

**SDA04P™**  
**SDA04PX™**  
**SDA04PIV™**

**SecuGen**

## **Fingerprint Sensor OEM Modules**

**From the world's leading  
supplier of advanced,  
optical fingerprint  
technology for  
embedded systems...**

**SecuGen's SDA fingerprint  
sensor OEM modules are  
made with the industry's  
most rugged and accurate  
optical sensors based on  
patented SEIR™ technology.**



**FBI Certified**

## ***SecuGen Provides the Highest Quality in Fingerprint Biometrics at Affordable Prices***

### ***Durable***

SecuGen fingerprint sensors are extremely rugged and feature a virtually indestructible sensor prism. From the sensor surface to the internal lens and electronic components, SecuGen sensors are designed to be strong and dependable to deliver consistent performance in indoor, outdoor, hot, cold and other harsh environments.

### ***Accurate***

SecuGen sensors are very accurate thanks to a patented optic design that produces distortion-free images from which data points are extracted for matching. Higher quality images mean greater precision, less false rejection and acceptance, and better overall performance.

### ***Maintenance-free***

Unlike semiconductor-based sensors and other optical sensors in the market, SecuGen sensors are made with a hard quartz-like material that needs no coatings but resists scratches, ESD, corrosion and other stresses. The optic parts are tightly assembled so that if the sensors are ever dropped, there is no need for recalibration.

### ***Cost-effective***

SecuGen designs, develops and manufactures its own fingerprint sensors that are built to last. SecuGen guarantees the best product quality in the industry, which translates into savings by eliminating costly replacements and losses from system downtime.

***Since 1999*** SecuGen fingerprint technology has been used in over 100 countries around the world. Our sensors have been integrated with a wide variety of security applications including access control and labor tracking systems, door locks, and kiosks.

We continually research and develop new and improved technologies and are pleased to offer our latest and best in the SDA line of fingerprint sensor OEM modules.

# Technical Specifications

## SDA04P, SDA04PX

## SDA04PIV

## Developer Kits

Each fingerprint sensor OEM module includes:

- Optic Module
- Board with CPU, Memory & Embedded Algorithms
- FPC Cable



**FBI Certified**

Each SDA Developer Kit includes:

- Choice of one SDA OEM module
- C9 and RS232 cables
- DB9 interface board
- 3.3V DC power supply
- CD with software and documentation
- One year of support

### Optic Module

Optic Module  
Image Resolution / Size  
Sensing Area / Platen Size  
Fingerprint Capture Time  
Light Source / Typical Lifetime  
Dimensions / Weight

SDOPP03P  
500 DPI / 260 x 300 pixels  
13.2 x 15.2 mm / 16.1 x 18.2 mm  
0.2 ~ 0.5 second with Smart Capture  
LED / 60,000 hours  
21 x 32 x 62 mm / 32 g

SDOPP04P  
508 DPI / 258 x 336 pixels  
12.9 x 16.8 mm / 16.1 x 18.2 mm  
0.2 ~ 0.7 second with Smart Capture  
LED / 60,000 hours  
21 x 32 x 62 mm / 32 g

### Description

The Developer Kit provides the hardware, software, and support needed to help accelerate the design and integration of SecuGen's OEM module into stand-alone or networked devices.

### Board

CPU / Flash Memory  
Storage Capacity  
Minutiae Extraction Time  
Matching Time (1:1)  
Matching Time (1:N)  
MINEX Compliant Algorithms  
Fingerprint Template  
Communication Speed (max)  
External Interface

533 MHz ARM / 128 MB  
10,000 users (1:1 or 1:N)  
< 0.3 second  
< 0.1 second  
< 0.2 second  
No  
SecuGen, INCITS 378, ISO 19794-2  
921,600 bps  
RS232 Serial (SDA04P only), Wiegand (SDA04P only), GPIO (SDA04P only), CMOS Level Serial  
59 x 43 x 8 mm / 16 g

533 MHz ARM / 128 MB  
10,000 users (1:1 or 1:N)  
< 0.9 second  
< 0.1 second  
< 0.4 second  
Yes  
SecuGen, INCITS 378, ISO 19794-2  
921,600 bps  
RS232 Serial, Wiegand, GPIO, CMOS Level Serial  
59 x 43 x 8 mm / 16 g

### Features

APIs and data conversion modules are provided in the Developer Kit to expand the capabilities of your biometric system with these functions:

- Verify or identify authorized users by their fingerprints
- Register and manage user profiles
- Interface with PC and SecuGen USB fingerprint readers
- Adjust imaging parameters, quality thresholds, and security levels
- Test all functions

### Other

Supply Voltage  
Current Consumption  
Operating Temperature  
Operating Humidity  
Auto-On™ & Smart Capture™  
Compliance / Certification  
Optional Water Resistance (WR)

3.3 V DC  
120 mA (idle), 400 mA (operating)  
-20° ~ 65° C  
90% or less RH, noncondensing  
Yes  
RoHS  
Water-resistant optic module

3.3 V DC  
120 mA (idle), 400 mA (operating)  
-20° ~ 65° C  
90% or less RH, noncondensing  
Yes  
RoHS, FIPS 201 / FBI (PIV Single Finger)

# SecuGen

SecuGen Corporation

[www.secugen.com](http://www.secugen.com)

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