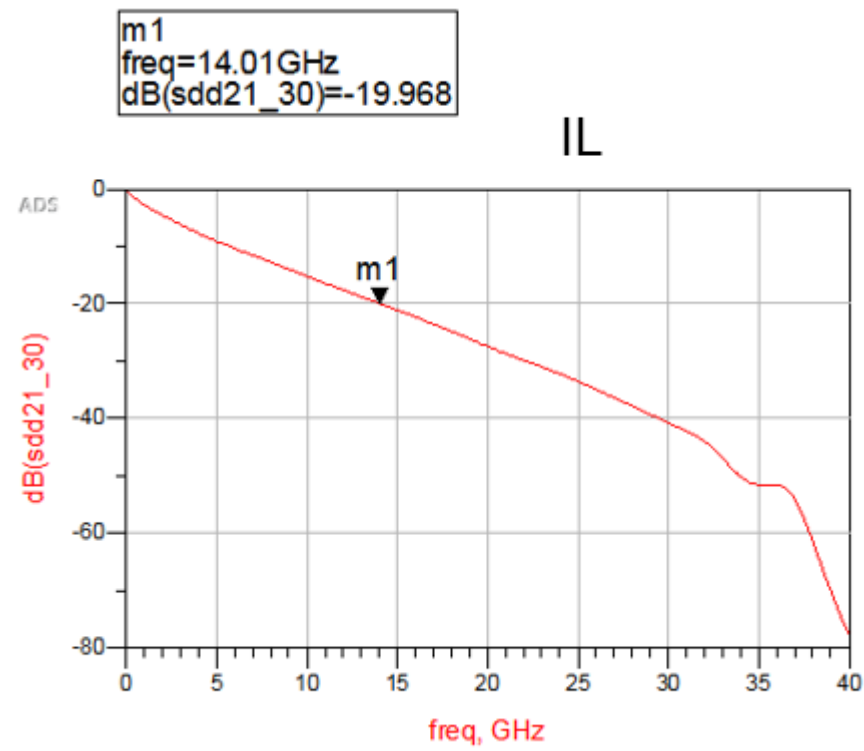
30dB_HighZ_Nom_HighZ Cavium Channel



Port order

1 2
3 4

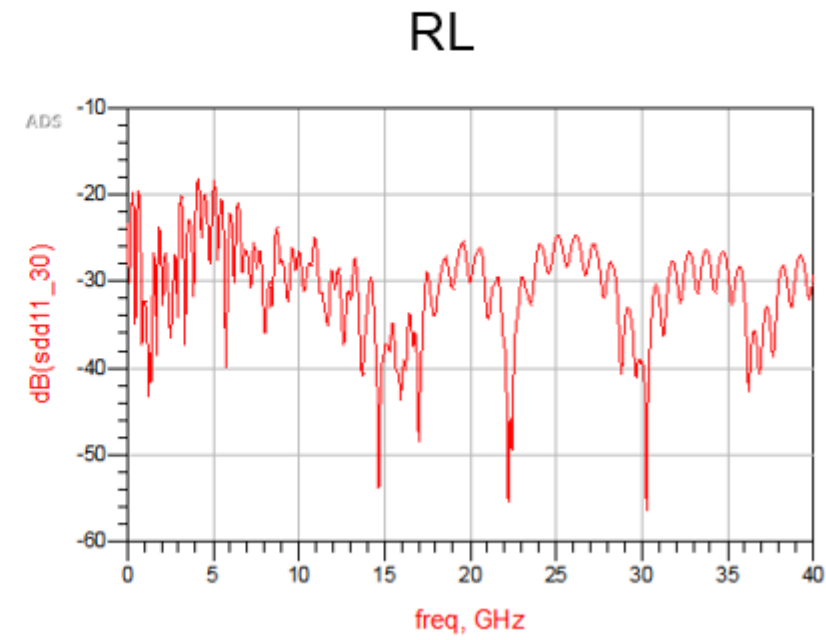
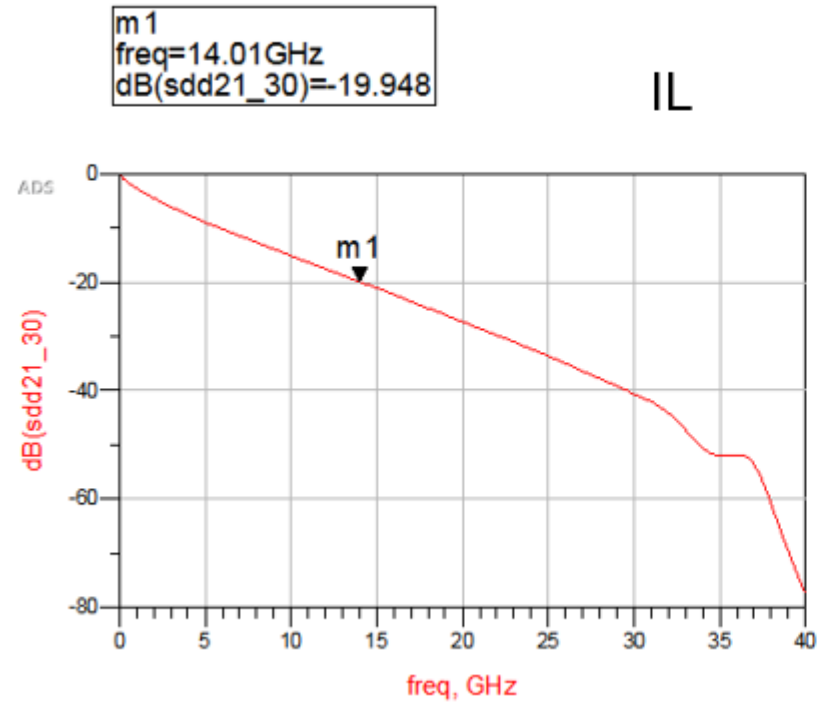
20dB_HighZ Cavium Channel



