DESCRIPTION

The PT2484/PT2484A is a dual channel H-bridge motor driver that operates on wide supply voltage range from 4V to 16V. Four individual control logic pins provides flexibility to drives a 4-wire bipolar stepping motor or two brushed dc motors or solenoid load. The chip has built-in protection circuit to prevent the short circuit or over temperature event to damage the H-bridge driver.
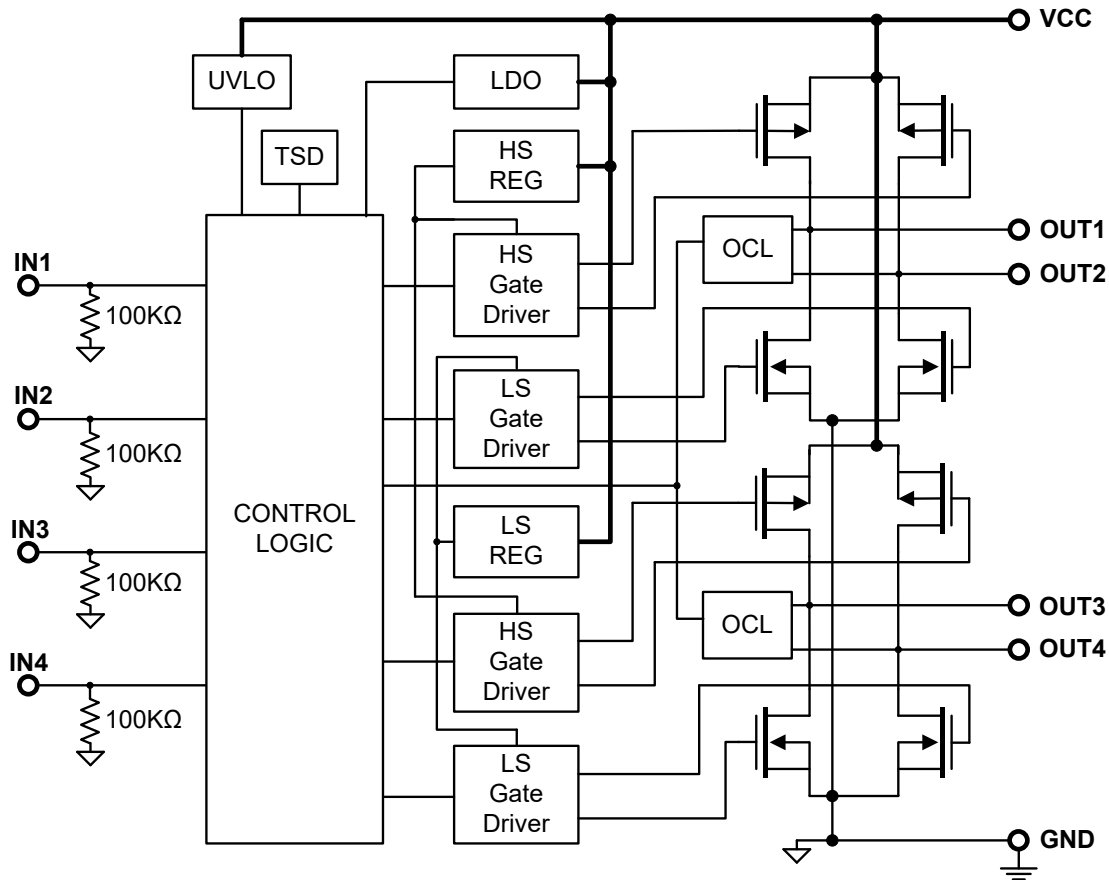
APPLICATIONS

- Airflow flap control for refrigerators.
- Air Conditioner venting control
- Home appliance
- Office automation machines

