

Bill of Materials

TI DESIGNS

Power Regulation and Control for Intel SkyLake Ultrabook
TIDA-00194

Footprint	Comment	LibRef	Designator	Description	Quantity
	Printed Circuit Board	PCB	IPC	Printed Circuit Board	1
Keystone5005	5005	5005	+3.3V_USB, +5V_USB, BATT+, U1_V1(1.8V), U2_V1(1.8V), U3_V2(3.3V), U4_V2(3.3V), U5_V3(3.3V), U6_V3(3.3V), U7_V4 (1.00V), U8_PVIN, U9_VIN, U10_VIN, U11_PVIN	Test Point, Compact, Red, TH	14
7361-38	TPSV686M035R0150	TPSV686M025R0095	C1	CAP, TA, 68uF, 35V, +/-20%, 0.095 ohm, SMD	1
1210	C3225X6S1V106K250AC	GRM32DR61E106KA12L	C2	CAP, CERM, 10uF, 35V, +/-10%, X5R, 1210	1
0805_HV	C1608X7R1V105K080AC	GRM21BR61E226ME44	C3, C5	CAP, CERM, 1uF, 35V, +/-20%, X5R, 0805	2
0805_HV	Taiyo Yuden	GRM21BR61E226ME44	C4, C6, C22	CAP, CERM, 0.1uF, 35V, +/-20%, X5R, 0603	3
0805_HV	0805ZC105KAT2A	0805ZC105KAT2A	C7, C9, C11, C13, C15, C16, C17, C18	CAP, CERM, 1uF, 10V, +/-10%, X7R, 0805	8
0603	C0603C104K8RACTU	GRM188R71C104KA01D	C8, C10, C12, C14, C26, C32, C33, C34, C35, C36, C42, C43, C44, C45, C52, C58, C59, C60, C61, C62, C68, C69, C78, C84, C85, C88, C94, C102	CAP, CERM, 0.1uF, 10V, +/-10%, X7R, 0603	28
0805_HV	C0805C106K8PACTU	C0805C106K8PACTU	C19, C20	CAP, CERM, 10uF, 10V, +/-10%, X5R, 0805	2
0805_HV	C2012JB1V106K085AC	C2012X5R1E106K125AB, GRM21BR61E226ME44, GRM21BR61E226ME44, GRM21BR61E226ME44, GRM21BR61E226ME44	C21, C66, C82, C92, C97	CAP, CERM, 10uF, 35V, +/-10%, X5R, 0805	5
0603	C0603C332J3RACTU	C0603C332K5RACTU	C23, C48, C74	CAP, CERM, 3300pF, 25V, +/-5%, X7R, 0603	3
0805_HV	C2012X5R1V226M125AC	GRM21BR61E226ME44	C24	CAP, CERM, 22uF, 35V, +/-20%, X5R, 0805	1
0603	GRM188C81A225KE34D	GRM188C81A225KE34D	C27, C30, C37, C40, C53, C56, C63, C74	CAP, CERM, 2.2uF, 10V, +/-10%, X6S, 0603	9
0805_HV	GMK212BJ104KGHT	GRM21BR61E226ME44	C31, C41, C57, C67, C83, C93, C107	CAP, CERM, 0.1uF, 35V, +/-20%, X5R, 0805	7
0805_HV	C2012JB1V226M125AC	GRM21BR61E226ME44	C46, C47, C72, C73	CAP, CERM, 22uF, 35V, +/-20%, X5R, 0805	4
0805_HV	C2012X5R1A476M125AC	GRM21BR61E226ME44	C49, C50, C75, C76	CAP, CERM, 47uF, 10V, +/-20%, X5R, 0805	4
0603	C0603C105K8PACTU	C0603C105K8PACTU	C70, C86, C95, C108	CAP, CERM, 1uF, 10V, +/-10%, X5R, 0603	4
0805_HV	08055C104JAT2A	08055C104JAT2A	C98	CAP, CERM, 0.1uF, 50V, +/-5%, X7R, 0805	1
0603	C0603C471K5RACTU	C0603C471K5RACTU	C99	CAP, CERM, 470pF, 50V, +/-10%, X7R, 0603	1
0805_HV	LMK212BJ226MG-T	LMK212BJ226MG-T	C100	CAP, CERM, 22uF, 10V, +/-20%, X5R, 0805	1
0603	GRM188R60J475KE19D	GRM188R60J475KE19D	C103, C106	CAP, CERM, 4.7uF, 6.3V, +/-10%, X5R, 0603	2
SMB	SMBJ18A-13-F	SMBJ18A-13-F	D1	Diode, TVS, Uni, 18V, 600W, SMB	1
LED_SML	SML312ECTT86	SML312WBCW1	D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D26	LED, Green, SMD	21
LED_SML	SML312BCTT86	SML312WBCW1	D22, D23, D24, D25	LED, Blue, SMD	4
Fiducial10-20	Fiducial	Fiducial	FID1, FID2, FID3, FID4, FID5, FID6	Fiducial mark. There is nothing to buy or mount.	6
Keystone5006	5006	5006	GND	Test Point, Compact, Black, TH	1

