

XXX### REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		XXX###	Any	Printed Circuit Board	
C1, C2	2	33uF	EEV-EB2C330SQ	Panasonic	CAP, AL, 33 μ F, 160 V, +/- 20%, SMD	D12.5xL16.5mm
C3, C4, C14	3	2.2uF	CGA6N3X7R2A225K230AB	TDK	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1,	
C5, C7, C12	3	0.1uF	HMK107B7104KAHT	Taiyo Yuden	CAP, CERM, 0.1 μ F, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
C6	1	0.012uF	CC1206KRX7R9BB123	Yageo America	CAP, CERM, 0.012 uF, 50 V, +/- 10%, X7R, 1206	1206
C8	1	0.01uF	12065C103KAT2A	AVX	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 1206	1206
C9, C10	2	2200pF	C0603C222K5RACTU	Kemet	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603	603
C11	1	47pF	C0805C470J5GACTU	Kemet	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0805	805
C13	1	47uF	EEE-FK1V470P	Panasonic	CAP, AL, 47 uF, 35 V, +/- 20%, 0.36 ohm, AEC-Q200 Grade 2, SMD	SMT Radial D
C15, C17, C19, C21, C25, C26, C27, C29, C30, C33, C34, C35, C36, C38, C40, C42	16	0.1uF	06033C104KAT2A	AVX	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	603
C16, C31, C37, C39	4	1uF	C2012X8R1C105K125AB	TDK	CAP, CERM, 1 uF, 16 V, +/- 10%, X8R, 0805	805
C18	1	10uF	GRM21BZ71E106KE15L	MuRata	CAP, CERM, 10 uF, 25 V, +/- 10%, X7R, 0805	805
C20, C28	2	4.7uF	C2012X7R1V475K125AC	TDK	CAP, CERM, 4.7 uF, 35 V, +/- 10%, X7R, 0805	805
C22	1	15uF	C3225X5R1C156M250AA	TDK	CAP, CERM, 15 uF, 16 V, +/- 20%, X5R, 1210	1210
C23	1	0.022uF	C0603C223K4RACTU	Kemet	CAP, CERM, 0.022 uF, 16 V, +/- 10%, X7R, 0603	603
C32	1	1uF	C0805C105K5RACTU	Kemet	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	805
C41	1	1uF	GCM188R71C105KA64D	MuRata	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
C43	1	3300pF	C0603C332K5RACTU	Kemet	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0603	603
D3	1	75V	SMCJ26CA-TR	STMicroelectronics		SMC (No Polarity Mark)
D4	1	100V	10MQ100NTRPBF	International Rectifier	Diode, Schottky, 100 V, 1.5 A, SMA	SMA
D5	1	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	SOD-123
FID4, FID5, FID6	3		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
H13, H15	2		7109DG	Aavid	Surface mount heat sink for D2PAK	Surface mount heat sink for D2PAK
J1, J4, J5, J6, J8	5		282834-2	TE Connectivity	Terminal Block, 2x1, 2.54mm, TH	Terminal Block, 2x1, 2.54mm, TH
J2, J3	2		1986660-2	TE Connectivity	Terminal Block, 2 Pos, 10.16mm, TH	Terminal Block, 2 Pos, 10.16mm, TH
J7	1		PEC03SAAN	Sullins Connector Solutions	Header, 100mil, 3x1, Tin, TH	Header, 3 PIN, 100mil, Tin
J9	1		614 104 150 121	Würth Elektronik	Connector, Receptacle, USB Type A, R/A, Bottom Mount TH	Connector, Receptacle, USB Type A, TH
L1	1	150uH	MSS1210-154KE	Coilcraft	Inductor, Shielded, Ferrite, 150 uH, 2.5 A, 0.176 ohm, SMD	Inductor, 12.3x10x12.3mm
L2	1	6.8uH	ME3220-682MLB	Coilcraft	Inductor, Drum Core, Ferrite, 6.8 uH, 1.1 A, 0.27 ohm, SMD	ME3220
Q1, Q2	2	100V	CSD19536KTT	Texas Instruments	MOSFET, N-CH, 100 V, 200 A, KTT0002A (TO-263-2)	KTT0002A
Q3	1	150 V	MMBT5401LT1G	ON Semiconductor	Transistor, PNP, 150 V, 0.5 A, SOT-23	SOT-23
Q4	1	-20V	CSD25501F3	Texas Instruments	MOSFET, P-CH, -20 V, -3.6 A, YJN0003A (PICOSTAR-3)	YJN0003A
R1	1	0.002	WSL40262L000FEB	Vishay-Dale	RES, 0.002, 1%, 3 W, AEC-Q200 Grade 0, 4026	4026

