


[Home](#) > [Support](#) > [Documents](#) > Loader (TinyBooter) Update G400

Documents

System on Module

File System Hardware

NETMF

.NET Gadgeteer

Loader (TinyBooter) Update G400

Tagged with no-tag

Contents

1. [Introduction](#)
2. [Loader Update](#)

Introduction

Cross Reference: you might want to read the [introductory page](#) explaining the firmware (TinyCLR) and the loader (TinyBooter). It gives a basic procedure for determining whether or not you need to update. It also contains **tips** and **trouble shooting advice**.



Tip

This document describes updating TinyBooter for *specific* processors.

To make sure that this document is *for your processor* see the generic [Loader \(TinyBooter\)](#) documentation.

Loader Update

This process will delete all data currently on the board (loader, firmware, config) and update the loader (TinyBooter) with the version that is in the current SDK.



Tip

On Windows 8, you must have Administrator privileges to perform this procedure.

Before proceeding, you must download and install the 2.12 version of the [Atmel In-system Programmer](#):

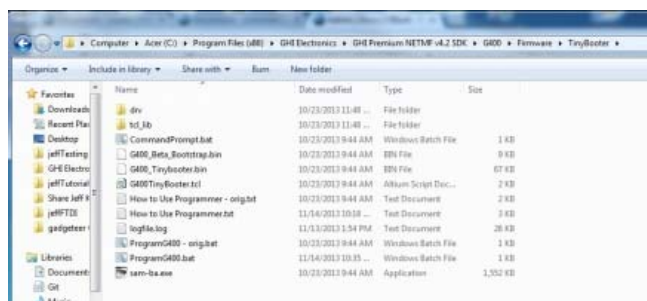
1. You should turn-off any Anti-virus programs on your computer due to a false-positive virus detection while installing.
2. Go to the [Atmel web site](#), and click on the icon in the "Software" column next to "SAM-BA 2.12 for Windows (XP, Vista, Seven editions)". Follow the instructions.
3. Once downloaded, run the installer application (*sam-ba_2.12.exe*).

Now you are ready to update the loader (Tinybooter):

Step 1. use the appropriate paragraph below:

if using a 4.3 based SDK (GHI Electronics' "NETMF and Gadgeteer Package 2014 R2" and newer), C:\Program Files (x86)\GHI Electronics\GHI NETMF v4.3 SDK\Firmwares\G400

If using a 4.2 based SDK: Navigate to "C:\Program Files (x86)\GHI Electronics\GHI Premium NETMF v4.2 SDK\G400\Firmware\TinyBooter" (Or if you are on 32bit Windows, "C:\Program Files\GHI Electronics\GHI Premium NETMF v4.2 SDK\G400\Firmware\TinyBooter"). Substitute the major version of NETMF that you are using in place of **4.2**.



Tip

The following tip is purely informative; if you do not understand it, ignore it.

Although there are "LDR1" and "LDR0" buttons on the FEZ Raptor, they currently (as of NETMF and Gadgeteer Package 2013 R3) have no function regards updating TinyBooter. A piece of the underlying low level code needs to be added before the buttons can be used for entering loader mode. This unimplemented software has absolutely no relation to the functionality of

TinyBooter, TinyCLR and/or .NET Micro Framework.

Step 2.

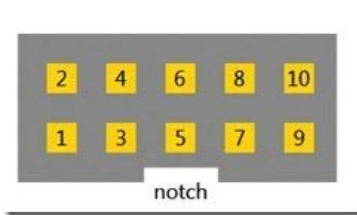
Put the board in Loader mode; depending on your product this is done one of the following ways:

G400 SoC products: Ground PA11, reset or power cycle the board. With power still ON, unground PA11

FEZ Raptor mainboard:

1. connect the board to the power supply and computer,
2. locate socket 3,
3. on socket 3, connect pins 8 and 10 with a wire,
4. press the reset button on the Raptor board,
5. remove the wire ("unjumper") from pins 8 and 10

In either case, be sure to unjumper the FEZ Raptor board or the G400 processor within 3 seconds.



More info on sockets found in [Gadgeteer Hardware](#)



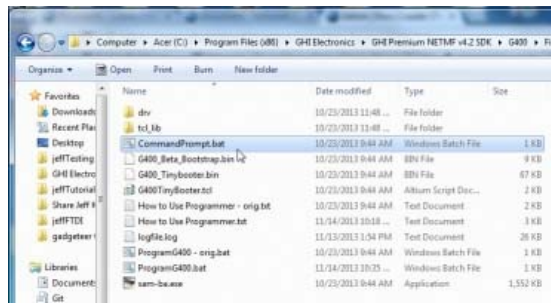
Step 3.

Open the "Devices and Printers" window, under "Unspecified" you should see a device with a "COMnn" label (where nn is some number). For example "Bossa Program Port (COM38)"



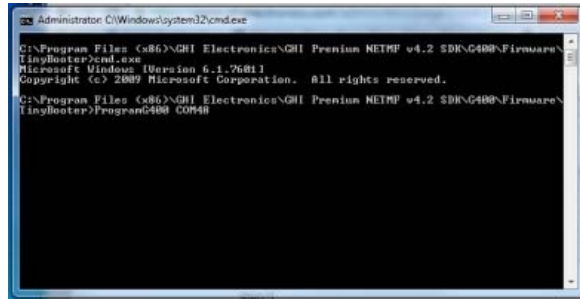
Step 4.

Once you have the COM port number, double click on the CommandPrompt.bat batch file to bring up the command prompt.



Step 5.

At the command prompt, you will need to type: "ProgramG400 COMnn"
Where COMnn is from Step 3. (NOTE - "COM" needs to be in upper case for this to work)



Step 6.

Wait until the process is complete (be patient, it can take a while). Once complete, a log file (*logfile.log*) will open in "notepad".

1. Close *notepad*.
2. Type "exit" at the command prompt.



Step 7.

Reset the device and [Firmware Update](#) using FEZ Config.
Enjoy!

[Leave feedback](#) about this document.

Let us know if the information presented here was accurate, helpful and if you have any suggestions.