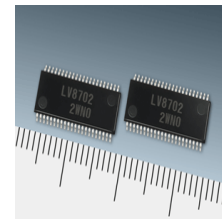


产品概览

LV8702V: PWM 电流控制高效步进电机驱动器

欲看完整文档，请参阅数据表。



LV8702V 是一款 2 沟道全桥式驱动器集成电路，可以驱动步进电机驱动器，能够实现微步驱动，支持四分之一步进。电流根据电机负载和转速以半步、半步全扭矩和四分之一步进励磁进行控制，因此实现了高效驱动。同时也降低了功耗、产热、振动和噪声。

特性

- Built-in 1ch PWM current control stepper motor driver (bipolar type)
 - Ron (High-side Ron: 0.3Ω, Low-side Ron: 0.25Ω, total: 0.55Ω, Ta = 25°C, IO = 2.5A)
 - Micro-step mode is configurable as follows: full step/half step full-torque/half step/quarter step
 - Excitation step moves forward only with step signal input
 - Built-in output short protection circuit (latch method)
 - Control power supply is unnecessary
 - Built-in high-efficient drive function (supports half step full-torque/half step/quarter step excitation mode)
 - Built-in step-out detection function (Step-out detection may not be accurate during high speed rotation)
 - IO max=2.5A
 - Built-in thermal shut down circuit
- For more features, see the data sheet

应用

- Stepper
- Computing & Peripherals
- Industrial

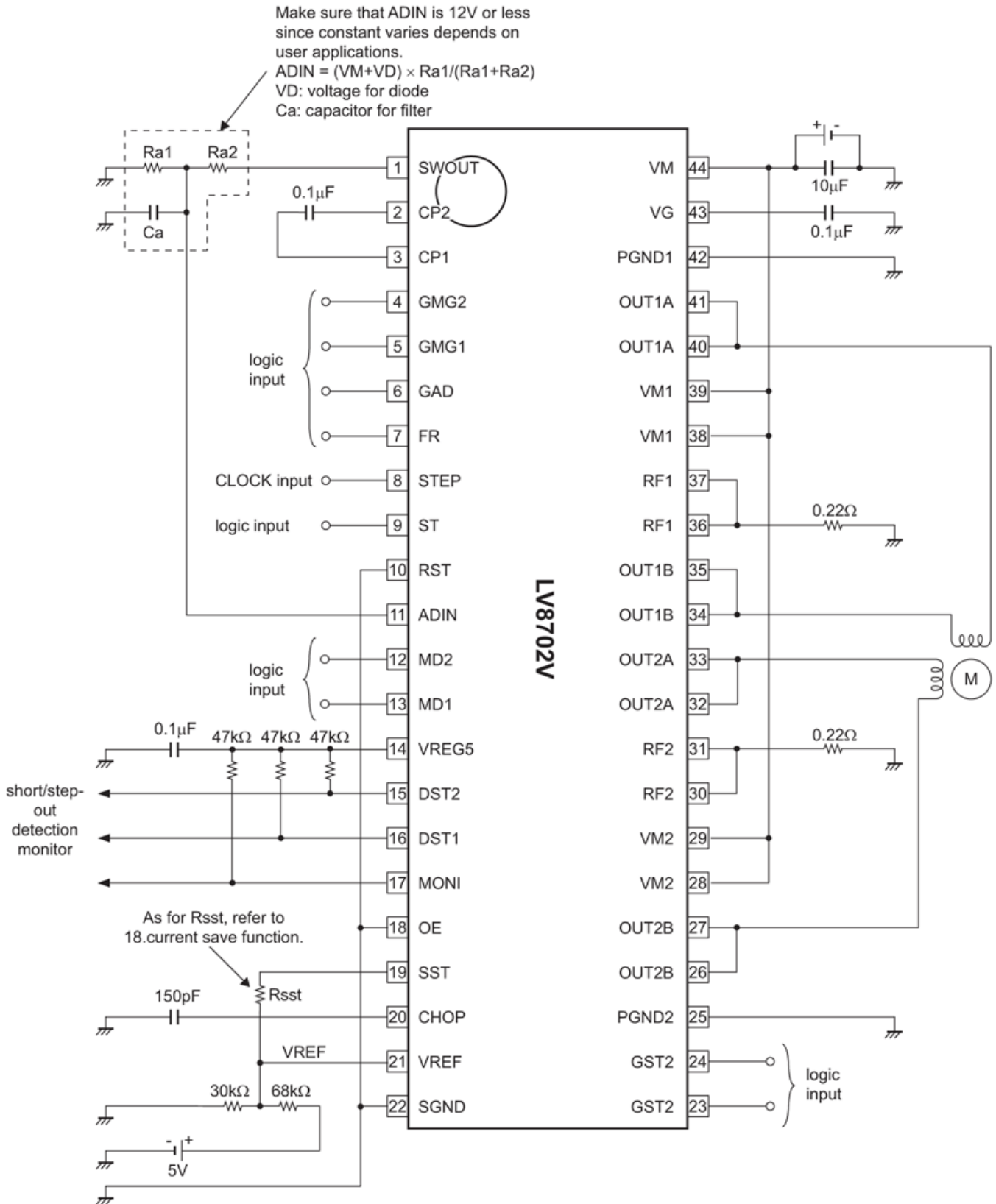
终端产品

- Printer
- Scanner
- Surveillance camera(CCTV)
- Textile machine

器件电气规格

产品	Pricing (\$/Unit)	Compliance	Status	V _M Min (V)	V _M Max (V)	V _{CC} Min (V)	V _{CC} Max (V)	I _O Max (A)	I _O Peak Max (A)	Step Resolution	Control Type	Current Sense	Fault Detection	Package Type
LV8702V-TLM-H	3.9999	Pb-free Halide free	Active	9	32			2.5	3	1 1/4 1/2	Clock	External Resistor	Thermal	SSOP-44J EP

应用框图



Calculation for each constant setting according to the above circuit diagram is as follows.

1) Constant current (100%) setting

$$VREF = 5V \times 30k\Omega / (68k\Omega + 30k\Omega) \approx 1.53V$$

When $VREF = 1.53V$:

$$I_{OUT} = VREF / 5 / 0.22\Omega \approx 1.39A$$

2) Chopping frequency setting

$$F_{chop} = I_{chop} / (C_{chop} \times V_{tchop} \times 2)$$

$$= 10\mu A / (150pF \times 0.5V \times 2)$$

$$\approx 66.7kHz$$

欲了解更多信息，请联系您当地的销售支援 www.onsemi.cn。

创建于：7/13/2020