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TPS61088 Reference Design-PMP9779

Designator	QTY	Value	Description	Package	Part Number	MFG
C1, C2, C4, C5, C6	5	22uF	CAP, CERM, 22 µF, 16 V, +/- 10%, X5R, 1206	1206	GRM31CR61C226KE15L	MuRata
C3	1	1uF	CAP, CERM, 1 µF, 25 V, +/- 10%, X7R, 0603	0603	GRM188R71E105KA12D	MuRata
C7, C23	2	100pF	CAP, CERM, 100 pF, 50 V, +/- 1%, C0G/NP0, 0402	0402	GRM1555C1H101FA01D	MuRata
C8	1	4700pF	CAP, CERM, 4700 pF, 50 V, +/- 10%, X5R, 0402	0402	GRM155R61H472KA01D	MuRata
C9, C16	2	0.1uF	CAP, CERM, 0.1uF, 16V, +/-10%, X5R, 0402	0402	GRM155R61C104KA88D	MuRata
C12	1	2200pF	CAP, CERM, 2200 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603	GRM1885C1H222JA01D	MuRata
C14	1	4.7uF	CAP, CERM, 4.7uF, 10V, +/-10%, X5R, 0603	0603	0603ZD475KAT2A	AVX
C15	1	0.047uF	CAP, CERM, 0.047 µF, 16 V, +/- 10%, X7R, 0402	0402	GRM155R71C473KA01D	MuRata
C19	1	4700pF	CAP, CERM, 4700 pF, 25 V, +/- 10%, X7R, 0603	0603	GRM188R71E472KA01D	MuRata
C20, C21, C22	3	1uF	CAP, CERM, 1 µF, 25 V, +/- 10%, X5R, 0402	0402	GRM155R61E105KA12D	MuRata
L1	1	1.8uH	Inductor, Shielded Drum Core, Metal Composite, 1.2 µH, 12.9 A, 0.007 ohm, SMD	9.5x8.7mm	CDMC8D28NP-1R2MC	Sumida
Q1	1	25V	MOSFET, N-CH, 25 V, 60 A, SON 3.3x3.3mm	SON 3.3x3.3mm	CSD16323Q3	Texas Instruments
Q2	1	50V	MOSFET, N-CH, 50 V, 0.22 A, SOT-23	SOT-23	BSS138	Fairchild Semiconductor
R1	1	768k	RES, 768 k, 1%, 0.063 W, 0402	0402	CRCW0402768KFKED	Vishay-Dale
R2	3	120k	RES, 120 k, 1%, 0.063 W, 0402	0402	CRCW0402120KFKED	Vishay-Dale
R8, R12, R16	4	100k	RES, 100k ohm, 1%, 0.063W, 0402	0402	CRCW0402100KFKED	Vishay-Dale
R6	1	17.4k	RES, 17.4k ohm, 1%, 0.063W, 0402	0402	CRCW040217K4FKED	Vishay-Dale
R7	1	330k	RES, 330 k, 5%, 0.063 W, 0402	0402	CRCW0402330KJNED	Vishay-Dale
R10	1	0.03	RES, 0.03, 1%, 1 W, 2010	2010	CSRN2010FK30L0	Stackpole Electronics Inc
R11	1	10.0	RES, 10.0, 1%, 0.063 W, 0402	0402	CRCW040210R0FKED	Vishay-Dale
R13	1	715k	RES, 715 k, 1%, 0.063 W, 0402	0402	CRCW0402715KFKED	Vishay-Dale
R14	1	33.2k	RES, 33.2 k, 1%, 0.063 W, 0402	0402	CRCW040233K2FKED	Vishay-Dale
R15	1	499k	RES, 499 k, 1%, 0.063 W, 0402	0402	CRCW0402499KFKED	Vishay-Dale
R17	1	499k	RES, 499 k, 1%, 0.063 W, 0402	0402	CRCW0402499KFKED	Vishay-Dale
R20	1	0	RES, 0, 5%, 0.063 W, 0402	0402	RC0402JR-070RL	Yageo America
U1	1		13.2-V Output, Synchronous Boost Converter with 10-A Switch, RHL0020A	RHL0020A	TPS61088RHLR	Texas Instruments
U2	1		SINGLE DIFFERENTIAL COMPARATOR, DBV0005A	DBV0005A	TL3311DBVR	Texas Instruments
U3	1		ULTRA LOW-NOISE, 250-mA LINEAR REGULATOR FOR RF AND ANALOG CIRCUITS REQUIRES NO BYPASS CAPACITOR, DBV0005A	DBV0005A	LP5907MFX-2.5/NOPB	Texas Instruments
C13	0	47pF	CAP, CERM, 47 pF, 50 V, +/- 1%, C0G, 0402	0402	GRM1555C1H470FA01D	MuRata
R9	0	1.00	RES, 1.00, 1%, 0.125 W, 0805	0805	CRCW08051R00FKEA	Vishay-Dale

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted.

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