

Validator VFS101

Reliable *2D Swipe Sensor*[™]
Fingerprint Imaging on Flexible
Tape

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

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

No Latent Fingerprint Images

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



Validator Integrated into USB Peripheral

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

Integration Ease

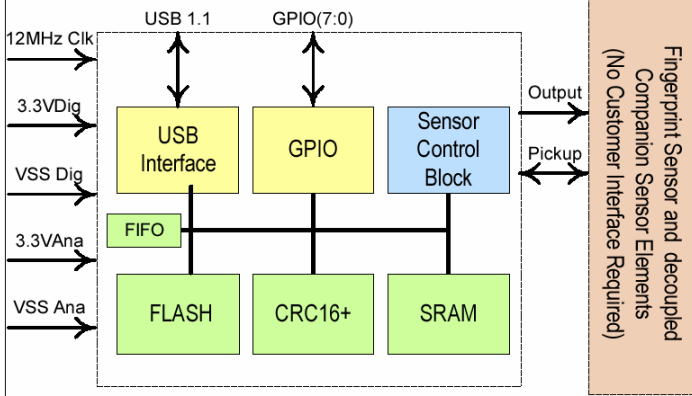
- Ⓢ USB Interface on board
- Ⓢ 500dpi image acquisition
- Ⓢ BioAPI compliant
- Ⓢ Software modules for match, enrol and security applications

Validity, Inc

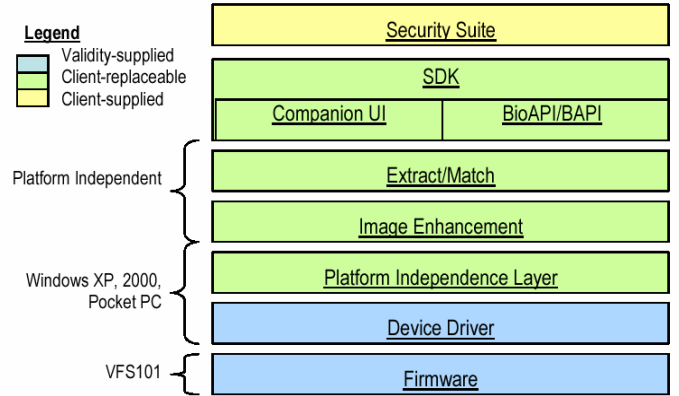
1300 Massachusetts Ave
Suite 200
Boxborough, MA 01719

Phone: 978 635-3400
Fax: 978 635-3492
www.validityinc.com

Hardware Block Diagram



Software Architecture



Hardware Specifications

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

USA/Canada

Ph: +1 (602) 284-0335

Fx: +1 (480) 699-8221

mdelvechio@validityinc.com

Europe/Asia/Pacific

Ph: +61 417 665 617

Fx: +61 2 6249 6909

bminifie@validityinc.com

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