

WM_W60X_Firmware Upgrade Guide

V1.3

Beijing Lianshengde Microelectronics Co., Ltd. (winner micro)

Address: Floor 18, Yindu Building, No. 67, Fucheng Road, Haidian District, Beijing

Tel: +86-10-62161900

Company website: www.winnermicro.com



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1 Overview

After compiling and linking the SDK of W60X, three firmwares for burning will be generated:

1ÿWM_W600.FLS

2ÿWM_W600_GZ.img

3) WM_W600_SEC.img ------ After version G3.04.00, this firmware will no longer be provided.

For the description of these three firmwares, see the SDK DOC document "WM_W60X_Firmware Generation Instructions",

This article mainly introduces how to use the serial port tool secureCRT to upgrade the firmware of the W60X module.

The red boxes in the figure below show the three firmwares generated after compilation.

▶ 本地磁盘 (F:) ▶ wenlong ▶ workspace ▶ G3.00.00 ▶ Bin 44 搜索 Bin Q -工具(T) 帮助(H) 共享▼ 新建文件夹 . 名称 类型 修改日期 大小 secboot.img 14 KB 2018/10/22 16:48 光盘映像文件 🖉 version.txt 2018/10/11 18:35 TXT 文件 1 KB version_bk.txt 2018/10/11 18:35 TXT 文件 1 KB WM W600.bin 2018/10/18 9:36 KuaiZipMount.bin 351 KB WM_W600.bin.gz 2018/10/18 9:36 GZ 压缩文件 252 KB FLS 文件 WM_W600.FLS 2018/10/18 9:36 407 KB WM_W600.map 2018/10/18 9:36 Linker Address ... 620 KB WM_W600_GZ.img 2018/10/18 9:36 光盘映像文件 252 KB O WM_W600_SEC.img 2018/10/18 9:36 光盘映像文件 351 KB



2 Instructions for firmware upgrade under ROM

2.1 How to enter the ROM program for firmware upgrade

There are two ways to enter the ROM program for firmware upgrade

1) The W60X module does not have a secboot program that has passed the verification (the W60X module has no firmware, or the

way to destroy SECBOOT)

2) Pull down the BOOTMODE (PA0) pin of the W60X module, and then power on the W60X module.

2.2 Which firmware can be upgraded in ROM

The firmware that can be upgraded in ROM is only WM_W600.FLS

2.3 Steps to upgrade firmware in ROM

1) Power on the device, connect the hardware serial port tool, and connect the computer serial port with the device serial port.



Figure 2-1

2) Open secureCRT and select the serial port connected to the W60X module.

Note: RTS/CTS must not be checked when setting the serial port (as shown in Figure 2-2)



3) Pull down the bootmode pin, that is, ground PA0 of the chip. 4) Press the reset button to

reset the device. At this time, you can see that CCC is continuously printed out in the secureCRT dialog box.



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5) Drag and drop the WM_W600.FLS file into the dialog box, as shown in the figure below after the drag and drop is completed.

1

Figure 2-5

6) Select the Send Xmodem... option.

7) After clicking to select this item, the program of the device starts to upgrade the firmware, and the progress will be displayed during the upgrade.



Serial: COM21, 115200 10, 62 10 Rows, 80 Cols VT100

Figure 2-6

CAP NUM

8) After the upgrade is successful, the dialog box will continue to print CCC. At this time, manually reset the device, and the device will run the new firmware.

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Ready

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Re	ady Serial: COM21, 115200 10, 1 10 Rows, 80 Cols VT100 CAP NUM

Figure 2-7



3 Firmware upgrade instructions under SECBOOT

3.1 How to enter the SECBOOT program for firmware upgrade

To enter SECBOOT, the following operations are required: 1)

Connect UART0/UART1 (SECBOOT V3.1 version) to the host computer, and open the serial port tool 2) In the serial port tool output window of the

host computer, press and hold the ESC key on the keyboard, and then press Press the reset key of W60X to reset the W60X module, and release the ESC key

after the serial port tool outputs secboot running.

3.2 What firmware can be upgraded under SECBOOT

The firmware upgrades supported under Secboot include: WM_W600_GZ.img and WM_W600_SEC.img, 1) WM_W600_GZ.img is the

compressed firmware, which is the preferred upgrade firmware under SECBOOT.

2) WM_W600_SEC.img is a non-compressed firmware, it is not recommended to use, because the firmware is too large and may destroy the user area.

3.3 Steps to upgrade firmware under SECBOOT

1. Power on the device, connect the hardware serial port tool, and connect the computer serial port with the device serial port.



Figure 3-1



2. Open secureCRT and select the host computer serial port corresponding to the serial port connection of the

module. Note: **RTS/CTS** must not be checked when setting the serial port (as shown in Figure 3-2)

	Quick Connect	×
	Protocol: Serial 👻	
	The port may be manually entered or selected from the list.	
	Port: JSB-SERIAL CH340 -	
	Baud rate: Flow Control	
	Data bits: 8 RTS/CTS	
	Parity: None XON/XOFF	
	Stop bits:	17
	Name of pipe:	
		r
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	☑ Open in a <u>t</u> ab	
	Connect	Cancel
~	Figure 3-2	
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Ready	Seria: COM21, 113200 5, 1 10 Rows, 80 Cols	VIIIO CAP NOM
1	Figure	

3-3 3. Click the dialog output box (the printing area in the upper part of the figure below) with the mouse, then press and hold the Esc key on the keyboard,

and then reset the device. After the reset is complete, you can see that the dialog box has output secboot running... CCC.



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4. Drag and drop the WM_W600_GZ.img file into the dialog box, as shown in the figure below after the drag and drop is completed.

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		Send ASCII CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
s	Default 🔹 🔵 QMAC 🌑 at+z 🔵 at+oneshot=1 😜	Send Kermit Send Xmodem Send Ymodem Send Zmodem
		Send Zmodem

Figure 3-5

5. Select the Send Xmodem... option.

6. After clicking to select this item, the device starts to upgrade the firmware, and the progress will be displayed during the upgrade.



 Serial-COI 	M21 ×						4
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ady	Serial:	COM21, 115200	10, 62	10 Rows, 80	Cols VT10	0	CAP NUN
ıdy	Serial:	COM21, 115200	10, 62	10 Rows, 80	Cols VT10	0	CAP NUN

Figure 3-6

7. After the upgrade is successful, the device program will decompress the firmware first, then automatically reset and run the new firmware

Serial-COM21 - SecureCRT	
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Serial-COM21 ×	4 Þ
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update header reset chip to run user code decompress success user task	H
Default 🔹 🥯 QMAC 🥌 at+z 🥌 at+oneshot=1 🥌 at+lkstt 🥥 at+tem 🥥 at+wjoin 🍚 at+wprt	
Send commands to active session	×
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Ready Serial: COM21, 115200 10, 1 10 Rows, 80 Cols VT100 0	AP NUM

Figure 3-7