# **Design Simulation Results**



## CELL: BD2SCARUDQPCH\_EXT\_CSF\_1V8\_FC\_OUTER

TIMING					
Arc: IO-ZI	Arc: IO-ZI				
Dependancy: H	/ST				
Delay/Transition	Mode	Slope(nS)	Load(pF)	Min(nS)	Max(nS)
RiseDelay	0	1.66	0.2	0.391472	0.840616
RiseDelay	1	1.66	0.2	0.673969	1.16716
FallDelay	0	1.66	0.2	0.445276	0.906743
FallDelay	1	1.66	0.2	0.692279	1.23551
RiseTransition	0	1.66	0.2	0.0132214	0.149939
RiseTransition	1	1.66	0.2	0.0132925	0.149991
FallTransition	0	1.66	0.2	0.02294	0.141496
FallTransition	1	1.66	0.2	0.0229494	0.141477

TIMING					
Arc: A-IO	Arc: A-IO				
Dependancy: LO	OWEMI				
Delay/Transition	Mode	Slope(nS)	Load(pF)	Min(nS)	Max(nS)
RiseDelay	0	0.1	15	1.23404	3.1101
RiseDelay	1	0.1	15	1.44991	3.6762
FallDelay	0	0.1	15	1.24321	2.97719
FallDelay	1	0.1	15	1.48804	3.64623
RiseTransition	0	0.1	15	0.578776	1.41962
RiseTransition	1	0.1	15	0.619595	1.54411
FallTransition	0	0.1	15	0.689586	1.59051
FallTransition	1	0.1	15	0.730633	1.71696

LEAKAGE					
Rail: vdde1v8					
Dependancy: Pl	Dependancy: PUN PDN PUN15K LOWEMI HYST				
Leakpower	Mode	Min(uW)	Max(uW)		



Leakage	0010X	0.0008889	10.83
Leakage	00110	0.0008889	10.83
Leakage	00111	0.0008889	10.92
Leakage	01100	0.0008721	125.3
Leakage	01101	0.0008889	125.3
Leakage	0111X	0.0008889	125.3
Leakage	101XX	0.006261	132.5
Leakage	110XX	0.0008889	421.7
Leakage	11100	0.0008889	10.61
Leakage	11101	0.0008889	10.83
Leakage	1111X	0.0008889	10.83

LEAKAGE						
Rail: vdd						
Dependancy: PUN	N PDN PUN15K LOWEM	HYST				
Leakpower	Mode	Min(uW)	Max(uW)			
Leakage	0010X	0.0001766	6.188			
Leakage	00110	0.0001766	6.188			
Leakage	00111	0.0001766	6.233			
Leakage	011XX	0.0001759	6.188			
Leakage	101XX	0.0001766	6.195			
Leakage	110XX	0.0001769	6.188			
Leakage	111XX	0.0001766	6.188			



## CELL: BD4SCARUDQPCH\_EXT\_CSF\_1V8\_FC\_OUTER

TIMING					
Arc: A-IO	Arc: A-IO				
Dependancy: LC	OWEMI				
Delay/Transition	Mode	Slope(nS)	Load(pF)	Min(nS)	Max(nS)
RiseDelay	0	0.1	15	0.884751	2.31323
RiseDelay	1	0.1	15	1.04923	2.68992
FallDelay	0	0.1	15	0.883061	2.24234
FallDelay	1	0.1	15	1.04885	2.68551
RiseTransition	0	0.1	15	0.328266	0.82599
RiseTransition	1	0.1	15	0.362575	0.916077
FallTransition	0	0.1	15	0.374755	0.882764
FallTransition	1	0.1	15	0.412072	0.990433

TIMING					
Arc: IO-ZI					
Dependancy: H	YST				
Delay/Transition	Mode	Slope(nS)	Load(pF)	Min(nS)	Max(nS)
RiseDelay	0	1.66	0.2	0.391598	0.83997
RiseDelay	1	1.66	0.2	0.668028	1.15885
FallDelay	0	1.66	0.2	0.444501	0.907112
FallDelay	1	1.66	0.2	0.708533	1.23227
RiseTransition	0	1.66	0.2	0.0132036	0.149765
RiseTransition	1	1.66	0.2	0.0131842	0.150026
FallTransition	0	1.66	0.2	0.0227831	0.141308
FallTransition	1	1.66	0.2	0.0228014	0.141198

LEAKAGE				
Rail: vdde1v8				
Dependancy: PUN PDN PUN15K LOWEMI HYST				
Leakpower	Mode	Min(uW)	Max(uW)	



Leakage	001XX	0.0009216	14.42
Leakage	011XX	0.0009216	125.3
Leakage	101XX	0.006299	132.5
Leakage	110XX	0.0009216	421.7
Leakage	111XX	0.0009216	14.42

LEAKAGE Rail: vdd						
Leakpower	Mode	Min(uW)	Max(uW)			
Leakage	001XX	0.0001771	6.186			
Leakage	01100	0.0001764	6.295			
Leakage	01101	0.0001764	6.186			
Leakage	0111X	0.0001764	6.186			
Leakage	101XX	0.0001771	6.194			
Leakage	110XX	0.0001774	6.186			
Leakage	111XX	0.0001771	6.186			

