BARIX
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Release Note

SIP OPUS CODEC V1.3.7

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Firmware name:	SIP OPUS CODEC V1.3.7
FW Release Date:	10. Feb. 2022
Package Names:	update-core-image-barix-sip-opus-codec-v1.3.7.tar (to be installed on MA-400 device) update-core-image-barix-sip-opus-decoder-v1.3.7.tar (to be installed on M-400 device)
Yocto Layers Version Overview:	**Layer** / **Branch** / **Tag/Revision** bitbake / 1.34 / ca9b9ffc250eb3ece5af3d64ff5febef69d555b0 openembedded-core / pyro / 2db9d0854239bca9d5c4efde808a1931c4c0ca0e meta-openembedded / pyro / 5e82995148a2844c6f483ae5ddd1438d87ea9fb7 meta-sunxi / master / a84d6a40c1c786c64824e8e13b289fccc0b32b92 meta-qiba / add_i2s_support_with_kernel_5_0 / aaf33ce4a3bd5f01233ec2aa0daef76e7e71a03e meta-barix / develop / 701b47f6257047144820365241d0578972776636 meta-sipopus / master / refs/tags/sip-opus-v1.3.7 ec9549224131d94d845ce1d80615639b90fcccf6

1 Hardware Compatibility

This firmware is fully supported on the following Barix devices:

- MA400 (full duplex mono SIP CODEC)
- M400 (SIP OPUS Decoder/Encoder)

The FW has been tested and proven to work with the following USB Audio devices:

Device Name	*Description*	*Manufacturer*	*Audio In/Out*	*USB ID*
USB PnP Sound Device	Low end USB Gooseneck microphone	C-Media Electronics	Input only	0d8c:013c
USB PnP Sound Device	Low end miniature USB Mic plug	C-Media Electronics	Input only	0d8c:013c
Samson Q2U Microphone	High quality microphone with headphone output	Samson Technologies	In/Out	17a0:0304
Audio-Technica ATR USB microphone	High quality microphone with headphone output	Audio-Technica	In/Out	0909:001b

Other USB mics will most probably work, but is not guaranteed.

2 Fixed Bugs

The following bugs have been implemented compared to the previously released V1.3.6:

- SSIPOPUS-52: HDX Trigger Level and HDX Trigger Timeout do not change
- SSIPOPUS-53: Syslog is not sending messages to the configured remote server
- SSIPOPUS-54: Wrong value for next registration on the SIP home page when the client is not registered

3 New Features and Improvements

The following new features have been implemented compared to the previously released V1.3.6:

- SSIPOPUS-21: Update PJSIP stack to v2.11

4 Useful Tips and Known Issues

1. ***IMPORTANT!*** If the FW is installed on top of previous version prior to 1.3.3, a reset to factory defaults is required in order to add the proper USB audio configuration.
2. The FW exports to the webUI only the input or output controls, that have volume control (ex. Speaker with listed volume values in dB or %, or Microphone with listed preamp values). Switch control elements (ex. Speaker mute, or microphone boost on/off switches) are not exported.
3. Some USB audio controls might be wrongly detected, and the device might misbehave. In addition, you may have an information dialog box popping up when loading the Advanced Settings page. If this is the case, please remove the USB sound

card, reboot the device, and try another USB sound card/mic.

4. Reload the Advanced Settings configuration page after plugging the USB sound card, and check if it is listed in the Audio Input/Output selection drop-down list. If it is the first time you use this USB device, please do save the settings by clicking on the “Apply” button to save the configuration settings of the detected USB controls.
5. If you unplug the device, the settings remain stored, and will be reused the next time you plug this device again.
6. The stored setting will be lost after factory defaults, or overwritten if you plug another USB audio device.
7. Some USB devices with broken driver may make the device hang. In this case remove the USB card, and reboot the device.
8. The device may misbehave if you plug USB sound cards with the same name.
9. When FW 1.3.7 is installed on top of FW version prior to v1.3.6, the web access to the device will stay HTTP unless otherwise configured after the update. When the HTTPS access is enabled, the device will generate a self-signed certificate. Please note that the device will not automatically redirect the HTTP request to HTTPS, so you will have to manually enter the HTTPS address in your browser.
10. Please be warned that some browsers do not accept, or need to be explicitly configured to accept self-signed certificates.

5 Release generating details[1]

5.1 GIT release tag

Use the following tag to get the sip-opus-codec.xml manifest file:

```
sip-opus-codec-v1.3.7
```

Example:

```
repo init -u https://user_name@path.to/yocto.xml.files.git -b
refs/tags/sip-opus-codec-v1.3.7 -m sip-opus-codec.xml

repo sync
```

Replace the user name and the path to the GIT repository with the correct ones.

5.2 Compile commands:

Run the following command from the oe-core folder:

```
bitbake -f core-image-barix-sip-opus-codec

bitbake -f core-image-barix-sip-opus-decoder
```

This will generate the corresponding rootfs images. After that run the commands to create the webupdate files and the production images according to the Barix release procedure. Take care to add the following script files to the generated update images:

`shadow-codec.tgz` for the SIP OPUS codec FW image

`shadow-decoder.tgz` for the SIP OPUS decoder FW image

`http_postinit_script.tgz` for both

1 This information is intended for BARIX developers only

NOTE: Please make sure that you generate production images without the `http_postinit_script.tgz`. This script is useful only when the FW update is applied to already deployed devices. It is not needed for devices being manufactured because they will have all the relevant default HTTPS settings deployed during the manufacturing process.

6 Legal Information

For information about our devices and the latest version of this manual please visit www.barix.com

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