# KBDFans Original firmware/flashing guide

(yes, you *might* have to flash it manually) ...

▲ Please verify the PCB or <u>you could brick/break your PCB</u> ▲. Not sure? Click below!
● KBDfans guide to identifying the correct firmware for your keyboard

**OPTIONAL** USB bootloader flashing guide: <u>Here</u> (*Here* **For macOS specific one**, <u>click here</u>.)

 For those who do not want to read: MechMerlin's VIA video guide
 MechMerlin's Flashing guide \* Skip the MCU & qmk.fm section

#### Before we start the flashing process (flashing process: skip to page 2)

#### <u>Step 0</u>

**ALWAYS test your PCB before starting the assembly.** This will save you so much time and would avoid the warranty nullification. Yes, you can use tweezers, as seen in this <u>how to test a PCB</u> link.

#### <u>Step 1</u>

Download the VIA or Vial application

- Via for Windows, install via-2.0.5-win.exe
- Via for Mac, install via-2.0.5-mac.dmg
- Vial for Windows/Mac https://get.vial.today/download/

#### <u>Step 2</u>

**Install the program**. If you see the pop-up message saying the program could be harmful, please skip it and install anyway. VIA/Vial is a trustable program, and you can install it!

#### Step 3

Launch the program. KBDFans board would come pre-flashed with VIA/Vial compatible firmware already! So when you plug the keyboard in, the program should detect your board automatically. \*If you are having issues with your keyboard, skip to next step\*

Once the board is detected, try testing the matrix at the **Key Tester** tab. If the board works fine, you are good to go! Start mapping your board and enjoy your new keeb!

**If, for some reason, VIA/Vial is not detecting your board** or the board does not react to your VIA/Vial key mapping; please continue to follow this guide.

# Steps to flashing the PCB

For your best experience with flashing, please  $\checkmark$  <u>flash the PCB outside the case</u> to eliminate any other possible issues. Also connect the USB directly to the computer when flashing. Please  $\checkmark$  <u>avoid using a USB hub or a USB extension cable</u> for this process.

<u>Step 1</u>

Download the latest QMK Toolbox from: <u>https://tinyurl.com/ycujc8hz</u> (Version 0.2.2 or newer)

\*\* QMK Toolbox 0.1.1 (https://qmk.fm/toolbox) Supported bootloaders:

- For Windows, install qmk\_toolbox.exe (or the \_install.exe works too)
   <u>Install the drivers and reboot your computer</u>. To install the drivers, go
  - to Tools and click Install Drivers

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File	Tools He	lp				
Loca	Flash Ctrl+Shift+F			MCU (AVR only)		
	EEPRO	М		►	✓ Open atmega32u2	$\sim$
Keyb	Exit DI	U	Ctrl+Shift+X		Keymap Flash E	xit DFU
Sele	Auto-	Auto-Flash			→ default → Load Auto-Flash	
*** (	Install	Drive	rs Ctrl+N		nk.fm/toolbox)	
1	Option	15	Ctrl+P		THIRD CTHRONICS WIS I AND	

• For Mac OS, install **QMK.Toolbox.pkg** (no need to install drivers like seen above, just a Windows thing)

#### <u>Step 2</u>

After restarting your computer, launch QMK Toolbox. <u>DO NOT</u> touch or select any file just yet. Proceed to step 3.

#### Step 3

With the QMK Toolbox running, reset your PCB by either:

- Hold ESC While Plugging in the USB cable to the computer, OR IF THAT DOESN'T WORK
- Press the reset button underside of your PCB (see figure 1)



Figure 1: Example PCB

Step 4

Normally, the following should happen;

• A <u>Yellow Text</u> appears in the Toolbox indicating the board has entered bootloader mode. Proceed to <u>Step 5</u>

\*\*\* DFU device connected: Atmel Corp. ATmega32U4 (03EB:2FF4:0000)

## <u>OR</u>

\*\* LUFA Mass Storage device connected (USBSTOR): Compatible USB storage device USB Mass Storage Device (03EB:2045:0001)

#### Quick note for HEX file devices:

 If you see the following NO DRIVERS, make sure you are using the latest qmk toolbox, and go into settings and reinstall the drivers. Then reboot your computer.

\*\* Atmel DFU device connected (NO DRIVER): ATm32U4DFU (03EB:2FF4:0000)

Step 5

Find the appropriate firmware for your PCB in the link below

📜 🖬 KBDfans firmware listing

ATTENTION: KBDFans have so many similarly named PCBs. Please check the figure and table below for the commonly mistaken PCBs. Additionally, the guide link below will help you with identifying what file to download. (\*\*If\*\* you have a file given to you, skip this step)

E CKBDfans guide to identifying the correct firmware for your keyboard

#### Step 6

Return to QMK Toolbox. Press the **OPEN** button and select your downloaded file.

QMK Toolbox	
Local file	
	✓ Open

#### AWARNING: Do not use the qmk.fm box or Load features. Leave it blank!!!

Keyboard from qmk.fm	DO NOT USE THIS!	Keymap	$\sim$
	Leave this EMPTY!	$-\mathbf{X}$	

#### <u>Step 7\*</u>

With the Yellow Text still displaying in the Toolbox Window, Click the **Clear EEPROM** Button **IF IT IS AN OPTION\***, and wait for the <u>following message</u> below saying success(it will ask "Did you erase" which you just did) \*<u>New update decides which PCB's can and cannot do this function</u>\*

- If this does not show up, proceed to step 8



Figure 3: Clear EEPROM successful!

#### Step 8

Lastly; Click the FLASH button and wait for the following message



Figure 4: Successful firmware flash

### Finish! Enjoy your build!

**Quick note:** This doc is arranged by Fluorezent#6666, PancakesType#001 and MachineAbuse#1442.

**Fluo's note:** English is not my first language. Apologize if I have made any typo or confusion. If something needs to be fixed, feel free to contact me through discord at any time!

Comments? Fill out this form