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UCC28710 High-side Buck Converter

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
!PCB1	1		Printed Circuit Board		PMP9530	Any	-	-
C1	1	10uF	CAP, AL, 10uF, 35V, +/-20%, TH	CAPPR2-5x11	UVR1V100MDD1TA	Nichicon		
C2	1	22pF	CAP, CERM, 22pF, 50V, +/-5%, COG/NP0, 0603	0603	06035A220JAT2A	AVX		
C3	1	6.8uF	CAP, AL, 6.8uF, 400V, +/-20%, TH	8x11	400AX6R8M8x11	Rubycon		
C4	1	10uF	CAP ALUM 10UF 450V 20% RADIAL		ECA-2WM100	Panasonic		
C5	1	150uF	CAP ALUM 150UF 25V 20% RADIAL	6.3x11.2mm	EEU-FR1E151B	Panasonic		
C6	1	1uF	CAP, CERM, 1uF, 50V, +/-10%, X7R, 0805	0805	08055C105KAT2A	AVX		
D1	1	100V	Diode, Ultrafast, 100V, 0.15A, SOD-123	SOD-123	1N4148W-7-F	Diodes Inc.		
D2	1	600V	DIODE FAST REC 600V 1A DO214AC	SMA	ES1J-JP	Diodes Inc.		
D3, D5	2	1000V	Diode, P-N, 1000V, 1A, TH	DO-41	1N4007	Fairchild Semiconductor		
D4	1	600V	Diode, Ultrafast, 600V, 1A, SMB	SMB	MURS160-13-F	Diodes Inc.		
L1	1	1mH	Inductor, Unshielded Drum Core, Ferrite, 1mH, 0.25A, 4.38 ohm, TH	D6 x 8.5mm	7447462102	Würth Elektronik eiSos		
L2	1	120uH	INDUCTOR 120UH 1A 8075 RAD	D6 x 8.5mm	744732121	Würth Elektronik eiSos		
Q1	1	600V	MOSFET N-CH 600V 2.4A DPAK	DPAK	STD3NK60ZD	ST Microelectronics		None
R1	1	39.2k	RES, 39.2k ohm, 1%, 0.1W, 0603	0603	CRCW060339K2FKEA	Vishay-Dale		
R2	1	150k	RES, 150k ohm, 1%, 0.25W, 1206	1206	CRCW1206150KFKEA	Vishay-Dale		
R3	1	11.0k	RES, 11.0k ohm, 1%, 0.1W, 0603	0603	CRCW060311K0FKEA	Vishay-Dale		
R4	1	243	RES, 243 ohm, 1%, 0.1W, 0603	0603	CRCW0603243RFKEA	Vishay-Dale		
R5	1	0.5	RES, 0.5 ohm, 1%, 0.5W, 1206	1206	CSR1206FKR500	Stackpole Electronics Inc		
R6	1	12.1k	RES, 12.1k ohm, 1%, 0.25W, 1206	1206	CRCW120612K1FKEA	Vishay-Dale		
RF1	1	4.7	RES, 4.7 ohm, 5%, 1W, Fusible, TH	Axial resistor	FKN1WSJR-52-4R7	Yageo America		
TP1, TP2	2	Red	Test Point, Miniature, Red, TH	Red Miniature Testpoint	5000	Keystone		
TP3, TP4	2	Black	Test Point, TH, Miniature, Black	Keystone5001	5001	Keystone	Equivalent	Any
U1	1		Constant-Voltage, Constant-Current Controller With Primary-Side Regulation, D0007A	D0007A	UCC28710D	Texas Instruments		None

Notes:

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

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