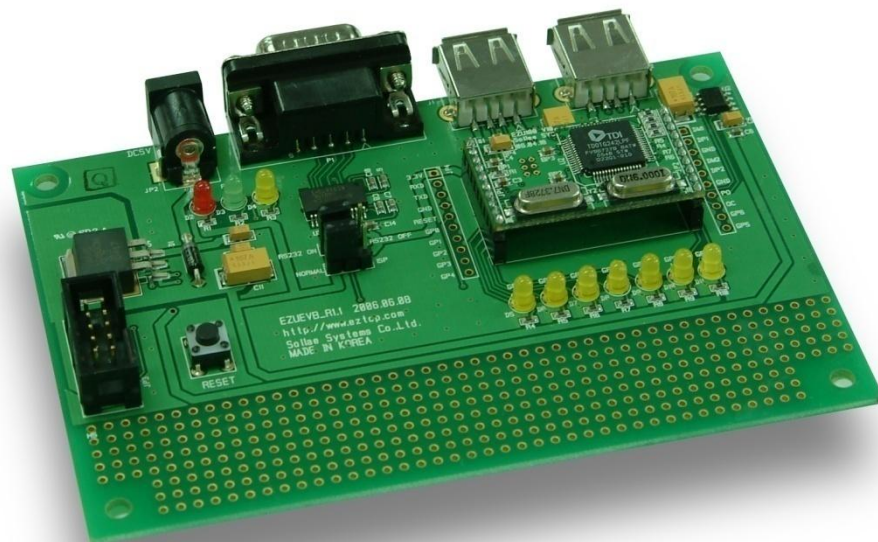


Application Note

EZU-100 EVB Manual

Version 1.0
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1 Overview

1.1 Introduction

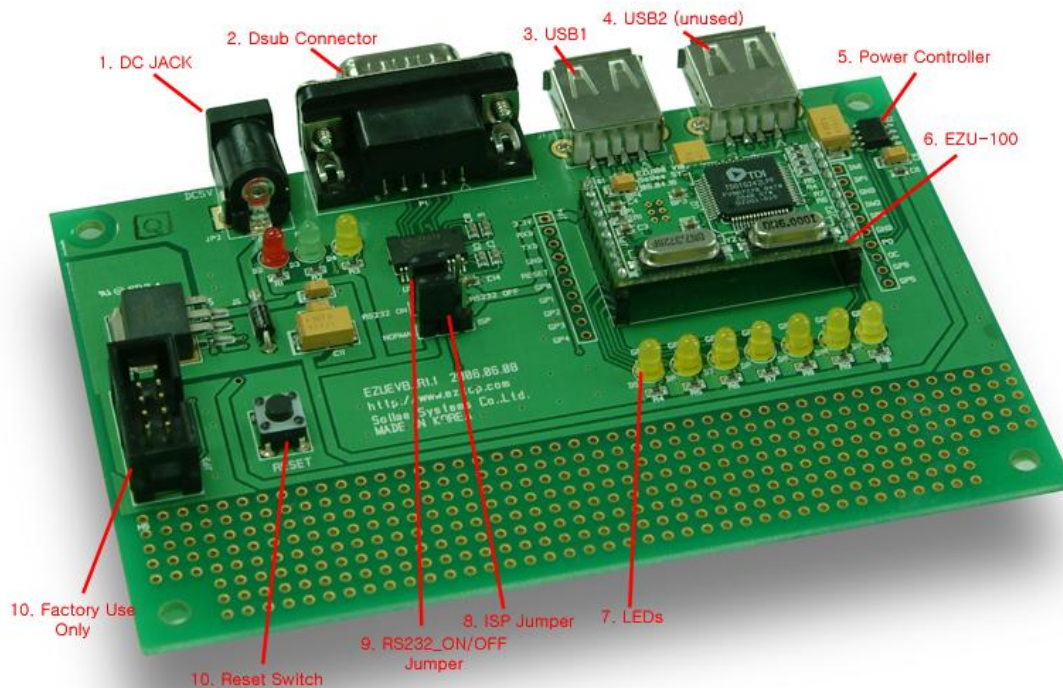


Fig 1-1 Interface of EVB

EZU-100 EVB is a board for interfacing EZU-100. EZU-100 EVB provides an RS232 port, two USB ports, and power control logic to control USB power.

