This revolutionary 2D Swipe Sensor™ provides higher reliability and superior imaging performance

- Our fingerprint sensors have the active electronics decoupled from the sensing elements
- A built-in companion sensor ensures accurate images are captured
- Robust and flexible Chip-on-Film design provides for custom packaging
- Integration simplification by conforming to current standards; USB, Windows, BioAPI and 500dpi

Validator
VFS101

Reliable 2D Swipe Sensor™ Fingerprint Imaging on Flexible Tape

Robust and Flexible

The Validator VFS101 fingerprint sensor by Validity uses a unique method of acquiring a fingerprint image that does not require the user’s finger to touch silicon or a lens. Giving it distinct advantages over direct contact methods, without increasing cost.

- Sensor elements are mechanically decoupled from the electronics
- The silicon that drives the sensor is unexposed and never touched during a scan
- Percussion and ESD events (Tap and Zap) do not affect this sensor
- Flexible packaging allows easier product customization
- Ultra-thin plastic sensor allows unique product placement
- Proven, world-class manufacturing process

Integrated Companion Sensor

Unique feature giving real-time feedback to the user, training the user and delivering higher quality images:

- Rate, Position, Speed and Finger Contact metrics are measured
- Quality controls the image scanning, giving less false rejects

No Latent Fingerprint Images

The swiping action required to acquire an image on the Validator 2D Swipe Sensor™ leaves no fingerprint image behind.

Integration Ease

- USB Interface on board
- 500dpi image acquisition
- BioAPI compliant
- Software modules for match, enrol and security applications

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Physical

*Kapton Flex Circuit*
- Length: 42mm
- Width: 27.6mm

*Total Sensor Area (Swipe and Companion)*
- Length: 29mm
- Width: 12mm
- Thickness (min - max): 0.1 - 1.6mm
- Conformability: 180° bend
- Radius Bend (max): tbd
- Abrasion Resistance: tbd

Electrical

- Operating Voltage: 3.3 ± 0.3V
- Max Current (imaging): tbd
- Idle Current: tbd
- Operating Temp: 0°C - 70°C
- Fosc: 12MHz

Operational

- Scanning Channels: 288
- Imaging Width: 12mm
- Resolution: 500dpi

Software Specifications

Device Driver
- Operating System: Windows 9x, 2000, and XP
- Functions: Communications drivers, imaging reconstruction, training data feedback

Fingerprint Matching
- Operating System: BioAPI compliant Windows, Unix
- Matching Type: Minutiae based
- False Accept Rate: Tunable
- False Reject Rate: Tunable
- Finger Image Stretch: ± 20%
- Finger Image Skew: 20°

User Interface
- Operating System: Windows
- Functions: Pre-boot, log-on, file, folder and disk encryption

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All information in this document is preliminary and subject to change, please contact Validity Inc for the latest information