

WIZ750SR-110 Datasheet

Supported Languages

- English only

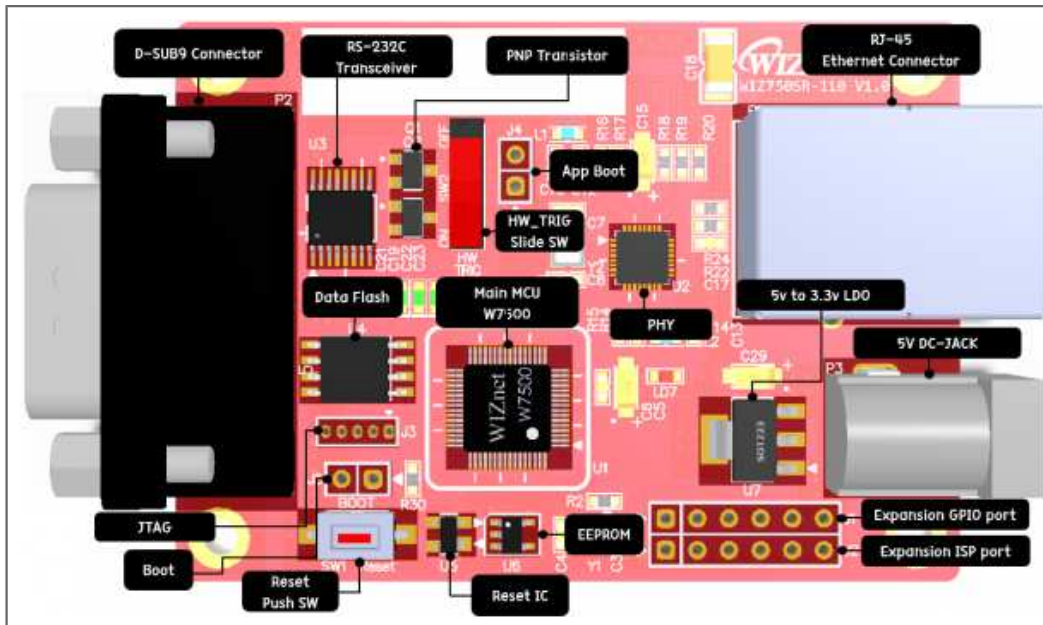


Hardware Specification

Product Spec Table

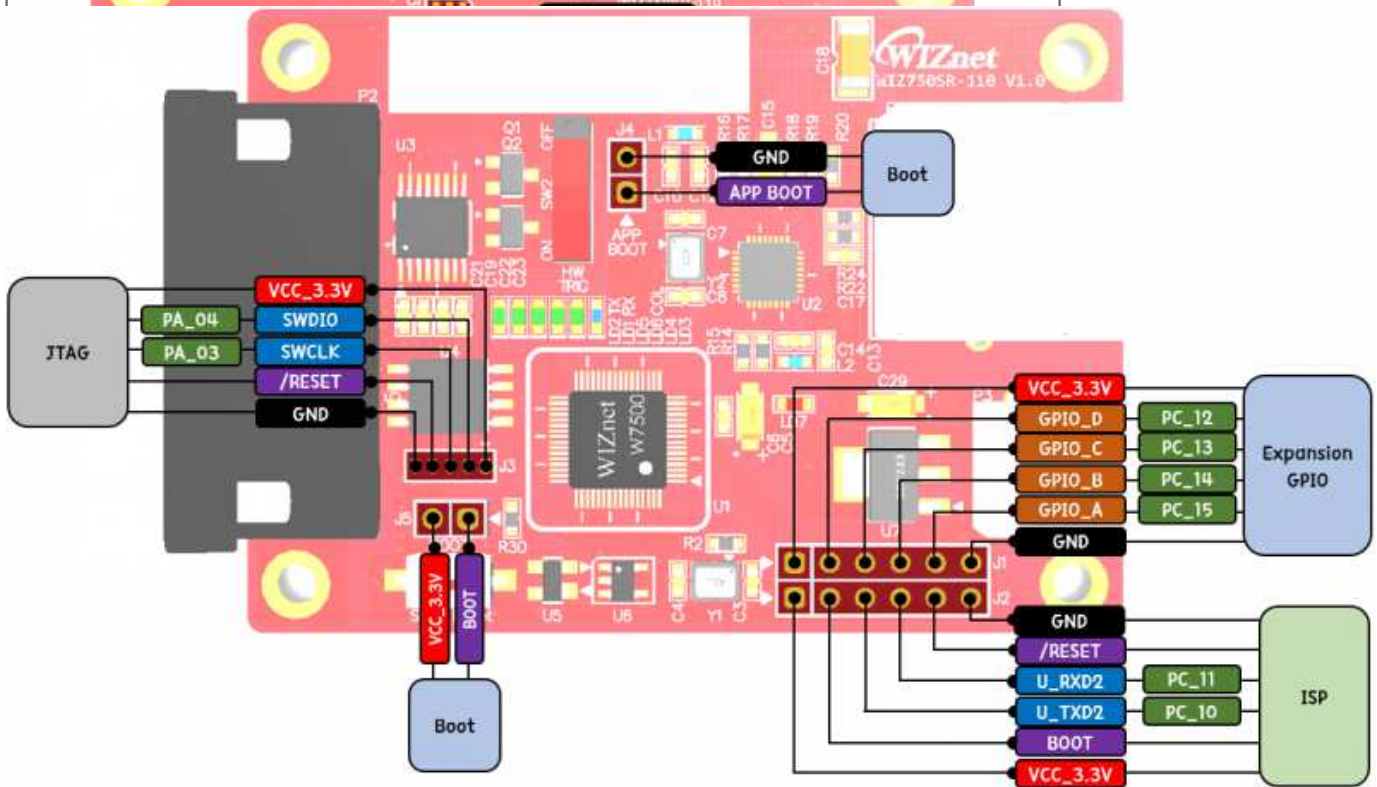
Category		Description
MCU	ARM Cortex-M0 Core	W7500 48Mhz maximum frequency Internal 8Mhz RC Oscillator Flash: 128KB Large flexible-size SRAM buffer for various User Application - Min 16KB available if full 32KB socket buffer used - Max 48KB available if no socket buffer used ROM for boot code: 6 KB
	Hardwired TCP/IP Core	8 independent Sockets SRAM for socket: 32KB MII (Medium-Independent Interface) TCP/IP Protocols: TCP, UDP, ICMP, IPv4, ARP, IGMP, PPPoE
PHY	Transceiver	IP101GRI Single 10/100M Ethernet Transceiver
Serial	Signal	TXD, RXD, RTS, CTS, GND
	Parameters	Parity: None, Odd, Even Data bits: 7, 8 bit Flow control: None, RTS / CTS, XON / XOFF
	Speed	Up to 230Kbps
Dimension		62mm x 40mm (PCB board size) 62mm x 40mm x 18mm (Include part size)
Connector type		RJ-45(Ethernet Connector) D-sub9 Connector(RS-232C)
Input Voltage		DC 5V, 100mA under
Temperature		-40°C ~ 85°C (Operation), -40°C ~ 85°C (Storage range)

