

**ANALOG
PRODUCTS**

**MPC17517
FACT SHEET**



**POWER ICs
H-BRIDGE**

MPC17517 0.46 Ω (TYP) 3-PHASE BRIDGE MOTOR DRIVER

APPLICATIONS

- Portable Electronics
- Lens Shutter Camera
- Optical Disc Drive (MO, DVD, CD, etc.)

The MPC17517 is a monolithic 3-Phase Bridge Brushless DC-motor driver that is ideal in portable electronic applications to control small BLDC motors such as Camera Lens Shutters and Optical Disk drives (MO drive, DVC, CD, etc.)

MPC17517 is 2.0 – 6.8 V H-bridge motor driver with enable and tri-state bridge control via a parallel MCU interface (3 and 5 V compatible logic). The IC can drive various types of micro motors with low loss via parallel drive because each section has very efficient drivers designed for PWM Control frequency up to 200 kHz for high speed drive and independent input/output circuitry.

The MPC17517 has Low ON-Resistance of 0.6 Ω (max). The IC has an integrated charge pump and level shifter (for gate drive voltages). Additionally, the IC has a built in Shoot through current protection circuit and undervoltage detector to avoid malfunction. This IC has 4 output control modes: Forward, Reverse, Brake, Tri-state (Open).

FEATURES


- Low $R_{DS(on)}$ 0.46 Ω (typ)
- Output current 1 A (DC), 3 A (Peak)
- Shoot through current protection circuit
- PWM control input frequency 200 kHz
- Charge pump circuit
- Additional devices available for comparison in Analog Selector Guide SG1002/D

Performance	Typical Values
Outputs	1.5 ch
Output Current	1 A (DC), 3 A (Peak)
Motor Operating Voltage	2.0 – 6.8 V
Logic Operating Voltage	2.7 – 5.7 V
Input PWM	200 kHz
Operating Temp	-20°C ≤ T _A ≤ 65°C

QUESTIONS

- Are you working with portable electronic battery powered applications?
- Do you need to control a small 3-Phase BLDC motor in a 3 or 5 V logic system?
- Are you designing a Brushless DC-motor controller for motors up to 3 A (peak) and 6.8 V DC?

Protection	Detect	Shut Down
Under Voltage	•	•

Ordering Information	Package	Ship Method	Motorola Part Number
	16 TSSOP	Rail	MPC17517VM



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