

## CMT216x Offline Writer Operating Guide

### Overview

CMOSTEK CMT216x offline writer (hereinafter referred to as Burner or Writer) is a high efficiency production tool which copy the user program and configuration parameters to the NextGenRF™ CMT216x chip storage. CMOSTEK CMT216x offline writer supports for single machine manual recording and automatic batch recording.

This document introduces basic function, using process as well as using notice of the recorder.

**Table 1. Part number covered in this document**

Part Number	Single ended PA	Differential PA	12-Bit ADC	Operational Amplifier	Low Frequency Wake up	External 32.768 kHz	Package
CMT2160A		●	●4-ch				SOP14
CMT2163A	●	●	●9-ch		●	●	TSSOP28
CMT2168A	●		●12-ch	●	●	●	QFN32
CMT2189D	●		●8-ch				QFN20
CMT2189BE	●		●4-ch				SOP14






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# 1 Offline Writer Kit Content

Offline writer kit is comprising of the following hardware and software.

**Table 2. Hardware and Software of the Offline Writer**

Type	Picture	Name	Function Description
Hardware		Host machine	Fast and efficient offline burning
		DC power adapter	Specification is: Input: AC 100 ~ 240 V 50/60 Hz 0.6 A Output: DC 9 V 1 A
		USB wire	USB A type interface->USB B type interface, 1.5 m. They are used to connect the writer to the computer and induces the chip configuration parameters.
		Writer connecting cable	1 IDC 10P cable, using for connecting the writer with the chip burn-in socket. (pins)
Software		CMOSTEK CMT216x WriterConfig	Operating on the computer and introduces the *.hex document of chip procedure to the writer.

## 2 Hardware Introduction

### 2.1 Offline Writer Host Panel

#### 2.1.1 Description of the front view of each component on the offline writer panel

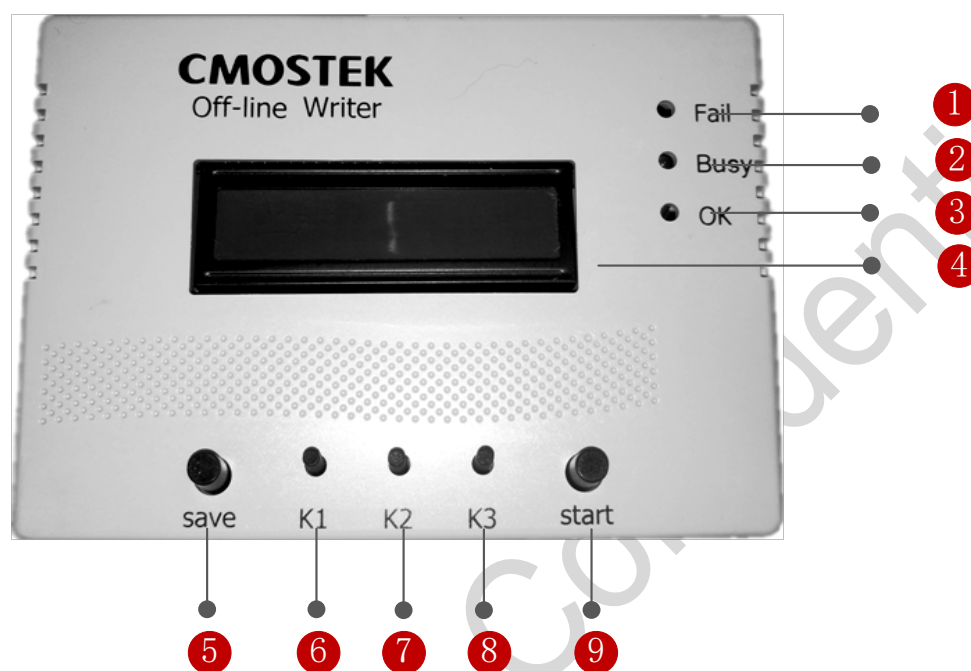


Figure 1. Front View of the Host Panel

Table 3. Description of Components on the Host Panel

Number	Name	Function
1	Fail (Red Light)	Red light indicates programming failed.
2	Busy (Yellow Light)	Yellow light indicates busy with the following two situations: 1. In burning mode: indicates that the target chip model has been identified and programming; 2. In USB mode: Information is exchanged between the USB and computer.
3	OK (Green Light)	Green light indicates OK and it will keep light up even after removing the chip.
4	LCD Display	Display information of configuration and programming.

5	Save Key	Press this key to manually save the programming counts to Flash
6 - 8	Key of K1 – K3	Reserve keys for subsequent function expansion
9	Start Key	Press the key to start programming

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### 2.1.2 Interface description of the offline writer back view

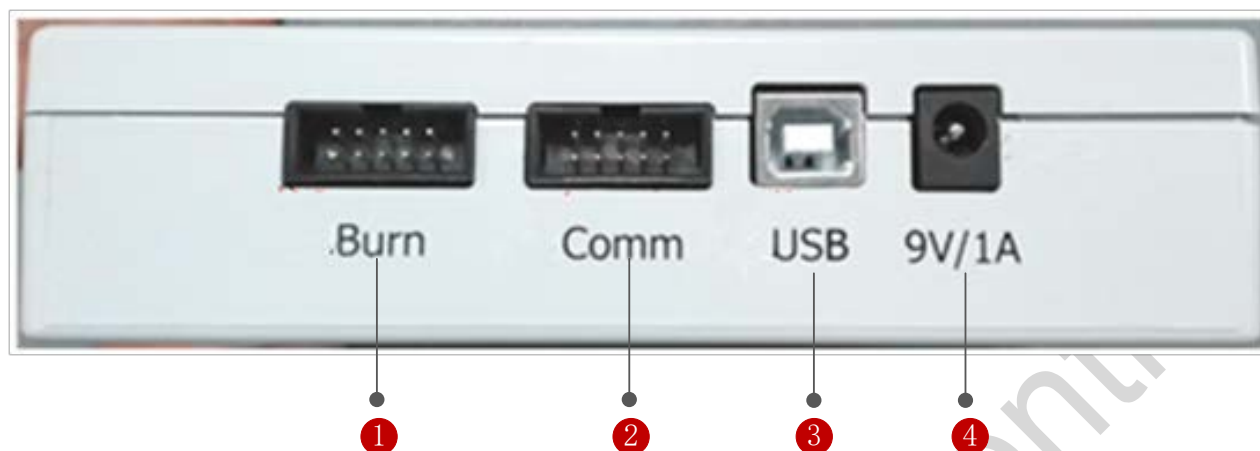


Figure 3. Back View of the Host Machine

Table 4. Interface Description of the Host Machine Back View

Number	Name	Function
1	Burn	Connect to the burning chip
2	Comm	Connect the automatic machine to control burning. Automatic machine refers to the 3 <sup>rd</sup> party automatic production equipment, which can be connected with the burner to achieve batch burning.
3	USB	Used to connect to the computer, import the burning user procedures and configuration data
4	Power Supply 9 V/1 A	Burner power supply, connected to 9 V/1 A DC power adapter

## 2.2 LCD Display Information

### 2.2.1 Offline burner startup initialization display information

The information displayed within 5 seconds after startup are shown in the following figure and table:



Figure 4. LCD display at startup initialization

Table 5. LCD display description at startup initialization

No.	LCD display character	Description
1	CMT216x	Represents CMT216x series chip burner
2	Writer V3.2	Represents the burner hardware version number
3	FV505	Represents the burner firmware version number

### 2.2.2 Offline writer display information

The offline writer information is displayed as follows.

