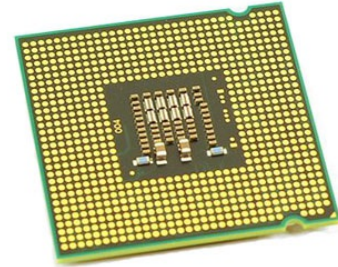


Integrated Optical Module Digital Output 1.8V 24-Pin LGA T/R

Manufacturers	Analog Devices, Inc
Package/Case	LGA
Product Type	Optical Sensors
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADPD188BI-ACEZR7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADPD188BI is a complete photometric system for smoke detection using optical dual wavelength technology. The module integrates a highly efficient photometric front end, two light emitting diodes (LEDs), and two photodiodes (PDs). These items are housed in a custom package that prevents light from going directly from the LED to the photodiode without first entering the smoke detection chamber.

The front end of the application specific integrated circuit (ASIC) consists of a control block, a 14-bit analog-to-digital converter (ADC) with a 20-bit burst accumulator, and three flexible, independently configurable LED drivers. The control circuitry includes flexible LED signaling and synchronous detection. The analog front end (AFE) features best-in-class rejection of signal offset and corruption due to modulated interference commonly caused by ambient light. The data output and functional configuration occur over a 1.8 V I²C interface or serial peripheral interface (SPI) port.

Features

Supports UL-217 edition 8/ UL-568 ed. 7; EN-54; GB.; ISO

Lowers Nuisance Alarms using a Dual Wavelength detection with higher SNR and dynamic range.

3X Lower power dissipation enables smaller/ cheaper batteries

Integrated Optical Module (3.8mm x 5mm x 0.9mm with 1 blue LED, 1 IR LED and 2 Photo diodes)

simplifies EMC design,

allows for greater diversity of industrial design options and

results in 75% fewer discrete components.

Loop calibration at final test reduces calibration challenges with smoke detector products.

Supported by ADI designed smoke chamber manufactured by Accumold, 28800X. (Please see , also under Resources below)

Application

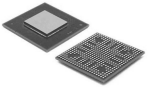
Smoke Detection

Related Products



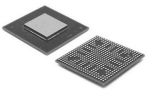
[ADDI9036BCBZRL](#)

Analog Devices, Inc
117-Ball WLCSP (6.04 mm x 6.12 mm x 0.60 mm)



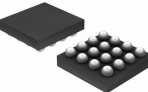
[ADPD1080WBCPZR7](#)

Analog Devices, Inc
28-Lead LFCSP (4mm x 4mm w/ EP)



[ADPD105BCPZRL](#)

Analog Devices, Inc
28-Lead LFCSP (4mm x 4mm w/ EP)



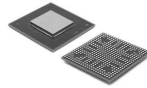
[ADPD105BCBZR7](#)

Analog Devices, Inc
16-UFBGA, WLCSP



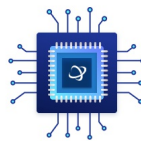
[ADPD4100BCBZR7](#)

Analog Devices, Inc
35-Ball WLCSP (2.14 mm x 3.11 mm x 0.50 mm)



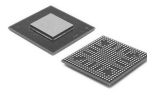
[ADPD1080BCPZR7](#)

Analog Devices, Inc
28-Lead LFCSP (4mm x 4mm w/ EP)



[ADPD105BCPZ](#)

Analog Devices, Inc
WFQF28



[ADAL6110-16BCPZ-RL](#)

Analog Devices, Inc
48-Lead LFCSP (7mm x 7mm x 0.85mm w/ EP)