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/*
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 *
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 * it under the terms of the GNU General Public License version 2 as
 * published by the Free Software Foundation.
 */

/dts-v1/;

#include "am33xx.dtsi"

/ {
    model = "TI AM335x Msd3";
    compatible = "ti,am335x-msd3", "ti,am33xx";

    cpus {
        cpu@0 {
            cpu0-supply = &dc2c2_reg;
        };
    };

    memory@80000000 {
        device_type = "memory";
        reg = <0x80000000 0x10000000>; /* 256 MB */
    };

    chosen {
        stdout-path = &uart0;
    };

    vmmcsd_fixed: fixedregulator0 {
        compatible = "regulator-fixed";
        regulator-name = "vmmcsd_fixed";
        regulator-min-microvolt = <3300000>;
        regulator-max-microvolt = <3300000>;
    };

    backlight {
        status = "okay";
        compatible = "pwm-backlight";
        pwms = <&ehrpwm1 0 1000000 0>;

        brightness-levels = <
            0 1 2 3 4 5 6 7 8 9
            10 11 12 13 14 15 16 17 18 19
            20 21 22 23 24 25 26 27 28 29
            30 31 32 33 34 35 36 37 38 39
            40 41 42 43 44 45 46 47 48 49
            50 51 52 53 54 55 56 57 58 59
            60 61 62 63 64 65 66 67 68 69
            70 71 72 73 74 75 76 77 78 79
            80 81 82 83 84 85 86 87 88 89
            90 91 92 93 94 95 96 97 98 99
            100
        >;
        default-brightness-level = <50>;
    };

    /* Embest 4.3 inch LCD cape: */
    panel {
        compatible = "tilcdc,panel";
        pinctrl-names = "default";
        pinctrl-0 = <&lcd_pins_s0>;
    };
};

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panel-info {
    ac-bias                = <255>;
    ac-bias-intrpt        = <0>;
    dma-burst-sz          = <16>;
    bpp                   = <32>;
    fdd                   = <0x80>;
    tft-alt-mode          = <0>;
    stn-565-mode          = <0>;
    mono-8bit-mode        = <0>;
    sync-edge             = <0>;
    sync-ctrl             = <1>;
    raster-order          = <0>;
    fifo-th               = <0>;
};

display-timings {
    native-mode = <&timing0>;
    timing0: 480x272 {
        hactive          = <480>;
        vactive          = <272>;
        hback-porch      = <44>;
        hfront-porch     = <9>;
        hsync-len        = <5>;
        vback-porch      = <13>;
        vfront-porch     = <4>;
        vsync-len        = <10>;
        clock-frequency  = <90000000>;
        hsync-active     = <0>;
        vsync-active     = <0>;
    };
};

};

sound {
    compatible = "simple-audio-card";
    simple-audio-card,name = "AM335x-EVMSK";
    simple-audio-card,widgets =
        "Headphone", "Headphone Jack";
    simple-audio-card,routing =
        "Headphone Jack", "HPLOUT",
        "Headphone Jack", "HPROUT";
    simple-audio-card,format = "dsp_b";
    simple-audio-card,bitclock-master = <&sound_master>;
    simple-audio-card,frame-master = <&sound_master>;
    simple-audio-card,bitclock-inversion;

    simple-audio-card,cpu {
        sound-dai = <&mcasep0>;
    };

    sound_master: simple-audio-card,codec {
        sound-dai = <&tlv320aic3106>;
        system-clock-frequency = <24000000>;
    };
};

gpio-leds {
    compatible = "gpio-leds";
    label = "gpio-leds";
    output_pin_0 {
        label = "OutputPin-0";
        gpios = <&pca9555_output 0 GPIO_ACTIVE_LOW>;
    };
    output_pin_1 {
        label = "OutputPin-1";

