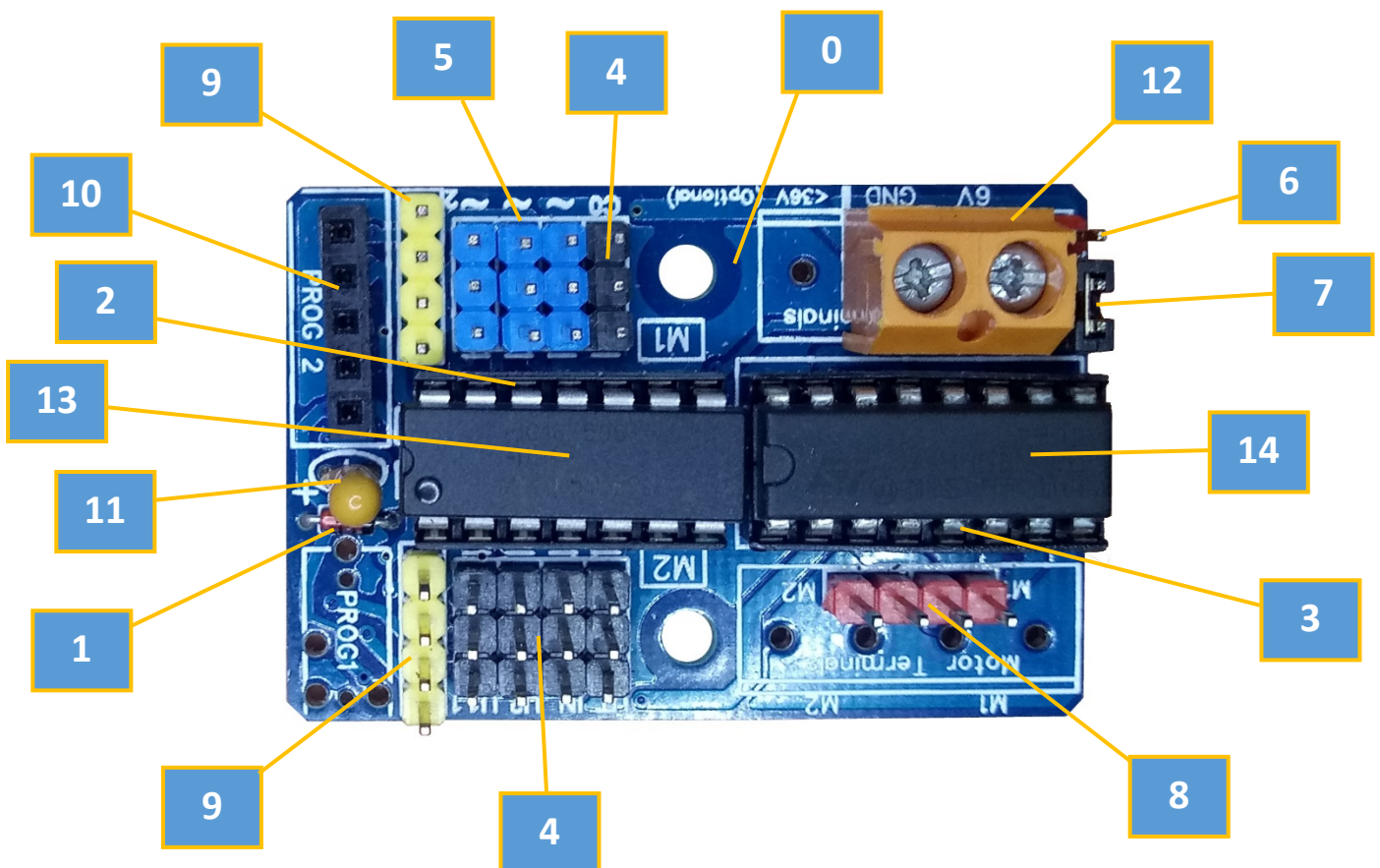


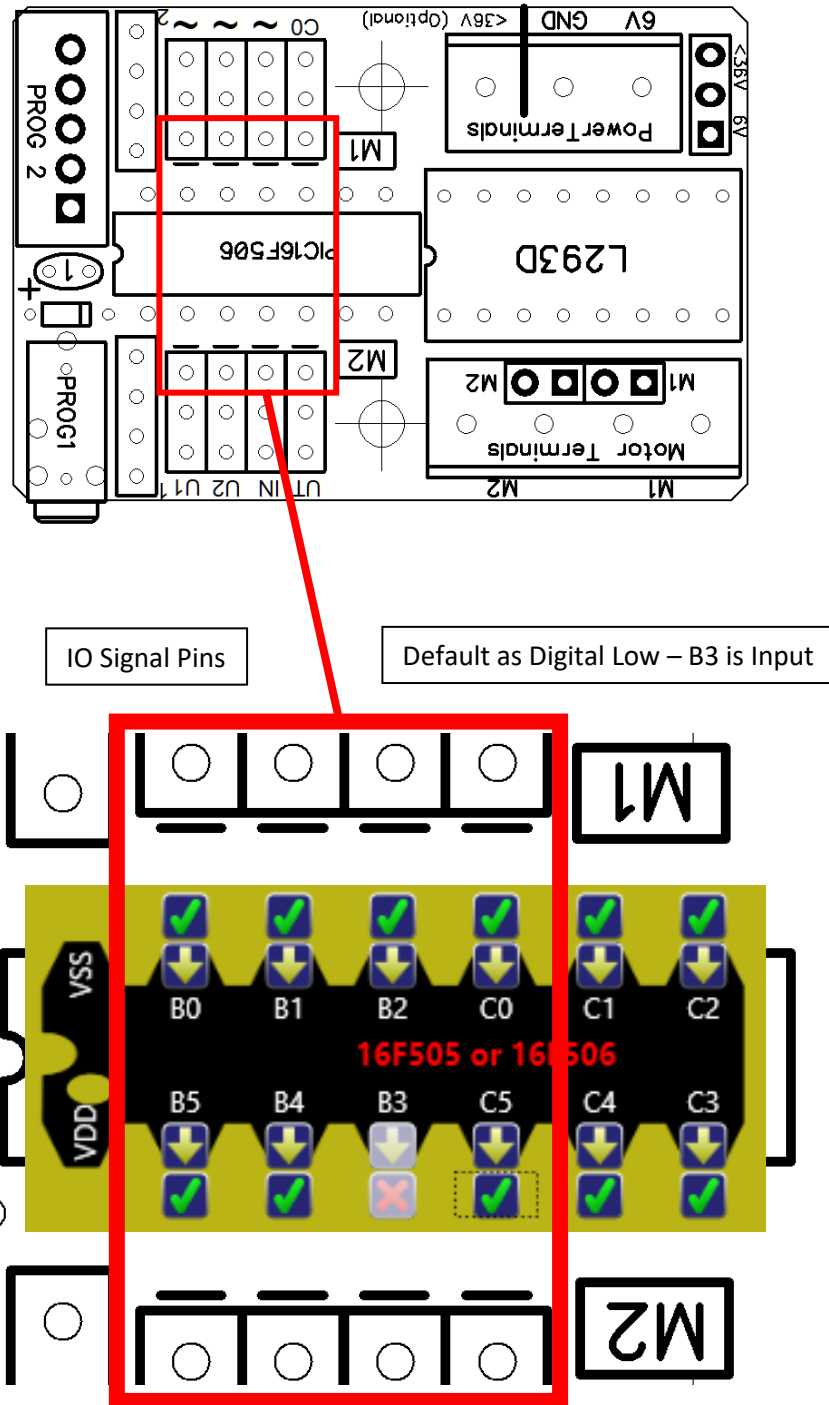
Soldering the PicoMini-DRIVER V2

Components and Soldering Order:

Order	Component	QTY	Comment	Pin Labels
0	PicoMini DRIVER V2 PCB	1	Printed Circuit Board	
1	Diode IN4148	1	VDD Voltage Stability - Polarised	
2	IC Socket 14 pin	1	Align Orientation Notch	
3	IC Socket 16 pin	1		
4	3 Pin Header – BLACK	5	General IO Module connectors	CO, UT, IN, U2, U1
5	3 Pin Header – BLUE	3	IO Module connectors with Analog	~ ~ ~
6	3 Pin Header – RED	1	Selects Motor Driver Supply Voltage	
7	2 Pin Jumper	1	Place on Red Header – 6V Connects the Motor Driver Supply	
8	4 pin Header – RED	1	Motors plug on to this header	
9	4 pin Header - YELLOW	2	Ultrasonic module connectors	UT, U2, U1
10	5 pin Programming Socket	1	PicoCODER ICSP Programmer	
11	Tag Tantulum 1uF Capacitor	1	VDD Voltage Stability – Polarised	
12	Screw Terminal	1	Battery Pack Connector	6V, GND
13	PIC12F506 Microcontroller IC	1	Gently compress the pins and insert	
14	L293D Motor Driver IC	1		
15	Battery Box with Switch	1	Red Wire is 6V, and Black is GND	Not shown



PicoMini-DRIVER V2 Module Control Pin Connections



