

Release Note

MorphoTablet™ 2 - Firmware TAF-P

For online updates (latest firmware): please connect to our web site

<http://www.biometric-terminals.com>

For support, please contact our hotline: hotline.biometrics@idemia.com

1 Applicable models

TAF-P firmware version supports all “MorphoTablet 2” and “MorphoTablet 2 iris”.

TAF-P firmware version includes specific features that are not included in TMx (x being a identifier, for example: TMF) firmware versions.

Below the list of main features included in TAF-P firmware version, but not included in TMx firmware version :

- Hardware Secure Boot
- Android security patches
- Encryption enhancement (Anti-tamper protection)
- Dedicated area for customization by integrators /programs
- Open Mobile API (SAM, Contact / Contactless card reader)
- HID iClass Seos

Warning : For security reason, it’s not possible to move back from secure TAx-P version to unsecure TMx version.

2 Current revision

2.1 Firmware version TAF-P

2.1.1 Evolutions

New features

None

New hardware support

Drivers management for new LCD

Certification

None

2.1.2 Bugs fixed

Correction of MorphoTablet reboot after connecting to VPN

2.1.3 Identification of MorphoTablet 2 hardware revision

The product hardware revision (Rev.) is on the product label that is at the back of the MorphoTablet 2

See below an example of label for a product with hardware revision XX :



2.1.4 Compatibility with hardware

TAF-P firmware is compatible with all “MorphoTablet 2” and “MorphoTablet 2 iris” tablets.

2.1.5 What firmware flashing method to use

If previous firmware is TAx-P (x can be a number or a letter), please refer to §2.1.6 Firmware upgrade method.

Otherwise, a migration to secured TAx-P firmware is first mandatory. For this, please refer to §2.1.7 Firmware migration method

2.1.6 Firmware upgrade method

Notes:

- This section only concerns tablets that are secured ie with a TAx-P version.
- Firmware downgrade isn't possible because of security and new hardware support.
- Firmware upgrade will preserve user data, settings and installed applications.
- Using internal storage for updating will require to have no SD card inserted in tablet.

Requirements:

- A micro SD card with at least 1 GB free formatted in FAT32 or at least 1 GB free internal storage.
- MorphoTablet 2 with a battery level above 50%

Steps:

- copy update archive (Firmware_update-TAx-P.zip or MtabletV2-vTAx-P_update_abc.zip, with x and abc as numerical values) on root folder of micro SD card and insert it into tablet, or just copy file in tablet internal storage root folder.
- Go to Settings menu → About tablet → System updates (storage)
- Select the update archive and validate the update
- Wait for the MorphoTablet 2 to reboot.

Troubleshooting :

- If zip file isn't seen by update manager, please check that filename is *update*.zip, where "*" can be any string.

If any error, please check that previous firmware version was a TAx-P, that current version is lower than new one, and please check sha256 checksum :

```
sha256sum (Firmware_update-TAF-P.zip) =  
2fc3356206df21dff1344b2f6790a8c01a61b26c59cb4390bc616f211ca6714f
```

2.1.7 Firmware migration method

Notes:

- This section only concerns tablets that are non secured ie with a TMx version.
- If previous firmware version isn't TAx-P (x can be a letter or a number), then it's necessary to migrate tablet to secure firmware TAx-P.
- It's impossible to switch back to unsecure firmwares, as well to downgrade firmwares.
- Migration will delete all user data, it's equivalent to factory reset.

Requirements:

- MorphoTablet 2 with a battery level above 50%
- Windows PC with fastboot.exe (provided with android studio) or Linux PC with "fastboot" or "android-tools-fastboot" package
- MorphoTablet migration firmware TAx-P.tar.gz (x can be a letter or a number)

Steps:

- Extract TAx-P.tar.gz (x can be a letter or a number) and go to extracted files folder.
- If using windows, copy fastboot.exe to extracted files folder
- Poweroff tablet
- Hold vol+ and vol- buttons and plug PC USB cable to tablet
- Tablet will now display Idemia logo and will not start Android.
- If using windows, wait for driver installation and run flash.bat
- If using Linux, run chmod +x then run ./flash.sh
- After flashing, tablet will reboot

Troubleshooting :

- Nothing is displayed on screen when plugging PC → charge device
- Android is starting instead having fixed Idemia logo → Check that current firmware isn't a secure firmware (TAx-P), and try to power down tablet from Android instead of hardware power off.

