

## How to make the DTB Files correct? For PiKVM

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extracting:

```
dtc -I dtb -O dts -f inputfile.dtb -o outputfile.dts
```

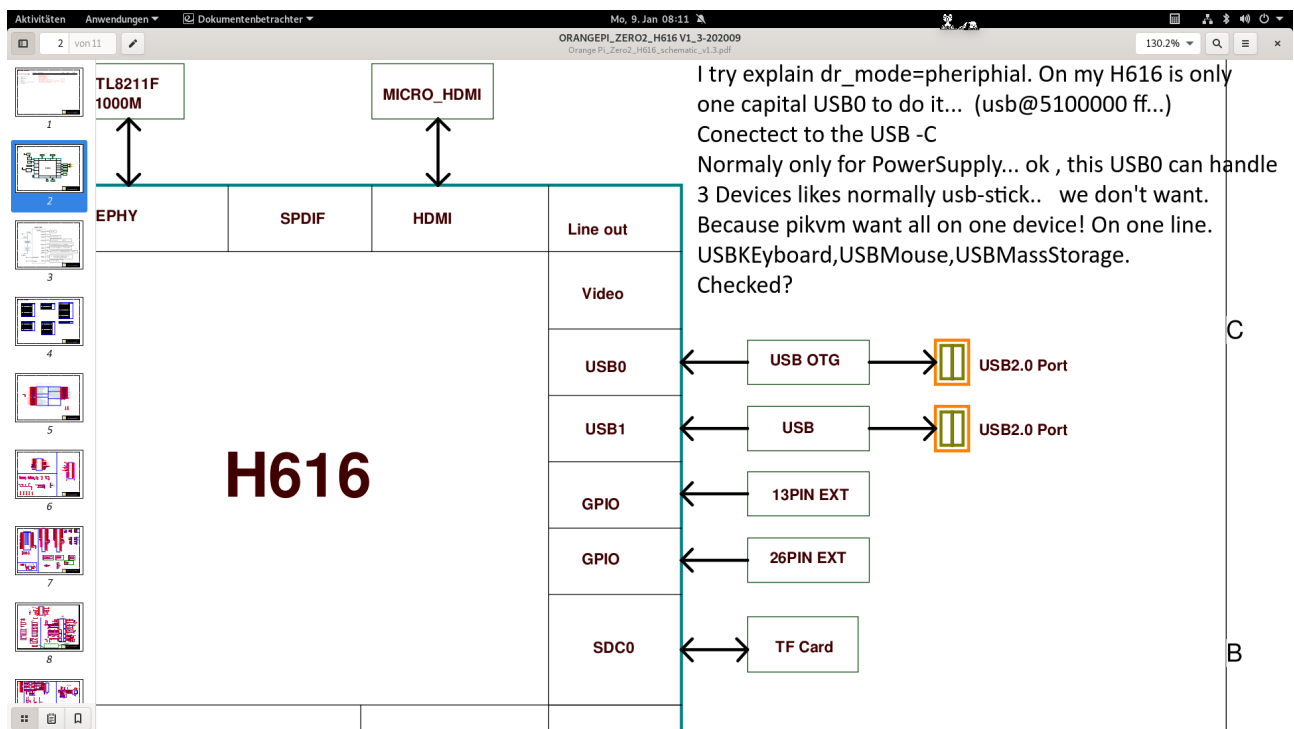
OK, now you can edit that outputfile.dts , save all, ready? Ok we go on....

We recompile back your changes.....

```
dtc -I dts -O dtb -f inputfile.dts -o outputfile.dtb
```

checked? Done....

Why?? i show....