Port order

1 2
3 4

20dB_HighZ_Nom_HighZ Cavium Channel



Port order

1 2
3 4

COM – Baseline with A_fe and A_ne = 0

Table 93A-1 parameters				I/O control			Table 93A-3 parameters		
Parameter	Setting	Units	Information				Parameter	Setting	Units
f_b	26.5625	GBd		DIAGNOSTICS	0	logical	package_tl_gamma0_a1_a2	[0 1.734e-3 1.455e-4]	
f_min	0.05	GHz		DISPLAY_WINDOW	0	logical	package_tl_tau	6.141E-03	ns/mm
Delta_f	0.01	GHz		Display frequency domain	1	logical	package_Z_c	[83.7 102.3]	Ohm (tdr sel)
C_d	[1.8e-4 1.8e-4]	nF	[TX RX]	CSV_REPORT	1	logical			
z_p select	[1 2]		[test cases to run]	RESULT_DIR	.\results\V165_{date}\				
z_p (TX)	[12 30]	mm	[test cases]	SAVE_FIGURES	0	logical			
z_p (NEXT)	[12 12]	mm	[test cases]	Port Order	[1 3 2 4]				
z_p (FEXT)	[12 30]	mm	[test cases]	RUNTAG	v165_d1p0a				
z_p (RX)	[12 30]	mm	[test cases]						
C_p	[1.1e-4 1.1e-4]	nF	[TX RX]	Receiver testing					
R_0	50	Ohm		RX_CALIBRATION	0	logical			
R_d	[55 45]	Ohm	tdr selected	Sigma BBN step	5.00E-03	V			
f_r	0.75	*fb		IDEAL_TX_TERM	0	logical			
c(0)	0.6		min	T_r	1.20E-02	ns			
c(-1)	[-0.25:0.05:0]		[min:step:max]	FORCE_TR	1	logical			
c(-2)	[0:0.025:0.1]		[min:step:max]						
c(1)	[-0.25:0.05:0]		[min:step:max]	Non standard control options					
g_DC	[-20:1:0]	dB	[min:step:max]	COM_CONTRIBUTION	0	logical			
f_z	10.625	GHz							
f_p1	10.625	GHz		New 'cd exploratory					
f_p2	1.00E+99	GHz		TDR	1	logical			
A_v	[0.39357 0.436]	V	tdr selected	WC_PORTZ	0	logical			
A_fe	[0 0]	V	tdr selected	T_k	0.6	ns			
A_ne	[0 0]	V	tdr selected						
L	4								
M	32								
N_b	12	UI							
b_max(1)	0.7								
b_max(2..N_b)	0.2								
sigma_RJ	0.01	UI							
A_DD	0.02	UI							
eta_0	1.64E-08	V ² /GHz							
SNR_TX	32.5	dB	tdr selected						
R_LM	0.95								
DER_0	1.00E-04								
Operational control									
COM Pass threshold	3	dB							
Include PCB	0	Value	0, 1, 2						
g_DC_HP	[-6:1:0]		[min:step:max]						
f_HP_PZ	0.6640625	GHz							