FEATURES

- Wide Supply Voltage Range: 4V to 16V
- Single voltage supply with built-in regulator; control logic supply is not necessary.
- Dual H-bridge Drivers for a bipolar stepping motor or two brushed dc motors.
- MOSFET RDS(on) Resistance HS + LS =1.2Ω
- Maximum Output Current: 1A (Peak), 700mA (RMS).
- Low Power Stand-by mode
- Built-in Protection Circuits with Thermal Shutdown (TSD), Under Voltage Lock-Out (UVLO)
- Output current limiting (OCL) during load terminal connects to GND.
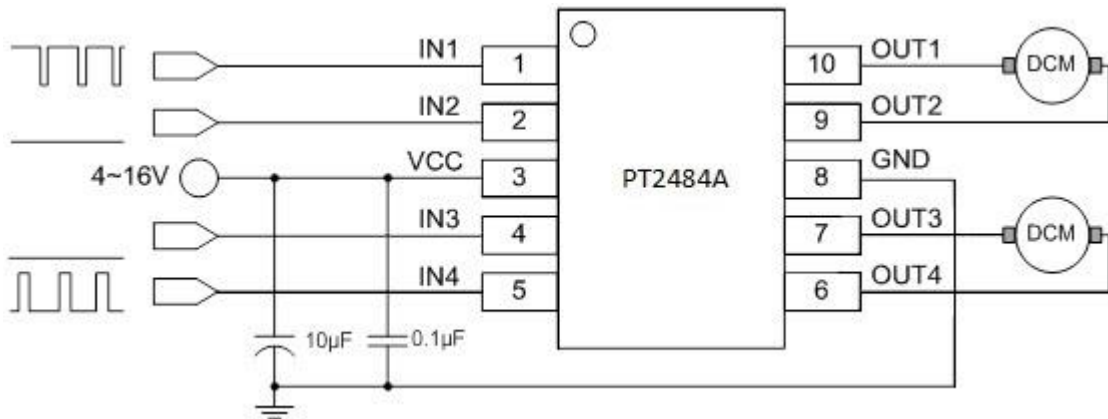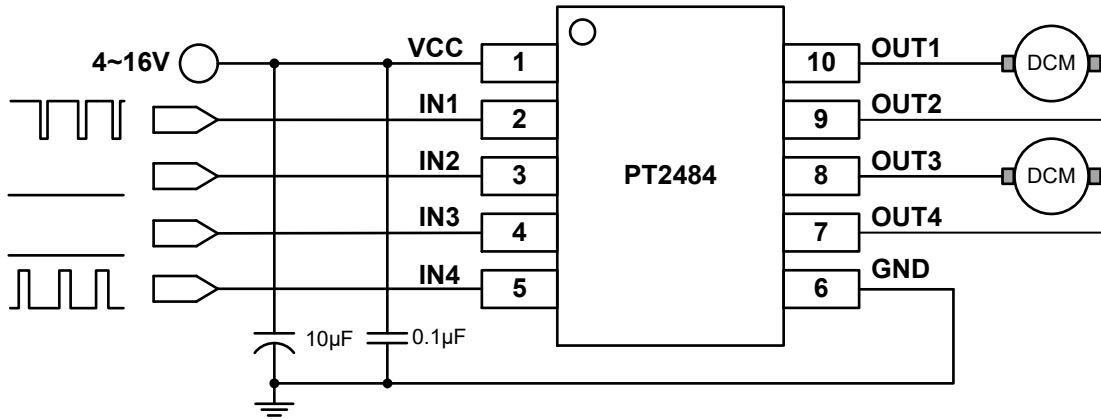- 10Pins Small Outline Package (SOP), Pitch=1.0mm. 10Pins Small Outline Package (MSOP), Pitch=0.5mm.

