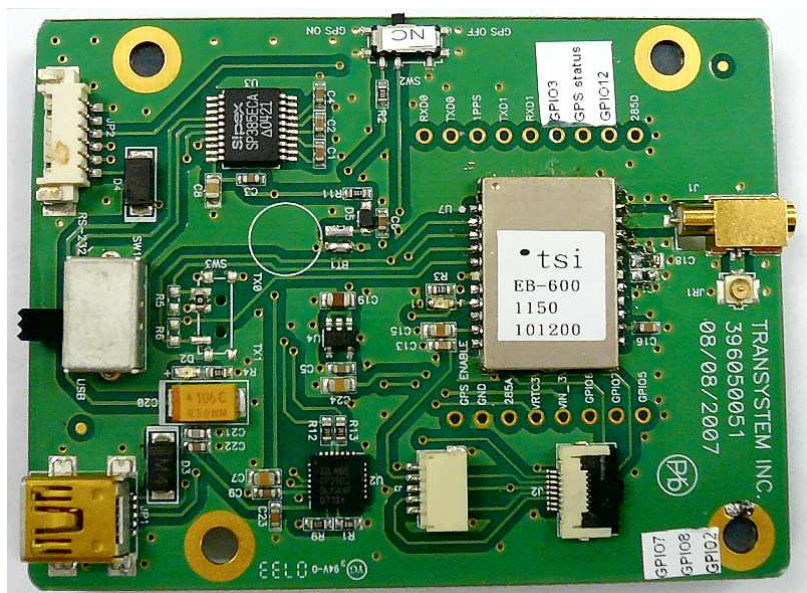


EB-600 GPS Engine Board Evaluation Kit User's Manual

AN-01



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1. Introduction

EB-600 evaluation kit is a user friendly tool for your evaluation of TSI's EB-600 GPS / Glonass engine board. With its miniature size, low power consumption and superior performance, EB-600 is your ultimate choice for all embedded applications such as:

- Handheld devices
- Automotive and Marine Navigation
- Automotive Navigator Tracking
- Emergency Locator
- Geographic Surveying
- Personal Position
- Sporting and Recreation
- Embedded applications : PDA, DSC, Smart phone, UMPC PND MP4

2. When you open it

2.1. Checking the package content

a.



c.



b.

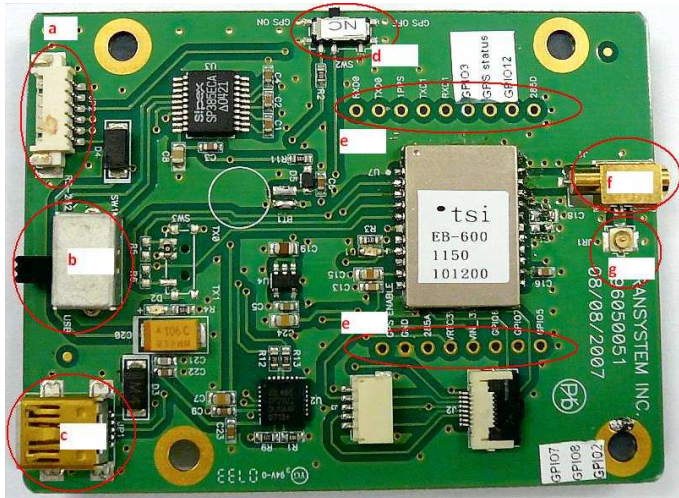


d.



