handibot®
smart power tool

TROUBLESHOOTING: Re-flashing Edison (using Windows PC)

1

This document is intended to help solve **problems with hooking-up** and getting your Handibot/FabMo running.

It is an extreme solution involving totally re-flashing the Edison Single Board Computer on your tool.

2

Re-Flash the onboard Intel-Edison SBC with full OS and Software Image

- This procedure re-installs **all software** on FabMo's Single Board Computer, including OS and FabMo. It is a **last-resort option** for FabMo units that are locked, bricked, or in-accessible. All configuration and history data will be lost and settings restored to default values. You will need a Windows PC, standard USB A (male) to micro-USB B (male) cable. This this is the type cable typically used for phone charging.
- You will need to download a very large file (+200M) for the install before you start. Note though, that the re-flashing does not require the FabMo unit to itself have either an AP mode or Network mode connection. An internet connection is only needed to download the large installation file to your device.

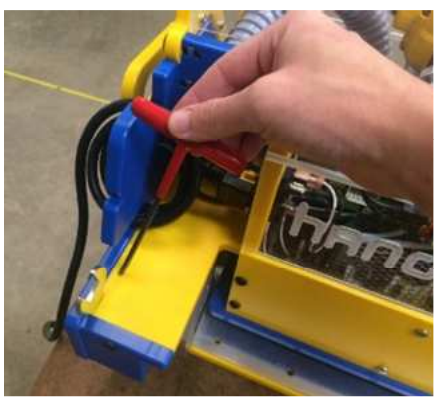
3

First let's prep the Edison SBC on your Handibot

Download and follow these instructions to remove (and later re-install) your FabMo Control Card:

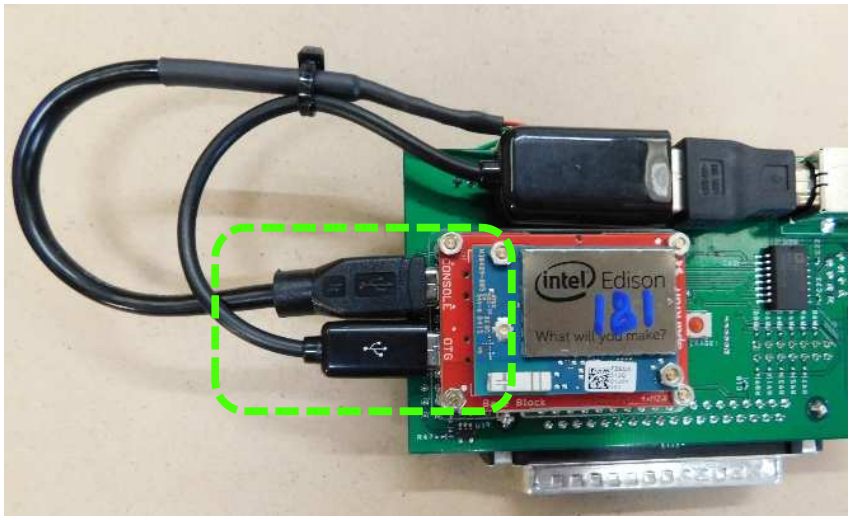
http://docs.handibot.com/doc-output/Handibot2_Replacing_FabMo_Control_Card.pdf

(On the docs.Handibot.com site: "Replacing your Control Card")



