eMMC Setting SOP

Overview

- **1.GPIO setting**

-- Tools
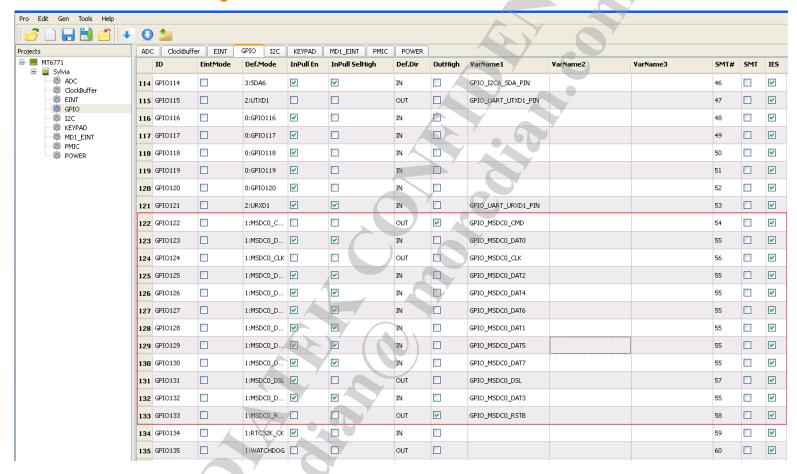
-- Setup

GPIO related Tools & Files

- ## 1. DCT tool – DrvGen.exe

-- \alps\vendor\mediatek\proprietary\scripts\dct\DrvGen.exe

- ## 2. DWS file – codegen.dws

- alps\kernel-4.4\drivers\misc\mediatek\dws\mt6771\{Project}.dws

- --
  alps\vendor\mediatek\proprietary\bootable\bootloader\preloader\custom\${Project_name}\dct\dct\codegen.dws

- --
  alps\vendor\mediatek\proprietary\bootable\bootloader\lk\target\${Project_name}\dct\dct\codegen.dws

- 保证这三份dws中关于eMMC gpio的setting一致

GPIO setup

- Find out eMMC relative pin assignment in GPIO mapping table

与eMMC有关的有：

    -- MSDC0_CLK

    -- MSDC0_CMD

    -- MSDC0_DAT0 ~ MSDC0_DAT7

    -- MSDC0_RST

    -- MSDC_DSL

GPIO setup

Pro Edit Gen Tools Help

| | ADC | ClockBuffer | EINT | GPIO | I2C | KEYPAD | MD1_EINT | PMIC | POWER |

	ID	EintMode	Def.Mode	InPull En	InPull SelHigh	Def.Dir	OutHigh	VarName1	VarName2	VarName3	SMT#	SMT	IES
114	GPIO114	☐	3:SDA6	☑	☑	IN	☐	GPIO_I2C6_SDA_PIN			46	☐	☑
115	GPIO115	☐	2:UTXD1	☐	☐	OUT	☐	GPIO_UART_UTXD1_PIN			47	☐	☑
116	GPIO116	☐	0:GPIO116	☑	☐	IN	☐				48	☐	☑
117	GPIO117	☐	0:GPIO117	☑	☐	IN	☐				49	☐	☑
118	GPIO118	☐	0:GPIO118	☑	☐	IN	☐				50	☐	☑
119	GPIO119	☐	0:GPIO119	☑	☐	IN	☐				51	☐	☑
120	GPIO120	☐	0:GPIO120	☑	☐	IN	☐				52	☐	☑
121	GPIO121	☐	2:URXD1	☑	☑	IN	☐	GPIO_UART_URXD1_PIN			53	☐	☑
122	GPIO122	☐	1:MSDC0_C...	☐	☐	OUT	☑	GPIO_MSDC0_CMD			54	☐	☑
123	GPIO123	☐	1:MSDC0_D...	☑	☑	IN	☐	GPIO_MSDC0_DAT0			55	☐	☑
124	GPIO124	☐	1:MSDC0_CLK	☐	☐	OUT	☐	GPIO_MSDC0_CLK			56	☐	☑
125	GPIO125	☐	1:MSDC0_D...	☑	☑	IN	☐	GPIO_MSDC0_DAT2			55	☐	☑
126	GPIO126	☐	1:MSDC0_D...	☑	☑	IN	☐	GPIO_MSDC0_DAT4			55	☐	☑
127	GPIO127	☐	1:MSDC0_D...	☑	☑	IN	☐	GPIO_MSDC0_DAT6			55	☐	☑
128	GPIO128	☐	1:MSDC0_D...	☑	☑	IN	☐	GPIO_MSDC0_DAT1			55	☐	☑
129	GPIO129	☐	1:MSDC0_D...	☑	☑	IN	☐	GPIO_MSDC0_DAT5			55	☐	☑
130	GPIO130	☐	1:MSDC0_D...	☑	☑	IN	☐	GPIO_MSDC0_DAT7			55	☐	☑
131	GPIO131	☐	1:MSDC0_DSL	☑	☐	OUT	☐	GPIO_MSDC0_DSL			57	☐	☑
132	GPIO132	☐	1:MSDC0_D...	☑	☑	IN	☐	GPIO_MSDC0_DAT3			55	☐	☑
133	GPIO133	☐	1:MSDC0_R...	☐	☐	OUT	☑	GPIO_MSDC0_RSTB			58	☐	☑
134	GPIO134	☐	1:RTC32K_CK	☑	☐	IN	☐				59	☐	☑
135	GPIO135	☐	1:WATCHDOG	☐	☐	OUT	☐				60	☐	☑

Projects
- MT6771
  - Sylvia
    - ADC
    - ClockBuffer
    - EINT
    - GPIO
    - I2C
    - KEYPAD
    - MD1_EINT
    - PMIC
    - POWER

GPIO setting

- ## GPIO driving setting

- alps/kernel-4.4/arch/arm64/boot/dtd/mediatek/cust_mt6771_msdc.dtsi

```
68  &pio {
69          msdc0_pins_default: msdc0@default {
70                  pins_cmd {
71                          drive-strength = /bits/ 8 <4>;
72                  };
73                  pins_dat {
74                          drive-strength = /bits/ 8 <4>;
75                  };
76                  pins_clk {
77                          drive-strength = /bits/ 8 <4>;
78                  };
79                  pins_rst {
80                          drive-strength = /bits/ 8 <4>;
81                  };
82                  pins_ds {
83                          drive-strength = /bits/ 8 <4>;
84                  };
85          };
```