

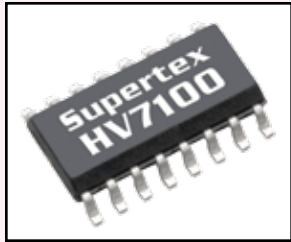
Product Summary Sheet

HV7100

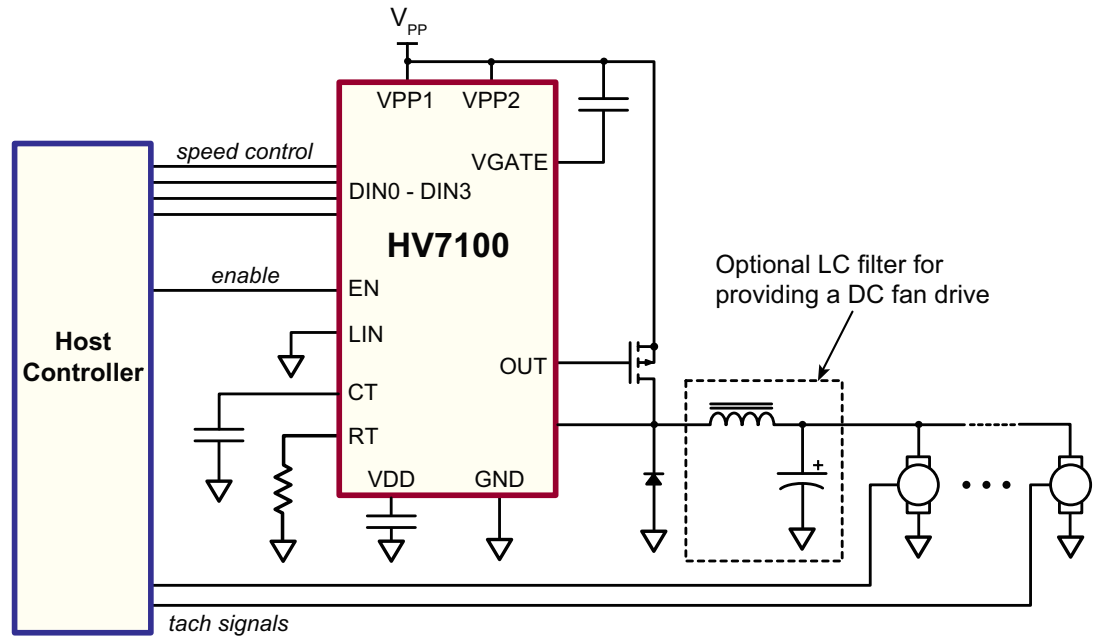
24V/48V Fan Driver/Controller with High-Side Drive

Applications:

- ▶ 24V/48V Chassis Cooling
- ▶ Servers
- ▶ SAN Equipment
- ▶ Cellular and Fix Wireless System
- ▶ 24V/48V PBX System
- ▶ Base Stations



14-Lead SO (NG)



Typical Application Circuit

Product Overview:

The HV7100 is an integrated PWM speed controller for driving 24V and 48V DC Fans. The features and benefits provided by the HV7100 make driving fans simple and low cost. The HV7100 drives a high side external P-channel FET, allowing the use of fans having a ground-based tachometer signal. It has a wide input voltage range of +16V to +90V, ideal for +24V or +48V systems. No low voltage supply is needed.

A 4-bit digital control input provides direct interfacing with a microcontroller or system processor to control the fan speed. It can also be used as a stand-alone fan controller, via a thermistor connection to the Linear Control pin.

The HV7100 has a wide PWM frequency range. When driving fans directly with a PWM supply voltage, frequency may be set low, around 50Hz - 120Hz. When used to drive fans requiring a DC supply, an LC filter may be employed. In this case, PWM frequency may be as high as 100kHz, reducing component sizes in the filter.

The HV7100 is an ideal device to incorporate in fan trays and fan control modules, as it reduces circuit complexity and minimizes parts count and overall cost for thermal management.

Features:	Benefits:
Wide input voltage range	Ideal for 24V and 48V systems
Linear speed control	Enables use in stand-alone systems
Internal voltage regulator	Eliminates need for 2nd low voltage supply
Programmable frequency 50Hz-100kHz	Can be used with or without LC output filter
High-side drive	Enables use of fans having a ground referenced tachometer signal
Digital speed control, 4-BIT DAC	Enables direct control from a microcontroller



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Supertex inc.

24V/48V Fan Driver/Controller with High-Side Drive

Ordering Information / Availability

Part Number	Package Option	Samples	Lead Time
HV7100NG-G	14-Lead SO (Green)	Now	4-5 weeks

-G indicates the part is RoHS compliant (Green).



Product Contact

For any questions regarding the HV7100, please contact your local area Supertex sales office, or contact the main office in the US at:

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