

FDD Mode Current

#1: FDD: 4T4R2FB/ 4T4R1F Single band ; DAC 6GSPS, ADC 3GSPS; TX/FB 368.64MHz, RX 184.32MHz; Lane rate 25GSPS; TX LMSF 2818, FB 1418, RX 1/8/1/16.

Current Breakdown and 25% Current Margin Non- Interleaved DAC; Tx DSA = 0dB

TX DSA = 0dB											
FDD: 4T4R2FB/4T4R1F Single band , DAC 6GSPS, ADC 3GSPS; TX/FB 368.64MHz, RX 184.32MHz, 25GSPS; TX LMSF 2818, FB1418, RX 1/8/1/16; NCO 1800M											
						4T4R2F			4T4R1F		
	Supply	Description	Min (V)	Nominal (V)	Max (V)	FDD Typical current (I mA)	FDD Typical power (mW)	Current Margin(25%) for design (1.25* I mA)	FDD Typical current (I mA)	FDD Typical power (mW)	Current Margin(25%) for design (1.25* I mA)
PLL Analog	VDD1P8PLL+VDD1P8PLLVC0	Analog 1.8V supply for PLL	1.75	1.8	1.85	78.3	141	97.875	78.3	141	97.875
	VDD1P2PLLCLKREF	Analog PLL + Clock supply	1.15	1.2	1.25	73.0	88	91.25	72.3	87	90.375
RF Analog Supply	VDD1P8FB+VDD1P8RX+VDD1P8TX	Analog 1.8V supply for FB+TX+RX	1.75	1.8	1.85	1661.1	2990	2076.375	1487.5	2678	1859.375
	VDD1P2FB+VDD1P2RX	Analog 1.2V supply for FB+RX	1.15	1.2	1.25	891.3	1070	1114.125	743.7	892	929.625
Clock Distribution Supply	VDD1P8TXDAC+VDD1P8FBCLK+VDD1P8RXCLK+VDDA1P8V (SerDes)+VDD1P8VGPI0	Analog 1.8V supply for TX DAC, and clock supply for FB+RX+GPI0	1.75	1.8	1.85	663.0	1193	828.75	583.6	1050	729.5
	VDDPLL1P2FBCML+VDDPLL1P2RXCML+VDD1P2TXENC+VDD1P2TXCLK										
		Clocking 1.2V supply for RF	1.15	1.2	1.25	917.1	1101	1146.375	914.4	1097	1143
Digital	DVDD+VDDT0P9V (SerDes)	Digital supply	0.9	0.925	0.95	2892.0	2661	3615	2696.5	2481	3370.625
Note: 1. Un-used lanes for serdes are turned off; 2. TX Dsa = 0dB; 3.DAC Non-IL mode (Room Temperature)							9243			8426	

#3: FDD: 4T4R2FB/ 4T4R1F Single band , DAC 6GSPS, ADC 3GSPS; TX/FB 245.76MHz, RX 122.88MHz; Lane Rate 16GSPS ; TX LMSF 2818, FB 1418, RX 1/8/1/16