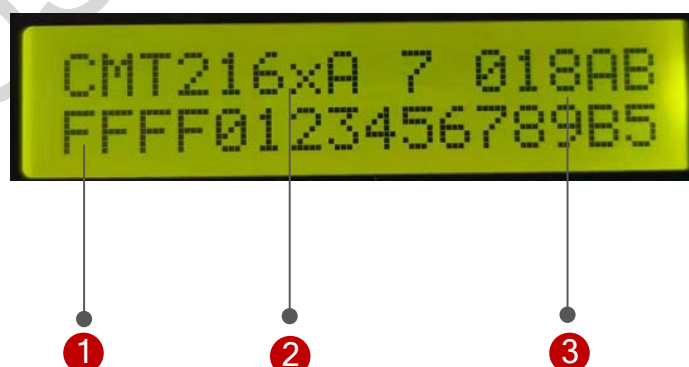


Figure 5. Offline writer display information

No.	LCD display character	Description
1	0 (SN setting disable)	Indicates that the already burned consecutive chip numbers, the values are based on decimal integer. Each burn was automatically added to one with a maximum number of 4294967295, and recounted from 0 after exceeding the maximum value. When WriterConfig downloads the user program and configuration data again, the count will be cleared to zero.
	FFFF0123456789B5 (SN setting enable)	When SN Settings Enable, it will display the current SN number to be burned.
2	CMT216xA	Series number, covering the applicable chip model: CMT2168A、CMT2163A、CMT2160A、CMT2189BE、CMT2189D
3	7_0	The corresponding value for burn options (tick)
	18AB	Represents the checksum of the contents of the burn program.

Table 6. Burning information display description

## 2.3 Indicator and Beeper status description

Offline writer uses indicator light and buzzer state to represent the state information in the process of using the writer. For the indicator state, please refer to the table of components on the panel of the burner host, and the buzzer state description that shown in the table below

Table 7. Beeper status description

Warning tone	Tip state	Description
"Beep" once	The burner is ready or already successfully burned.	<ol style="list-style-type: none"> <li>1. After startup: beep, it means that the recording machine is ready for USB configuration or chip burning starts.</li> <li>2. Burning process: beep indicates that burning is successful, and the green light lights up.</li> </ol>



"Beep" twice	Burning failed	After the recording is completed, "beep" twice, and the LCD screen prompts recording failed and red lights on, it indicates that the burning has failed.
	The identification model does not match	If the chip is identified while the model is not consistent with the configured parameter, the system beeps twice and displays a message on the LCD screen, it indicates that the model does not match.
	Verification error while burning programs or configuring data	When the burning program or configuration data source verification error, "beep" twice, and LCD screen information prompts verification error, please reload user program and configuration data.

## 2.4 Description of burning control interface and connection mode

The burning control interface includes two parts: burning and automation control. For manual control burning, it only needs to connect the chip by pressing the start button. For batch burning, the chip and automaton control are connected as follows:

### 1. Burning interface

The burning interfaces are shown in the following figure and table:



Figure 6. Burning interface

Table 8. Burning interface description

Pin No.	Pin name	Description	Connect to chip pin
1	CSB	Selected signal	B2 / S3S_CSB
2	GND	Ground	CSB GND GND
3	-	-	-
4	VDD	Chip power supply	VDD VDD
5	CLK	RF serial clock signal	B3 / S3S_CLK SCI
6	-	-	-
7	DIO	RF serial port data signal	B4 / S3S_DIO SDA
8	-	-	-
9	-	-	-
10	VPP	Voltage output regulating	B1 / VPP -
Note: Due to the high speed of the burning port signal, connecting line between the recorder and chip needs to use the same length of flat cable or Dupont line to ensure that the signal timing is correct.			

## 2. Automatic control interface

Connect the burner automatic control interface with the automatic machine through wire, and the automatic machine sends out the start signal to trigger the burning, and detect the OK, BUSY, FAIL status signal sent by the burner to control the operation of the machine, and then carry out automatic batch burning. The connection mode of the burner automatic control interface and the automatic machine is shown in the figure and table below:

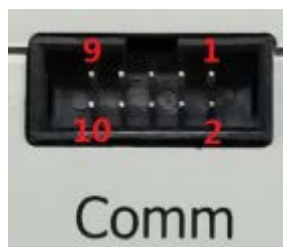


Figure 7. Automatic control interface (Comm interface)

Table 9. Description of the automatic control interface

Pin No.	Pin name	IO	Description	Connect to host machine
1	FAIL	O	Indicates output is failed and low level is valid.	Fail
2	GND	GND	Ground	GND
3	BUSY	O	Indicates that the burner is busy and low level is effective.	Busy
4	-	-	-	-
5	OK	O	Indicates burning successfully and low level effective.	Ok
6	-	-	-	-
7	START	I	Burning trigger signal, low level effective. Low level duration should be greater than 30 ms and less than 50 ms	Start
8	-	-	-	-
9	3.3 V	O	3.3 V power supply output	-
10	-	-	-	-

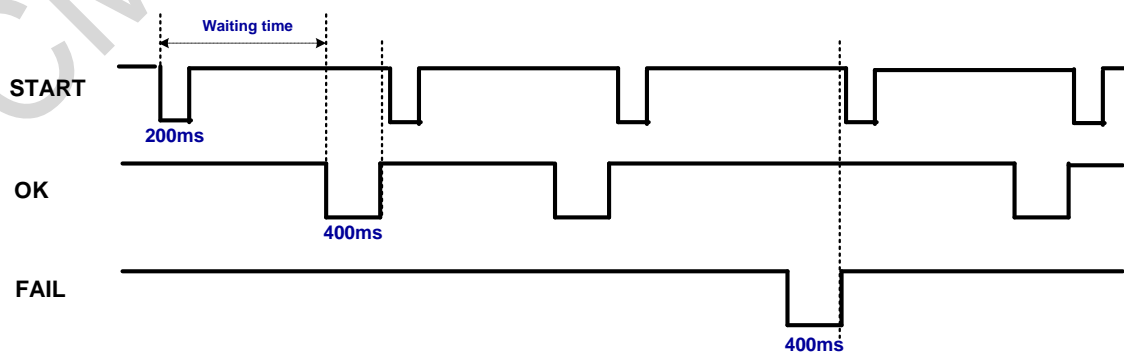


Figure 8. Burning automatic control sequence diagram

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### 3 Offline burning operation and description

#### 3.1 Basic operation

The basic burning steps are as follows:

1. Connect the burner to the computer through the USB cable and load the user program data file \*.hex in WriterConfig, and then configure and download to the burner. (More information, see chapter 3.2 "WriterConfig" configuration download description.)
2. Insert the "burning connection flat cable" into the burning interface, connect the burner and the chip module, and connect to power supply. Or connect the burner control interface to the automaton table in mass production, and connect the power supply (See Chapter 2.4 "The burner control interface description and connection mode" for details).
3. Recording by manually pressing the start button or the start signal from the automatic machine.