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R3	1	102k	CRCW0603102KFKEA	Vishay-Dale	RES, 102 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R5	1	95.3k	CRCW060395K3FKEA	Vishay-Dale	RES, 95.3k ohm, 1%, 0.1W, 0603	603
R6	1	95.3k	RT0603BRD0795K3L	Yageo America	RES, 95.3 k, 0.1%, 0.1 W, 0603	603
R7	1	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100 ohm, 1%, 0.1W, 0603	603
R8	1	4.12k	CRCW06034K12FKEA	Vishay-Dale	RES, 4.12 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R9	1	7.15k	RG1608P-7151-B-T5	Susumu Co Ltd	RES, 7.15 k, 0.1%, 0.1 W, 0603	603
R10	1	30.0k	RG1608P-303-B-T5	Susumu Co Ltd	RES, 30.0 k, 0.1%, 0.1 W, 0603	603
R11	1	1.02k	RC1206FR-071K02L	Yageo America	RES, 1.02 k, 1%, 0.25 W, 1206	1206
R12	1	25.5k	CRCW080525K5FKEA	Vishay-Dale	RES, 25.5 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	805
R13, R20, R28, R31	4	0	5106	Keystone	RES, 0, 1%, 0.5 W, 0805	805
R14	1	422k	ERJ-6ENF4223V	Panasonic	RES, 422 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	805
R15	1	113k	CRCW0603113KFKEA	Vishay-Dale	RES, 113 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R16	1	576k	RC0603FR-07576KL	Yageo	RES, 576 k, 1%, 0.1 W, 0603	603
R17	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R18	1	187k	CRCW0603187KFKEA	Vishay-Dale	RES, 187 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R19	1	49.9k	RC0603FR-0749K9L	Yageo	RES, 49.9 k, 1%, 0.1 W, 0603	603
R21	1	24.9k	CRCW060324K9FKEA	Vishay-Dale	RES, 24.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R22	1	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R23	1	88.7k	CRCW060388K7FKEA	Vishay-Dale	RES, 88.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R24	1	1.40k	CRCW06031K40FKEA	Vishay-Dale	RES, 1.40 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R25	1	22.1k	CRCW060322K1FKEA	Vishay-Dale	RES, 22.1 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R26	1	8.06k	CRCW06038K06FKEA	Vishay-Dale	RES, 8.06 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R27	1	26.7k	CRCW060326K7FKEA	Vishay-Dale	RES, 26.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R29, R38	2	23.7k	CRCW060323K7FKEA	Vishay-Dale	RES, 23.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R30	1	23.2k	CRCW060323K2FKEA	Vishay-Dale	RES, 23.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R32, R39	2	4.99k	CRCW06034K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R33	1	13.3k	CRCW060313K3FKEA	Vishay-Dale	RES, 13.3 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R34	1	0	CRCW0603000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R35	1	6.98k	CRCW06036K98FKEA	Vishay-Dale	RES, 6.98 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R36	1	14.3k	CRCW060314K3FKEA	Vishay-Dale	RES, 14.3 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R37	1	51.1k	CRCW060351K1FKEA	Vishay-Dale	RES, 51.1 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R40	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R41	1	12.7k	CRCW060312K7FKEA	Vishay-Dale	RES, 12.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R42	1	10.2k	CRCW060310K2FKEA	Vishay-Dale	RES, 10.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
RESET, TP1, TP2, TP3, TP5, TP6, TP7, TP8, TP10, TP11, TP12, TP13, TP14, TP15, TP17, TP19, TP20	17		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP4, TP9, TP16, TP18, TP22	5		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
U1	1		LM5050MK-1/NOPB	Texas Instruments	High Side OR-ing FET Controller, DDC0006A (SOT-23-T-6)	DDC0006A
U2	1		LM5069MM-2/NOPB	Texas Instruments	Positive High Voltage Hot Swap / Inrush Current Controller with Power Limiting, 10-pin MSOP, Pb-Free	DGS0010A
U3	1		LM5164DDAT	Texas Instruments	100-V Low IQ Synchronous Buck Regulator, DDA0008E (SOIC-8)	DDA0008E
U4	1		TPS26624DRCCR	Texas Instruments	60-V, 800-mA Industrial eFuse with Integrated Reverse Polarity Protection, DRC0010J (VSON-10)	DRC0010J

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
U5	1		TPS560430YDBVR	Texas Instruments	4V to 36 V 0.6 A Synchronous Step-Down Converter, DBV0006A (SOT-23-6)	DBV0006A
U6	1		TPS2121RUXR	Texas Instruments	2.7V-22V, 4A, 50mohm Priority Power MUX, RUX0012A (VQFN-HR-12)	RUX0012A
U7	1		LP38691SD-3.3/NOPB	Texas Instruments	500mA Low Dropout CMOS Linear Regulators Stable with Ceramic Output Capacitors, 6-pin LLP, Pb-Free, 1000 Reel	NGG0006A
U8	1		TPS22919DCKR	Texas Instruments	5.5-V, 1.5-A, 100-mohm Load Switch with Output Discharge, DCK0006A (SOT-SC70-6)	DCK0006A
U9	1		TPS3703A4330DSERQ1	Texas Instruments	Overvoltage and Undervoltage Reset IC With Time Delay and Manual Reset, DSE0006A (WSON-6)	DSE0006A
D2	0	100V	VS-6CWQ10FN-M3	Vishay-Semiconductor	Diode, Schottky, 100 V, 3.5 A, DPAK	DPAK
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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