

Bill of Materials

TI DESIGNS

 TIDA-00142: Automotive High Current Brushless DC Motor Drive
 F28035 Piccolo controlCARD

Item	Description	Digikey Part #	Comments				
U1	F28035 (TI) SMD (LQFP-80)		Texas Instruments				
C1, C14, C22-C29	CAP ceramic 100n X5R, SMD 0603 (decoupling)						
C2-C9	CAP ceramic 3300p X7R, SMD 0603						
C10-C12, C19-C21	CAP ceramic 2u2 X7R, SMD 0603						
C13	CAP Tant 47u 10V SMD (3216-12)	511-1500-2					
C15	CAP ceramic 10u X5R, SMD 0603						
C16, C18	CAP ceramic 1u X7R, SMD 0603						
C17	CAP ceramic 0.01u X7R, SMD 0603						
L1, L2	Inductor 60Ω impedance, 100MHz, SMD 0805	587-1932-1-ND					
L3, L4	Inductor 220Ω impedance, 100MHz, SMD 0805	490-1054-1-ND					
R1, R13	Resistors 2K2, 5% - SMD, 0603						
R2, R5,R6	Resistors 0R, 5% - SMD, 0805						
R3, R7, R8	Resistors 680R, 5% - SMD, 0603						
R4	Do NOT populate - SMD, 0805	---					
R9, R10	Resistors 3K3, 5% - SMD, 0603						
R11, R12	Resistors 820R, 5% - SMD, 0603						
RN1, RN2	Resistor network 56R 5%	Y1560CT					
RN3	Resistor network 33R 5%	Y1330CT					
X1	Do NOT populate - SMD	---					
LD1	LED SMD 0805 - Green	404-1021-1					
LD2,LD3	LEDs SMD 0805 - Red	404-1017-1					
U2, U3	Diodes, clamping, NUP4201MR6 TSOP-6	NUP4201MR6T1GOSTR					
U4	TPS73033 (TI) - SOT23-5	296-2652-5					
U6	ISO7221CDR	296-21955-1					
U5	MAX3221 (TI)	296-19825-2					
U7	SN74LVC2G07 (TI)	296-13494-2					
SW1	CHS-01TB	563-1004-1-ND					
SW2	CT2182LPST	CT2182LPST-ND					
SW3	CAS-D20TA - 2xSPDT	CASD20JCT-ND					

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