

<Parameter EVM_Orderable not found>

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPC81	1		Printed Circuit Board		PMP20587	Any	-	-
C2, C3, C4, C20, C21, C36, C37, C52, C53, C200, C201	11	220uF	CAP, AL, 220 µF, 63 V, +/- 20%, 0.16 ohm, SMD	D12.5xL13.5mm	AFK227M63H32T-F	Cornell Dubilier Electronics		
C5, C6, C7, C8, C11, C22, C23, C24, C25, C38, C39, C40, C41, C54, C55, C56, C57, C125, C126, C127, C128, C129, C130, C131, C132, C150, C151, C152, C153, C180, C182, C202, C203, C204, C205	35	4.7uF	CAP, CERM, 4.7 µF, 80 V, +/- 10%, X7R, 1210	1210	GRM32ER71K475KE14L	MuRata		
C10, C15, C26, C31, C43, C47, C59, C63, C120, C121	10	1uF	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603	GCM188R71C105KA64D	MuRata		
C12, C28, C44, C60	4	0.1uF	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 0603	0603	GRM188R72A104KA35D	MuRata		
C13, C14, C29, C30, C45, C46, C61, C62	8	33pF	CAP, CERM, 33 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603	06035A330JAT2A	AVX		
C18, C32, C48, C64	4	1uF	CAP, CERM, 1 µF, 250 V, +/- 10%, X7R, 2220	2220	GRM55DR72E105KW01L	MuRata		
C67, C69, C74, C80, C83, C104, C107, C115, C116, C301	10	100pF	CAP, CERM, 100 pF, 50 V, +/- 1%, C0G/NP0, 0603	0603	06035A101FAT2A	AVX		
C68, C72, C77, C82, C305	5	22pF	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603	06035A220JAT2A	AVX		
C70, C71, C76, C81, C84, C108, C110, C111, C117, C303, C307	11	0.1uF	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603	06035C104KAT2A	AVX		
C73, C75	2	220pF	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0603	0603	C0603C221K5RACTU	Kemet		
C78, C79, C85, C86, C98, C100	6	0.01uF	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0603	0603	C0603C103K5RACTU	Kemet		
C87, C92, C403	3	0.1uF	CAP, CERM, 0.1 µF, 100V, +/-10%, X7R, 0603	0603	GRM188R72A104KA35D	MuRata		
C88, C133	2	0.015uF	CAP, CERM, 0.015 µF, 50 V, +/- 10%, X7R, 0402	0402	GRM155R71H153KA12D	MuRata		
C89	1	22uF	CAP, CERM, 22 µF, 16 V, +/- 10%, X7R, 1210	1210	GRM32ER71C226KE18L	MuRata		
C90, C401	2	22uF	CAP, CERM, 22 µF, 25 V, +/- 10%, X7R, 1210	1210	GRM32ER71E226KE15L	MuRata		
C93	1	1000pF	CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402	GRM1555C1H102JA01D	MuRata		
C94	1	2.2uF	CAP, CERM, 2.2 µF, 100 V, +/- 10%, X7R, 1210	1210	GRM32ER72A225KA35L	MuRata		
C95, C96	2	10uF	CAP, CERM, 10 µF, 25 V, +/- 10%, X7R, 1206	1206	GRM31CR71E106KA12L	MuRata		
C97	1	1uF	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	0603	GRM188R71E105KA12D	MuRata		
C99, C101, C134	3	2.2uF	CAP, CERM, 2.2 µF, 6.3 V, +/- 10%, X5R, 0603	0603	C0603C225K9PACTU	Kemet		
C102	1	22pF	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603	C0603C220J5GACTU	Kemet		
C103	1	2.2uF	CAP, CERM, 2.2 µF, 16 V, +/- 10%, X5R, 0805	0805	0805YD225KAT2A	AVX		
C105, C106, C112, C114	4	0.022uF	CAP, CERM, 0.022 µF, 50 V, +/- 10%, X7R, 0603	0603	C0603C223K5RACTU	Kemet		
C109, C113, C119, C122, C124, C135, C402	7	0.01uF	CAP, CERM, 0.01 µF, 50 V, +/- 5%, X7R, 0402	0402	C0402C103J5RACTU	Kemet		
C118, C123	2	4.7uF	CAP, CERM, 4.7 µF, 10 V, +/- 10%, X5R, 0603	0603	C0603C475K8PACTU	Kemet		
C136, C137	2	0.1uF	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0402	0402	C1005X7R1H104K050B	TDK		
C302	1	1000pF	CAP, CERM, 1000 pF, 16 V, +/- 10%, X7R, 0603	0603	GRM188R71C102KA01D	MuRata		
C304, C306, C500	3	2.2uF	CAP, CERM, 2.2 µF, 10 V, +/- 10%, X6S, 0603	0603	GRM188C81A225KE34D	MuRata		
C731, C751	2	0.039uF	CAP, CERM, 0.039 µF, 25 V, +/- 10%, X7R, 0603	0603	GRM188R71E393KA01D	MuRata		
D2, D7, D12, D17	4	250V	Diode, Switching, 250 V, 0.25 A, AEC-Q101, SOD-323	SOD-323	BAV21WS-7-F	Diodes Inc.		

