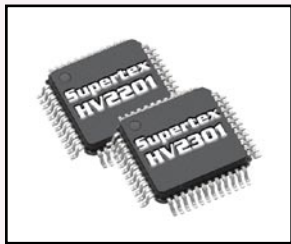


## Product Summary Sheet

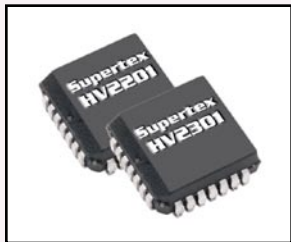
### Low Charge Injection, High Voltage, Enhanced Analog Switches

#### Applications:

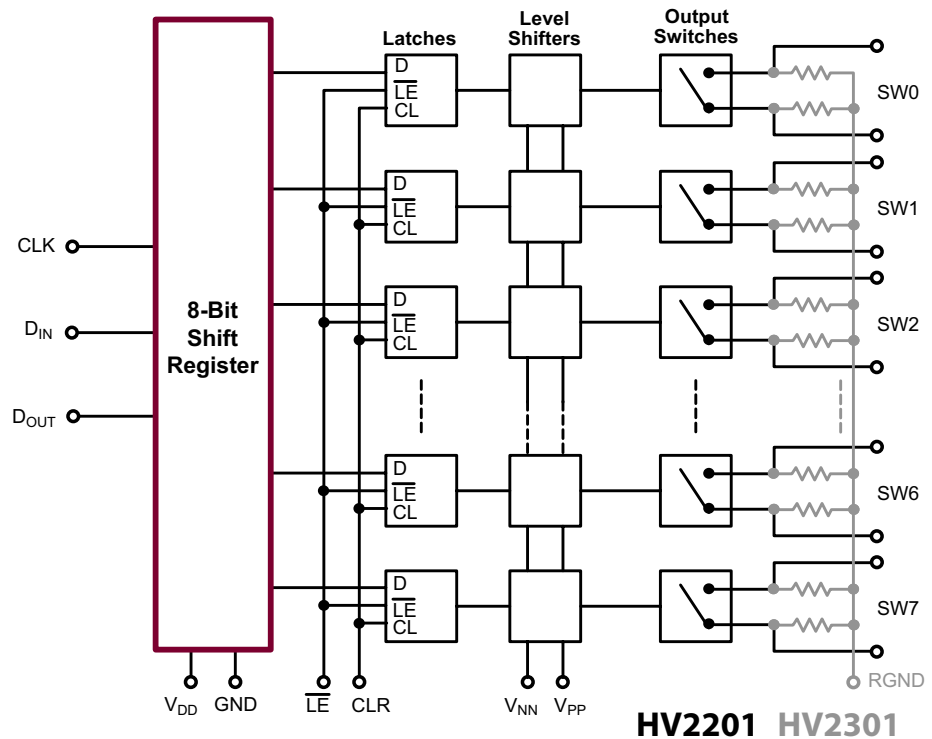
- ▶ Medical Ultrasound Imaging
- ▶ NDT Metal Flaw Detection
- ▶ Piezoelectric Transducer Drivers
- ▶ Inkjet Printer Heads
- ▶ Optical MEMS Modules



48-Lead LQFP (FG)  
(7x7x1.4mm)



28-Lead PLCC (PJ)



HV2201 HV2301

Block Diagram

#### Product Overview:

The Supertex HV2201 and HV2301 are low charge injection, 8-channel, high voltage analog switch integrated circuits (ICs). The devices can be used in applications requiring high voltage switching controlled by low voltage control signals, such as medical ultrasound imaging, piezoelectric transducer drivers, and inkjet printer heads. The built-in bleed resistors in the HV2301 eliminate voltage built up on capacitive loads such as piezoelectric transducers. The HV2201 is an enhanced version of the HV20220, while the HV2301 is an enhanced version of the HV232. They have very robust latch-up protection.

Input data is shifted into an 8-bit shift register that can then be retained in a 8-bit latch. To reduce any possible clock feed-through noise, the latch enable bar should be left high until all bits are clocked in. Data is clocked in during the rising edge of the clock. Using HVCMOS technology, these devices combine high voltage bilateral DMOS switches and low power CMOS logic to provide efficient control of high voltage analog signals.

These devices are suitable for various combinations of high voltage supplies, e.g.,  $V_{PP}/V_{NN}$ : +40V/-160V, +100V/-100V, and +160V/-40V.

Features:	Benefits:
Up to 200V operating voltage	Allows for higher transmit voltages for deeper body tissue imaging capability
22Ω switch resistance	Minimizes return signal attenuation for increased signal-to-noise ratio for clearer images
Low charge injection	Allows for clearer images and faster frame rate
CMOS serial shift register control	Minimizes I/O connections and power dissipation



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## Low Charge Injection, High Voltage, Enhanced Analog Switches

### Ordering Information / Availability

Part Number	Package Option	Samples	Lead Time
HV2301FG-G	48-Lead LQFP (7x7x1.4mm) (Green)	Now	4-5 Weeks
HV2301PJ-G	28-Lead PLCC (Green)		

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



### Product Contact

For any questions regarding the HV2201 or the HV2301, 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](mailto:mktg@supertex.com)  
 Website: [www.supertex.com](http://www.supertex.com)

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