#### 3.2 Use WriterConfig for program and configuration download

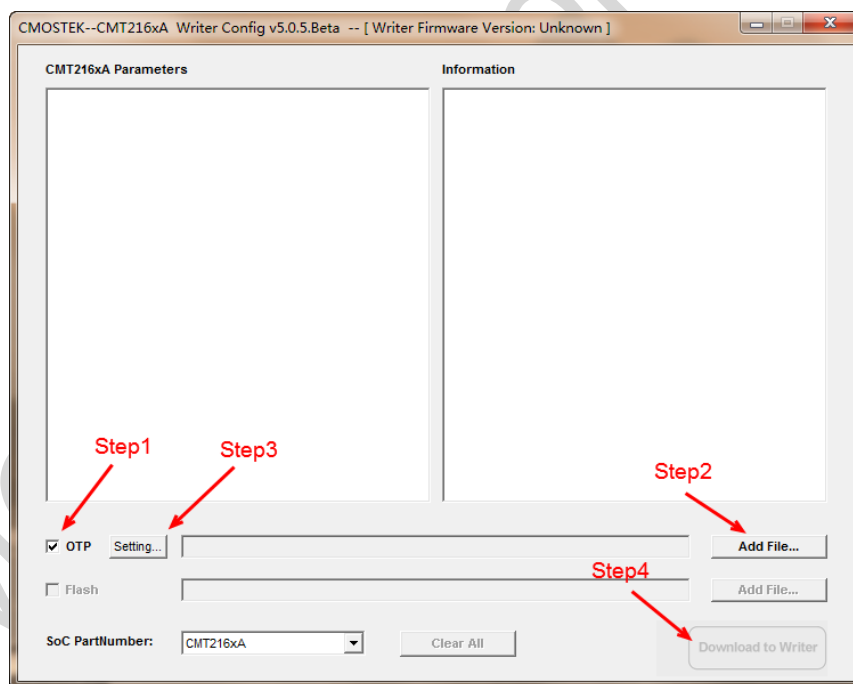


Figure 9. CMT216x Writer Config Master Interface

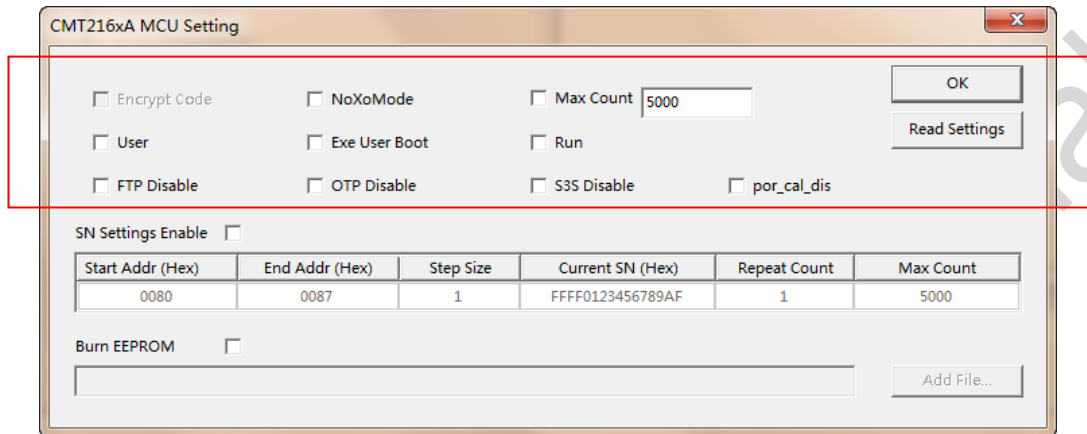
Steps for downloading the burning target Hex to offline burner:

1. Select the "OTP", which means the operation burning target is the import Hex file in OTP.
2. Click "Add File...", import the target burning Hex file;
3. Click "Setting...", choose the required burning option;
4. Click "Download to Writer", download the target Hex and burning options to the offline writer, after

which the offline writer can carry out the offline mass production burn mode

### 3.2.1 Burning option description

Click “Setting...” the interface of burning option and the descriptions are shown as followed.



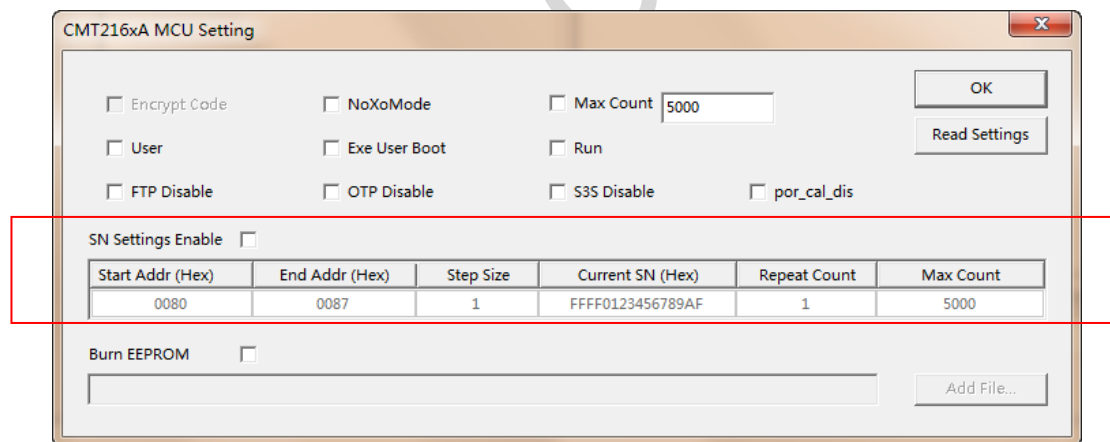
**Figure 10. CMT216xA MCU Setting Interface (Burning option part)**

**Table 10. CMT216x MCU Setting Description**

No.	Option	Description
1	Encrypt Code	The enabling user code encryption option. It is not recommended temporarily.
2	NoXoMode	Disable external crystal (26MHz) mode. This will save cost for situations of no require of high frequency transmission. It should be noted that CMT216x chip needs to be connected to the external 26MHz crystal during the initial power-on self-test by default. Otherwise, the user program will not operate if self-test fails.
3	User	User mode option. If this option is selected, the chip will be burned to User mode. For details of the User mode feature, see the <i>AN290 CMT216xA User manual</i>
4	Exe User Boot	User code execution option. If this option is selected, the user code will be automatically executed after being loaded. If unchecked, user code is only loaded into PRAM, but not executed.
5	Run	Run mode option If this option is selected, the chip will be burned into Run mode (that is, finished chip mode). For details about Run mode features, see the <i>AN290CMT216xA user manual</i>
6	FTP Disable	FTP protection switch option. If it is selected under the Run mode, the FTP protection mechanism takes effect in Re-test mode and FTP access is prohibited. For details about the protection mechanism and Re-test mode, see <i>AN290 CMT216xA user manual</i> .

