

**ANALOG
PRODUCTS**

**MPC17529
FACT SHEET**



**POWER ICs
H-BRIDGE**

MPC17529 0.7 Ω (TYP) DUAL H-BRIDGE MOTOR DRIVER

The MPC17529 is a monolithic dual H-Bridge that is ideal in portable electronic applications to control bipolar stepper motors and Brush DC-motors such as found in Camera Lens Shutters, Optical Disk drives and other head positioners.

MPC17529 is 2.0 – 6.8 V dual H-bridge motor driver with enable and tri-state bridge control via a parallel MCU interface (3 and 5 V compatible logic). The device features an on-board charge pump, and built-in shoot through current protection and undervoltage detector to avoid malfunction.

This IC has 4 output control modes: Forward, Reverse, Brake, Tri-state (Open) and low ON-Resistance of 1.2 Ω (max). This MPC17529 can drive various type of micro motor with low loss via parallel drive because each section has very efficient drivers for PWM Control frequency up to 200kHz for high speed drive and independent input/output circuitry.

APPLICATIONS

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

FEATURES

- Low $R_{DS(on)}$ 0.7 Ω (typ)
- Output current 700 mA (DC), 1.4 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 | 2 ch |
| Output Current | 0.7 A (DC), 1.4 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 |

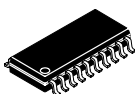
QUESTIONS

- Are you working with portable electronic battery powered applications?
- Do you need to control a bipolar stepper or Brush DC-motor in a 3 or 5 V logic system?
- Are you designing a motion control system using motors up to 1.4 A (peak) and 6.8 V DC?

| Protection | Detect | Shut Down |
|---------------|--------|-----------|
| Under Voltage | • | • |

Ordering Information

| Package | Ship Method | Motorola Part Number |
|---------|-------------|----------------------|
| 20 VMFP | Rail | MPC17529VM |



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