

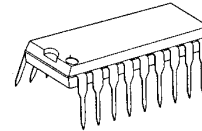
DUAL H-BRIDGE DRIVER

■ GENERAL DESCRIPTION

NJM2672 is a dual H-bridge driver, it consists of a LS-TTL compatible logic input stage and pair of H-bridges with a protection diode. The maximum output current is 500mA per channel.

NJM2672 is able to make up pulse input stepper motor system when using with translator NJU7380.

■ PACKAGE OUTLINE

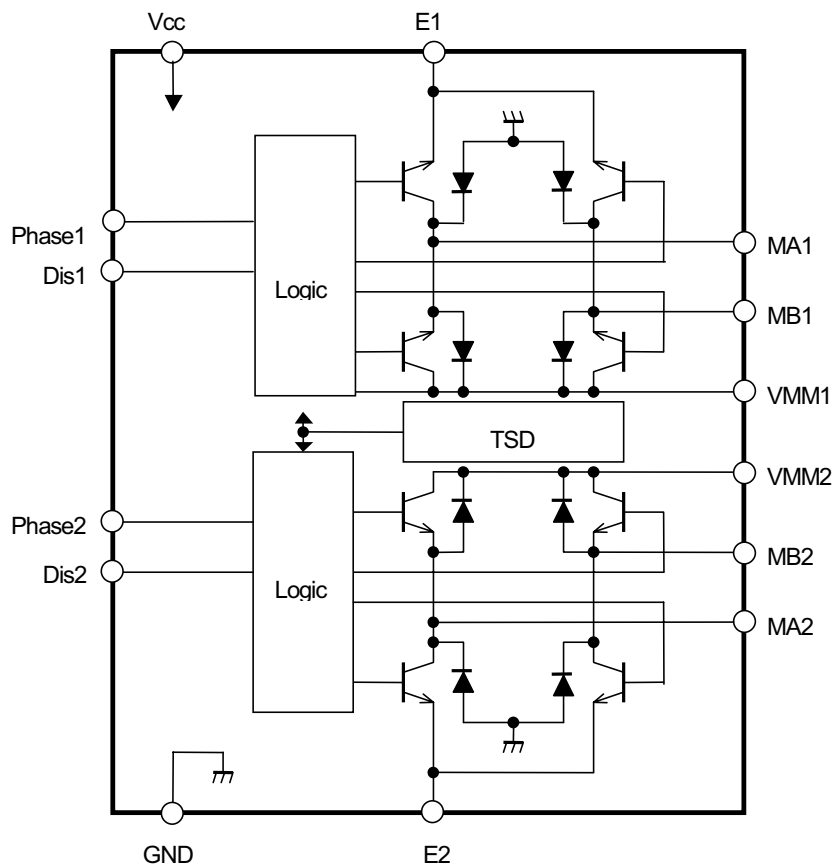


NJM2672D

■ FEATURES

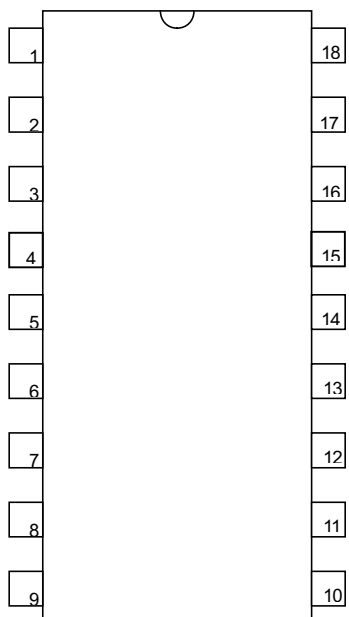
- Operating Voltage 4V to 45V
- Maximum Output Current 500mA
- Internal Thermal Shutdown Circuit
- Dead Band Protector
- Specially matched to Translator (Stepping motor controller) NJU7380
- Package DIP18

■ BLOCK DIAGRAM



NJM2672

■ PIN CONFIGURATION



- | | |
|--------------------|--------------------|
| 1.V _{MM2} | 10.GND |
| 2.MB2 | 11.Phase1 |
| 3.E2 | 12.Dis1 |
| 4.MA2 | 13.V _{CC} |
| 5.Power GND | 14.NC |
| 6.MA1 | 15.NC |
| 7.E1 | 16.Dis2 |
| 8.MB1 | 17.Phase2 |
| 9.V _{MM1} | 18.GND |

■ ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

| PARAMETER | SYMBOL | RATINGS | UNIT | NOTE |
|--------------------------------|------------------|-----------------|------|---------------|
| Voltage | | | | |
| Motor Supply | V _{MM} | 45 | V | |
| Logic Supply | V _{CC} | V _{CC} | V | |
| Logic Inputs | V _{IN} | -0.3 ~ 7 | V | |
| Current | | | | |
| Motor Output Current | I _{OUT} | 500 | mA | |
| Logic Input Current | I _L | -10 | mA | |
| Temperature | | | | |
| Operating Temperature | Topr | -40 ~ 85 | °C | |
| Storage Temperature | Tstg | -55 ~ 150 | °C | |
| Total Power Dissipation | | | | |
| DIP18 Package | P _D | 1.3 | W | Device itself |

RECOMMENDED OPERATING CONDITIONS

(Ta=25°C)

| PARAMETER | SYMBOL | RATINGS | UNIT | NOTE |
|------------------------|------------------|-------------|------|------|
| Motor Supply | V _{MM} | 4 ~ 40 | V | |
| Logic Supply | V _{CC} | 4.75 ~ 5.25 | V | |
| Maximum Output Current | I _{OUT} | 350 | mA | |

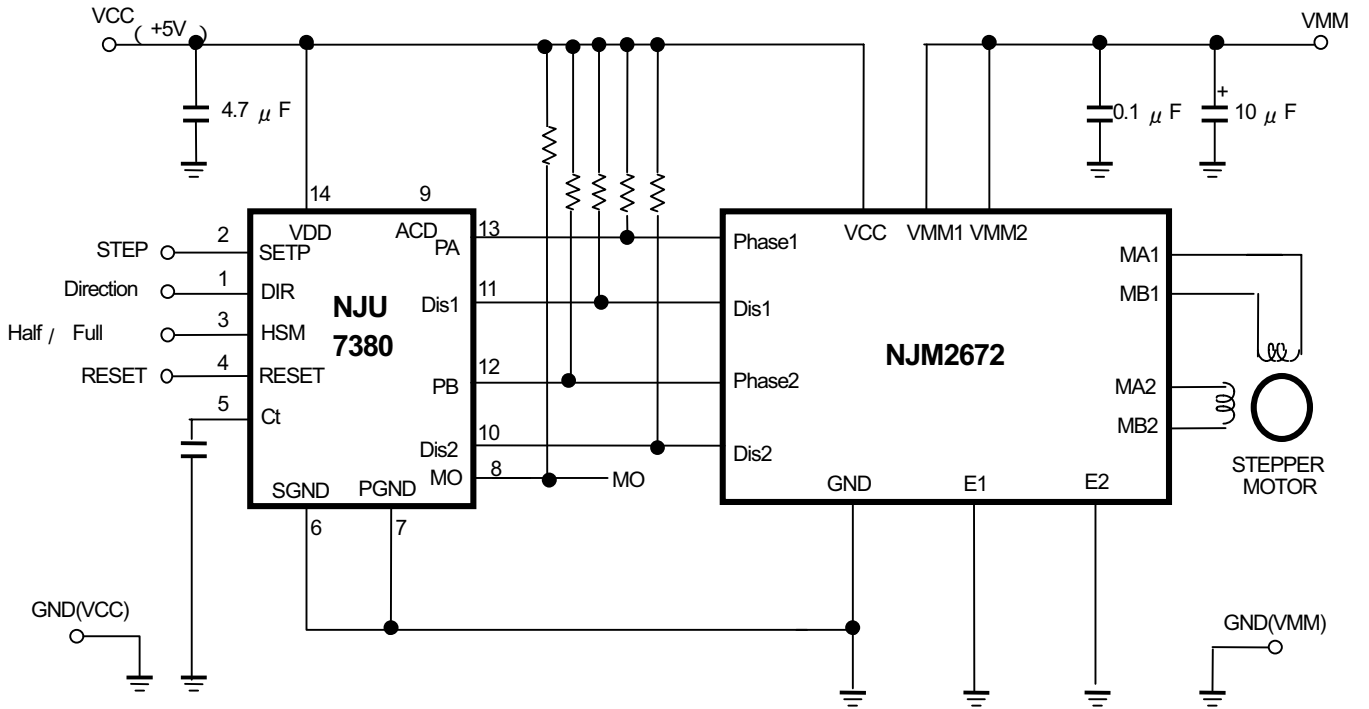
ELECTRICAL CHARACTERISTICS

(Ta=25°C)

