

# Product Summary Sheet

## Applications:

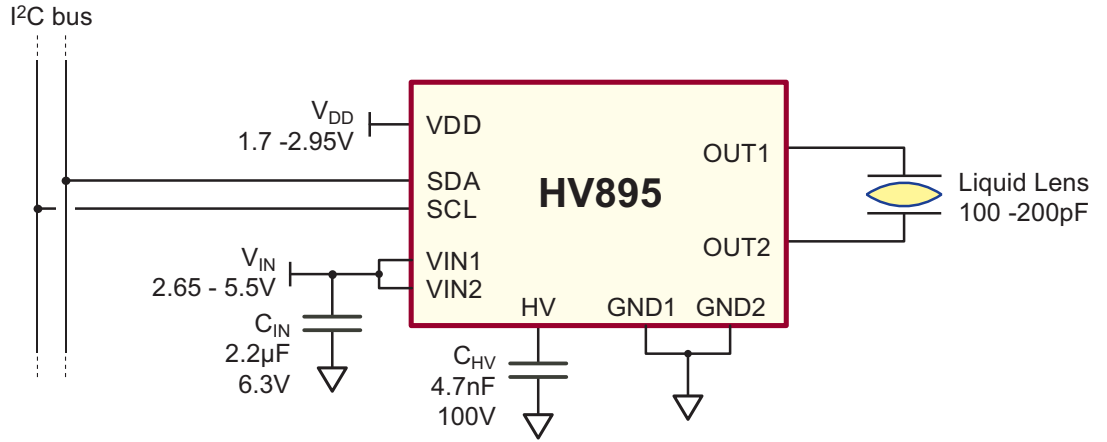
- ▶ Cell phone and PDA cameras
- ▶ Bar code readers
- ▶ Web and laptop cameras
- ▶ Biometric scanners
- ▶ Ultracompact cameras



**HV895BD**  
Solder-bumped Die

# HV895

## Liquid Lens Driver



**Typical Application Circuit**

### Product Overview:

The HV895 is designed to drive liquid lenses of up to 200pF with a 1.5kHz waveform at amplitudes up to 60V<sub>RMS</sub>, controlled via an I<sup>2</sup>C interface.

A single byte (AMP) written to the HV895 controls the operation of the driver. Setting AMP = 01h to FFh controls output amplitude in 255 monotonic steps. Setting AMP = 00h causes the HV895 to go into low power standby mode, consuming less than 1.0µA. When active, the HV895 draws less than 20mA.

A charge pump boost converter integrated on-chip provides the high voltage necessary for driving the lens. No external inductors or diodes are needed. Two ceramic 0402 size capacitors are the only external components required for a complete lens driver circuit. The narrow die size and only 2 small external components allow an entire lens driver circuit to be incorporated inside a camera module.

An H-bridge output stage provides AC drive to the lens, allowing the use of a single high voltage boost converter while providing alternating polarity to the lens. Controlled rising and falling edges on the drive waveform reduces EMI.

The HV895 is offered in a 1.0mm × 6.0mm lead-free solder-bumped flip-chip.

Features:	Benefits:
High voltage charge pump integrated on-chip	No bulky external inductors or diodes required
I <sup>2</sup> C interface	Ease of system design
Low operating and standby power	Prolongs battery life
Only 2 external components	Allows complete driver to be located inside a camera module
Controlled-edge drive waveform	Reduces EMI



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**Supertex inc.**

# HV895

## Liquid Lens Driver

### Ordering Information / Availability

<u>Part Number</u>	<u>Package Option</u>	<u>Samples</u>	<u>Lead Time</u>
HV895BD	Lead-free solder-bumped die	Contact factory	Contact factory

This product is RoHS compliant ('Green')



### Product Contact

For any questions regarding the HV895 please contact your local area Supertex sales office, or contact the main office in the US at:

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***Supertex inc.***

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