

# VBSS – SENSOR PERFORMANCE BIOMETRICS SOFTWARE AND MATERIAL PACKAGE

Officially approved for VBSS Sensor Performance

The new introduced approval process for biometrics and especially for fingerprintsensor performance on card products. Since fingerprint sensors are getting more and more implemented into card formfactor products below is listed the officially approved Software and Hardware **cetecom advanced** can provide to start VBSS Sensor Performance.

VBSS Sensor Performance Package	Tool	Tool Description
Software	VBSS – Sensor Performance tool (current version)	Calculations of Sensor characteristics (native resolution, Sensor Effective Resolution, Grayscale Repartition, Timing Performance, Matching Performance, Presentation Attack Resistance) Including 3 month maintenance for minor updates
Hardware (part 1/2)	Database Fingerprint Set	One full set of with more than 280 artificial Fingerprints generated out of the database for testing of VBSS Sensor Performance.
Hardware (part 2/2)	PAD Kit	Includes material to produce PAD fingerprints according Level A, B and C and the corresponding Form Kit

## VBSS - SENSOR PERFORMANCE SOFTWARE

The Software includes different parts of the VBSS Sensor performance testing and characterisation. Calculations of Sensor characteristics

- native resolution
- Sensor Effective Resolution
- Grayscale Repartition
- Timing Performance - EMVCo Reference equipment is needed to perform this measurement
- Matching Performance
- Presentation Attack Resistance
- Result summary generation feature
- Software package includes a special 3 month maintenance for bugfixes and updates of the same version

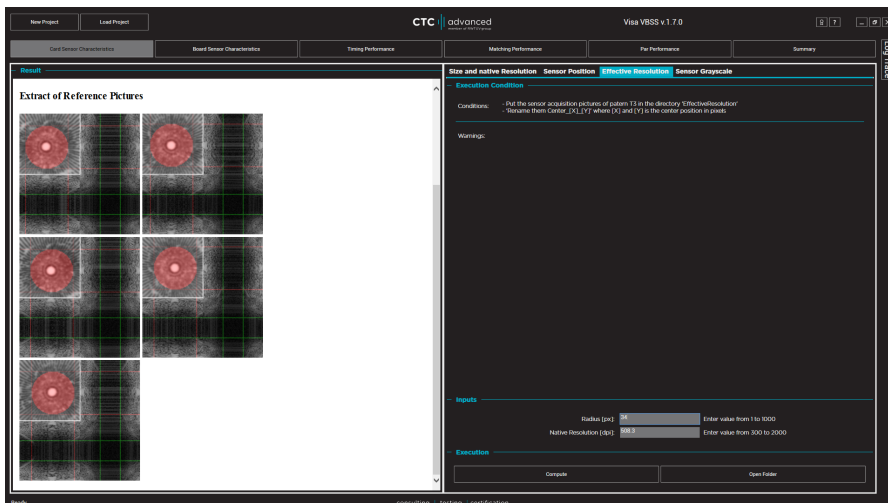
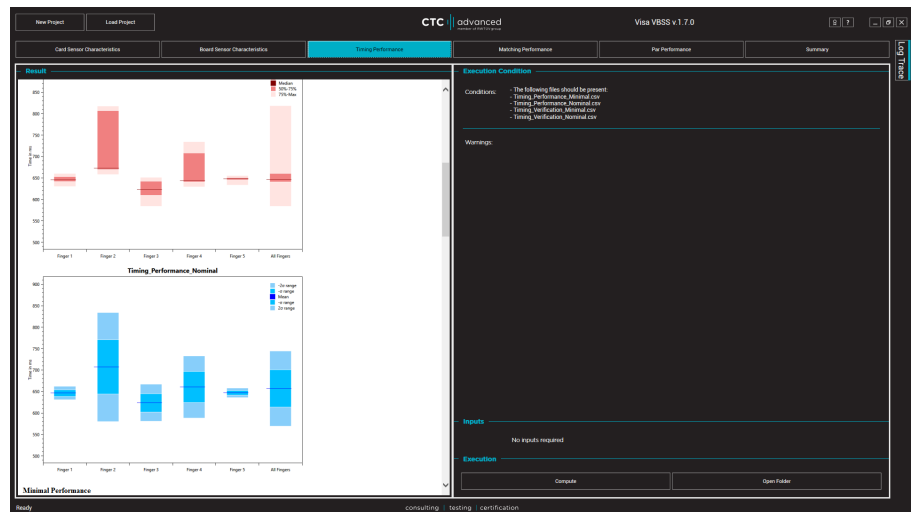
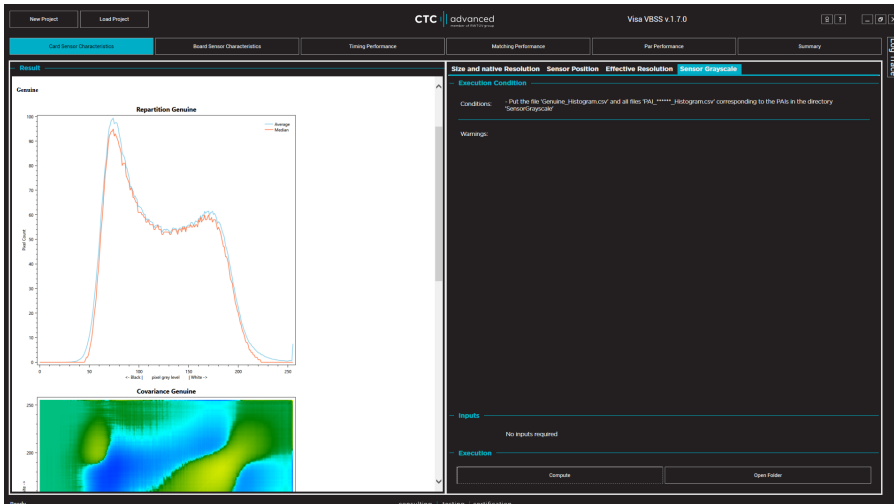
Hardware requirements: The tests need to be performed on a test PC. This PC must be isolated from the rest of the world; in particular any access to internet, Bluetooth and similar must be disabled on BIOS level by laboratory intern trusted authority. Data exchange should only be possible by USB (if possible secured). The test PC must be located in a restricted area.

