Instruction Manual for Evaluation Board of theTC78H621FNG

March 22, 2018

Rev.1.0

【Outline】
The TC78H621FNG 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 1.1A 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 TC78H621FNG.

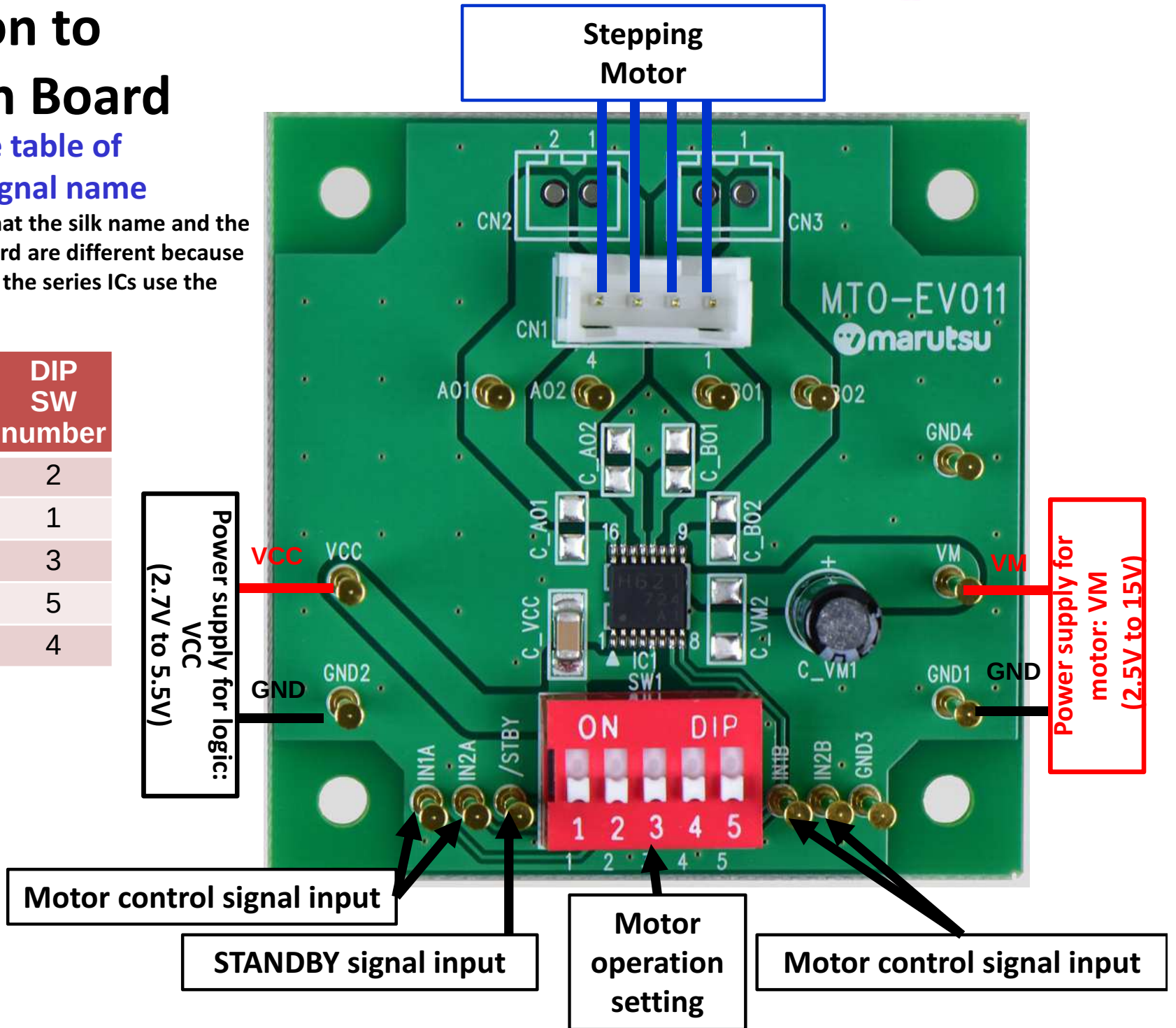
【Note】
In using, please be careful about the thermal condition sufficiently.
For each control signal, please refer to the IC specifications by accessing to the following URL:
http://toshiba.semicon-storage.com/ap-en/product/linear/motordriver/detail.TC78H621FNG.htmll
Further, the application of this 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

