TID#:TIDA-060009

TIDA-060009 Bill of Materials

Designator	Description	Footprint	Quantity	Manufacturer	PartNumber
C1, C15	CAP, CERM, 10 µF, 50 V,+/- 10%, X7R, 12	1210_280	2	Taiyo Yuden	UMK325AB7106KM-T
C2, C12, C14, C16	CAP, CERM, 0.1 µF, 25 V,+/- 5%, X7R, 060	0603	4	AVX	06033C104JAT2A
C3	CAP, CERM, 4.7 µF, 10 V,+/- 10%, X5R, 06	0603	1	AVX	0603ZD475KAT2A
C4, C7, C13	CAP, CERM, 1 µF, 25 V,+/- 10%, X7R, 060	0603	3	AVX	06033C105KAT2A
C5	CAP, AL, 680 µF, 25 V, +/- 20%, SMD	CL_1000x1350	1	Nichicon	UCL1E681MNL1GS
C6, C8, C20	CAP, CERM, 1 µF, 6.3 V,+/- 20%, X7R, 040	0402	3	MuRata	GRM155R70J105MA12D
C9, C10, C17, C18	CAP, CERM, 0.01 µF, 50 V,+/- 5%, X7R, 04	0402	4	Kemet	C0402C103J5RACTU
C11	CAP, CERM, 10 µF, 50 V,+/- 10%, X5R, 12	1206_180	1	TDK	C3216X5R1H106K160AB
C19	CAP, CERM, 1000 pF, 16 V,+/- 10%, X7R,	0402	1	MuRata	GRM155R71C102KA01D
CS, GND, GND	Test Point, Compact, Black, TH	Keystone5006	3	Keystone	5006
D1	LED, Green, SMD	LTST-C191_Green	1	Lite-On	LTST-C191TGKT
D2	Diode, Schottky, 40 V, 5 A, SMC	SMC	1	Diodes Inc.	B540C-13-F
D3	LED, Orange, SMD	LTST-C170KFKT_Oran	1	Lite-On	LTST-C170KFKT
DOWN, MANUAL, UP	Switch, Push Button, SMD	SW_SKRKAEE010	3	Alps	SKRKAEE010
J1, J4, J5	Terminal Block, 6.35mm, 2x1, TH	On-Shore_OSTT70201	3	On-Shore Technology	OSTT7020150
J2, J3	Receptacle, 2.54mm, 10x2, Gold, TH	HDR2X10	2	Samtec	SSQ-110-03-G-D
J6	Receptacle, 2.54mm, 4x1, Tin, TH	Sullins_xPxC041LFBN	1	Sullins Connector Solu	PPTC041LFBN-RC
LS1	BUZZER MAGNETIC, 12V, 12.8MM, SMD	WST-1310S	1	Sobertron	WST-1310S-3
Motor1, Motor2	Test Point, Compact, White, TH	Keystone5007	2	Keystone	5007
PVDD, VBAT	Test Point, Compact, Red, TH	Keystone5005	2	Keystone	5005
Q1	MOSFET, N-CH, 40 V, 75 A, PowerPAK_SO	PowerPAK_SO-8L	1	Vishay-Siliconix	SQJ422EP-T1-GE3
Q2, Q3, Q4, Q5	MOSFET, N-CH, 40 V, 32 A, AEC-Q101, P	PowerPAK_SO-8L	4	Vishay-Siliconix	SQJA412EP-T1_GE3
Q6, Q7	Transistor, NPN, 45 V, 0.5 A, SOT-23	SOT-23	2	ON Semiconductor	BC817-16LT1G
R1, R3, R6	RES, 100, 5%, 0.063 W, 0402	0402	3	Vishay-Dale	CRCW0402100RJNED
R2, R4, R7	RES, 1.5 k, 5%, 0.063 W, 0402	0402	3	Vishay-Dale	CRCW04021K50JNED
R5	RES, 4.99 k, 1%, 0.063 W, 0402	0402	1	Vishay-Dale	CRCW04024K99FKED
R8, R9, R16, R17, R25	RES, 0, 5%, 0.063 W, 0402	0402	5	Panasonic	ERJ-2GE0R00X
R10, R11, R20, R21, R24, F	RES, 100, 1%, 0.063 W, 0402	0402	6	Vishay-Dale	CRCW0402100RFKED
R12, R13, R14, R15, R19, F	RES, 10.0 k, 0.5%, 0.063 W, 0402	0402	7	Vishay-Dale	CRCW040210K0DHEDP
R18	RES, 499, 1%, 0.063 W, 0402	0402	1	Vishay-Dale	CRCW0402499RFKED

R22, R29, R30	RES, 1.0 k, 5%, 0.063 W, 0402	0402	3	Vishay-Dale	CRCW04021K00JNED
R23	RES, 0.002, 1%, 2 W, 2512	2512	1	Stackpole Electronics	CSNL2512FT2L00
U1	300mA High-Voltage Ultra-Low-Iq Low-D	DGN0008D_N	1	Texas Instruments	TPS7B8233QDGNRQ1
U2	Smart Diode Controller, DGK0008A	DGK0008A_N	1	Texas Instruments	LM74610QDGKRQ1
U3	Automotive Brushed DC Gate Driver, RHB	RHB0032E	1	Texas Instruments	DRV8703QRHBRQ1
U4	40V/100mOhm Single Channel Smart Hig	PWP0014C_N	1	Texas Instruments	TPS1H100AQPWPRQ1
U5	Automotive Catalog Dual Schmitt-Trigge	DCK0006A_N	1	Texas Instruments	SN74LVC2G17QDCKRQ1

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