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        gpios = <&pca9555_output 1 GPIO_ACTIVE_LOW>;
    };
    output_pin_2 {
        label = "OutputPin-2";
        gpios = <&pca9555_output 2 GPIO_ACTIVE_LOW>;
    };
    output_pin_3 {
        label = "OutputPin-3";
        gpios = <&pca9555_output 3 GPIO_ACTIVE_LOW>;
    };
    output_pin_4 {
        label = "OutputPin-4";
        gpios = <&pca9555_output 4 GPIO_ACTIVE_LOW>;
    };
    output_pin_5 {
        label = "OutputPin-5";
        gpios = <&pca9555_output 5 GPIO_ACTIVE_LOW>;
    };
    output_pin_6 {
        label = "OutputPin-6";
        gpios = <&pca9555_output 6 GPIO_ACTIVE_LOW>;
    };
    output_pin_7 {
        label = "OutputPin-7";
        gpios = <&pca9555_output 7 GPIO_ACTIVE_LOW>;
    };
    output_pin_8 {
        label = "OutputPin-8";
        gpios = <&pca9555_output 8 GPIO_ACTIVE_LOW>;
    };
    output_pin_9 {
        label = "OutputPin-9";
        gpios = <&pca9555_output 9 GPIO_ACTIVE_LOW>;
    };
    output_pin_10 {
        label = "OutputPin-10";
        gpios = <&pca9555_output 10 GPIO_ACTIVE_LOW>;
    };
    output_pin_11 {
        label = "OutputPin-11";
        gpios = <&pca9555_output 11 GPIO_ACTIVE_LOW>;
    };
    output_pin_12 {
        label = "OutputPin-12";
        gpios = <&pca9555_output 12 GPIO_ACTIVE_LOW>;
    };
    output_pin_13 {
        label = "OutputPin-13";
        gpios = <&pca9555_output 13 GPIO_ACTIVE_LOW>;
    };
    output_pin_14 {
        label = "OutputPin-14";
        gpios = <&pca9555_output 14 GPIO_ACTIVE_LOW>;
    };
    output_pin_15 {
        label = "OutputPin-15";
        gpios = <&pca9555_output 15 GPIO_ACTIVE_LOW>;
    };
};

gpio-keys {
    compatible = "gpio-keys";
    label = "gpiokeys";
};

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up {
    label = "GPIO Key UP";
    linux,code = <103>;
    gpios = <&pca9555_input 0 1>;
};

down {
    label = "GPIO Key DOWN";
    linux,code = <108>;
    gpios = <&pca9555_input 4 1>;
};

left {
    label = "GPIO Key LEFT";
    linux,code = <105>;
    gpios = <&pca9555_input 2 1>;
};

right {
    label = "GPIO Key RIGHT";
    linux,code = <106>;
    gpios = <&pca9555_input 3 1>;
};

record {
    label = "GPIO Key RECORD";
    linux,code = <29>;
    gpios = <&pca9555_input 1 1>;
};

stop {
    label = "GPIO Key STOP";
    linux,code = <1>;
    gpios = <&pca9555_input 5 1>;
};

start {
    label = "GPIO Key START";
    linux,code = <57>;
    gpios = <&pca9555_input 7 1>;
};

ok {
    label = "GPIO Key OK";
    linux,code = <28>;
    gpios = <&pca9555_input 8 1>;
};

power {
    label = "GPIO Key POWER";
    linux,code = <14>;
    gpios = <&pca9555_input 6 1>;
};

din9 {
    label = "GPIO DIN9";
    linux,code = <2>;
    gpios = <&pca9555_input 9 1>;
};

remoteQA {
    label = "GPIO Remote QA";
    linux,code = <3>;
    gpios = <&pca9555_input 10 1>;
};

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};

remoteQB {
    label = "GPIO Remote QB";
    linux,code = <4>;
    gpios = <&pca9555_input 11 1>;
};

remoteQC {
    label = "GPIO Remote QC";
    linux,code = <5>;
    gpios = <&pca9555_input 12 1>;
};

remoteQD {
    label = "GPIO Remote QD";
    linux,code = <6>;
    gpios = <&pca9555_input 13 1>;
};

din14 {
    label = "GPIO DIN14";
    linux,code = <7>;
    gpios = <&pca9555_input 14 1>;
};

din15 {
    label = "GPIO DIN15";
    linux,code = <8>;
    gpios = <&pca9555_input 15 1>;
};