1.1.1 Components

- EZU-100 EVB Body
- 5V SMPS Adapter
- RS232 cable

1.2 Interface

1.2.1 Power

The power of EZU-100 EVB is 5V. EZU-100 EVB supplies 5V to USB device (MT2) and 3.3V to EZU-100 after converting 3.3V with LDO. The following is the DC jack for EVB of EZU-100

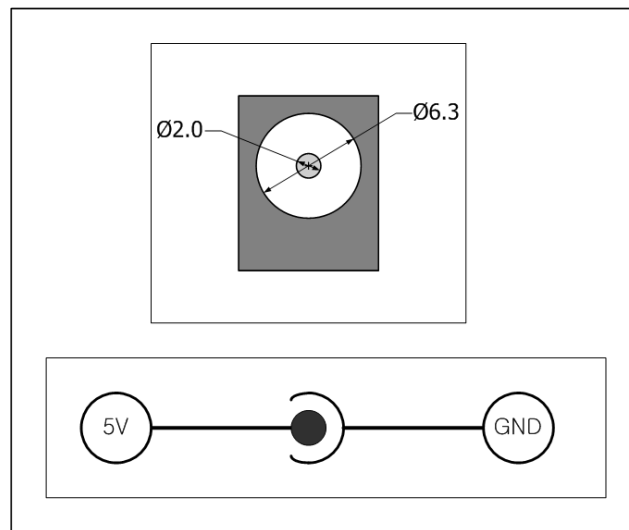


Fig 1-2 DC jack

1.2.2 Serial Port

EZU-100 EVB's serial interface is RS232. The specification is followed:

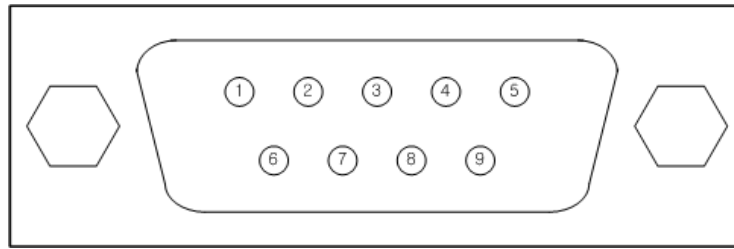


Fig 1-3 Interface of RS232 port

Table 1-1 Pins of RS232 port

number	name	description	EZU-100	Dir.
1	NC	No Connect	-	-
2	RXD	Receive Data	RXD	Input
3	TXD	Transmit Data	TXD	Output
4	DTR	Data Terminal Ready (always ON)	-	Output
5	GND	Ground	Ground	-
6	NC	No Connect	-	-
7	RTS	Request To Send	GP3(RTS)	Output
8	CTS	Clear To Send	GP4(CTS)	Input
9	NC	No Connect	-	-

1.2.3 USB Port

EZU-100 EVB has 2 USB ports (USB1: J1, USB2: J2). But EZU-100 supports only USB1 (J1).

EZU-100 EVB has a circuit to control USB power. It gets PO signal from EZU-100 and supplies 5V power to USB device (MT2). If there's over-current (over 500mA) in USB device (MT2), EZU-100EVB signals to EZU-100 with OC.

For Power control, a TPS2042BD of TI Inc. is used.

