

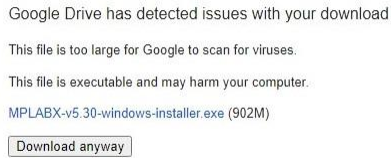
Updating the Genesis With the Pickit3 In The Programmer-To-Go Mode

1. Using the Pickit3 and its USB cable (any USB to USB mini will work) connect the **USB** mini to the Pickit3 & the full-size **USB** end to the USB port on the right edge of the PCB.
2. Connect the Pickit3 to the **'PROGRAM'** header on the PCB, with the pin 1 white triangle indicator oriented toward the lower edge of the board.
3. When the **blue 'ACTIVE'** LED signal starts to flash, press the **button on the PICKit3** to program the PCB.
4. After pressing the program button there should be a moment of the 'STATUS' led flashing **RED** on the PICKit3 as it writes to the PCB, and then turns solid **GREEN** to signal success.
5. Unplug the PICKit3 from the PCB. The display should show the TITLE screen with the updated version number. If the screen stays blank, cycle the power to the PCB to get the TITLE screen.

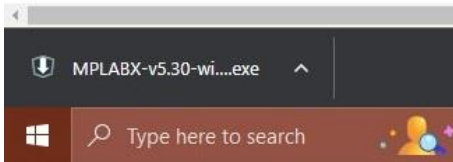
Installing the MPLAB Software

1. Run the **MPLAB IDE Install**, from https://drive.google.com/file/d/1LV-JKttUeT-Lk2dZfyVAotH_IKNOCPP/view?usp=share_link
2. When the page loads click Download.

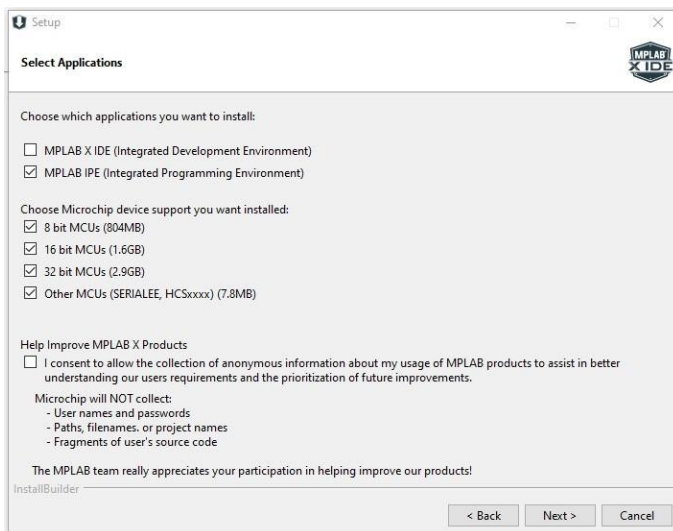
3. The next window will likely show the following message: Click Download anyway.



4. Once the software downloads click on the execution pop up at the bottom of the screen to launch the Setup Wizard. Press Next.



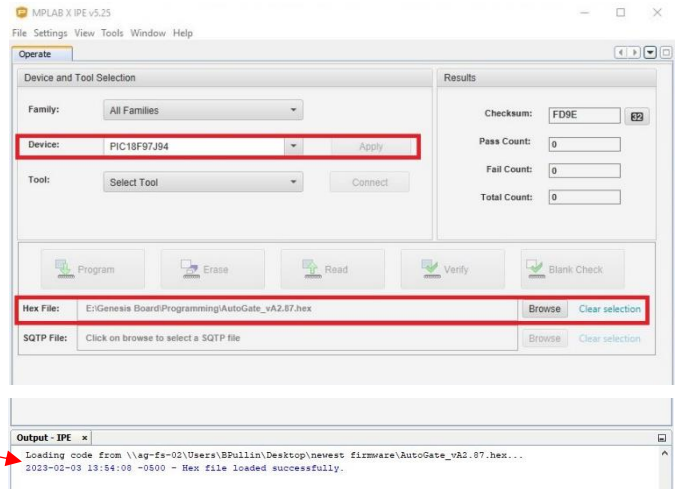
5. Accept the License Agreement. Press Next.
6. Select 'Use System Proxy Settings'. Press Next.
7. During the next step, select just the MPLAB IPE to be installed. (The MPLAB IDE is not needed so uncheck it when installing the program.) Leave all the remaining choices checked. Uncheck the bottom line asking if you want to help with improving the program. After loading program follow the instructions here. Press Next.



