TECHNICAL NOTE

Date: 23rd May 2023
Ref: 582
Raised by: AR
Distributed to: As Required

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DMI-Dante64@96 with IP Zynq HC
Upgrading Firmware Code

The new DMI-Dante64@96 with Zynq module ships with firmware version v105 from the factory – see Tech Note 580.

The card is compatible with SD and Quantum consoles, S-Series consoles and the OrangeBox.

As of May 2023, this card is not yet compatible with 4REA4 systems.

No firmware upgrade is required to use the card with the current versions of software.

But since the card's firmware version of v105 is not included in the current software packages, it is possible that older firmware gets installed which leaves the card inoperable.

This Tech Note explains the necessary steps to remedy this situation and re-install the v105 firmware.

The next software release will address this and prevent unintended firmware downgrades.

For this you will require:

- TN582 (this document)
- A USB stick readable by a computer and the console
- The DMI-Dante64@96 V105 firmware files, downloadable from:
  https://digico.biz/wp-content/uploads/2023/05/DMI_Dante6496_v105.zip

Steps to perform the firmware upgrade on an S-Series console.

Steps to perform the firmware upgrade on a Quantum or SD Series console.

Steps to perform the firmware upgrade on an S-Series console.

1. Download the v105 firmware files.
   https://digico.biz/wp-content/uploads/2023/05/DMI_Dante6496_v105.zip
2. Extract the archive and copy the files called **digico_dmi_dante6496z.bin** and **digico_dmi_dante6496z_fpga.bit** to a USB stick.
3. On the console, insert the USB stick and navigate to the System \ DMI Slots page.
4. The DMI-Dante64@96 card is detected and the firmware is displayed as 'up-to-date'.
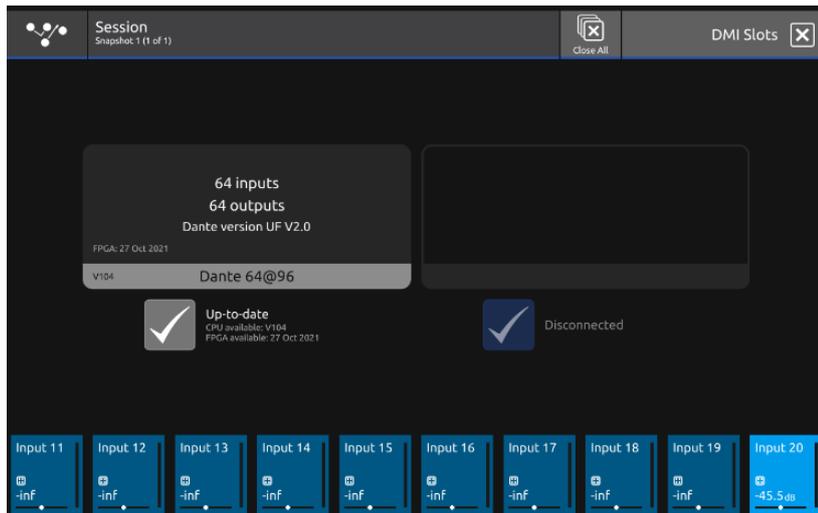
5. Click-hold on 'Up-to-date' and it will show the option to update the files for the CPU and FPGA manually.
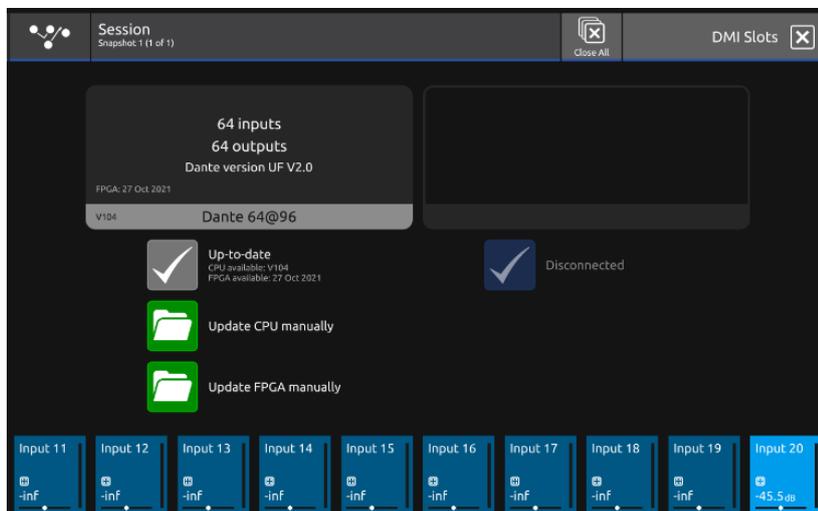
6. Click on 'Update CPU manually' and select the external file location (USB stick).
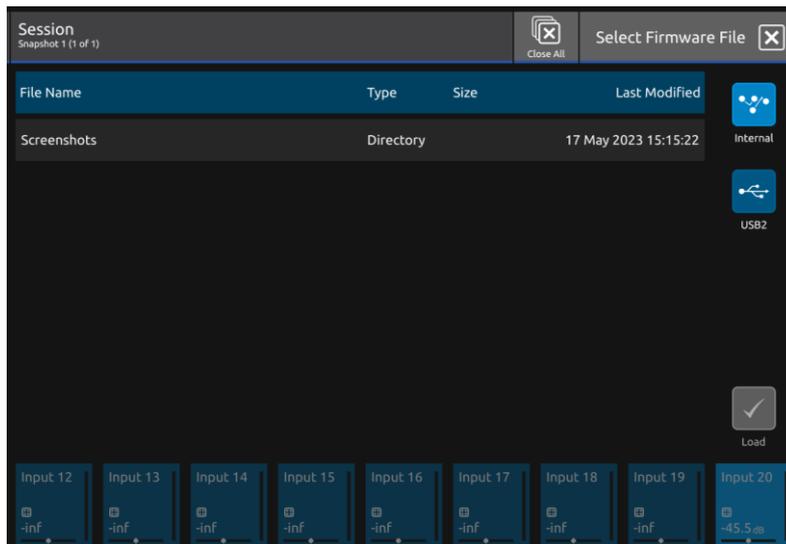
7. Navigate to the location where the .bin file resides. Select the file and click on the green 'Load' button in the lower right corner.
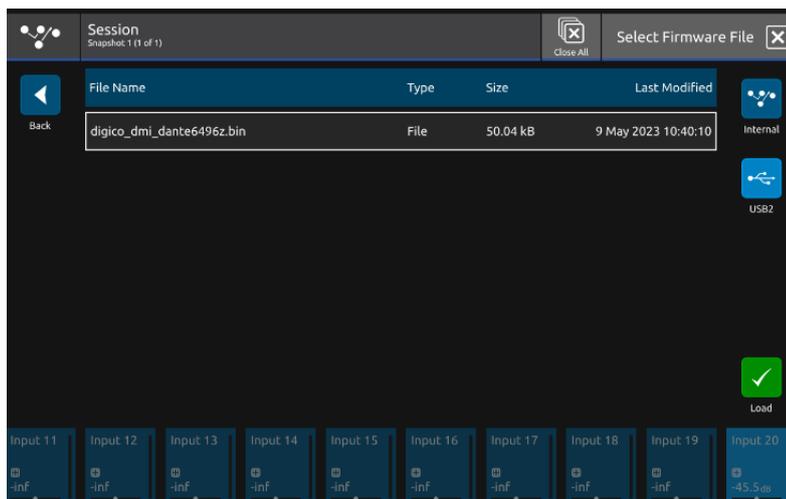
8. The system will inform you that either the CPU or FPGA update has started.
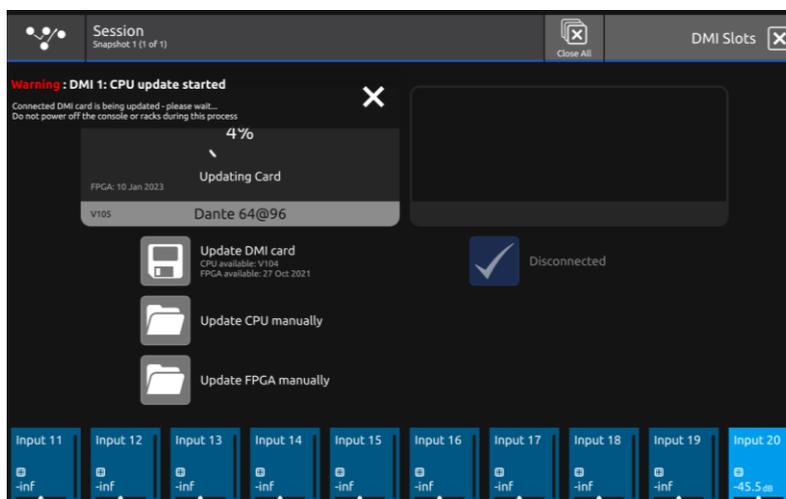
9. Wait for the confirmation on-screen that the process has finished.
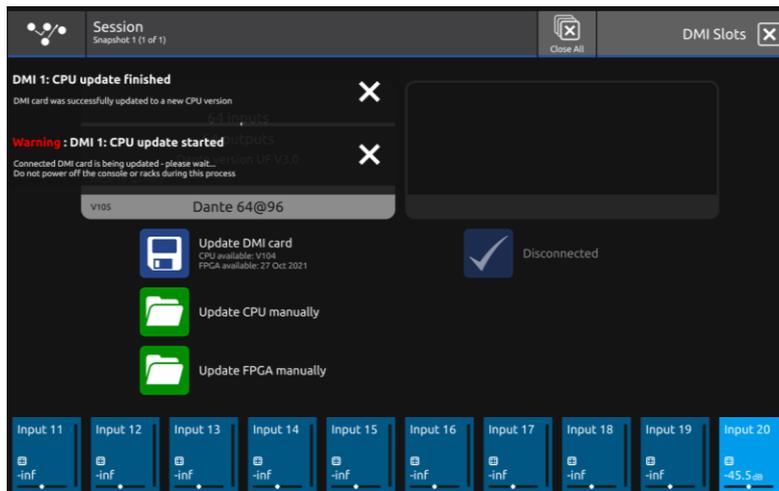
10. Complete these steps for both the CPU and FPGA firmware.

