PMP31182-UCC14130 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
15VIN, 15VINF, HVIN, ISO15VH, ISO15VL, LDO5V	6		5005	Keystone Electronics	Test Point, Compact, Red, TH	Red Compact Testpoint
C1, C11	2	10uF	TMK316AB7106KLHT	Taiyo Yuden	CAP, CERM, 10 µF, 25 V,+/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
C2, C12	2	0.22uF	GCM155R71C224KE02D	MuRata	CAP, CERM, 0.22 µF, 16 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0402	402
C3, C13	2	2.2uF	CGA4J3X7R1E225K125AB	TDK	CAP, CERM, 2.2 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	805
C4, C24, C31, C34, C47, C53	6	0.1uF	CGA3E3X8R1H104K080AE	TDK	CAP, CERM, 0.1 µF, 50 V,+/- 10%, X8R, AEC-Q200 Grade 0, 0603	603
C5, C23	2	22pF	GCM1555C1H220JA16D	MuRata	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	402
C6, C14	2	68pF	C1005C0G1H680J050BA	TDK	CAP, CERM, 68 pF, 50 V, +/- 5%, C0G/NP0, 0402	402
C7, C32	2	2.2uF	CGA4J3X7R1H225K125AB	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	805
C8	1	47uF	HHXC250ARA470MF61G	Chemi-Con	CAP, AL, 47 µF, 25 V, +/- 20%, 0.05 ohm, AEC-Q200 Grade 1, SMD	D6.3xL6.1mm
C9, C26	2	1uF	GRT155R6YA105KE13D	MuRata	CAP, CERM, 1 µF, 35 V,+/- 10%, X5R, AEC-Q200 Grade 3, 0402	402
C10, C27	2	0.1uF	GCM155R71H104KE02D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	402
C15, C16, C17, C18	4	0.022uF	CGA5K4X7R2J223K130AA	TDK	CAP, CERM, 0.022 µF, 630 V,+/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
			C1206C223KDRACTU	Kemet	CAP, CERM, 0.022 µF, 1000 V,+/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
C22, C33	2	4.7uF	CGA6P3X7R1H475M250AB	TDK	CAP, CERM, 4.7 uF, 50 V, +/- 20%, X7R, AEC-Q200 Grade 1, 1210	1210
C25	1	10uF	C1206C106J3RACAUTO	Kemet	CAP, CERM, 10 µF, 25 V,+/- 5%, X7R, AEC-Q200 Grade 1, 1206	1206
C28, C29, C35, C36	4	10µF	CGA4J1X7S1E106K125AC	TDK Corporation	Cap Ceramic 10uF 25V X7S 10% Pad SMD 0805 +125°C Automotive T/R	805
C30, C37	2	330pF	06035A331JAT2A	AVX	CAP, CERM, 330 pF, 50 V, +/- 5%, C0G/NP0, 0603	603
C39, C40, C56, C57	4	43pF	GCQ1555C1H430JB01D	MuRata	CAP, CERM, 43 pF, 50 V,+/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	402
C41, C44	2	1uF	CGA3E1X7R1E105K080AD	TDK	CAP, CERM, 1 µF, 25 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
C42, C43	2	100pF	CGA2B2C0G1H101J050BA	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	402
C45, C46, C50, C51, C52, C55	6	39pF	GRM1885C1H390JA01D	MuRata	CAP, CERM, 39 pF, 50 V, +/- 5%, C0G/NP0, 0603	603
C48	1	22uF	GRT32ER61E226KE13L	MuRata	CAP, CERM, 22 µF, 25 V,+/- 10%, X5R, AEC-Q200 Grade 3, 1210	1210
C49	1	1uF	CKG57NX7T2J105M500JJ	TDK	CAP, CERM, 1 uF, 630 V,+/- 20%, X7R, AEC-Q200 Grade 1, 2220	2220
			2220Y6300105KXTWS2	Knowles Capacitors	CAP, CERM, 1 uF, 630 V,+/- 10%, X7R, AEC-Q200 Grade 1, 2220	2220
D1, D2	2	18V	BZT52C18-7-F	Diodes Inc.	Diode, Zener, 18 V, 500 mW, AEC-Q101, SOD-123	SOD-123
D11, D12	2	30V	BAT42WS-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323
GND_LV, GNDHV, GNDLV, GNDLVF, ISO15VGND, ISO15VSW	6		5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
HS_FLT, LDO, LS_FLT	3	Red	LS L29K-G1J2-1-Z	OSRAM	LED, Red, SMD	SMD, 2-Leads, Body 1.3x0.8mm
HS_OC, LS_OC	2	Yellow	SML-E12Y8WT86	Rohm	LED, Yellow, SMD	1.6x0.8mm
J1, J4	2		731375003	Molex	Connector BNC Female 0Hz To 2GHz 50 Ohm Solder Right Angle Through Hole Gold Tray	CONN_BNC_RCPT

