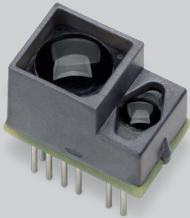# BROADCOM®

Product Brief

AFBR-S50

Key Features

- Integrated Laser light source
- Between 1 - 16 illuminated pixels
- Very fast measurement rates of up to 3 kHz
- Variable distance range up to 10m
- Operation up to 200k Lux ambient light
- Works well on all surface conditions
- SPI digital interface (up to 20MHz)
- Single voltage supply 5V
- Integrated clock source
- Laser Class 1
- Accuracy < 1%
- Drop in compatible within the AFBR-S50 Sensor Plattform

Applications

- Industrial Sensors
- Gesture Sensing
- Distance measurement
- Robotics
- Automation and Control

Description

Broadcom´s multi-pixel distance and motion measurement sensor based on the optical Time of flight principle excels through supporting up to 3000 frames per second with up to 16 illuminated pixels, The sensor has been developed with a special focus on precise distance sensing and gesture sensing applications with the need for highest speed, with small size and very low power consumption. Through its best-in-class ambient light suppression of up to 200k Lux, the use in outside environments is no problem.

The technology has been optimized to measure distances up to 10m (black target) with an accuracy of < 1% on a wide variety of surfaces. It works equally well on white, black, colored as well as metallic reflective surfaces.

The module has an integrated 680nm/850nm laser light source and uses a single voltage supply of 5V, the data is transferred via a digital SPI interface.

First samples will be available in 04/2018 and official SOP 11/2018.

AFBR-S50MV85G

- Lightsource: 850nm
- Pixels: 9 – 16
- FOV: 6,2° x 6,2°

AFBR-S50MV680B

- Lightsource: 680nm
- Pixels: 1
- FOV: 1,55° x 1,55°

Specifications

- Voltage supply range: 4.5 ... 5.5V
- SPI interface compatible with 3.3V
- Active current consumption typ. < 25 mA
- Operation temperature: -20 to 70 °C
- Size l x w x h: ~ 11.3mm x 7.3mm x 7.8mm
- Weight: 0,7 gram

Contact

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