11. Shut down and power off the console completely. Then you may power the console on and continue using it.

Steps to perform the firmware upgrade on a Quantum or SD Series console.

1. Download the v105 firmware files.
   https://digico.biz/wp-content/uploads/2023/05/DMI_Dante6496_v105.zip
2. Extract the archive and copy the files called **digico_dmi_dante6496z.bin** and
   digico_dmi_dante6496z_fpga.bit to a USB stick.
3. On the console, insert the USB stick, quit to Windows, and navigate to the D:\ drive.
4. Open the main SD or Quantum folder.
5. Open the DMI folder inside.
6. Move (don't copy) the files **digico_dmi_dante6496.bin** and **digico_dmi_dante6496_fpga.bit** onto the
   USB stick. These are the previous firmware files (v104) without the letter 'z' in the file name.
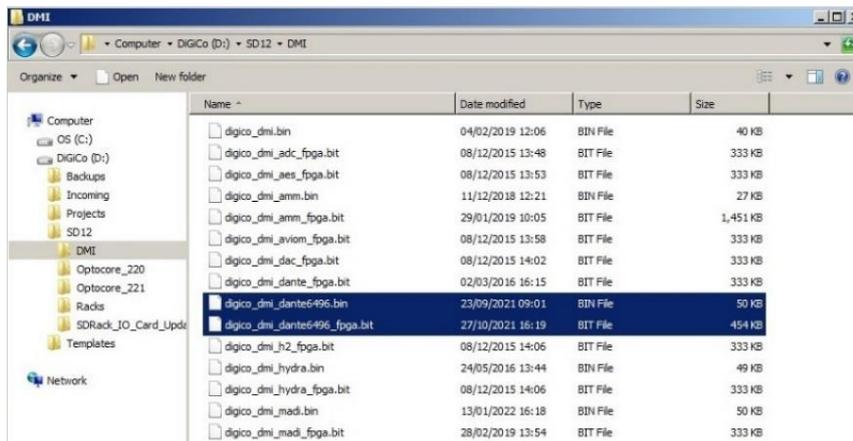
7. Now copy the new files (with letter 'z') from the USB stick into the DMI folder on the console.

8. <u>Important!</u> Rename the files by deleting the letter 'z' from the file name. The files will not be correctly recognised if the letter 'z' is not removed from the file name.

