

### FEATURES

- 1024 (horizontal) × 1024 (vertical) pixel array**
- 3.5 μm × 3.5 μm square pixels**
- 1/3.6 inch optical format**
- 4-wire SPI or 2-wire I<sup>2</sup>C serial interface**
- MIPI CSI-2 transmitter interface with support for 1, 2, or 4 data lanes, programmable up to 1.5 Gbps per lane**
- Dual, 3.3 V and 1.27 V external supplies, 1.8 V I/O section**
- Die size: 5.364 mm × 9.799 mm**

### APPLICATIONS

- Smartphones**
- Augmented reality (AR)/virtual reality (VR)**
- Machine vision systems (logistics and inventory)**
- Robotics (consumer and industrial)**

### GENERAL DESCRIPTION

The ADSD3100 is a CMOS 3D Time of Flight (ToF)-based 3D depth and 2D visual light imager that is available for integration into 3D sensor systems. The functional blocks required for read out, which include an analog to digital converter (ADC), pixel biasing circuitry, and sensor control logic, are built into the chip to enable a cost effective and simple implementation into systems.

The ADSD3100 interfaces electrically to a host system over a mobile industry processor interface (MIPI), Camera Serial Interface 2 (CSI-2) interface. A lens plus optical band-pass filter for the imager and an infrared light source plus an associated driver are required to complete the working subsystem.

### FUNCTIONAL BLOCK DIAGRAM

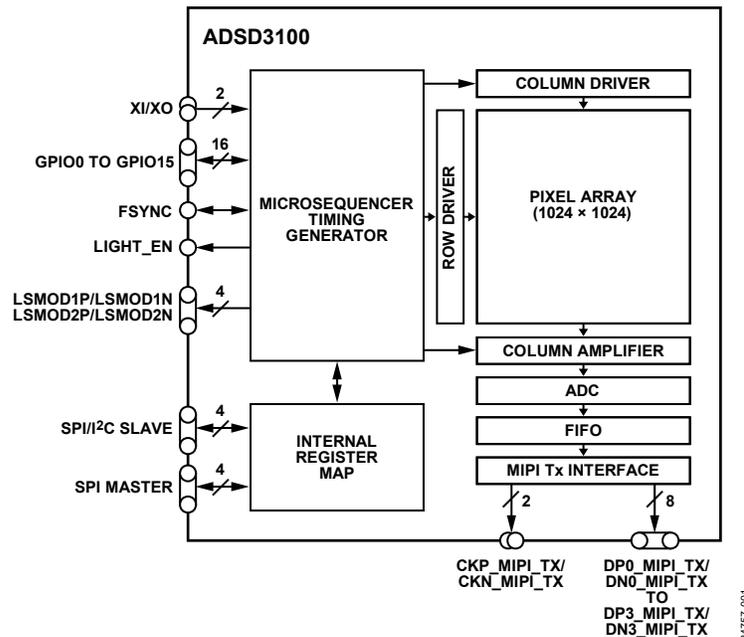


Figure 1.

For more information about the ADSD3100, contact the Analog Devices, Inc., at [sublime3D@analog.com](mailto:sublime3D@analog.com).

**NOTES**