WIZ750SR-110 Callout

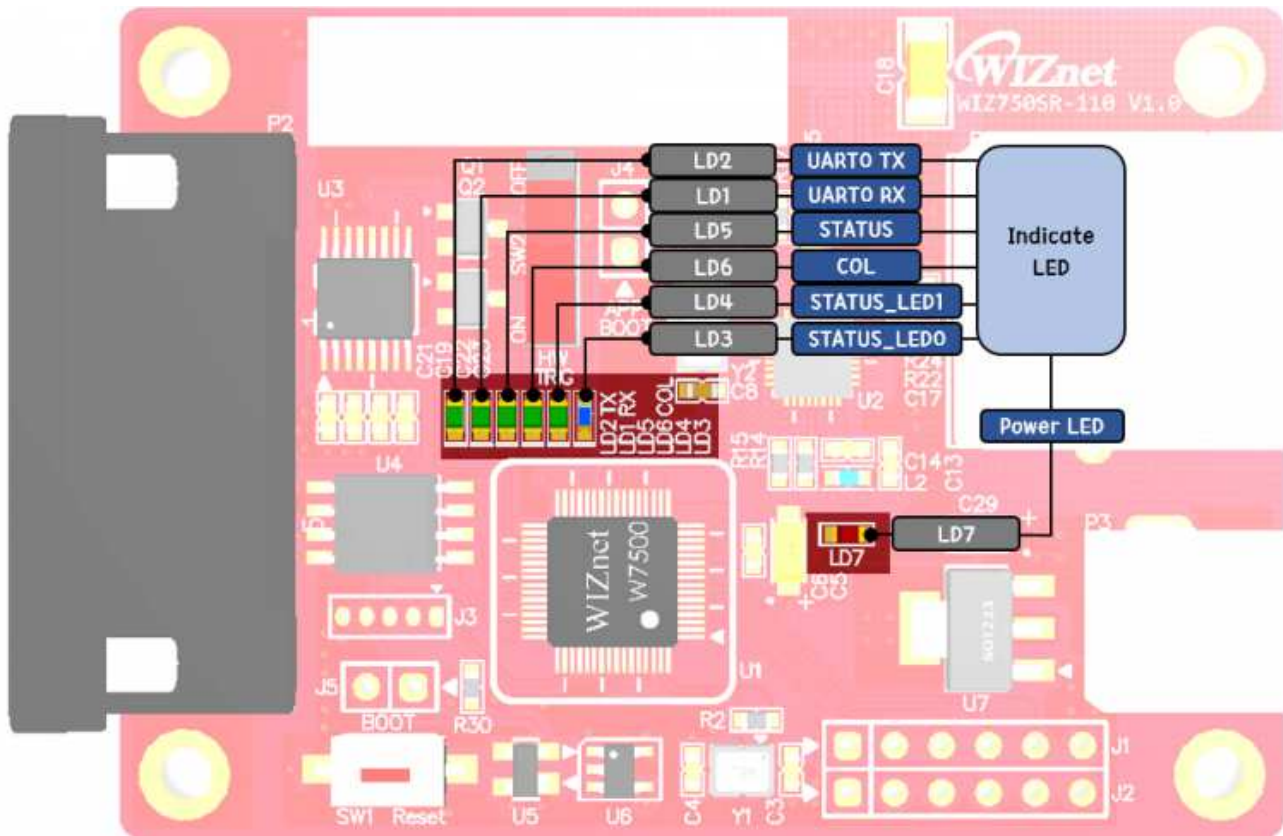


TOP

WIZ750SR-110 Pinout

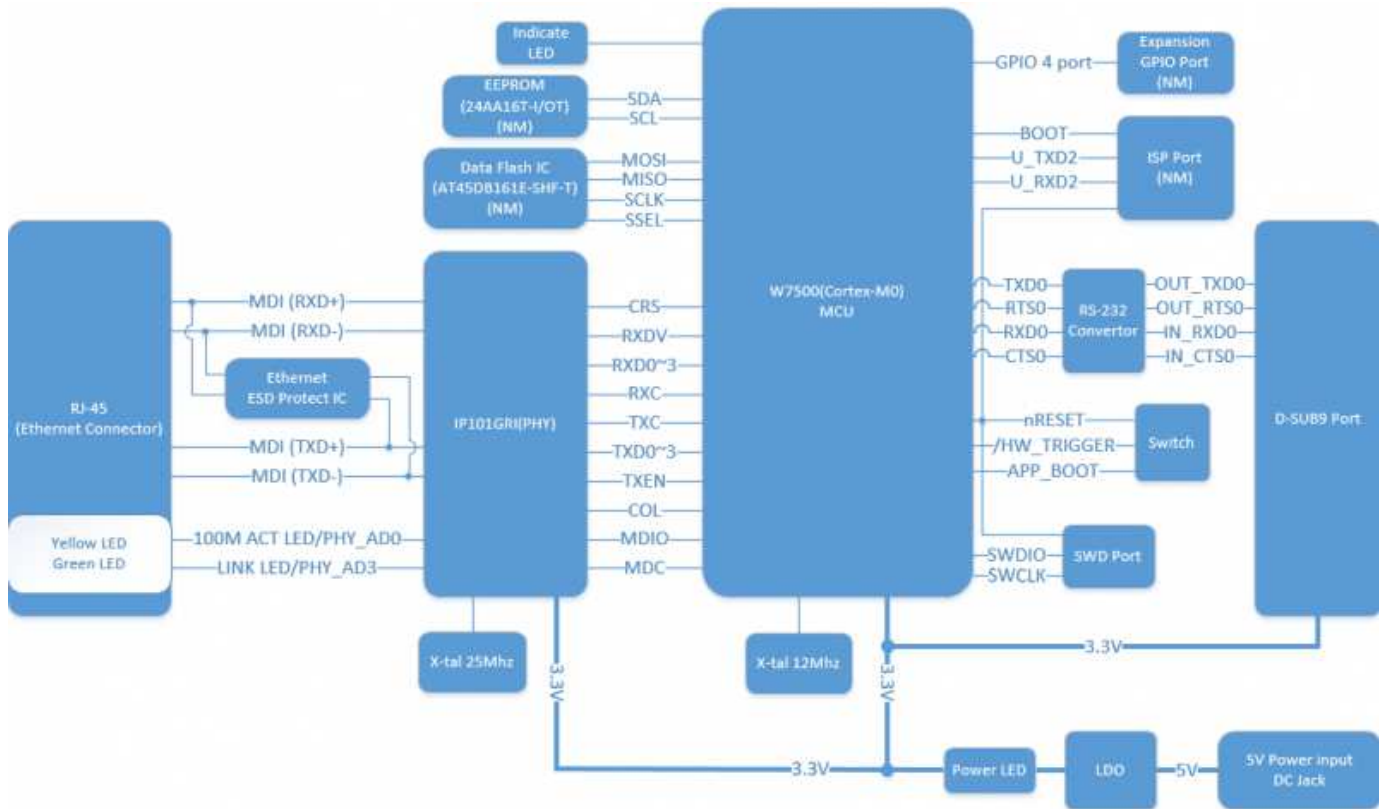


WIZ750SR-110 indicate



Pin Number	Pin Name	Signal	Description
1	LD1	UART0 RX	UART receiver indicate
2	LD2	UART0 TX	UART Transceiver indicate
3	LD3	Status_LED0	PHY LINK check or initialize done
4	LD4	Status_LED1	TCP Connection
5	LD5	STATUS	Not function
6	LD6	COL	Collision Detected
7	LD7	Power LED	-

WIZ750SR-110 Block Diagram



Schematic & Artwork

WIZ750SR-110

H/W version	Type	Filetype	Download Link	Remarks
1.0	RS232	Altium	Download	-
		PDF	Download	-

Part list

WIZ750SR-110

H/W version	Type	Filetype	Download Link	Remarks
1.0	RS232	Excel	Download	-
		PDF	Download	-

Electrical Characteristics

Operating Conditions

Symbol	Parameter	Pins	Min	Typ	Max	Unit
V_{cc}	Operating Voltage	3.3V	3.135	3.3	3.465	V
