

Variant: 001
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LP081 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB1	1		LP081	Any	Printed Circuit Board	
2	C3	1	4.7uF	C0603C475K8PACTU	Kemet	CAP, CERM, 4.7 uF, 10 V, +/- 10%, X5R, 0603	603
3	C4, C7, C11, C15	4	22uF	GRM21BZ71A226ME15L	MuRata	CAP, CERM, 22 uF, 10 V, +/- 20%, X7R, 0805	805
4	C8, C12, C16	3	2.2uF	TMK212B7225KG-TR	Taiyo Yuden	CAP, CERM, 2.2 uF, 25 V, +/- 10%, X7R, 0805	805
5	C9, C13, C17	3	1uF	GMC04X7R105K10NT	Cal-Chip Electronics	1uF +/-10% 10V Ceramic Capacitor X7R 0402 (1005 Metric)	402
6	C21	1	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	402
7	C22, C23	2	10uF	GMC31X7R106K50NT	Cal-Chip Electronics	10 uF +/-10% 50V Ceramic Capacitor X7R 1206 (3216 Metric)	1206
8	C27, C47, C65	3	4.7uF	CGA4J1X7R1H475K125AC	TDK Corporation	Cap Ceramic 4.7uF 50V X7R 10% Pad SMD 0805 +125°C Automotive T/R	805
9	C30, C31, C56, C57, C68, C69	6	560uF	20SEF560M	Panasonic	Cap Aluminum Polymer 560uF 20VDC 20% (10 X 13mm) Radial 5mm	RADIAL
10	C32, C33, C58, C59, C70, C71	6	22uF	CL32B226KAJNFNE	Samsung Electro-Mechanics	CAP, CERM, 22 uF, 25 V, +/- 10%, X7R, 1210	1210
11	C34, C60, C72	3	1uF	C0805C105K4RACAUTO	Kemet	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	805
12	C35, C36, C37, C61, C62, C63, C73, C74, C75	9	0.1uF	UMK105B7104MV-FR	Taiyo Yuden	CAP, CERM, 0.1 uF, 50 V, +/- 20%, X7R, 0402	402
13	J1, J5, J19, J23	4		RF12-07H-T-00-50-G	Adam Tech	MMCX Connector Jack, Female Socket 50Ohm Through Hole Solder	CONN_MMCX
14	J2, J21, J27	3		571-0500	DEM Manufacturing	Standard Banana Jack, insulated, 10A, red	571-0500
15	J4, J7, J12, J22	4		RF2-04A-T-00-50-G	Adam Tech	SMA Connector Jack, Female Socket 50Ohm Through Hole Solder	CONN_RF_7MM00_7MM00
16	J9, J25, J31	3		571-0100	DEM Manufacturing	Standard Banana Jack, insulated, 10A, black	571-0100
17	J11, J30	2		6.91138E+11	Würth Elektronik	TERM BLK 2POS SIDE ENTRY 5MM PCB	HDR2
18	J13	1		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
19	J14, J15, J17, J20	4		JMP-36-30X40SMT	Any	Jumper, SMT	shorting jumper, SMT
20	J18	1		PBC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Gold, TH	Sullins 100mil, 1x2, 230 mil above insulator
21	MP1	1		19.05MM-6.35MM-25-8810	3M	Thermal Pad White 19.05mm x 6.35mm Rectangular Adhesive - Both Sides	THERMAL_PAD
22	MP2	1		V5618B	Assmann WSW Components	Heatsink, 46 K/W, 19x6.3x4.8 mm, black anodized	HEATSINK
23	Q1	1		ISK024NE2LM5AULA1	Infineon	40 V optiMOS Power Transistor, Surface Mount 6-PQFN Dual (2x2)	VSON6
24	R1, R4, R7	3	2.5m	ULR1S-R0025FT2	Welwyn	Fixed Resistor, Metal Alloy, 1W, 0.0025ohm, 1% +/-Tol, 50ppm/Cel, Surface Mount, 1206	1206
25	R2, R5, R8	3	100k	CRCW0402100KFKEDC	Vishay	100 kOhms +/-1% 0.063W, 1/16W Chip Resistor 0402 (1005 Metric) Thick Film	402
26	R9, R25	2	49.9	CRCW1206499R9FKEAHP	Vishay Dale	RES Thick Film, 49.9k, 1%, 0.75W, 100ppm/C, 1206	1206
27	R10	1	4.99k	CRCW04024K99FKED	Vishay-Dale	RES, 4.99 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