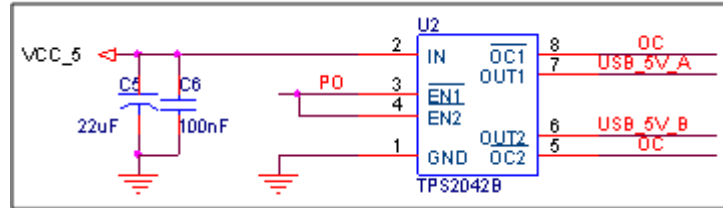


Fig 1-4 Circuit of connection with TPS204BD

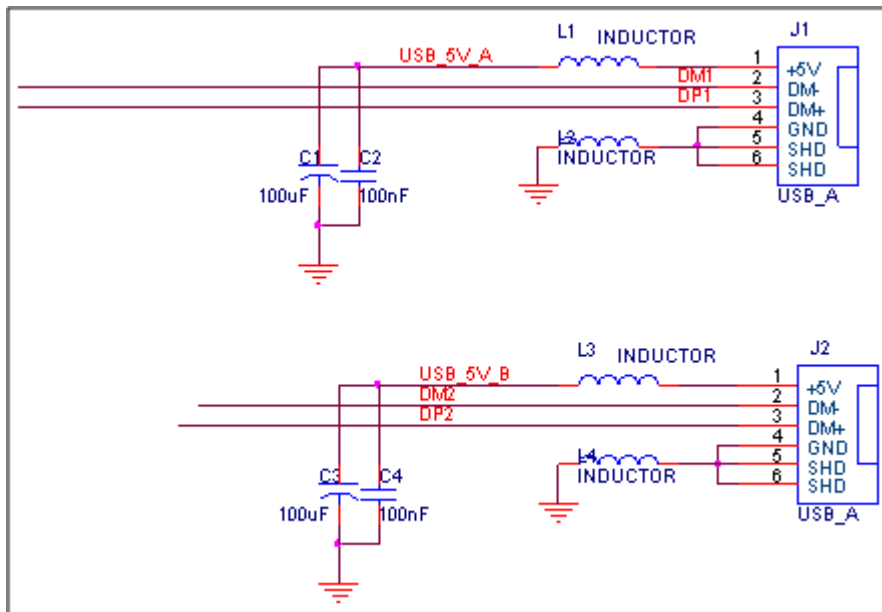


Fig 1-5 Circuit of connection with USB

1.2.4 LED Interface

There are 10 LEDs in EZU-100 EVB.

Table 1-2 LED interface

Name	Description
PWR	Power LED of EZU-100 EVB
RXD	Blink if there are data in RXD
TXD	Blink if there are data in TXD
GP0	Connected to GP0 of EZU-100
GP1	Connected to GP1 of EZU-100 (ISP)
GP2	Connected to GP2 of EZU-100
GP3	Connected to GP3 of EZU-100 (RTS)
GP4	Connected to GP4 of EZU-100 (CTS)
GP5	Connected to GP5 of EZU-100
GP6	Connected to GP6 of EZU-100

1.2.5 LED status in each mode

Table 1-3 Status of Each mode

Mode	Name	Status
Normal mode	PWR	On when power is supplied
	GP2	Off
	GP3	On
	GP4	On when the serial port is connected
ISP mode	PWR	On when power is supplied
	GP2	On
	GP3	Off
	GP4	On when the serial port is connected

1.2.6 Jumpers

- JP6

This jumper enables/disables the RS232 driver (U3). It is useful to interface to outside of board via JP4 and JP5.

