

DESCRIPTION

The PT2477 is a monolith integrated motor driver designed for printers, scanners, and home or office automated equipment. The dual H-bridge drivers are consisting by all of N-channel MOSFETs, and designed to drive a 4-wires bipolar stepper motor. The output driving current of the PT2477 allows up to 1.6 Amps (mounted on dual layer PCB with proper heatsinking, $V_M=24V$, $T_A=25^\circ C$).

To simplified control interface, the STEP and DIR pins allows easy communicates with micro controller, Three Mode Select pins allow for configuration the micro steps from full-step divides to 1/32 micro-step. 3 kind of winding current decay modes are configurable to keeps motor not missing step and low current ripple. A low-power sleep mode is provided which shuts down internal circuitry to achieve very-low quiescent current draw. This sleep mode can be sets by SLEPN pin.

The PT2477 is available in 28-pins HTSSOP or 28-pins QFN package, both packages with thermal pad.

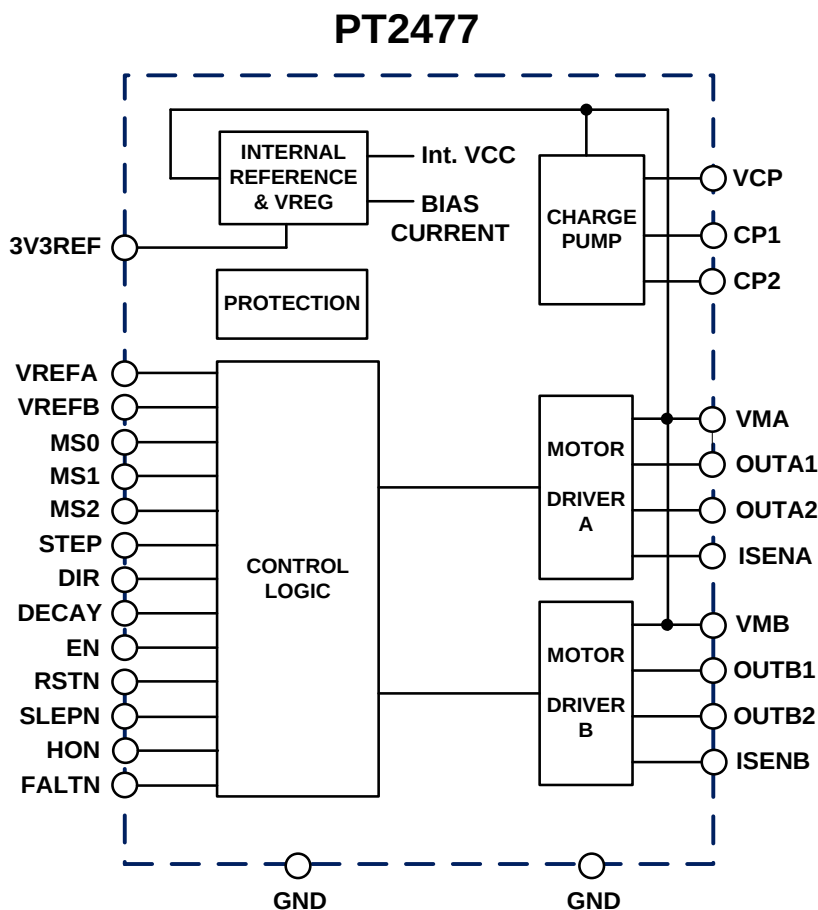
FEATURES

- 7.4-V to 45-V supply voltage range
- 1.6-A maximum driving current at $V_M=24V$ (with additional heatsink)
- Dual H-bridge driver for bipolar stepper motor with such features:
 - PWM chopping constant current regulation
 - Built-In micro stepping sequencer
 - Multiple micro steps, Full, 1/2, 1/4, 1/8, 1/16 and up to 1/32 steps
- STEP and DIR logic inputs can control stepping motor revs and direction.
- Winding current decay modes
 - Mixed Decay
 - Slow Decay
 - Fast Decay
- Built In a 3.3V reference voltage output
- Low-power sleep mode
- Protection features
 - Over current protection (OCP)
 - Thermal shutdown (TSD)
 - VM under voltage lock out (UVLO)
 - Fault indication pin (FALTN)

