

Instruction Manual for Evaluation Board of theTC78H610FNG

July 28, 2016

Rev.1.0

【Outline】

The TC78H610FNG is a 2-channel brushed DC motor driver corresponding to the direct PWM control system. This product is capable of driving up to 2 brushed DC motors or 1 bipolar stepping motor. CD process is adopted and the rating of 18V and 1.0A are realized.

This evaluation board mounts necessary components to evaluate the IC. Two brushed motors can be controlled by the direct PWM drive.

Mounting a connector for a stepping motor also enables a stepping motor control. Please sense controllability of a brushed DC motor by applying the TC78H610FNG.

【Note】

In using, please be careful about the thermal condition sufficiently.

For each control signal, please refer to the IC specifications by accessing to the following URL:

<http://toshiba.semicon-storage.com/ap-en/product/linear/motordriver/detail.TC78H610FNG.html>

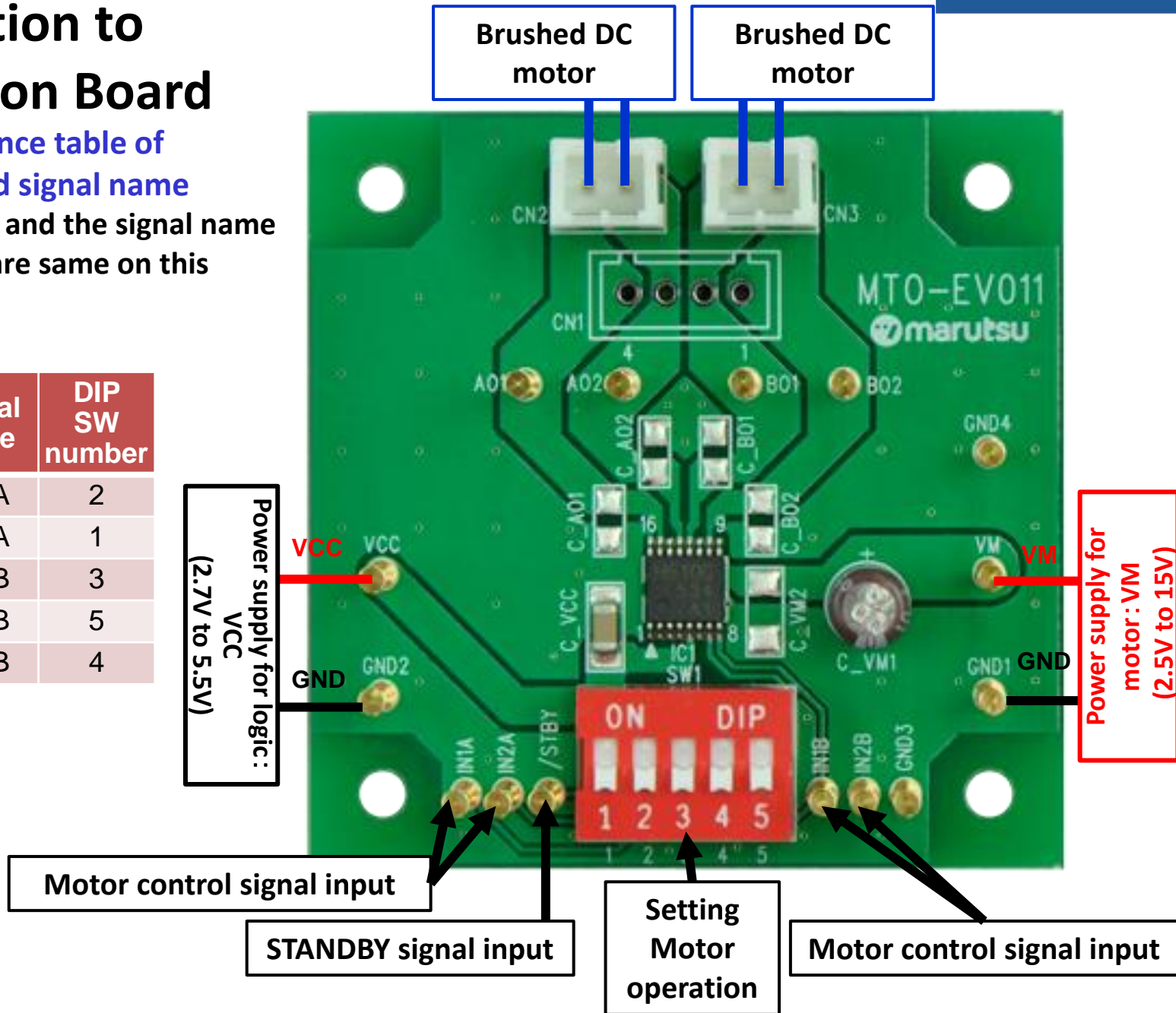
Further, the application of this evaluation board is limited to the purpose of evaluating and learning the motor control. Please do not ship them to a market.

