

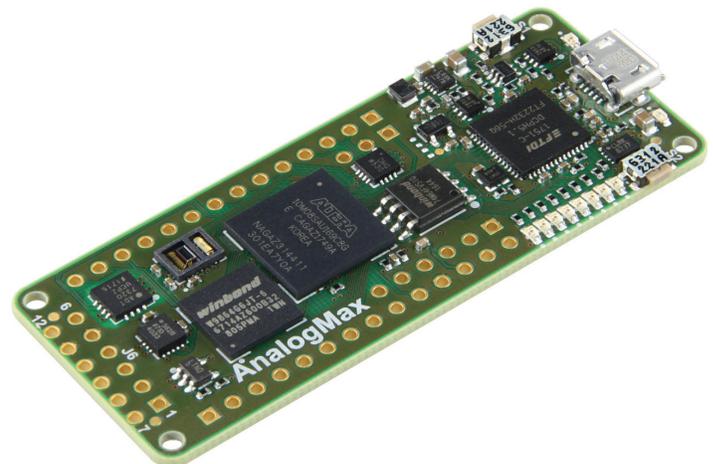
AnalogMAX

Full-featured Sensor Fusion FPGA Board for Smoke and Aerosol Detection

Developed in association with Arrow Electronics and Trezz Electronic GmbH, the AnalogMAX is a full-featured sensor fusion FPGA board based on the Intel® MAX® 10 FPGA and Analog Devices' new ADPD188BI integrated optical module for smoke and aerosol detection.

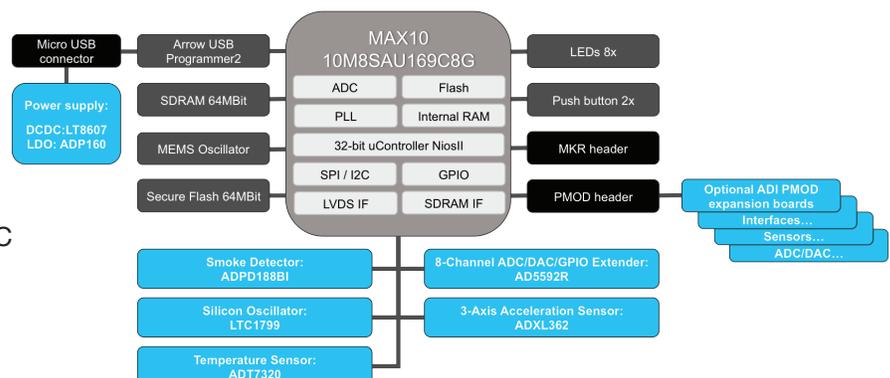
The ADPD188BI is a complete photometric system for smoke and aerosol detection that utilizes optical dual-wavelength technology. The chip integrates a highly efficient photometric front end, two LEDs and a photodiode.

AnalogMAX also features a fully calibrated, single-chip temperature sensor (0.25°C, 16-bit), MEMs accelerometer (3-axis), and 8 channel, 12-bit, configurable ADC/DAC/GPIO with on-chip reference.



> Features

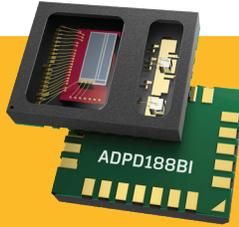
- ADPD188BI integrated optical module for smoke and aerosol detection
- Intel MAX 10 FPGA
- AD5592R configurable ADC/DAC/GPIO with on-chip reference
- ADT7320 0.25°C accurate, 16-bit temperature sensor
- ADXL362 3-axis acceleration sensor
- LTC1799 silicon oscillator for clocking
- Power Supply by Analog Devices, DC/DC LT8607, LDO ADP160
- PMOD and MKR for optional expansion boards
- Pre-programmed demo application
- Customized board available for real world products!



Featured Products

> ADPD188BI - OPTICAL MODULE FOR SMOKE AND AEROSOL MONITORING

- > Complete optical solution in a tiny module ideal for:
 - Residential and commercial smoke detection
 - Pollution monitoring
 - Aerosol detection



- > Meets UL217Rev. 8 and other agency requirements
- > Enables more design and integration options, including chamberless designs
- > Eases assembly flows and supply chain management
- > Companion evaluation tool also available (EVAL-ADPD188BIZ-SK)

Additional Products from Analog Devices enabling Arrow's AnalogMAX-01:

SENSORS:

- > ADXL362 - Micropower, 3-Axis, ± 2 g/ ± 4 g/ ± 8 g Digital Output MEMS Accelerometer. Companion evaluation tool also available (EVAL-ADXL362Z)
- > ADT7320 - $\pm 0.25^\circ\text{C}$ Accurate, 16-Bit Digital SPI Temperature Sensor

DATA CONVERSION:

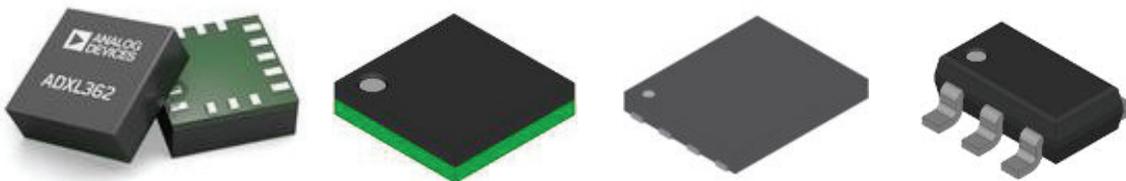
- > AD5592R - 8 Channel, 12-Bit, Configurable ADC/DAC with on-chip Reference, SPI interface

POWER MANAGEMENT:

- > LT8607 - 42V, 750mA Synchronous Step-Down Regulator with 2.5 μA Quiescent Current
- > ADP160 - Ultra Low Quiescent Current 150 mA, CMOS Linear Regulator

CLOCKING:

- > LTC1799 - 1kHz to 33MHz Resistor Set SOT-23 Oscillator



In Person

303 824 5285

Online

arrow.com

