

### LM5118Q Two Switch Buck Boost

Designator	Description	Manufacturer	PartNumber	Quantity
!PCB1	Printed Circuit Board	Any	PMP7905	1
C1	CAP, AL, 100uF, 100V, +/-20%, 0.17 ohm, SMD	Panasonic	EEV-FK2A101M	1
C2, C3, C4, C5, C6, C101, C102, C103, C104, C105	CAP, CERM, 4.7uF, 100V, +/-20%, X7S, 1210	TDK	C3225X7S2A475M	10
C7, C8, C9, C10	CAP, CERM, 47uF, 16V, +/-20%, X5R, 1210	MuRata	GRM32ER61C476ME15L	4
C11, C12, C13	CAP, AL, 100uF, 16V, +/-20%, 0.024 ohm, SMD	Nippon Chemi-Con	APXE160ARA101MF80G	3
C14, C16, C17	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0805	TDK	C2012X7R1E104K	3
C15, C24, C25	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0805	TDK	C2012X7R2A104K	3
C18	CAP, CERM, 1000pF, 25V, +/-10%, X7R, 0805	MuRata	GRM216R71E102KA01D	1
C19	CAP, CERM, 750pF, 50V, +/-5%, C0G/NP0, 0805	MuRata	GRM2165C1H751JA01D	1
C20	CAP, CERM, 0.047uF, 25V, +/-10%, X7R, 0805	MuRata	GRM219R71E473KA01D	1
C21	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0805	TDK	C2012C0G1H101J	1
C22, C23	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0805	TDK	C2012X7R1E105K	2
D1, D2	Diode, Schottky, 30V, 20A, TO-220	On Semiconductor	MBR2030CTL	2
D3, D4	Diode, Schottky, 100V, 30A, TO-220	ON Semiconductor	MBR30H100CT	2
D5, D6	Diode, Ultrafast, 100V, 0.15A, SOD-123	Diodes Inc.	1N4148W-7-F	2
FID1, FID2, FID3, FID4, FID5, FID6	Fiducial mark. There is nothing to buy or mount.	N/A	N/A	6
H1, H2, H3, H4, H5, H6	THERM PAD TO-220 W/ADH .009" SP9	Bergquist	SP900S-0.009-AC-58	6
H7, H8, H9, H10, H11, H12	WASHER SHOULDER #4 NYLON 25/PK	Richco Plastic Co	MNI-4-3	6
H13, H14, H15	Machine Screw, Round, #4-40 x 1/2 Steel, Philips panhead	B&F Fastener Supply	PMS 440 0050 PH	3
H16, H17, H18	WASHER FLAT #4 STEEL	TE Connectivity	5205820-3	3
H19, H20, H21	HEX NUT 1/4" 4-40 100/PK	B&F Fastener Supply	HNZ 440	3
HS1, HS2, HS3	Heat Sink TO-220 Vertical 1 Inch	AAVID Thermalloy	529702B02500G	3
J1, J2, J3, J4	Terminal, Turret, TH, Triple	Keystone	1598-2	4
J5, J6, J7, J8	Connector, RF Jack, Vertical, Gold, SMD	Amphenol	A-1JB	4
L1	Inductor, Shielded E Core, Ferrite, 10uH, 28A, 0.0026 ohm, SMD	Coilcraft	SER2918H-103KL	1
LBL1	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	Brady	THT-14-423-10	1
Q1	MOSFET, N-CH, 100V, 100A, TO-220	Infineon Technologies	IPP045N10N3 G	1
Q2	MOSFET, N-CH, 30V, 80A, TO-220	Infineon Technologies	IPP034N03L G	1
R1	RES, 0.5 ohm, 1%, 0.5W, 1206	Stackpole Electronics Inc	CSR1206FKR500	1
R2, R3	RES, 0.015 ohm, 1%, 3W, 4527	Vishay-Dale	WSR3R0150FEA	2
R4, R7, R9, R14	RES, 1.0 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW08051R00JNEA	4

Designator	Description	Manufacturer	PartNumber	Quantity
R5	RES, 75.0k ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW080575K0FKEA	1
R6	RES, 1.0Meg ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW08051M00JNEA	1
R8	RES, 15.0k ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW080515K0FKEA	1
R10	RES, 60.4k ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW080560K4FKEA	1
R11	RES, 5.6k ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW08055K60JNEA	1
R12	RES, 10.7k ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW080510K7FKEA	1
R13	RES, 51 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW080551R0JNEA	1
R15	RES, 1.24k ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW08051K24FKEA	1
R16, R17, R18, R19	RES, 49.9 ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW080549R9FKEA	4
TP1, TP3	Test Point, TH, Multipurpose, Red	Keystone	5010	2
TP2, TP4	Test Point, TH, Multipurpose, Black	Keystone	5011	2
TP5, TP6, TP7, TP8, TP9, TP10, TP11	Test Point, SMT, Miniature	Keystone	5015	7
TP12, TP13	Test Point, TH, Multipurpose, White	Keystone	5012	2
U1	Wide Voltage Range Buck-Boost Controller, 20-pin TSSOP-EP, Pb-Free	National Semiconductor	LM5118Q1MHX/NOPB	1

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