V_{ss}	Ground	ALL		0	50	mV
f_{CLK}	Internal CPU clock frequency	ALL	0	-	48	MHz
T_{stg}	Storage Temperature (max)	ALL	-40		85	°C
T_A	Ambient operating temperature	ALL	-40	85		°C

Symbol	Parameter	Pins	Min	Typ	Max	Unit
V _{IO}	I/O Signal voltage (Tolerance)	ALL	V _{ss} -0.3	3.3	5	V
V _{IH}	Input high voltage	ALL	2.5			V
V _{IL}	Input low voltage	ALL			0.6	V
V _{OH}	Output high voltage (High driving strength Current load = 6mA) (Low driving strength Current load = 3mA)	ALL	2.83			V
V _{OL}	Output high voltage (High driving strength Current load = 6mA) (Low driving strength Current load = 3mA)	ALL			0.32	V

Flash Memory

Symbol	Parameter	Min	Unit
NEND	Sector Endurance	10,000	Cycles
TDR	Data Retention	10	Years

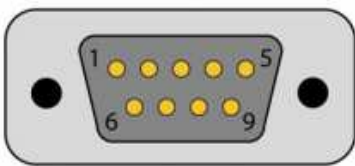
EEPROM

Symbol	Parameter	Min	Unit
NEND	Sector Endurance	1M	Cycles
TDR	Data Retention	200	Years

