🜵 Texas Instruments

Bill of Materials

TI DESIGNS

TIDA-00885

ltem	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer	PCB Footprint
						Part Number	-
1	11	3p3_LM_TP, 3p3_TPS_TP,		Test Point, Compact, White, TH	Keystone	5007	White Compact
2	1	C1_LF	560pF		Kemet	C0603C561K5RACTU	0603
3	1	C2_LF	0.047uF	CAP, CERM, 0.056uF, 16V, +/-10%, X7R, 0603	MuRata	GRM188R71H473KA61D	0603
4	1	C4_LF	6800pF	CAP, CERM, 6800 pF, 50 V, +/- 10%, X7R, 0603	MuRata	GRM188R71H682KA01D	0603
5	2	C7, C10	1uF	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603	TDK	C1608X7R1C105K	0603
6	8	C8, C9, C11, C12, C16,	0.1uF	CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603	AVX	0603YC104JAT2A	0603
7	6	C13, C14, C15, C17, C18,	100pF	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0,	MuRata	GRM1535C1H101JDD5D	0402
8	6	C21, C22, C23, C24, C25,	10uF	CAP, CERM, 10uF, 10V, +/-10%, C0G/NP0, 0603	TDK	C1608X5R1A106M	0603
9	1	C27	1uF	CAP, CERM, 1 µF, 6.3 V, +/- 10%, X5R, 0603	TDK	C1608X5R0J105K	0603
10	1	Cbias	1uF	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603_095	Wurth Elektronik	885012206052	0603_095
11	1	Cboot	0.47uF	CAP, CERM, 0.47 µF, 10 V, +/- 10%, X5R, 0402	TDK	C1005X5R1A474K050BB	0402
12	1	Cff	10pF	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0,	MuRata	GRM1885C1H100JA01D	0603
13	1	Cin1	0.47uF	CAP, CERM, 0.47 μF, 50 V, +/- 10%, X7R, 0603	TDK	C1608X7R1H474K080A C	0603
14	2	Cin, Cin_0	10uF	CAP, CERM, 10 µF, 25 V, +/- 10%, X5R, 0805	MuRata	GRM219R61E106KA12D	0805
15	3	Cout0, Cout1, Cout2	22uF	CAP, CERM, 22 µF, 16 V, +/- 10%, X5R, 0805	TDK	C2012X5R1C226K125A C	0805
16	1	Css	3300pF	CAP, CERM, 3300 pF, 50 V, +/- 5%, C0G/NP0, 0603	MuRata	GRM1885C1H332JA01D	0603
17	1	CVcc	2.2uF	CAP, CERM, 2.2 μF, 10 V, +/- 10%, X5R, 0402	ТДК	C1005X5R1A225K050BC	0402
18	1	D1	Green	LED, Green, SMD	Lite-On	LTST-C190GKT	1.6x0.8x0.8mm
19	4	L1, L2, L3, L4	18nH	Inductor, Multilayer, Air Core, 18 nH, 0.3 A, 0.36 ohm, SMD	MuRata	LQG15HS18NJ02D	0402 polarized
20	1	L1_LM	12uH	Inductor, Shielded Drum Core, Ferrite, 12 µH, 1.4 A, 0.16 ohm, SMD	Coilcraft	LPS5030-123MLB	LPS5030
21	1	L1_TPS	2.2uH	Inductor, Shielded, Composite, 2.2 µH, 3.7 A, 0.02	Coilcraft	XFL4020-222MEB	4x2x4mm
22	7	OSCinM, OSCinP,		Connector, SMT, End launch SMA 50 ohm	Emerson Network Power Connectivity	142-0701-851	SMA
23	1	R2_LF	150	RES, 150, 5%, 0.1 W, 0603	Vishay-Dale	CRCW0603150RJNEA	0603
24	1	R3_LF	12	RES, 270 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060312R0JNEA	0603

