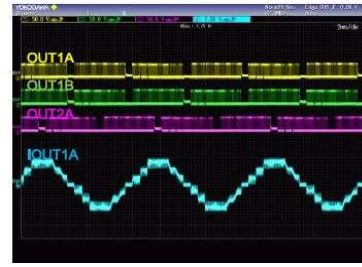


Specifications of Bipolar Driver Board BD202411-H

- For Ring Pump RP-H1.6 / 2.0 series -

1. Power supply voltage DC 24V
2. Drive system Limited to quarter (1/4) steps.



3. Output current 0.4A
- Quarter Step Drive Waveform (CLK: 2400Hz)

Applicable Stepper Motor : MX444-PHM-5-Y983 (Three Peaces Co., Ltd.)
PF-42T-48R1(NPM)

4. CW/CCW switching High = CW Low = CCW
Select High when the voltage is higher than 2.0V and lower than 5.0V.
Select Low when the voltage is lower than 0.8V.
5. Start/Stop switching High = Start Low = Stop
Select High when the voltage is higher than 2.0V and lower than 5.0V.
Select Low when the voltage is lower than 0.8V.
6. Driver IC BD63725BEFV (ROHm)

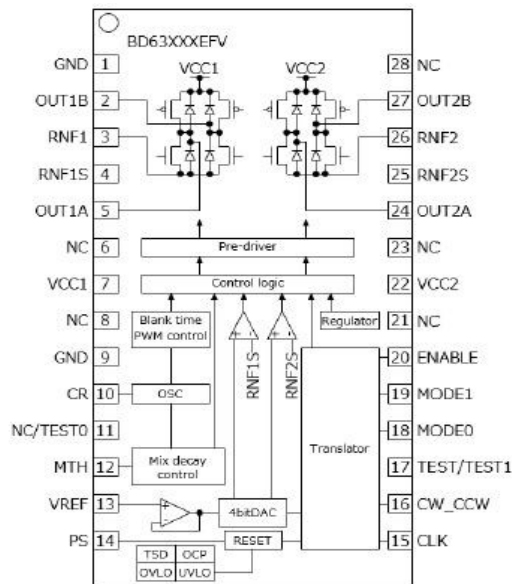


Figure 2 Driver Block

Terminal Number	Name	Function	Terminal Number	Name	Function
1	GND	Ground Terminal	15	CLK	Phase-Forward Clock Input Terminal
2	OUT1B	H-bridge output terminal	16	CW_CCW	Motor rotation direction setting terminal
3	RNFI	Resistor connection terminal for current sensing	17*1	TEST	Test terminal (used by connecting to GND)
4	RNFIS	Current-sense comparator input terminal		TEST1	Test terminal
5	OUT1A	H-bridge output terminal	18	MODE0	Motor excitation mode setting terminal
6	NC	Non-connection	19	MODE1	Motor excitation mode setting terminal
7	VCC1	Power Terminal	20	ENABLE	Output Enable Terminal
8	NC	Non-connection	21	NC	Non-connection
9	GND	Ground Terminal	22	VCC2	Power Terminal
10	CR	Chopping frequency setting terminal	23	NC	Non-connection
11*1	NC	Non-connection	24	OUT2A	H-bridge output terminal
	TEST0	Test terminal	25	RNF2S	Current-sense comparator input terminal
12	MTH	Current attenuation method setting terminal	26	RNF2	Resistor connection terminal for current sensing
13	VREF	Output current value setting terminal	27	OUT2B	H-bridge output terminal
14	PS	Power Save Terminal	28	NC	Non-connection

* 1 : Upper row BD63715AEFV, BD63725BEFV, BD63525AEFV

7. Clock terminal

Duty : 50%

Select High when the voltage is higher than 2.8V and lower than 5.0V.

Select Low when the voltage is lower than 0.6V.

RP-H1.6/02 * -7Z/10Z-DC24VS

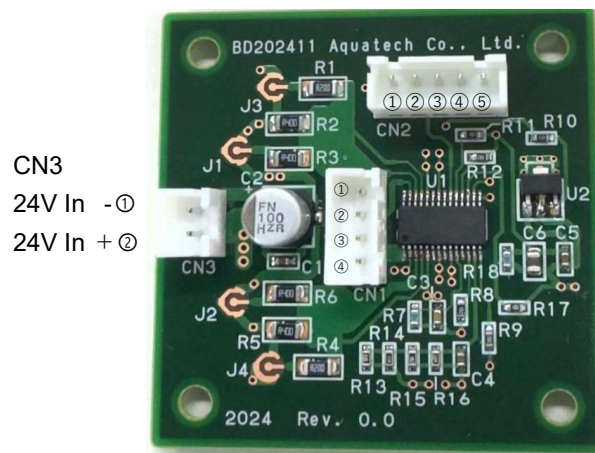
RP-H1.6 series Continuous Driving Max : 1600Hz 400PPS 100rpm

Frequency (Hz)	40	400	800	1200	1600
PPS	10	100	200	300	400
Rotation (rpm)	2.5	25	50	75	100

8. Optical terminal

DC5.0V 15mA Output terminal (CN2 ⑤Pin)

9. Explanation of Bi-polar Driver Board **BD202411-H** 50 x 50 □



Board-side male connector

B*B-XH-A Series/JST

Connection-side female connector

XHP* Series/JST

Contact Pin

BXH-001T-P0.6

CN1 Stepper motor connection

- | | | |
|---|-----|--------|
| ① | B + | Red |
| ② | B - | Yellow |
| ③ | A + | Brown |
| ④ | A - | Orange |

CN2 Control circuit connection

- | | |
|---|------------|
| ① | GND |
| ② | CLK |
| ③ | START/STOP |
| ④ | CW/CCW |
| ⑤ | DC5V-out |

CN3 Power input

- | | |
|---|------------|
| ① | DC24V In- |
| ② | DC24V In + |

[An example of control board connection circuit]