Current Breakdown and 25% Current Margin
Non- Interleaved DAC; Tx DSA = 0dB

TX DSA = 0dB											
FDD: 4T4R2FB/4T4R1F Single band , DAC 6GSPS, ADC 3GSPS; TX/FB 245.76MHz, RX 122.88MHz, 16GSPS ; TX LMSF 2818, FB1418, RX 1/8/1/16; NCO 1800M											
						4T4R2F			4T4R1F		
	Supply	Description	Min (V)	Nominal (V)	Max (V)	FDD Typical current (I mA)	FDD Typical power (mW)	Current Margin(25%) for design (1.25* I mA)	FDD Typical current (I mA)	FDD Typical power (mW)	Current Margin(25%) for design (1.25* I mA)
PLL Analog	VDD1P8PLL+VDD1P8PLLVCO	Analog 1.8V supply for PLL	1.75	1.8	1.85	79.5	143	99.3125	78.3	141	97.875
	VDD1P2PLLCLKREF	Analog PLL + Clock supply	1.15	1.2	1.25	72.8	87	90.9375	71.7	86	89.625
RF Analog Supply	VDD1P8FB+VDD1P8RX+VDD1P8TX	Analog 1.8V supply for FB+TX+RX	1.75	1.8	1.85	1661.1	2990	2076.375	1485.9	2675	1857.375
	VDD1P2FB+VDD1P2RX	Analog 1.2V supply for FB+RX	1.15	1.2	1.25	892.7	1071	1115.8125	743.0	892	928.6875
Clock Distribution Supply	VDD1P8TXDAC+VDD1P8FBCLK+VDD1P8RXCLK+VDDA1P8V (SerDes)+VDD1P8VGPI0	Analog 1.8V supply for TX DAC, and clock supply for FB+RX+GPIO	1.75	1.8	1.85	652.9	1175	816.125	607.2	1093	759
	VDDPLL1P2FBCML+VDDPLL1P2RXCML+VDD1P2TXENC+VDD1P2TXCLK	Clocking 1.2V supply for RF	1.15	1.2	1.25	925.2	1110	1156.5	912.9	1095	1141.125
Digital	DVDD+VDDT0P9V (SerDes)	Digital supply	0.9	0.925	0.95	2702.5	2486	3378.125	2473.5	2276	3091.875
Note: 1. Un-used lanes for serdes are turned off; 2. TX Dsa = 0dB; 3.DAC Non-IL mode (Room Temperature)							9063			8257	

#2: FDD: 2T4R1FB Single band, DAC 6GSPS, ADC 3GSPS; TX/FB 368.64MHz, RX 184.32MHz;
Lane Rate 25GSPS ; TX LMSF 2818, FB 1418, RX 1/8/1/16

Current Breakdown and 25% Current Margin

TX DSA = 0dB								
FDD: 2T4R1F Single band , DAC 6GSPS, ADC 3GSPS; TX/FB 368.64MHz, RX 184.32MHz, 25GSPS; TX LMSF 2818, FB1418, RX 1/8/1/16; NCO 1800M								
						2T4R1F		
	Supply	Description	Min (V)	Nominal (V)	Max (V)	FDD Typical current (I mA)	FDD Typical power (mW)	Current Margin(25%) for design (1.25* I mA)
PLL Analog	VDD1P8PLL+VDD1P8PLLVCO	Analog 1.8V supply for PLL	1.75	1.8	1.85	77.6	140	96.9375
	VDD1P2PLLCLKREF	Analog PLL + Clock supply	1.15	1.2	1.25	70.8	85	88.5
RF Analog Supply	VDD1P8FB+VDD1P8RX+VDD1P8TX	Analog 1.8V supply for FB+TX+RX	1.75	1.8	1.85	1196.7	2154	1495.875
	VDD1P2FB+VDD1P2RX	Analog 1.2V supply for FB+RX	1.15	1.2	1.25	736.5	884	920.625
Clock Distribution Supply	VDD1P8TXDAC+VDD1P8FBCLK+VDD1P8RXCLK+VDDA1P8V (SerDes)+VDD1P8VGPIO	Analog 1.8V supply for TX DAC, and clock supply for FB+RX+GPIO	1.75	1.8	1.85	502.7	905	628.3125
	VDDPLL1P2FBCML+VDDPLL1P2RXCML+VDD1P2TXENC+VDD1P2TXCLK	Clocking 1.2V supply for RF	1.15	1.2	1.25	577.7	693	722.0625
Digital	DVDD+VDDT0P9V (SerDes)	Digital supply	0.9	0.925	0.95	2251.4	2071	2814.1875
Note: 1. Un-used lanes for serdes are turned off; 2. TX Dsa = 0dB; 3.DAC Non-IL mode (Room Temperature)							6932	