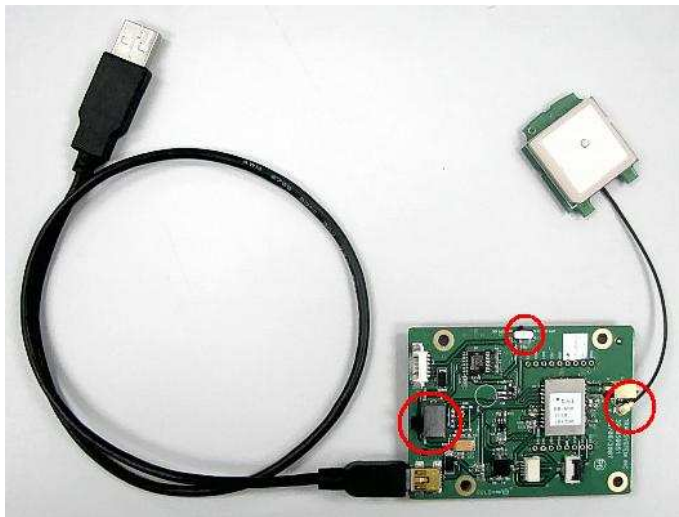
- a. USB cable *1
- b. EB-600 evaluation board *1
- c. GA-723 GPS/Glonass active antenna *1
- d. CD-ROM *1

2.2. Evaluation Board Picture



- a. RS-232 port
- b. USB & RS232 select switch
- c. Mini USB port
- d. GPS on/off switch
- e. Test point
- f. Aux RF port1 (MMCX)
- g. RF port2 (IPEX)

