

## Bill of Materials

TI DESIGNS

2513756a

ITEM	QTY	REFERENCE DESIGNATOR	VALUE	DESCRIPTION	SIZE	MANUFACTURER	MANUFACTURER PART NUMBER
1	1	IPC81		Printed Circuit Board	NA	Any	TIDLP-2513757
2	23	C1,C2,C3,C4,C5,C7,C11,C14,C171,C172,C186 C193,C198,C199,C200,C201,C202,C203,C204, C205,C206,C207,C208	0.1uF	Capacitor, 0.1uF, 25V, 10%, , 0402	402	Taiyo Yuden	587-1456-1-ND
3	6	C6,C60,C62,C195,C197,C209	1.0uF	Capacitor, 1.0uF, 16V, 10%, , 0402	402	TDK	445-4978-1-ND
4	2	C8,C9	18pF	Capacitor, 18pF, 50V, 5%, , 0402	402	Murata	490-5858-1-ND
5	1	C10	1000pF	Capacitor, 1000pF, 25V, 10%, , 0402	402	TDK	445-4924-1-ND
6	117	C12,C13,C16,C17,C18,C19,C20,C22,C23,C24, C26,C27,C28,C29,C31,C32,C33,C34,C35,C36, C38,C39,C40,C41,C43,C44,C45,C47,C48,C50, C51,C52,C54,C55,C56,C58,C59,C61,C63,C77, C78,C79,C80,C81,C82,C83,C84,C85,C86,C87, C90,C91,C92,C93,C94,C95,C96,C97,C98,C99, C100,C101,C102,C104,C105,C106,C107,C108, C109,C110,C111,C112,C113,C114,C115,C116, C118,C119,C121,C122,C123,C124,C125,C126, C127,C128,C129,C130,C132,C133,C135,C137, C138,C139,C140,C141,C142,C143,C144,C145, C146,C149,C150,C151,C152,C153,C154,C155, C156,C157,C158,C159,C161,C162,C163,C164, C210	0.1uF	Capacitor, 0.1uF, 16V, 10%, , 0402	402	TDK	445-4970-1-ND
7	2	C15,C30	22uF	Capacitor, 22uF, 16V, 10%, , 0805	805	TDK	445-6797-1-ND
8	4	C21,C25,C37,C49	10uF	Capacitor, 10uF, 16V, 20%, , 0603	603	Samsung	1276-1870-1-ND
9	8	C42,C46,C53,C57,C89,C103,C120,C136	10uF	Capacitor, 10uF, 10V, 20%, , 0603	603	Taiyo Yuden	587-2562-1-ND
10	11	C64,C65,C66,C67,C68,C69,C70,C71,C72,C73, C74	15pF	Capacitor, 15pF, 16V, 5%, , 0402	402	AVX	478-7886-1-ND
11	2	C75,C76	33pF	Capacitor, 33pF, 50V, 1%, , 0402	402	TDK	445-7009-1-ND
12	4	C88,C117,C131,C134	100uF	Capacitor, 100uF, 6.3V, 20%, , 1206	1206	Kemet	399-5620-1-ND
13	3	C147,C148,C194	2.2uF	Capacitor, 2.2uF, 25V, 10%, , 0603	603	Taiyo Yuden	587-2908-1-ND
14	3	C160,C165,C195	4.7uF	Capacitor, 4.7uF, 16V, 20%, , 0603	603	TDK	445-7479-1-ND
15	2	C166,C167	0.1uF	Capacitor, 0.1uF, 50V, 10%, , 0402	402	TDK	445-5932-1-ND
16	3	C168,C169,C170	100uF	Capacitor, 100uF, 25V, 10%, , 2917	2917	Kemet	399-5202-6-ND
17	2	C173,C176	10uF	Capacitor, 10uF, 25V, 10%, , 0805	805	Murata	490-5523-1-ND
18	3	C174,C175,C177	68uF	Capacitor, 68uF, 10V, 20%, , 1206	1206	TDK	445-14673-1-ND
19	1	C178	10 nF	Capacitor, 10 nF, 25V, 10%, , 0402	402	TDK	445-7386-1-ND
20	2	C179,C189	47nF	Capacitor, 47nF, 16V, 10%, , 0402	402	Taiyo Yuden	587-1225-1-ND
