

TIDA-00891 USB Type-C TM Plug to USB Type-A Receptacle SS MUX with UFP Controller Reference Design

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Item	Quantity	Reference	Part	Manufacturer	Manufacturer Part Number	Digi-Key Part Number	PCB Footprint	Description	
		1 C1	0.01uF		0014455034140044040	400 4000 4 80		2 CAP CER 1000PF 50V X7R 0402	
1			0.1uF	Murata Electronics North America	GRM155R71H102KA01D	490-1303-1-ND			
2		4 C2,C3,C4,C15		Samsung Electro-Mechanics America, Inc.	CL05A104MP5NNNC	1276-1443-1-ND		2 CAP CER 0.1UF 10V X5R 0402	
3		1 C5	NC, 10uF	Samsung Electro-Mechanics America, Inc.	CL10A106MP8NNNC	1276-1871-1-ND		3 CAP CER 10UF 10V X5R 0603	
4		1 C7	10uF	Yageo	CC0805ZKY5V6BB106	311-1355-1-ND		5 CAP CER 10UF 10V Y5V 0805	
5		2 C12,C13	10uF	Murata Electronics North America	GRM219R60J106KE19D	490-3340-1-ND		805 CAP CER 10UF 6.3V X5R 0805	
6		1 C14	22uF	Samsung Electro-Mechanics America, Inc.	CL21A226MQCLQNC	1276-2412-1-ND		805 CAP CER 22UF 6.3V X5R 0805	
7		1 C16	47uF	TDK Corporation	C2012X5R1A476M125AC	445-8239-1-ND	805 CAP CER 47UF 10V X5R 0805		
8		6 C17,C18,C19,C20,C21,C22	0.47uF	TDK Corporation	C0603X5R1A474M030BC	445-13666-1-ND	20	1 CAP CER 0.47UF 10V X5R 0201	
9	1	1 D2	LED Green 0402	Lumex	SML-LX0402SUGC-TR	67-1881-1-ND	LED_0402	Green LED	
10		1 D6	ESD5Z6.0T1G	ON Semi	ESD5Z6.0T1G	ESD5Z6.0T1GOSCT-ND	SOD_523	TVS Diode	
11		1 D7	LED Orange 0402	Lumex	SML-LX0402SOC-TR	67-1879-1-ND	LED_0402	Orange LED	
12		1 D8	LED YLW 0402	Lumex	SML-LX0402SYC-TR	67-1880-1-ND	LED_0402	Orange LED	
13		1 D9	LED RED 0402	Lumex	SML-LX0402SIC-TR	67-1878-1-ND	LED_0402	Orange LED	
14		1 FB1	220 @ 100MHZ	MuRata	BLM18EG221SN1D	490-3992-1-ND	60	3 FBEAD 1000@100MHz	
								Connector Receptacle USB TypeA 3.0, Super Speed 9 Position Through Hole, Right Angle,	
15		1 J3	USB3_TypeA_Connector	Amphenol	GSB311131HR	GSB311131HR-ND	USB3_TYPEA	Horizontal	
16		1 J4	TypeC_Receptacle_DualSMT_TOP	Foxconn	UT12113-11601-7H		USB_TYPEC_UT1211		
17		1 L1	1uH	Taiyo Yuden	NR3015T1R0N	587-1647-1-ND	IND_NR3015	FIXED IND 1UH 2.1A 36 MOHM SMD	
18		1 R4	1.6K	Panasonic Electronic Components	ERJ-2GEJ162X	P1.6KJCT-ND	40	402 RES SMD 1.6K OHM 5% 1/10W 0402	
19		4 R5,R6,R38,R43	() Yageo	RC0402JR-070RL	311-0.0JRCT-ND	40	2 RES SMD 0.00HM JUMPER 1/16W 0402	
20		1 R27	178K	Yageo	RC0402FR-07178KL	YAG3010CT-ND	40	2 RES SMD 178K OHM 1% 1/16W 0402	
21		2 R28,R29	NC, 0	Yageo	RC0402JR-070RL	311-0.0JRCT-ND	402 RES SMD 0.00HM JUMPER 1/16W 0402		
22		1 R35	900K	Panasonic Electronic Components	ERJ-2RKF9093X	P909KLCT-ND	402 RES SMD 909K OHM 1% 1/10W 0402		
23		1 R36	4.7K	Yageo	RC0402JR-074K7L	311-4.7KJRCT-ND	40	2 RES SMD 4.7K OHM 5% 1/16W 0402	
24		1 R37	NC, 10K	Yageo	RC0402JR-0710KL	311-10KJRCT-ND	40	2 RES SMD 10K OHM 5% 1/16W 0402	
25		4 R39,R40,R41,R42	100K	Yageo	RC0201JR-07100KL	311-100KNCT-ND	20	1 RES SMD 100K OHM 5% 1/20W 0201	
26		5 R45.R46.R47.R48.R54	200K	Panasonic Electronic Components	ERJ-1GEF2003C	P200KABCT-ND	20	1 RES SMD 200K OHM 1% 1/20W 0201	
27		2 R49,R50	NC, 10K	Yageo	RC0201JR-0710KL	311-10KNCT-ND		1 RES SMD 10K OHM 5% 1/20W 0201	
28		3 R51,R53,R55		Panasonic Electronic Components	ERJ-2RKF4990X	P499LCT-ND		2 RES SMD 499 OHM 1% 1/10W 0402	
29		1 852) Panasonic	ERJ-XGNJ331Y	Mouser667-ERJ-XGNJ331Y		402 Distributed by Mouser	
30		6 TP1,TP2,TP5,TP6,TP7,TP8	15-mil TEST PAD				15 mil Round Probe Point	15 mil Round Pad	
31		1 U1	TUSB211RWB	Texas Instruments	TUSB211RWBR		RWB	USB 2.0 480Mbps High Speed Signal Conditioner	
32		1 112	HD3SS3220	Texas Instruments	HD3SS3220RNHR		RNH QFN-30	USB Type-C DRP Port Controller with SuperSpeed 2:1 MUX_DISTRIBUTED BY TI	
33		2 U3,U4	TPD4E05U06	Texas Instruments	TPD4E05U06DQAR	296-35765-1-ND	DQA	4 Channel Ultra Low Capacitance IEC ESD Protection Diodes	
34		1 U5	TPD6E05U06	Texas Instruments	TPD6E05U06RVZR	TPD6E05U06RVZR-ND	BVZ	6-Channel Ultra low capacitance IEC ESD Protection blocks	
35		1 U8	TPS62082DSGT	Texas Instruments	TPS62082DSGT	296-29647-1-ND	dsg	1.2A High Efficient Step Down Converter in 2x2mm SON Package. 3.3 Vout (Min)	
36		1 PCB	11 3020020301	ANY	INT027	235 23047-1-110		PCB Board	

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