### **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.

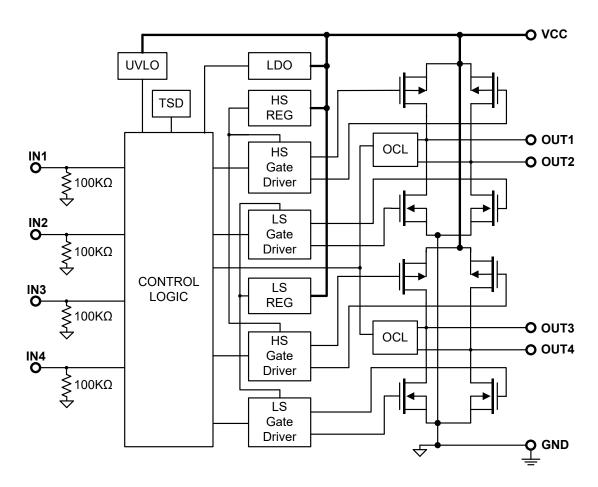
#### **APPLICATIONS**

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

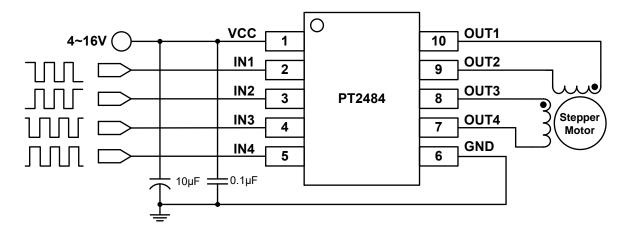
#### **FEATURES**

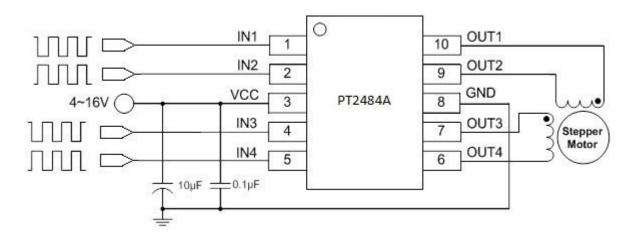
- Wide Supply Voltage Range: 4V to 16V
- Single voltage supply with built-in regulator; control logic supply is not necessary.
- Dual H-bridge Drivers for a bipolar stepping motor or two brushed dc motors.
- MOSFET RDS(on) Resistance HS + LS =1.2Ω
- Maximum Output Current: 1A (Peak), 700mA (RMS).
- Low 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**



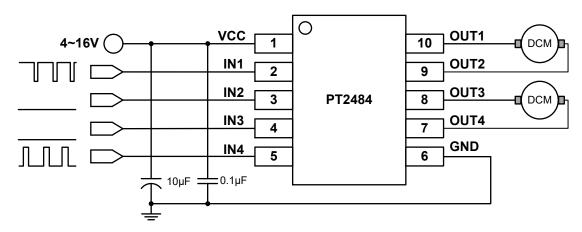
# **APPLICATION CIRCUITS**

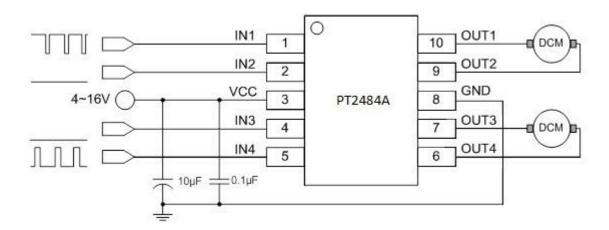




Drives a bipolar stepping motor

V1.5 2 March 2024





Drives two brushed dc motor

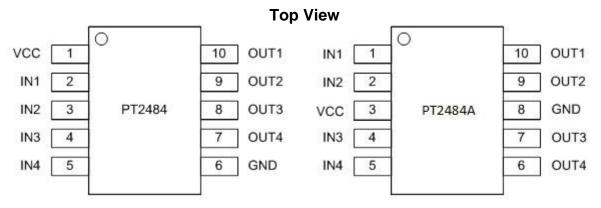
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# **ORDER INFORMATION**

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**



# **PIN DESCRIPTION**

			Pin No.		
Pin Name	I/O	Description	PT2484-S	PT2484A-S	PT2484A
			SOP-10	SOP-10	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 $100 \text{K}\Omega$ pull-low resistor.	3	2	2
IN3	I	Control input pin 3 for H-bridge driver 2, built-in a 100K $\Omega$ pull-low resistor.	4	4	4
IN4	I	Control input pin 4 for H-bridge driver 2, built-in a $100 \text{K}\Omega$ pull-low resistor.	5	5	5
GND	Power	Ground pin	6	8	8
OUT4	0	OUT4 of H-bridge driver 2	7	6	6
OUT3	0	OUT3 of H-bridge driver 2	8	7	7
OUT2	0	OUT2 of H-bridge driver 1	9	9	9
OUT1	0	OUT1 of H-bridge driver 1	10	10	10
PGND	GND	Connect to GND.	-	-	Thermal Pad