

TBBLUE v.0.7 SD card distribution containing the following: Fixed HDMI/VGA core with programmable PLL clocks controllable via configuration file, NextOS 1.92D, Support for dual SD cards (in both Core and OS), Geoff Wearmouth's Gosh Wonderful 1.32 and Paul Farrow's ZX80 and ZX81 emulators (latter accessible both as a tape-only supporting personality via Menu or directly via NextOS with .P and .O files launchable via Browser).

This edition introduces a new FW file whose version is 1.04c as opposed to the previously available 1.03.

This version introduces a second variable in the config.ini file menu items right after the machine type.

The menu lines now read: Menu=[Name of Personality],[MachineType],[MonitorType],[mainrom],[additionalrom]

The [MonitorType] is an integer from 0 to 7 with 0,1,2,3,4,5,6 being (mainly) for VGA and 7 exclusively for HDMI.

Starting with 50Hz (or 60Hz) each number until 6 increases the frequency by approximately 1Hz (dependent on the internal multiplier) with 7 being locked at 50@720x576p and 60@720x480

There are two preprogrammed defaults in the config.ini, one with VGA with timing 0 and one with HDMI with timing 7.

F3 switches from 50Hz to 60Hz and vice-versa

Notes on settings. If you had a firmware prior to HDMI1/2 (which weren't F3 switchable) and it worked fine with HDMI that means your most appropriate timings are 0. HDMI (7) will work too but some stuff may behave a bit funny (especially if you're locked at 60Hz currently). You should therefore select default=7 instead of default=8 (or press SPACE while booting to access the boot menu and select ZX Spectrum Next VGA)

Prepare the card as usual, dumping the appropriate version (Regular or speed reduced) into your card. Firmware file will be replaced and unless you fall in a specific category (see below) you should leave it alone.

*****WARNING*****

USERS OF FlashAir CARDS are advised to perform ALL file copy operations locally on their PC/MAC and NOT over the air.

*****IMPORTANT*****

Changing the timing will provide you with a PERFECT picture but it will impact the speed of your classic software. Especially DEMOS may not work at all as they rely on very weird timings. The next CORE that's expected will further improve that by introduction of further refinements in the ability to read timings.

WEIRDLY LOOKING/BEHAVING DEMOS ARE ***NOT*** SOMETHING TO REPORT. They're NORMAL

FLASHING THE NEW CORE

1. For people with normal PS/2 keyboards and/or membranes (but which also have PS/2 keyboards)

Let the machine boot normally, then press and hold U on your PS/2 keyboard, then tap momentarily on F1 (still holding U) and release U when you see the updater module. Press Y wait until all flashing is completed, then power down the Next and REMOVE ALL CABLES. Wait a little and then plug everything back up again. If you have a VGA you need to select upon boot (with space) the option ZX Spectrum Next VGA, otherwise if you have HDMI boot with ZX Spectrum Next HDMI (default). If you're in Brazil, Japan, the USA or Canada, chances are your monitor only supports 60Hz, so go ahead and tap F3 now -or alternative you can change the 50_60 setting to 1 from config.ini or by editing the settings in the boot module

2. For people with Perixx PS/2 keyboards and/or keyboards with a similar controller on board. You cannot upgrade immediately. First you need to go to c:/FactoryTBU/FW 1.04c/ and grab TBBLUE.TBU.CLOCKS and place it in the root folder of your SD and replace TBBLUE.TBU Then proceed as in case 1 above. Failing to use this core will render your keyboard useless and you will need to use the AB system to recover (AB system uses a compatible keyboard controller with your keyboard). In that case see notes on using the AB in case 3 below.

3. For people with membrane keyboards where the updater module cannot be entered. This becomes a bit complicated so you need to follow these instructions carefully

a. Rename the TBBLUE.FW in the root of your SD Card to TBBLUE.FW.NEW

Copy from c:/FactoryTBU/FW 1.03/the file TBBLUE.FW to the root of the card.

b. Enter AB mode by removing all cables (including HDMI), pressing and holding M1 and Drive (simultaneously), then reapplying power (no HDMI or VGA yet) waiting a few seconds (2-3) and releasing the keys, then reconnecting the display lead that worked for you previously. Press Y for update

Once the flashing is completed and before booting, take your card to a PC, DELETE TBBLUE.FW from the root of the card and rename TBBLUE.FW.NEW you had previously modified back to TBBLUE.FW

c. Follow the instructions in Step 1 to boot the system.

For people with persisting membrane keyboard problems, there is an alternative membrane keyboard core for which you need first to talk to me before applying.

Happy Nexting and Happy Christmas from The SpecNext Team and myself!