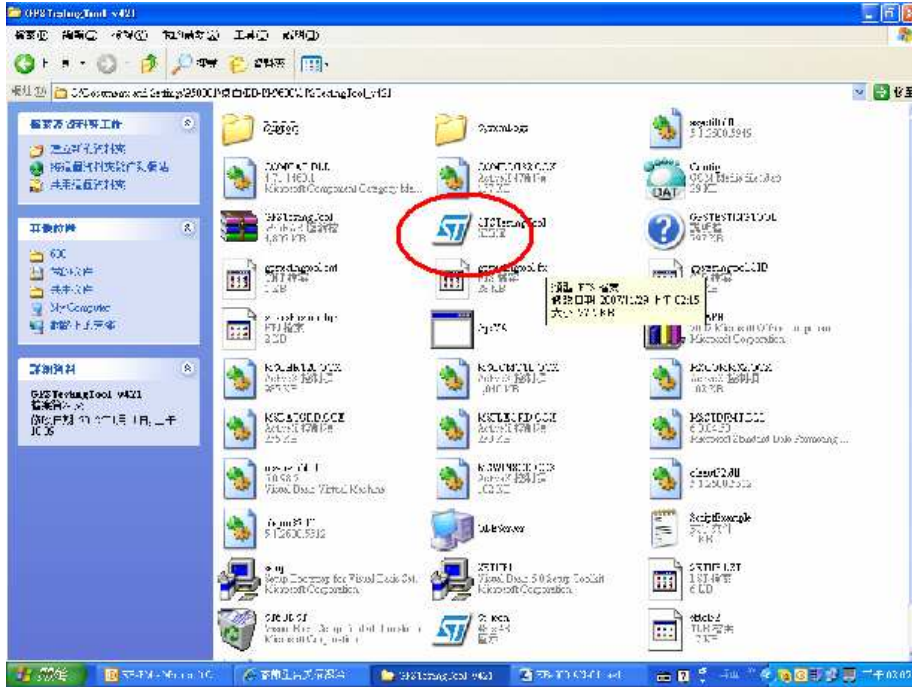
2.3. USB Setup



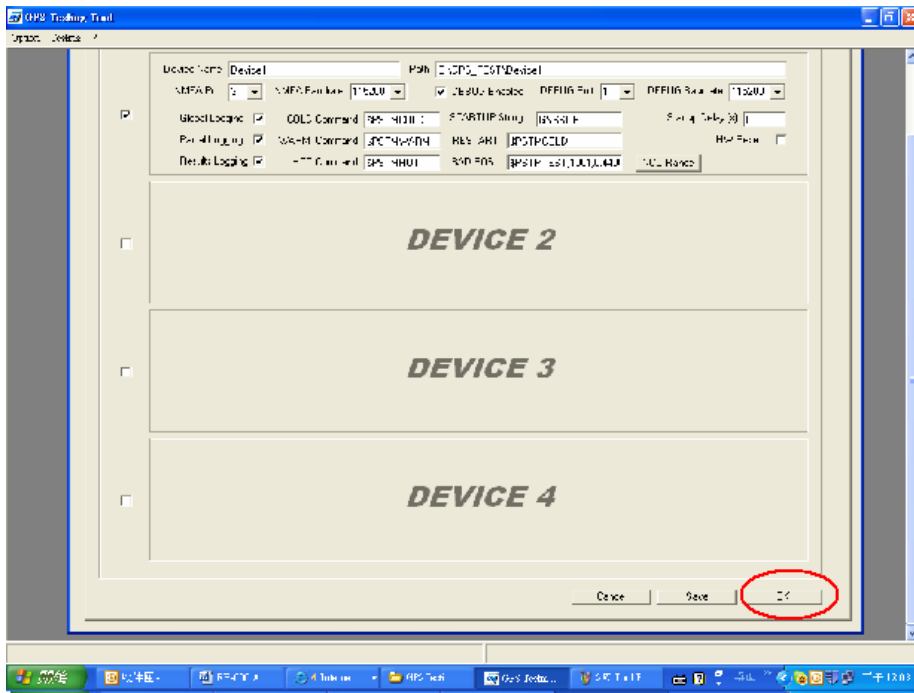
- a. Plug active antenna into the RF port2 (IPEX)
- b. Connect USB cable between EB-600 evaluation board and PC
- c. Turn USB & RS232 select switch to “USB” position
- d. Turn GPS on/off switch to “GPS on” position

3. EB Testing Software

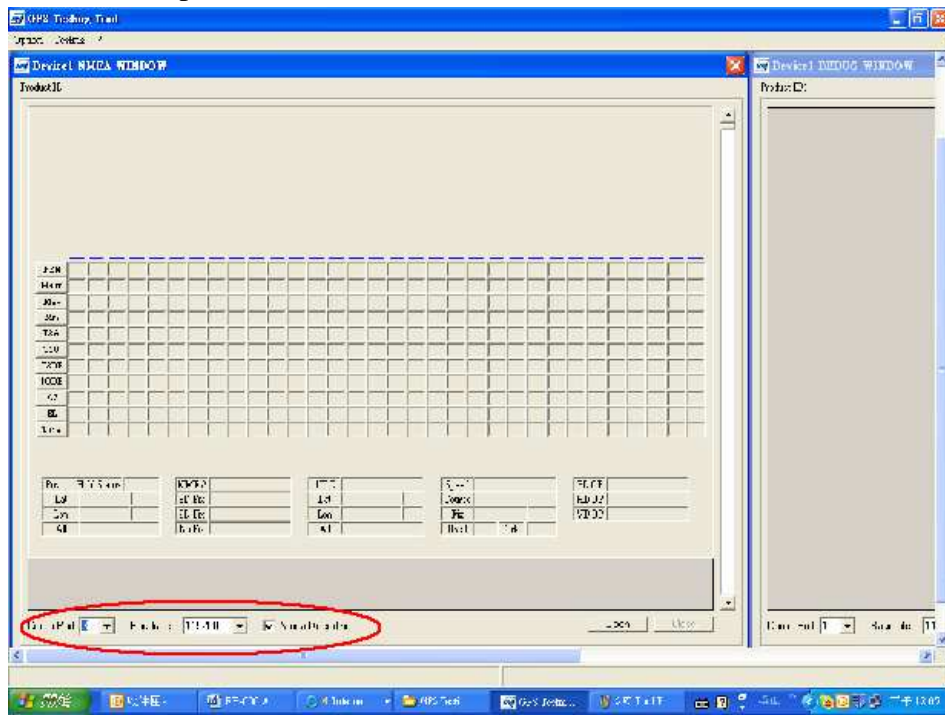
- Open GPSTestingTool software



- Scroll down to the bottom of the first page and click OK.