21	3	C180,C183,C190	4.7uF	Capacitor, 4.7uF, 50V, 10%, , 0805	805	TDK	445-5980-1-ND
22	1	C181	3900pF	Capacitor, 3900pF, 25V, 5%, , 0603	603	TDK	445-2685-1-ND
23	1	C182	100pF	Capacitor, 100pF, 50V, 5%, , 0402	402	Yageo	311-1024-1-ND
24	1	C184	82nF	Capacitor, 82nF, 50V, 10%, , 0603	603	Kemet	399-9129-1-ND
25	1	C185	56pF	Capacitor, 56pF, 50V, 5%, , 0402	402	Yageo	311-1022-1-ND
26	1	C187	47uF	Capacitor, 47uF, 16V, 20%, , 1210	1210	Kemet	399-5514-1-ND
27	1	C188	22uF	Capacitor, 22uF, 25V, 10%, , 1206	1206	Murata	490-5527-1-ND
28	1	C191	0.033uF	Capacitor, 0.033uF, 16V, 10%, , 0402	402	Murata	490-6333-1-ND
29	1	C192	120pF	Capacitor, 120pF, 50V, 10%, , 0402	402	Taiyo Yuden	587-1212-1-ND
30	4	D1,D2,D3,D4	DF3A6,8FU11G	TVS ZENER DUAL CA 20W SOT323, DF3A6,8FU11G, V-Breakdown-6.4V, , , SOT323	SOT323	ON Semi	DF3A6,8FU11G50SCT-ND
31	1	D5	LTST-C190EKT	LED RED CLEAR 0603, LTST-C190EKT, 2 Vt, 0603	603	Lite On	160-1182-1-ND
32	3	D6,D8,D9	LTST-C190GKT	LED GREEN CLEAR 0603, LTST-C190GKT, 2 Vt, 0603	603	Lite On	160-1183-1-ND
33	1	D7	SMCJ15CA	SMCJ15CA, DO-214AB	DO-214AB	Littlefuse	SMCJ15CALFCT-ND
34	1	FB1	BKP1005HS221-T	FERRITE BEAD 220 OHM 0402, BKP1005HS221-T, 2 OHM, 0.8A, 0402	402	Taiyo Yuden	587-2088-1-ND
35	9	FB2,FB3,FB4,FB5,FB6,FB7,FB8,FB9,FB10	BKP1005EM221-T	FERRITE BEAD 220 OHM 1A 0402, BKP1005EM221-T, 15 OHM, 1A, 0402	402	Taiyo Yuden	587-3290-1-ND
36	7	FB11,FB12,FB13,FB14,FB15,FB16,FB17	BK1005HS431-T	FERRITE BEAD 430OHM 350MA 0402, BK1005HS431-T, 45 OHM, 0.35A, 0402	402	Taiyo Yuden	587-1845-1-ND
37	2	FB18,FB19	FBMH1608HM101-T	FERRITE BEAD 100 OHM 0603, FBMH1608HM101-T, 35 OHM, 2A, 0603	603	Taiyo Yuden	587-1738-1-ND
38	1	FB20	H112067500R-10	FERRITE 6A 50 OHM 1206 SMD, H112067500R-10, .01 OHM, 6A, 1206	1206	Laird	245-2412-1-ND
39	1	F1	NANOSMDC075F	POLYSWITCH 0.75A RESET FUSE SMD, NANOSMDC075F, Ihold 75A, Itrp 1.5V, SMD	SMD	TE	NANOSMDC075FCT-ND
40	1	F2	2410SFV10.0FM/125-2	FUSE 10A 125V FAST 2410, 2410SFV10.0FM/125-2, 10A, SMD	SMD	TE	2410SFV10.0FM/125CT-ND
41	0	GP1,GP2,GP3,GP4,GP5,GP6,GP7,GP8,GP9,G P10,GP11,GP12,GP13,GP14,GP15,GP16	Ground point	Ground point, Nothing to Buy			
42	1	J1	HDMI Type A CON	HDMI connector, HDMI Type A CON	19POS SMT	FCI	609-4614-2-ND
43	1	J2	DP Rx Conn	DP CONN RCPT R/A W/O FLANGE, DP Rx Conn, RA Thru-hole	RA Thru-hole	TE	A99345CT-ND
44	5	J3,J4,J5,J9,J11	TSM-102-01-T-SV	CONN HEADER 2POS 100' SMD, TSM-102-01-T-SV, 2POS 1" SPACING	2POS 1" SPACING	Samtec	TSM-102-01-T-SV