Note: Up to eight 3 pin module cables (Yellow, Red, Black) are connected by positioning the Yellow Signal Wire on the pin closest to the Microcontroller.



As pictured above, these modules will be controlled in the PicoFlow ALPHA software using Module Pins B0, B1, B2, C0, C5, B3, B4 & B5. While C1 with C2 control the rotation of Motor 1, and C3 with C4 control the rotation of Motor 2.

Module Pins and PicoPI-PRO Connections

Each pin has numerous functionality (referred to as Peripherals) and will be described below along with the PicoPI preferred configuration

PIN	PicoPI Module	Pin Peripherals	PicoCODER ICSP	Notes
B0	Reflection Sensor 1	Digital Output, Digital Input, Analogue Input	Data Pin	Disconnect Sensors when Programming
B1	Reflection Sensor 2	Digital Output, Digital Input, Analogue Input	Clock Pin	Disconnect Sensors when Programming
B2	Potentiometer	Digital Output, Digital Input, Analogue Input		
C0	Intelli-LCD	Digital Output , Digital Input		
C5	Buzzer Module	Digital Output , Digital Input		
B3	NA	Digital Input , Master Clear	VPP (High Voltage Programming 12V)	Disconnect Outputs when Programming
B4	Switch Module 1	Digital Output, Digital Input		
B5	Switch Module 2	Digital Output, Digital Input		

Connecting the PicoCODER for Programming