};

&am33xx_pinmux {
    pinctrl-names = "default";
    pinctrl-0 = <&pca9555_interrupt_pin>;

    i2c0_pins: pinmux_i2c0_pins {
        pinctrl-single,pins = <
            AM33XX_IOPAD(0x988, PIN_INPUT_PULLUP | MUX_MODE0) /*
i2c0_sda.i2c0_sda */
            AM33XX_IOPAD(0x98c, PIN_INPUT_PULLUP | MUX_MODE0) /*
i2c0_scl.i2c0_scl */
        >;
    };

    dcan1_pins_default: dcan1_pins_default {
        pinctrl-single,pins = <
            AM33XX_IOPAD(0x980, PIN_OUTPUT | MUX_MODE2) /*
uart1_rxd.d_can1_tx */
            AM33XX_IOPAD(0x984, PIN_INPUT_PULLDOWN | MUX_MODE2) /*
uart1_txs.d_can1_rx */
            AM33XX_IOPAD(0x858, PIN_OUTPUT_PULLDOWN | MUX_MODE7) /*
gpmc_a6.gpio1_22 */
        >;
    };

    uart0_pins: pinmux_uart0_pins {
        pinctrl-single,pins = <
            AM33XX_IOPAD(0x970, PIN_INPUT_PULLUP | MUX_MODE0) /*
uart0_rxd.uart0_rxd */
            AM33XX_IOPAD(0x974, PIN_OUTPUT_PULLDOWN | MUX_MODE0) /*
uart0_txd.uart0_txd */

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        >;
    };

    uart3_pins: uart3_pins {
        pinctrl-single,pins = <
            AM33XX_IOPAD(0x960, PIN_INPUT_PULLUP | MUX_MODE1) /*
spi0_csl.uart3_rxd */
            AM33XX_IOPAD(0x964, PIN_OUTPUT_PULLDOWN | MUX_MODE1) /*
eCAP0_in_PWM0_out.uart3_txd */
        >;
    };

    uart4_pins: uart4_pins {
        pinctrl-single,pins = <
            AM33XX_IOPAD(0x870, PIN_INPUT_PULLUP | MUX_MODE6) /*
gpmc_wait0.uart4_rxd */
            AM33XX_IOPAD(0x874, PIN_OUTPUT_PULLDOWN | MUX_MODE6) /*
gpmc_wpn.uart4_txd */
        >;
    };

    pca9555_interrupt_pin: pca9555_interrupt_pin {
        pinctrl-single,pins = <
            AM33XX_IOPAD(0x9b0, PIN_INPUT_PULLUP | MUX_MODE7) /*
xdma_event_intr0.gpio0_19 */
        >;
    };

    cpsw_default: cpsw_default {
        pinctrl-single,pins = <
            /* Slave 1 */
            AM33XX_IOPAD(0x910, PIN_INPUT_PULLUP | MUX_MODE0) /*
miil_rxerr.miil_rxerr */
            AM33XX_IOPAD(0x914, PIN_OUTPUT_PULLDOWN | MUX_MODE0) /*
miil_txen.miil_txen */
            AM33XX_IOPAD(0x918, PIN_INPUT_PULLUP | MUX_MODE0) /*
miil_rxdv.miil_rxdv */
            AM33XX_IOPAD(0x91c, PIN_OUTPUT_PULLDOWN | MUX_MODE0) /*
miil_txd3.miil_txd3 */
            AM33XX_IOPAD(0x920, PIN_OUTPUT_PULLDOWN | MUX_MODE0) /*
miil_txd2.miil_txd2 */
            AM33XX_IOPAD(0x924, PIN_OUTPUT_PULLDOWN | MUX_MODE0) /*
miil_txd1.miil_txd1 */
            AM33XX_IOPAD(0x928, PIN_OUTPUT_PULLDOWN | MUX_MODE0) /*
miil_txd0.miil_txd0 */
            AM33XX_IOPAD(0x92c, PIN_INPUT_PULLUP | MUX_MODE0) /*
miil_txclk.miil_txclk */
            AM33XX_IOPAD(0x930, PIN_INPUT_PULLUP | MUX_MODE0) /*
miil_rxclk.miil_rxclk */
            AM33XX_IOPAD(0x934, PIN_INPUT_PULLUP | MUX_MODE0) /*
miil_rxd3.miil_rxd3 */
            AM33XX_IOPAD(0x938, PIN_INPUT_PULLUP | MUX_MODE0) /*
miil_rxd2.miil_rxd2 */
            AM33XX_IOPAD(0x93c, PIN_INPUT_PULLUP | MUX_MODE0) /*
miil_rxd1.miil_rxd1 */
            AM33XX_IOPAD(0x940, PIN_INPUT_PULLUP | MUX_MODE0) /*
miil_rxd0.miil_rxd0 */
        >;
    };