Connection to Evaluation Board

Correspondence table of silk name and signal name

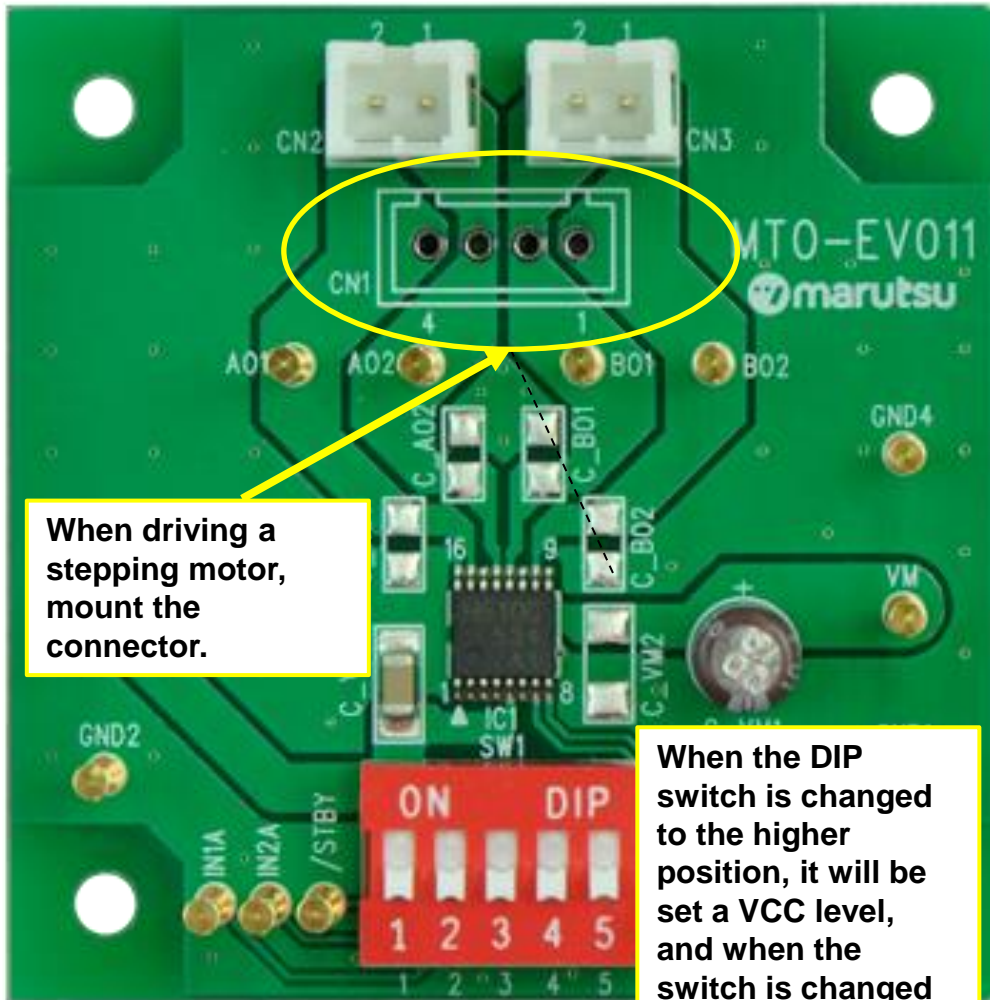
The silk name and the signal name of the board are same on this board.

Silk name	Signal name	DIP SW number
IN1A	IN1A	2
IN2A	IN2A	1
/STB	/STB	3
IN1B	IN1B	5
IN2B	IN2B	4



Setting Evaluation Board

Setting Motor Operation



When driving a stepping motor, mount the connector.

