

# CSD010P\_Breif

## Class-D Amplifier based MEMS Scanner Driver IC

### General Description

The CSD010P is a Class-D amplifier based MEMS scanner driver for projector systems. This IC consists of Class-D Driver, A/D converters, D/A converters, PLL, Low pass filters, Comparators, PGAs and reference circuit

The horizontal and vertical control signals are transferred through the 12-bit parallel interface. The H/V control loop signals are converted to digital signals and serialized to minimize pin connections between scanner driver and video processor.

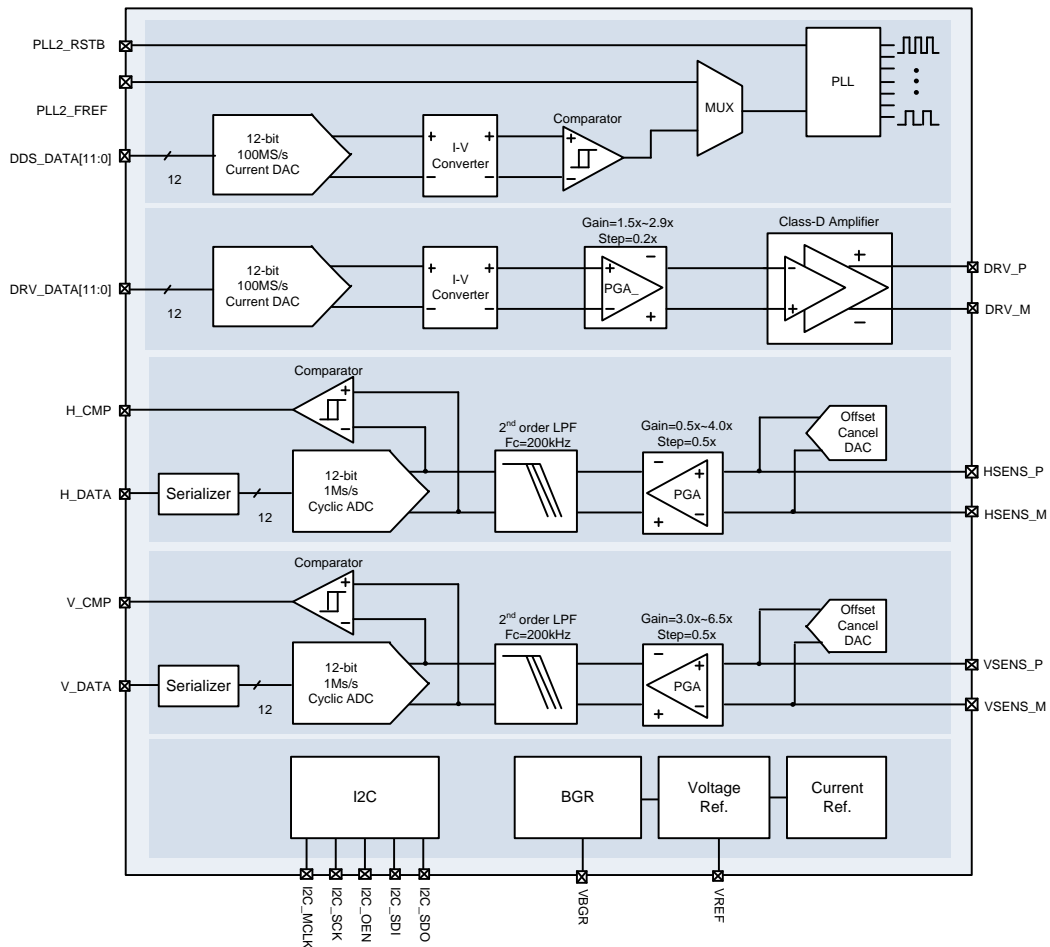
### Features

- Dual supply voltage of 1.8 V and 3.3 V
- 0.5W maximum output power at 2 Ω load
- 12-bit 100 MHz DAC
- 12-bit 1 MHz ADC
- 200 kHz bandwidth 2<sup>nd</sup> order LPF w/ PGA
- Low offset comparator
- 144 pin LQFP package (20mm x 20mm)

### Applications

- MEMS scanner based projector system

### Block Diagram



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Figure 1. Functional block diagram of CSD010P