    cpsw_sleep: cpsw_sleep {
        pinctrl-single,pins = <
            /* Slave 1 reset value */
            AM33XX_IOPAD(0x910, PIN_INPUT_PULLDOWN | MUX_MODE7)

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        AM33XX_IOPAD(0x914, PIN_INPUT_PULLDOWN | MUX_MODE7)
        AM33XX_IOPAD(0x918, PIN_INPUT_PULLDOWN | MUX_MODE7)
        AM33XX_IOPAD(0x91c, PIN_INPUT_PULLDOWN | MUX_MODE7)
        AM33XX_IOPAD(0x920, PIN_INPUT_PULLDOWN | MUX_MODE7)
        AM33XX_IOPAD(0x924, PIN_INPUT_PULLDOWN | MUX_MODE7)
        AM33XX_IOPAD(0x928, PIN_INPUT_PULLDOWN | MUX_MODE7)
        AM33XX_IOPAD(0x92c, PIN_INPUT_PULLDOWN | MUX_MODE7)
        AM33XX_IOPAD(0x930, PIN_INPUT_PULLDOWN | MUX_MODE7)
        AM33XX_IOPAD(0x934, PIN_INPUT_PULLDOWN | MUX_MODE7)
        AM33XX_IOPAD(0x938, PIN_INPUT_PULLDOWN | MUX_MODE7)
        AM33XX_IOPAD(0x93c, PIN_INPUT_PULLDOWN | MUX_MODE7)
        AM33XX_IOPAD(0x940, PIN_INPUT_PULLDOWN | MUX_MODE7)
    >;
};

davinci_mdio_default: davinci_mdio_default {
    pinctrl-single,pins = <
        /* MDIO */
        AM33XX_IOPAD(0x948, PIN_INPUT_PULLUP | SLEWCTRL_FAST |
MUX_MODE0) /* mdio_data.mdio_data */
        AM33XX_IOPAD(0x94c, PIN_OUTPUT_PULLUP | MUX_MODE0)
        /* mdio_clk.mdio_clk */
    >;
};

davinci_mdio_sleep: davinci_mdio_sleep {
    pinctrl-single,pins = <
        /* MDIO reset value */
        AM33XX_IOPAD(0x948, PIN_INPUT_PULLDOWN | MUX_MODE7)
        AM33XX_IOPAD(0x94c, PIN_INPUT_PULLDOWN | MUX_MODE7)
    >;
};

mmc1_pins: pinmux_mmc1_pins {
    pinctrl-single,pins = <
        AM33XX_IOPAD(0x840, PIN_INPUT_PULLUP | MUX_MODE7) /*
gpmc_a0.gpio1_16 -> SD_CARD_CD */
        AM33XX_IOPAD(0x9A0, PIN_INPUT | MUX_MODE4) /*
mcas0_aclkr.mmc0_sdwp */
    >;
};