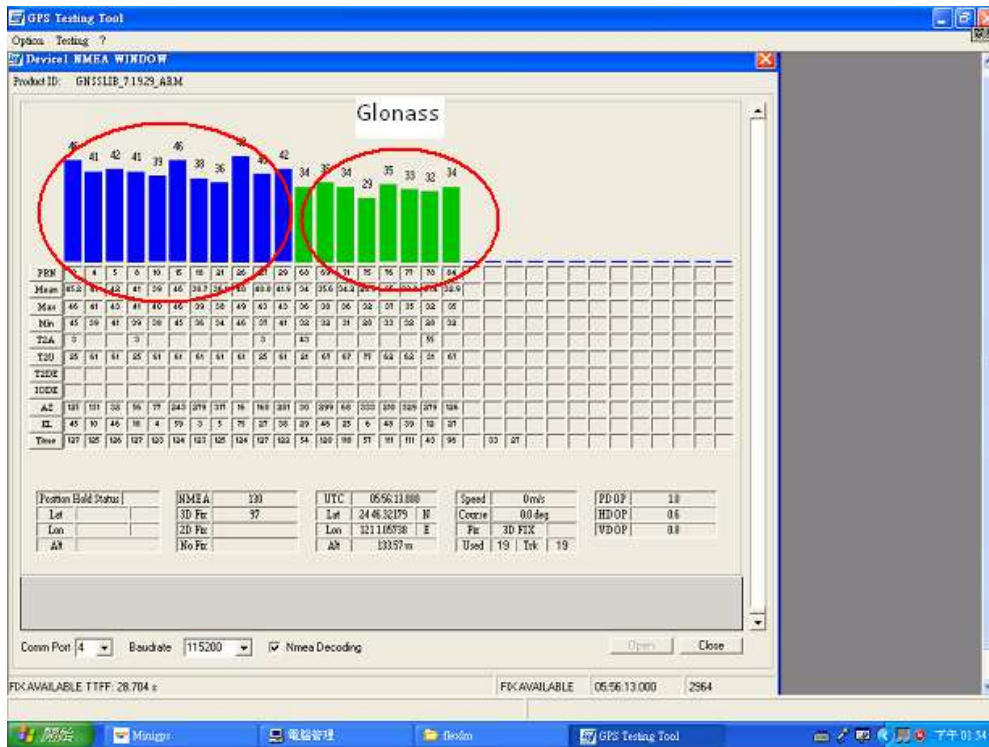


- Select correct COM port and Baud Rate





- If the connection is successful, the NMEA stream will keep showing.