45	1	J6	TMMH-103-01-L-DV	CONN HEADER 6POS 2ROWS 2MM SPACING, TMMH-103-01-L-DV, 6POS 2ROWS 2MM SPACING	POS 2ROWS 2MM SPACIN	Samtec	TMMH-103-01-L-DV
46	1	J7	USB Type B Rcpt	USB RCPT B-TYPE R/A, USB Type B Rcpt, 4pinthruhole	4pinthruhole	FCI	609-3656-ND
47	1	J8	5103308-5	CONN HEADER LOPRO STR 20POS GOLD, 5103308-5, 2x10Pos2.54mm	2x10Pos2.54mm	TE	A33165-ND
48	3	J10,J20,J24	532610671	CONN HEADER 6POS 1.25MM R/A SMD, 0532610671, 6POS1.25mm	6POS1.25mm	Molex	WM7624CT-ND
49	1	J12	87832-1420	CONN HEADER 14POS 2MM VERT SMD, 87832-1420, 14POS 2ROWS 2mm VERT	14POS 2ROWS 2mm VERT	Molex	WM18641-ND
50	3	J13,J14,J15	53261-0471	CONN HEADER 4POS 1.25MM RA SMD, 53261-0471, 4POS 1.25MM SPACING	4POS 1.25MM SPACING	Molex	WM7622CT-ND
51	1	J16	DMD Flex Connector	DMD Flex Connector		InterCon Systems	
52	1	J17	RAPC712X	CONN POWERJACK MINI R/A PCMT, RAPC712X	3pin-Through Hole	Switchcraft	SC237-ND
53	1	J18	392959062	CONN HEADER 6POS 4.2MM VERT TIN, 00392959062	6POS 4.2MM	Molex	WM7326-ND
54	4	J19,J21,J22,J25	TSM-103-01-T-SV	CONN HEADER 3POS 100' SMD, TSM-103-01-T-SV, 3POS 1" SPACING	3POS 1" SPACING	Samtec	TSM-103-01-T-SV
55	1	J23	S14B-PHDSS(LF)(SN)(P)	CONN HEADER PHR SIDE 14POS 2MM, S14B-PHDSS(LF)(SN)(P), 14thruhole2mm	14thruhole2mm	JST	455-1777-ND
56	2	L1,L2	4.7uH	INDUCTOR 4.7uH 4.5A 20%, 4.7uH, 20%, ,	2xSMD	Coilcraft	XAL4030-472MEB

57	1	L3	3.3uH	INDUCTOR 3.3uH 5.5A 20%, 3.3uH, .20%, .	2xSMD	Coilcraft	XAL4030-332MEB
58	1	Q1	FDV303N	MOSFET N-CH 25V 680MA SOT-23, FDV303N, 25V, Id 680mA, SOT-23	SOT-23	Fairchild	FDV303NCT-ND
59	15	RP1,RP2,RP3,RP4,RP5,RP6,RP7,RP8,RP9,RP10,RP11,RP12,RP13,RP14,RP15	22	Resistor Array, 22, 1/32W, .0804	804	Panasonic	Y10220CT-ND
60	0	R1,R5,R111,R112,R115	DNI	Resistor, DNI, 1/16W, 5%, .0402	402	NA	NA
61	6	R2,R3,R10,R13,R14,R47	1M	Resistor, 1M, 1/10W, 5%, .0402	402	Panasonic	P1.0MJCT-ND
62	1	R4	200k	Resistor, 200k, 1/16W, 5%, .0402	402	Yageo	311-200KJRCT-ND
63	13	R6,R28,R56,R91,R92,R93,R94,R95,R107,R108,R113,R114,R150	1k	Resistor, 1k, 1/16W, 5%, .0402	402	Yageo	311-1.0KJRCT-ND
64	41	R7,R8,R12,R17,R21,R29,R30,R50,R51,R65,R66,R67,R68,R70,R71,R72,R73,R74,R76,R77,R78,R79,R81,R82,R84,R100,R102,R103,R105,R117,R131,R139,R140,R141,R142,R143,R144,R145,R146,R149,R156	10k	Resistor, 10k, 1/10W, 5%, .0402	402	Panasonic	P10KJCT-ND
65	1	R9	0	Resistor, 0, 1/10W, .0603	603	Yageo	311-0.0GRCT-ND
66	10	R11,R15,R16,R32,R98,R99,R155,R157,R158,R159	0	Resistor, 0, 1/10W, .0402	402	Panasonic	P0.0JCT-ND
67	3	R18,R62,R116	1.5k	Resistor, 1.5k, 1/10W, 5%, .0603	603	Panasonic	P1.5KGCT-ND
