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TID #: TIDA-01095



TIDA-01095 REV E1 Bill of Materials

Itom #	Docianotos	Quantitie	Value	PartNumber	Manufacturer	Docorintian	Dackage Peference
Item #		Quantity	value			Description Printed Circuit Poord	PackageReference
1	!PCB1	$-\frac{1}{4}$	2.205	TIDA-01095	Any	Printed Circuit Board	1010
2	C1		2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 µF, 100 V, +/- 10%, X7R, 1210	1210
3	C2		2.2uF	GRM188R61C225KE15D	MuRata	CAP, CERM, 2.2 μF, 16 V, +/- 10%, X5R, 0603	0603
4	C3	1	1uF	C3225X7R2A105K200AA	TDK	CAP, CERM, 1 µF, 100 V, +/- 10%, X7R, 1210	1210
5	C4	1	1800pF	GRM188R71E182KA01D	MuRata	CAP, CERM, 1800 pF, 25 V, +/- 10%, X7R, 0603	0603
6	C5	1	0.22uF	GRM188R71E224KA88D	MuRata	CAP, CERM, 0.22 μF, 25 V, +/- 10%, X7R, 0603	0603
7	C6, C12, C20	3	10uF	GRT188C81A106ME13D	MuRata	CAP, CERM, 10 μF, 10 V, +/- 20%, X6S, AEC-Q200 Grade 2, 0603	0603
8	C7, C8, C10,	5	0.1uF	GRM188R71E104KA01D	MuRata	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X7R, 0603	0603
	C13, C19						
	C11		0.47uF	CGA3E3X7R1E474K080AB	TDK	CAP, CERM, 0.47 µF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
10	C14, C18		0.47uF	GRM188R70J474KA01D	MuRata	CAP, CERM, 0.47 μF, 6.3 V, +/- 10%, X7R, 0603	0603
11	C15		0.047uF	GRM188R70J473KA01D	MuRata	CAP, CERM, 0.047 µF, 6.3 V, +/- 10%, X7R, 0603	0603
	C16		4700pF	GCM188R71H472KA37D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
	C17		470pF	C0603X471K5RACTU	Kemet	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0603	0603
	D1	1	100V	MBR1H100SFT3G	ON Semiconductor	Diode, Schottky, 100 V, 1 A, SOD-123FL	SOD-123FL
15	D2	1	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	SOD-123
16	H1, H2, H3, H4	4		PMSSS 440 0025 PH	B&F Fastener Supply	MACHINE SCREW PAN PHILLIPS 4-40	Machine Screw, 4-40,
							1/4"
17	H5, H6, H7, H8	4		1902E	Keystone	Standoff, Hex, 1"L #4-40 Nylon	Standoff
18	J1, J3	2		691216510002	Wurth Elektronik	Receptacle, 5.08mm, 2x1, Brass, TH	Receptacle, 5.08mm,
h							2x1, TH
19	J2	1		SL 11 112 03G	Fischer Elektronik	Header, 2.54mm, 3x1, Gold, TH	TH, 3-Leads, Body
- i		١,					2.5x7.62mm, Pitch
- i		١,					2.54mm
20	J4	1		TSW-105-07-G-S	Samtec	Header, 100mil, 5x1, Gold, TH	5x1 Header
	J5, J6	2		PEC10DAAN	Sullins Connector Solutions	Header, 100mil, 10x2, TH	Header, 10x2,
i		! ,	l	I		<u> </u>	2.54mm, TH
22	L1	1		74435586800	Wurth Elektronik	WE-HCI SMD Flat Wire High Current Inductor, Inductance = 68.0 μH	·
23	Q1		60V	CSD18537NQ5A	Texas Instruments	MOSFET, N-CH, 60 V, 50 A, SON 5x6mm	SON 5x6mm
24	Q2	1	60V	CSD18563Q5A	Texas Instruments	MOSFET, N-CH, 60 V, 15 A, SON 5x6mm	SON 5x6mm
25	R1	1	120k	CRCW0603120KJNEA	Vishay-Dale	RES, 120 k, 5%, 0.1 W, 0603	0603
26	R2	1	47k	CRCW060347K0JNEA	Vishay-Dale	RES, 47 k, 5%, 0.1 W, 0603	0603
27	R3		4.99k	CRCW06034K99FKEA	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, 0603	0603
	R4, R10	2	100	RC0603FR-07100RL	Yageo America	RES, 100, 1%, 0.1 W, 0603	0603
29	R5	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
	R8	1	1.21Meg	CRCW06031M21FKEA	Vishay-Dale Vishay-Dale	RES, 1.21 M, 1%, 0.1 W, 0603	0603
	R9	1	475	CRCW0603475RFKEA	Vishay-Dale Vishay-Dale	RES, 475, 1%, 0.1 W, 0603	0603
32	R11	-	10.0k	CRCW0603475RFKEA	Vishay-Dale Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
33	R12		0.05	CSRN2512FK50L0	Stackpole Electronics Inc	RES, 0.05, 1%, 0.1 W, 0603	2512
34	R13	1	5.6k	CRCW06035K60JNEA	Vishay-Dale	RES, 5.6 k, 5%, 0.1 W, 0603	0603
35	R13		100k	RC0603FR-07100KL	Yageo America	RES, 5.6 k, 5%, 0.1 W, 0603 RES, 100 k, 1%, 0.1 W, 0603	0603
36	R14		100k 866	RC0603FR-07100KL RC0603FR-07866RL	Yageo America Yageo America	RES, 866, 1%, 0.1 W, 0603	0603
36	R16		8.66k	RC0603FR-078K66L	Yageo America Yageo America		0603
38	R16		86.6k			RES, 8.66 k, 1%, 0.1 W, 0603	0603
	R17 R18			CRCW060386K6FKEA	Vishay-Dale	RES, 86.6 k, 1%, 0.1 W, 0603	
39			866k	RC0603FR-07866KL	Yageo America	RES, 866 k, 1%, 0.1 W, 0603	0603
40	R19		11.0k	CRCW060311K0FKEA	Vishay-Dale	RES, 11.0 k, 1%, 0.1 W, 0603	0603
41	R20	1	1.50k	RC0603FR-071K5L	Yageo America	RES, 1.50 k, 1%, 0.1 W, 0603	0603
42	R21	1	0 M/bito	MCR18EZHJ000	Rohm	RES, 0, 5%, 0.25 W, 1206	1206
43	TP1, TP3, TP4,	8	White	5002	Keystone	Test Point, Miniature, White, TH	White Miniature
i	TP6, TP7, TP9,	! ,	l	I			Testpoint
	TP10, TP11	ب			-		DIMPETIT
	U1	1		TPS92641PWPR/NOPB	Texas Instruments	Synchronous Buck Controller for Precision Dimming LED Drivers, PWP0016A	PWP0016A
45	U2	1		OPA376AIDBVR	Texas Instruments	Precision, Low Noise, Low Iq Operational Amplifier, 2.2 to 5.5 V, -40 to	DBV0005A
1	<u> </u>	<u></u>		<u></u>		125 degC, 5-pin SOT23 (DBV0005A), Green (RoHS & no Sb/Br)	
46	C9	0	1uF	GRM32RR71H105KA01L	MuRata	CAP, CERM, 1 μF, 50 V, +/- 10%, X7R, 1210	1210
47	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
48	Q3		60V	CSD18563Q5A	Texas Instruments	MOSFET, N-CH, 60 V, 15 A, SON 5x6mm	SON 5x6mm
	R6		866	RC0603FR-07866RL	Yageo America	RES, 866, 1%, 0.1 W, 0603	0603
50	R7	0	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
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