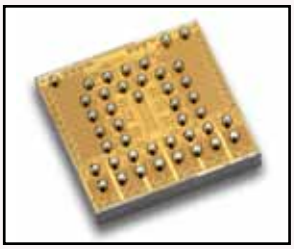
HV2601

Product Summary Sheet

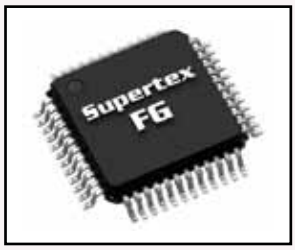
Low Charge Injection 16-Channel High Voltage Analog Switches

Applications:

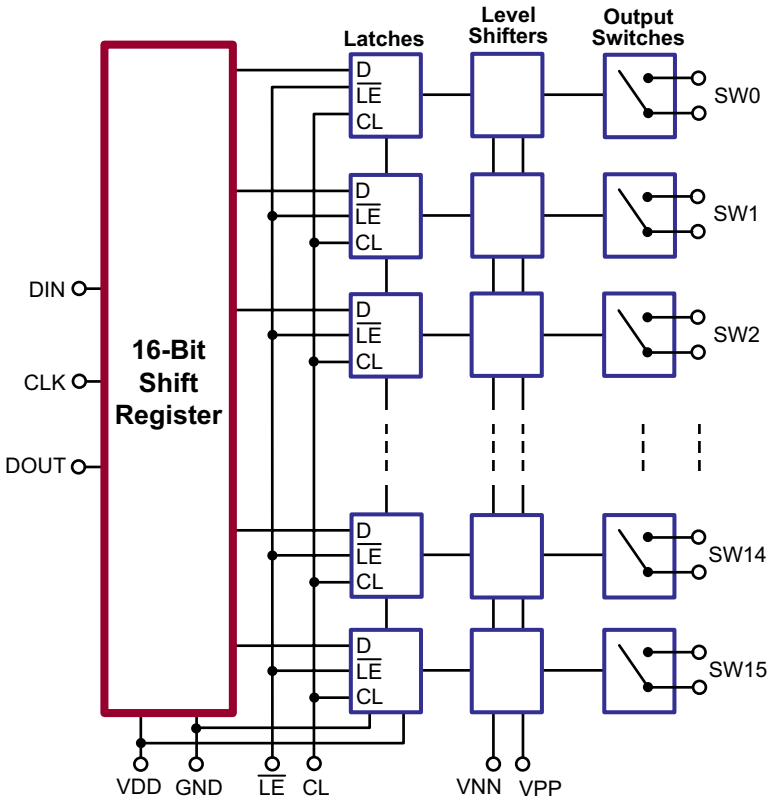
- Medical ultrasound imaging
- NDT metal flaw detection



42-Ball Bumped Die (BD)



48-Lead LQFP (FG)



Block Diagram

Product Overview:

The Supertex HV2601 is a low charge injection 16-channel high voltage analog switch integrated circuit (IC) intended for use in applications requiring high voltage switching controlled by low voltage control signals, such as medical ultrasound imaging and other piezoelectric transducer drivers.

Input data are shifted into a 16-bit shift register that can then be retained in a 16-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 are clocked in during the rising edge of the clock. Using HVCMOS technology, this device combines high voltage bilateral DMOS switches and low power CMOS logic to provide efficient control of high voltage analog signals.

The device is 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
Bumped die package	Higher board density

Green Initiative • Supertex • RoHS Compliant • Lead (Pb) - Free

032111

Supertex inc.

Low Charge Injection 16-Channel High Voltage Analog Switches

Ordering Information / Availability

Part Number	Package Option	Samples	Lead Time
HV2601BD M936	42-Ball Bumped Die (Green)	Now	4-6 Weeks ARO
HV2601FG-G	48-Lead LQFP (Green)	Now	4-6 Weeks ARO

-G indicates package is RoHS compliant ('Green').
Bumped Die package is RoHS compliant ('Green').
M936 specifies product in tape and reel.

Product Contact

For any questions regarding the HV2601, please contact your local area Supertex sales office, or contact the main office in the US at:

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