Recovering a Bricked Chuwi Hi12 caused by Corrupt Bios

BIOS corruption occurs when something goes wrong during a firmware update process. Either the wrong BIOS file was flashed or the process got interrupted by usb stick removed or tablet powered off too soon. When this happens the tablet will not be able to turn on anymore so you cannot re-flash the BIOS by the usual means – instead you will need to open the tablet and flash the BIOS using an external usb programmer connected to another computer.

The BIOS chip in the Hi12 is a Winbond W25Q64FW. It is a 1.8v chip and most cheap programmers are 3.3v so you will need a 1.8v adapter.



Tools Required



To open the Tablet, first remove any microsd card or plugs.

Remove the four corner Torx T3 screws and place in a container for safe keeping.

Using a guitar pick or similar pry tool work your way around the edge of the metal back cover to gently pry it away from the screen edge.

After removing the back, peel back the black tape covering the wire from the battery so you can unsolder the red positive wire. Wrap the end with a bit of tape to prevent accidental shorts.

The BIOS chip is hidden under the CPU thermal pad. I cut away the corner of the pad but you will also need to hinge open the metal cover.





Before connecting the Test Clip you will need to get the software working on another computer. You will need at least version 1.29 of the CH341a software that has support for the W25Q64FW chip as posted by Richard in this thread:

http://techtablets.com/forum/topic/bricked-trying-bios-update/page/3/

But first you will need the driver. I used the one in the flash package posted by Chris in these links:

http://techtablets.com/forum/topic/dual-os-version-announced/page/2/#post-27702

https://mega.nz/#!7B4Anbza!CNW5BsyKKFKLrLg53Xx2OrhSDuZ0qwn5mVN HsgQj-eM Plug the CH341 into your computer. Unzip the flash packet posted by Chris but don't install ver 1.18 as it's too old. Open the Treiber folder (I think German for driver) and run the driver setup:

	ws v open 🔣 sna	13				Ø
avorīte Līnks	Name	Date modified	І Туре		Size	
Documents	CH341DLL.DLL	10/14/2008 3:0	0 PM Applic	ation Extens.	31 KB	
Pictures	CH341PAR	7/1/2010 1;35	PM Applic	ation	161 KB	
Music	CH341W64.SYS	6/11/2009	Setup V1.40	100	7.48	
Recently Changed	CH341WDM	6/11/2009	- Device Dri	ver Install	/ Uninstall	
Casashan		2/14/2009				
Dublin	SETUP	9/16/2007	Select INF	File : C	H341WDM.INF	
PUDIIC	D40	-/			VCH CN	
			INSTA	<u></u> ['.	USB-EPP/I2C.	CH341A
			LIMINO		L06/05/2009	, 2.2.2009.06
			UNINS	ALL		
			HEL	P		
			5			
						12

I used an old computer as it's not a signed driver and will have trouble with Windows later than win 7. Someone may know a link to an updated driver.

Accept the warning



Then install the version 1.29 software you downloaded separately.

I still got a warning about the driver when I opened the software but I clicked OK and it worked.



