P/N: EFR32xG1x_DISC_REF_DES

Revision: A00

Description: EFR32FG14 Discrete Balun 610MHz 20 dBm Reference Design

Revised: Friday, March 03, 2023

evisea:		arch 03, 2023								
tem		Reference	Value	Manufacturer	Manufacturers Part Number	Description	Toleranc	e Rating	Technology	Not Mounted
	1	1 AT1	INVERTED_F							
	2	1 C1	NC							NM
	3	2 C3,C4	1P6	Murata	GRM0335C1H1R6BA01		±0.1P		COG	
	4	1 C5	270P	Murata	GRM0335C1E271GA01					
	5	1 C6	7P0	Murata	GRM0335C1H7R0BA01					
	6	1 C8	3P6	Murata	GRM0335C1H3R6BA01		±0.1P		COG	
	7	2 C10,C12	4P3	Murata	GRM0335C1H4R3BA01		±0.1P		COG	
	8	1 C11	7P5	Murata	GRM0335C1H7R5BA01		±0.1P		C0G	
	9	1 C13	NC							NM
	10	1 C14	3P0	Murata	GRM0335C1H3R0BA01		±0.1pF			
	11	1 C102	100P			CAP CER COG 100pF 50V 5%		5% 50V	COG	
	12	2 C103,C107	10P			CAP CER NPO 10pF 50V 5%		5% 50V	COG	
	13	1 C106	220N			CAP CER X7R 220nF 16V 10%		10% 16V	X7R	
	14	2 C110,C112	10U			CAP CER X5R 10uF 6.3V 20%		20% 6.3V	X5R	
	15	3 C111,C114,C117	1U			CAP CER X5R 1uF 25V 10%		10% 25V	X5R	
	16	1 C113	10N			CAP CER X7R 10nF 16V 10%		10% 16V	X7R	
	17	1 C115	4U7			CAP CER X5R 4.7uF 6.3V 10%		10% 6.3V	X5R	
	18	6 C116,C124,C200,C201,C203,C207	100N			CAP CER X7R 100nF 16V 10%		10% 16V	X7R	
	19	1 C205	10U					10% 10V	X5R	NM
	20	1 L1	NC							NM
	21	1 L2	270P	Murata	GRM0335C1E271GA01					
	22	1 L3	39N	Murata	LQP03HQ39NH02	INDUCTOR RF 39nH 150mA	±3%			
	23	2 L4	270N	Murata	LQW15CNR27J10D	INDUCTOR RF 180nH 420mA 1GHz 59	% ±5%			
	24	2 L5,L6	6N2	Murata	LQP03HQ6N2H02	INDUCTOR RF 6.2nH 400mA	±3%			
	25	3 L7,L8,L9	15N	Murata	LQP03HQ15NH02	INDUCTOR RF 15nH 300mA	±3%			
	26	1 L100	4U7	Murata	LQH3NPN4R7MM0L	INDUCTOR POWER 4.7uH 1.25A 20%				
	27	1 L101	CBF102WB	Würth Electronics	7427926	6 FERRITE BEAD 1000R 200mA				
	28	2 L102,L103	BLM18AG601SN1	Murata	BLM18AG601SN1D					
	29	1 PCB1	PCB4259A		PCB4259A Rev. A00					
	30	1 P1	SMA	TE Connectivity	5-1814832-1	CONN SOCKET SMA STR DIE CAST				
	31	1 P2	U.FL	Hirose	U.FL-R-SMT-1					
	32	2 P200,P201	SOCKET 2X20 1.27MM	S Samtec	SFC-120-T2-L-D-A-K-TR	CONN SOCKET STRIP 1.27mm				
	33	1 RP200	100R	ROHM	MNR04M0APJ101	RES ARRAY 100R 5% CONVEX				
	34	5 R1,R201,R203,R205,R211	OR			RES OR Imax 2A JUMPER				
	35	4 R2,R204,R206,R210	OR							NM
	36	1 R100	1R			RES 1R 1/16W 1% 200ppm				
	37	1 R103	330K			RES 330K 1/16W 1% 100ppm				
	38	1 R200	10K			RES 10K 1/16W 1% 100ppm				
	39	1 SH100	RF_SHIELD_FRAME_BM	I-! Laird Technologies	BMI-S-203-F					NM
	40	1 SH101	RF_SHIELD_COVER_BMI	-S Laird Technologies	BMI-S-203-C					NM
		20 TPJ1,TPJ2,TPJ3,TPJ4,TPJ5,TPJ6,TPJ7,TPJ8,TPJ9,TPJ10,TPJ11,TPJ		-						
	42	1 TP1	RF_TEST_POINT							
	43	1 U1	EFR32FG14P233F256GN	14 Silicon Labs	EFR32FG14P233F256GM48-BR					
	44	1 U100	NC	Macronix	MX25R8035FBDIL0	IC SERIAL FLASH 8Mb				NM
	45	1 U200	NC	Microchip	24AA024T-I/MNY	IC EEPROM 2KBIT SERIAL				NM
	46	1 X1	38.400 MHz	KDS	DSX211SH 1ZZNAE38400AB0A					