



PN 313-001, Rev B H-Bridge Peripheral

Stacking Headers

Top / Bottom Header (P3 / J2)

1	Vcc		2
3		DIO-1*	4
5	PWM-1	PWM-2	6
7	ICOC-1+	ICOC-2+	8
9	GND	ICOC-3+	10

* - Nfault output from DRV8833
 R4 – Current Sense for A chans. Default setting disabled. When enabled, can be used to limit drive current on associated channels.
 R5 – Current Sense for B chans. Default setting disabled.

To enable current sense channels, replace associated jumpers with shut resistors per recommendations of DRV8833 data sheet.

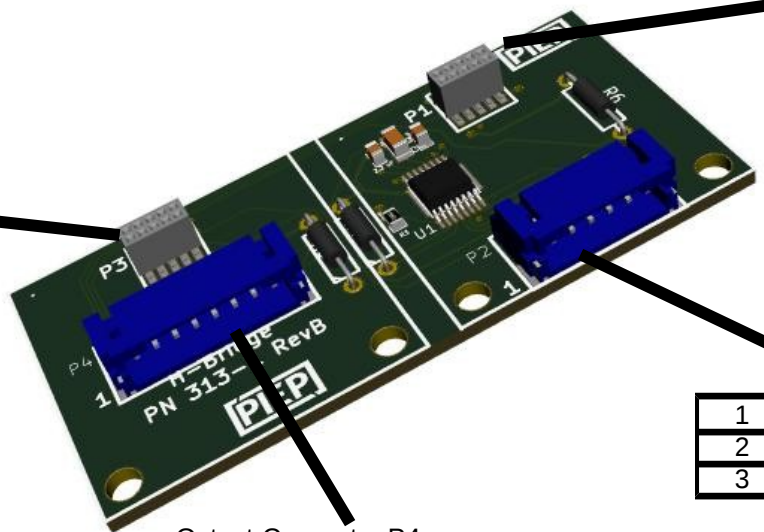
R6 – default setting connects A and B outputs to Vcc. When removed, an external source voltage may be applied via P2 pin 1. Max voltage 24 Volts

DRV8833 based H-Bridge driver chip; 24 Volts / 2 Amps max. Can drive four servos, two servos with direction, or one stepper motor. For speed control, requires 2 PWMs from associated processor (minimum); 4 PWMs for stepper control or multi-servo control. Optional input captures required for encoder feedback (up to 6 maximum for 2 axis control with 3 signals per axis). Not compatible with mini-PIEP boards. Operates from either 5V or 3.3V logic.

Output Connector P4

1	Vcc	P3-7*	5
2	P1-7*	P3-8*	6
3	P1-8*	P3-10*	7
4	P1-10*	GND	8

Encoder Inputs on pins 2 through 7 are routed to pins SPIP7,8,10 on J1, J2 (bottom) stacking headers (input capture / output compare processor pins).
 Mating connector SKU 400-006
 Mating crimped cables SKU 400-009



Top / Bottom Header (P1 / J1)

1	Vcc		2
3		DIO-1* &	4
5	PWM-3	PWM-4	6
7	ICOC-4+	ICOC-5+	8
9	GND	ICOC-6+	10

*& Device enable; drive low to enter low power mode
 ICOC pins available for encoder feedback via P2 & P3 connectors

Output Connector P2

1	Vext	Bout2	4
2	Aout1	Bout1	5
3	Aout2	GND	6

Vext – external H-Bridge driver supply, max 24VDC

Aout1 – output controlled by PWM3
 Aout2 – output controlled by PWM4
 Bout1 – output controlled by PWM2
 Bout2 – output controlled by PWM1
 2 Amps max output
 Mating connector SKU 400-005
 Mating crimped cables SKU 400-009
 Standoffs SKU 400-012