🍫 СН34	1A Programm	ner																						×
File	Data Buffer	r Opei	ate Languag	ges	ł	lelp	i																	
6			⇔ ।	0			4	5		1		4			2		4	6		8	P.	(10	*
Open	Save	Fill	Swap	Au	to		Bla	nk	F	Read		Wr	ite	J	/erify		Era	se			ak.	About	E	cit 👘
ľ		Main Memory	<u> </u>																					
Chip S	earch	Detect	Address	60	01	02	03	64	05	06	07	08	09	ØA	ØB	ØC	ØD	ØE	ØF	01	234	56789	ABCDE	F 🔺
Type: 2	25\26 SPI FLAS	SH 👻		FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF					
1.1			00000010	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF					-
Manu.	WINDUND		00000020	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF					
Name: N	W25Q64FW	*	00000030	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF					-
Cine: Of	MDuta/CAMDit		00000040	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF					-
0126. UI	MDV(E/04MD)(00000050	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF					54 I.
			00000060	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF		• • •			S
			00000070	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	• •	• • •			-
			00000080	FF	FF	FF.	FF FF	FF	FF FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF FF	20000				<u>ः</u>
			00000090	FF	FF FF	FF	FF FF	FF FF	FF FF	FF FF	FF FF	PP PP	FF FF	68988	•		• • • • • •							
			00000040	FF	FF	FF	FF	FF	FF	FF FF	FF	EE.	FF	FF	FF	FF	FF	FF	FF	100.00			• • • • • •	
			00000080	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF					
				FF	FE	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FE	FF	FF	00.00				
			000000000	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF					-
	0		888886E 8	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	1999				84
			000000100	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF					18 -
			00000110	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF					-
	22		00000120	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF					
	22		00000130	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF					-
	6		00000140	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF		• • •			·
	Č.	1	00000150	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF		• • •			2 I
			00000160	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF					S2
	0%		00000170	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	• •	• • •			• •
Official Ch		-Dee Car A	J nananana	CC	CC	CE	CC NC	CC	CC	CC	CC	CC	CC	CC	CC	CC Our	CC	CC	CC	00000	00.0	Devie		
Unicial store, skylaz i ausau cum Aurior, campanula nigrit siyu(skylaz) copyright; mapie Unime Uverwrite Uutset; UUUUUUU, U Device state; Connecter;																								

Make sure the correct chip is selected as shown.

I would now unplug the usb while you attach the Test Clip to the BIOS chip making sure the red wire is positioned at pin 1 indicated by dot on chip.



Plug usb back in and make sure you see device connected in bottom corner.

Click the detect button and you should see additional information about your chip indicating good connection with test clip.

At this point you could do a read and save a backup of your chip but if it's not even booting there's not much point in that.

Click Erase to wipe the chip

Click Blank to check the chip is blank

Open the BIOS file you want to flash. Please refer to these links and be sure to get the right one for your version of Hi12 (single or dual boot).

http://forum.chuwi.com/thread-1160-1-1.html Dual Boot

http://forum.chuwi.com/thread-277-1-1.html (old single boot Win 10)

Unzip the BIOS rar but you only need bios.bin for this method of flashing so discard the rest:

퉲 efi	5/05/2016 10:21 a	File folder	
afuefi.efi	24/06/2015 11:50 a	EFI File	315 KB
afuefix64.efi	24/06/2015 11:49 a	EFI File	368 KB
📑 afuwin.exe	24/06/2015 11:44 a	Application	301 KB
🚓 afuwingui.exe	24/06/2015 11:46 a	Application	541 KB
👍 afuwinguix64.exe	24/06/2015 11:47 a	Application	713 KB
📑 afuwinx64.exe	24/06/2015 11:48 a	Application	366 KB
🚳 amifldrv32.sys	5/12/2014 2:58 a.m.	System file	14 KB
🚳 amifldrv64.sys	5/12/2014 2:58 a.m.	System file	18 KB
📄 bios.bin	29/04/2016 8:40 a	BIN File	8,192 KB
E4D6_HI-122LP.223	29/04/2016 8:40 a	223 File	8,192 KB
startup.nsh	28/04/2016 7:36 p	NSH File	1 KB

Once the file has loaded, click Write to send it to the chip and then click verify to check.

Some more links:

CH341a

http://www.banggood.com/CH341A-24-25-Series-EEPROM-Flash-BIOS-DVD-USB-Programmer-p-929338.html

Test Clip

http://www.banggood.com/SOP8-SOIC8-Test-Clip-With-Cable-For-EEPROM-93CXX-25CXX-24CXX-p-924051.html

Search Aliexpress or other for:

1.8V Adapter, SPI Flash Memory SOP8, DIP8