9. Run the UpdateHardware.exe program (SD Consoles) or the UpgradeQuantum.exe program (Quantum consoles). Check that the available firmware version is now v105 and the FPGA date code is 10/01/2023.
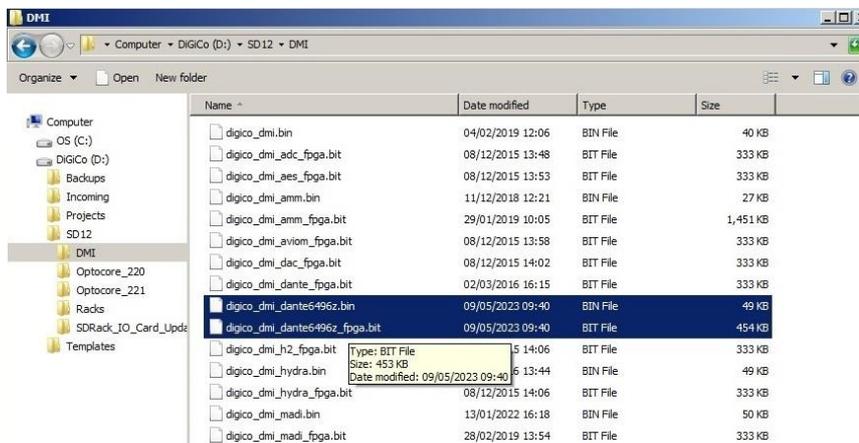
10. Click on 'Update' and the process will start.
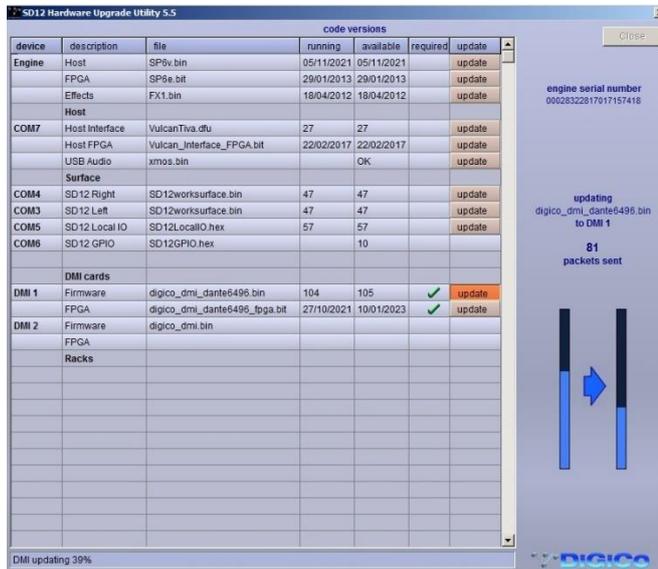
11. Ensure the upgrade process is reported as 'successful', then repeat the process for the FPGA.
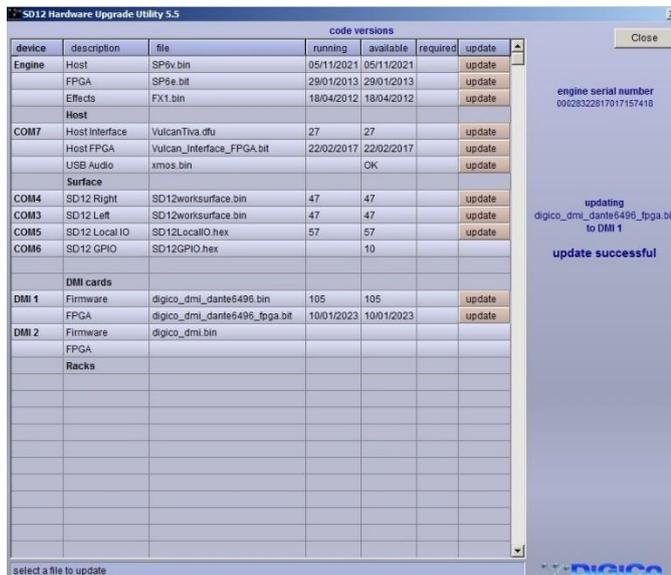
12. Once both the firmware and the FPGA have been updated successfully, close the updater.

13. Use File Explorer to copy the two original files from the USB stick back into the DMI folder, overwriting the renamed files that were used for this upgrade process. This restores the software installation to its original state. This is advisable as it prevents the v105 files being used to update any original DMI-Dante64@96 cards.

14. Shut down and power off the console completely. Then you may power the console on and continue using it.