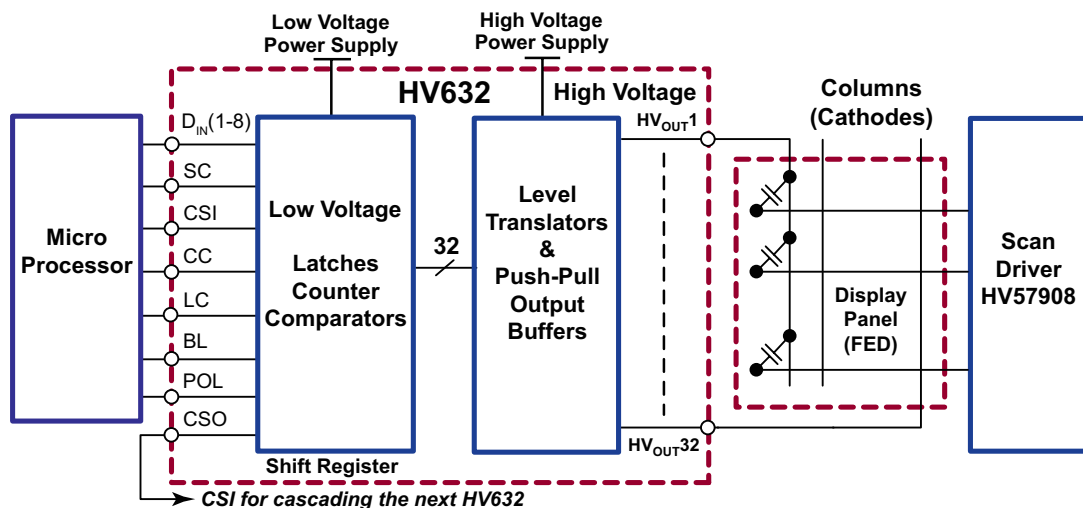


Product Summary Sheet

High Voltage 32-Channel Gray-Shade, Column Driver IC

Applications:

- ▶ Field Emission Displays (FED)
- ▶ Polymer Liquid Crystal Displays (PLCD)
- ▶ Vacuum Fluorescent Displays (VFD)



Typical Application Circuit



64-Lead, 3-Sided Plastic Gullwing (PG)

Product Overview:

The HV632 is a high voltage 80V, 32-channel with 256 gray-shades driver IC designed for driving flat panel displays such as polymer liquid crystal (PLC), vacuum fluorescent (VF), electrofluorescent and field emission displays. It is especially suitable for applications requiring a high data rate up to 20MHz and operating at an output voltage range of 12V to 80V.

Using Supertex proprietary HVCMOS technology, the HV632 features full integration of low voltage CMOS logic to support the pulse width modulation (PWM) conversion of 256 levels of gray shading for higher display resolution and 32 high voltage CMOS outputs, each capable of 80V operation as well as sourcing and sinking 4mA. The HV632 provides an 8-bit data bus for fast moving display image and for fine 256-level gray-scale resolution of each display pixel. It also features output polarity and blank functions that provide flexibility in output control.

The data latched in each of the 32-channel latches is compared twice to the content of an 8-bit up and down counter, thus generating the pulse width that is proportional to the data latched in every channel latch. The HV_{OUT} pulse width resolution and frame rate is proportional to the input data width (8 bits) and counter clock speed (10 MHz).

Features:	Benefits:
PWM gray-shade conversion	Higher resolution of high voltage pulses
HVCMOS technology, V _{pp} = 80V	Combines high voltage and low voltage integrated into one die, reducing component count, saves space and cost
Data speed is 20MHz	High processing speed display refresh
8 bit data bus	256 gray-scale column width, 8 times resolution
Output current per channel is 4mA	Meets fast switching requirements
Output polarity and blank CSI	Flexibility in output control
CSO Output	For device cascading



High Voltage 32-Channel Gray-Shade, Column Driver IC

Ordering Information / Availability

Part Number	Package Option	Samples	Lead Time
HV632PG-G	3-Sided Plastic Gullwing (PG)	Now	4-6 Weeks ARO

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



Product Contact

For any questions regarding the HV632, please contact your local area Supertex sales office, or contact the main office in the US at:

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