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TPS40170 Buck-Boost

Designator	Quantity	Value	Description	Package	PartNumber	Manufacturer
C17	1	0.022uF	CAP, CERM, 0.022uF, 100V, +/-10%, X7R, 0603	0603	C1608X7R2A223K	TDK
C9	1	0.1uF	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603	C1608X7R1H104K	TDK
C22	1	0.33uF	CAP, CERM, 0.33uF, 25V, +/-10%, X7R, 0603	0603	C1608X7R1E334K	TDK
C3, C24, C26	3	1000pF	CAP, CERM, 1000pF, 50V, +/-10%, X7R, 0603	0603	C1608X7R1H102K	TDK
C23	1	1uF	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603	0603	C1608X7R1C105K	TDK
C15	1	220pF	CAP, CERM, 220pF, 100V, +/-5%, C0G/NP0, 0603	0603	C1608C0G2A221J	TDK
C16	1	1uF	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0805	0805	C2012X7R1E105K	TDK
C25	1	4.7uF	CAP, CERM, 4.7uF, 16V, +/-20%, X7R, 0805	0805	Std	TDK
C18, C19, C20, C21	4	100uF	CAP, CERM, 6.3V, +/-10%, X5R, 1210	1210	C3225X5R0J107MT	TDK
C1, C2, C4, C5, C6, C7, C8, C10, C11, C12, C13, C14	12	22uF	CAP, CERM, 25V, +/-10%, X7R, 1210	1210	C3225X7R1E226MT	TDK
D1	1	B320B	Diode, Schottky, 20V, 3A, SMB	SMB	B320B	Diodes Inc.
J1, J3	2		TERMINAL BLOCK 5.08MM VERT 2POS	TERM_BLK, 2pos, 5.08mm	ED120/2DS	OST
J2	1	PEC02SAAN	Header, Male 2-pin, 100mil spacing,	0.100 inch x 2	PEC02SAAN	Sullins
L1	1	2uH	Inductor, Ferrite, 2uH, 37A, 0.0012 ohm, SMD	SER2011	SER2011-202MLB	Coilcraft
Q1	1	MMBT3906	Transistor, PNP, 40V, 0.2A, SOT-23	SOT-23	MMBT3906	Diodes Inc.
Q2	1	2N7002ET1G	MOSFET, N-CH, 60V, 0.26A, SOT-23	SOT-23	2N7002ET1G	ON Semi
Q3, Q4, Q5, Q6	4	CSD17510Q5A	MOSFET, N-CH, 30V, 100A, SON 5x6mm	SON 5x6mm	CSD17510Q5A	Texas Instruments
R9, R10, R11, R12, R16	5	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	CRCW06030000Z0EA	Vishay-Dale
R15	1	10.0k	RES, 10.0k ohm, 1%, 0.1W, 0603	0603	CRCW060310K0FKEA	Vishay-Dale
R18	1	13.0k	RES, 13.0k ohm, 1%, 0.1W, 0603	0603	CRCW060313K0FKEA	Vishay-Dale
R5, R6	2	14.7k	RES, 14.7k ohm, 1%, 0.1W, 0603	0603	CRCW060314K7FKEA	Vishay-Dale
R2, R3	2	150k	RES, 150k ohm, 1%, 0.1W, 0603	0603	CRCW0603150KFKEA	Vishay-Dale
R1, R4, R7	3	20.0k	RES, 20.0k ohm, 1%, 0.1W, 0603	0603	CRCW060320K0FKEA	Vishay-Dale
R14	1	3.16k	RES, 3.16k ohm, 1%, 0.1W, 0603	0603	CRCW06033K16FKEA	Vishay-Dale
R22	1	332	RES, 332 ohm, 1%, 0.1W, 0603	0603	CRCW0603332RFKEA	Vishay-Dale
R17	1	47.5k	RES, 47.5k ohm, 1%, 0.1W, 0603	0603	CRCW060347K5FKEA	Vishay-Dale
R21	1	49.9	RES, 49.9 ohm, 1%, 0.1W, 0603	0603	CRCW060349R9FKEA	Vishay-Dale
R20	1	49.9k	RES, 49.9k ohm, 1%, 0.1W, 0603	0603	CRCW060349K9FKEA	Vishay-Dale
R19	1	8.06k	RES, 8.06k ohm, 1%, 0.1W, 0603	0603	CRCW06038K06FKEA	Vishay-Dale
R13	1	open	RES, open, 1%, 0.1W, 0603	0603		Vishay-Dale
R8	1	0	RES, 0 ohm, 5%, 0.125W, 0805	0805	CRCW08050000Z0EA	Vishay-Dale
TP1, TP2, TP4, TP5, TP7, TP8, TP10	7	Red	Test Point, TH, Miniature, Red	5000	5000	Keystone
TP3, TP6, TP9	3	Black	Test Point, TH, Miniature, Black	5001	5001	Keystone
U1	1		4.5-v to 60-v wide-input synchronous PWM buck controller, RGY0020A	RGY0020A	TPS40170RGY	Texas Instruments

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