

P/N: EFR32xG1x_DISC_REF_DES
Revision: A00
Description: EFR32FG14 Discrete Balun 490MHz 20 dBm Reference Design
Revised: Friday, March 20, 2020

Item	Quantity	Reference	Value	Manufacturer	Manufacturers Part Number	Description	Tolerance	Rating	Technology	Not Mounted
1	1	AT1	INVERTED_F							
2	1	C1	NC							NM
3	2	C3,C4	1P7	Murata	GRM0335C1H1R7BA01		±0.1P		COG	
4	1	C5	270P	Murata	GRM0335C1E271GA01					
5	1	C6	10P	Murata	GRM0335C1H100GA01					
6	1	C8	5P6	Murata	GRM0335C1H5R6BA01		±0.1P		COG	
7	1	C10	6P2	Murata	GRM0335C1H6R2BA01		±0.1P		COG	
8	1	C11	10P	Murata	GRM0335C1H100GA01		±2%		COG	
9	1	C12	6P2	Murata	GRM0335C1H6R2BA01		±0.1pF		COG	
10	1	C13	NC							NM
11	1	C14	2P	Murata	GRM0335C1H2R0BA01		±0.1pF			
12	1	C102	100P			CAP CER COG 100pF 50V 5%		5% 50V	COG	
13	2	C103,C107	10P			CAP CER NP0 10pF 50V 5%		5% 50V	COG	
14	1	C106	220N			CAP CER X7R 220nF 16V 10%		10% 16V	X7R	
15	2	C110,C112	10U			CAP CER X5R 10uF 6.3V 20%		20% 6.3V	X5R	
16	3	C111,C114,C117	1U			CAP CER X5R 1uF 25V 10%		10% 25V	X5R	
17	1	C113	10N			CAP CER X7R 10nF 16V 10%		10% 16V	X7R	
18	1	C115	4U7			CAP CER X5R 4.7uF 6.3V 10%		10% 6.3V	X5R	
19	6	C116,C124,C200,C201,C203,C207	100N			CAP CER X7R 100nF 16V 10%		10% 16V	X7R	
20	1	C205	10U					10% 10V	X5R	NM
21	1	L1	NC							NM
22	1	L2	120P	Murata	GRM0335C1H121GA01		±2%			
23	1	L3	62N	Murata	LQP03HQ62NH02	INDUCTOR RF 62nH 100mA 3%	±3%			
24	2	L4	330N	Murata	LQW15CNR33J10D	INDUCTOR RF 330nH 390mA 520MHz ±5%				
25	2	L5,L6	12N	Murata	LQP03HQ12NH02	INDUCTOR RF 12nH 300mA 3%	±3%			
26	1	L7	18N	Murata	LQP03HQ18NH02	INDUCTOR RF 18nH				
27	2	L8,L9	22N	Murata	LQP03HQ22NH02	INDUCTOR RF 22nH 170mA 3%	±3%			
28	1	L100	4U7	Murata	LQH3NPN4R7MM0L	INDUCTOR POWER 4.7uH 1.25A 20%				
29	1	L101	CBF102WB	Würth Electronics	74279266	FERRITE BEAD 1000R 200mA				
30	2	L102,L103	BLM18AG601SN1	Murata	BLM18AG601SN1D					
31	1	PCB1	PCB4259A		PCB4259A Rev. A00					
32	1	P1	SMA	TE Connectivity	5-1814832-1	CONN SOCKET SMA STR DIE CAST				
33	1	P2	U.FL	Hirose	U.FL-R-SMT-1					
34	2	P200,P201	SOCKET_2X20_1.27MM	Samtec	SFC-120-T2-L-D-A-K-TR	CONN SOCKET STRIP 1.27mm				
35	1	RP200	100R	ROHM	MNR04M0APJ101	RES ARRAY 100R 5% CONVEX				
36	5	R1,R201,R203,R205,R211	OR			RES OR lmax 2A JUMPER				
37	4	R2,R204,R206,R210	OR							NM
38	1	R100	1R			RES 1R 1/16W 1% 200ppm				
39	1	R103	330K			RES 330K 1/16W 1% 100ppm				
40	1	R200	10K			RES 10K 1/16W 1% 100ppm				
41	1	SH100	RF_SHIELD_FRAME_BMI	Laird Technologies	BMI-S-203-F					NM
42	1	SH101	RF_SHIELD_COVER_BMI	Laird Technologies	BMI-S-203-C					NM
43	20	TPJ1,TPJ2,TPJ3,TPJ4,TPJ5,TPJ6,TPJ7,TPJ8,TPJ9,TPJ10,TPJ11,TPJ	TPJ_SMD							
44	1	TP1	RF_TEST_POINT							
45	1	U1	EFR32FG14P233F256GM	Silicon Labs	EFR32FG14P233F256GM48-BR					
46	1	U100	NC	Macronix	MX25R8035FBDIL0	IC SERIAL FLASH 8Mb				NM
47	1	U200	NC	Microchip	24AA024T-I/MNY	IC EEPROM 2KBIT SERIAL				NM
48	1	X1	38.400 MHz	KDS	DSX211SH 1ZZNAE38400AB0A					
49	1	X2	32.768 kHz	KDS	DST210 1TJG125DP1A0012					