No.	Option	Description
7	OTP Disable	The OTP protection switch option. If the item is selected in Run mode, the protection mechanism remains active in the Re-test mode, and the OTP forbids access. For protection mechanisms and Re-test mode features, see the <i>AN290 CMT216xA User Manual</i> .
8	S3S Disable	S3S Bus Switch Options. If the item is selected in Run mode, the S3S bus and 1-wire debugging interface are disabled and the chip has been encrypted and cannot enter re-test mode at the same time. If this parameter is not selected, S3S and 1-wire can be opened in a special mode and enters Re-test mode. More details about Re-test mode, see <i>AN290 CMT216xA user manual</i>
9	por_cal_dis	Disable the calibration option when the chip is powered on for the first time. After the check, the chip will be banned for the first time on internal calibration processing, which can shorten the time of the first power on to the user program execution (equivalent power on reset time). Since the cancellation of calibration will affect the part function modules, it is suggested to operate under the guidance of professionals.
10	Max Count	It is used to limit the maximum times of burning in chip configuration.

### 3.2.2 User-defined serial number (SN) increment function and settings



**Figure 11. CMT216xA MCU Setting Interface (SN setting part)**

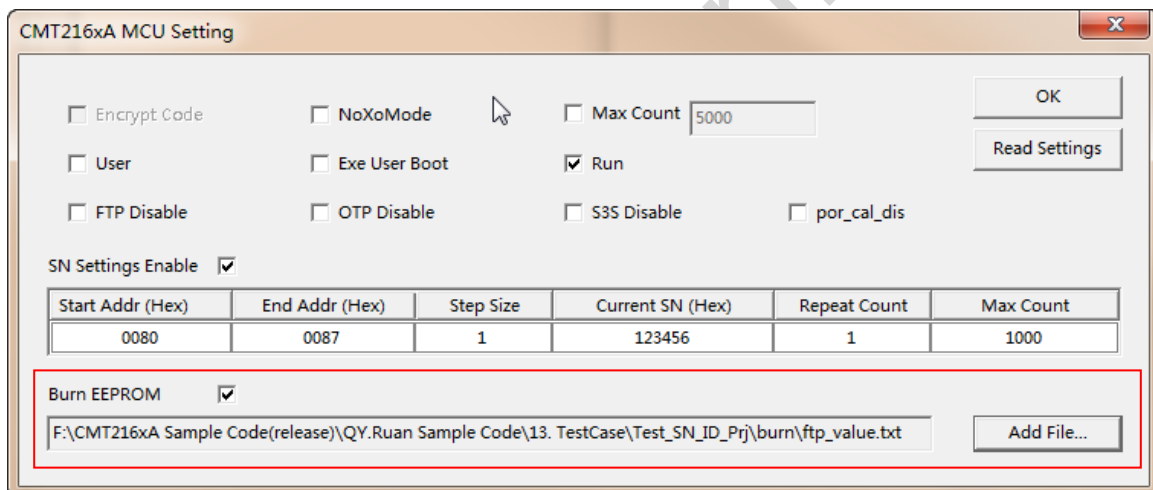
SN Settings Enable, select whether to synchronize the ID self-add function. When SN Settings in CMT216xA MCU Setting is selected, related configuration items is shown in the following table.

**Table 11. SN Settings in CMT216xA MCU Setting**

No.	Option	Description
1	Start Addr (Hex)	The start addresses of SyncID storing, with up to 8 bytes serial number storing. The serial number is burned to specified address of OTP.

No.	Option	Description
2	End Addr (Hex)	The ending address of SyncID storing
3	Step Size	After each chip is burned, the next ID will change incrementally according to Step Size setting rule
4	Current SN(Hex)	1. SN changes according to the Current SN value when the chip is continuously burned; 2. Both of the interface and Writer displayed ID value are hexadecimal number; 3. SN最大支持范围为8字节。
5	Repeat Count	The numbers of chips that are burned repeatedly until changing the ID.
6	Max Count	Used to limit the maximum burning times of the chip

### 3.2.3 EEPROM initial burning value inside chip



**Figure 12. CMT216xA MCU Setting Interface (Burn EEPROM part)**

CMT216xA series chip has a 64-byte EEPROM internally, which can be saved by users as important information on power failure. The default value of this part of memory is 0. When users burn the target program, they can specify an initial value for the 64-byte EEPROM at the same time. Users just need to edit the specify initial value into TXT text format as shown below. After that, select *Burn EEPROM* and loading the file via *Add File...*





**Figure 13. Example for specific EEPROM initial value**

Note;

1. All the edit content is in hexadecimal (0-9, A-F, case unlimited);
2. Use the byte unit, and insert spaces between each byte;
3. Users can define its content according to all 64 bytes or part of them, noted that the burner address is written from 0x00, and the first 64 bytes are treated as valid content (ignored the exceed part and filled the vacancy with 0, the chip default value).
4. EEPROM initial value burning function only supports edited content, and does not support self-increasing burning of SN serial

### 3.2.4 WriterConfig Interface Description

The following figure shows the WriterConfig page and version information and they are marked as 9 and 10. However, Num 9 indicates the Writer hardware and Firmware version. Below, the hardware version is V3.2, and the Firmware version is 505.bet.app, Num 10 indicates the CMT216x WriterConfig software version which is V5.0.5 below.

