

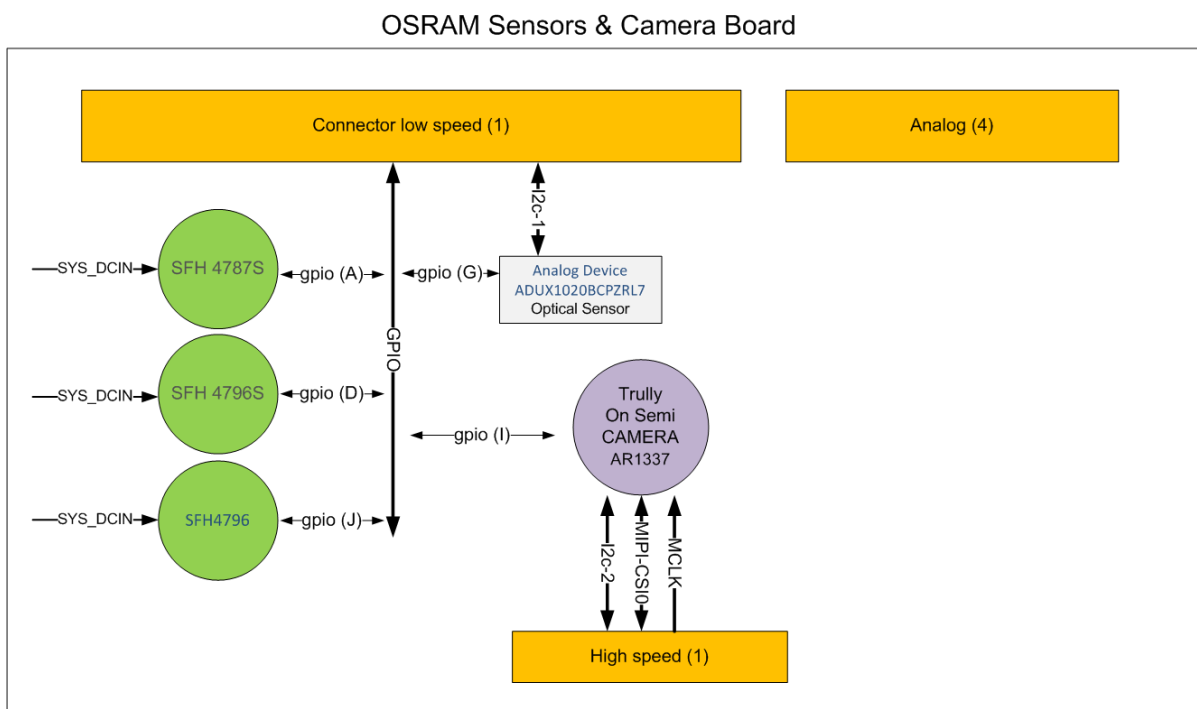
On-Board OnSemi Camera Mezzanine for 96Boards with IRS SCAN & Face Recognition

First time IRIS SCAN and FACE Recognition 96Boards Mezzanine, the easiest and fastest way to add those Features to your product

→ GET YOUR PRODUCT MOVING!

The new Shiratech Camera and OSRAM mezzanine adds the first-ever IRIS Scan And Face recognition features to the 96Boards family.

The board contains the following parts and capabilities:



Using the Shiratech Camera and OSRAM mezzanine on top of a main board forms a complete solution for any application that needs Biometric and Face Recognition features. The mezzanine can be extended with additional functionality through the built-in expansion connectors allowing to plug-in additional mezzanines, sensors and peripherals.

The Camera and OSRAM mezzanine is compatible with the 96Boards consumer edition (CE) products.

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TECHNICAL SPECIFICATIONS:

MAIN FEATURES

OSRAM LEDS

**SFH 4787S - Infrared (IR) Emitter 820nm 3.3V
500mA 815mW/sr @ 1A 36° 1414 (3535 Metric)**

Features:

- IR lightsource with high efficiency
- Double stack emitter
- Low thermal resistance (Max. 25 K/W)
- Centroid wavelength 810 nm
- Small package dimensions (LxWxH): 3.5mm x 3.5mm x 1.6mm
- Narrow half angle (+/- 18°) / 8° tilted

SFH 4796S – IR OSLUX Emmitter - (850nm) - 80°

Features:

- Corrosion Robustness Class: 3B
- ESD: 2 kV acc. to ANSI/ESDA/JEDEC JS-001 (HBM, Class 2)
- IR lightsource with high efficiency
- Double stack emitter
- Low thermal resistance (Max. 14 K/W)
- Centroid wavelength 850 nm
- Small package (LxWxH): 3.5mm x 3.5mm x 1.4mm

**SFH 4775S- Infrared (IR) Emitter 950nm 2.8V 1.5A
360mW/sr @ 1A (Typ) 120° 1108 (2720 Metric)**

Features:

- Package: clear silicone
- Corrosion Robustness Class: 3B
- ESD: 2 kV acc. to ANSI/ESDA/JEDEC JS-001 (HBM, Class 2)
- IR lightsource with high efficiency
- Double stack emitter
- Low thermal resistance (Max. 9 K/W)
- Centroid wavelength 940 nm

MIPI Camera Module

OnSemi Camera AR1337

Features:

- 4-lane MIPI
- Optical format 1/3.2" 13Mp (4:3)
- Active pixels 4208H x 3120V
- View Angle 74.48° +/-3°
- Autofocus

Analog Device ADUX1020

Features:

- Multifunction photometric sensor and signal conditioning
- Fully integrated AFE, ADC, LED driver and timing core
- Usable for multiple optical measurement applications including gesture control and proximity sensing.
- Ambient light rejection capability using both optical and analog filtering.
- On-chip programmable flexible current sink for external LED.
- High sensitivity and signal to noise ratio (SNR)
- High resolution position measurement
- Gesture recognition with 0.5cm to 15cm range
- Proximity sensing to 20cm
- 400KHz I2C interface
- Gesture/proximity works under infrared (IR) transparent glass or other materials.

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