4. Connector Definition

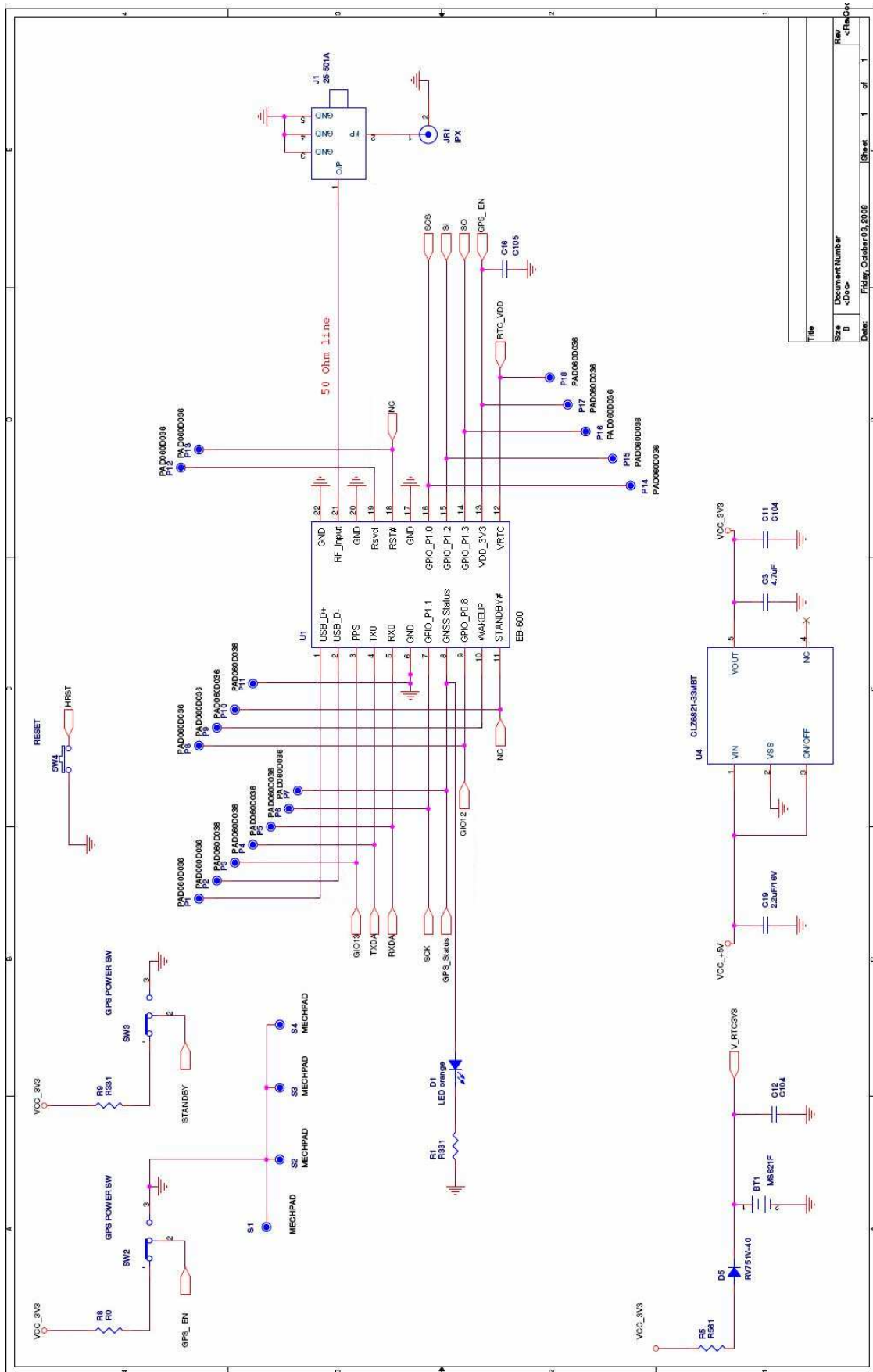
Pin#	Signal Name	Type	Description
1	USB_D+ / RX1	I	USB Data Plus ; UART port 1 input, leave open if not used
2	USB_D- / TX1	O	USB Data Minus ; UART port 1 output, leave open if not used
3	GPIO_P0.0 / PPS	O	Pulse per second output
4	TX0	O	UART port 0 output for NMEA
5	RX0	I	UART port 0 input
6	GND	P	Ground
7	GPIO_P1.1 / SP_SCK	I/O*	General input/ output ; SPI clock, leave open if not used
8	GPIO_P0.9 / GNSS Status / I2C_CLK	O	General input/ output ; GNSS status indication ; I2C clock
9	GPIO_P0.8 / I2C_SD	I/O*	General input/ output ; I2C serial data
10	WAKEUP	I	Wakeup from standby mode
11	STANDBY#	I	Active low to put module into standby mode, leave open if not used.
12	VRTC	P	RTC power 1.62~3.6VDC
13	VDD_3V3	P	Power supply 3.0~4.2VDC
14	GPIO_P1.3 / SSP_SO	I/O*	General input/ output ; SPI data output, leave open if not used
15	GPIO_P1.2 / SSP_SI	I/O*	General input/ output ; SPI data input, leave open if not used
16	GPIO_P1.0 / SP_CS#	I/O*	General input/ output ; SPI chip select, leave open if not used
17	GND	P	Ground
18	RST#	I	Reset input, active low with Schmitt-Trigger, leave open if not used.
19	Rsvd	I/O*	Reserve for future use, leave open if not used
20	GND	P	Ground
21	RF_Input	I	RF input port, L1 band, 50 ohm Active antenna power feed, same as VDD_3V3
22	GND	P	Ground

Note :1) P: Power, I: Input, O: Output, I/O*: Input or Output, leave open if not used.

