

**150W Boost w/ LM5121**

Quantity	Designator	Value	Description	PackageReference	PartNumber	Manufacturer
1	C1	330pF	CAP, CERM, 330pF, 100V, +/-10%, X7R, 0603	0603	GRM188R72A331KA01D	MuRata
4	C2, C3, C10, C11	10uF	CAP, CERM, 10uF, 50V, +/-10%, X7R, 1210	1210	GRM32ER71H106KA12L	MuRata
4	C4, C5, C12, C13	2.2uF	CAP, CERM, 2.2uF, 100V, +/-10%, X7R, 1210	1210	GRM32ER72A225KA35L	MuRata
2	C6, C7	0.1uF	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0805	0805	C2012X7R2A104K	TDK
1	C8	470uF	CAP, AL, 470uF, 63V, +/-20%, 0.082 ohm, SMD	SMT Radial J16	EEV-FK1J471M	Panasonic
2	C9, C15	220uF	CAP, AL, 220uF, 100V, +/-20%, 0.153 ohm, SMD	SMT Radial K16	EEV-FK2A221M	Panasonic
2	C14, C19	1uF	CAP, CERM, 1uF, 50V, +/-10%, X7R, 0805	0805	GRM21BR71H105KA12L	MuRata
2	C16, C21	0.1uF	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0603	0603	GRM188R71E104KA01D	MuRata
3	C17, C18, C20	100pF	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0603	0603	GRM1885C1H101JA01D	MuRata
1	C22	0.22uF	CAP, CERM, 0.22uF, 25V, +/-10%, X7R, 0603	0603	GRM188R71E224KA88D	MuRata
1	C23	4.7uF	CAP CER 4.7UF 10V 10% X6S 0603	0603 (1608 Metric)	C1608X6S1A475K	TDK Corporation
1	C24	4700pF	CAP, CERM, 4700pF, 50V, +/-5%, X7R, 0603	0603	C0603C472J5RACTU	Kemet
1	C25	22pF	CAP, CERM, 22pF, 50V, +/-5%, C0G/NP0, 0603	0603	C0603C220J5GACTU	Kemet
2	D1, D3	0.77V	Diode, Schottky, 100V, 1A, PowerDI123	PowerDI123	DFLS1100-7	Diodes Inc.
1	D2	0.57V	Diode, Schottky, 60V, 1A, SOD-123F	SOD-123F	PMEG6010CEH,115	NXP Semiconductor
1	D4	80V	Diode, Schottky, 80V, 1A, SMA	SMA	B180-13-F	Diodes Inc.
1	J1		Header, TH, 100mil, 2x1, Gold plated, 230 mil above insulator	TSW-102-07-G-S	TSW-102-07-G-S	Samtec, Inc.
1	L1	22uH	Inductor, 22.3milliOhm, 11Asat, ±20% @ 100KHz	0.675 x 0.675 inch	IHLP-6767GZ-5A	Vishay
1	L2	105nH	Inductor, Shielded Drum Core, Ferrite, 105nH, 30A, 0.000235 ohm, SMD	7x5x7mm	744302010	Würth Elektronik eiSos
1	Q1	60V	MOSFET, N-CH, 60V, 172A, SON 5x6mm	SON 5x6mm	CSD18532Q5B	Texas Instruments

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1	Q2	80V	MOSFET, N-CH, 80V, 23A, PG-TDSON-8	PG-TDSON-8	BSC340N08NS3 G	Infineon Technologies
1	Q3	80V	MOSFET, N-CH, 80V, 55A, PG-TDSON-8	PG-TDSON-8	BSC123N08NS3 G	Infineon Technologies
1	R1	4.7	RES, 4.7 ohm, 5%, 0.25W, 1206	1206	CRCW12064R70JNEA	Vishay-Dale
1	R2	0.01	RES, 0.01 ohm, 0.5%, 0.5W, 1206	1206	LVK12R010DER	Ohmite
2	R3, R4	100	RES, 100 ohm, 1%, 0.1W, 0603	0603	CRCW0603100RFKEA	Vishay-Dale
5	R5, R8, R9, R13, R18	0, 0, 0, DNP, 0	RES, 0 ohm, 5%, 0.1W, 0603	0603	ERJ-3GEY0R00V	Panasonic
1	R6	200k	RES, 200k ohm, 1%, 0.1W, 0603	0603	CRCW0603200KFKEA	Vishay-Dale
1	R7	3.3	RES, 3.3 ohm, 5%, 0.1W, 0603	0603	CRCW06033R30JNEA	Vishay-Dale
1	R10	22.6k	RES, 22.6k ohm, 1%, 0.1W, 0603	0603	CRCW060322K6FKEA	Vishay-Dale
1	R11	7.32k	RES, 7.32k ohm, 1%, 0.1W, 0603	0603	CRCW06037K32FKEA	Vishay-Dale
1	R12	56.2k	RES, 56.2k ohm, 1%, 0.1W, 0603	0603	CRCW060356K2FKEA	Vishay-Dale
1	R14	140k	RES, 140k ohm, 1%, 0.1W, 0603	0603	CRCW0603140KFKEA	Vishay-Dale
1	R15	2.21k	RES, 2.21k ohm, 1%, 0.1W, 0603	0603	CRCW06032K21FKEA	Vishay-Dale
1	R16	49.9	RES, 49.9k ohm, 1%, 0.1W, 0603	0603	CRCW060349K9FKEA	Vishay-Dale
1	R17	100k	RES, 100k ohm, 1%, 0.125W, 0805	0805	CRCW0805100KFKEA	Vishay-Dale
4	TP1, TP8, TP10, TP11	White	Test Point, TH, Miniature, White	Keystone5002	5002	Keystone
4	TP2, TP3, TP6, TP7	15A	Terminal screw, vertical, snap-in	7693	7693	Keystone
3	TP4, TP5, TP9	Black	Test Point, TH, Multipurpose, Black	Keystone5011	5011	Keystone
1	U1		Wide Input Synchronous Boost Controller with Disconnection Switch Control, PWP0020A	PWP0020A	LM5121MH/NOPB	Texas Instruments

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