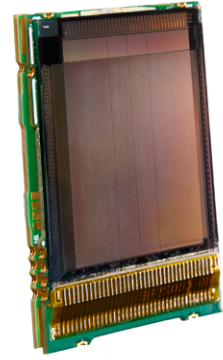




NEXT BIOMETRICS BASALT – L1 SLIM



The NEXT Basalt L1 Slim takes NEXT Biometrics' range of high security, high performance fingerprint sensors to the next level.

The thinnest sensor of its kind, this high-performance FAP 20 sized fingerprint module is ideally suited for integration into a broad range of applications and devices, particularly handheld devices.

Building on patented and proven NEXT Active Thermal® technology, the NEXT Basalt L1 Slim fingerprint module:

- Offers excellent image quality, leading performance and excellent user experience.
- It has a UIDAI L1-compliant authentication device controller board featuring a certified Renesas Controller. Each device is assigned a unique identifier, ensuring traceability, analytics, and fraud management.
- Offers high security, certified for L1 applications in the world's largest biometric system, Aadhaar.
- Brings leading anti-spoofing technologies, reliably rejecting latent fingerprint images and preventing fake finger attacks. NEXT Biometrics offers SDK support with one touch enrollment, 360-degree rotational tolerance and exceptional biometric performance.
- NEXT Biometrics Basalt – L1 Slim comes in two connector variants:
FFC 3.6 mm12 pin connector
JST 5.5 mm 4 pin JST connector

DESIGNED FOR INTEGRATION INTO

- Point of Sales terminals
- Readers & Peripherals
- Terminals & Kiosks
- Healthcare Devices



FEATURES

- UIDAI L1 Compliant with certified Renesas controller
- MOSIP compliant
- FBI image quality standards with 500dpi and comply with PIV requirements specified by PIV-071006
- Secure Biometric Processing – Biometric data is signed within the device to ensure live capture authenticity
- Registered Device (RD) Support – Encrypted PID block formation before transmission
- Anti-Spoof & Fake Finger Detection
- Templates generated meet ISO/IEC19794-2:2011
- Biometric performance of <1% FRR @ 0.01% FAR

ADVANCED SECURITY FEATURES

- Hardware-based encryption: RSA-2048, AES GCM-250, SHA-256, TRNG
- Secure Boot & TrustZone Encryption for enhanced protection
- TEE & Secure Memory with key-wrapping capability
- SDK & API Integration – Supports biometric capture, preview, encryption, and signing

TECHNICAL SPECIFICATIONS

Product Name	NEXT Basalt – L1 Slim
Module Ordering Number	NB-65110-L1-JST, NB-65110-L1-FFC
Sensor Technology	NEXT Active Thermal® sensing (patented)
Specification	FBI PIV & Mobile ID FAP20
Module size (mm)	22 x 35 x 4 mm
Active sensing area (mm)	15.24 x 20.32
Image size	300 x 400 pixels
Image resolution	500 ppi
Image gray scale levels	256
Image Quality	PIV (PIV-071006)
Logical interface	USB / UART / SPI
Physical interface	4-pin JST connector or 12-pin FPC connector
Power supply	5 V or 3.3 V
Scan time	> 2 sec for full scan
Scan current	Typical 60 mA
Standby current consumption	200 µA
Scratch resistance	Diamond-like Carbon (DLC) Coating, 9H
ESD protection	±8 kV contact discharge, ±15 kV air discharge per IEC 61000-4-2
Dust/Water resistance	Enables IP67 protection according to IEC 60529
Operating conditions	-20°C to +60°C at 85% RH (non-condensing)
Storage conditions	-30°C to +70°C at 85% RH (non-condensing)



ACTIVE SENSING AREA (mm)

15.24 x 20.32

NEXT Biometrics capture your whole fingerprint