

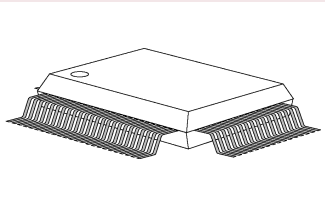
# Product Summary Sheet

# HV632 High Voltage 32-Channel Gray-Shade, Column Driver IC

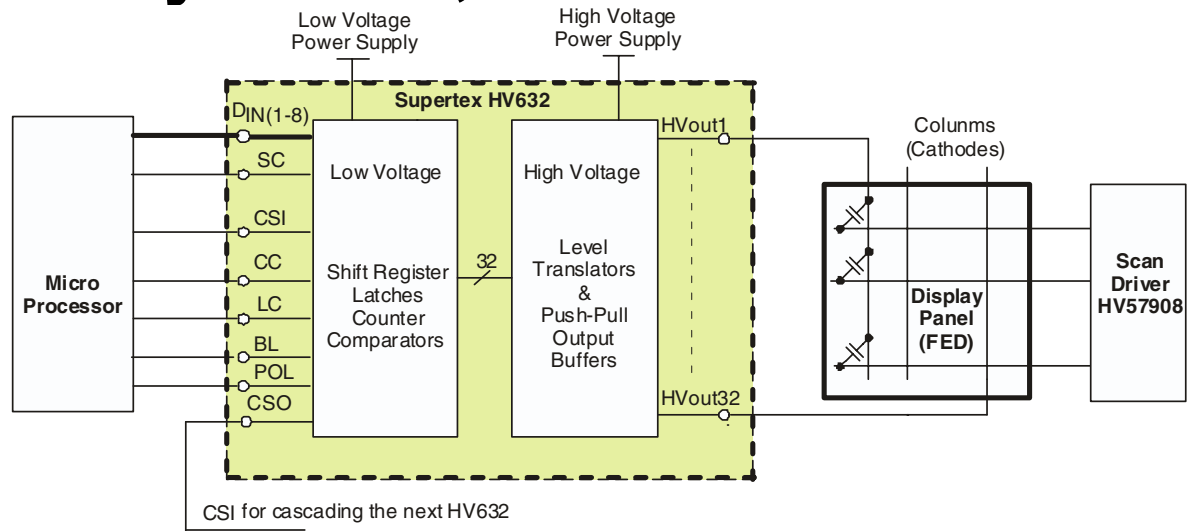
## Applications

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

## Package Type:



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



## Product Overview:

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, 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. 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:

PWM gray-shade conversion

HVCMOS Technology,  $V_{pp}=80V$

Data speed is 20MHz

8 bit data bus

Output current per channel is 4mA

Output Polarity and Blank CSI

CSO Output

## Benefits:

Higher resolution of high voltage pulses

Combines high voltage and low voltage integrated into one die, reducing component count, saves space and cost

High processing speed display refresh

256 gray-scale column width, 8 times resolution

Meets fast switching requirements

Flexibility in output control

For Device Cascading

# HV632 High Voltage 32-Channel Gray-Shade, Column Driver IC

## Main Specifications:

<u>PWM Gray-Shade</u>	<u>PWM Resolution</u>	<u>HV Output Voltage</u>	<u>LV Input Voltage</u>	<u>HV Output Current</u>
256 levels	100 nsec	12V - 80V	4.5V - 5.5V	4mA

## Ordering Information / Availability:

<u>Part Number</u>	<u>Datasheet</u>	<u>Samples</u>	<u>Lead Time</u>	<u>Package Options</u>
HV632	HV632 Now	HV632PG Now	4 - 6 weeks ARO	64-Lead, 3-Sided Plastic Gullwing

## Product Contact

If you have any questions regarding the HV632 or samples, contact Supertex Applications at:

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Supertex Sales: Contact your local Supertex Sales Office

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