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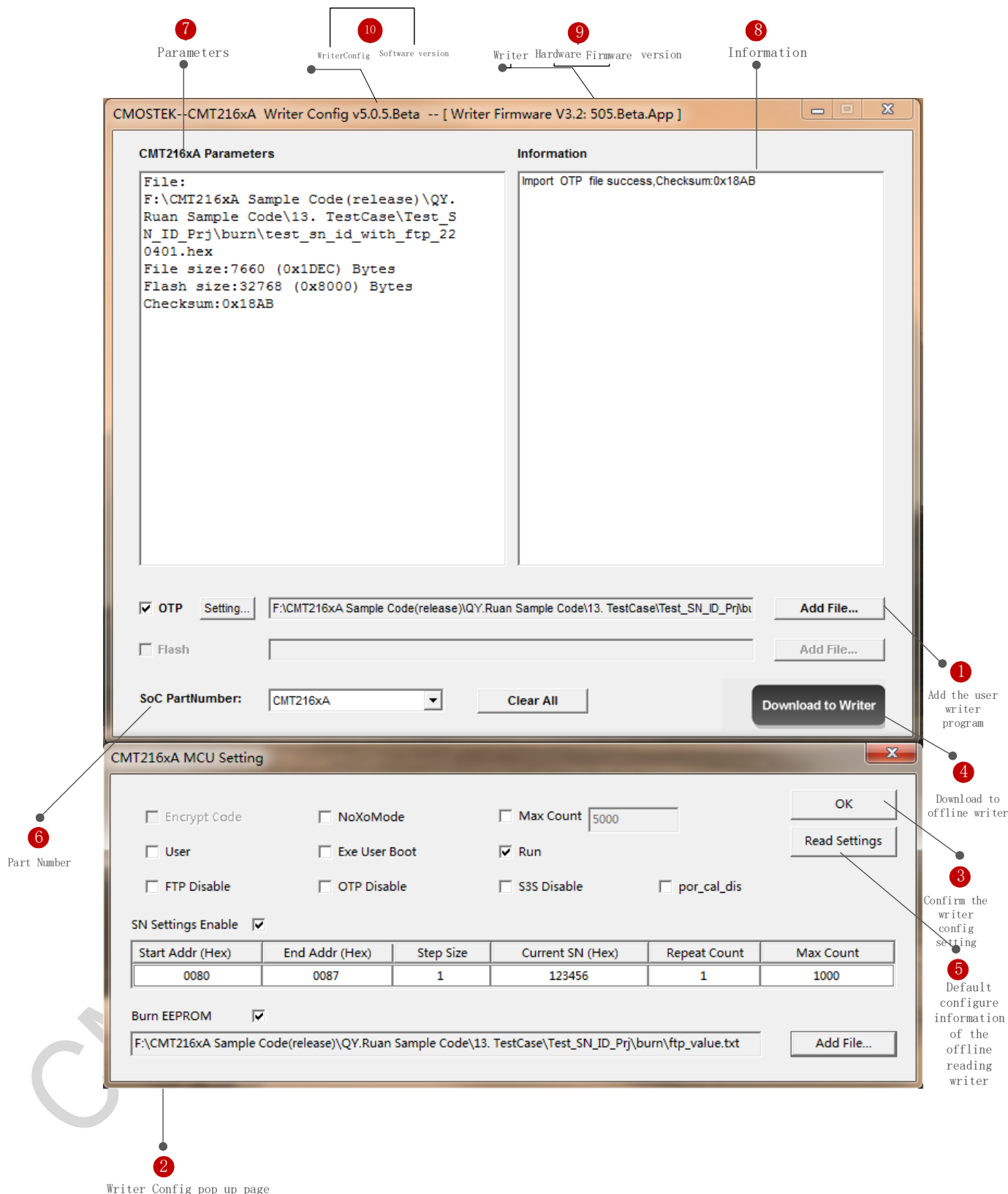


Figure 14. CMT216x Writer Config main page and pop-up page

**Table 12. User program and configuration download steps description**

Num	Name	Description
1	Add File...	Adding the hex document to be burned
2	Settings...	CMT216x MCU Setting, CMT216x chip burning option. Details see at the following table "CMT216x MCU Setting" description. The dialog box will be displayed automatically after the file is imported. Click the "OK" button to save the settings.
3	OK (popup window)	Click the OK button to confirm the burning configuration.
4	Download to Writer	Click the button, Download burning configuration parameters and user program to the offline writer.
5	Read Settings	Click the button, read the original MCU configuration and display in the current MCU config window, users can modify the configuration as required.
6	SoC PartNumber	Automatically display as CMT216x
7	Parameters	The imported file and chip Flash size are used to check whether the downloaded data is correct, including the file name, file size, and chip Flash size.
8	Information	Import the file Checksum (in hexadecimal). The Checksum displayed on the LCD of the burner must be the same as the Checksum displayed here. If not, the LCD displays an error message of CFG CHK ERR1. In this case, you need to download the Checksum again.

## 4 Online Burning Operating Mode

All of the mentioned off-line burners are commonly used in mass production mode and it is very efficient to meet mass production needs for specified files (fixed burning contents). However, in mass production, the content of each burn will be changed, such as adding some specific information based on the Hex burn, and then downloading it to the writer for burning. In this case, the offline production mode is not flexible enough. To fulfill this requirement, it is necessary to use the online burning mode.

Online burning mode is set up as follow: the host computer (generally the PC or industrial computer) connected to the offline burning device through USB data cable (host computer will identify it as HID device), and then the writer connects to the burning target.



**Figure 15. Online burning construction**

The burning starts when the upper machine sends out the calling command (writerconfig.exe) and then users can perform the needed operations on the upper system, such as adding specific content to the Hex file. For the upper system, the offline burner in this mode is the device for performing burning. The upper system only needs to generate different Hex files according to the user's needs and send the files offline to the offline burner through USB data.

**Table 13. Parameter list of online operating commands**

Parameter	Function	Description
-ram	Writer RAM operation mode	Affirmative option
-otp	Writer operation OTP	Affirmative option
-burn	Execute burning	
-f <hex file>	OTP target to be burned in Hex file	
-fast	Download speedup (only shorten the time from the host computer to the burner)	
-p <txt file>	EEPROM target to be burned in txt file	
-poweron	Power on the target burning chip	Operating separately, which makes it convenient for the upper system to carry out the power supply control on the target chip when the function test is needed after burning.
-poweroff	Power off the target burning chip	
-uuid	Achieve the 32-bit UUID on the burning target chip	Operating separately, and must be used before burning the OTP program, because after burning the OTP, the chip is encrypted, and the UUID can no longer be read through the interface

**Table 14. Parameter list of OTP burning**

Parameter	Function	Description
-user	User mode	Select User
-exe	Exe User Boot mode	Select Exe User Boot
-run	Run mode	Select Run
-disable_otp	OTP Disable	Select OTP Disable
-disable_ftp	FTP Disable	Select FTP Disable
-disable_s3s	S3S Disable	Select S3S Disable
-noxomode	Power on mode exclude of 26MHz	Select NoXoMode
-porcaldis	Switch off the power calibration mode	Select por_cal_dis

**Table 15. Parameter list of return value description**

Parameter	Description
-1	Working failed, please check the command path
0	Indicates successful when burning OTP is working Indicates UUID is read failed (UUID cannot be 0)
1	Invalid command
2	No required parameter “-ram -otp”
3	Download Hex file failed
4	Burning OTP failed
5	Power Off failed
6	Power On failed