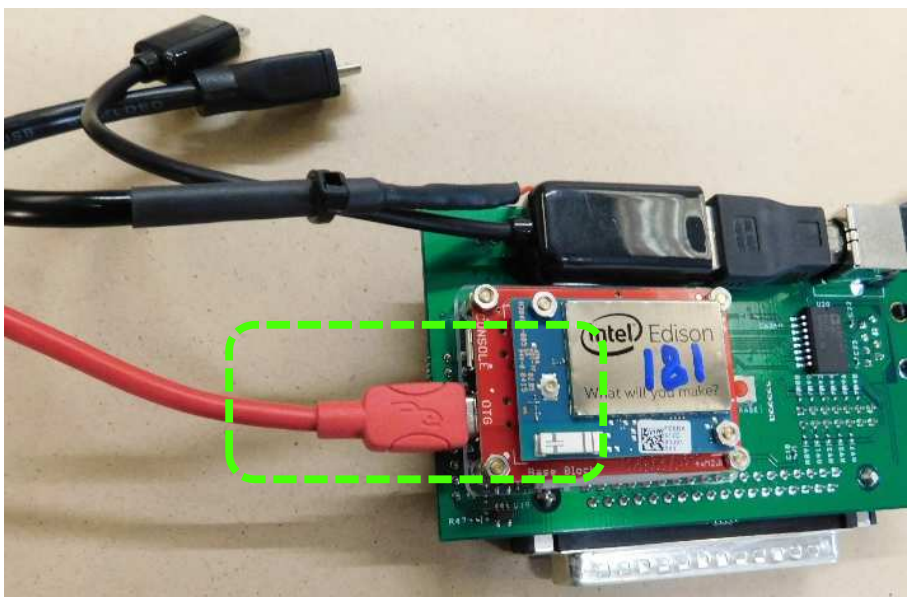
4

Disconnect BOTH USB cables from Edison.



5

Plug USB micro connector on your cable into Edison at “OTG” location. Do not plug the other end in yet.



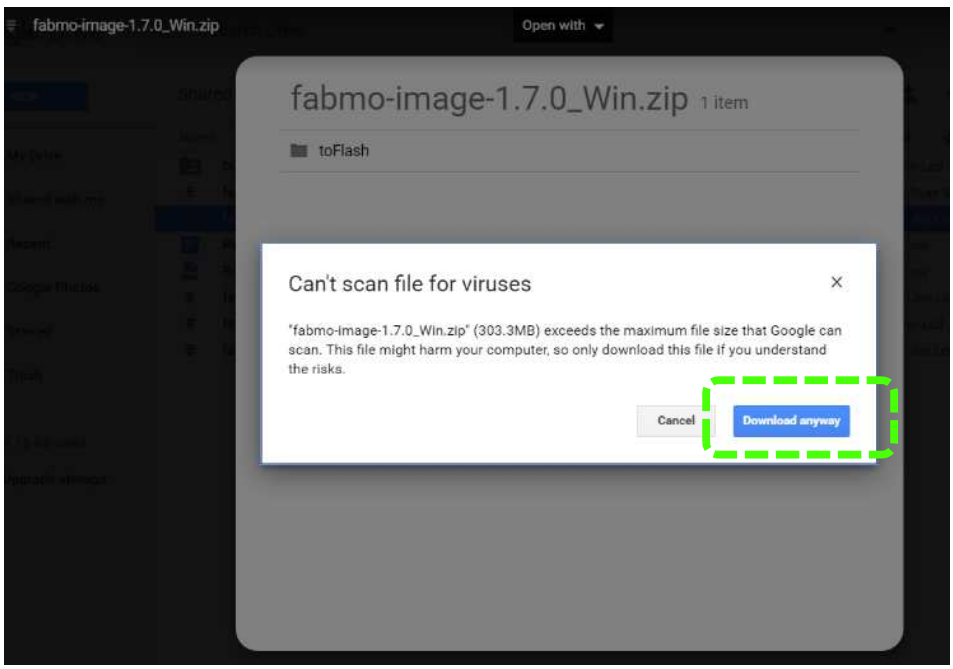
6

From your PC's Browser:
- Go to the link below
- Download the file to a convenient location

https://drive.google.com/open?id=0B5S7sMQs5whAOVpfZzlnYUN0VzQ

7

Click Download Anyway to start the download …



8

Extract the compressed files (Unzip)

<u>This first time you flash a FabMo Control Card:</u>
You will need to install the USB Drivers for the Intel Edison. Double click on …

https://drive.google.com/open?id=0B5S7sMQs5whAUVNEcUpycHVkdEk

… and follow the instructions.
*You only need to install these one time.
Then *plug in the USB from the Card for a minute* to trigger the completion of the driver install. <u>*Unplug when you are finished.*</u>

9

Now you're ready to re-flash your Card.