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D3, D8, D13, D18	4	100V	Diode, Switching, 100 V, 0.2 A, SOD-323	SOD-323	BAV19WS-7-F	Diodes Inc.		
D4, D9, D14, D19	4	40V	Diode, Schottky, 40V, 0.5A, SOD-123	SOD-123	MBR0540T1G	ON Semiconductor		
D21	1	100V	Diode, Switching, 100V, 0.2A, SOT-23	SOT-23	MMBD7000LT1G	ON Semiconductor		
D22, D23	2	Green	LED, Green, SMD	LED, GREEN, 0603	SML-LX0603GW-TR	Lumex		
D24, D28	2	100V	Diode, Schottky, 100V, 1A, SOD-123FL	SOD-123FL	MBR1H100SFT3G	ON Semiconductor		
D26, D27	2	5V	Diode, TVS, Uni, 5V, 300W, SOT-23	SOT-23	SM05T1G	ON Semiconductor		
H1, H2, H3, H4	4		Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw	NY PMS 440 0025 PH	B&F Fastener Supply		
H5, H6, H7, H8	4		Standoff, Hex, 0.5"L #4-40 Nylon	Standoff	1902C	Keystone	-	-
J1, J4	2	50A	Terminal 50A Lug	CB35-36-CY	CB35-36-CY	Panduit	-	-
J2, J3, J5, J6	4		Standard Banana Jack, Uninsulated, 8.9mm	Keystone575-8	575-8	Keystone	-	-
J7	1		Header, 2.54mm, 5x1, Gold, R/A, TH	Header, 2.54mm, 5x1, R/A, TH	PRPC005SBAN-M71RC	Sullins Connector Solutions		
J8	1		Header (shrouded), 100mil, 5x2, High-Temperature, Gold, TH	Header, 5x2 Shrouded header	N2510-6002-RB	3M		
J9	1		Header, 100mil, 7x2, Tin, TH	Header, 7x2, 100mil, Tin	PEC07DAAN	Sullins Connector Solutions		
J502	1		Header, 100mil, 2x1, Gold, TH	Sullins 100mil, 1x2, 230 mil above insulator	PBC02SAAN	Sullins Connector Solutions		
L1, L3, L5	3	22uH	Inductor, Shielded, Ferrite, 22 uH, 37 A, 0.00264 ohm, SMD	28.5x19.5mm	7443642200	Wurth Elektronik		
L2, L7, L8	3	400nH	Inductor, Shielded Drum Core, Ferrite, 400 nH, 26 A, 0.00037 ohm, SMD	10.1x6.8x7mm	744308040	Wurth Elektronik		
L4	1	22uH	Inductor, Shielded, Ferrite, 22 uH, 37A, 0.00264 ohm, SMD	28.5x19.5mm	7443642200	Wurth Elektronik		
L6	1	220uH	Coupled inductor, 220 uH, 0.31 A, 1.72 ohm, SMD	7.5x4.6x7.5mm	MSD7342-224MLB	Coilcraft		
Q1, Q2, Q4, Q5, Q6, Q7, Q9, Q10, Q11, Q12, Q14, Q15, Q16, Q17, Q19, Q20	16	150V	MOSFET, N-CH, 150 V, 33 A, PG-TDSON-8	PG-TDSON-8	BSC360N15NS3 G	Infineon Technologies		None
Q3, Q8, Q13, Q18	4	20 V	Transistor, PNP, 20 V, 1.5 A, SOT-23	SOT-23	FMMT718TA	Diodes Inc.		
Q21, Q22	2	0.2V	Transistor, NPN, 40V, 0.2A, SOT-23	SOT-23	MMBT3904	Fairchild Semiconductor		
R2, R12, R43, R52	4	15.0	RES, 15.0, 1%, 0.1 W, 0603	0603	RC0603FR-0715RL	Yageo America		
R3, R17, R30, R44	4	0.004	RES, 0.004, 1%, 3 W, 2512 WIDE	2512 WIDE	KRL6432E-M-R004-F-T1	Susumu Co Ltd		
