

Firmware Update Application Guide

SONiX

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v1.0.6.1



Use Files Introduction

- **Fw_update :** BurnAP Tool
- **Device_Config.ini :** Tool settings
- **SerialNumber.txt :** Mask parameter
- **XXXXXX.bin :** FW binary file

Use Terminal Window

Method

- 1. Enable Chrome OS Developer Mode**
- 2. (No need to login to the user account)**
- 3. Press Ctrl + ALT + F2 (->) into Chrome terminal window.**
- 4. Login localhost host account**
 1. localhost login: root

Use USB Hard Drive

- Put Use Files(4 files) into USB hard drive
- Plug in your USB hard drive to your USB port
- Find out what name your block device: `fdisk -l`

Device	Boot	Start	End	Sectors	Size	Id	Type
/dev/sdc1	*	8192	15523839	15515648	7.4G	b W95	FAT32

- Create mount point: `mkdir /media/usb1`
- Mount USB Drive: `mount /dev/sdc1 /media/usb1`
(`**sd**c1' is system distributed path by platform)
- Accessing USB Drive: `cd /media/usb1`

Device_Config.ini

■ OpenSpecDev

- 1 : Restricted burning by PID / VID (default)
- 0 : Unrestricted

■ Rework

- 1 : Depend on SerialNumberAndReworkAddress (default)
- 0 : Disable

■ WriteSeiralNumber

- 1 : Enable Write SN which is from SerailNumber.txt
- 0 : Disable (default)

■ SerialNumberAndReworkAddress

- 1 : write to iSerialNumber (default)
- 0 : write to iManufacturer

Device_Config.ini

- **SensorInitialTime(ms): 2500**
 - fine tune sensor initial time (Adjusted by engineering)
- **EraseDelayTime(ms): 1000**
 - fine erase delay time (Adjusted by engineering)
- **DeviceFileName: XXXXXX.bin**
 - F/W Binary file name. (User fill in)
- **ReserveCalibrationData: 0**
 - 1 : Enable Write Calibration from Calibration.ini for special sensor. (HM1091)
 - 0 : Disable (default)
- **CalibrationSectorSize: 3000**
 - Read the specified calibration size.

FW Update Command

■ localhost /media/usb1 # ./fw_update Para1

- Para1 field
 - -1 is 64kB FW update
 - -2 is 128kB FW update

■ Example

- ./fw_update -2
 - Update 128KB Firmware and Keep the serial number information.
- ./fw_update -getver
 - Get Device Firmware version.
- ./fw_update -getbcd
 - Get Device BCD version.

FW Update Result

```
localhost /media/usb1/Chromebook_Linux_PCam_V1.0.6.0 # ./fw_update -2
```

```
Program : SONiX F/W Update Tool on Linux
Version : v1.0.6.0
Date : 2019-10-25 15:35:10
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```

```
Prepare : enumerate webcam ...
Prepare : select webcam #0 ...
[Progress] Cam_Select OK!
```

```
-----Device Info-----
VendorID:0x0c45
ProductID:0x6a09
bcdDevice:0x8262
-----End Of Device Info-----
```

```
Prepare : read .ini file - SN9C2750_OV9734_MIPI_All_T22.bin ...
[Progress] Setup FW file OK!
```

```
Source : 128K from FILE - SN9C2750_OV9734_MIPI_All_T22.bin
[Progress] Sensor Initial Time = 2000 (ms)
[Progress] Burn to FLASH
Start the burning process ...
Step 0 : INIT -----> Pass!
[Progress] Run Set_Serial_Number_Rework
[Progress] Erase Delay Time = 1000 (ms)
Step 1 : ERASE -----> Pass!
Step 2 : CHECK -----> Pass!
Step 3 : PROGRAM -----> Pass!
Step 4 : VERIFY -----> Pass!
Step 5 : END PROCESS -----> Pass!
[Progress] Burn to Flash Success!
Exit program!
```

```
localhost /media/usb1/Chromebook_Linux_PCam_V1.0.6.0 #
```

```
localhost /media/usb1/Chromebook_Linux_PCam_V1.0.6.0 # ./fw_update -getver
```

```
Program : SONiX F/W Update Tool on Linux
Version : v1.0.6.0
Date : 2019-10-25 15:36:31
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```

```
Prepare : enumerate webcam ...
Prepare : select webcam #0 ...
[Progress] Cam_Select OK!
-----Get FW Version-----
```

```
VendorID:0x0c45
ProductID:0x6a09
Current FW Version: SONiX_ISP_CNFHH52T22
-----
```

```
Exit program!
```

```
localhost /media/usb1/Chromebook_Linux_PCam_V1.0.6.0 #
```

```
localhost /media/usb1/Chromebook_Linux_PCam_V1.0.6.0 # ./fw_update -getbcd
```

```
Program : SONiX F/W Update Tool on Linux
Version : v1.0.6.0
Date : 2019-10-25 15:36:52
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```

```
Prepare : enumerate webcam ...
Prepare : select webcam #0 ...
[Progress] Cam_Select OK!
```

```
-----Get BCD-----
bcdDevice:0x8262
Manufacturer:0x2
SerialNumber:0x0
-----
```

```
Exit program!
```

```
localhost /media/usb1/Chromebook_Linux_PCam_V1.0.6.0 #
```