

User manual

1 x single axis TB6600 Stepper Motor Driver board

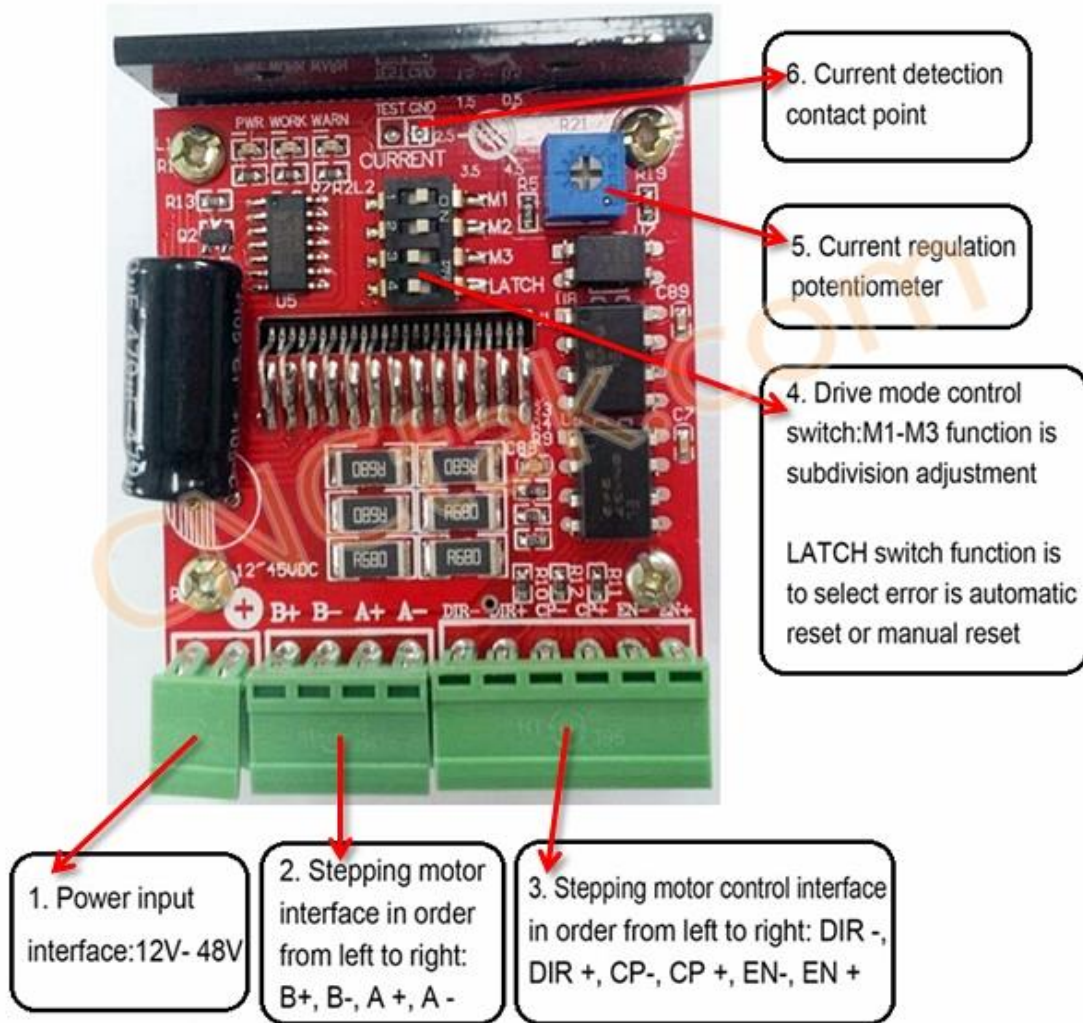


The main advantages of the TB6560AHQ chip:

- 1) 5 microstep: 1,1/2,1/4,1/8,1/16
- 2) current from 0.7-4.5A stepless adjust
- 3) overheat/undervoltage/overcurrent protection (TB6560 only have overheat protection)

TB6600HQ VS TB6560AHQ Comparision of Specifications

| TB6600HQ VS TB6560AHQ Comparision of Specifications | | |
|---|--|---|
| | TB6600QH | TB6560AHQ |
| Process | BICD0.13 50 V | BICD0.6 40 V |
| Power supply voltage | Vcc = 8.0 to 45.0 V (single power supply) | VDD = 4.5 to 5.5 V, Vm = 4.5 to 34.0 V |
| Output current (peak) | 5.0 A | 3.5 A |
| ON resistance (upper + lower) | 0.4 Ω | 0.6 Ω |
| Excitation mode | 1/1, 1/2, 1/4, 1/8, 1/16 | 1/1, 1/2, 1/8, 1/16 |
| CLK frequency | Up to 200 kHz | Up to 15 kHz |
| Minimum of clock pulse width | 2.2 μ s | 10 μ s |
| OSC frequency | 4000 kHz | Up to 600 kHz |
| Chopping frequency | 20 kHz to 60 kHz | Up to 150 kHz |
| Decay mode | O (40%) | O - (100%, 50%, 25%, 0%) |
| Protection | ①TSD ②ISD ③UVLO | Only TSD |
| Torque | Vref and TQ pins (100% , 30%) | TQ pin (100%, 75%, 50%, 20%) |
| Package | HZIP25-P-1.00F | HZIP25-P-1.27 |



Features:

1. As shown above POWERIN power input interface, as shown above left negative ultra-right is positive, $\sim\sim$ 50V input voltage 12.
2. STEP DIRVER PORT is stepping motor interface, from left to right definition A is B +, B -, A +, A -
3. CTR PORT is input control interface,, from left to right in turn definition is DIR -, DIR +, STEP -, STEP +, EN, EN +
4. MOD SW is working mode selector switch, as shown in figure, from the top to the bottom of a single definition is M1, M2, M3, LATCH, which control the driver the breakdown of the selection and error reset mode

| | | | |
|----|-----|-----|------------------------|
| ON | OFF | OFF | 1/4 subdivision |
| ON | OFF | ON | 1/8 subdivision |
| ON | ON | OFF | 1/16 subdivision |
| ON | ON | ON | Free, Motor don't lock |

Attention : as shown in figure 3 shows, switch to the left dial is OFF, switch dial the to the right is ON LATCH: ON: automatic recovery mode, OFF: manual recovery mode.