28	R19, R20	2	20.0k	RC0603FR-0720KL	Yageo	RES, 20.0 k, 1%, 0.1 W, 0603	603
29	SH-J4	1	1x2	SMT-100-BK-G	Samtec	Shunt, 100mil, Gold plated, Black	Shunt
30	TP1, TP2, TP3	3		5016	Keystone	Test Point, Compact, SMT	Testpoint_Keystone_Compact
31	U1, U2, U3	3		TPS7A5701RTET	Texas Instruments	5-A, Low-VIN (0.7V), Low-Noise, High-Accuracy, Ultra-Low Dropout (LDO) Voltage Regulator	WQFN16
32	U4	1		LMG1020YFFR	Texas Instruments	5V, 7A/5A Low Side GaN Driver With 60MHz/1ns Speed, YFF0006AEAE (DSBGA-6)	YFF0006AEAE
33	C1, C28, C29, C48, C49, C66, C67	0	560uF	20SEF560M	Panasonic	Cap Aluminum Polymer 560uF 20VDC 20% (10 X 13mm) Radial 5mm	RADIAL
34	C2	0	10uF	GRM32ER7YA106KA12K	MuRata	CAP, CERM, 10 uF, 35 V, +/- 10%, X7R, 1210	1210
35	C5	0	22uF	GRM21BZ71A226ME15L	MuRata	CAP, CERM, 22 uF, 10 V, +/- 20%, X7R, 0805	805
36	C6, C20, C26, C45, C64	0	10uF	TPSC106M025R0500	AVX	CAP, TA, 10 uF, 25 V, +/- 20%, 0.5 ohm, SMD	6032-28
37	C10, C14, C18	0	4.7uF	GRM188Z71C475KE21D	MuRata	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X7R, 0603	603
38	C19	0	1pF	GQM2195C2A1R0CB01D	MuRata	CAP, CERM, 1 pF, 100 V, +/- 5%, COG/NP0, 0805	805
39	C24, C25	0	1000pF	06031C102JAT2A	AVX	CAP, CERM, 1000 pF, 100 V, +/- 5%, X7R, 0603	603
40	C38, C46, C76	0	4.7uF	CGA4J1X7R1H475K125AC	TDK Corporation	Cap Ceramic 4.7uF 50V X7R 10% Pad SMD 0805 +125°C Automotive T/R	805
41	C39, C40, C50, C51, C77, C78	0	22uF	CL32B226KAJNFNE	Samsung Electro-Mechanics	CAP, CERM, 22 uF, 25 V, +/- 10%, X7R, 1210	1210
42	C41, C52, C79	0	1uF	C0805C105K4RACAUTO	Kemet	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	805
43	C42, C43, C44, C53, C54, C55, C80, C81, C82	0	0.1uF	UMK105B7104MV-FR	Taiyo Yuden	CAP, CERM, 0.1 uF, 50 V, +/- 20%, X7R, 0402	402
44	FID1, FID2, FID3, FID4, FID5, FID6, FID7, FID8, FID9, FID10	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
45	J3, J10, J16	0		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
46	J6, J28	0		TSW-102-07-G-D	Samtec	Header, 100mil, 2x2, Gold, TH	2x2 Header
47	J8, J24, J26, J29, J32	0		JMP-36-30X40SMT	Any	Jumper, SMT	shorting jumper, SMT
48	R3, R24, R26, R27, R28	0	1	ERJ-6BQF1R0V	Panasonic	RES, 1.00, 1%, 0.333 W, AEC-Q200 Grade 1, 0805	805
49	R6	0	4.99k	CRCW04024K99FKED	Vishay-Dale	RES, 4.99 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
50	R11	0	0.005	WSL1206SLO00FEA18	Vishay-Dale	RES, 0.005, 1%, 0.5 W, AEC-Q200 Grade 0, 1206	1206
51	R12	0	0.05	ERJ-B2CFR05V	Panasonic	RES, 0.05, 1%, 1 W, AEC-Q200 Grade 0, 0612	612
52	R13, R14, R15, R16, R17	0	154	RC1210FR-07154RL	Yageo	RES, 154, 1%, 0.5 W, 1210	1210
53	R18	0	0	ERJ-6GEY0R00V	Panasonic	RES, 0, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	805
54	R21	0	1.00k	ERJ-6ENF1001V	Panasonic	RES, 1.00 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	805
55	R22, R23	0	0	RMC0F0603ZT0R00	Stackpole Electronics Inc	RES, 0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
56	SH-J1, SH-J2, SH-J3	0	1x2	SNT-100-BK-G	Samtec	Shunt, 100mil, Gold plated, Black	Shunt

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