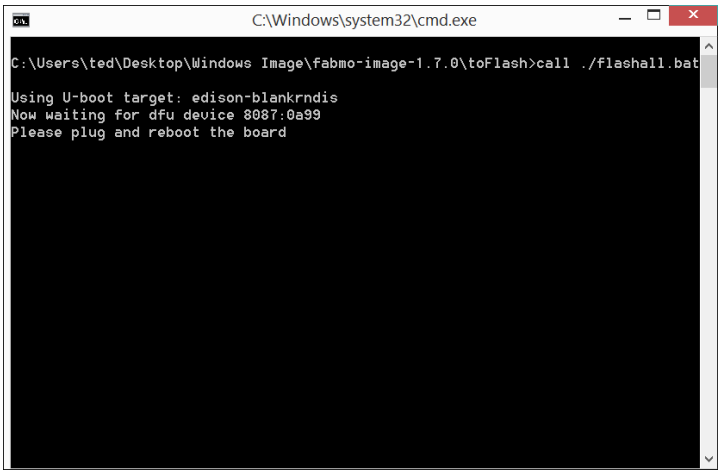
a. Open the Folder labeled: *fabmo-image-xxxx*

a. Then, open the Folder labeled: *toFlash*

b. Double click (to run): *flash.bat*
*Careful, **not** flashall.bat !*

If you get a security warning from Windows:
Click "more info" and choose "Run Anyway" …

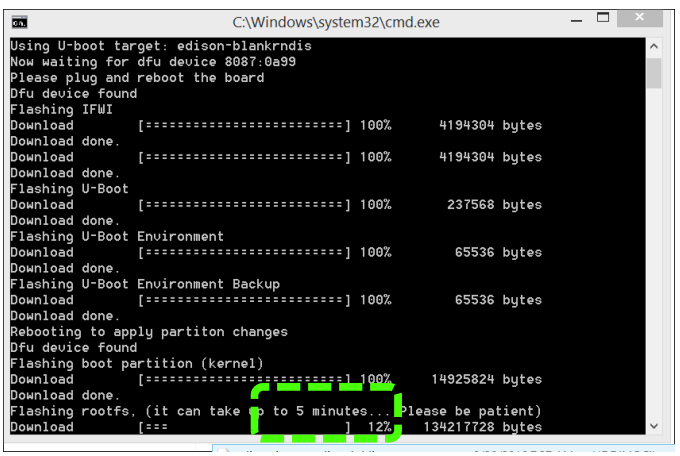
10 You should see a console screen that looks something like this.



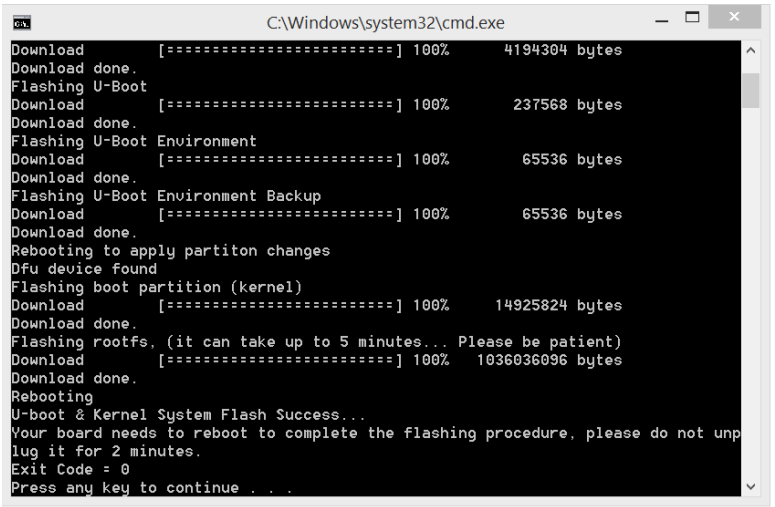
Now, PLUG-IN the USB cable to a USB 2.0 slot on your computer to start the re-flash.

11

- a blue LED on the Edison should come on
- you may hear a couple beeps from the PC
- (you may need to wait a couple of minutes before things continue)
- the screen will show several download messages before one that says up to “5 minutes” … so wait



12 Eventually, the primary download will complete.



After the primary download completes, wait 2 full minutes for all processes to update before unplugging the cable.

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The Re-Flash is Complete!

*Re-install the Control Card and you are about ready to run your Handibot again.

Turn your Handibot on once, let it sit about 2 min to upgrade firmware, then turn it off and back on before using your device to connect.

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Possible Issues:

- download may not work on USB3.0 or USB port designated high power (“+” or lightening symbol) … try another USB port

- download may require installing the dfu-utility.exe for Windows. This utility is also in the folder you unzipped. Right click it and “Run as Administrator”. Then re-flash.

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Give us a call if you have problems with this procedure!

919.680.4800