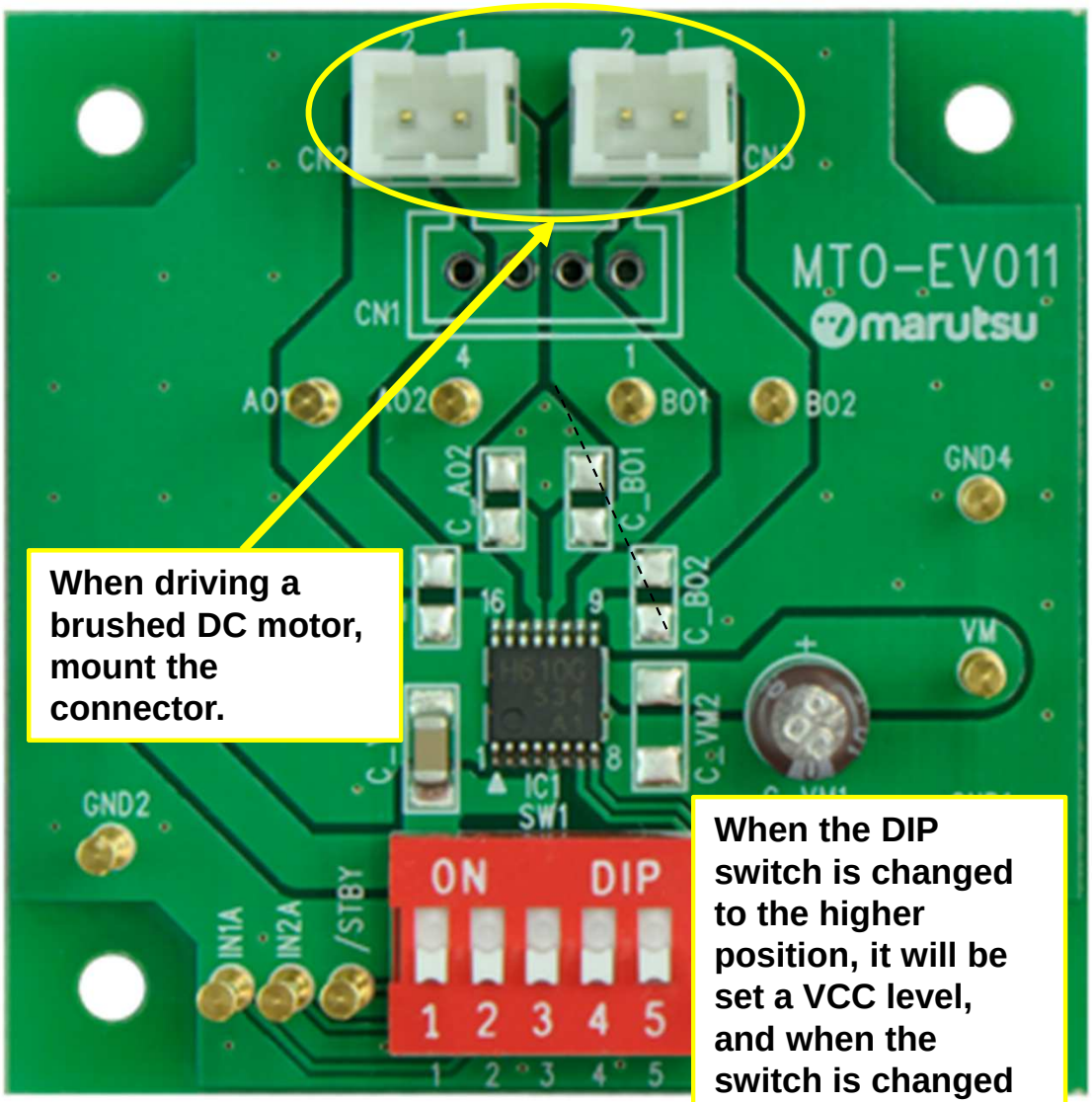
Please pay attention that the silk name and the signal name of the board are different because the TC78H621FNG and the series ICs use the common board.

