GT1216 & LTP1218
Multi-Function EVB
User Guide

Apr.2016

Longsys

Index

1 General Description 3

1.1 The Development board connection diagram 3

1.2 The picture of the actual object 4

2 The Development board layout and interface 5

3 The Development board interfaces 6

3.1 HOST MODE OPTION 6

3.2 UART&USB OPTION 7

3.3 RXD Option 7

3.4 GPIOS 8

3.6 VCC Interface 8

Longsys

1 General Description

1.1 The Development board circuit diagram

The development platform is used for functional demonstration of GT1216 and LTP1218, in order to accelerate user's development process, it supports LTM1216 and GT1216 module by two modes: Hostless and USB mode. It also contains 4 LEDs which are drivered by GPIO easily for function display. Please see Figure 1-1 for the Evaluation board circuit diagram.

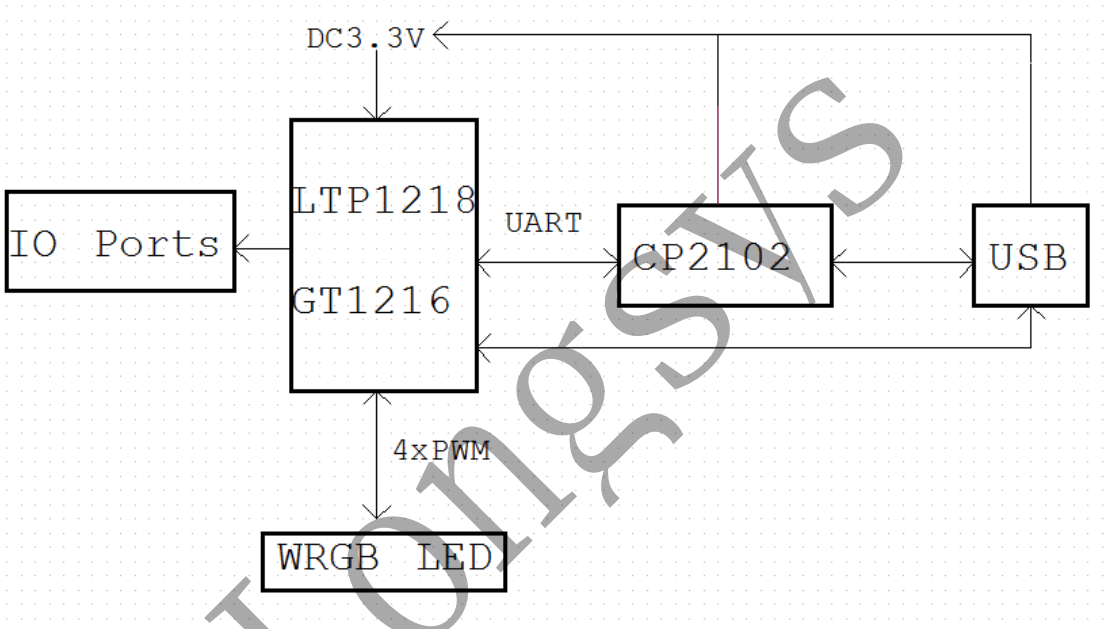


Figure 1-1 EVB Circuit Diagram

Longsys

1.2 The picture of the actual object

The figure 1-2 and 1-3 is the physical picture for LTM1216 and GT1216, Both of them have the same function and Pin outs. LTM1216 is a demo board P2P with GT1216 for LTP1218 SIP.