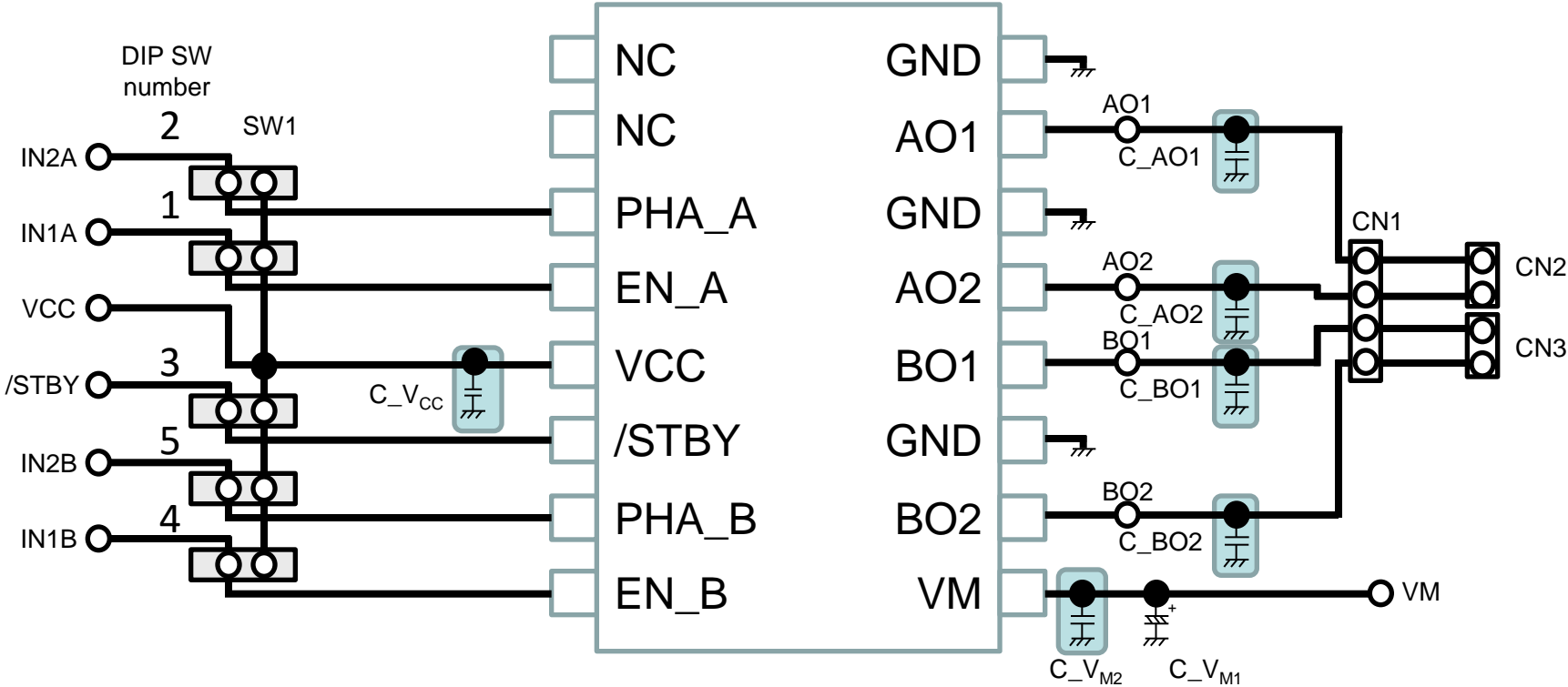
When the DIP switch is changed to the higher position, it will be set a VCC level, and when the switch is changed to the lower position, it will be set Open.

This evaluation board has a DIP switch (SW) so that the operation setting of the TC78H610FNG can be set without the external signal input.

When the DIP switch is changed to the higher position, it will be set a VCC level = "High level", and when the switch is changed to the lower position, it will be set Open.

In the case of Open, the input signal can be input from the pin, and even if there is no input signal, the switch is fixed to "GND level" = "Low" level by the pull down resistance in the IC.

Circuit of Evaluation Board



- Check pin
- Dip switch
- Socket
- Surface-mounting component