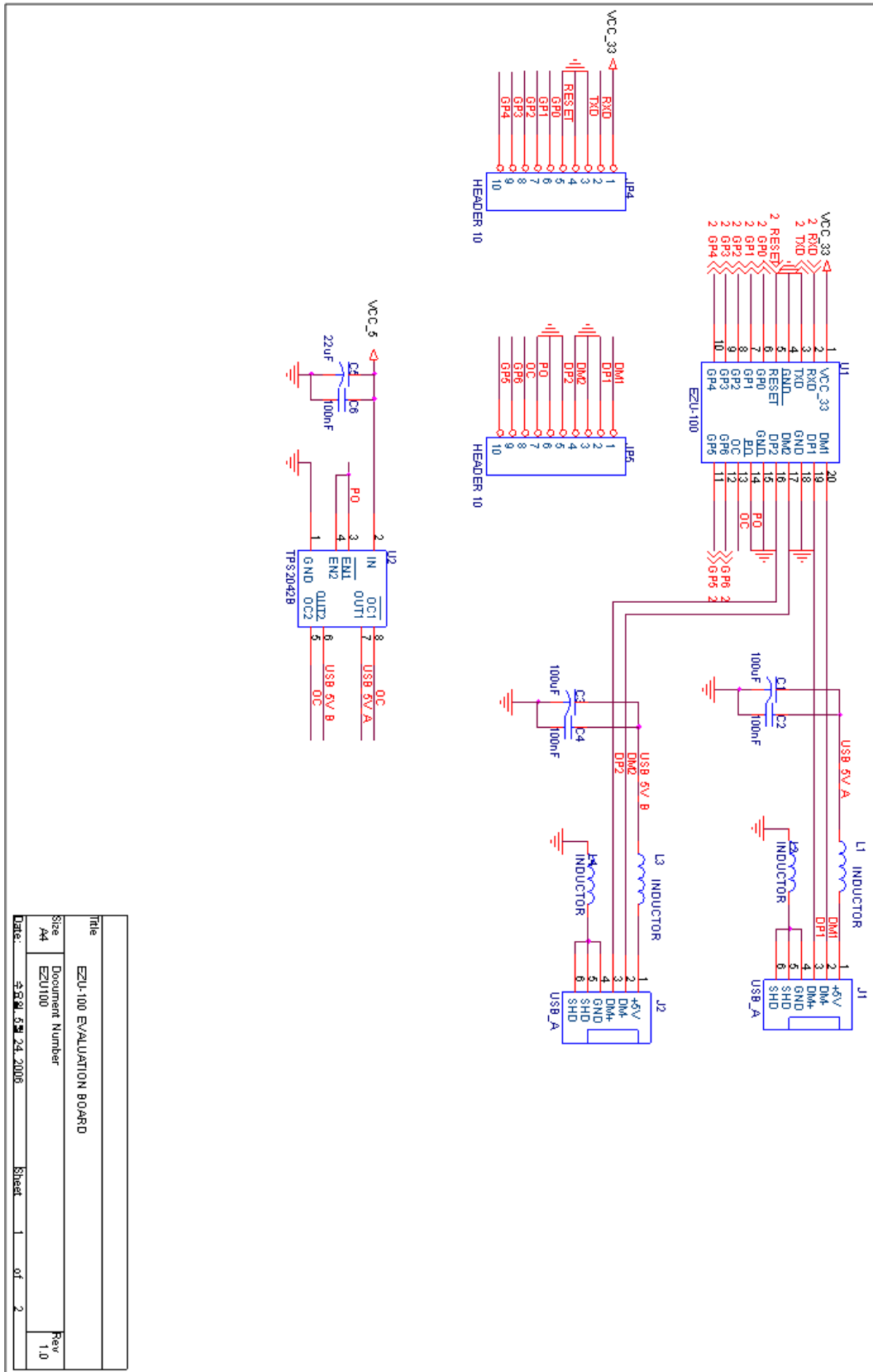
			RS232 ON	Enable the RS232 driver (U3)
			RS232 OFF	disable the RS232 driver (U3)