- Following minimum requirements on hardware:
- 64 bits PC
- Windows 10
- RAM 4 – 8 GB or better
- 256 GB SSD or better
- 4 Cores 2.4 GHz or better

### Software requirements:

- The installation of a Virtual Machine (e.g.Oracle VM) is strongly advised.
- The use of crypto container (e.g. Veracrypt) is strongly advised.
- The use of a secure erasing program is strongly advised.
- The Sensor Performance Software is compiled to work on Windows 10.
- Windows 10 or newer
- The laboratory must be able to install the software from the customer.





## DATABASE FINGERPRINT SET

One full set of with more than 280 artificial Fingerprints generated out of the database for characterisations testing of VBSS Sensor Performance.

These set is needed to perform measurements of fingerprint card products.



## PAD KIT

PAD kit includes the precise mixture of materials to generate own PAD fake fingers according sensor performance guidelines and the Form kit to generate the customized molds.

Includes the following raw materials:

PAD Level A	CTC-M-P001-02	3 cups
PAD Level A	CTC-M-P003-02	3 cups
PAD Level A	CTC-M-P201-03	3x 40 ml
PAD Level A	CTC-M-P301-02	3x 40 ml
PAD Level A & C	CTC-M-P401-03	6x 40 ml
PAD Level A & C	CTC-M-P403-02	6x 40 ml
PAD Level B	CTC-M-P402-03	3x 40 ml
PAD Level B	CTC-M-P202-03	3x 40 ml
PAD Level B	CTC-M-P501-02	3x 40 ml
PAD Level B	CTC-M-P101-02	3x 40 ml
PAD Level C	CTC-M-P302-02	3x 40 ml
PAD Level C	CTC-M-P404-02	3x 40 ml

Form Kit	CTC-M-F201-02	250 ml
Form Kit	CTC-M-F103-01	1 Double Pack
Form Kit	CTC-M-F001-01	4 Packs

