

NEXT BIOMETRICS FINGERPRINT AREA SENSOR MODULE

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The NEXT Biometrics NB-2023-U

is a high quality fingerprint area sensor module designed for integration into custom application products such as notebooks, tablets, USB peripherals and smart card readers. It relies on the NEXT sensor chipset mounted on a small printed circuit board for seamless hardware integration. The module connects to a USB hub or embedded USB host.

The fingerprint 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-2023-U 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 compromising functionality or performance. NEXT Biometrics offers a turnkey biometric subsystem by providing hardware drivers and a NEXT-certified partner algorithm for a variety of host platforms.

NB-2023-U is ready for WBF and Windows Hello. USB host drivers are available for Windows, Android and Linux.

APPLICATION EXAMPLES:

- Notebooks
- Tablets
- USB Peripheral devices
- Smartcard readers
- Portable hard drives



TECHNICAL SPECIFICATIONS

Sensor technology	NEXT Active Thermal™ sensing (patented)
Total dimensions in mm	20.9 x 27.37 x 2.47 (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	0.45s
Power supply	5.0 V
Scan current consumption (typical)	75 mA
Standby current consumption (maximum)	420 μA
Logical Interface	USB 2.0 full-speed interface
Physical Interface	6-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, hardness ≥ 9H
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	Standard tape: NB-2023-U-X IP55 tape: NB-2023-U-V



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