For examples:

1. `C:\...\program\WriterConfig.exe -ram -otp -burn -f D:\...\hex\test_201214.hex -run`  
Operation: Download the target file test\_201214.hex to the offline burner, and perform OTP burning in Run mode.
2. `WriterConfig.exe -ram -otp -burn -f test_201214.hex -run -p ftp_hex.txt`  
Operation: Download the target file test\_201214.hex to the offline burner, and download the EEPROM initial value file ftp\_hex.txt to the offline burner at the same time, performing OTP burning and EEPROM burning to the target chip in Run mode.
3. `WriterConfig.exe -ram -otp -burn -f test_201214.hex -run -poweroff`  
Operation: Download the target file test\_201214.hex to the offline burner, and perform OTP burning in Run mode. Power off the target chip after burning complete.
4. `WriterConfig.exe -ram -otp -burn -f test_201214.hex -run`  
Operation: Download the target file test\_201214.hex to the offline burner, and perform OTP burning in Run mode.
5. `WriterConfig.exe -ram -otp -burn`  
Operation: Perform OTP burning, and the burning content has been downloaded from the offline burner (the host computer should have delivered the target hex and corresponding burning mode parameters firstly).

6. `WriterConfig.exe -ram -otp -f test_201214.hex -run`

Operation: Download the target file test\_201214.hex to the offline burner, select Run mode (but do not perform OTP burn, that is, only download the hex and burn parameters to the offline burner, noted that the offline burner will poweroff)

7. `WriterConfig.exe -ram -otp -fast -f test_201214.hex -run`

Operation: Download the target file test\_201214.hex to the offline burner, select Run mode (but do not perform OTP burn, that is, only download the hex and burn parameters to the offline burner, noted that the offline burner will poweroff)

8. `WriterConfig.exe -ram -otp -poweron`

Operation: Power on the target chip.

9. `WriterConfig.exe -ram -otp -uuid`

Operation: Read the 32-bit UUID of the target chip.

## 5 Firmware Upgrade and Degrade Function

WriterConfig can upgrade and degrade offline burner firmware versions. The update function synchronizes the offline burner firmware version with the latest release of WriterConfig. The degrade feature allows users to choose the burn firmware back to a lower suitable version.

Before performing the upgrade and degradation, make sure the offline burner connected to the computer through a USB cable, and the main interface of the WriterConfig program has been opened.

### 5.1 Firmware Upgrade

When WriterConfig starts, it detects the firmware version of the burner. If the current firmware version is lower than WriterConfig version, it will automatically prompt the user whether to upgrade. Click OK to download and upgrade the firmware. Clicking Cancel will call off the upgrade. The details are shown in the following figure.

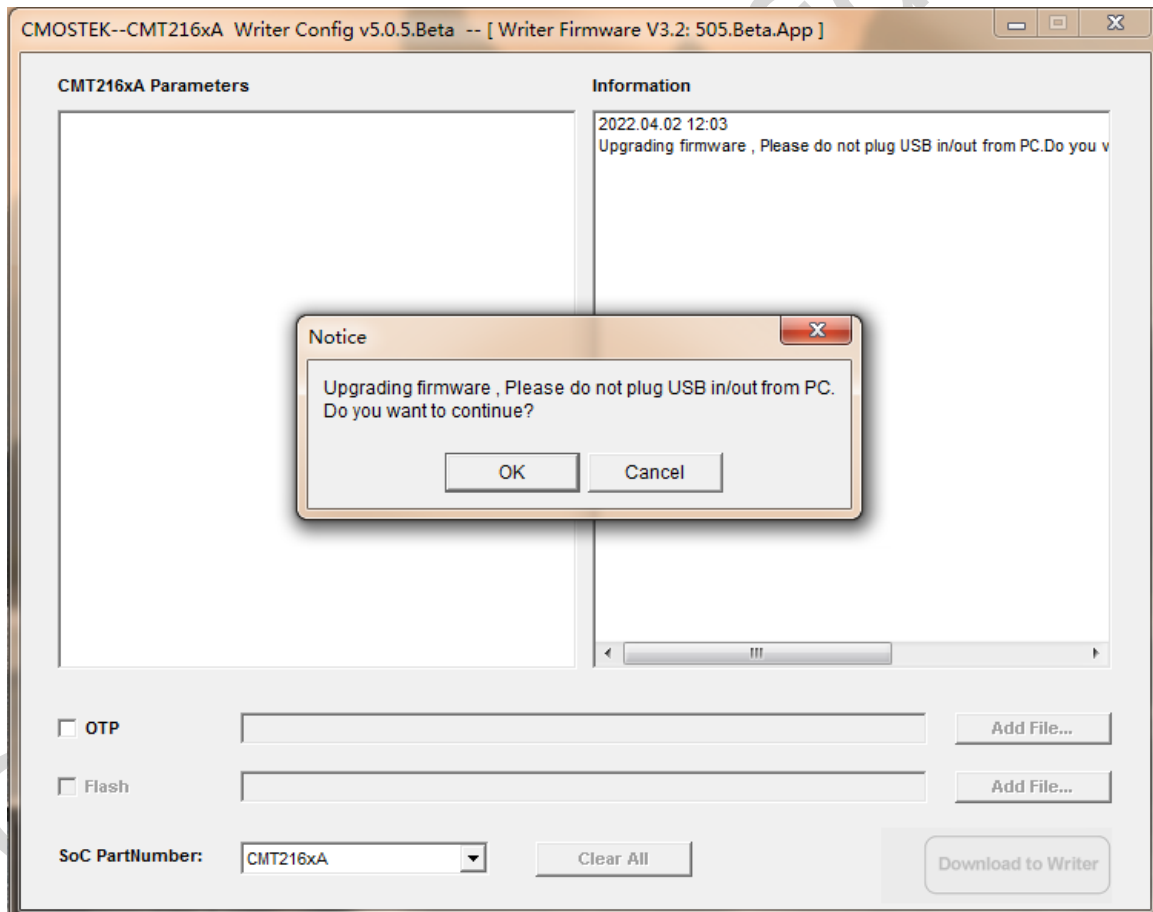


Figure 16. WriterConfig upgrade offline burner firmware



## 5.2 Firmware Degradate

Degrade firmware requires to select *brn-Vx.y.z.32c* in the WriterConfig installation directory and change the file name to *brn-V5.9.9.32c* and then restart the WriterConfig program. Noted information will be pop-uped automatically as the upgrade process. Clicking *OK* will continue the degrade operation and click *Cancel* to call off the operation. Details are shown in the following figure.

In file *brn-vx.y.z. 32c*, *x.y.z* represents firmware version. For example, *brn-V1.5.1.32c* represents firmware version *V1.5.1*.

After the degrade complete, restore *brn-V5.9.9.32c* to the original file name to avoid repeat degradation next time.