What is defined in dtb original? Or what is wrong for PiKVM??? Look on USB510000..ff

```
ethernet@5030000 {  
    compatible = "allwinner,sun50i-h616-eth";  
    syscon = <0x33 0x01>;  
    reg = <0x5030000 0x10000>;  
    interrupts = <0x00 0x0f 0x04>;  
    interrupt-names = "macirq";  
    resets = <0x02 0x1f>;
```

```

reset-names = "stmmaceth";
clocks = <0x02 0x53>;
clock-names = "stmmaceth";
status = "disabled";
phandle = <0x75>;

mdio {
    compatible = "snps,dwmac-mdio";
    #address-cells = <0x01>;
    #size-cells = <0x00>;
    phandle = <0x76>;
};
};

usb@5100000 {
    compatible = "allwinner,sun50i-h616-musb\0allwinner,sun8i-h3-musb";
    reg = <0x5100000 0x400>;
    clocks = <0x02 0x70>;
    resets = <0x02 0x32>;
    interrupts = <0x00 0x19 0x04>;
    interrupt-names = "mc";
    phys = <0x36 0x00>;
    phy-names = "usb";
    extcon = <0x36 0x00>;
    status = "okay";
    dr_mode = "peripheral";
    phandle = <0x77>;
};

phy@5100400 {
    compatible = "allwinner,sun50i-h616-usb-phy";
    reg = <0x5100400 0x24 0x5101800 0x14 0x5200800 0x14 0x5310800 0x14
0x5311800 0x14>;
    reg-names = "phy_ctrl\0pmu0\0pmu1\0pmu2\0pmu3";
    clocks = <0x02 0x61 0x02 0x63 0x02 0x65 0x02 0x67 0x02 0x6e>;
    clock-names = "usb0_phy\0usb1_phy\0usb2_phy\0usb3_phy\0pmu2_clk";
    resets = <0x02 0x26 0x02 0x27 0x02 0x28 0x02 0x29>;
    reset-names = "usb0_reset\0usb1_reset\0usb2_reset\0usb3_reset";
    status = "okay";
    #phy-cells = <0x01>;
    usb1_vbus-supply = <0x37>;
    phandle = <0x36>;
};

usb@5101000 {
    compatible = "allwinner,sun50i-h616-ehci\0generic-ehci";
    reg = <0x5101000 0x100>;
    interrupts = <0x00 0x1a 0x04>;
    clocks = <0x02 0x68 0x02 0x6c 0x02 0x60 0x02 0x65>;

```

```

        resets = <0x02 0x2a 0x02 0x2e 0x02 0x28>;
        phys = <0x36 0x00>;
        phy-names = "usb";
        status = "okay"
        phandle = <0x78>;
};

usb@5101400 {
    compatible = "allwinner,sun50i-h616-ohci\0generic-ohci";
    reg = <0x5101400 0x100>;
    interrupts = <0x00 0x1b 0x04>;
    clocks = <0x02 0x68 0x02 0x60 0x02 0x65>;
    resets = <0x02 0x2a 0x02 0x28>;
    phys = <0x36 0x00>;
    phy-names = "usb";
    status = "okay"
    phandle = <0x79>;
};

usb@5200000 {
    compatible = "allwinner,sun50i-h616-ehci\0generic-ehci";
    reg = <0x5200000 0x100>;
    interrupts = <0x00 0x1c 0x04>;
    clocks = <0x02 0x69 0x02 0x6d 0x02 0x62 0x02 0x65>;
    resets = <0x02 0x2b 0x02 0x2f 0x02 0x28>;
    phys = <0x36 0x01>;
    phy-names = "usb";
    status = "okay";
    phandle = <0x7a>;
};

usb@5200400 {
    compatible = "allwinner,sun50i-h616-ohci\0generic-ohci";
    reg = <0x5200400 0x100>;
    interrupts = <0x00 0x1d 0x04>;
    clocks = <0x02 0x69 0x02 0x62 0x02 0x65>;
    resets = <0x02 0x2b 0x02 0x28>;
    phys = <0x36 0x01>;
    phy-names = "usb";
    status = "okay";
    phandle = <0x7b>;
};

usb@5310000 {
    compatible = "allwinner,sun50i-h616-ehci\0generic-ehci";
    reg = <0x5310000 0x100>;
    interrupts = <0x00 0x1e 0x04>;
    clocks = <0x02 0x6a 0x02 0x6e 0x02 0x64>;
    resets = <0x02 0x2c 0x02 0x30>;
};

