

WIZ750SR-105 Datasheet

Supported Languages

- English only

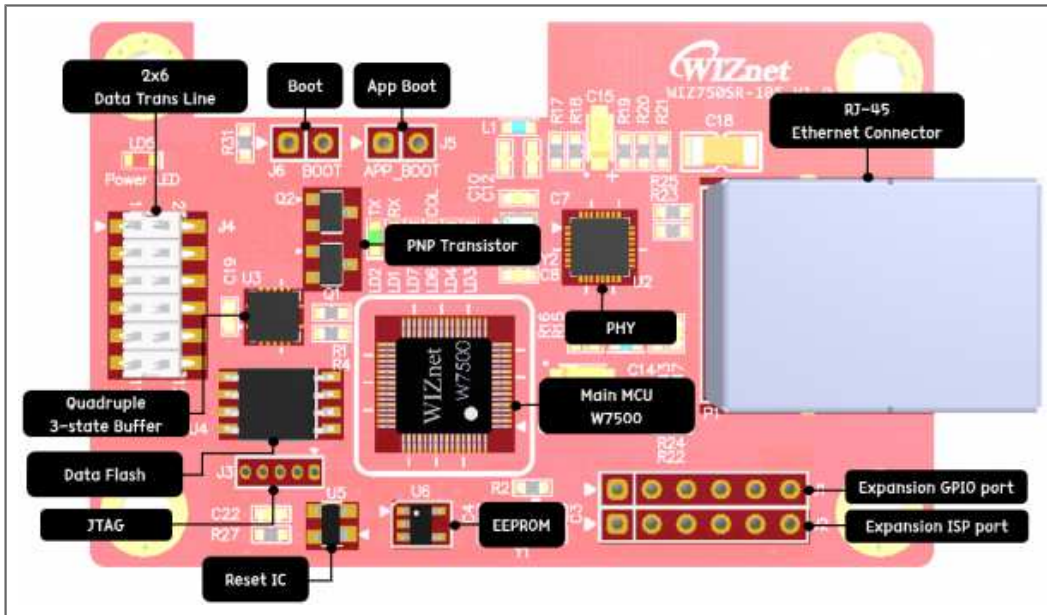


Hardware Specification

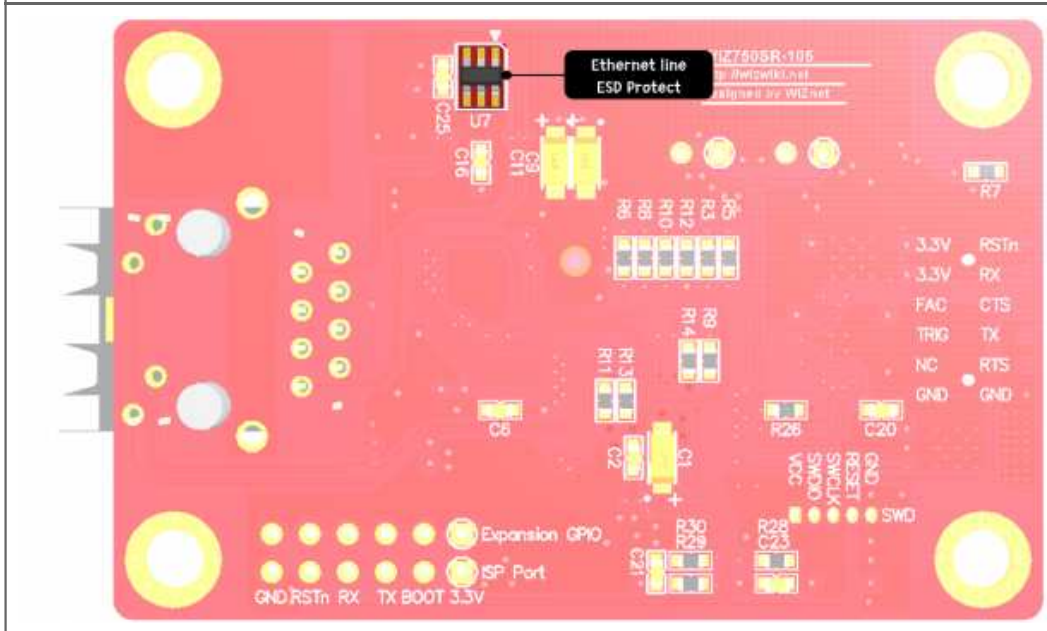
Product Spec Table

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	Interface	WIZ750SR-105: TTL Version WIZ105SR-EVB: RS-232 Version
	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) 2.00mm Pitch 2×6 SMD Pin-header(Data Line)
Input Voltage		DC 3.3V, 100mA under
Temperature		-40°C ~ 85°C (Operation), -40°C ~ 85°C (Storage range)