Connector Specification

Data D-SUB9 Connector (P2)

DB9M Connector



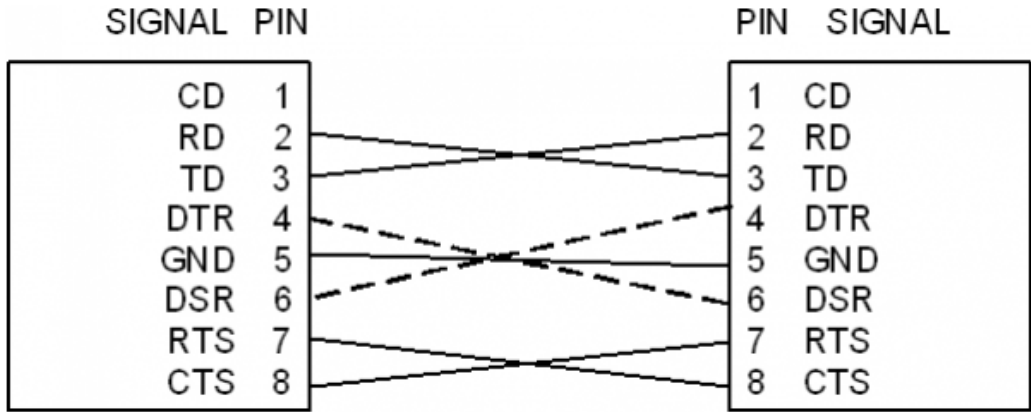
RS-232 Pinout

Pin#	Signal
1	NC
2	RX
3	TX
4	NC
5	GND
6	NC
7	RTS
8	CTS
9	NC

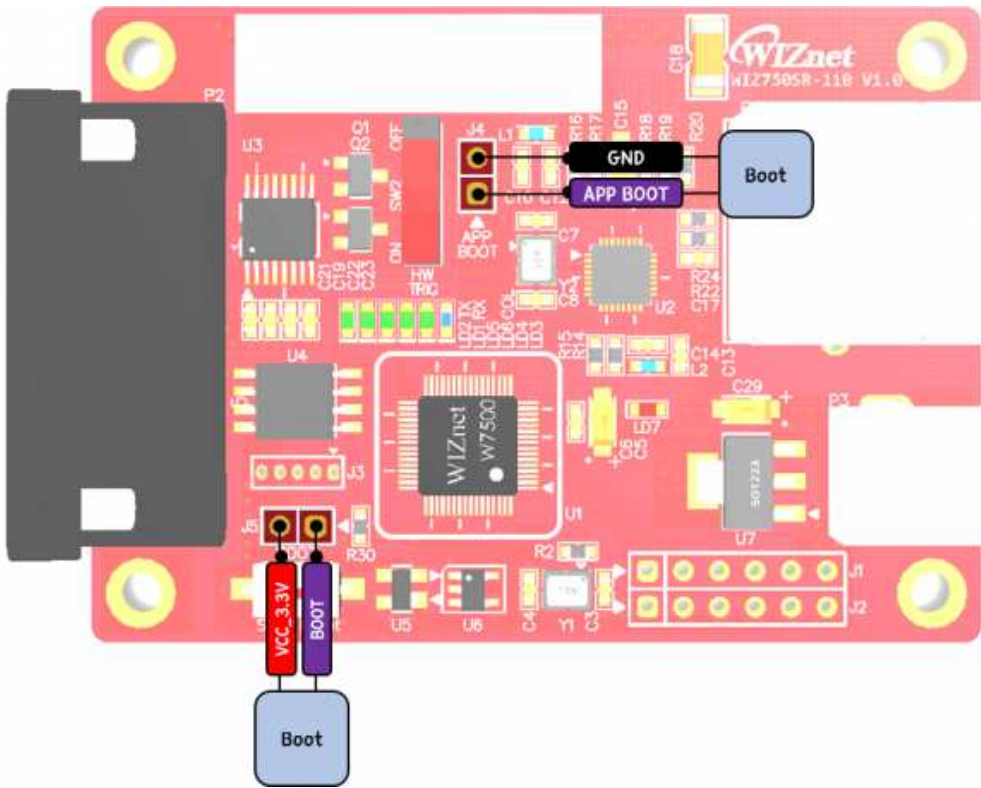
Pin Number	Signal	Description
1	DCD	NC
2	RXD	Receive Data
3	TXD	Transmit Data
4	DTR	NC
5	GND	System Ground(Signal Ground)
6	DSR	NC
7	RTS	Request To Send
8	CTS	Clear To Send