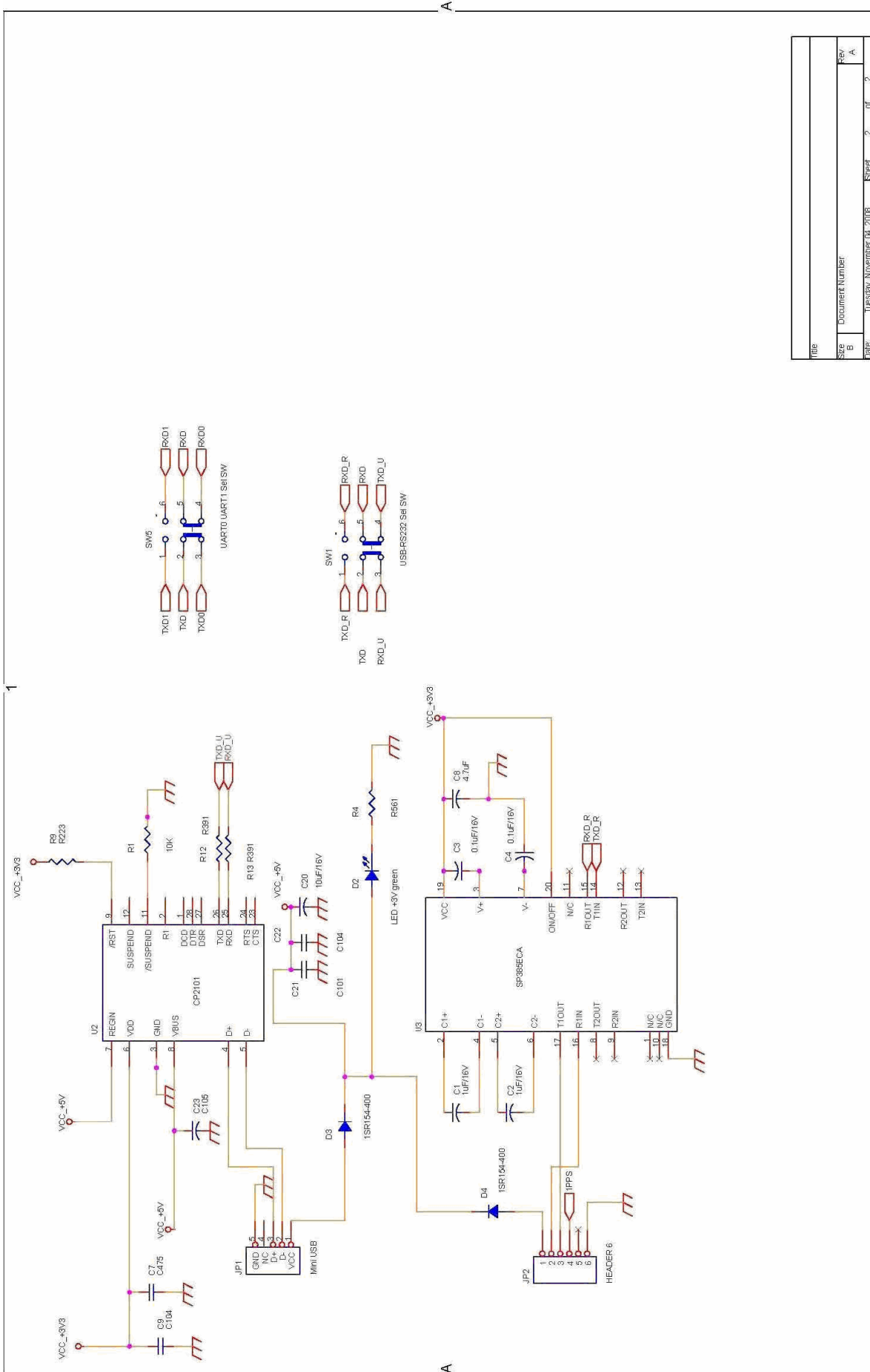
2) GPIO current output default : 4mA, Max : 16mA



5. Evaluation Board Schematics



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