WIZ750SR-105 Callout

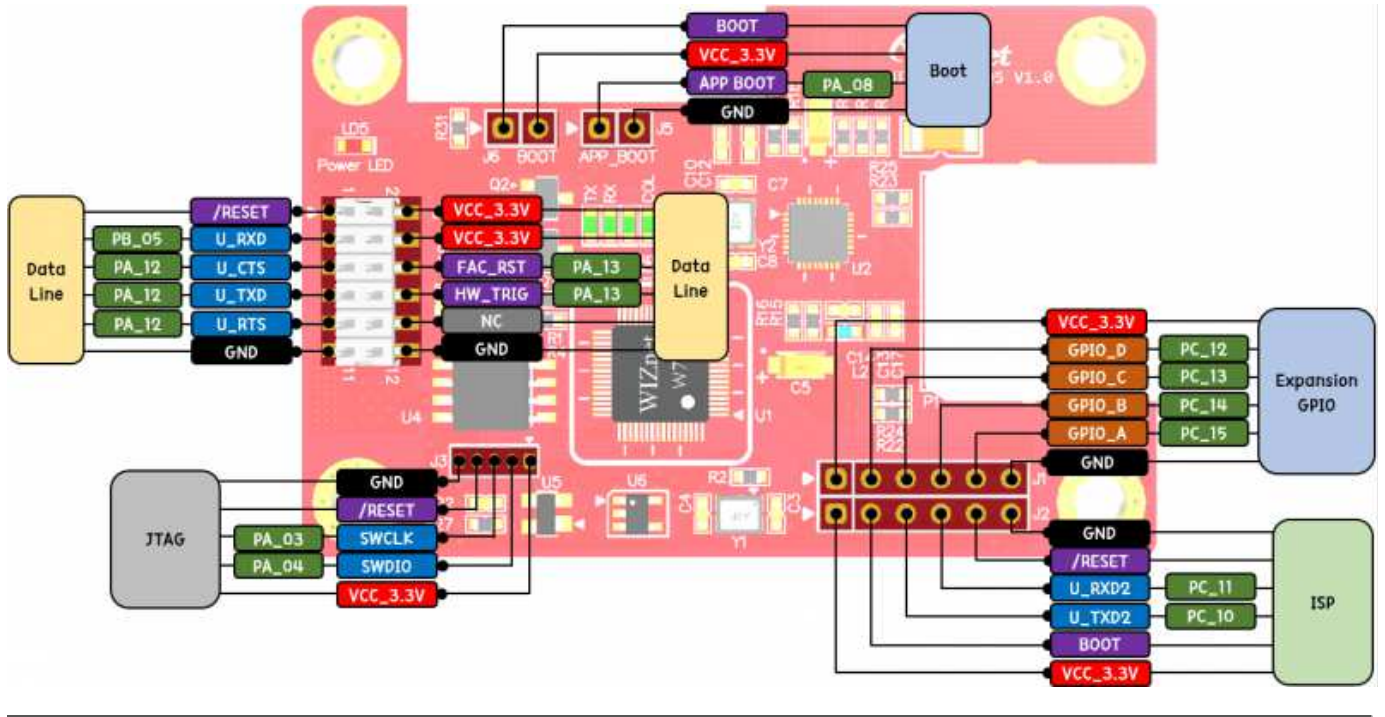


TOP