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	PCB Footprint
	12	R4 LF, R12, R23, R24,	0	RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA	0603
		R31, R36, R39, R40, R41,	°		Violity Dalo		
25		R42, R43, Rtps1					
26	4	R5, R6, R9, R13	12k	RES, 12k ohm, 5%, 0.1W, 0603	Vishav-Dale	CRCW060312K0JNEA	0603
27	4	R16, R18, R20, R22	18	RES, 18 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060318R0JNEA	0603
28	2	R19, R21	68	RES, 68 ohm, 5%, 0.1W, 0603	Vishav-Dale	CRCW060368R0JNEA	0603
29	4	R25, R27, R28, R30	18	RES, 18, 5%, 0.063 W, 0402	Vishav-Dale	CRCW040218R0JNED	0402
30	2	R26, R29	68	RES, 68, 5%, 0.063 W, 0402	Vishay-Dale	CRCW040268R0JNED	0402
31	2	R32, R34	49.9	RES, 49.9, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040249R9FKED	0402
32	1	R37	10	RES, 10 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060310R0JNEA	0603
33	1	R38	680	RES, 680, 1%, 0.1 W, 0603	Yageo America	RC0603FR-07680RL	0603
34	1	R45	330	RES, 330 ohm, 5%, 0.1W, 0603	Yageo America	RC0603JR-07330RL	0603
35	1	Rfbb	442k	RES, 442 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402442KFKED	0402
36	1	Rfbb1	180k	RES, 180 k, 0.1%, 0.1 W, 0603	Yageo America	RT0603BRD07180KL	0603
37	1	Rfbt	1.00Meg	RES, 1.00 M, 1%, 0.1 W, 0402	Panasonic	ERJ-2RKF1004X	0402
38	1	Rfbt1	562 k	RES, 562 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603562KFKEA	0603
39	1	Rt	80.6k	RES, 80.6 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW060380K6FKEA	0603
40	1	Rtps	0	RES, 0, 5%, 0.125 W, 0805	Vishay-Dale	CRCW08050000Z0EA	0805
	1	U1		Dual output, 2-Phase, Stackable PMBLMX2592	Texas Instruments	LMX2592	RHA0040B
				test chip QFN 0.4mm-pitch 40-pin 6x6 PKG			
41							
	1	U2		SIMPLE SWITCHER 3.5 V to 36 V 1 A	Texas Instruments	LM43601PWPR	PWP0016G
				Synchronous Step-Down Voltage Converter,			
42				PWP0016G			
	1	U3		Buck Step Down Regulator with 3 to 17 V Input	Texas Instruments	TPS62150RGTR	RGT0016C
				and 0.9 to 6 V Output, -40 to 85 degC, 16-Pin			
43				QFN (RGT), Green (RoHS & no Sb/Br)			
	1	uWire		Header (shrouded), 100mil, 5x2, Gold plated,	FCI	52601-S10-8LF	SMT Header
44				SMD			
45	1	Y1		OSC 100.0000MHZ 3.3V +-25PPM SMD	Connor-Winfield	CWX813-100.0M	7x1.3x5mm
46	0	C1	0.1uF	CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603	AVX	0603YC104JAT2A	0603
47	0	C2	10uF	CAP, CERM, 10uF, 10V, +/-10%, X5R, 0805	Kemet	C0805C106K8PACTU	0805
	0	C3_LF	300pF	CAP, CERM, 3300pF, 100V, +/-5%, X7R, 0603	MuRata	GRM1885C2A301JA01D	0603
48		_		· · · · · · · ·			
	0	R3, R4, R7, R8, R10, R11,	12k	RES, 12k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060312K0JNEA	0603
49		R14, R15			-		
50	0	R16p	18	RES, 18 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060318R0JNEA	0603
51	0	R17	10	RES, 10 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060310R0JNEA	0603
52	0	R33, R35	49.9	RES, 49.9, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040249R9FKED	0402
53	0	R44, Rlm1	0	RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA	0603
54	0	RIm	0	RES, 0, 5%, 0.125 W, 0805	Vishay-Dale	CRCW08050000Z0EA	0805

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