emmc_pins: pinmux_emmc_pins {
    pinctrl-single,pins = <
        AM33XX_IOPAD(0x880, PIN_INPUT_PULLUP | MUX_MODE2) /*
gpmc_csn1.mmc1_clk */
        AM33XX_IOPAD(0x884, PIN_INPUT_PULLUP | MUX_MODE2) /*
gpmc_csn2.mmc1_cmd */
        AM33XX_IOPAD(0x800, PIN_INPUT_PULLUP | MUX_MODE1) /*
gpmc_ad0.mmc1_dat0 */
        AM33XX_IOPAD(0x804, PIN_INPUT_PULLUP | MUX_MODE1) /*
gpmc_ad1.mmc1_dat1 */
        AM33XX_IOPAD(0x808, PIN_INPUT_PULLUP | MUX_MODE1) /*
gpmc_ad2.mmc1_dat2 */
        AM33XX_IOPAD(0x80c, PIN_INPUT_PULLUP | MUX_MODE1) /*
gpmc_ad3.mmc1_dat3 */
        AM33XX_IOPAD(0x810, PIN_INPUT_PULLUP | MUX_MODE1) /*
gpmc_ad4.mmc1_dat4 */
        AM33XX_IOPAD(0x814, PIN_INPUT_PULLUP | MUX_MODE1) /*
gpmc_ad5.mmc1_dat5 */
        AM33XX_IOPAD(0x818, PIN_INPUT_PULLUP | MUX_MODE1) /*
gpmc_ad6.mmc1_dat6 */
        AM33XX_IOPAD(0x81c, PIN_INPUT_PULLUP | MUX_MODE1) /*
gpmc_ad7.mmc1_dat7 */

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        >;
    };

    ehrpwm1_pins: backlight_pins {
        pinctrl-single,pins = <
            0x48 ( PIN_OUTPUT_PULLUP | MUX_MODE6 ) /* gpmc_a2.ehrpwm1A */
        >;
    };

    lcd_pins_s0: lcd_pins_s0 {
        pinctrl-single,pins = <
            0xa0 0x08 /* lcd_data0.lcd_data0, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xa4 0x08 /* lcd_data1.lcd_data1, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xa8 0x08 /* lcd_data2.lcd_data2, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xac 0x08 /* lcd_data3.lcd_data3, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xb0 0x08 /* lcd_data4.lcd_data4, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xb4 0x08 /* lcd_data5.lcd_data5, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xb8 0x08 /* lcd_data6.lcd_data6, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xbc 0x08 /* lcd_data7.lcd_data7, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xc0 0x08 /* lcd_data8.lcd_data8, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xc4 0x08 /* lcd_data9.lcd_data9, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xc8 0x08 /* lcd_data10.lcd_data10, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xcc 0x08 /* lcd_data11.lcd_data11, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xd0 0x08 /* lcd_data12.lcd_data12, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xd4 0x08 /* lcd_data13.lcd_data13, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xd8 0x08 /* lcd_data14.lcd_data14, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xdc 0x08 /* lcd_data15.lcd_data15, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT | AM33XX_PULL_DISA */
            0xe0 0x00 /* lcd_vsync.lcd_vsync, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT */
            0xe4 0x00 /* lcd_hsync.lcd_hsync, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT */
            0xe8 0x00 /* lcd_pclk.lcd_pclk, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT */
            0xec 0x00 /* lcd_ac_bias_en.lcd_ac_bias_en, OMAP_MUX_MODE0 |
AM33XX_PIN_OUTPUT */
        >;
    };

    mcasp0_pins: mcasp0_pins {
        pinctrl-single,pins = <
            AM33XX_IOPAD(0x990, PIN_INPUT_PULLDOWN | MUX_MODE0) /*
mcasp0_aclkx */
            AM33XX_IOPAD(0x9AC, PIN_INPUT_PULLDOWN | MUX_MODE0) /*
mcasp0_ahclkx */
            AM33XX_IOPAD(0x998, PIN_INPUT_PULLDOWN | MUX_MODE0) /*
mcasp0_axr0 */

