

How To Debug Led

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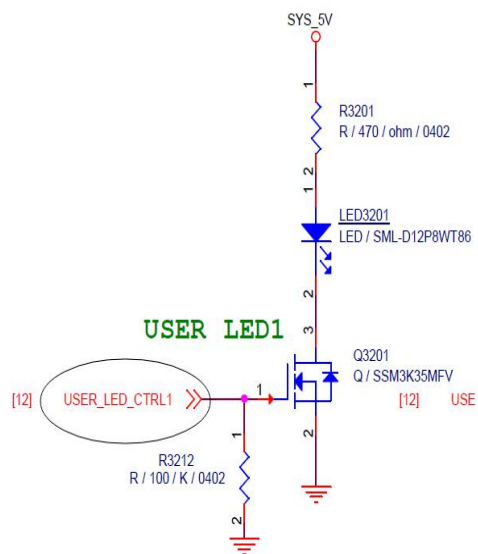
1. Introduction

There are six leds on the MediaTek X20 Development Board. led0,led1,led2,led3 are named USER_LED, which can be used by developers.led4 is designated as Bluetooth indicator light,which is named BT_LED;led5 is designated as WiFi indicator light,which is named WLAN_LED.Flexible use of led will be of great benefit to the development.

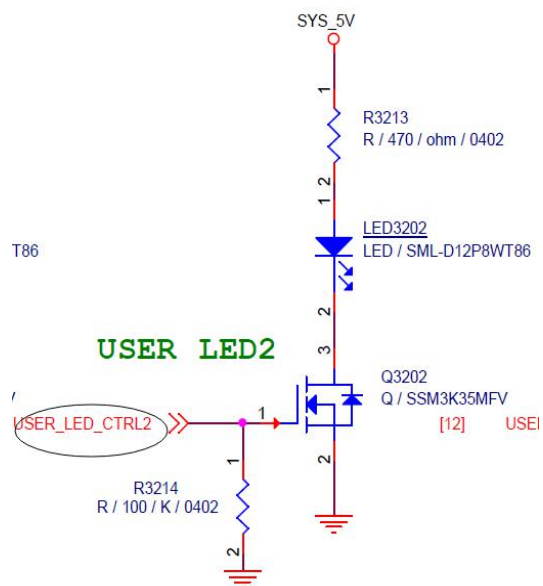
2. Led Profile

2.1. Led Schematic Diagram

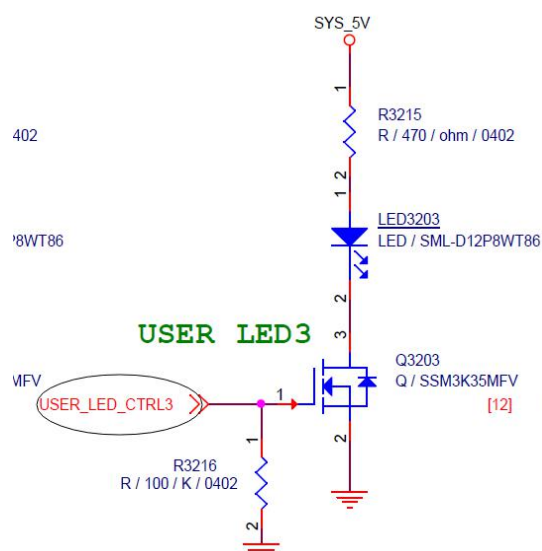
led0



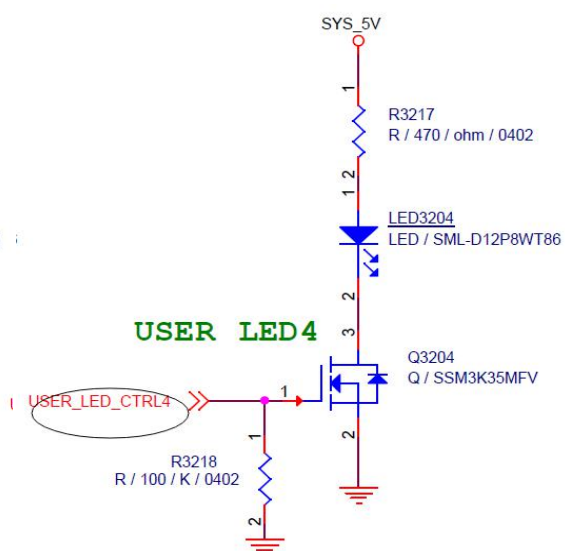
led1



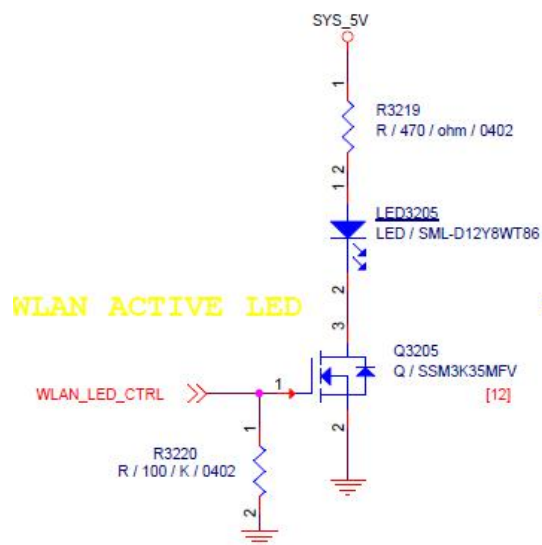
led2



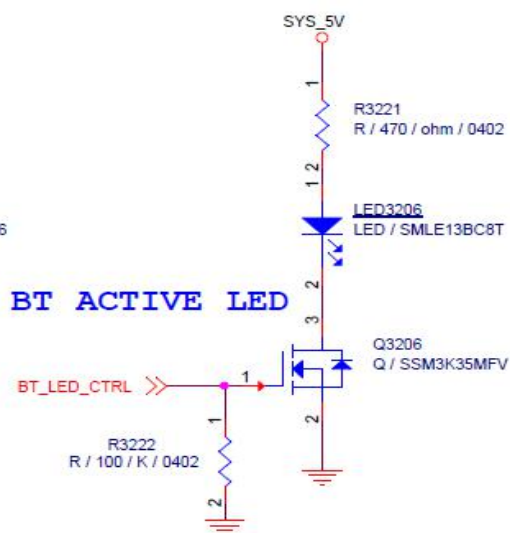
led3



led4



led5



2.2. Correspondence between LED and GPIO

Led No	Led Name	Contrl Pin	GPIO	ON/OFF
Led0	USER_LED1	USER_LED_CTRL1	GPIO196	High/on low/off
Led1	USER_LED2	USER_LED_CTRL2	GPIO197	High/on low/off
Led2	USER_LED3	USER_LED_CTRL3	GPIO198	High/on low/off
Led3	USER_LED4	USER_LED_CTRL4	GPIO199	High/on low/off
Led4	WLAN_ACTIVE_LED	WLAN_LED_CTRL	GPIO200	High/on low/off
Led5	BT_ACTIVE_LED	BT_LED_CTRL	GPIO201	High/on low/off

3. How to light on/off Led

On the 96 board, we created six nodes in the `/sys/class/misc/96board_leds/` path to correspond to six led. Echo on/off for the node is equivalent to the light on/off of the LED, as described below.

3.1. light on/off led0

Led0 corresponds to the `/sys/class/misc/96board_leds/96_led0` node.

In the path : `/sys/class/misc/96board_leds/`

We can use `<cat 96_led0>` command to check the status of led0 , use `<echo on > 96_led0>` command to light on led0,and use `<echo off > 96_led0>` command to light off led0.

