

## 6590370 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
*ILIM, LOS	2	White	5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
+5	1	Green	LTST-C150KGKT	LiteOn	LED, Green, SMD	1.6x3.2mm
+5V	1		RAPC722X	Switchcraft	Power Jack, mini, 2.1mm OD, R/A, TH	Jack, 14.5x11x9mm
C1	1	10uF	GRM188R60J106ME84	MuRata	CAP, CERM, 10 $\mu$ F, 6.3 V, +/- 20%, X5R, 0603	0603
C2	1	47uF	TPSB476K010R0250	AVX	CAP, TA, 47 $\mu$ F, 10 V, +/- 10%, 0.25 ohm, SMD	3528-21
C3	1	10uF	GRM21BR61E106KA73L	MuRata	CAP, CERM, 10 $\mu$ F, 25 V, +/- 10%, X5R, 0805_140	0805_140
C5	1	22uF	C1608X5R0J226M080AC	TDK	CAP, CERM, 22 $\mu$ F, 6.3 V, +/- 20%, X5R, 0603	0603
C6	1	10uF	TAJB106K016RNJ	AVX	CAP, TA, 10 $\mu$ F, 16 V, +/- 10%, 2.8 ohm, SMD	3528-21
C7, C23	2	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1 $\mu$ F, 16 V, +/- 5%, X7R, 0603	0603
C8, C11, C12, C15	4	0.1uF	C1206C104J5RACTU	Kemet	CAP, CERM, 0.1 $\mu$ F, 50 V, +/- 5%, X7R, 1206	1206
C9, C13	2	1000pF	CC1206KRX7R9BB102	Yageo America	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 1206	1206
C10, C14	2	2.2uF	C3216X7R1E225K	TDK	CAP, CERM, 2.2 $\mu$ F, 25 V, +/- 10%, X7R, 1206	1206
C16	1	1.0uF	0805YC105KAT2A	AVX	CAP, CERM, 1.0 $\mu$ F, 16 V, +/- 10%, X7R, 0805	0805
C17	1	0.1 $\mu$ F	08051C104K4T2A	AVX	CAP, CERM, 0.1 $\mu$ F, 100 V, +/- 10%, X7R, 0805	0805
C18	1	0.22uF	12061C224KAT2A	AVX	CAP, CERM, 0.22 $\mu$ F, 100 V, +/- 10%, X7R, 1206	1206
C19	1	0.01uF	C1608X7R2A103K	TDK	CAP, CERM, 0.01 $\mu$ F, 100 V, +/- 10%, X7R, 0603	0603
C20	1	1000pF	C0603C102K5RACTU	Kemet	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
C21, C24	2	0.1uF	GRM155R61E104KA87D	MuRata	CAP, CERM, 0.1 $\mu$ F, 25 V, +/- 10%, X5R, 0402	0402
C25	1	1000pF	GRM155R71H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0402	0402
D1	1	15V	MBRB2515LT4G	ON Semiconductor	Diode, Schottky, 15 V, 25 A, DDPAK	DDPAK
FLT1	1	0.2uF	NFM41PC204F1H3L	MuRata	Filter, LC, 0.2uF, 1806, SMT	1806
fSEL, Gain Control	2		CL-SB-12B-01T	Copal Electronics	Switch, Slide, SPDT, 0.2A, GULL, 12V, SMD	SMD, 3-Leads, Body 8.5x3.5mm, Pitch 2.5mm
H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
ILIM_MON	1	Orange	5013	Keystone	Test Point, Multipurpose, Orange, TH	Orange Multipurpose Testpoint
L2	1	10uH	SD3110-100-R	Cooper Bussmann	Cooper Bussmann 10 $\mu$ H SD3110 Series Low Profile Power Inductor, SMD	3.1x3.1x1.0mm
MON	1	Yellow	5014	Keystone	Test Point, Multipurpose, Yellow, TH	Yellow Multipurpose Testpoint
OUT+, OUT-	2		142-0801-801	Johnson	Connector, End launch SMA, 50 ohm, SMT	End Launch SMA
Q1	1	60V	CSD18532Q5B	Texas Instruments	MOSFET, N-CH, 60 V, 172 A, SON 5x6mm	SON 5x6mm
R1	1	1.00k	ERJ-2RKF1001X	Panasonic	RES, 1.00 k, 1%, 0.1 W, 0402	0402
R4, R6	2	17.4k	CRCW120617K4FKEA	Vishay-Dale	RES, 17.4 k, 1%, 0.25 W, 1206	1206
R5, R7	2	10.0KW	ERJ-8ENF1002V	Panasonic	RES, 10.0 k, 1%, 0.25 W, 1206	1206
R8, R13	2	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R9, R12, R25, R30	4	0W	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R10	1	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, 0603	0603
R11	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R14	1	487k	CRCW0603487KFKEA	Vishay-Dale	RES, 487 k, 1%, 0.1 W, 0603	0603
R15	1	15.0k	CRCW060315K0FKEA	Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, 0603	0603
R16, R18	2	374W	CRCW0402374RFKED	Vishay-Dale	RES, 374, 1%, 0.063 W, 0402	0402
R19, R20	2	2.00KW	CRCW04022K00FKED	Vishay-Dale	RES, 2.00 k, 1%, 0.063 W, 0402	0402
R21, R22	2	49.9W	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, 0402	0402