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        AM33XX_IOPAD(0x99C, PIN_OUTPUT_PULLDOWN | MUX_MODE1) /*
mcasep0_ahclkr.mcasep0_axr2 */
        AM33XX_IOPAD(0x994, PIN_INPUT_PULLDOWN | MUX_MODE0) /*
mcasep0_fsx */
        >;
    };

    mcasep0_pins_sleep: mcasep0_pins_sleep {
        pinctrl-single,pins = <
            AM33XX_IOPAD(0x990, PIN_INPUT_PULLDOWN | MUX_MODE7) /*
mcasep0_aclkx */
            AM33XX_IOPAD(0x9AC, PIN_INPUT_PULLDOWN | MUX_MODE7) /*
mcasep0_ahclkx */
            AM33XX_IOPAD(0x998, PIN_INPUT_PULLDOWN | MUX_MODE7) /*
mcasep0_axr0 */
            AM33XX_IOPAD(0x99C, PIN_INPUT_PULLDOWN | MUX_MODE7) /*
mcasep0_ahclkr.mcasep0_axr2 */
            AM33XX_IOPAD(0x994, PIN_INPUT_PULLDOWN | MUX_MODE7) /*
mcasep0_fsx */
        >;
    };

};

&uart0 {
    status = "okay";
    pinctrl-names = "default";
    pinctrl-0 = <&uart0_pins>;
};

&uart3 {
    status = "okay";
    pinctrl-names = "default";
    pinctrl-0 = <&uart3_pins>;
};

&uart4 {
    status = "okay";
    pinctrl-names = "default";
    pinctrl-0 = <&uart4_pins>;
};

&usb {
    status = "okay";
};

&usb_ctrl_mod {
    status = "okay";
};

&usb0_phy {
    status = "okay";
};

&usb1_phy {
    status = "okay";
};

&usb0 {
    status = "okay";
    dr_mode = "peripheral";
};

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&usb1 {
    status = "okay";
    dr_mode = "host";
};

&cppi41dma {
    status = "okay";
};

&i2c0 {
    pinctrl-names = "default";
    pinctrl-0 = <&i2c0_pins>;

    status = "okay";
    clock-frequency = <400000>;

    tps: tps@24 {
        reg = <0x24>;
    };

    baseboard_eeprom: baseboard_eeprom@50 {
        compatible = "at,24c256";
        reg = <0x50>;

        #address-cells = <1>;
        #size-cells = <1>;
        baseboard_data: baseboard_data@0 {
            reg = <0 0x100>;
        };
    };

    pcf8563: pcf8563@51 {
        compatible = "nxp,pcf8563";
        reg = <0x51>;
        #clock-cells = <0>;
    };

    pca9555_input: pca9555_input@21 {
        compatible = "nxp,pca9555";
        interrupt-parent = <&gpio0>;
        interrupts = <19 0x2>;
        gpio-controller;
        #gpio-cells = <2>;
        interrupt-controller;
        #interrupt-cells = <2>;
        reg = <0x21>;
    };

    pca9555_output: pca9555_output@22 {
        compatible = "nxp,pca9555";
        gpio-controller;
        #gpio-cells = <2>;
        reg = <0x22>;
    };

    tlv320aic3106: tlv320aic3106@18 {
        #sound-dai-cells = <0>;
        compatible = "ti,tlv320aic3106";
        reg = <0x18>;
        status = "okay";
    };
};

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```
/include/ "tps65217.dtsi"
```

```
&tps {
    /*
     * Configure pmic to enter OFF-state instead of SLEEP-state ("RTC-only
     * mode") at poweroff. Most BeagleBone versions do not support RTC-only
     * mode and risk hardware damage if this mode is entered.
     *
     * For details, see linux-omap mailing list May 2015 thread
     * [PATCH] ARM: dts: am335x-bone* enable pmic-shutdown-controller
     * In particular, messages:
     * http://www.spinics.net/lists/linux-omap/msg118585.html
     * http://www.spinics.net/lists/linux-omap/msg118615.html
     *
     * You can override this later with
     * &tps { /delete-property/ ti,pmic-shutdown-controller; }
     * if you want to use RTC-only mode and make sure you are not affected
     * by the hardware problems. (Tip: double-check by performing a current
     * measurement after shutdown: it should be less than 1 mA.)
     */
    ti,pmic-shutdown-controller;