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
J2, J3	2		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
J5	1		395443002	Molex	Terminal Block, 5.08mm, 2x1, TH	Terminal Block, 5.08mm, 2x1, TH
J6	1		282834-2	TE Connectivity	Terminal Block, 2x1, 2.54mm, TH	Terminal Block, 2x1, 2.54mm, TH
J7	1		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
L1, L2	2	4.7uH	MPIA2510V2-4R7-R	Eaton	4.7µH Shielded Molded Inductor 1.22A 262mOhm Max 1008 (2520 Metric)	1008
L3	1	240nH	0603AF-241KRB	Coilcraft	Inductor, Wirewound, Ferrite, 240 nH, 0.85 A, 0.119999 ohm, SMD	1.8x0.91x1.12mm
L4, L5	2		744231061	Wurth Elektronik	Common Mode Chokes / Filters WE-CNSW 0805 400mA 67Ohm 100MHz AECQ200	
			ACM2012-900-2P-T001	TDK	2 Line Common Mode Choke Surface Mount 90 Ohms @ 100MHz 400mA DCR 190mOhm	SMD4
R2, R5	2	200K	3224X-1-204E	Bourns	Trimmer, 200 K, 0.25 W, SMD	3.5x5.3x4.8mm
R4, R25	2	1.00k	RT0603BRD071KL	Yageo America	RES, 1.00 k, 0.1%, 0.1 W, 0603	603
R6, R15, R19, R20, R39, R40	6	300	CRCW0402300RJNED	Vishay-Dale	RES, 300, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	402
R7, R16	2	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
R8, R26	2	22.0k	RC0603FR-0722KL	Yageo	RES, 22.0 k, 1%, 0.1 W, 0603	603
R9, R18, R24, R27, R31, R32, R41	7		ERJ-3GEY0R00V	Panasonic	0 Ohms Jumper 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Automotive AEC-Q200 Thick Film	603
R10, R12, R14, R17, R21	5	3.3k	CRCW06033K30JNEA	Vishay-Dale	RES, 3.3 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R11, R28	2	51.1k	RT0603BRD0751K1L	Yageo America	RES, 51.1 k, 0.1%, 0.1 W, 0603	603
R13	1	0.33	ERJ-3RQFR33V	Panasonic	RES, 0.33, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R22, R29	2	10.0k	ERJ-3EKF1002V	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0603	603
R23, R30	2	10.2k	RT0603DRE0710K2L	Yageo America	RES, 10.2 k, 0.5%, 0.1 W, 0603	603
R33, R37	2	5K	3224X-1-502E	Bourns	Trimmer, 5 K, 0.25 W, SMD	3.5x5.3x4.8mm
R34, R38	2	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R35, R36	2	100k	CRCW0603100KJNEAC	Vishay-Dale	RES, 100 k, 5%, 0.1 W, 0603	603
SH-J1, SH-J2, SH-J3	3	1x2	SNT-100-BK-G	Samtec	Shunt, 100mil, Gold plated, Black	Shunt
T3	1		TPS7B8150QDRVRQ1	Texas Instruments	150-mA High-Voltage Ultralow-IQ Low-Dropout Regulator, DRV0006A (WSON-6)	DRV0006A
Top_FET_PWM	1		5007	Keystone	Test Point, Compact, White, TH	White Compact Testpoint
TP1	1		5016	Keystone	Test Point, Compact, SMT	Testpoint_Keystone_Compact
TP2	1		S2751-46R	Harwin	Test Point, SMT	Test Point, SMT
U1, U2	2		LMG3525R030Q	Texas Instruments	650-V 30-mΩ GaN FET with Integrated Driver and Protection	VQFN52
U3, U4	2		ISO7741FQDBQRQ1	Texas Instruments	General Purpose Digital Isolator 2500Vrms 4 Channel 100Mbps 85kV/µs CMTI 16-SSOP (0.154", 3.90mm Width)	SSOP16
U5, U6	2		UCC14130DWNQ1	Texas Instruments	2W, 24V-Vin, 25V-Vout, High-Efficiency, 5 kVRMS Isolated DC-DC Converter	SOIC36
U7, U10	2		SN74LVC3G14DCUTG4	Texas Instruments	Triple Schmitt-Trigger Inverter, DCU0008A (VSSOP-8)	DCU0008A
U8, U9	2		SN74LVC2G08IDCTRQ1	Texas Instruments	Automotive Catalog Dual 2-Input Positive-AND Gate, DCT0008A, LARGE T&R	DCT0008A

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