68	0	R19	DNI	Resistor, DNI, 1/10W, 5%, .0402	402	NA	NA
69	14	R20,R24,R35,R52,R53,R55,R61,R75,R83,R89,R96,R104,R147,R160	4.7k	Resistor, 4.7k, 1/10W, 5%, .0402	402	Panasonic	P4.7KJCT-ND
70	1	R22	500	Resistor, 500, 0.15W, 0.05%, .0603	603	Vishay	PLT0603-500ACT-ND
71	1	R23	3k	Resistor, 3k, 1/16W, 5%, .0402	402	Yageo	311-3.0KJRCT-ND
72	6	R25,R26,R27,R33,R34,R69	22	Resistor, 22, 1/10W, 1%, .0402	402	Panasonic	P22.0LCT-ND
73	1	R31	100k	Resistor, 100k, 1/10W, 1%, .0603	603	Panasonic	P100KHCT-ND
74	11	R36,R37,R38,R39,R40,R41,R42,R43,R44,R45,R46	10	Resistor, 10, 1/16W, 1%, .0402	402	Yageo	311-10.0LRCT-ND
75	2	R48,R148	100	Resistor, 100, 1/10W, 5%, .0603	603	Panasonic	P100GCT-ND
76	7	R49,R54,R57,R58,R59,R90,R106	33	Resistor, 33, 1/16W, 5%, .0402	402	Stackpole	RMCF0402J33RJCT-ND
77	3	R60,R118,R138	10k	Resistor, 10k, 1/10W, 5%, .0603	603	Panasonic	P10KGCT-ND
78	2	R63,R64	22	Resistor, 22, 3/4W, 1%, .2010	2010	Vishay Dale	541-22.0AECT-ND
79	0	R80,R85,R86,R87,R88,R151,R152,R153,R154	DNI	Resistor, DNI, 1/10W, 5%, .0402	402	NA	NA
80	2	R97,R101	120	Resistor, 120, 1/10W, 5%, .0402	402	Panasonic	P120JCT-ND
81	1	R109	0.36	Resistor, 0.36, 1/8W, 1%, .0402	402	Panasonic	P.36AKCT-ND
82	1	R110	1	Resistor, 1.0, 1/16W, 1%, .0402	402	Yageo	311-1.00LRCT-ND
83	4	R119,R125,R132,R134	63.4k	Resistor, 63.4k, 1/10W, 1%, .0402	402	Panasonic	P63.4KLCT-ND
84	1	R120	88.7k	Resistor, 88.7k, 1/10W, 1%, .0402	402	Panasonic	P88.7KLCT-ND
85	1	R121	4.42k	Resistor, 4.42k, 1/10W, 1%, .0603	603	Panasonic	P4.42KHCT-ND
86	1	R122	12.7k	Resistor, 12.7k, 1/10W, 0.1%, .0603	603	Susumu	RG16P12.7KBCT-ND
87	1	R123	90.9k	Resistor, 90.9k, 1/10W, 1%, .0402	402	Panasonic	P90.9KLCT-ND
88	1	R124	4.02k	Resistor, 4.02k, 1/16W, 1%, .0402	402	Yageo	311-4.02KLCT-ND
89	2	R126,R135	2.21k	Resistor, 2.21k, 1/10W, 1%, .0402	402	Panasonic	P2.21KLCT-ND
90	3	R127,R130,R137	10k	Resistor, 10k, 1/16W, 0.1%, .0402	402	Panasonic	P10KDCCT-ND
91	2	R128,R136	10.5k	Resistor, 10.5k, 1/10W, 1%, .0402	402	Panasonic	P10.5KLCT-ND
92	1	R129	22.1k	Resistor, 22.1k, 1/10W, 1%, .0402	402	Panasonic	P9P22.1KLCT-ND
93	1	R133	31.6k	Resistor, 31.6k, 1/16W, 1%, .0402	402	Panasonic	P31.6KDCCT-ND
94	1	SW1	TL1105F100Q	SWITCH TACTILE SPST-NO 0.05A 12V, TL1105F100Q	4pin Through Hole	Eswitch	EG2494-ND
95	8	S_TP1,S_TP2,S_TP3,S_TP4,S_TP5,S_TP6,S_TP7,S_TP8	SMD_Testpoint	PC TEST POINT MINI SMD, SMD_Testpoint, MINI, SMD	MINI, SMD	Keystone	5015KCT-ND