    regulators {
        dcdc1_reg: regulator@0 {
            regulator-name = "vdds_dpr";
            regulator-always-on;
        };

        dcdc2_reg: regulator@1 {
            /* VDD_MPU voltage limits 0.95V - 1.26V with +/-4% tolerance
            */
            regulator-name = "vdd_mpu";
            regulator-min-microvolt = <925000>;
            regulator-max-microvolt = <1351500>;
            regulator-boot-on;
            regulator-always-on;
        };

        dcdc3_reg: regulator@2 {
            /* VDD_CORE voltage limits 0.95V - 1.1V with +/-4% tolerance
            */
            regulator-name = "vdd_core";
            regulator-min-microvolt = <925000>;
            regulator-max-microvolt = <1150000>;
            regulator-boot-on;
            regulator-always-on;
        };

        ldo1_reg: regulator@3 {
            regulator-name = "vio,vrtc,vdds";
            regulator-always-on;
        };

        ldo2_reg: regulator@4 {
            regulator-name = "vdd_3v3aux";
            regulator-always-on;
        };

        ldo3_reg: regulator@5 {
            regulator-name = "vdd_1v8";
            regulator-always-on;
            regulator-min-microvolt = <1800000>;
            regulator-max-microvolt = <1800000>;
        };
    };
};
```

```

        };

        ldo4_reg: regulator@6 {
            regulator-name = "vdd_3v3a";
            regulator-always-on;
        };
    };

    &cpsw_emac0 {
        phy_id = <&davinci_mdio>, <0>;
        phy-mode = "mii";
    };

    &mac {
        slaves = <1>;
        pinctrl-names = "default", "sleep";
        pinctrl-0 = <&cpsw_default>;
        pinctrl-1 = <&cpsw_sleep>;
        status = "okay";
    };

    &davinci_mdio {
        pinctrl-names = "default", "sleep";
        pinctrl-0 = <&davinci_mdio_default>;
        pinctrl-1 = <&davinci_mdio_sleep>;
        status = "okay";
    };

    &mmcl {
        status = "okay";
        bus-width = <0x4>;
        pinctrl-names = "default";
        pinctrl-0 = <&mmcl_pins>;
        cd-gpios = <&gpio1 16 GPIO_ACTIVE_LOW>;
        vmmc-supply = <&vmmcsrcd_fixed>;
    };

    &mmc2 {
        vmmc-supply = <&vmmcsrcd_fixed>;
        pinctrl-names = "default";
        pinctrl-0 = <&mmc_pins>;
        bus-width = <8>;
        status = "okay";
    };

    &aes {
        status = "okay";
    };

    &sham {
        status = "okay";
    };

    &epwmss1 {
        status = "okay";

        ehrrpwm1: pwm@48302200 {
            status = "okay";
            pinctrl-names = "default";
            pinctrl-0 = <&ehrrpwm1_pins>;
        };
    };
};

```

```

&rtc {
    system-power-controller;
};

&lcdc {
    status = "okay";
    blue-and-red-wiring = "crossed";
};

&spi0 {
    status = "okay";
};

&mcasp0 {
    #sound-dai-cells = <0>;
    pinctrl-names = "default", "sleep";
    pinctrl-0 = <&mcasp0_pins>;
    pinctrl-1 = <&mcasp0_pins_sleep>;

    status = "okay";

    op-mode = <0>;          /* MCASP_IIS_MODE */
    tdm-slots = <2>;
    /* 4 serializers */
    serial-dir = < /* 0: INACTIVE, 1: TX, 2: RX */
        2 0 1 0
    >;
    tx-num-evt = <32>;
    rx-num-evt = <32>;
};

&tscadc {
    status = "okay";

    adc {
        ti,adc-channels = <0 1 2 3 4 5 6 7>;
    };
};

&dcan1 {
    status = "okay";
    pinctrl-names = "default";
    pinctrl-0 = <&dcan1_pins_default>;
};

```