## CELL: BD6SCARUDQPCH\_EXT\_CSF\_1V8\_FC\_OUTER

TIMING					
Arc: A-IO	Arc: A-IO				
Dependancy: LC	<b>WEMI</b>				
Delay/Transition	Mode	Slope(nS)	Load(pF)	Min(nS)	Max(nS)
RiseDelay	0	0.1	15	0.771522	2.05244
RiseDelay	1	0.1	15	0.965802	2.53642
FallDelay	0	0.1	15	0.8099	2.09649
FallDelay	1	0.1	15	0.99213	2.58243
RiseTransition	0	0.1	15	0.265569	0.671988
RiseTransition	1	0.1	15	0.311522	0.802147
FallTransition	0	0.1	15	0.293279	0.706875
FallTransition	1	0.1	15	0.338155	0.835187

TIMING					
Arc: IO-ZI	Arc: IO-ZI				
Dependancy: H	YST				
Delay/Transition	Mode	Slope(nS)	Load(pF)	Min(nS)	Max(nS)
RiseDelay	0	1.66	0.2	0.392577	0.840712
RiseDelay	1	1.66	0.2	0.667381	1.16516
FallDelay	0	1.66	0.2	0.445867	0.911491
FallDelay	1	1.66	0.2	0.704486	1.2383
RiseTransition	0	1.66	0.2	0.0129898	0.149745
RiseTransition	1	1.66	0.2	0.0133272	0.149885
FallTransition	0	1.66	0.2	0.0229158	0.140978
FallTransition	1	1.66	0.2	0.0229074	0.141121

LEAKAGE				
Rail: vdde1v8				
Dependancy: PUN PDN PUN15K LOWEMI HYST				
Leakpower	Mode	Min(uW)	Max(uW)	



Leakage	001XX	0.0009399	16.75
Leakage	011XX	0.0009399	125.3
Leakage	101XX	0.006298	132.5
Leakage	110XX	0.0009399	421.7
Leakage	111XX	0.0009399	16.75

LEAKAGE Rail: vdd					
Leakpower	Mode	Min(uW)	Max(uW)		
Leakage	001XX	0.0001771	6.182		
Leakage	011XX	0.0001764	6.182		
Leakage	101XX	0.0001771	6.189		
Leakage	1100X	0.0001774	6.182		
Leakage	11010	0.0001774	6.182		
Leakage	11011	0.0001774	6.206		
Leakage	111XX	0.0001771	6.182		

## CELL: BD8SCARUDQPCH\_EXT\_CSF\_1V8\_FC\_OUTER

TIMING					
Arc: IO-ZI					
Dependancy: H	YST				
Delay/Transition	Mode	Slope(nS)	Load(pF)	Min(nS)	Max(nS)
RiseDelay	0	1.66	0.2	0.392472	0.839841
RiseDelay	1	1.66	0.2	0.67784	1.16936
FallDelay	0	1.66	0.2	0.440575	0.907795
FallDelay	1	1.66	0.2	0.706037	1.23886
RiseTransition	0	1.66	0.2	0.0133308	0.149828
RiseTransition	1	1.66	0.2	0.0129179	0.150119
FallTransition	0	1.66	0.2	0.0229003	0.140534
FallTransition	1	1.66	0.2	0.0227993	0.140933

TIMING					
Arc: A-IO					
Dependancy: LOWEMI					
Delay/Transition	Mode	Slope(nS)	Load(pF)	Min(nS)	Max(nS)
RiseDelay	0	0.1	15	0.706726	1.89535
RiseDelay	1	0.1	15	0.909125	2.42014
FallDelay	0	0.1	15	0.735959	1.91758
FallDelay	1	0.1	15	0.894547	2.33842
RiseTransition	0	0.1	15	0.222259	0.566798
RiseTransition	1	0.1	15	0.272822	0.709528
FallTransition	0	0.1	15	0.239482	0.577975
FallTransition	1	0.1	15	0.278506	0.692028

LEAKAGE				
Rail: vdde1v8				
Dependancy: PUN PDN PUN15K LOWEMI HYST				
Leakpower	Mode	Min(uW)	Max(uW)	



Leakage	001XX	0.0009485	19.93
Leakage	011XX	0.0009485	125.3
Leakage	101XX	0.006314	132.5
Leakage	110XX	0.0009485	421.7
Leakage	111X0	0.0009485	19.67
Leakage	111X1	0.0009485	19.93

LEAKAGE Rail: vdd						
					Dependancy: PU	Dependancy: PUN PDN PUN15K LOWEMI HYST
Leakpower	Mode	Min(uW)	Max(uW)			
Leakage	0010X	0.0001766	6.188			
Leakage	00110	0.0001766	6.188			
Leakage	00111	0.0001766	6.225			
Leakage	011XX	0.000176	6.188			
Leakage	101XX	0.0001766	6.196			
Leakage	1100X	0.000177	6.188			
Leakage	11010	0.000177	6.188			
Leakage	11011	0.000177	6.225			
Leakage	111XX	0.0001766	6.188			