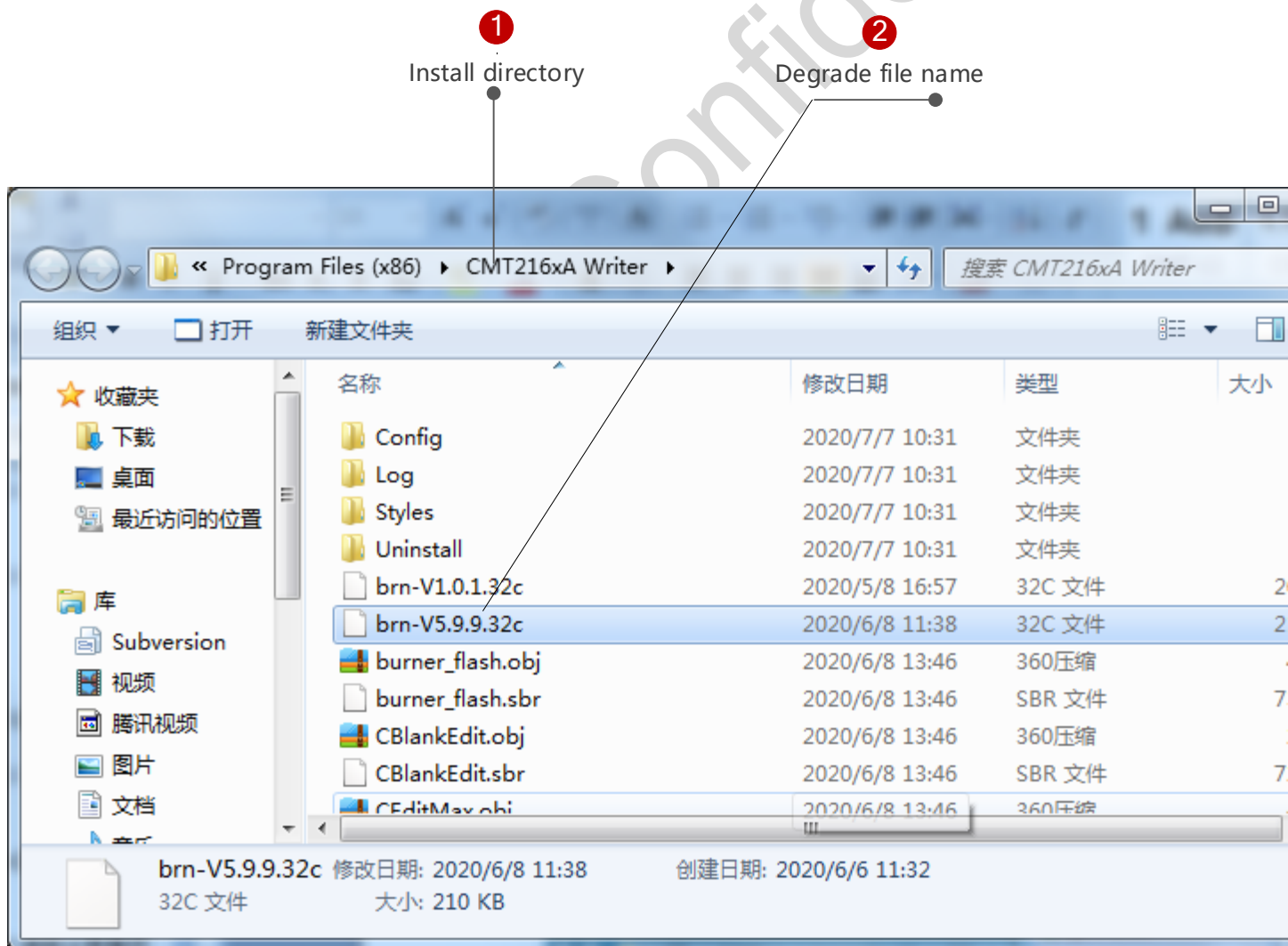


Figure 17. WriterConfig degrade offline burner firmware

### 5.3 Error Upgrade Handling

CMOSTEK provides several types of offline burner. Different types of offline burner correspond to different upper computer software names, version ranges and degrade operation file names, shown in the following table. When users apply more than one type of burner at the same time, it is required to select the right upper computer software according to type of the offline burner.

**Table 16. Offline Information**

No.	Offline writer name	Upper computer software name	Upper computer software version range	Degrade file name	Description
1	CMOSTEK Offline Writer	CMOSTEK WriterConfig	V130 - V499	brn-V4.9.9.32c	CMOSTEK general Offline Writer
2	CMT2380F32 Offline Writer	CMT2380F32 WriterConfig	V100 - V129	brn-V1.2.9.32c	CMT2380F32 Offline Writer
3	CMT216xA Offline Writer	CMT216xA WriterConfig	V500 - V599	brn-V5.9.9.32c	CMT216xA serial Offline Writer

When the user applies more than one type of burner at the same time, there may be error upgrade due to operation error. For example, the user needs to use the CMT2380F32 WriteConfig upper computer software, but the CMT216xA WriterConfig upper computer software is opened mistakenly. The corresponding CMT216xA burning device firmware version is higher than the CMT2380F32's, instantaneously there will prompt an upgrade firmware notice. If the user mistakenly clicks OK, this will lead to an error firmware upgrade, affecting the normal use of the burning device.

When the above mistake operation occurs, user can follow the following steps to restore the burner to the normal state as before.

1. Power on the offline burner hardware through USB
2. Turn off the host computer software that has been opened mistakenly.
3. Select the target file on the host computer and rename it to the degraded file name

For example:

Select the correct upper computer software, click the right mouse button-> Property -> Open the file location and select the target file with the largest xyz value (the target file with the largest version) in

the *brn-Vx.y.z.32c*. Select the target file and rename the target file to the degrade file name (general burner to *brn-V4.9.9.32c*, CMT2380F32 burner to *brn-V1.2.9.32c*, CMT216xA series burner to *brn-V5.9.9.32c*, see the table above for detail information).

4. Restart the correct host computer software and the system prompts you to upgrade, click OK and wait until the upgrade is complete. At this point, the firmware of the burner that was mistakenly upgraded has been restored to the normal state through the degradation process.
5. Modify the file name changed in Step 3 to the original file name. Otherwise, it will remind you of upgrading every time you open the upper computer software.