R4, R10, R11, R18, R23, R25, R31, R37, R38, R45, R50, R53	12	10	RES, 10, 5%, 0.25 W, 0603	0603	CRCW060310R0JNEAHP	Vishay-Dale		
R6, R7, R20, R21, R33, R34, R47, R48, R117, R118, R119, R120	12	0	RES, 0, 5%, 0.1 W, 0603	0603	ERJ-3GEY0R00V	Panasonic		
R9, R15, R22, R28, R35, R41, R49, R56, R57, R63, R64, R66, R70, R71, R75, R76, R81, R82, R84, R85, R88, R89, R100, R101, R302, R307	26	1.00k	RES, 1.00 k, 1%, 0.1 W, 0603	0603	CRCW06031K00FKEA	Vishay-Dale		
R13, R26, R39, R54	4	10.0	RES, 10.0, 1%, 0.1 W, 0603	0603	CRCW060310R0FKEA	Vishay-Dale		
R58, R62	2	59.0k	RES, 59.0 k, 1%, 0.1 W, 0603	0603	CRCW060359K0FKEA	Vishay-Dale		
R59, R72, R86, R96	4	7.15k	RES, 7.15 k, 1%, 0.1 W, 0603	0603	CRCW06037K15FKEA	Vishay-Dale		
R60, R65, R74, R77, R87, R90, R97, R102	8	499	RES, 499, 0.1%, 0.1 W, 0603	0603	RT0603BRD07499RL	Yageo America		
R61, R306	2	1.5k	RES, 1.50 k, 1%, 0.1 W, 0603	0603	CRCW06031K50FKEA	Vishay-Dale		
R67, R80, R91, R103	4	301k	RES, 301 k, 1%, 0.1 W, 0603	0603	CRCW0603301KFKFA	Vishay-Dale		
R68, R69, R78, R79	4	40.2k	RES, 40.2 k, 1%, 0.1 W, 0603	0603	CRCW060340K2FKEA	Vishay-Dale		
R73, R83	2	976	RES, 976, 1%, 0.1 W, 0603	0603	CRCW0603976RFKEA	Vishay-Dale		
R92, R93, R106, R107	4	499	RES, 499, 1%, 0.1 W, 0603	0603	CRCW0603499RFKEA	Vishay-Dale		
R94, R95	2	3.32k	RES, 3.32 k, 1%, 0.1 W, 0603	0603	CRCW06033K32FKEA	Vishay-Dale		
R98, R99, R104, R105, R126, R127, R128, R129, R130	9	10.0k	RES, 10.0 k, 1%, 0.1 W, 0603	0603	CRCW060310K0FKEA	Vishay-Dale		
R108	1	30k	RES, 30 k, 5%, 0.063 W, 0402	0402	CRCW040230K0JNED	Vishay-Dale		
R110	1	499k	RES, 499 k, 1%, 0.063 W, 0402	0402	CRCW0402499KFKED	Vishay-Dale		
R111	1	110k	RES, 110 k, 5%, 0.063 W, 0402	0402	CRCW0402110KJNED	Vishay-Dale		
R112	1	15.8k	RES, 15.8 k, 1%, 0.063 W, 0402	0402	CRCW040215K8FKED	Vishay-Dale		
R114	1	4.3k	RES, 4.3k ohm, 5%, 0.063W, 0402	0402	CRCW04024K30JNED	Vishay-Dale		
R115	1	3.92k	RES, 3.92 k, 1%, 0.063 W, 0402	0402	CRCW04023K92FKED	Vishay-Dale		
R116, R121, R122, R125	4	33.2	RES, 33.2, 1%, 0.1 W, 0603	0603	CRCW060333R2FKEA	Vishay-Dale		
R123	1	51.1k	RES, 51.1 k, 1%, 0.1 W, 0603	0603	CRCW060351K1FKEA	Vishay-Dale		
R131	1	1.00	RES, 1.00, 1%, 0.1 W, 0603	0603	CRCW06031R00FKEA	Vishay-Dale		
R135	1	2.2k	RES, 2.2 k, 5%, 0.1 W, 0603	0603	CRCW06032K20JNEA	Vishay-Dale		
R136, R137	2	0	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603	CRCW0603000Z0EA	Vishay-Dale		