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



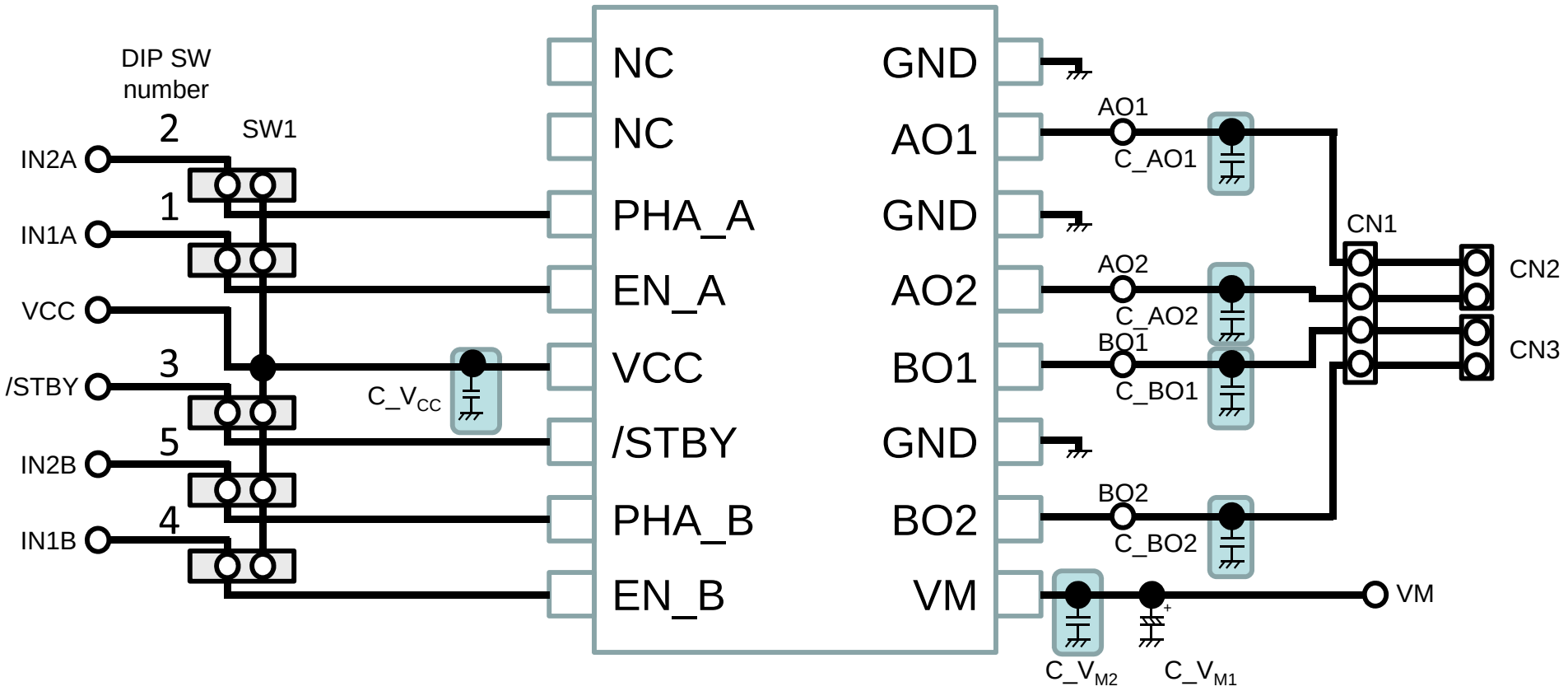
Setting Evaluation Board

Setting Motor Operation



This evaluation board has a DIP switch (SW) so that the operation setting of the TC78H621FNG 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 a terminal, 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