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## 6 Using Notice

The following table lists several precautions for using an offline burner

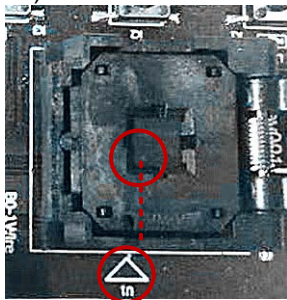
**Table 17. Offline Writer Using Notice**

No.	Notice
1	After successfully burning the CMT216x series chips, it is not allowed to burn it again (programm).
2	Before replacing the button battery, press Save to manually save the count value of the current burning chip into the FLASH and the last saved value will be recovered when the next power on. Users need to manually save after each burning to ensure the reliability of burning records.
3	Don't open RFPDK in the process of downloading user programs and configuration parameters to the burner while using WriterConfig, otherwise it will cause the burner download configuration parameters error or abnormal failure of the burner for the reason of occupying USB communication of both the RFPDK and WriterConfig. Thus, do not startup WriterConfig and RFPDK at the same time when the USB is connected to the burner and the computer to avoid exceptions
4	CMT216x series chips do not support CMOSTEK general WriterConfig software. Users must download CMT216x WriterConfig specific user program and configuration parameters to the CMT216x offline burner.
5	CMT216x offline burner uses specific WriterV3.2 burner hardware and cannot use general CMOSTEK burner hardware.
6	The CMT216x offline burner is distinguished from the general offline burner by the following methods: the LCD display interface and the outline printing (with CMT216x words).
7	The CMT216x Writer Config software is distinguished from the general Writer Config software by the following methods: CMT216x WriterConfig is displayed at the top of the <i>CMT216x WriterConfig</i> interface window and CMOSTEK WriterConfig is displayed at the top of the general WriterConfig software interface window.

## 7 FAQ

Below shows some common questions and solutions.

**Table 18. Common questions and solutions**

No.	Abnormal situation	Cause and solution
1	LCD appears one of the 4 following messages: 1. Low Battery, Pls Press SAVE key; 2. Low Battery, Pls Replace Battery; 3. No Battery, Pls Press SAVE key; 4. No Battery, Pls Replace Battery	<b>Reason:</b> Low battery or no battery in writer <b>Solution:</b> After pressing the "Save" key, replace the button battery under the LCD screen which is inside the burning device to save the burning count.
2	The LCD screen displays a string of black squares without correct characters	<b>Reason:</b> The power supply is not properly connected during power-on. <b>Solution:</b> Power off the power and wait a few seconds before powering it on again. If the fault persists, contact technical personnel for support.
3	LCD appears: CFG CHK ERR1 ...	<b>Reason:</b> Configuration data of the Checksum is incorrect. <b>Solution:</b> Use WriterConfig to re-download the configuration file
4	Computer pop up dialog when WriterConfig is downloading parameters: The version between Writer Config and Offline-Writer does not match, please update the Writer Config version.	<b>Reason:</b> The software version of WriterConfig (for example, Vx.y.z) does not match the Firmware version of the Writer burner (for example, abc.App). That is, the software version of the xyz combination does not match the firmware version of the abc combination. <b>Solution:</b> Update to the latest version of WriterConfig or the two match versions to WriterConfig.
5	LCD display: com fail	<b>Reason:</b> The chip is not properly placed <b>Solution:</b> Reposition the chip; Make sure the white dot of the chip corresponds to the triangle orientation (as shown below). 
6	Burning fail	<b>Reason:</b> It may be caused by abnormal voltage <b>Solution:</b> Measure and check the voltage. The normal voltage between VPP and GND of the burning socket should be 6.5V; the voltage between VDD and GND should be 3.9V. Specific voltage measurement points are shown in Figure 18.

7	When WriterConfig applied, the USB communication is abnormal and the interface is slow with refreshing speed of one second or lower.	<b>Reason:</b> USB communication abnormal <b>Solution:</b> Turn off WriterConfig and reinsert the USB. Run WriterConfig again. If it is still abnormal, please restart the computer
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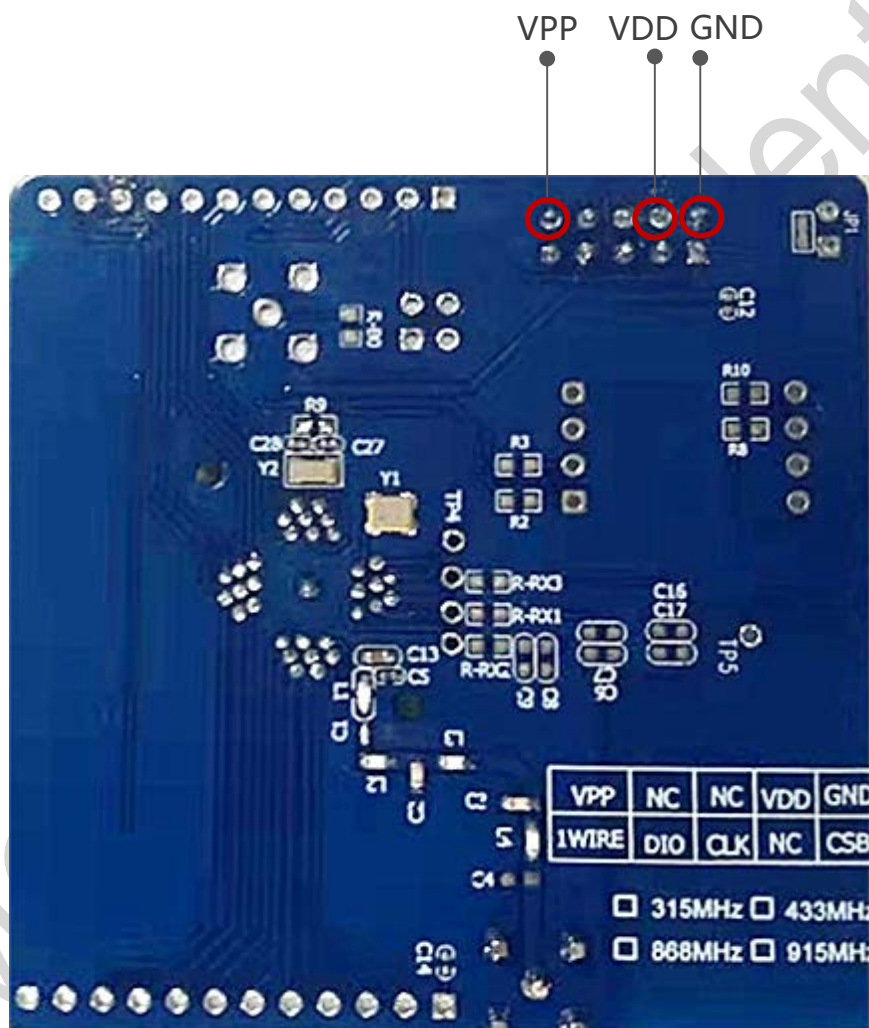


Figure 18. Measure the failing possibility of burning among VDD, VPP and GND

## 8 Revise Record

Table 19. Revise Record

Version	Chapter	Description	Date
0.5	All	Initial version	2020-07-07
0.6	1 <sup>st</sup> Page	Update product list	2021-10-19
0.7	All	Review and add the online burning mode	2022-04-02

## 9 Contacts

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