SigmaKey
User Manual

v1.0

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SigmaKey Dongle Activation/Update Procedure

For correct installation and stable SigmaKey operation it is recommended to connect the dongle to the motherboard USB port directly avoiding USB HUB connection.

- Install SigmaKey updater
- Install SigmaKey drivers (available at your local PC in the Program Files\GsmServer\SigmaKey updater\drivers\ folder)
- Launch SigmaKey updater
- Select interface language
- Connect SigmaKey dongle to PC USB port and press Next
- The software should detect SigmaKey dongle and display its serial number
- Message "Processing SigmaKey dongle" informs that update is in progress
- Operation completed
- SigmaKey is updated

Read Codes

- Connect SigmaKey Dongle to PC USB port and launch SigmaKey Software
- Go to "Unlock" tab
- Connect* turned off phone to PC
- Select an appropriate COM port in SigmaKey Software (usually the highest number)
- Press "Read Unlock Codes" button and follow the instructions in the log window**
- Press and hold "Power ON" button on the phone
- As soon as SigmaKey Software shows an appropriate message in the log window, release "Power ON" button
- Message "Reading Unlock Codes… OK" indicates that procedure was completed successfully
- Disconnect the handset
- Turn the phone on with the non-original SIM card inserted
- Phone's menu will pop-up with unlock code request
- Enter the code that was read by SigmaKey Software

Direct Unlock

- Connect SigmaKey Dongle to PC USB port and launch SigmaKey Software
- Go to "Unlock" tab
- Connect* turned off phone to PC
- Select an appropriate COM port in SigmaKey Software (usually the highest number)
- Press "Unlock" button and follow the instructions in the log window
- Press and hold "Power ON" button on the phone
- As soon as SigmaKey shows an appropriate message in the log window, release "Power ON" button
- The message "Unlock done… OK" indicates that procedure was completed successfully
- Disconnect the handset
- Phone is unlocked *

EX-Series Unlock

EX108, EX109, EX112, EX115, EX118, EX119, EX122, EX126, EX128, EX211, EX212, EX223, EX245, EX292, WX345

Please perform Backup Flex and Calibration Backup before Unlock procedure, except for WX345.

Please remember that backup must be saved before Unlock operation.

- Connect SigmaKey Dongle to PC USB port and launch SigmaKey Software
- Go to "Unlock" tab
- Connect* turned off phone to PC
- Select an appropriate COM port in SigmaKey Software (usually the highest number)
- Press "Unlock" button and follow the instructions in the log window
- Press and hold "Power ON" button on the phone
- As soon as SigmaKey shows an appropriate message in the log window, release "Power ON" button
- The message "Unlock done… OK" indicates that procedure was completed successfully
- Disconnect the handset
- Phone is unlocked**

** Please perform Restore Flex and Calibration Backup after unlock procedure, except for WX345

Read User Code

- Connect SigmaKey Dongle to PC USB port and launch SigmaKey Software
- Go to "Unlock" tab
- Reboot your phone and power it OFF completely (only if "Format FFS" was just performed)
- Connect* turned off phone to PC
- Select an appropriate COM port in SigmaKey Software (usually the highest number)
- Press "Read User Code" button and follow the instructions in the log window**
- Press and hold "Power ON" button on the phone
- As soon as SigmaKey Software shows an appropriate message in the log window, release "Power ON" button
- Message "Reading Codes… OK" indicates that procedure was completed successfully
- Active user code is marked in black, inactive – in grey
- Disconnect the handset
- Turn the phone on
- Phone's menu will pop-up with user code request
- Enter the code that was read by SigmaKey Software

Flash

Please perform Calibration Backup before Flash procedure

- Connect SigmaKey Dongle to PC USB port and launch SigmaKey Software
- Go to "Flash" tab
- Connect* turned off phone to PC
- Select an appropriate COM port in SigmaKey Software (usually the highest number)
- Press "Write Flash" button and follow the instructions in the log window
- Press and hold "Power ON" button on the phone
- As soon as SigmaKey shows an appropriate message in the log window, release "Power ON" button
- SigmaKey will read phone's information and pop-up window with the flash file request
- Choose appropriate flash file and press open
- Message "Flash Completed" indicates that procedure was completed successfully and the handset can be disconnected

Please perform Calibration Restore after Flash procedure

Backup

- Connect SigmaKey Dongle to PC USB port and launch SigmaKey Software
- Go to "Flash" tab
- Connect* turned off phone to PC
- Select an appropriate COM port in SigmaKey Software (usually is the highest number)
- Press "Backup Phone Flash" and follow the instructions in the log window
- Press and hold "Power ON" button on the phone
- As soon as SigmaKey Software shows an appropriate message in the log window, release "Power ON" button
- The message "Backup Saved" indicates that procedure was completed successfully
- Disconnect the handset

Calibration

Backup Calibration

- Connect SigmaKey Dongle to PC USB port and launch SigmaKey Software
- Go to "Service" tab
- Connect* turned off phone to PC
- Select an appropriate COM port in SigmaKey Software (usually the highest number)
- Press "Backup Calibration" button
- Press and hold "Power ON" button on the phone
- As soon as SigmaKey Software shows an appropriate message in the log window, release "Power ON" button
- Choose location to save calibration file (in *.wxcf format)
- Message "Reading Flash is Done" indicates that Calibration backup procedure was completed successfully

Restore Calibration

- Connect SigmaKey Dongle to PC USB port and launch SigmaKey Software
- Go to "Service" tab
- Reboot your phone and power it OFF completely (only if "Format FFS" was just performed)
- Connect* turned off phone to PC
- Select an appropriate COM port in SigmaKey Software (usually the highest number)
- Press "Restore Calibration" button
- Press and hold "Power ON" button on the phone
- As soon as SigmaKey Software shows an appropriate message in the log window, release "Power ON" button
- Select required calibration file (in *.wxcf format)
- Message "Writing Flash is Done" indicates that Calibration restore procedure was completed successfully