Pin Number	Signal	Description
9	RI	NC

- WIZ750SR-110 supports only 4 signals. (TXD, RXD, CTS, RTS)
- If you want to use all 9 signals, you have to make them separately. or you must design new hardware
- TXD, RXD, CTS, RTS are provided as peripheral functions.
- And already made DSR and DTR signal in GPIO functions.(WIZ750SR Firmware code)
- Therefore, DCD and RI functions must be created.
- RXD, TXD, GND: These are all you need if the device does not use hardware handshaking.
- RXD, TXD, GND, RTS, CTS: These are the signals used when serial device uses hardware handshaking.
- DTR, DSR: Not used



BOOT Pin (J4, J5)

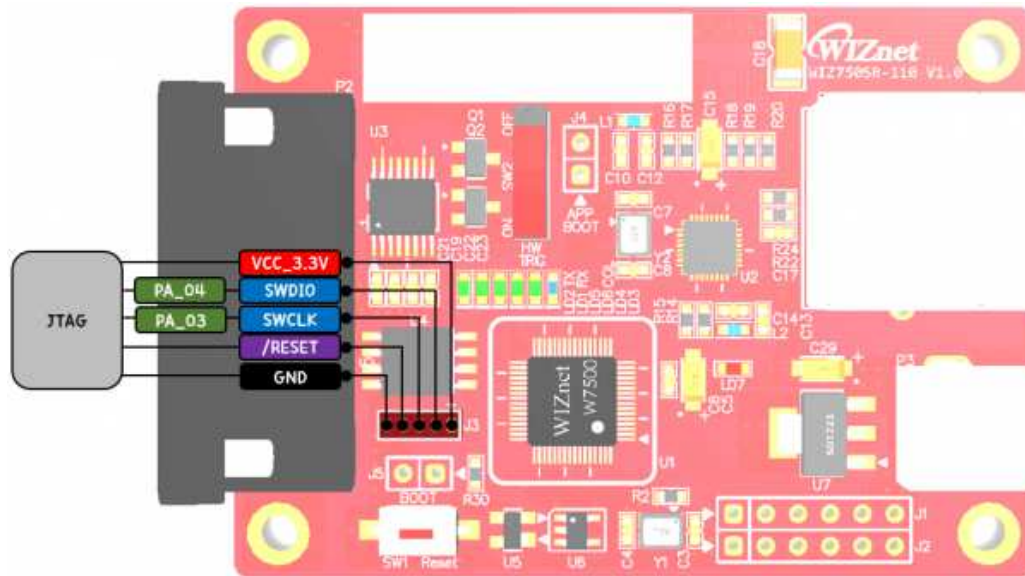


Parts	Pin Number	Signal	Description
J4	1	APP BOOT	Application Jump at BOOT mode
	2	GND	System Ground