Figure 1-2 LTM1216

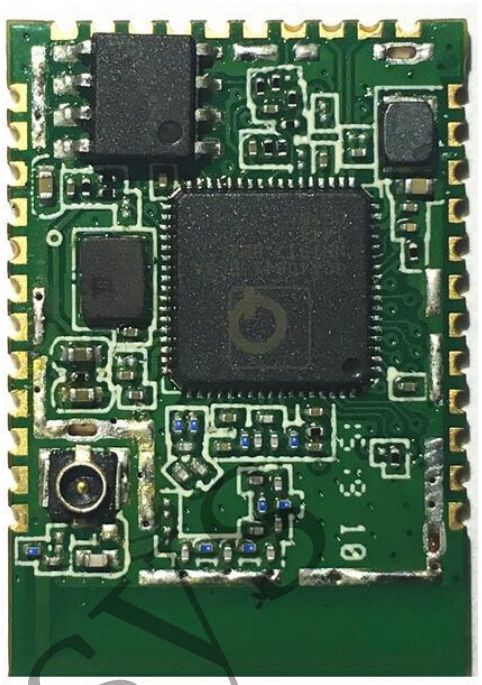


Figure 1-3 GT1216



Figure 1-4 LTM1216 on the board

longsys

2 The Development board layout and interface

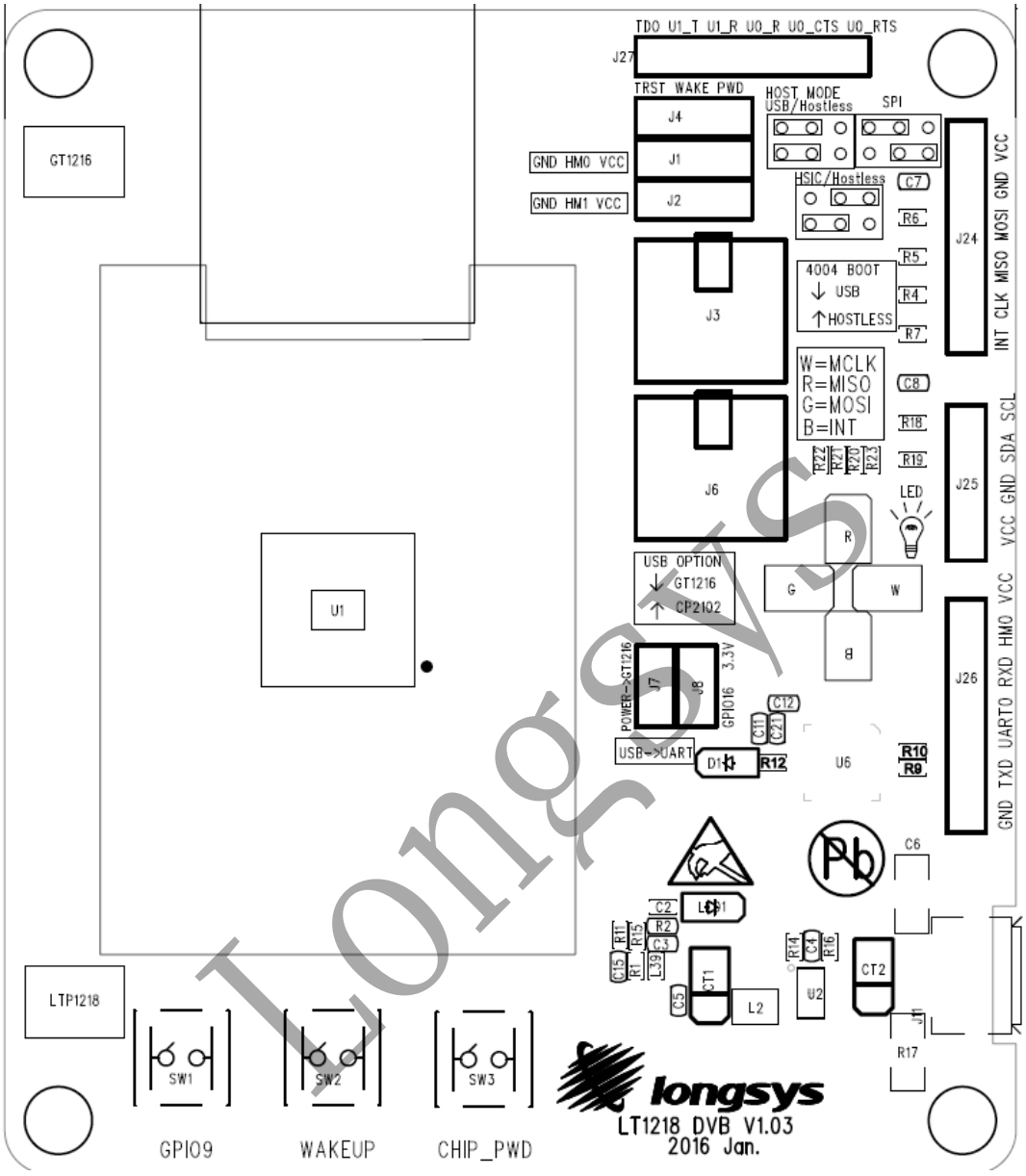


Figure 2-1 Top Screen of the LTP1218 development board

Table 2-1 LTP1218 DVB components

J1、J2	HOST MODE option	D1	LED for Cp2102
J3	HMO&GPIO16	W、R、G、B	Four color LEDs
J6	USB option	U1	LTP1218
J7	VCC interface	U6	Cp2102
J8	GPIO_16 option	SW1	GPIO9
J11	Micro USB	SW2	WAKEUP
J4,J24,J25 ,J26,J27	GT1216 GPIOs	SW3	CHIP_PWD
LED1	Power LED		

3 The Development board interfaces

3.1 HOST MODE OPTION

The GT1216 have two different host mode.

1、 USB Mode：user can download and calibration LTP1218 through USB mode, just push the button J3 and J6 or jumper J1 and J2 （**Figure3-1**）

2、 Hostless Mode: if user want to the module work in normal mode, just release the button J3 and J6 or jumper J1 and J2 . (**Figure3-2**)



Figure 3-1

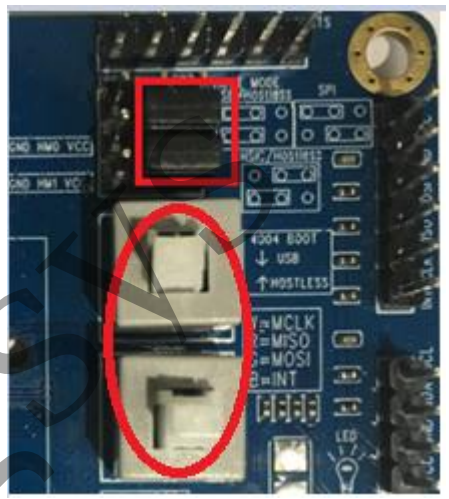