Flex

Backup Flex for EX-Series

- Connect SigmaKey Dongle to PC USB port and launch SigmaKey Software
- Go to "Service" tab
- Connect your phone to PC via original micro-USB cable
- Power On the phone & select COM-Port mode from handset's menu
- Install drivers (drivers are available at your local PC in the Program Files\GsmServer\Sigma\drivers\MTK USB Driver folder)
- After successful installation, press "Refresh Port List" button in SigmaKey Software
- Select an appropriate COM port in SigmaKey Software (usually is the highest number)
- Press "Backup FLEX" button and choose location to save flex file
- Message "Done. Restarting phone" indicates that backup procedure was completed successfully, handset restarts and can be disconnected

Restore Flex for EX-Series

- Connect SigmaKey Dongle to PC USB port and launch SigmaKey Software
- Go to "Service" tab
- Connect your phone to PC via original micro-USB cable
- Power On the phone & select "Service" mode from handset's menu
- Install drivers (drivers are available at your local PC in the Program Files\GsmServer\Sigma\drivers\MTK USB Driver folder)
- After successful installation, press "Refresh Port List" button in SigmaKey Software
- Select an appropriate COM port in SigmaKey Software (usually is the highest number)
- Press "Restore FLEX" button and select required flex file (in *.wxfx-format)
- Message "Done. Restarting phone" indicates that flashing procedure was completed successfully, handset restarts and can be disconnected

Repair IMEI

- Connect SigmaKey Dongle to PC USB port and launch SigmaKey Software
- Go to "IMEI" tab
- Connect* turned off phone to PC
- Select an appropriate COM port in SigmaKey Software (usually the highest number)
- Enter IMEI number in the "Phone IMEI" field **
- Press "Restore IMEI" and follow the instructions in the log window
- Press and hold "Power ON" button on the phone
- As soon as SigmaKey Software shows an appropriate message in the log window, release "Power ON" button
- The message "Writing IMEI… OK" indicates that procedure was completed successfully
- Disconnect the handset

Format FFS

Please perform Calibration Backup before "Format FFS" procedure

- Connect SigmaKey Dongle to PC USB port and launch SigmaKey Software
- Go to "Service" tab
- Connect* turned off phone to PC
- Select an appropriate COM port in SigmaKey Software (usually the highest number)
- Press "Format FFS" button and follow the instructions in the log window
- Press and hold "Power ON" button on the phone
- As soon as SigmaKey Software shows an appropriate message in the log window, release "Power ON" button
- Message "Format FFS... OK" indicates that procedure was completed successfully
- Disconnect the handset

Please perform Calibration Restore after "Format FFS" procedure.

Boot-Loader v2.0

In order to download files from Boot-Loader v2.0 portal, you have to perform these few easy steps after SigmaKey registration:

- Download and install Boot-Loader Download Manager.
- Connect SigmaKey Dongle to PC.
- Launch Boot-Loader Download Manager. When prompted, enter your Boot-Loader v2.0 login and password.
- If download manager is already open, select Settings: Devices in the top menu.
- Download manager will scan connected devices and pop-up a dialog box.
- Follow Register link to register your device.
- If SigmaKey Dongle is already registered, click Next button.
- Go to My Account: Device Accounts section to check your device's status and download allowance.
- If you're allowed, you can follow to Sigma category and start downloading files.

Settings Description

Phone MCU boost mode

Allows you to accelerate execution of operations in the phone.

Force simple mode (slower)

Certain flash memory chips have issues with block programming method. In this case it's possible to work with slower and more reliable flashing method – "word" flashing method. Such method takes up to 3-4 times longer to flash, but allows to work with wider variety of microchips. We recommend using this method in case of problems with block method.

Smart write (faster)

With this option flashing process is accelerated by avoiding reprogramming if the data which is about to be programmed matches the existing data.

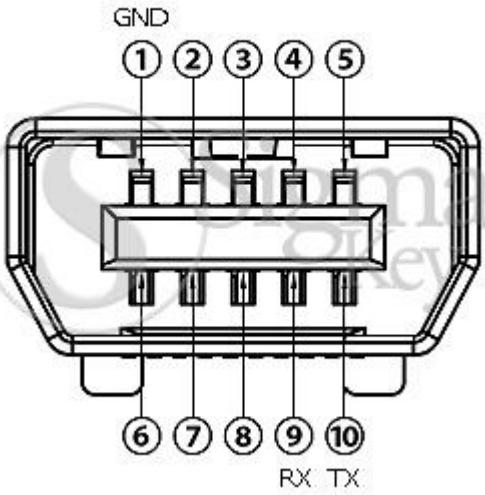
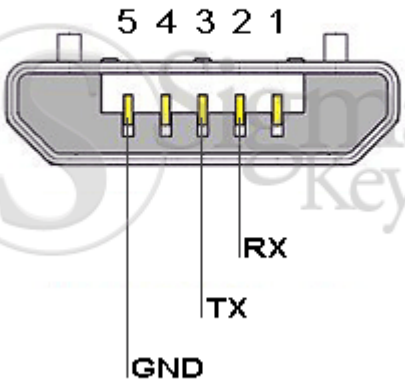
Check IMEI veracity

This option is ticked off by default. It allows you to check whether software IMEI was patched by third-party software.

Pinouts

* MTK models require to be connected to PC COM port via original COM data cable or using any COM port emulator.

Mini USB 10 pin connector



Micro USB connector