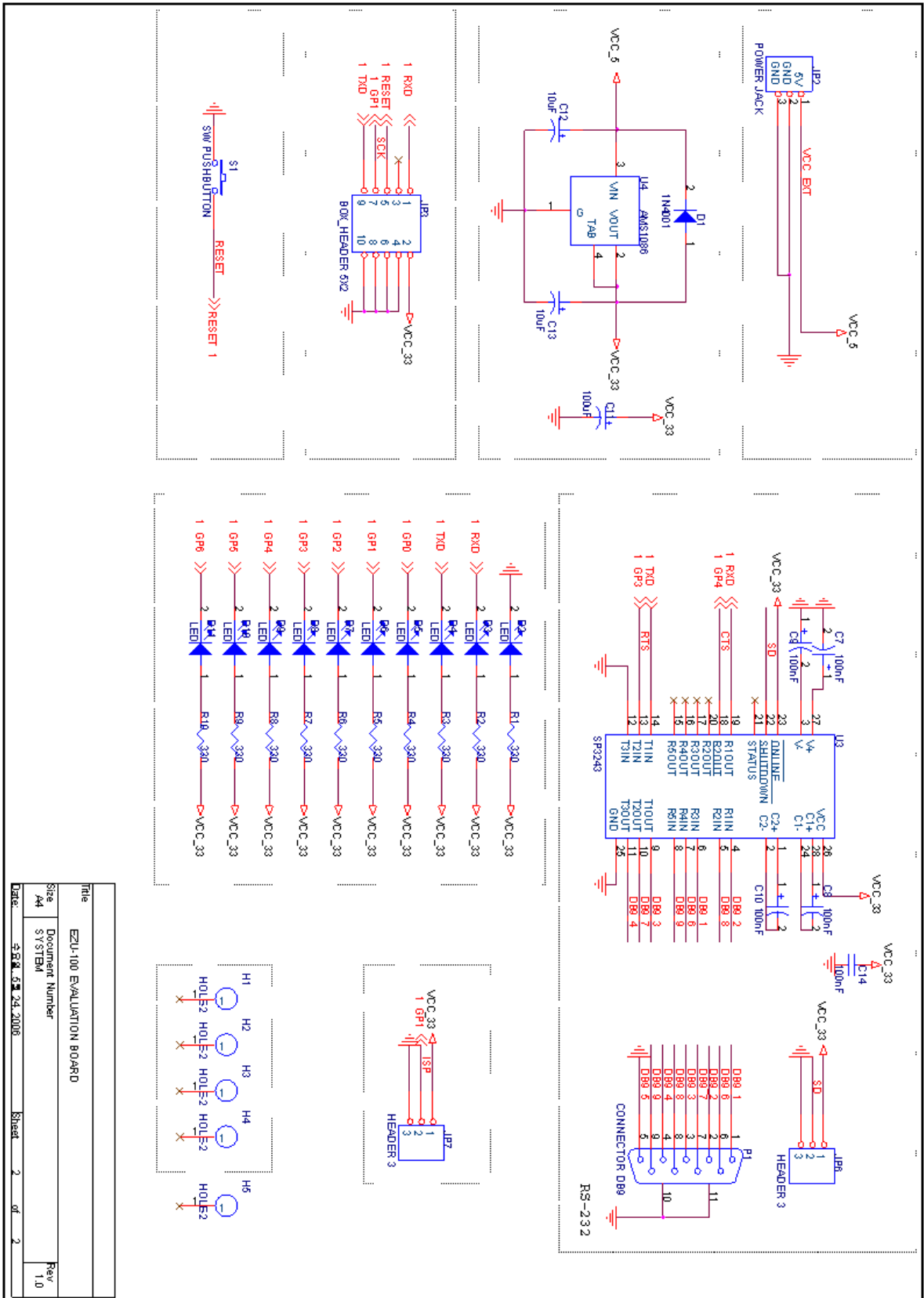
- JP7

The pin 2 of JP7 is connected to ISP pin of EZU-100. It is for operating EZU-100 as Normal mode or ISP mode. When EZU-100 boots up, it checks ISP pin. If this pin is High, it operates as Normal mode. And if this pin is Low, it operates as ISP mode.

			NORMAL	Operates as Normal mode
			ISP	Operates as ISP mode

1.3 Schematics





Title	EZU-100 EVALUATION BOARD
Size	Document Number
Rev	SYSTEM
Date	5.8.2008 5.24.2008
Sheet	2 of 2
Rev	1.0

2 Revision History

Date	Version	Description
2009.09.01	1.0	Created