

NEXT BIOMETRICS FINGERPRINT AREA SENSOR MODULE

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The NEXT Biometrics NB-2020-S

is a high quality fingerprint area sensor module designed for integration into custom application products including notebooks, tablets, time and attendance terminals and card readers. It relies on the NEXT sensor chipset mounted on a small printed circuit board for seamless hardware integration. The module connects to the host system via a flex cable.

The sensor module works with the patented NEXT Active Thermal™ principle. The sensor technology is tolerant against dirt, grease and varying environmental conditions. The large active area of the NB-2020-S allows stable imaging, intuitive user operation and is ideally suited for mass market applications in need of both security and convenience.

The NEXT technology enables an economical production process and makes a quality sensor available to price sensitive applications without compromises.

NEXT Biometrics offers a turnkey biometric subsystem by providing hardware drivers and a NEXT certified partner algorithm for a variety of host platforms including Android and Cortex M3 and M4 embedded microcontrollers.

APPLICATION EXAMPLES:

- Notebooks
- Tablets
- Logical Access Control
- Card Readers
- Authentication Tokens
- Remote Controls



TECHNICAL SPECIFICATIONS

Sensor technology	NEXT Active Thermal™ sensing (patented)
Total dimensions in mm	19.9 x 28.52 x 4.18 (including connector)
Active sensing area in mm	11.9 x 16.9
Pixels	180 x 256
Resolution	385 ppi (pixel size 66 µm * 66 µm)
Gray scale levels	256
Image scan time	0.53 s
Power supply	3.3 V
Scan current consumption	90 mA
Standby current consumption	30 µA
Logical Interface	SPI 4-8 MBps
Physical Interface	12-pin FFC connector
ESD protection	±8 kV contact discharge , ±15 kV air discharge according to IEC 61000-4-2
Mechanical durability	2 million touches @ 2.45N
Scratch resistance	durable lifetime coating
Operating conditions	-10 °C to +60 °C at 95% RH (non condensing)
Storage conditions	-20 °C to +70 °C at 95% RH (non condensing)
The sensor is designed to enable	CE, FCC, RoHS and WEEE product certifications
Sensor module offerings	Black bezel: NB-2020-S2G-BR



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