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R191, R192, R193, R194, R195, R401, R402	7	1.0	RES, 1.0, 5%, 0.125 W, 0805	0805	CRCW08051R00JNEA	Vishay-Dale		
R196, R197, R198, R199	4	2.00k	RES, 2.00 k, 1%, 0.1 W, 0603	0603	CRCW06032K00FKEA	Vishay-Dale		
R301, R309	2	DNP	RES, 1.50 k, 1%, 0.1 W, 0603	0603	CRCW06031K50FKEA	Vishay-Dale		
R303, R304	2	2.15k	RES, 2.15 k, 1%, 0.1 W, 0603	0603	CRCW06032K15FKEA	Vishay-Dale		
R305, R308	2	49.9	RES, 49.9, 1%, 0.1 W, 0603	0603	CRCW060349R9FKEA	Vishay-Dale		
R310	1	10	RES, 10, 5%, 0.1 W, 0603	0603	CRCW060310R0JNEA	Vishay-Dale		
R501, R502, R503	3	DNP	RES, 0, 5%, 0.1 W, 0603	0603	CRCW06030000Z0EA	Vishay-Dale		
R611	1	1K	Resistor	J1-0603				
R681, R781	2	2.67k	RES, 2.67 k, 1%, 0.1 W, 0603	0603	CRCW06032K67FKEA	Vishay-Dale		
S1, S2	2		Switch, Toggle, SPDT 1Pos, TH	7 X 11 X4.5 mm	G12AP	NKK Switches		
TP1, TP4, TP8	3	Black	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint	5011	Keystone		
TP2, TP5, TP7	3	Red	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint	5010	Keystone		
TP3, TP6, TP9, TP10, TP11	5	White	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint	5012	Keystone		
TP16, TP17	2		SMA Straight PCB Socket Die Cast, 50 Ohm, TH	SMA Straight PCB Socket Die Cast, TH	5-1814832-1	TE Connectivity		
TP18, TP19	2		Terminal, Turret, TH, Double	Keystone1502-2	1502-2	Keystone		
U1, U2, U3, U4	4		4A/6A Isolated Dual-Channel Gate Driver, NPL0013A (VLGA-13)	NPL0013A	UCC21225ANPLR	Texas Instruments		Texas Instruments
U5	1		Low Power, Single-Supply, Rail-to-Rail Operational Amplifier MicroAmplifier(TM) Series, 2.5 to 5.5 V, -55 to 125 degC, 5-pin SOT23 (DBV0005A), Green (RoHS & no Sb/Br)	DBV0005A	OPA344NA/250	Texas Instruments	Equivalent	None
U6, U7, U10, U11, U302	5		50 MHz, Low-Noise, Single-Supply Rail-to-Rail Operational Amplifier, 2.2 to 5.5 V, -40 to 125 degC, 5-pin SOT23 (DBV0005A), Green (RoHS & no Sb/Br)	DBV0005A	OPA365AIDBVR	Texas Instruments	Equivalent	Texas Instruments
U8, U9	2		2.7V Temperature Sensor, 3-pin SOT-23	MF03A	LM60BIM3X/NOPB	Texas Instruments		
U13	1		Wide Input 65V, 1.5A Synchronous Step-Down DC-DC Converter, PWP0014A (TSSOP-14)	PWP0014A	LM5161PWPR	Texas Instruments	LM5161PWPT	Texas Instruments
U14	1		Highly Integrated Digital Controller for Isolated Power, RGC0064B	RGC0064B	UCD3138064ARGCR	Texas Instruments	UCD3138064ARGCT	Texas Instruments
U301	1		Dual General Purpose, Low Voltage, Tiny Pack Comparator, 8-pin Narrow SOIC	M08A	LMV393MX	Texas Instruments		
U401	1		Micropower 150 mA Low-Noise Ultra Low-Dropout Regulator, 5-pin SOT-23	MF05A	LP2985AIM5-3.3	Texas Instruments		
FID1, FID2, FID3	0		Fiducial mark. There is nothing to buy or mount.	Fiducial	N/A	N/A		
R132, R133, R134, R500	0	DNP	RES, xxx ohm, x%, xW, [PackageReference]	Used in PnP output	Used in BOM report	Used in BOM report	-	-

Notes:

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

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