DC Motor Control

DC motor control is implemented in myCNC software, and it useful for certain hardware such as the affordable THC lifters used on certain systems:

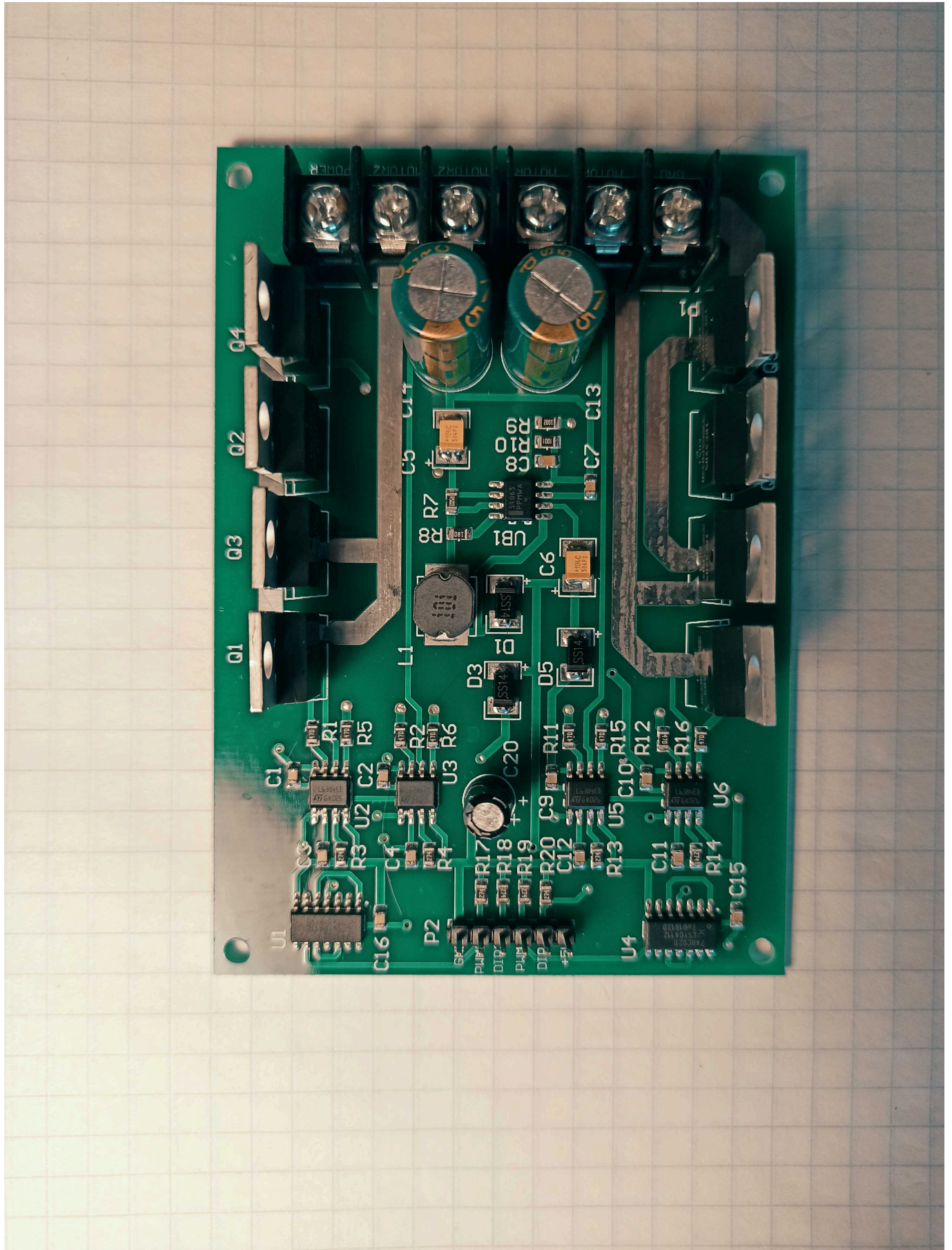
To turn on DC motor control, head into Settings → Config → Technology → THC, and enable the DC Motor Control option:

When the checkbox is enabled, the Z+ and Z- buttons send commands to turn on the DC motor instead of controlling the Z axis via pulse-dir. This is also relevant in situations where it appears that

the the pulse-dir Z axis does not move and the coordinates do not change despite pressing the buttons - it is then necessary to check whether this option has been incorrectly left enabled.

Pictured below is the DC motor driver board:

There are two control signals - direction and PWM voltage (speed) reference signal.

Gvariables used for DC control

Name	Global variable	Description
GVAR_SET_THC_PWM	8970	Set a PWM number to work with the DC motor
Value assigned to variable		
0		Disable (switch to regular pulse-dir axis)
1		Enable PWM1
2		Enable PWM2
3		Enable PWM3

Name	Global variable	Description
GVAR_SET_THC_PWM_Dir	8971	Set a DIR signal number

Name	Global variable	Description
GVAR_SET_DC_MOVE	8972	Give a Jog command, with the recorded variable being the movement speed
Value assigned to variable		
Positive value		Movement up
Negative value		Movement down
0		Stop