DE10-Nano FAQ

Q1

Why can't I find the version corresponding to DE10-Nano kernel 4.5 at Intel's official GitHub website (https://github.com/altera-opensource/linux-socfpg)?

A1 : Intel has removed the link to download old versions due to its business strategy. But don't worry! Terasic has kept all branches at https://github.com/terasic/linux-socfpga so you can download multiple versions of kernel source code from there.

Q2

Where can I find the most-used source codes of "Web Server" demonstration in "DE10-Nano Getting_Started_Guide.pdf" manual?

A2 : Hardware source code:
https://github.com/intel/de10-nano-hardware
Software source code:
https://github.com/intel-iot-devkit/terasic-de10-nano-kit/tree/master/code-samples/fast-fourier-transform

Q3

When using the LXDE image file to play video on the DE10-Nano, the video images displayed correctly but without audio output from the HDMI. Why?

A3 : The LXDE image file does not contain driver for implementing HDMI. User should implement the HDMI audio hardware design in the image's underlying hardware Quartus II project, while implementing the HDMI driver in the kernel.

Q4

Where are the Quartus hardware projects corresponding to the three Linux image files (Console, Xfce Desktop, and LXDE Desktop) on the DE10-Nano official website?

A4 : Download the hardware project for DE10-Nano Linux Console from DE10-Nano system CD with file path: \Demonstrations\SoC_FPGA\DE10_NANO_SoC_GHRD

Download the hardware project for DE10-Nano Xfce Desktop at https://github.com/01org/de10-nano-hardware/tree/RELEASE_BUILDS

Download the hardware project for DE10-Nano Linux LXDE Desktop from DE10-Nano system CD with file path: \Demonstrations\SoC_FPGA\DE10_NANO_SoC_FB

Q5

When the DE10-Nano is set in FPP mode (01010) and executes the image file "DE10_Nano_Xfce.img", simultaneously, the user downloads .sof file (for example DE10_Nano_Default.sof) into the FPGA, this will cause the HPS to reboot, i.e. the LED goes out and Linux system automatically restarts. Why is that?

A5 :
When using DE10_Nano_Xfce.img in FPP mode (01010) and booting up the board from the SD card, it will configure .rbf (similar with .sof file) to FPGA first then launch Linux system. If you download the .sof file in this mode, it will cause FPGA hardware changes and restart Linux. As a result, the LED is off and the system restarts.

If you only want to use FPGA part for research& development without HPS fabric, please switch the MSEL to AS Mode (0010) before downloading files.

P.S. Earlier versions of the images such us "DE10_Nano_LXDE.img" and "de10_nano_linux_console.img" won't cause you such problem.