- Fastboot is stucked on “< waiting for device >” message → If using windows, check if drivers are correctly installed, if using Linux, try as root or add adequate udev rule.

2.1.8 Known issues

Camera

Picture stored in raw format can not be visualized using “Gallery” application. A delay of nearly 2 seconds can be necessary before getting a clear picture when using zoom.

Printer

Printing a document using Canon IP110 could provide a different content between numeric and real picture.

Setting

The setting menu name “Backup & Reset” is misleading as no backup tool is available.

Mobile Device Management

Airwatch client will not be useable.

Language

Gujarati, Oriya and Punjabi languages not supported

Wifi

Issue to use Wifi with WEP encryption. Note: WEP should not be used, use WPA2 instead for security

Bluetooth

May be subjected to Blueborne attack. Bluetooth should not be activated if not needed.

3 Previous revisions

3.1 Firmware version TAE-P

3.1.1 Evolutions

New features

None

New hardware support

New ACS module (ACS39) support due to previous ACS reader end of life

Certification

Adding elabels following Costa Rica & South Africa certification respectively on “MorphoTablet 2” and “MorphoTablet 2 iris”

3.1.2 Bugs fixed

None

3.2 Firmware version TAD-P

3.2.1 Evolutions

New features

None

New hardware support

New e-compass module support due to previous e-compass end of life

Certification

Adding Philipine and Ifetel certification information

3.2.2 Bugs fixed

Corrected camera failure during stresstest

Corrected USB host failure during stresstest

3.3 Firmware version TAB-P

3.3.1 Evolutions

New features

Iris features (Iris tablets hardware only)

Minor optimizations, Idemia brand change

New hardware support

New back camera module due to EOL, same camera sensor

IRIS tablets management

Certification

None

3.3.2 Bugs fixed

None

3.4 Firmware version TA8-P

3.4.1 Evolutions

New features

CBM power off improvements. SDK MSO minimum version 6.17.3 is required.

Support of EXT4 for SD cards only (i.e. not mass storage USB stick), including FW upgrade.

Append '000' as emergency number for Australia and New Zealand.

New hardware support

None

Certification

Add e-label SUTEL

Add e-label Australia and New Zealand.

3.4.2 Bugs fixed

Improved startup when a mass storage stick is connected on OTG USB.

Chinese menu.

Camera adjustment

Tricolor led

3.5 Firmware version TA7-P

3.5.1 Evolutions

New hardware support

Provide support for new hardware rev 16.

New API for anti-tamper

Provide new API to allow factory tests on tamper component.

Certification

Add e-label CNC.

3.5.2 Bugs fixed

CBM

Information displayed when CBM is powered off in settings menu is now intelligible.

Tablet parameters

Tablet name can now be updated by API.

3.6 Firmware version TA6-P

3.6.1 Evolutions

New hardware support

Provide support for new hardware rev 13 and above.

Ethernet configuration

Add possibility to configure Ethernet link without USB adapter connected.

Language

Add Spanish LATAM language.

Certification

Add e-label IFETEL.

Secured firmware

Implementation of Google security patches up to December 2016.

3.6.2 Bugs fixed

Encryption, anti-tamper, MorphoTop, OpenMobile API, SAM card reader, Bluetooth and Customer Support Package issues resolved.

3.7 Firmware version TA4-P

3.7.1 Evolutions

Secured firmware.

Activation of hardware secure boot

Implementation of Google security patches up to August

Addition of anti-tamper component for securing device encryption

External storage access.

Enhance external masstorage read and write permissions

Customization package.

Support of customization package

OpenMobile API.

Sam card and smartcard reader access by enhanced openmobile API

3.7.2 Bugs fixed

Sam card and smartcard reader android API issue resolved

3.8 Firmware version TM2

3.8.1 Evolutions

MicroSD card access

Add direct access from application to MicroSD card content.

USB Ethernet adaptor

Add capacity to set static IP on Ethernet adaptor connected on USB port.

3.8.2 Bugs fixed

Multi-color LED

Solve issues on multi-color LED API.

USB Ethernet adaptor

Solve configuration issues.

SAM card reader

Solve hard-reset API issue.

Camera

Solve camera start issue.

Solve Flash LED issues

3.9 Firmware version T69

3.9.1 Evolutions

None. First version of firmware.

3.9.2 Bugs fixed

None. First version of firmware.