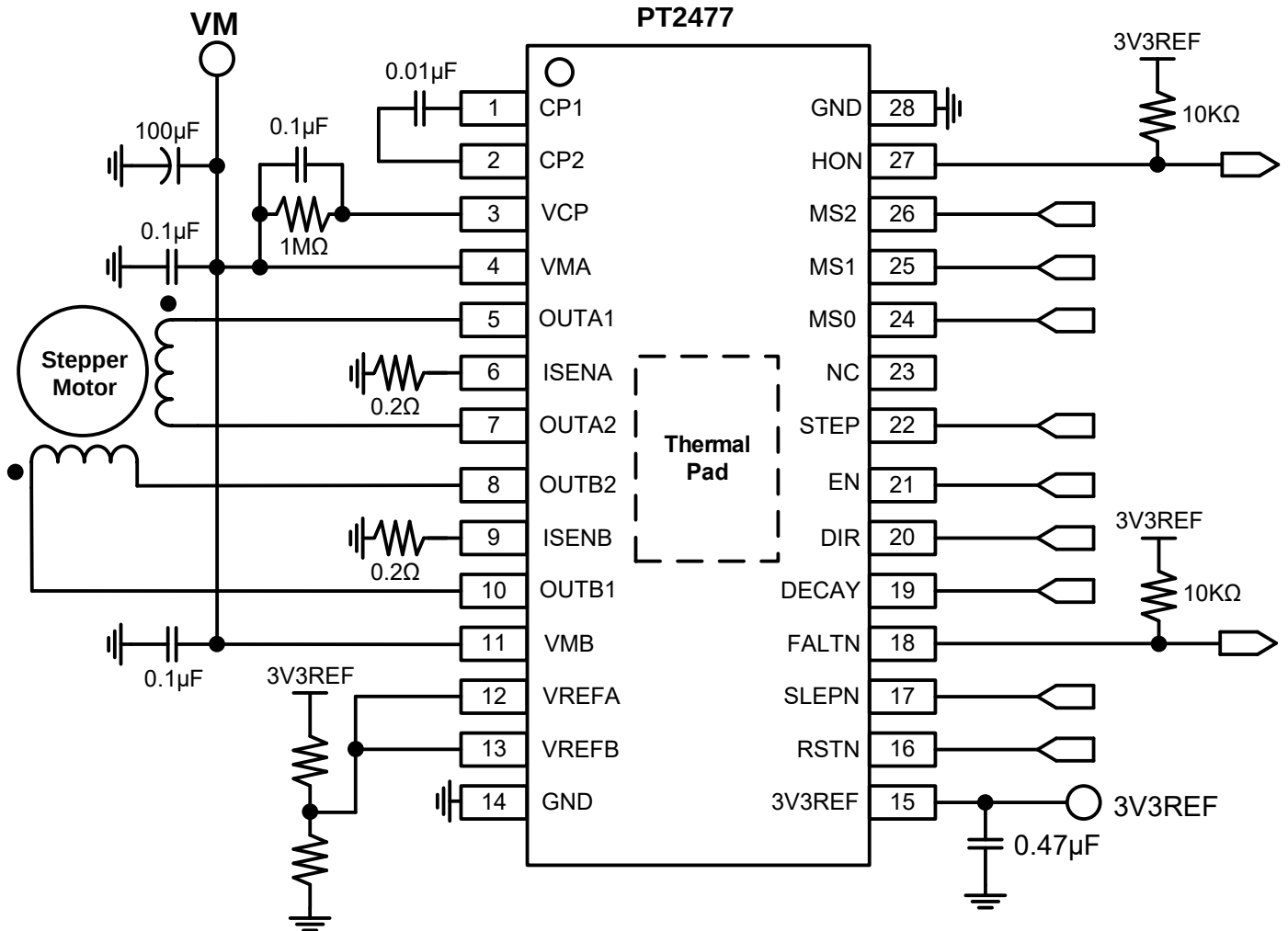
APPLICATIONS

- Automatic teller machines
- Video security cameras
- Printers
- Scanners
- Office automation machines
- Amusement machines
- Factory automation
- Robotics

