

# XinaBox Datasheet SG34 - Particle Sensor



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## Overview

This xCHIP is based on the MAX30105 particle sensing module. The MAX30105 includes internal LEDs, photo-detectors, optical elements, and low-noise electronics with ambient light rejection which is mainly aimed at smoke detection applications such as fire alarms.

## Product Highlights

- High Sensitivity Optical Reflective Solution for Detection of Wide Variety of Particle Sizes

## Applications

- Smoke Detectors

## Specifications

- Based on MAX30105 From Maxim Integrated
- Tiny 5.6mm x 3.3mm x 1.55mm 14-Pin Optical Module: Integrated Cover Glass for Optimal, Robust Performance
- Ultra-Low Power Operation
- Robust Motion Artifact Resilience: High SNR
- 40°C to +85°C Operating Temperature Range
- Capable of Operating at High Ambient Levels
- Excellent Ambient Rejection Capability
- Storage Temperature Range: -40°C to +105°C
- SCL Clock Frequency: 0 400 kHz
- Particle-Sensing Subsystem
- Temperature Sensor
- LED Driver
- Proximity Function

## External Links

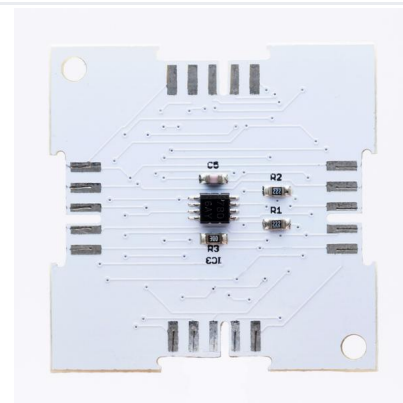
### GitHub

- SG34 on GitHub (<https://github.com/xinabox/xSG34>)

## SG34 - Particle Sensor (MAX30105)



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### ✕CHIP

Main Category	Sensor
Sub Category	Gas
Introduced	1 January 2017
Current version	1.0.0
Current version date	1 January 2017
Dimensions	
Size	2x2U (32x32mm)
Weight	3 g
Height	4.3/1.6/0mm
Main Chip Set	
Main Chip	MAX30105
I <sup>2</sup> C Configuration	
Default Address	0x57