PinStem Xmega to Motor Controller

dac   c2 b3 b2 a7   a6 a5 a4   cmp   adc+

⊕ Vsupply   adc-

gnd

c3   a3
c4   a2
c5   a1
    NC
c6   NC
c7   NC
d0   NC
d1   e3

Fuse   C₂   C₃   24 V

11   C₁   15   5

1 IN1   ALERT   VREG V$_{CC}$
16 IN2   OUT1   7
2 SB   **TB6559FG**   M
3 Vref   OUT2   9
OSC/PWM   RSA   S-GND   P-GND
14   8   4/12/13   10

spi   i2c

PWM   reset
usart   out   Void

d2 d3 d6   d7 e0 e1 e3

Vsupply = 3.8 - 6 Vdc   **AVR GNU C**

Note: Signal on colored lines is inverted. Mode: PWM default

Input/Output Functions

	Input				Output			
V$_{ref}$	IN1	IN2	SB	PWM/OSC	I$_O$ (100%) (typ.)	OUT1	OUT2	Mode
	H	H	H	Capacitor	—	L	L	Short brake
	L	H	H	Capacitor	$\dfrac{V_{ref}}{6 \cdot RSA}$	L L	Constant-current chopping	CCW Short brake
OSC 0 to 3 V	H	L	H	Capacitor	$\dfrac{V_{ref}}{6 \cdot RSA}$	Constant-current chopping	L L	CW Short brake
	L	L	H	Capacitor	—	OFF (Hi-Z)		Stop
	X	X	L	Capacitor	—	OFF (Hi-Z)		Standby
	H	H	H	H L		L	L	Short brake
	L	H	H	H L		L L	H L	CCW Short brake
PWM 4.5 to 5.5 V	H	L	H	H L		H L	L L	CW Short brake
	L	L	H	H L		OFF (Hi-Z)		Stop
	X	X	L	H L		OFF (Hi-Z)		Standby

Note: X = Don't care