BLOCK DIAGRAM



APPLICATION CIRCUIT



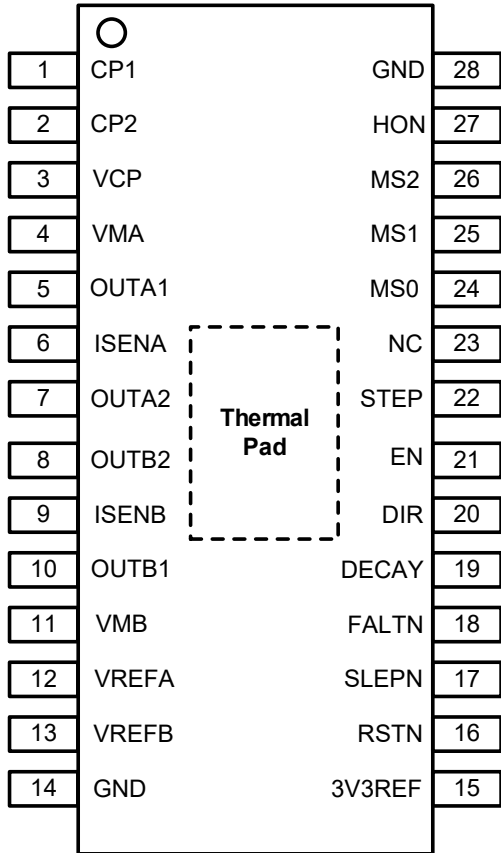
(HTSSOP-28 package for example)

ORDER INFORMATION

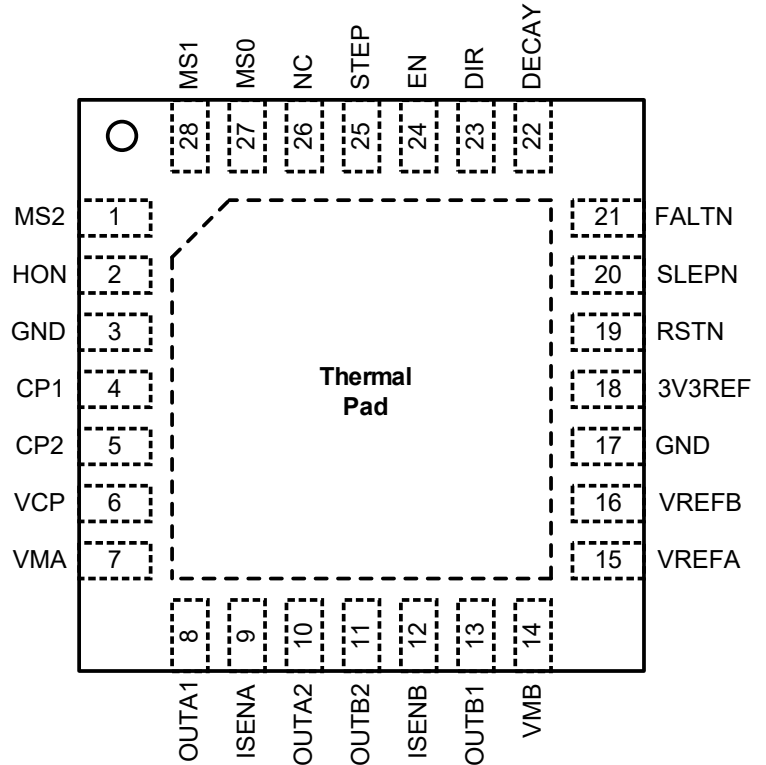
Valid Part Number	Package Type	Top Code
PT2477-HT	28 Pins, HTSSOP	PT2477-HT
PT2477	28 Pins, QFN	PT2477

PIN CONFIGURATION

PT2477
 28-Pin HTSSOP
 Top View



PT2477
 28-PIN QFN
 TOP VIEW



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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