

# UUB's SPI device tree configuration

This document describe which files are safe to modify to get the functionality of the SPI interface on UUB under petalinux.

PetaLinux device tree configuration is associated with following config files that are located at <plnx-projroot>/subsystems/linux/configs/device-tree/.

Two device tree files used to build device tree are: **zynq-7000.dtsi** and **pcw.dtsi**

## Modifications for the file "zynq-7000.dtsi" for SPI0 and SPI1

```
spi0: spi@e0006000 {
    compatible = "xlnx,zynq-spi-r1p6";
    reg = <0xe0006000 0x1000>;
    status = "okay";
    interrupt-parent = <&intc>;
    interrupts = <0 26 4>;
    clocks = <&clkc 25>, <&clkc 34>;
    clock-names = "ref_clk", "pclk";
    #address-cells = <1>;
    #size-cells = <0>;
    num-cs = <5>;
    is-decoded-cs = <1>;

    spidev@0 {
        compatible = "spidev";
        reg = <0>;
        spi-max-frequency = <50000000>;
    };
    spidev@1 {
        compatible = "spidev";
        reg = <1>;
        spi-max-frequency = <50000000>;
    };
    spidev@2 {
        compatible = "spidev";
        reg = <2>;
        spi-max-frequency = <50000000>;
    };
    spidev@3 {
        compatible = "spidev";
        reg = <3>;
        spi-max-frequency = <50000000>;
    };
    spidev@4 {
        compatible = "spidev";
        reg = <4>;
        spi-max-frequency = <50000000>;
    };
};
```

```

spi1: spi@e0007000 {
    compatible = "xlnx,zynq-spi-r1p6";
    reg = <0xe0007000 0x1000>;
    status = "disabled";
    interrupt-parent = <&intc>;
    interrupts = <0 49 4>;
    clocks = <&clkc 26>, <&clkc 35>;
    clock-names = "ref_clk", "pclk";
    #address-cells = <1>;
    #size-cells = <0>;
spidev@0 {
    compatible = "spidev";
    reg = <0>;
    spi-max-frequency = <50000000>;
};
};

```

## Modifications for the file "pcw.dtsi" for SPI0 and SPI1

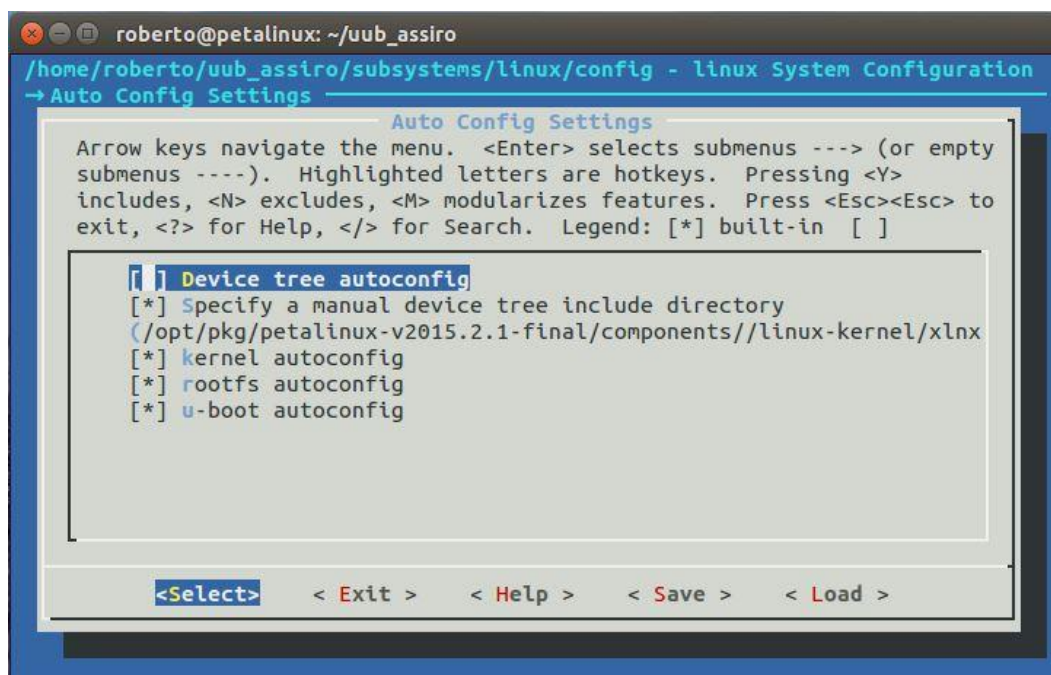
```

&spi0 {
    is-decoded-cs = <1>;
    num-cs = <5>;
    status = "okay";
};

&spi1 {
    is-decoded-cs = <0>;
    num-cs = <1>;
    status = "okay";
};

```

## Modification for petalinux-config



Deselect 'Device tree auto config' and run petalinux-build