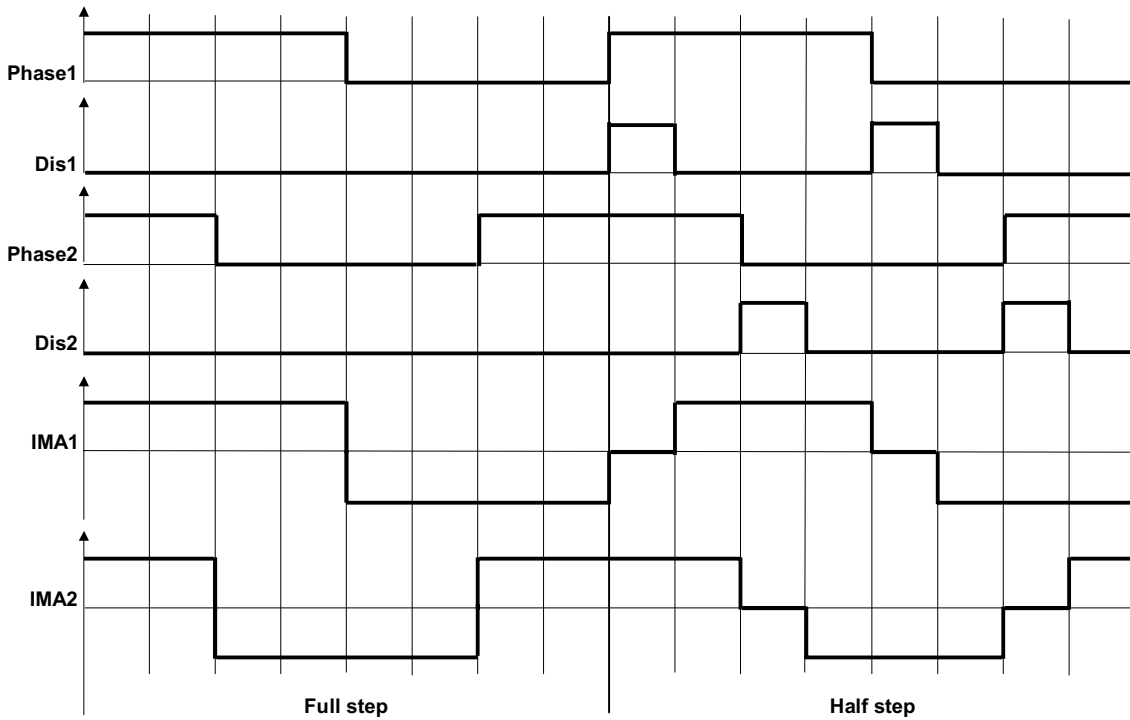
| PARAMETER | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|-------------------------------------|----------------------|-----------------------------------|------|------|------|------|
| • General | | | | | | |
| Supply Current 1 | I _{CC1} | DIS1=DIS2=L | - | 36 | 48 | mA |
| Supply Current 2 | I _{CC2} | DIS1=DIS2=H | - | 2.6 | 3.3 | mA |
| Thermal Shutdown Temperature | TSD | - | - | 170 | - | °C |
| • Logic Inputs | | | | | | |
| L Level Input Voltage | V _{IL} | - | - | - | 0.6 | V |
| H Level Input Voltage | V _{IH} | - | 2.0 | - | - | V |
| L Level Input Current | I _{IL} | - | - | - | 20 | μA |
| H Level Input Current | I _{IH} | - | -0.2 | - | - | μA |
| • Motor Outputs | | | | | | |
| Upper Transistor Saturation Voltage | V _{OU} | I _{OUT} =300mA | - | 1.1 | 1.4 | V |
| Lower Transistor Saturation Voltage | V _{OL} | I _{OUT} =300mA | - | 0.4 | 0.8 | V |
| Upper Diode Forward Voltage Drop | V _{fU} | I _{OUT} =300mA | - | 1.1 | 1.4 | V |
| Lower Diode Forward Voltage Drop | V _{fL} | I _{OUT} =300mA | - | 1.1 | 1.4 | V |
| Upper Transistor Leakage Voltage | V _{OU-LEAK} | V _{MM} =40V, DIS1=DIS2=H | - | - | 100 | μA |
| Lower Transistor Leakage Voltage | V _{OL-LEAK} | V _o =12V | - | - | 100 | μA |

NJM2672

TYPICAL APPLICATION



TIMING CHART



MEMO

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