Footprint	Comment	LibRef	Designator	Description	Quantity
2512M	RMCF2512JT33R0	CSNL2512FT2L00	R60	RES, DNP, 5%, 1W, 2512	1
2512M	CRCW251236R5FKEG	CSNL2512FT2L00	R61	RES, DNP, 1%, 1W, 2512	1
2512M	CRCW251215R0FKEG	CSNL2512FT2L00	R68	RES, DNP, 1%, 1W, 2512	1
2512M	RMCF2512FT16R5	CSNL2512FT2L00	R69, R81	RES, DNP, 1%, 1W, 2512	2
PWR5322	PWR5322WR500JE	PWR5322WR500JE	R70, R71, R84, R85	RES, DNP, 5%, 3W, 13.5x5.65x5.5mm	4
2512M	RLP73K3AR22JTE	CRCW25121K10JNEG	R72, R73, R106	RES, DNP, 5%, 2W, 2512	3
2512M	CRCW25123R30FKEGHP	CRCW25121K10JNEG	R82, R83	RES, DNP, 5%, 1.5W, 2512	2
SM_3	2-1879021-1	SMW31R0JT	R86	RES, DNP, 5%, 3W, SM_3, 10.5x5x5.5mm	1
1206	CRCW1206110RJNEA	CRCW1206110RJNEA	R93	RES, DNP, 5%, 0.25W, 1206	1
SM_3	A103634CT	SMW31R0JT	R94, R95, R96, R97	RES, DNP, 5%, 3W, SM_3, 10.5x5x5.5mm	4
2512M	RLP73K3AR20JTE	CRCW25121K10JNEG	R105	RES, DNP, 5%, 2W, 2512	1
0603	CRCW060351K0JNEA	CRCW060351K0JNEA	R115	RES, 51k ohm, 5%, 0.1W, 0603	1
0603	CRCW0603200KFKEA	CRCW0603200KFKEA	R116	RES, 200k ohm, 1%, 0.1W, 0603	1
RLW0020A	TPS22993RLW	TPS22993RLW	U1, U2, U3, U4, U5, U6, U7	Quad Channel Load Switch with GPIO and I2C Control, RLW0020A	7
RGT0016C	TPS62151RGTT	TPS62151RGTT	U8	Buck Step Down Regulator with 3 to 17 V Input and 1.8 V Output, -40 to 85 degC, 16-Pin QFN (RGT), Green (RoHS & no Sb/Br)	1
YZF0024AMAM	TPS62182YZF	TPS62182YZF	U9, U10	4 - 17V, 6A, 2-Phase Step-Down Converter, YZF0024	2
RGT0016C	TPS62130RGTR	TPS62130RGTR	U11	Buck Step Down Regulator with 3 to 17 V Input and 0.9 to 6 V Output, -40 to 85 degC, 16-Pin QFN (RGT), Green (RoHS & no Sb/Br)	1
DBV-6	TPS22929DDBV	TPS2292XDBV	U12, U13, U14, U15, U16, U17, U18, U19, U20, U21, U22, U23, U24, U25, U26, U27, U28, U29, U30, U31, U32, U33, U34, U35, U36	IC, LOW INPUT VOLTAGE LOAD SWITCH WITH CONTROLLED TURN-ON	25
Keystone5008	5008	5008	V1.8Dx_3G4G [1.8V,0.07A], V1.8Dx_AUDIO [1.8V,0.13A], V1.8Dx_SENSORS [1.8V,0.07A], V1.8Dx_SSD [1.8V,0.07A], V1.8Dx_USBSDIO [1.8V,0.05A], V1.8Dx_WIFI [1.8V,0.07A], V1.8M [1.8V,0.01A], V1.8S [1.8V,0.10A]	Test Point, Compact, Orange, TH	8
Keystone5009	5009	5009	V3.3A_EC [3.3V,0.10A], V3.3Dx_3G4G [3.3V,2.4A], V3.3Dx_AUDIO [3.3V,0.20A], V3.3Dx_DPWP [3.3V,0.50A], V3.3Dx_EDP [3.3V,0.75A], V3.3Dx_SENSORS [3.3V,0.09A], V3.3Dx_SSD [3.3V,2.50A], V3.3Dx_TOUCHSCREEN [3.3V,0.20A], V3.3Dx_USBSDIO [3.3V,0.80A], V3.3Dx_WIFI [3.3V,2.00A], V3.3M [3.3V,0.22A], V3.3S [3.3V,0.03A]	Test Point, Compact, Yellow, TH	12

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