

DESCRIPTION

The PT2470 is a brushed-DC motor driver for printers, home appliances, industrial equipment, and other small machines. Dual pin logic inputs controls the H-bridge driver output current flows to manipulate the motor rotation in forward or reverse direction. With sufficient heat dissipation PCB area or add-on heatsinking, the peak output current may up to 3.6 Amps.

The PT2470 has built-in PWM current regulation circuits; it's a very useful function to limiting average current draws from power supply during motor rotates starts up and stalled. The PWM current regulation level is determinates by an external applied VREF reference voltage and current sense resistance attached in ISEN pin.

The PT2470 is protected from many fault conditions, including under voltage (UVLO), across-load short circuits (SCP) and over temperature shut down (TSD). The drive will disable the H-bridge output during fault condition is met, and device will automatically recovery when fault phenomena is removed.

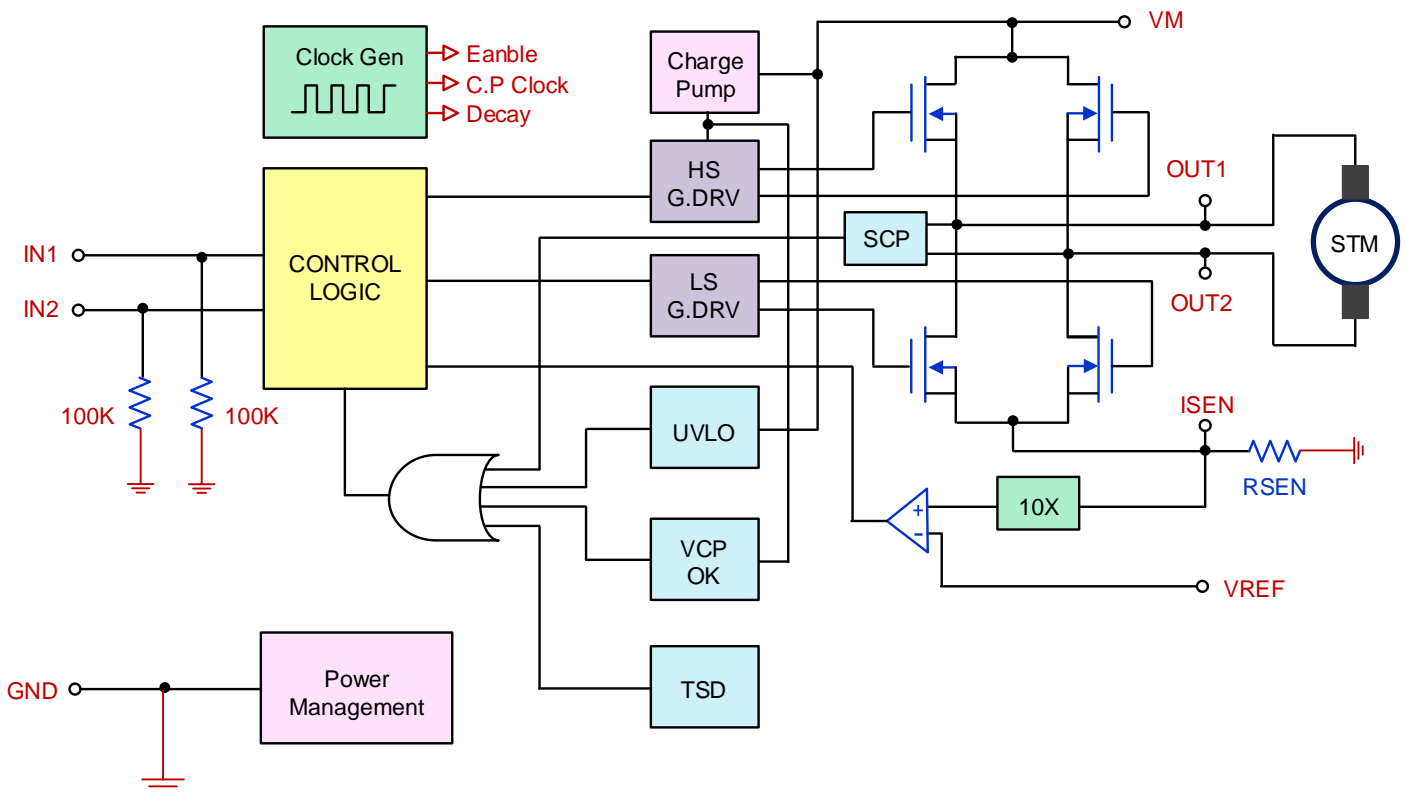
FEATURES

- H-Bridge Motor Driver for:
 - Single brushed DC Motor,
 - Single Winding of a Bipolar Stepping Motor
 - Solenoid High Side Driver
- Wide Operating Voltage : 9V to 36V
- Low Switches $R_{DS(on)}$ (HS+LS) : 500mΩ(typ)
- Peak Current Output : 3.6 Amps
- H-bridge Control Interface
- PWM Current Regulation
- Low-Power Sleep Mode
- Small Package and Footprint
 - 8-Pin HSOP With Thermal PAD
- **Protection Features**
 - VM Under voltage Lockout (UVLO)
 - Across-Load Short Circuit Protection (SCP)
 - Over Thermal Shutdown (TSD)
 - Automatic Fault Recovery

APPLICATIONS

- Printers
- Home Appliances
- Industrial Equipment

BLOCK DIAGRAM



APPLICATION CIRCUIT

Drives brushed DC motor with PWM current regulation function.

