Texas Instruments

Bill of Materials

TI DESIGNS

TIDA-00399 SSD Power Delivery Daughter Card

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	PCB Footprint	Note
1	8	1p0_AON, 1p0_ASIC, 1p8_AON, 1p8_NAND, 1p8_NAND2, 3p3_AON, 3p3_LOGIC, ALERT		LED, Blue, SMD	OSRAM	LB Q39G-L2N2-35-1	0603	
2	3	C1_1p0, C1_1p8, C1_3p3	10µF	CAP, CERM, 10 µF, 10 V, +/-20%, X5R, 0402	Samsung	CL05A106MP5NUNC	0402	
3	3	C2_1p0, C2_1p8, C2_3p3	22µF	CAP, CERM, 22 µF, 10 V, +/-20%, X5R, 0603	Samsung	CL10A226MP8NUNE	0603	
4	3	CEXT1, CEXT2, CEXT3	22µF	CAP, CERM, 22 µF, 6.3 V, +/-10%, X5R, 0805	Taiyo Yuden	JMK212BJ226KG-T	0805	DNP
5	4	CIN_1p0_ASIC, CIN_1p8_NAND, CIN_3p3_LOGIC, CIN_SSD	1µF	CAP, CERM, 1 µF, 25 V, +/-10%, X5R, 0402	TDK	C1005X5R1E105K050BC	0402	
6	4	COUT_1p0_ASIC, COUT_1p8_NAND, COUT_3p3_LOGIC, COUT_SSD	0.1µF	CAP, CERM, 0.1 µF, 25 V, +/-10%, X5R, 0402	MuRata	GRM155R61E104KA87D	0402	
7	1	CT	470pF	CAP, CERM, 470 pF, 50 V, +/-5%, C0G/NP0, 0402	TDK	C1005C0G1H471J	0402	
8	3	L1p0, L1p8, L3p3	0.47µH	Inductor, Shielded, Composite, 470 nH, 3.5 A, 0.0076 ohm, SMD	Coilcraft	XFL4015-471MEC		
9	1	R1_1p0	45.3kΩ	RES, 45.3 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040245K3FKED	0402	
10	1	R2_1p0	182kΩ	RES, 182 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402182KFKED	0402	
11	1	R3p3_BYP	0	RES, 0, 5%, 0.25 W, 1206	Vishay-Dale	CRCW12060000Z0EA	1206	DNP for VIN=3.3V operation

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	PCB Footprint	Note
12	4	R3_1p0, R3_1p8, R3_3p3, RPG_SSD	100kΩ	RES, 100 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW0402100KJNED	0402	
13	1	REN1	49.9kΩ	RES, 49.9 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040249K9FKED	0402	DNP
14	1	REN2	442kΩ	RES, 442 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402442KFKED	0402	DNP
15	8	RL1, RL2, RL3, RL4, RL4_2, RL5, RL6, RL7	100Ω	RES, 100, 5%, 0.063 W, 0402	Vishay-Dale	CRCW0402100RJNED	0402	
16	2	RPU1, RPU2	10kΩ	RES, 10 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW040210K0JNED	0402	
17	1	RSNS1	402kΩ	RES, 402 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402402KFKED	0402	DNP
18	1	RSNS2	100kΩ	RES, 100 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402100KFKED	0402	DNP
19	1	U1p0		3-A Step-Down Converter with Hiccup Short Circuit Protection in 2x2 QFN Package, RLT0007A	Texas Instruments	TPS62085RLTT	RLT	
20	1	U1p0_ASIC		Ultra-Low On-Resistance, 4-A Integrated Load Switch with Controlled Turn-on, YPZ0008ADCD	Texas Instruments	TPS22920YZPR	YZP	
21	1	U1p8		3-A Step-Down Converter with Hiccup Short Circuit Protection in 2x2 QFN Package, RLT0007A	Texas Instruments	TPS62087RLTT	RLT	
22	1	U1p8_NAND		Ultra-Low ON-Resistance, 3A Load Switch with Reverse Current Protection and Controlled Turn-ON, YZP0006AFAF	Texas Instruments	TPS22964CYZPR	YZP	
23	1	U1_SSD		5.5-V, 4-A / 6-A, 14-mΩ Load Switch with Adjustable Rise Time	Texas Instruments	TPS22954DQC	DQC	
24	1	U3p3		3-A Step-Down Converter with Hiccup Short Circuit Protection in 2x2 QFN Package, RLT0007A	Texas Instruments	TPS62086RLTT	RLT	

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	PCB Footprint	Note
25	1	U3p3_LOGIC		Low Input Voltage, Ultra-Low rON Load Switches, YFP0006AAAA	Texas Instruments	TPS22922YFPR	YFP	
26	1	UESD		ESD Protection Array for High-Speed Data Interfaces, 2 Channels, -40 to +85 degC, 3-pin SOT (DRT), Green (RoHS & no Sb/Br)	Texas Instruments	TPD2E009DRTR	DRT	
27	7	UL1, UL2, UL3, UL4, UL5, UL6, UL7		Single Channel Ultra-Low Resistnace Load Switch, YFP0004AAAA	Texas Instruments	TPS22914BYFP	YFP	
28	1	UTMP		Low-Power, Digital Temperature Sensor with Two-Wire Interface in WCSP, YFF0004AAAA	Texas Instruments	TMP103AYFFR	YFF	

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