

# PetaLinux Tools Documentation

## *First Boot Checklist*

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## Revision History

Date	Version	Notes
11/24/2014	2014.4	Initial public release for PetaLinux Tools 2014.4
08/17/2015	2015.2	Updated for PetaLinux Tools 2015.2 release
08/25/2015	2015.2.1	Updated for PetaLinux Tools 2015.2.1 release
12/07/2015	2015.4	Updated for PetaLinux Tools 2015.4 release

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## Online Updates

Please refer to the PetaLinux v2015.4 Master Answer Record ( [Xilinx Answer Record #55776](#) ) for the latest updates on PetaLinux Tools usage and documentation.

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## First-Boot Checklist

Topic	
<b>Hardware Configuration (Vivado)</b>	
AXI peripherals have interrupt lines connected	
System includes a timer peripheral (ARM: TTC; MicroBlaze: AXI Timer)	
UART is configured based on system requirements (eg, baud rate, parity)	
<b>System-Level</b>	
Default boot medium specified (eg, device which stores FS-BOOT (MicroBlaze) or BOOT.BIN (ARM))	
Default networking interface specified (multi-interface environments) in system-level configuration	
IP address allocation specified (eg, DHCP or static IP) in system-level configuration	
Default kernel storage medium specified in system-level configuration	
<b>U-Boot Configuration</b>	
(Optional) #define CONFIG_ options added to U-Boot platform-top.h	
(Optional) U-Boot environment variables specified in U-Boot platform-top.h	
<b>Device Tree Configuration</b>	
(Optional) Board-level interfaces (eg, SPI, I <sup>2</sup> C, etc.) added to system-top.dts	
Ethernet PHY device node(s) added to system-top.dts	
<b>Linux Kernel</b>	
(Optional) Kernel boot arguments updated in system-level configuration	
All needed device drivers are included in kernel configuration	
<b>Root Filesystem</b>	
(Optional) Flash partition specified in system-level configuration	
(Optional) Root filesystem package list updated in rootfs configuration	
Root filesystem type specified (eg, INITRAMFS, on-disk) in system-level configuration	
Raw root filesystem contents available in <project_dir>/build/linux/rootfs/targetroot	
<b>Output Collateral</b>	
(SoC Only) BOOT.BIN created with petalinux-package	
(FPGA Only) PROM MCS file created with Vivado	



**IMPORTANT:** *Re-synchronize hardware modifications with the PetaLinux project using `petalinux-config -get-hw-description <path_containing_hdf>`*



**IMPORTANT:** *See UG1144 - PetaLinux Reference Guide for details on the various PetaLinux workflows*

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## Additional Resources

### References

PetaLinux Tools Documentation is available at <http://www.xilinx.com/petalinux>.