96	0	TP1,TP2,TP3,TP4,TP5,TP6,TP7,TP8,TP9,TP10,TP11,TP12,TP13,TP14,TP15,TP16,TP17,TP18,TP19,TP20,TP21,TP22,TP23,TP24,TP25,TP26,TP27,TP28,TP29,TP30,TP31,TP32,TP33,TP34,TP35,TP36,TP37	Testpoint	Testpoint, Nothing to Buy			
97	4	U1,U2,U3,U4	TPD4S010DQAR	IC 4CH ESD SOLUTION HSDIFF 10SON, TPD4S010DQAR, 10-SON	10-SON	TI	
98	2	U5,U9	M24C02-WMN	IC EEPROM 2KBIT 400KHZ 8SO, M24C02-WMN, SO8	SO8	STMicro	497-8552-1-ND
99	1	U6	PCA9306DCUR	IC VOLT LEVEL TRANSLATOR I2C, PCA9306DCUR, 8-VFSOP	8-VFSOP	TI	296-17988-1-ND
100	1	U7	SN74LVC1G14DBVR	IC SGL SHMT-TRG INV GATE SOT23-5, SN74LVC1G14DBVR, SOT23-5	SOT23-5	TI	296-11607-1-ND
101	1	U8	IT6535	DP/HDMI Combo AFE Receiver, IT6535, 176-TQFP	176-TQFP	ITE	
102	1	U10	SN74CB30Q3306	IC DUAL FET BUS SWITCH 8-TSSOP, SN74CB30Q3306, 8TSSOP	8TSSOP	TI	296-15102-1-ND
103	1	U11	DLPC900	DLP DLPC900 Data Processor, DLPC900, 516PBGA	516PBGA	TI	
104	2	U12,U17	SN74AHC1G125DBVR	IC BUS BUFF TRI-ST N-INV SOT235, SN74AHC1G125DBVR, SOT235	SOT235	TI	296-8744-1-ND
105	1	U13	SN65220DBVT	IC SINGLE USB PORT TVS SOT-23-6, SN65220DBVT	SOT-23-6	TI	296-2341-1-ND
106	3	U14,U15,U16	M29D0W128G70NF6E	NOR Flash Parallel 3V/3.3V 128Mbit 8M x 16bit 70ns 56-Pin TSOP Tray, M29D0W128G70NF6E, 56TSOP	56TSOP	Micron	Order with Arrow
107	1	U18	TPS3838K33	IC 2.93V NANOPWR MON SOT23-5, TPS3838K33, SOT23-5	SOT23-5	TI	296-26956-1-ND
108	1	U19	SN74LVC1G07DBVR	IC BUFF/DVR NON-INVERT SOT235, SN74LVC1G07DBVR, SOT235	SOT235	TI	296-8485-1-ND
109	2	U20,U21	TPS54320RHLR	IC BUCK SYNC ADJ 3A 14QFN, TPS54320RHLR, 14-VQFN Exposed Pad	14-VQFN Exposed Pad	TI	296-27854-1-ND
110	1	U22	TPS54620RGYR	IC BUCK SYNC ADJ 6A 14VQFN, TPS54620RGYR, 14-VQFN Exposed Pad (3.5x3.5)	-VQFN Exposed Pad (3.5x3.5)	TI	296-24554-1-ND
111	1	U23	TPS76618D	IC REG LDO 1.8V 0.25A 8SOIC, TPS76618D, 8-SOIC	8-SOIC	TI	296-2724-5-ND
112	1	U24	TLV117118DCY	IC REG LDO 1.8V 1A SOT223, TLV117118DCY, 1A, SOT223	SOT223	TI	296-3508-1-ND
113	4	U25,U27,U29,U30	SN74AHC1T450DRLR	IC BUS TRANSCEIVER TRI-ST SC706, SN74AHC1T450DRLR, SOT-563	SOT-563	TI	296-21023-1-ND
114	2	U26,U28	SN74LVC1G17DBV	IC BUFFER SCHMIT TRIG SOT23-5, SN74LVC1G17DBV, SOT23-5	SOT23-5	TI	296-11933-1-ND
115	1	U31	TL7712ACDR	IC SUPPLY VOLT SUPERVISOR 8-SOIC, TL7712ACDR, 8-SOIC	8-SOIC	TI	296-15021-1-ND
116	1	U32	SN74LV21APWR	IC DUAL 4-IN AND GATE 14-TSSOP, SN74LV21APWR, 14TSSOP	14TSSOP	TI	296-3800-1-ND
117	1	X1	27MHz	CRYSTAL 27MHz 18PF SMD, 27MHz, CL=18pF, .30ppm, 4-SMD	4-SMD	CTS	CTX843CT-ND
118	1	X2	445I23D20M00000	CRYSTAL 20.000MHZ 18PF SMD, 445I23D20M00000, 50ESR, Stab 50ppm, 20ppm	4-SMD	CTS	CTX1172CT-ND