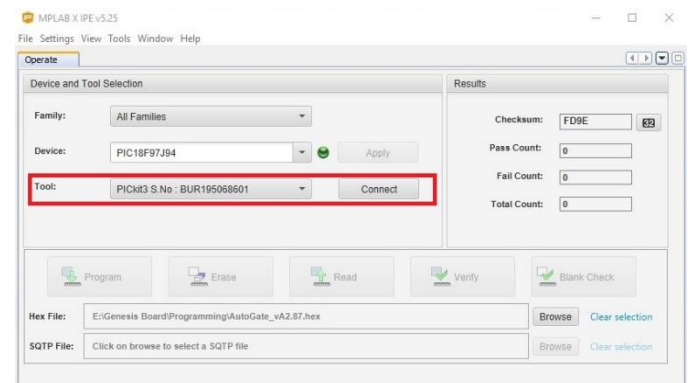
8. Press Next to start the installation. Then Finish.

Re-Programming the Pickit3 With the Download

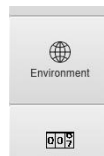
1. Open the MPLAB X IPE v5.30 Software.
2. Select appropriate **device: PIC18F97J94**. (You may type this in to make finding it easier.) Then click the **APPLY** button to the right.
3. Press the **'Browse'** button next to the 'Hex File' field and navigate to the desired firmware .hex file. This is the file that can be emailed by AutoGate. The new version will be AX.XX.



4. Then connect the PICKit3 to your computer USB port. Wait to make sure the PICKit3 is recognized and is listed in the 'Tool:' field. Notice the **GREEN** dot next to the Device. This is how you know that the software recognizes the PICKit3.



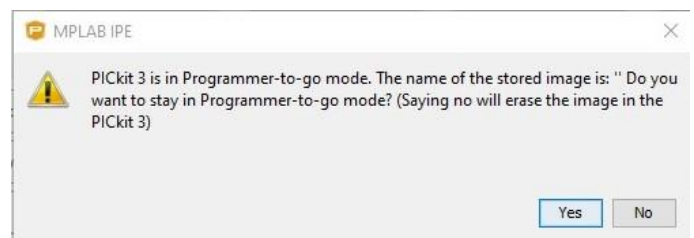
5. Press **'Connect'** button next to tool field. This may take a few minutes the first time as the PICKit3 may need to download the appropriate firmware for the selected device. There will be a statement in **RED** that says it does not see a device, that is OK.



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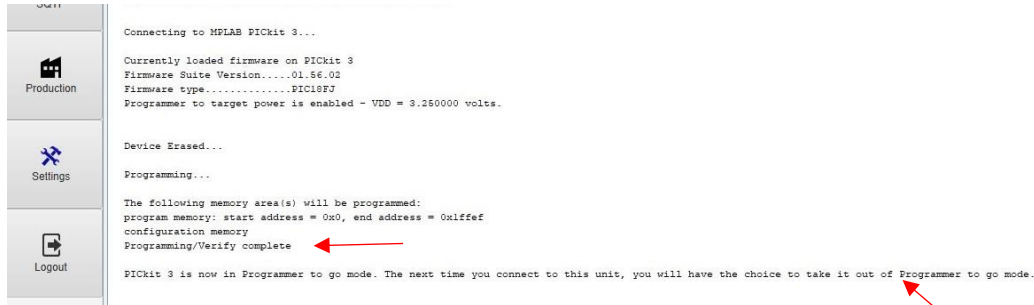
Connecting to MPLAB Pickit 3...
Currently loaded firmware on PICKit 3
Firmware Suite Version.....01.56.02
Firmware type.....PIC18FJ
Programmer to target power is enabled - VDD = 3.250000 volts.
Target Device ID (0x0) is an Invalid Device ID. Please check your connections to the Target Device.
    
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6. A window may pop up letting you know that the PICKit3 is in **Programmer-to-go mode**. It will ask if you want to stay in Programmer-to-go mode. Saying **NO** will erase the previous version of firmware. Press **NO**.



7. Go to **Settings > Advanced mode** in the upper tool bar.
8. Enter Password: **microchip** and press **'Log in'**
9. Select **Settings** in the left side buttons that appear.

10. Name the image if you'd like, but not necessary. I like to name it Ver. AX.XX. Press '**Programmer To Go**' button and wait for confirmation.



11. Click the 'Operate' button in the left side of the window and notice the verification in the Output text that the PICkit3 is now in Programmer to go mode.

12. Click the 'DISCONNECT' box next to the tool designation.

13. Remove the PICkit3 and its USB cable (any USB-to-USB mini will work) It is now ready to update a Genesis control board.