



Title EGR 314 Aadish Lele Schematic			
Size A4	Number		Revision
Date:	3-07-2025		Sheet of
File:	C:\Users\...\Schematic.SchDoc		Drawn By: Aadish Lele

Comment	Description	Designator	Footprint	LibRef	Quantity
0.01 uF 50V	CAP 10nF 50V ±2% 1812 (4532 Metric) Thickness 2.3mm SMD	C1, C_b	CAPC1812(4532)230_M	CMP-1040-00808-2	2
0.1uF 16V	CAP CER 0.1UF 16V X7R 0402	C2, C3	FP-GRM15-MFG	CMP-2100-03641-2	2
100uF	CAP CER 100UF 6.3V X5R 1210	C_in	FP-GRM32-0_3-MFG	CMP-2000-05259-2	1
68uF	Multilayer Ceramic Capacitors 68uF ±20% 10V X5R SMD 2220	C_out	FP-C5750-230-0_4- IPC_C	CMP-08246-004950-1	1
Male Header		Conn_IN	61300811121	CMP-1502-01076-3	1
Male Headers		Conn_OUT, EX_header, Snap Programmer	61300811121	CMP-1502-01076-3	3
S_Diode	DIODE SCHOTTKY 20V 1A SMA	D1	FP-SMA-MFG	CMP-12790-000051-1	1
Debug_LED	WURTH ELEKTRONIK- 150060VS75000 - LED, Green, SMD, 0603, 30 mA, 2 V, 570 nm	D2, D3, D4	WL- SMCW_0603_150060x x75000	CMP-1426-00006-7	3
0154004.DR	FUSE BRD MNT 4A 125VAC/VDC 2SMD	FUSE	FP-0154-MFG	CMP-08605-000003-1	1
1x2	CONN HEADER VERT 2POS 2.54MM	J3, J4	FP-90136-1202-MFG	CMP-04776-000259-1	2
694108301002		JP	694108301002	CMP-1502-00190-3	1
47 uH	SMD Inductors 47uH ±10% 0.205A 1.196Ω 1207	L1	FP-LB3218-1_8-0_2- IPC_A	CMP-14484-000479-1	1
PIC18F27Q10T-I/ML	PIC18F27Q10T-I/ML 8- bit PIC MCU, 128 KB, 3615 Bytes, 64 MHz, 1.8 to 5.5V, QFN-28, RoHS	MicroController	FP-C04-105-MFG	CMP-00252-96705243- 1	1
DRV8830DGQR	7-V, 1-AH-bridge motor driver with speed regulation and I2C control	Motor Driver	*IC_XTR111AIDGQR	DRV8830DGQR	1
1x3	Low Profile Through- Hole Header, Right Angle, -55 to 105 degC, 2 mm Pitch, 3- Pin, Male, RoHS	P1	SMTC-TMM-103-01-X- S-RA	CMP-1029-00176-1	1
10K	Chip Resistor, 10 KΩm, +/- 1%, 0.25 W, -55 to 155 degC, 1206 (3216 Metric), RoHS, Tape and Reel	R1, R2, R3, R6	RESC3116X65X40ML1 0T20	CMP-1014-00623-2	4
1k	Chip Resistor, 1 KΩm, +/- 1%, 100 mW, -55 to 155 degC, 0402 (1005 Metric), RoHS, Tape and Reel	R4, R5	RESC1005X40X25NL0 5T05	CMP-1011-00510-4	2
100 Ohm		R7	RESC3216X70X50NL0 5T20	CMP-2003-00016-1	1
0.22Ohm	RES 0.22 OHM 1% 1W 2512	R_SENSE	FP-ERJ1TR-MFG	CMP-05422-000060-1	1
B3U-1000P-B	SWITCH TACTILE SPST- NO 0.05A 12V	RESET	FP-B3U-1000P-B-MFG	CMP-08834-000005-1	1
LM2675MX-3.3/NOPB	IC REG BUCK 3.3V 1A 8SOIC	Switching Voltage Regulator	FP-D0008A-IPC_B	CMP-04918-000266-1	1