3.2. light on/off led1

Led1 corresponds to the `/sys/class/misc/96board_leds/96_led1` node.

In the path : `/sys/class/misc/96board_leds/`

We can use `<cat 96_led1>` command to check the status of led1 , use `<echo on > 96_led1>` command to light on led1,and use `<echo off > 96_led1>` command to light off led1.

3.3. light on/off led2

Led2 corresponds to the `/sys/class/misc/96board_leds/96_led2` node.

In the path : `/sys/class/misc/96board_leds/`

We can use `<cat 96_led2>` command to check the status of led2 , use `<echo on > 96_led2>` command to light on led2,and use `<echo off > 96_led2>` command to light off led2.

3.4. light on/off led3

Led3 corresponds to the `/sys/class/misc/96board_leds/96_led3` node.

In the path : `/sys/class/misc/96board_leds/`

We can use `<cat 96_led3>` command to check the status of led3 , use `<echo on > 96_led3>` command to light on led3,and use `<echo off > 96_led3>` command to light off led3.

3.5. light on/off led4

Led4 corresponds to the `/sys/class/misc/96board_leds/96_led4` node.

In the path : `/sys/class/misc/96board_leds/`

We can use `<cat 96_led4>` command to check the status of led4 , use `<echo on > 96_led4>` command to light on led4,and use `<echo off > 96_led4>` command to light off led4.

3.6. light on/off led5

Led5 corresponds to the `/sys/class/misc/96board_leds/96_led5` node.

In the path : `/sys/class/misc/96board_leds/`

We can use `<cat 96_led5>` command to check the status of led5 , use `<echo on > 96_led5>` command to light on led5,and use `<echo off > 96_led5>` command to light off led5.