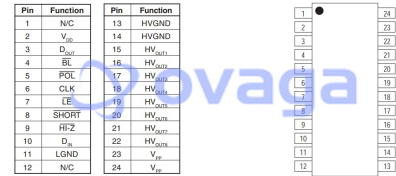


8-Channel Serial to Parallel Converter with High Voltage Push-Pull Outputs, POL, Hi-Z, and Short Circuit Detect, MOSFET & Power Driver ICs 250V 8Ch w/Push-Pull



Manufacturers	<u>Microchip Technology, Inc</u>
Package/Case	SOP-24
Product Type	Logic ICs
RoHS	Rohs
Lifecycle	

Images are for reference only

Please submit RFQ for HV513WG-G or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours. [RFQ](#)

General Description

The HV513 is a low voltage serial to high voltage parallel converter with 8 high voltage push-pull outputs. This device has been designed to drive small capacitive loads such as piezoelectric transducers. It can also be used in any application requiring multiple high voltage outputs, with medium current source and sink capabilities. The device consists of an 8-bit shift register, 8 latches, and control logic to perform the polarity select and blanking of the outputs. Data is shifted through the shift register on the low to high transition of the clock. A data output buffer is provided for cascading devices. Operation of the shift register is not affected by the LE, BL, POL, or the HI-Z control inputs. Transfer of data from the shift register to the latch occurs when the LE is high. The data in the latch is stored when LE is low. A high-Z (HI-Z) pin is provided to set all the outputs in a high-Z state. All outputs have short circuit protection that detects if the outputs have reached the required output state. If output does not track the required state, then the SHORT pin will be low. This output will pulse low during the output transition period under normal operation; see SC Timing Diagram for details. All outputs will have a break-before-make circuitry to reduce cross-over current during output state changes. The POL, BL, LE, and HI-Z inputs have an internal pull up resistor.

Features

HVCMOS® technology

Operating output voltage of 250V

Low power level shifting from 5.0 to 250V

Shift register speed 8.0MHz @>

8 latch data outputs

Output polarity and blanking

Output short circuit detect

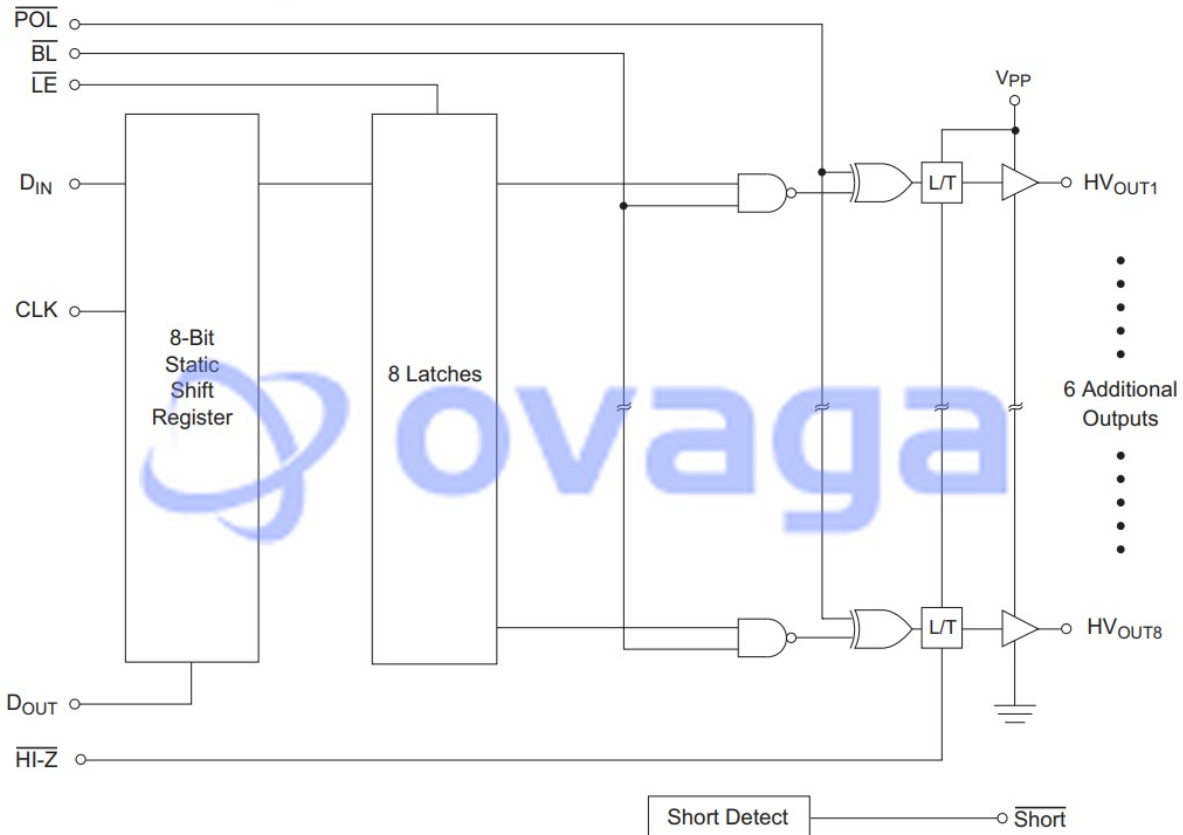
Output high-Z control

CMOS compatible inputs

Pin	Function
1	N/C
2	V _{DD}
3	D _{OUT}
4	$\overline{\text{BL}}$
5	$\overline{\text{POL}}$
6	CLK
7	$\overline{\text{LE}}$
8	$\overline{\text{SHORT}}$
9	$\overline{\text{HI-Z}}$
10	D _{IN}
11	LGND
12	N/C

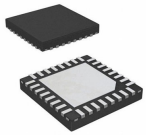
Pin	Function
13	HVGND
14	HVGND
15	HV _{OUT1}
16	HV _{OUT2}
17	HV _{OUT3}
18	HV _{OUT4}
19	HV _{OUT5}
20	HV _{OUT6}
21	HV _{OUT7}
22	HV _{OUT8}
23	V _{PP}
24	V _{PP}





$\overline{\text{POL}}$, $\overline{\text{BL}}$, $\overline{\text{LE}}$, and $\overline{\text{HI-Z}}$ have internal 20k Ω pull-up resistors.

Related Products



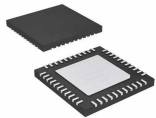
[HV513K7-G](#)

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WQFN-32



[HV9808PJ-G](#)

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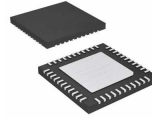
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