Figure 3-2

Longsys

3.2 UART&USB OPTION

If user need to use USB mode (download or test), only need to press the button (J6), if you use UART mode (debug software) only need to release the button.

Table 3-1 J3

Left Pin	Right Pin	Button	Description
1216_USB_DN	1216_USB_DP	↓	USB
USB_DN	USB_DP		
CP2102_USB_DN	CP2102_USB_DP	↑	UART



Figure 3-3

3.3 RXD Option

For the UART RXD, users need to choose HM0 or UART0 by the software, and then you can select one by shorting J26.2&J26.3 or J26.4&J26.3. (2or4)

Table 3-2 J26

Pin	Description
1	VCC
2	HM0
3	**RXD**
4	UART0
5	**TXD**
6	GND

Longsys

3.4 GPIOS

Table 3-3 J4

Pin	Description
1	PWD
2	WAKEUP
3	TRST

Table 3-4 J24

Pin	Description
1	SPI_INT
2	SPI_CLK
3	SPI_MISO
4	SPI_MOSI
5	GND
6	VCC

Table 3-5 J25

Pin	Description
1	SCL
2	SDA
3	GND
4	VCC

Table 3-6 J27

Pin	Description
1	UART0_RTS
2	UART0_CTS
3	UART0_RXD
4	UART1_RXD
5	UART1_TXD
6	TD0

Longsys

3.6 VCC Interface

Table 3-7 J7

Pin	Description
1	VCC- LTP1218
2	3.3V