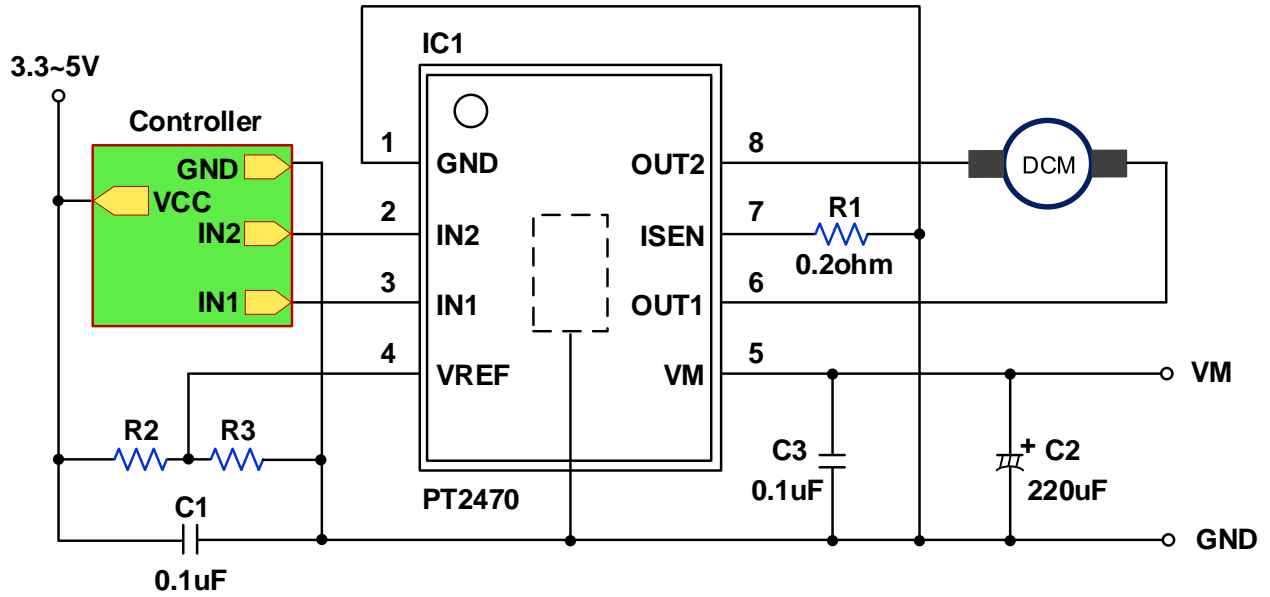


Figure 1. Typical Application Circuit

note(1) : The recommended value of R1 is from 0.1Ω to 0.5Ω, power dissipation from 0.5 to 1W.

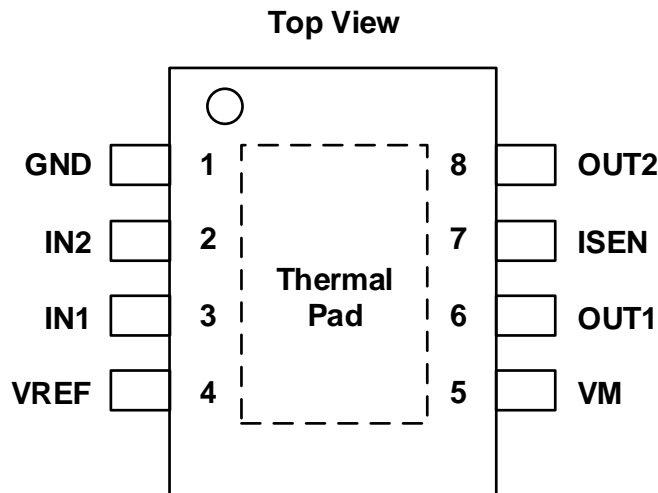
note(2) : Connects ISEN pin to power ground directly if PWM current regulation function is not necessary.

note(3) : VREF input voltage should not exceeds 5V.

ORDER INFORMATION

Valid Part Number	Package Type	Top Code
PT2470-HS	8 Pins, HSOP	PT2470-HS

PIN CONFIGURATION



IMPORTANT NOTICE

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PTC cannot assume responsibility for use of any circuitry other than circuitry entirely embodied in a PTC product. No circuit patent licenses are implied.

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