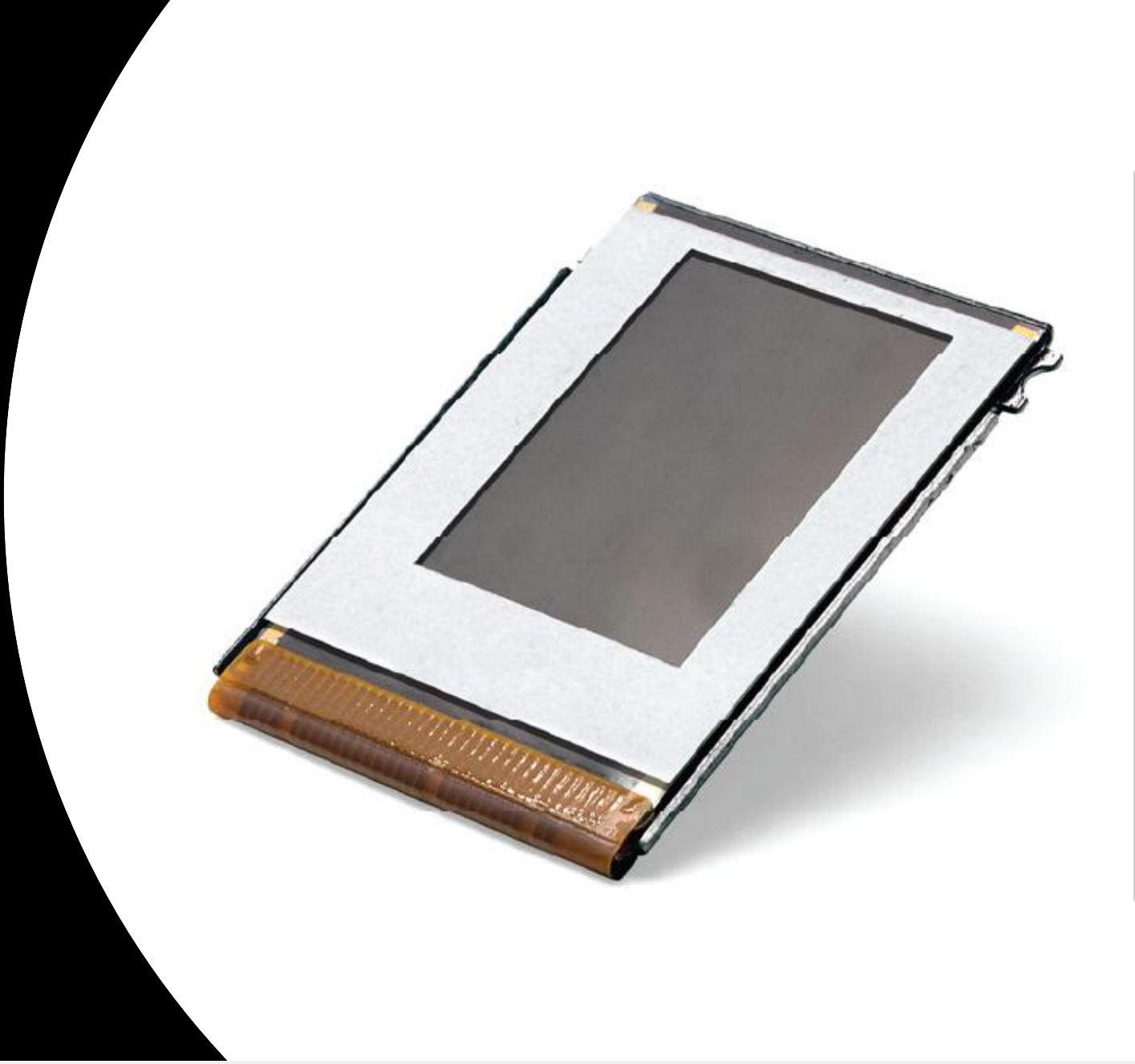




# NEXT BIOMETRICS

## NB-2033-S2-V-E



The NEXT Biometrics NB-2033-S2-V-E has been specifically designed for integration into applications such as time and attendance terminals, outdoor access control readers, door locks and mobile devices requiring enhanced operating and storage temperature conditions. Due to its thin form factor, the module offers seamless hardware integration and is ideally suited for a broad range of applications.

Equipped with a Very High Bond (VHB) double-sided tape on its top surface, The NEXT Biometrics NB-2033-S2-V-E provides the necessary water-tight seal to enable IP rating in end products. The module is connected to the host system via a SPI interface using a flex cable.

The NEXT Biometrics NB-2033-S2-V-E is based on the patented NEXT Active Thermal® principle. The large active sensor area offers stable imaging and intuitive user operation. The sensor technology is tolerant against dirt, grease and varying environmental conditions.

NEXT Biometrics fingerprint sensor technology is ideally suited for mass market applications in need of both security and convenience. The NEXT technology enables economic production of high-quality sensors for 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 SDK's for a variety of host platforms.

### TECHNICAL SPECIFICATIONS

Sensor technology	NEXT Active Thermal® sensing (patented)	Logical interface	SPI 4-18 Mbps
Total dimensions	20.9 × 27.39 × 2.97 mm3 (including connector)	Physical interface	12-pin FFC connector
Active sensing area	11.9 × 16.9 mm²	ESD protection	±8 kV contact discharge, ±15 kV air discharge per IEC 61000-4-2
Pixels	180 × 256	Mechanical durability	2 million touches @ 2.45 N
Resolution	385 ppi (pixel size 66 µm * 66 µm)	Ingress protection	Designed to enable IP rating in end products
Gray scale levels	256	Scratch resistance	Durable lifetime coating, hardness ≥ 9H
Image scan time	0.56 s	Operating conditions	-30 °C to +60 °C at 95% RH (non-condensing)
Power supply	3.3 V	Storage conditions	-30 °C to +70 °C at 95% RH (non-condensing)
Scan mode current draw	83 mA (typical)	Ordering Part Number	NB-2033-S2-V-E
Standby mode current draw	200 µA (maximum)		

### APPLICATION EXAMPLES

- Time and attendance terminals
- Access control readers
- Door locks
- Mobile devices
- Bike locks

