CN3927
Low Voltage Voice Coil Motor Driver with I2C interface

1. Description

The CN3927 is single 10-bit DAC with 150mA output current sink capability. Designed for linear control of voice coil motors, the CN3927 is capable of operating voltage from 2.3V to 5.5V. The DAC is controlled via a I2C serial interface that operates DAC by clock rates up to 400kHz.

The CN3927 incorporates with a UVLO reset circuit, power-down function, and exactly matched sense resistor. UVLO reset circuit ensure when supply power up, DAC output is to 0V until valid write-bit value takes place. It has a power down features that reduces the current consumption of the device to 1uA maximum.

The CN3927 is designed for auto focus and optical zoom camera phones, digital still cameras, and camcorders applications. The I2C address for the CN3927 is 0x18.

Features

- WLCSP package for minimum footprint
- Ramp control circuit
- Fixed I^{2}C logic thresholds
- 10-bit D-to-A converter
- 146μA *Iout* resolution
- I2C serial interface (1.8V input available)
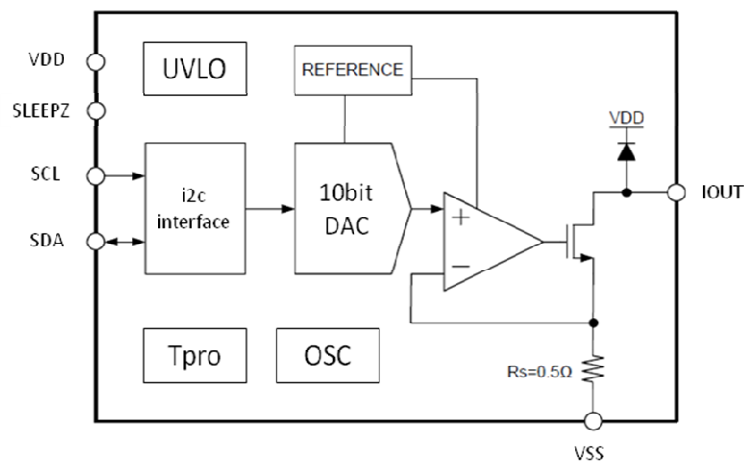- Low current sleep mode
- 2.3 to 5.5 V power supply

Applications

- Digital camera
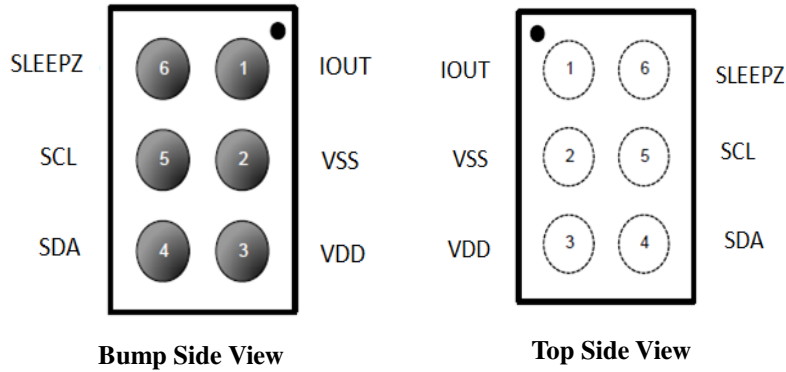- Cell phone
- Lens auto focus
- Web camera

Package:

- 6-Bump Chip Scale Package
- 0.80mm(W) x1.20mm(H) x 0.3mm(T)
- 0.4mm Bump Pitch

2. Functional Block Diagram

3. Pin Assignments

Bump Side View   Top Side View

4. Pin Description

Pin Name	Pin Number	Description
IOUT	1	Sink Drive Output
SLEEPZ	6	Standby Mode Control
VSS	2	Ground
SDA	4	I^2C data
VDD	3	Power Supply In
SCL	5	I^2C clock

5. Ordering Information

Order Part Number	Top Marking	Pb-Free	T_A	Package
CN3927CS6		Yes	-40 to +85°C	WLCSP6

6. Absolute Maximum Ratings

Stresses beyond those listed under "Absolute Maximum Rating" may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other condition beyond those indicated in the operational sections of the specifications is not implied. Exposure to absolute maxim rating conditions for extended periods may affect device reliability.