

**ANALOG  
PRODUCTS**

**MPC17510  
FACT SHEET**



**POWER ICs  
H-BRIDGE**

**MPC17510 0.45 Ω (TYP) H-BRIDGE MOTOR DRIVER**

The MPC17510 is a monolithic H-Bridge that is ideal in portable electronic applications to control small Brush DC-motors such as Digital Still and Single Lens Cameras.

MPC17510 is a 2 – 15 V H-bridge motor driver with enable and tri-state bridge control via a parallel MCU interface (5 V compatible logic). The IC has low ON-Resistance of 0.55 Ω (max.) and the drivers can be PWM-ed at 200 kHz control frequency up to 200 kHz. The device contains an integrated charge pump and level shifter (for gate drive voltages), in addition to integrated shoot through current protection and undervoltage circuit detector to avoid malfunction.

The MPC17510 can control 4 output modes: Forward, Reverse, Brake, Tri-state (Open).

**APPLICATIONS**

- Portable Electronics
- Single Lens Camera
- Digital Still Camera (DSC)

**FEATURES**

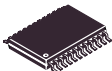
- Motor power supply 15 V operation
- Low  $R_{DS(on)}$  0.45 Ω (typ)
- Output current 1 A (DC), 3 A (Peak)
- Shoot through current protection circuit
- PWM control input frequency 200 kHz
- Additional devices available for comparison in Analog Selector Guide SG1002/D

Performance	Typical Values
Outputs	1 ch
Output Current	0.14 Ω
Motor Operating Voltage	2.0 – 15 V
Logic Operating Voltage	4.0 – 5.5 V
Input PWM	200 kHz
Operating Temp	$-30^{\circ}\text{C} \leq T_A \leq 65^{\circ}\text{C}$

**QUESTIONS**

- Are you working with portable electronic battery powered applications?
- Are you designing a brush DC-motor controller for motors up to 3 A (peak) and 15 V DC?
- Do you need to drive a motor both forward and reverse?
- Do you need to reduce system costs or have limited PC board space?

Protection	Detect	Shut Down
Under Voltage	•	•

Ordering Information	Package	Ship Method	Motorola Part Number
	24 TSSOP	Rail	MPC17510MTB



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MPC17510FS/D  
Rev. 0