

One Touch ID L0-150-UART/SPI Module

One Touch.
One You.
NEXT Biometrics

One Touch ID L0-150 UART/SPI

The One Touch ID L0-150 UART/SPI is a fingerprint module designed for UIDAI Level 0 Registered Device applications. The module allows device makers to quickly and securely integrate NEXT's STQC certified solution to virtually any platform with a USB interface, and enables easy integration into their preferred Registered Device (RD) Service.

The module is based on NEXT NB-0510-S sensor chipset combined with on-board Innovatrics MINEX III extractor engine. This sensor/chipset/extractor combination has passed May 2016 STQC testing and has been STQC certified in June 2018.

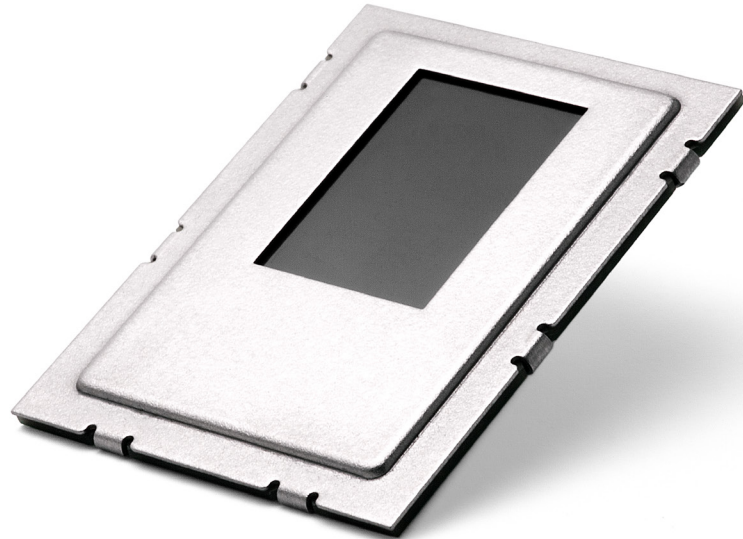
The NB-0510-S sensor chipset utilizes patented *NEXT Active Thermal*[®] principle to acquire fingerprints. The sensor technology is tolerant against dirt, grease and varying environmental conditions. The large active area allows stable imaging, intuitive user operation, and is ideally suited for mass market applications in need of both security and convenience.

The module features a secure micro-processor which performs image processing and template extraction operations directly on board the module. The resulting biometric template is transferred to the host system over encrypted channel using AES 256-bit algorithm.

The module comes with SDK for Windows, Android and Linux. In addition, an interface library is provided in source code to facilitate integration into any platform. Using the SDK, system integrators can easily connect the module with their own RD Service.

DESIGNED FOR INTEGRATION INTO:

- POS terminals
- MicroATM terminals
- eKYC
- Embedded applications



TECHNICAL SPECIFICATIONS

Sensor technology	<i>NEXT Active Thermal</i> [®] sensing (patented)
Total dimensions (mm)	35.00 x 26.00 x 2.74 (including connector)
Active sensing area (mm)	11.9 x 16.9
Pixels	180 x 256
Optical equivalent resolution (ppi)	500 (demonstrated per PIV test)
Gray scale levels	256
Finger detection	Hardware-assisted, low power
Status indicator	External LED via GPIO (sink current)
Total process time (s) (MINEX extraction)	< 2
Power supply (V)	3.3
Scan current consumption (mA)	90 (typical)
Suspend current consumption (µA)	250 (typical)
Logical Interface	USB 2.0 full speed
Physical interface	12 pin FFC connector with 0.5 mm pitch
MINEX template extractor	Embedded MINEX III certified: innovatrics+0015
Biometric error rates	< 2% FMR @ 0.01% FNMR
Ingress protection	IP67 (with suitable enclosure)
ESD protection	±8 kV contact discharge, ±15 kV air discharge per IEC 61000-4-2
Mechanical durability	> 2 million touches
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)
Module designed to enable	CE, FCC, RoHS, WEEE, STQC for UIDAI
Secure communications	AES 256-bit
Ordering options: NB-65100-U-101	UART/SPI module with bezel and Innovatrics MINEX III extractor license



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