```

```

    phys = <0x36 0x02>;
    phy-names = "usb";
    status = "okay";
    phandle = <0x7c>;
};

usb@5310400 {
    compatible = "allwinner,sun50i-h616-ohci\0generic-ohci";
    reg = <0x5310400 0x100>;
    interrupts = <0x00 0x1f 0x04>;
    clocks = <0x02 0x6a 0x02 0x64>;
    resets = <0x02 0x2c>;
    phys = <0x36 0x02>;
    phy-names = "usb";
    status = "okay";
    phandle = <0x7d>;
};

usb@5311000 {
    compatible = "allwinner,sun50i-h616-ehci\0generic-ehci";
    reg = <0x5311000 0x100>;
    interrupts = <0x00 0x20 0x04>;
    clocks = <0x02 0x6b 0x02 0x6f 0x02 0x66 0x02 0x65>;
    resets = <0x02 0x2d 0x02 0x31 0x02 0x28>;
    phys = <0x36 0x03>;
    phy-names = "usb";
    status = "okay";
    phandle = <0x7e>;
};

usb@5311400 {
    compatible = "allwinner,sun50i-h616-ohci\0generic-ohci";
    reg = <0x5311400 0x100>;
    interrupts = <0x00 0x21 0x04>;
    clocks = <0x02 0x6b 0x02 0x66 0x02 0x65>;
    resets = <0x02 0x2d 0x02 0x28>;
    phys = <0x36 0x03>;
    phy-names = "usb";
    status = "okay";
    phandle = <0x7f>;
};

hdmi-audio@1 {
    compatible = "allwinner,sunxi-hdmi-machine";
    sunxi,cpudai-controller = <0x38>;
    sunxi,snddaudio-codec = "hdmi-audio-codec.4.auto";
    status = "okay";
    phandle = <0x80>;
};

```

See the Result:

[usb@5100000](#) [usb@5101000](#) [usb@5101400](#) on status = okay on my USB-C

I said, PiKVM want all on one line right? oooh

So wie change just :

The part [usb@5101000](#) [usb@5101400](#) status = disabled , and we have a one line USB-OTG an drmode for PiKVM, important one line, only one Cable is concted USB A-A Pi to PC !!!

```
ethernet@5030000 {
    compatible = "allwinner,sun50i-h616-eth";
    syscon = <0x33 0x01>;
    reg = <0x5030000 0x10000>;
    interrupts = <0x00 0x0f 0x04>;
    interrupt-names = "macirq";
    resets = <0x02 0x1f>;
    reset-names = "stmmaceth";
    clocks = <0x02 0x53>;
    clock-names = "stmmaceth";
    status = "disabled";
    phandle = <0x75>;

    mdio {
        compatible = "snps,dwmac-mdio";
        #address-cells = <0x01>;
        #size-cells = <0x00>;
        phandle = <0x76>;
    };
};

usb@5100000 {
    compatible = "allwinner,sun50i-h616-musb\0allwinner,sun8i-h3-musb";
    reg = <0x5100000 0x400>;
    clocks = <0x02 0x70>;
    resets = <0x02 0x32>;
    interrupts = <0x00 0x19 0x04>;
    interrupt-names = "mc";
    phys = <0x36 0x00>;
    phy-names = "usb";
    extcon = <0x36 0x00>;
    status = "okay";
    dr_mode = "peripheral";
    phandle = <0x77>;
};
```

```

};

phy@5100400 {
    compatible = "allwinner,sun50i-h616-usb-phy";
    reg = <0x5100400 0x24 0x5101800 0x14 0x5200800 0x14 0x5310800 0x14
0x5311800 0x14>;
    reg-names = "phy_ctrl\0pmu0\0pmu1\0pmu2\0pmu3";
    clocks = <0x02 0x61 0x02 0x63 0x02 0x65 0x02 0x67 0x02 0x6e>;
    clock-names = "usb0_phy\0usb1_phy\0usb2_phy\0usb3_phy\0pmu2_clk";
    resets = <0x02 0x26 0x02 0x27 0x02 0x28 0x02 0x29>;
    reset-names = "usb0_reset\0usb1_reset\0usb2_reset\0usb3_reset";
    status = "okay";
    #phy-cells = <0x01>;
    usb1_vbus-supply = <0x37>;
    phandle = <0x36>;
};

usb@5101000 {
    compatible = "allwinner,sun50i-h616-ehci\0generic-ehci";
    reg = <0x5101000 0x100>;
    interrupts = <0x00 0x1a 0x04>;
    clocks = <0x02 0x68 0x02 0x6c 0x02 0x60 0x02 0x65>;
    resets = <0x02 0x2a 0x02 0x2e 0x02 0x28>;
    phys = <0x36 0x00>;
    phy-names = "usb";
    status = "disabled";
    phandle = <0x78>;
};

usb@5101400 {
    compatible = "allwinner,sun50i-h616-ohci\0generic-ohci";
    reg = <0x5101400 0x100>;
    interrupts = <0x00 0x1b 0x04>;
    clocks = <0x02 0x68 0x02 0x60 0x02 0x65>;
    resets = <0x02 0x2a 0x02 0x28>;
    phys = <0x36 0x00>;
    phy-names = "usb";
    status = "disabled";
    phandle = <0x79>;
};

usb@5200000 {
    compatible = "allwinner,sun50i-h616-ehci\0generic-ehci";
    reg = <0x5200000 0x100>;
    interrupts = <0x00 0x1c 0x04>;
    clocks = <0x02 0x69 0x02 0x6d 0x02 0x62 0x02 0x65>;
    resets = <0x02 0x2b 0x02 0x2f 0x02 0x28>;
    phys = <0x36 0x01>;
    phy-names = "usb";
};