Parts	Pin Number	Signal	Description
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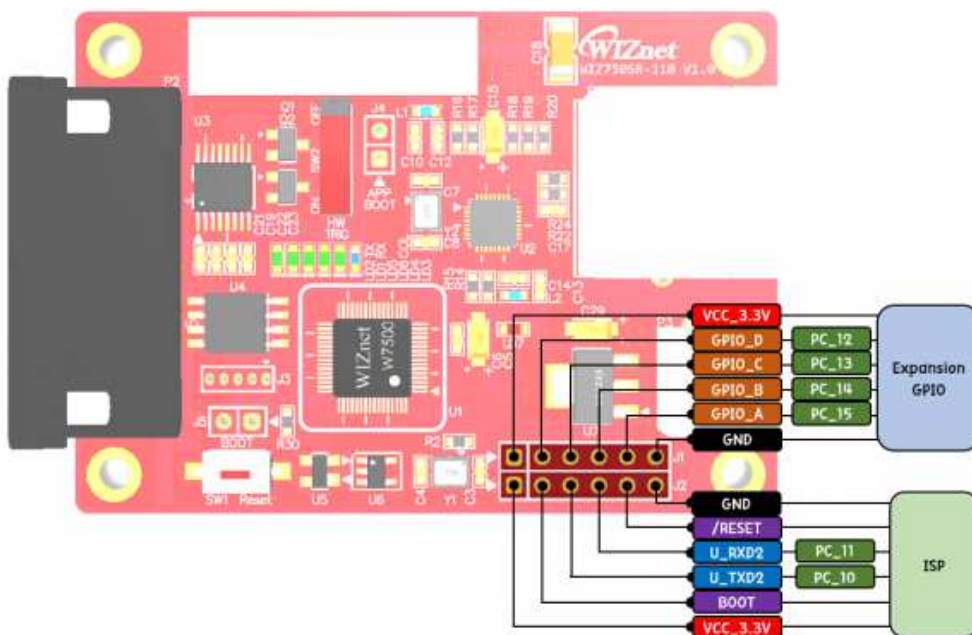
Parts	Pin Number	Signal	Description
J5	1	BOOT	System Ground
	2	VCC	System Power (3.3V)

SWD(JTAG) Pin (J3)



Pin Number	Signal	Description
1	VCC	System Power (3.3V)
2	SWDIO	SWD(JTAG) Data I/O pin
3	SWCLK	SWD(JTAG) Clock pin
4	nRESET	System Reset signal (Active Low)
5	GND	System Ground

ISP Port & Expansion GPIO (J1, J2)

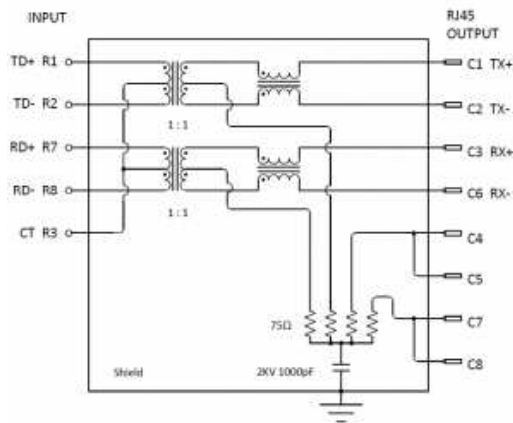


Parts	Pin Number	Signal	Description
J1	1	VCC_3.3V	ISP
	2	/RESET	
	3	U_RXD2	
	4	U_TXD2	
	5	GND	
J2	1	VCC_3.3V	Expansion GPIO
	2	GPIO_D	
	3	GPIO_C	
	4	GPIO_B	
	5	GPIO_A	
6	GND		

Parts	Pin Number	Signal	Description
J1	1	VCC	System Power (3.3V)
	2	Expansion GPIO D	Expansion User's depend on GPIO port
	3	Expansion GPIO C	
	4	Expansion GPIO B	
	5	Expansion GPIO A	
	6	GND	System Ground

Parts	Pin Number	Signal	Description
J2	1	VCC	System Power (3.3V)
	2	BOOT	BOOT SW
	3	U_TXD2	Simple UART2(Debug port) ISP mode firmware downloader port
	4	U_RXD2	Simple UART2(Debug port) ISP mode firmware downloader port
	5	nRESET	System Reset signal (Active Low)
	6	GND	System Ground

RJ-45 Connector (BS-RB10005)



Emitting Color	Ap (mm)	Vf @If=20mA	Ir @Vr=5V
Green	565	1.7~2.6 V	10µA max.
Yellow	585	1.7~2.6 V	10µA max.

Pin Number	Pin	Signal
1	R1	TX+
2	R2	TX-
3	R3	TCT/RCT(Center tap)
4	R7	RX+
5	R8	RX-
6	L1+(Active LED)	Anode
7	L2- (Active LED)	Cathode

Pin Number	Pin	Signal
8	L3+(LINK LED)	Anode
9	L4- (LINK LED)	Cathode

Dimension

- WIZ750SR-110 Rev1.0 Dimension :
 - 63mm x 45mm (PCB board size)
 - 75mm x 45mm x 18mm (Included part size)