Table 92-12 parameters		
Parameter	Setting	Units
board_tl_gamma0_a1_a2	[0 4.114e-4 2.547e-4]	
board_tl_tau	6.191E-03	ns/mm
board_Z_c	110	Ohm
z_bp (TX)	151	mm
z_bp (NEXT)	72	mm
z_bp (FEXT)	72	mm
z_bp (RX)	151	mm

Channel	12mm	30mm
30dB_HighZ_Nom_HighZ	4.88	4.11
30dB_HighZ	4.41	3.74
20dB_HighZ_Nom_HighZ	6.81	6.28
20dB_HighZ	6.32	5.92

Table 93A-1 parameters			
Parameter	Setting	Units	Information
f_b	26.5625	GBd	
f_min	0.05	GHz	
Delta_f	0.01	GHz	
C_d	[1.8e-4 1.8e-4]	nF	[TX RX]
z_p select	[2]		[test cases to run]
z_p (TX)	[12 30]	mm	[test cases]
z_p (NEXT)	[12 12]	mm	[test cases]
z_p (FEXT)	[12 30]	mm	[test cases]
z_p (RX)	[12 30]	mm	[test cases]
C_p	[1.1e-4 1.1e-4]	nF	[TX RX]
R_0	50	Ohm	
R_d	[55 55]	Ohm	tdr selected
f_r	0.75	*fb	
c(0)	0.6		min
c(-1)	[-0.25:0.05:0]		[min:step:max]
c(-2)	[0:0.025:0.1]		[min:step:max]
c(1)	[-0.25:0.05:0]		[min:step:max]
g_DC	[-20:1:0]	dB	[min:step:max]
f_z	10.625	GHz	
f_p1	10.625	GHz	
f_p2	1.00E+99	GHz	
A_v	[0.436]	V	tdr selected
A_fe	[0.436]	V	tdr selected
A_ne	[0.636]	V	tdr selected
L	4		
M	32		
N_b	12	UI	
b_max(1)	0.7		
b_max(2..N_b)	0.2		
sigma_RJ	0.01	UI	
A_DD	0.02	UI	
eta_0	1.64E-08	V ² /GHz	
SNR_TX	32.5	dB	tdr selected
R_LM	0.95		
DER_0	1.00E-04		
Operational control			
COM Pass threshold	3	dB	
Include PCB	0	Value	0, 1, 2
g_DC_HP	[-6:1:0]		[min:step:max]
f_HP_PZ	0.6640625	GHz	

I/O control		
DIAGNOSTICS	0	logical
DISPLAY_WINDOW	0	logical
Display frequency domain	1	logical
CSV_REPORT	1	logical
RESULT_DIR	.\results\%V165_(date)\	
SAVE_FIGURES	0	logical
Port Order	[1 3 2 4]	
RUNTAG	v165_d1p0a	
Receiver testing		
RX_CALIBRATION	0	logical
Sigma BBN step	5.00E-03	V
IDEAL_TX_TERM	0	logical
T_r	1.20E-02	ns
FORCE_TR	1	logical
Non standard control options		
COM_CONTRIBUTION	0	logical
New 'cd exploratory		
TDR	0	logical
WC_PORTZ	0	logical
T_k	0.6	ns

Table 93A-3 parameters		
Parameter	Setting	Units
package_tl_gamma0_a1_a2	[0 1.734e-3 1.455e-4]	
package_tl_tau	6.141E-03	ns/mm
package_Z_c	90	Ohm (tdr sel)
Table 92-12 parameters		
Parameter	Setting	Units
board_tl_gamma0_a1_a2	[0 4.114e-4 2.547e-4]	
board_tl_tau	6.191E-03	ns/mm
board_Z_c	110	Ohm
z_bp (TX)	151	mm
z_bp (NEXT)	72	mm
z_bp (FEXT)	72	mm
z_bp (RX)	151	mm

Channel	COM (30mm)
30dB_HighZ_Nom_HighZ	3.04
30dB_HighZ	3.03
20dB_HighZ_Nom_HighZ	3.36
20dB_HighZ	3.17