```

```

        status = "okay";
        phandle = <0x7a>;
};

usb@5200400 {
    compatible = "allwinner,sun50i-h616-ohci\0generic-ohci";
    reg = <0x5200400 0x100>;
    interrupts = <0x00 0x1d 0x04>;
    clocks = <0x02 0x69 0x02 0x62 0x02 0x65>;
    resets = <0x02 0x2b 0x02 0x28>;
    phys = <0x36 0x01>;
    phy-names = "usb";
    status = "okay";
    phandle = <0x7b>;
};

usb@5310000 {
    compatible = "allwinner,sun50i-h616-ehci\0generic-ehci";
    reg = <0x5310000 0x100>;
    interrupts = <0x00 0x1e 0x04>;
    clocks = <0x02 0x6a 0x02 0x6e 0x02 0x64>;
    resets = <0x02 0x2c 0x02 0x30>;
    phys = <0x36 0x02>;
    phy-names = "usb";
    status = "okay";
    phandle = <0x7c>;
};

usb@5310400 {
    compatible = "allwinner,sun50i-h616-ohci\0generic-ohci";
    reg = <0x5310400 0x100>;
    interrupts = <0x00 0x1f 0x04>;
    clocks = <0x02 0x6a 0x02 0x64>;
    resets = <0x02 0x2c>;
    phys = <0x36 0x02>;
    phy-names = "usb";
    status = "okay";
    phandle = <0x7d>;
};

usb@5311000 {
    compatible = "allwinner,sun50i-h616-ehci\0generic-ehci";
    reg = <0x5311000 0x100>;
    interrupts = <0x00 0x20 0x04>;
    clocks = <0x02 0x6b 0x02 0x6f 0x02 0x66 0x02 0x65>;
    resets = <0x02 0x2d 0x02 0x31 0x02 0x28>;
    phys = <0x36 0x03>;
    phy-names = "usb";
    status = "okay";
};

```

```

        phandle = <0x7e>;
};

usb@5311400 {
    compatible = "allwinner,sun50i-h616-ohci\0generic-ohci";
    reg = <0x5311400 0x100>;
    interrupts = <0x00 0x21 0x04>;
    clocks = <0x02 0x6b 0x02 0x66 0x02 0x65>;
    resets = <0x02 0x2d 0x02 0x28>;
    phys = <0x36 0x03>;
    phy-names = "usb";
    status = "okay";
    phandle = <0x7f>;
};

hdmi-audio@1 {
    compatible = "allwinner,sunxi-hdmi-machine";
    sunxi,cpudai-controller = <0x38>;
    sunxi,snddaudio-codec = "hdmi-audio-codec.4.auto";
    status = "okay";
    phandle = <0x80>;
};

```

Then save the stuff, recompile, and you are fine out.. well done....

The Higher Number USB52000ff they are a other socket USB2.0 on my Board...

So mybe you must study the board first ??

The Wrong way is in every part make drmode inside, hihi,, and the oder wrong way is all other to disable,, so both people have not checked the Ketchup.....

regards

PS: This looks simple ok, but if the kernel modules not on for other stuff (USB-OTG etc..), so not works.