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R23	1	10.0KW	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0k ohm, 1%, 0.1W, 0603	0603
R24	1	1.00k	ERJ-3EKF1001V	Panasonic	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R26	1	464	CRCW0603464RFKEA	Vishay-Dale	RES, 464, 1%, 0.1 W, 0603	0603
R27	1	2.00KW	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, 0603	0603
R29	1	0W	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805
U1	1		TPS2400DBVR	Texas Instruments	OVERVOLTAGE PROTECTION CONTROLLER, DBV0005A	DBV0005A
U3, U4	2		TPS79901DDCT	Texas Instruments	Single Output High PSRR LDO, 200 mA, Adjustable 1.2 to 6.5 V Output, 2.7 to 6.5 V Input, with Low IQ, 5-pin SOT (DDC), -40 to 85 degC, Green (RoHS & no Sb/Br)	DDC0005A
U5	1		LT3905EUD#PBF	Linear Technology	Linear Technology Boost DC/DC Converter with APD Current Monitor	
U6	1		OPA857	Texas Instruments	Ultralow-Noise, Wideband, Selectable-Feedback Resistance Transimpedance Amplifier	RGT0016A
U7	1		THS4541IRGT	Texas Instruments	Negative Rail Input, Rail-to-Rail Output, Precision, 850-MHz Fully Differential Amplifier, RGT0016A	RGT0016A
5V, V3p3_1, V3p3_2, VAMP5.0	0	Red	5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
C4	0	1000pF	C0603C102K5RACTU	Kemet	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
C22	0	0.1uF	GRM155R61E104KA87D	MuRata	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X5R, 0402	0402
F1	0		1206SFF200F/63-2	TE Connectivity	Fuse, 2 A, 63 V, SMD	1206
GND	0	Black	5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
L1	0	1.5uH	1286AS-H-1R5M	Toko	Inductor, Shielded, Powdered Iron, 1 µH, 2.7 A, 0.068 ohm, SMD	2.0x1.2x1.6mm
PD1	0			TE Connectivity	CONN SOCKET TRANSIST 3POS TO-5	
R2	0	1.05Meg	CRCW06031M05FKEA	Vishay-Dale	RES, 1.05 M, 1%, 0.1 W, 0603	0603
R3	0	200k	CRCW0603200KFKEA	Vishay-Dale	RES, 200 k, 1%, 0.1 W, 0603	0603
R17	0	4.99k	CRCW04024K99FKED	Vishay-Dale	RES, 4.99 k, 1%, 0.063 W, 0402	0402
R28	0		Used in BOM report	Used in BOM report	RES, xxx ohm, x%, xW, [PackageReference]	1206
U2	0		TPS63050YFF	Texas Instruments	Single Inductor Buck-Boost with 1A Switches and Adjustable Soft Start, YFF0012AFAP	YFF0012AFAP
VOCM	0		142-0701-851	Emerson Network Power	Connector, End launch SMA, 50 ohm, SMT	SMA End Launch

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