Supply:
Vm -> Motor supply
Vc -> Microcontroller supply
Ve -> Encoder supply

Serial communication - I2C:
SDA -> Serial Data
SCL -> Serial Clock

H-Bridge output (new motor supply):
OA -> Output A
OB -> Output B

H-Bridge input - PWM:
IN3 -> Microcontroller PWM 1
IN4 -> Microcontroller PWM 2

Encoder output:
ECA -> Channel A
ECB -> Channel B

IC1 — A3906

Pin		Pin	
13	VBB	19	CP1
17	VCP	1	CP2
3	SLEEP	18	CP3
4	IN1	20	CP4
5	IN2	16	OUT1A
6	IN3	14	OUT1B
7	IN4	15	SENSE1
8	FL1	10	OUT2A
9	FL2	12	OUT2B
2	GND	11	SENSE2
		EXP	EXP

U1
EN FB
GND
VIN SW

M1 — DSPIC33FJ32MC202-E/MM

Pin			Pin
10	VDD	PGED3/EMUD3/ASDA1/RP5(1)/CN27/RB5	11
25	AVDD	PGEC3/EMUC3/ASCL1/RP6(1)/CN24/RB6	12
17	VCAP	INT0/RP7(1)/CN23/RB7	13
26	~MCLR	TCK/PWM2H1/SCL1/RP8(1)/CN22/RB8	14
		TDO/PWM2L1/SDA1/RP9(1)/CN21/RB9	15
27	AN0/VREF+/CN2/RA0	PGED2/EMUD2/TDI/PWM1H3/RP10(1)/CN16/RB10	18
28	AN1/VREF-/CN3/RA1	PGEC2/EMUC2/TMS/PWM1L3/RP11(1)/CN15/RB11	19
6	OSC1/CLKI/CN30/RA2	PWM1H2/RP12(1)/CN14/RB12	20
7	OSC2/CLKO/CN29/RA3	PWM1L2/RP13(1)/CN13/RB13	21
9	SOSCO/T1CK/CN0/RA4	PWM1H1/RP14(1)/CN12/RB14	22
		PWM1L1/RP15(1)/CN11/RB15	23
1	PGED1/EMUD1/AN2/C2IN-/RP0(1)/CN4/RB0		
2	PGEC1/EMUC1/AN3/C2IN+/RP1(1)/CN5/RB1		
3	AN4/RP2(1)/CN6/RB2		
4	AN5/RP3(1)/CN7/RB3		
8	SOSCI/RP4/CN1/RB4		
5	VSS_2		
16	VSS		
24	AVSS		
29	EPAD		

Components: R1, R2, R3, R4, R5, R6, R7, R8, C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, H1, H2