

TIDA-00565 USB Type-C Audio Accessory Adapter Mode

Designator	Description	Manufacturer	PartNumber	Quantity
!PCB1	Printed Circuit Board	Any	TIDA-00565	1
C1, C4	CAP, CERM, 10 μ F, 25 V, +/- 20%, X5R, 0603	MuRata	GRM188R61E106MA73	2
C2, C12	CAP, CERM, 0.1 μ F, 10 V, +/- 10%, X5R, 0201	Samsung	CL03A104KP3NNNC	2
C3	CAP, CERM, 0.22 μ F, 6.3 V, +/- 20%, X5R, 0201	MuRata	GRM033R60J224ME90	1
C5, C20, C23, C26, C31, C34, C37, C42, C45, C48	CAP, CERM, 0.1 μ F, 50 V, +/- 20%, C0G/NP0, 0402, CAP, CERM, 0.1 μ F, 50V, +/-20%, C0G/NP0, 0402, CAP, CERM, 0.1 μ F, 50V, +/-20%, C0G/NP0, 0402, CAP, CERM, 0.1 μ F, 50V, +/-20%, C0G/NP0, 0402, CAP, CERM, 0.1 μ F, 50V, +/-20%, C0G/NP0, 0402, CAP, CERM, 0.1 μ F, 50V, +/-20%, C0G/NP0, 0402, CAP, CERM, 0.1 μ F, 50V, +/-20%, C0G/NP0, 0402, CAP, CERM, 0.1 μ F, 50V, +/-20%, C0G/NP0, 0402, CAP, CERM, 0.1 μ F, 50V, +/-20%, C0G/NP0, 0402, CAP, CERM, 0.1 μ F, 50V, +/-20%, C0G/NP0, 0402, CAP, CERM, 0.1 μ F, 50V, +/-20%, C0G/NP0, 0402	TDK	C1005X7R1H104M	10
C6	CAP, CERM, 1 μ F, 35 V, +/- 10%, JB, 0402	TDK	C1005JB1V105K050BC	1
C7, C8, C9, C10	CAP, CERM, 0.01 μ F, 50 V, +/- 10%, X7R, 0402	MuRata	GRM155R71H103KA88D	4
C11	CAP, CERM, 22 μ F, 10 V, +/- 20%, X5R, 0603	MuRata	GRM188R61A226ME15D	1
C13, C16, C17, C18	CAP, CERM, 1 μ F, 10 V, +/- 20%, X5R, 0201	Samsung	CL03A105MP3NSNC	4
C14	CAP, CERM, 10 μ F, 10 V, +/- 20%, X5R, 0402	Samsung	CL05A106MP5NUNC	1
C15, C19	CAP, CERM, 220 pF, 25 V, +/- 10%, X7R, 0201	MuRata	GRM033R71E221KA01D	2
C21, C54	CAP, CERM, 1 μ F, 6.3 V, +/- 20%, X5R, 0402	MuRata	GRM152R60J105ME15D	2
C22, C33, C44	CAP, CERM, 10 μ F, 25 V, +/- 10%, X5R, 0805	TDK	C2012X5R1E106K125AB	3
C24, C25, C35, C36, C46, C47	CAP, CERM, 22 μ F, 35 V, +/- 20%, X5R, 0805	TDK	C2012X5R1V226M125AC	6
C27, C30, C38, C41, C49, C52	CAP, CERM, 120 pF, 50 V, +/- 5%, C0G/NP0, 0402	MuRata	GRM1555C1H121JA01D	6
C28	CAP, CERM, 330 pF, 50 V, +/- 5%, C0G/NP0, 0402	TDK	C1005C0G1H331J	1
C29	CAP, CERM, 5600 pF, 50 V, +/- 10%, X7R, 0402	MuRata	GRM155R71H562KA88D	1
C32, C43	CAP, CERM, 0.1 μ F, 6.3 V, +/- 10%, X7R, 0402	MuRata	GRM155R70J104KA01D	2
C39	CAP, CERM, 100 pF, 50 V, +/- 10%, X7R, 0402	Yageo America	CC0402KRX7R9BB101	1
C40	CAP, CERM, 2200 pF, 50 V, +/- 10%, X5R, 0402	MuRata	GRM155R61H222KA01D	1
C50	CAP, CERM, 91 pF, 50 V, +/- 5%, C0G/NP0, 0402	MuRata	GRM1555C1H910JA01D	1
C51	CAP, CERM, 1800 pF, 50 V, +/- 10%, X7R, 0402	MuRata	GRM155R71H182KA01D	1
C53	CAP, CERM, 0.01 μ F, 10 V, +/- 10%, X5R, 0201	MuRata	GRM033R61A103KA01D	1
D1	Diode, Schottky, 40 V, 3 A, SMA	Diodes Inc.	B340A-13-F	1
D2, D3, D4, D5, D6, D7, D8, D9	LED, White, SMD	OSRAM	LW QH8G-Q2S2-3K5L-1	8
FID1, FID2, FID3, FID4	Fiducial mark. There is nothing to buy or mount.	N/A	N/A	4
H1, H2, H3, H4	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	B&F Fastener Supply	NY PMS 440 0025 PH	4
H5, H6, H7, H8	Standoff, Hex, 0.5"L #4-40 Nylon	Keystone	1902C	4
J1	Connector, Receptacle, USB Type C, R/A, SMT	Lintes Technology	20-0000016-01	1
J2, J3	Receptacle, 100mil, 10x2, Gold, TH	Sullins Connector Solutions	PPPC102LFBN-RC	2
J4	Connector, DC Power Jack, R/A, 3 Pos, TH	Foxconn	JPD1135-509-7F	1
J5	Receptacle, 100mil, 3x1, Gold, TH	Sullins Connector Solutions	PPPC031LFBN-RC	1

