

**Product
Summary
Sheet**

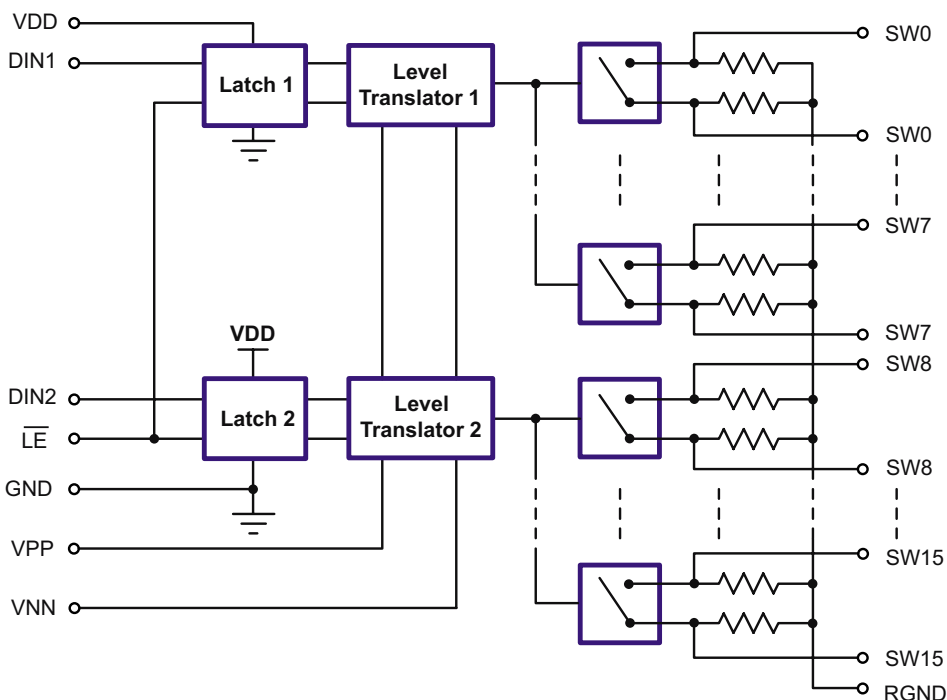
**220V Low Charge Injection 16-Channel
Analog Switch with Bleed Resistors**

Applications:

- ▶ Medical Ultrasound Imaging
- ▶ NDT Metal Flaw Detection



48-Lead LQFP (FG)



Block Diagram

Product Overview:

The Supertex HV238 is a low charge injection, 16-channel, high voltage analog switch integrated circuit (IC) with built-in bleed resistors (R_{INT}) intended for use in applications requiring high voltage switching controlled by low voltage control signals, such as medical ultrasound imaging and piezoelectric transducer drivers.

HV238 outputs are configured as two sets of eight single pole single throw analog switch that features low switch resistance of 22Ω to minimize signal attenuation in the receive mode and to provide 2A current capabilities in transmit mode. Integral bleed resistors of $35K\Omega$ connecting each output to a common ground ensures that the voltage on each piezoelectric transducer is kept at zero to prevent random movements of un-energized transducers.

Features:	Benefits:
Up to 200V operating voltage	Provides deeper imaging of body tissue
$35K\Omega$ integral bleed resistors	Prevents random movement of un-energized transducers
22Ω switch-on resistance	Good resolution due to improved signal to noise ratio
Very low quiescent current - 10mA	Low equipment heat dissipation, increased reliability
Low parasitic capacitances	Reduces/minimizes return signal attenuation
Very good cross talk (-45 dB) and off-isolation (-50 dB)	Increased image clarity due to the reduced inter-channel interference
Low voltage CMOS logic circuitry	Allows direct interfacing to control logic
Large supply voltage range	Permits operation at different voltages for optimum performance



120310

Low Charge Injection, High Voltage, Enhanced Analog Switches

Ordering Information / Availability

Part Number	Package Option	Samples	Lead Time
HV238FG	48-Lead LQFP (FG)	Now	4-5 Weeks

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



Product Contact

For any questions regarding the HV238, please contact your local area Supertex sales office, or contact the main office in the US at:

Telephone: 800-222-8888
Fax: 408-222-4895
EMail: mktg@supertex.com
Website: www.supertex.com

Supertex inc.
1235 Bordeaux Drive, Sunnyvale, CA 94089