

## Product Overview

### LV8762T: Motor Driver, H-Bridge, Forward / Reverse

For complete documentation, see the data sheet.

The LV8762T is a 1-channel H-bridge driver that can control four operation modes (forward, reverse, brake, and standby) of a motor. The LV8762T is optimal for use in driving brushed DC motors for office equipment.

#### Features

- Built-in current limiter
- Built-in thermal protection circuit
- Built-in short-circuit protection function(selectable from latch-type or auto reset-type)
- Built-in Brake Function
- Low ON Resistance : 1.25  $\Omega$
- Stand-by Current : 0  $\mu$ A
- Forward/reverse H-bridge motor driver : 1 channel
- Single power supply
- IOmax = 1 A
- Current limit mask function

For more features, see the data sheet

#### Applications

- Brush DC Motors
- Computing & Peripherals
- Industrial

#### Benefits

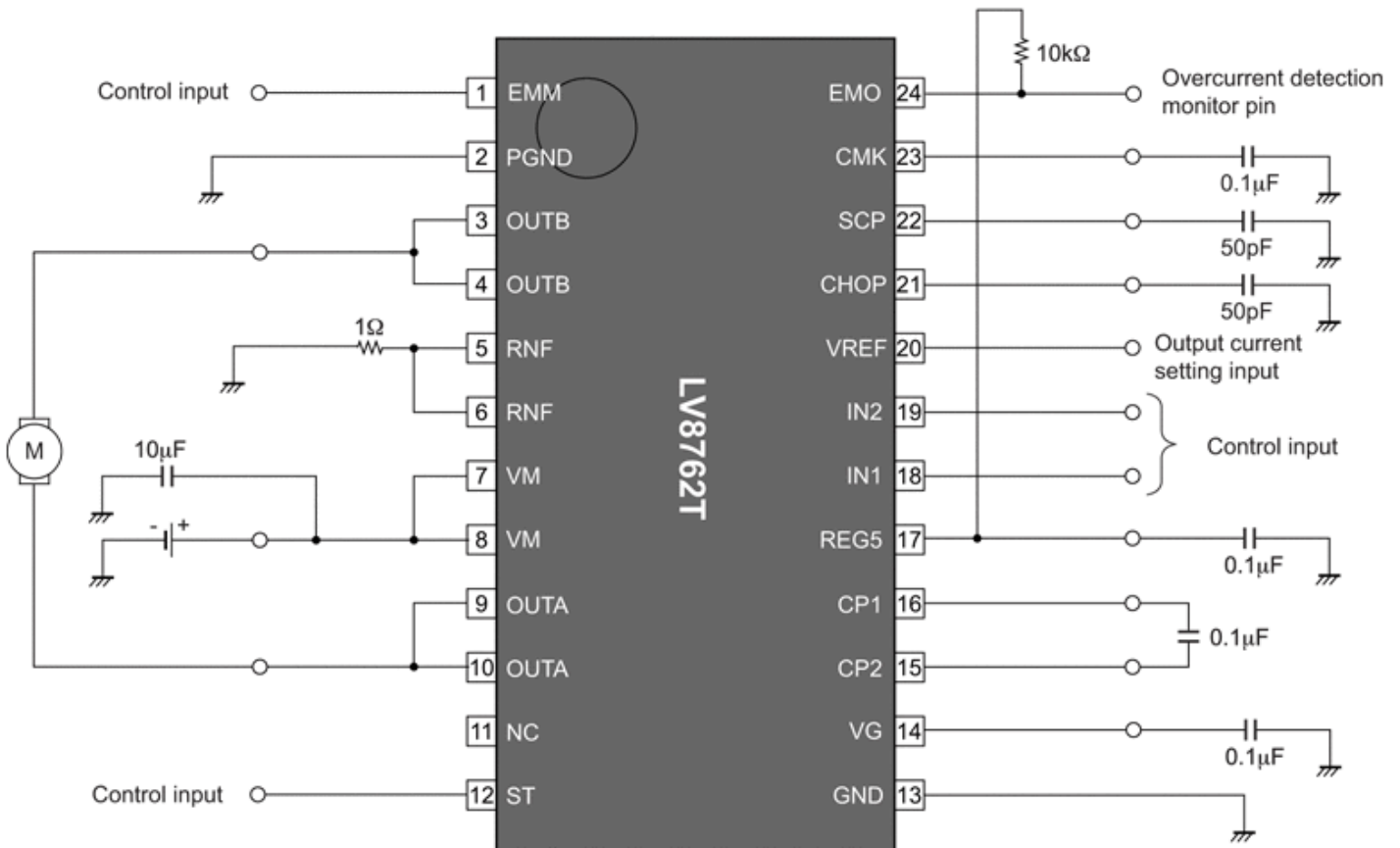
- Current Protection
- Thermal Protection
- Safety Design
- Safety Design
- High Efficiency
- Low Consumption

#### End Products

- Printers
- Flatbed Scanner
- Inkjet Printer
- Multi-Function Printer
- Document Scanner

# Application Diagram

## Application Circuit Example



### Current limit value

When  $V_{REF} = 1.5\text{ V}$ ,

$$I_{limit} = V_{ref} \div 5 \div R_{NF}$$

$$= 1.5\text{ V} \div 5 \div 1\ \Omega = 0.3\text{ A}$$

### Setting the current limit regeneration time and short-circuit detection time

$$T_{SCP} \approx C_{SCP} \times V_{t\ SCP} \div I_{SCP}$$

$$= 50\text{ pF} \times 1\text{ V} \div 5\ \mu\text{A} = 10\ \mu\text{s}$$

### Setting at current limit mask time

$$T_{CMK} \approx C_{CMK} \times V_{t\ CMK} \div I_{CMK}$$

$$= 0.1\ \mu\text{F} \times 1.5\text{ V} \div 25\ \mu\text{A} = 6\text{ ms}$$

### Setting at current limit brake time

$$T_{CHOP} \approx C_{CHOP} \times V_{t\ CHOP} \div I_{CHOP}$$

$$= 50\text{ pF} \times 1\text{ V} \div 5\ \mu\text{A} = 10\ \mu\text{s}$$

\* The external part constant is a reference value.

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

Created on: 6/5/2020