Designator	Description	Manufacturer	PartNumber	Quantity
J6	Header, 100mil, 2x1, Tin, TH	Molex	90120-0122	1
J7	Header, 100mil, 2x2, Tin, SMT	Molex	15-91-2040	1
J8	Audio Jack, 3.5mm, Stereo, R/A, SMT	CUI Inc.	SJ-43515TS-SMT-TR	1
L1	Ferrite Bead, 21 ohm @ 100MHz, 6A, 0805	Taiyo Yuden	FBMJ2125HM210NT	1
L2, L3, L4		ABRACON	ASPI-0630LR-100M-T15	3
Q1, Q2	MOSFET, N-CH, 30 V, 60 A, SON 3.3x3.3mm	Texas Instruments	CSD17309Q3	2
Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10	Transistor, NPN, 50 V, 0.05 A, SOT-323	Rohm	DTC114EUAT106	8
R1	RES, 0.01 ohm, 1%, 0.25W, 0805	Vishay-Dale	WSL0805R0100FEA18	1
R2, R3, R5, R6, R10, R11, R16, R17, R18, R19, R22, R23, R30, R31, R32, R34, R35, R36, R37, R38, R39, R40, R41, R46, R47, R48, R50, R51, R53, R54, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R71	RES, 0, 5%, 0.05 W, 0201	Panasonic	ERJ-1GE0R00C	45
R4, R7, R8, R9	RES, 3.3 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW04023K30JNED	4
R12, R13, R14, R15, R27	RES, 1.00 k, 1%, 0.05 W, 0201	Vishay-Dale	CRCW02011K00FKED	5
R20, R75, R76, R79, R80	RES, 3.83 k, 1%, 0.05 W, 0201	Vishay-Dale	CRCW02013K83FKED	5
R21, R24, R25, R26, R29, R33, R70	RES, 100 k, 1%, 0.05 W, 0201	Vishay-Dale	CRCW0201100KFKED	7
R28	RES, 15.0 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040215K0FKED	1
R72, R73, R74, R86, R87, R89, R90, R96	RES, 560, 5%, 0.063 W, 0402	Vishay-Dale	CRCW0402560RJNED	8
R77, R78	RES, 9.09 k, 1%, 0.05 W, 0201	Vishay-Dale	CRCW02019K09FKED	2
R81, R91, R101	RES, 220 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW0402220KJNED	3
R82, R92, R102	RES, 100 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402100KFKED	3
R83, R93, R103	RES, 43.2 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040243K2FKED	3
R84	RES, 32.4 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040232K4FKED	1
R85	RES, 2.74 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04022K74FKED	1
R88, R97, R109	RES, 47.5 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040247K5FKED	3
R94	RES, 19.1 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040219K1FKED	1

Designator	Description	Manufacturer	PartNumber	Quantity
R95	RES, 8.45 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04028K45FKED	1
R98, R105	RES, 4.70 k, 1%, 0.1 W, 0402	Panasonic	ERJ-2RKF4701X	2
R104	RES, 7.15 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04027K15FKED	1
R106, R107	RES, 10.0 k, 1%, 0.1 W, 0402	Panasonic	ERJ-2RKF1002X	2
R108	RES, 9.53 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04029K53FKED	1
S1	DIP Switch, SPST 4Pos, Slide, SMT	C&K Components	TDA04H0SB1	1
S3	SWITCH TACTILE SPST-NO 0.05A 12V	Omron Electronic Components	B3U-1000P	1
TP1, TP2, TP3, TP4, TP5	Test Point, Miniature, SMT	Keystone	5019	5
U1	3V, 8Mbit, Serial Flash Memory with Dual and Qual SPI, SOIC-8	Winbond	W25Q80DVSNIQ	1
U2	TPS65982 Preview Specification, ZQZ0096A	Texas Instruments	TPS65982AAZQZR	1
U3, U4	1, 4, 6 CHANNEL PROTECTION SOLUTION FOR SUPER-SPEED (UP TO 6 GBPS) INTERFACE, DQA0010A	Texas Instruments	TPD4E05U06DQA	2
U5, U6, U7	4.5V to 28V Input, 3A Output, Synchronous SWIFT Step-Down DC-DC Converter, DRC0010J	Texas Instruments	TPS54335DRCR	3
U8	Autonomous Audio Accessory Detection and Configuration Switch, RVA0016A	Texas Instruments	TS3A227ERVA	1
U9	USB 2.0 High-Speed (480Mbps) and Audio Switches with Negative Signal Capability, 3 / 4 ohm RON, -40 to 85 degC, 10-Pin UQFN (RSW), Green (RoHS & no Sb/Br)	Texas Instruments	TS5USBA224RSWR	1