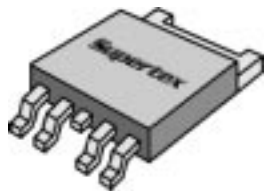


Product Summary Sheet

Applications

- IP Phones
- Wireless Access Points
- Power-Over-LAN Hubs
- Routers, Switches
- Chargers
- Security Peripherals & Cameras

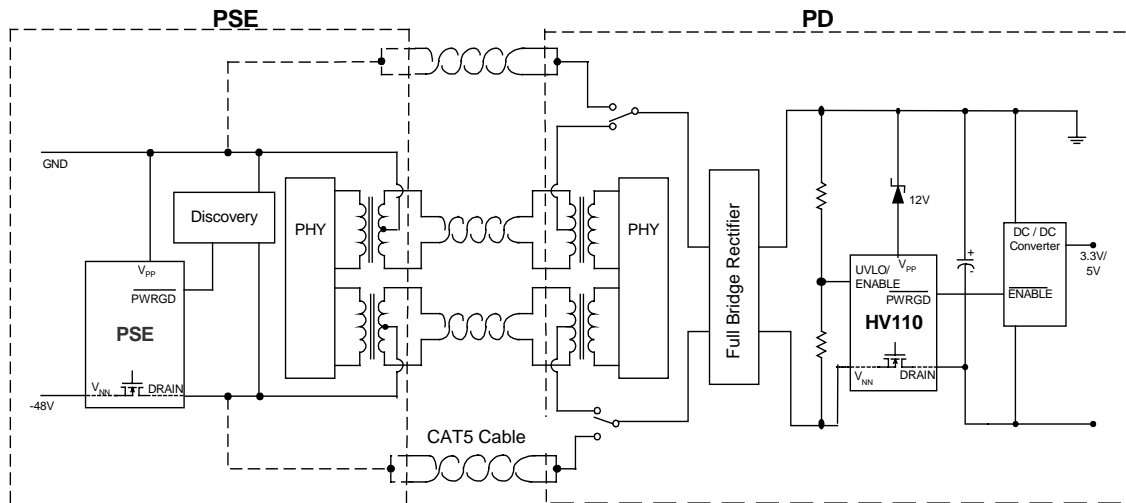
Package Type:



D-Pak-5 (K4)



HV110 Power-over-Ethernet Interface PD Controller IC



Note: A decoupling capacitor may be connected across V_{PP} and V_{NN} pins when used with long CAT5 cables

HV110 used in PSE and PD to meet IEEE802.3af standards

Product Overview:

The HV110 provides complete power management and protection for Powered Devices (PDs) utilizing the IEEE802.3af protocol. As the most complete PD Power Manager available, the HV110 features a 350mA inrush limit and fault current limit, as well as minimum current shutdown. The internal power switch uses scaled current-mirror technology which eliminates the need for an external sense resistor and provides highly accurate current sensing at the high and low end operating conditions.

HV110 uses rugged high voltage junction isolated process, which eliminates the need for any external high voltage protection devices at the input of these controllers. Circuit isolation also reduces the chance of tripping on system noise. An 80V open drain PWRGD pin provides status information and can be used to enable the DC/DC power supplies.

HV110 is available in a thermally rugged DPAK-5 package which provides improved thermal resistance when compared to SO-8 based solutions.

Features:

- Provides an internal current limit for inrush, normal operation and overload conditions.
- Meets the turn-on and turn-off thresholds for the Powered Device and has a built-in 8V hysteresis.
- Protects the device from thermal runaway, with thermal shut down and built in 9 sec restart timer.
- UVLO and POR provides hotswapping/de-bounce capabilities and inrush current limit.
- PWRGD (active LOW) provides enable signal to DC/DC converter.
- Complies with the timing requirements for IEEE 802.3af standard.
- Classification can be easily implemented.
- IOL tested.

Benefits:

- Redundant protection assures reliable operation as well as compliance to IEEE802.3af standard for Powered Devices.
- Provides shutdown timings normally found in only PSEs.
- High voltage process maximizes noise immunity and eliminates the need for external transient voltage suppressors.

Supertex inc.

HV110

Power-over-Ethernet Interface PD Controller IC

Typical Performance

<u>Device</u>	<u>V_{IN}</u>	<u>I_{OUT}</u>	<u>I_{LIMIT}</u>	<u>Overcurrent Timer</u>
HV110	36V - 56V	350mA	350mA	60ms

Ordering Information / Availability

<u>Part Number</u>	<u>Package</u>	<u>Datasheet</u>	<u>Demo Kit</u>	<u>Samples</u>	<u>Lead Time</u>
HV110	D-PAK-5	HV110 Now	HV110DB1 Now	HV110K4 Now	4 - 5 weeks ARO

For additional information on DC/DC controllers and power supplies for PoE applications, see the following:

<http://www.supertex.com/pdf/datasheets/HV9606.pdf>

<http://www.supertex.com/pdf/misc/HV9606DB4.pdf>

PoE interface devices from Supertex are tested for parametric characteristics and interoperability performance at the Interoperability Laboratory at the University of New Hampshire. Test reports are available upon request.

Product Contact

If you have any questions regarding the HV110 or would like to receive samples, contact Supertex Applications at:

Telephone: (800) 222-9883
Fax: (408) 222-4895
Email: apps@supertex.com
Web: www.supertex.com

Supertex Sales:

Contact your Supertex Area Sales Office