

*Anyway it works fairly well but there are a bunch of artifacts with my Tandy 1000 EX .. so I want to update the FPGA and see if the new modes help. Is there an idiots guide to this? Im more of a build stuff HW guy.*

First try adjusting the phase (reset button) if you haven't already.

You will need Quartus and a USB blaster. You can [download Quartus Prime Lite](#) for free after you register.

This is the cheapest USB blaster that I have found to be fully functional. The Waveshare blaster also works but it's about twice the price. (Using Linux, I was able to get the cheap USB blaster included in the kit to program the FPGA, but not the flash. So you might be able to use it for testing if you leave it powered up.)

The code is [here](#). Click the commit for the version you want. Then click "Browse files". Then click "Clone or download" and download the zip.

Install and run the Quartus Programmer. Click "Hardware Setup" and select your USB blaster. If it's not detected, install the driver in "quartus\drivers\usb-blaster" (Windows) or [change the port permissions](#) (Linux).

Click "Add File" and select the .jic file (in the output\_files folder of the code zip), check the program/verify boxes, and then "Start". The power must be on to the FPGA board. If it fails part way, you may need to retry it a few times.

If you are using the cheap USB blaster, select the .sof instead. This will only program the FPGA and not the flash (the config will be lost once you turn it off).

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#163



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I decided Plasma's instructions were easier to follow than mine. So, I deleted mine.

*Last edited by ibmapc; Today at 01:48 AM.*

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Today, 01:35 AM

#164



**dJOS** Senior Member

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**Originally Posted by ibmapc**

*I think dJOS is looking for guidance with updating the firmware. I would suggest buying a decent USB Blaster. I have not had any luck with the one that Plasma supplied with the kits. I just get a BSOD. However, **THIS ONE** works well for me. Then download the QUARTUS Programmer software and install it. If you don't plan to make modifications to the firmware, I think you can*