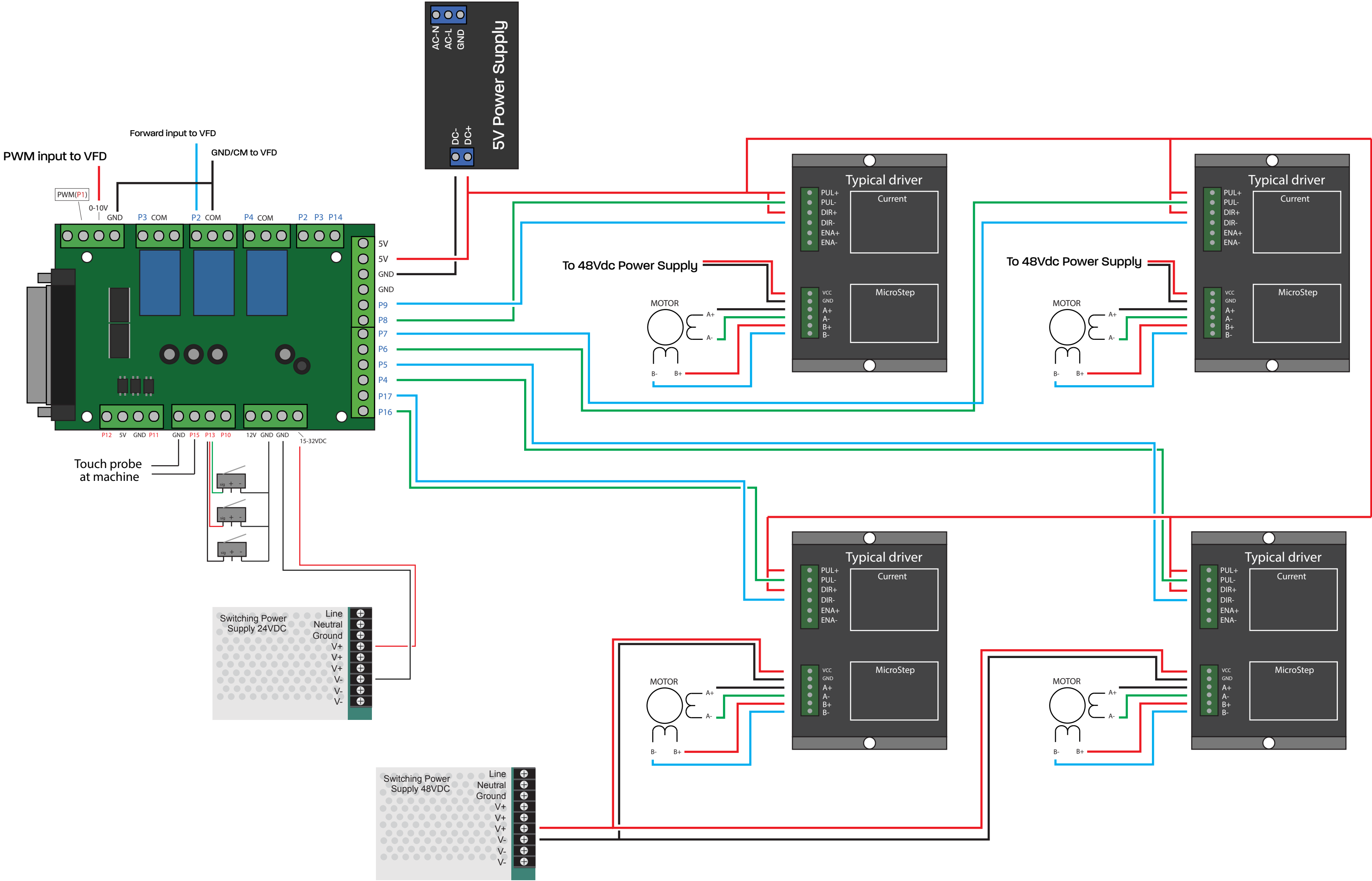# Mach3 Breakout Board with Relay & Spindle Control

Engine Configuration... Ports & Pins   ✕

| Port Setup and Axis Selection | Motor Outputs | Input Signals | Output Signals | Encoder/MPG's | Spindle Setup | Mill Options |

Signal	Enabled	Step Pin#	Dir Pin#	Dir LowActi...	Step Low A...	Step Port	Dir Port
X Axis	✔	4	5	✖	✔	1	1
Y Axis	✔	6	7	✖	✔	1	1
Z Axis	✔	8	9	✖	✔	1	1
A Axis	✖	16	17	✖	✔	1	1
B Axis	✖	0	0	✖	✖	0	0
C Axis	✖	0	0	✖	✖	0	0
Spindle	✔	1	0	✔	✔	1	1

OK   Cancel   Apply

Engine Configuration... Ports & Pins   ✕

| Port Setup and Axis Selection | Motor Outputs | Input Signals | Output Signals | Encoder/MPG's | Spindle Setup | Mill Options |

Signal	Enabled	Port #	Pin Number	Active Low	Emulated	HotKey
X ++	✖	0	0	✖	✖	0
X --	✖	0	0	✖	✖	0
X Home	✔	1	13	✔	✖	0
Y ++	✖	0	0	✖	✖	0
Y --	✖	0	0	✖	✖	0
Y Home	✔	1	13	✔	✖	0
Z ++	✖	0	0	✖	✖	0
Z --	✖	0	0	✖	✖	0
Z Home	✔	1	13	✔	✖	0

Pins 10-13 and 15 are inputs. Only these 5 pin numbers may be used on this screen

Automated Setup of Inputs

OK   Cancel   Apply

Engine Configuration... Ports & Pins   ✕

| Port Setup and Axis Selection | Motor Outputs | Input Signals | Output Signals | Encoder/MPG's | Spindle Setup | Mill Options |

Signal	Enabled	Port #	Pin Number	Active Low	
Enable1	✔	1	14	✘	
Enable2	✘	0	0	✘	
Enable3	✘	0	0	✘	
Enable4	✘	0	0	✘	
Enable5	✘	0	0	✘	
Enable6	✘	0	0	✘	
Output #1	✘	0	0	✘	
Output #2	✔	1	2	✔	
Output #3	✔	1	3	✘	
Output #4	✘	0	0	✘	

Pins 2 - 9 , 1, 14, 16, and 17 are output pins. No other pin numbers should be used.

OK   Cancel   Apply

Engine Configuration... Ports & Pins   ✕

| Port Setup and Axis Selection | Motor Outputs | Input Signals | **Output Signals** | Encoder/MPG's | Spindle Setup | Mill Options |

Signal	Enabled	Port #	Pin Number	Active Low	
Output #2	✔	1	2	✔	^
Output #3	✔	1	3	✖	
Output #4	✖	0	0	✖	
Output #5	✖	0	0	✖	
Output #6	✖	0	0	✖	
Charge Pump	✔	1	14	✔	
Charge Pump2	✖	0	0	✖	
Current Hi/Low	✖	0	0	✖	
Output #7	✖	0	0	✖	∨
Output #8	✖	0	0	✖	

Pins 2 - 9 , 1, 14, 16, and 17 are output pins. No other pin numbers should be used.

OK   Cancel   Apply