BLOCK DIAGRAM

APPLICATION CIRCUITS
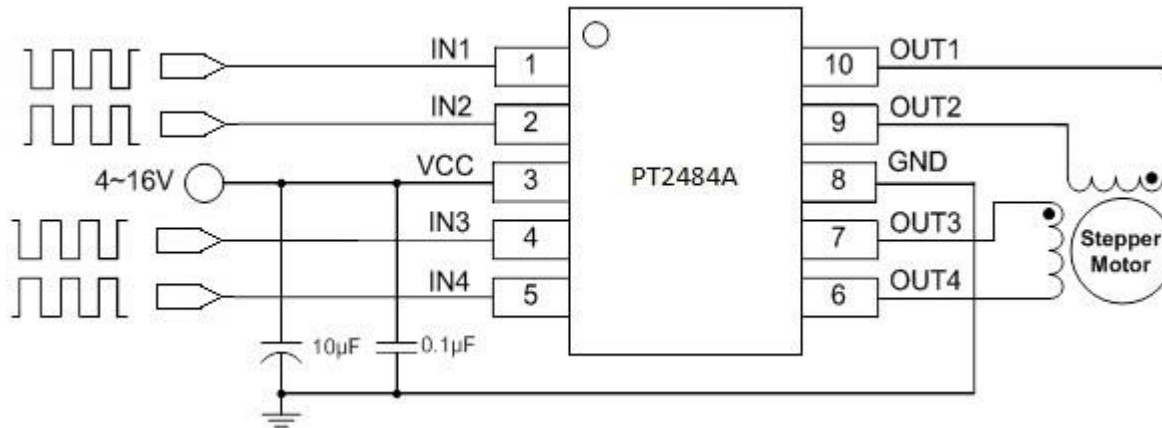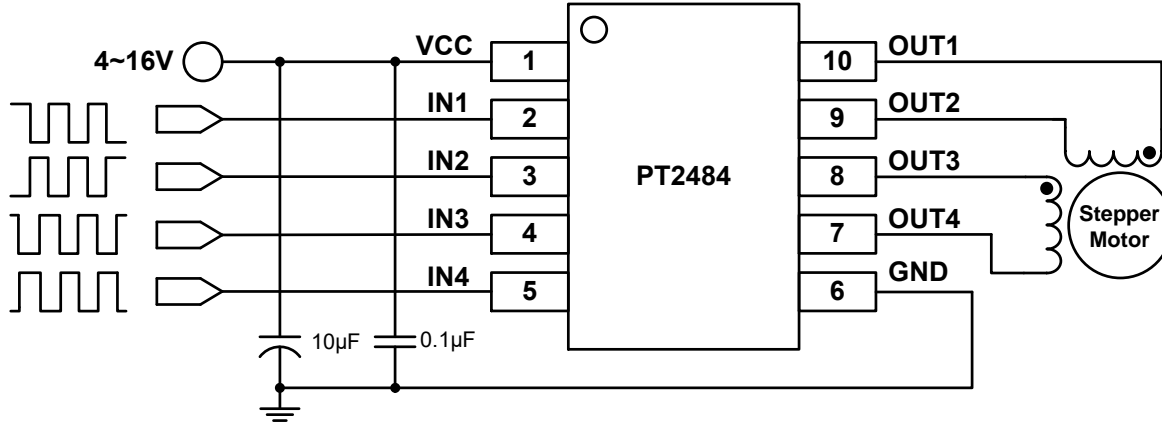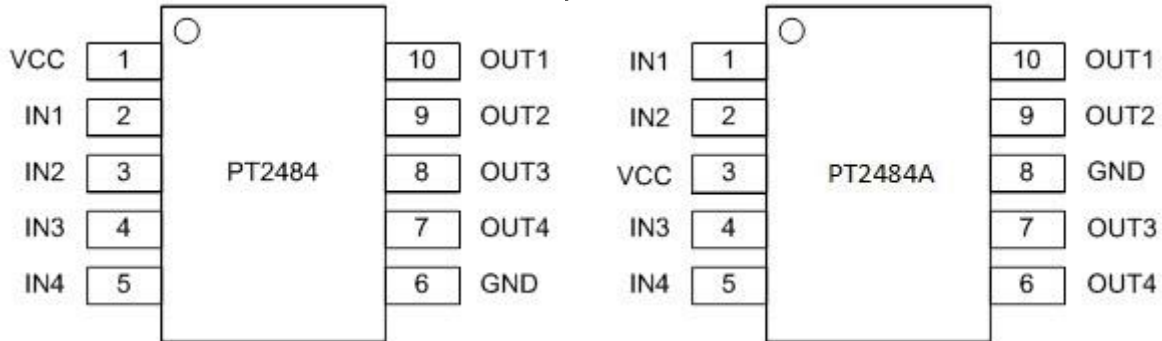

Drives a bipolar stepping motor

Drives two brushed dc motor

ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT2484-S	10Pins, SOP	PT2484-S
PT2484A-S	10Pins, SOP	PT2484A-S
PT2484A	10Pins, MSOP	PT2484A

PIN CONFIGURATION

Top View

PIN DESCRIPTION

Pin Name	I/O	Description	PT2484-S SOP-10	PT2484A-S SOP-10	PT2484A MSOP-10
VCC	Power	Power input pin, the operation voltage is from 4V to 16V. Connects a 0.1µF bypass capacitor between VCC and GND pin and add at least 10µF capacitor in the power line.	1	3	3
IN1	I	Control input pin 1 for H-bridge driver 1, built-in a 100KΩ pull-low resistor.	2	1	1
IN2	I	Control input pin 2 for H-bridge driver 1, built-in a 100KΩ pull-low resistor.	3	2	2
IN3	I	Control input pin 3 for H-bridge driver 2, built-in a 100KΩ pull-low resistor.	4	4	4
IN4	I	Control input pin 4 for H-bridge driver 2, built-in a 100KΩ pull-low resistor.	5	5	5
GND	Power	Ground pin	6	8	8
OUT4	O	OUT4 of H-bridge driver 2	7	6	6
OUT3	O	OUT3 of H-bridge driver 2	8	7	7
OUT2	O	OUT2 of H-bridge driver 1	9	9	9
OUT1	O	OUT1 of H-bridge driver 1	10	10	10
PGND	GND	Connect to GND.	-	-	Thermal Pad