

## Product Overview

### LV8548MC: Motor Driver, Forward / Reverse, Low-Saturation Voltage, 12 V

For complete documentation, see the data sheet.

The LV8548MC is a 2-channel low saturation voltage forward/reverse motor driver IC. It is optimal for motor drive in 12V system products and can drive either two DC motors, one DC motor using parallel connection, or it can drive a stepping motor in Full-step and Half-step.

#### Features

- DMOS output transistor adoption (Upper and lower total RON = 1Ω typ)
- Current consumption 0 when standby mode
- 4V to 16V Operating supply voltage range (The control system power supply is unnecessary.)
- VCC max = 20V, IO max = 1A
- The compact package (SOIC10) is adopted.
- It is possible to connect in parallel. (parallel, connection of drive channel)
- Pin compatible with LB1948MC
- Built-in brake function

#### Applications

- Consumer
- Industrial
- Computing & Peripherals

#### Benefits

- High Efficiency
- Low Consumption
- Easy design
- Safety design
- Board area reduction
- High current correspondence

#### End Products

- Refrigerator
- Flatbed Scanner
- Document Scanner
- PoE Point of Sales Terminal
- Clothes Dryer

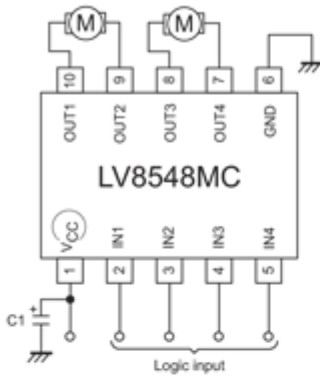
#### Part Electrical Specifications

Product	Compliance	Status	V <sub>M</sub> Min (V)	V <sub>M</sub> Max (V)	V <sub>CC</sub> Min (V)	V <sub>CC</sub> Max (V)	I <sub>O</sub> Max (A)	I <sub>O</sub> Peak Max (A)	Step Resolution	Control Type	Current Sense	Fault Detection	Package Type
LV8548MC-AH	Pb-free Halide free	Active	4	16	4	16		1	1	Parallel	None	Thermal	SOIC-10 NB

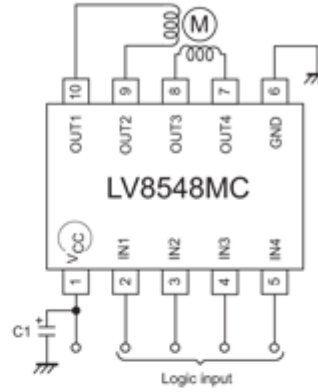
# Application Diagram

## Application Circuit Example

### when Two DC Motor Driving

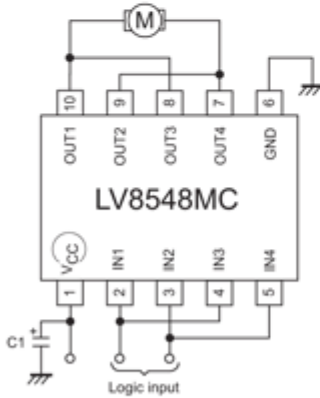


### when One Stepper Motor Driving



### when Connecting it in parallel

The use likened to H bridge 1ch is shown possible in the figure below by connecting IN1 with IN3, IN2 with IN4, OUT1 with OUT3, OUT2, and OUT4. ( $I_O \text{ max}=2.0\text{A}$ , Upper and lower total  $R_{ON}=0.5\Omega$ )



- \* Bypass capacitor (C1) connected between VCC-GND of all examples of applied circuit recommends the electric field capacitor of  $0.1 \mu\text{A}$  to  $10 \mu\text{A}$ .  
Confirm there is no problem in operation in the state of the motor load including the temperature property about the value of the capacitor.  
Mount the position where the capacitor is mounted on nearest IC.

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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