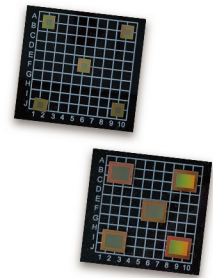


OPN8001/8008/8018

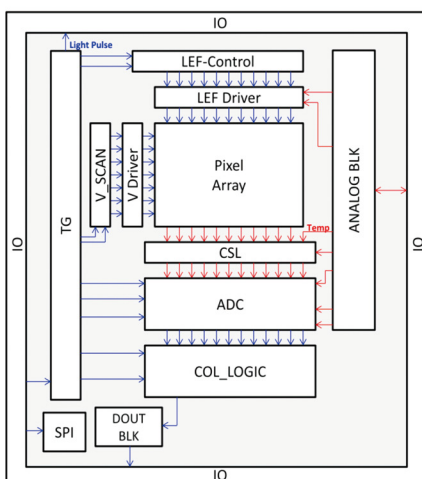
3D TOF SENSORS

GENERAL DESCRIPTION

OPN8001/8008/8018 are Time-of-Flight (ToF) imaging sensors for 3D sensing covering 100x100 / QVGA (320x240) / VGA (640x480) level matrix sensing resolutions. The 3D sensing is realized upon 850 nm and 940 nm NIR wave length with an industry leading accuracy. The power consumption achieves the lowest level in the industry, which benefits many portable and energy saving applications. OPN8001/8008/8018 are developed as key products of OPNOUS ToF solutions for a broad range of applications.



FEATURES



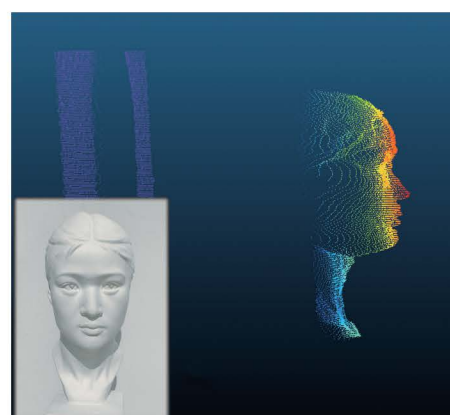
- Frame rate: 5fps, 10fps, 20fps, 30fps, 60fps, 120fps
- Low power consumption with flexible scalability
- Sensor array shrink and extension
- Master and slave mode, flexible for building sensor chains
- Built-in multi-ToF interference immunity
- Accurate temperature sensing for robust environment adaptability
- One system clock for all range measurement with wide range flexibility
- Leading accurate measurement resolution in the industry
- Micro lens availability with advanced optical system solution capability

SPECIFICATIONS

	OPN8018	OPN8008	OPN8001
Resolution	640x480	320x240	100x100
Die size	6.5x6.28 mm ²	7.52x6.42 mm ²	3.72x4.12 mm ²
Frame rate	5/10/20/30/60 fps	5/10/20/30/60 fps	5/10/20/30/60/120 fps
Accuracy	1% @ 5m	1% @ 5m	1% @ 5m
Data Interface	MIPI CSI-2, 4 Lanes	MIPI CSI-2, 2 Lanes	MIPI CSI-2, 2 Lanes
Control Interface	CCI (I2C)	CCI (I2C)	CCI (I2C)
Power consumption	<120 mW	<100 mW	<50 mW
Operating temperature	-20~85 °C	-20~85 °C	-20~85 °C

APPLICATIONS

- ✓ 3D Sensing
- ✓ 3D face & gesture recognition
- ✓ 3D Gaming and AR/VR solutions
- ✓ Drone, AGV and robot sensing
- ✓ Surveillance and industry automation
- ✓ Automotive self-driving sensing



CONTACT INFORMATION

Headquarter

Phone: +86 21 62351683

Email: sales@opnous.com