

**ANALOG
PRODUCTS**

**MPC17550
FACT SHEET**



**POWER ICs
H-BRIDGE**

MPC17550 0.7 Ω (TYP) QUAD H-BRIDGE MOTOR DRIVER

APPLICATIONS

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

The MPC17550VM is a monolithic Quad H-Bridge that is ideal in portable electronic applications such as Single Lens Reflex and Digital Still Cameras. It can control two bipolar stepper motors or four small DC-motors simultaneously.

This SMARTMOS IC integrates a four power H-Bridges and a 12 V output DC-DC Boost converter, all under the parallel MCU control.

This IC can control 4 mode output function (Forward, Reverse, Brake, H-impedance) by input logic.

FEATURES

- Low $R_{DS(on)}$ 0.7 Ω (typ)
- Output current 700 mA (DC), 2.0 A (Peak)
- Shoot through current protection circuit
- PWM control input frequency 200 kHz
- 12 V DC/DC converter circuit
- Additional devices available for comparison in Analog Selector Guide SG1002/D

Performance	Typical Values
Outputs	4 ch
Output Current	0.7 A (DC), 2.0 A (Peak)
Motor Operating Voltage	1.6 – 5.5 V
Logic Operating Voltage	2.5 – 5.5 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 stepper or Brush DC-motor in a 3 or 5 V system?
- Are you designing a Brush DC-motor controller for motors up to 2 A (peak) and 6.8 V DC?

Protection	Detect	Shut Down
Under Voltage	•	•

Ordering Information	Package	Ship Method	Motorola Part Number
	36 VMFP	Rail	MPC17550VM



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