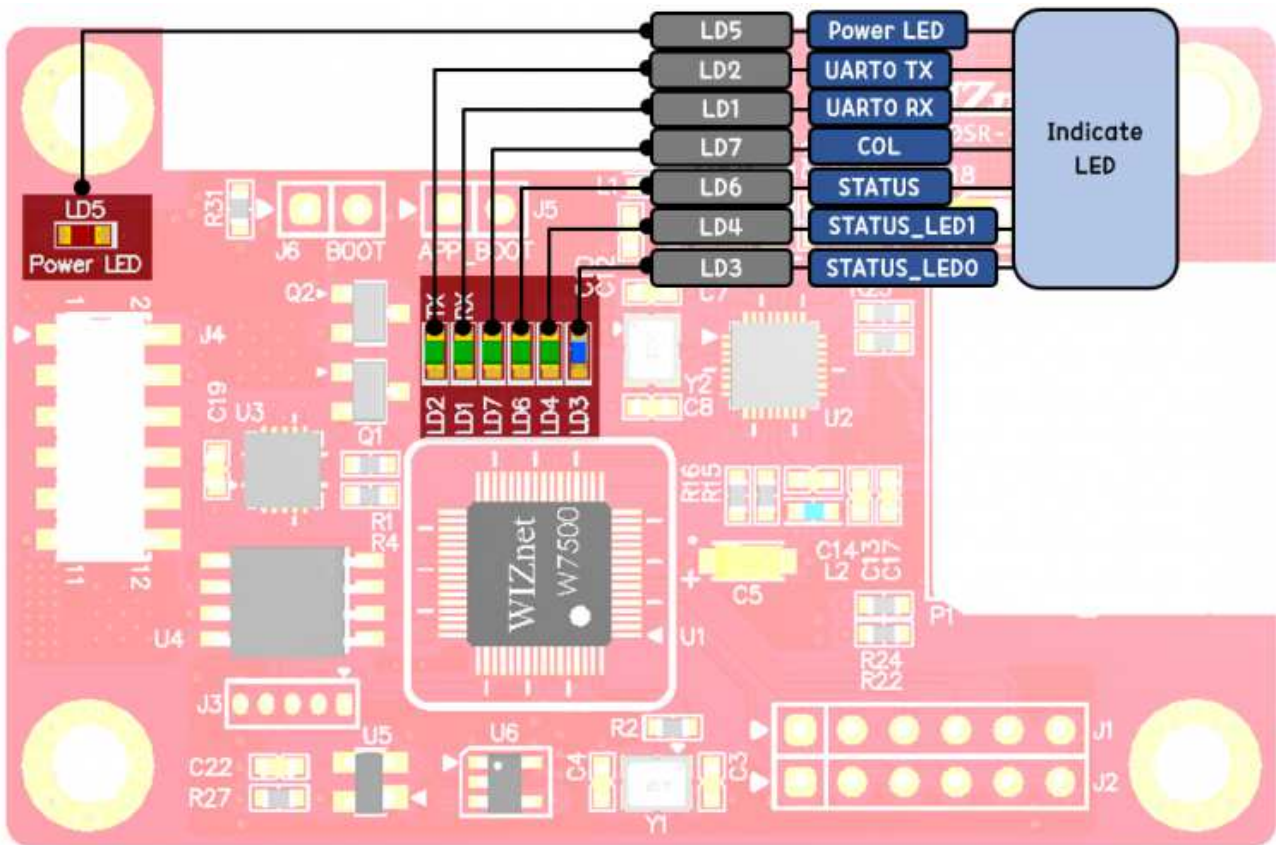


BOTTOM

WIZ750SR-105 Pinout



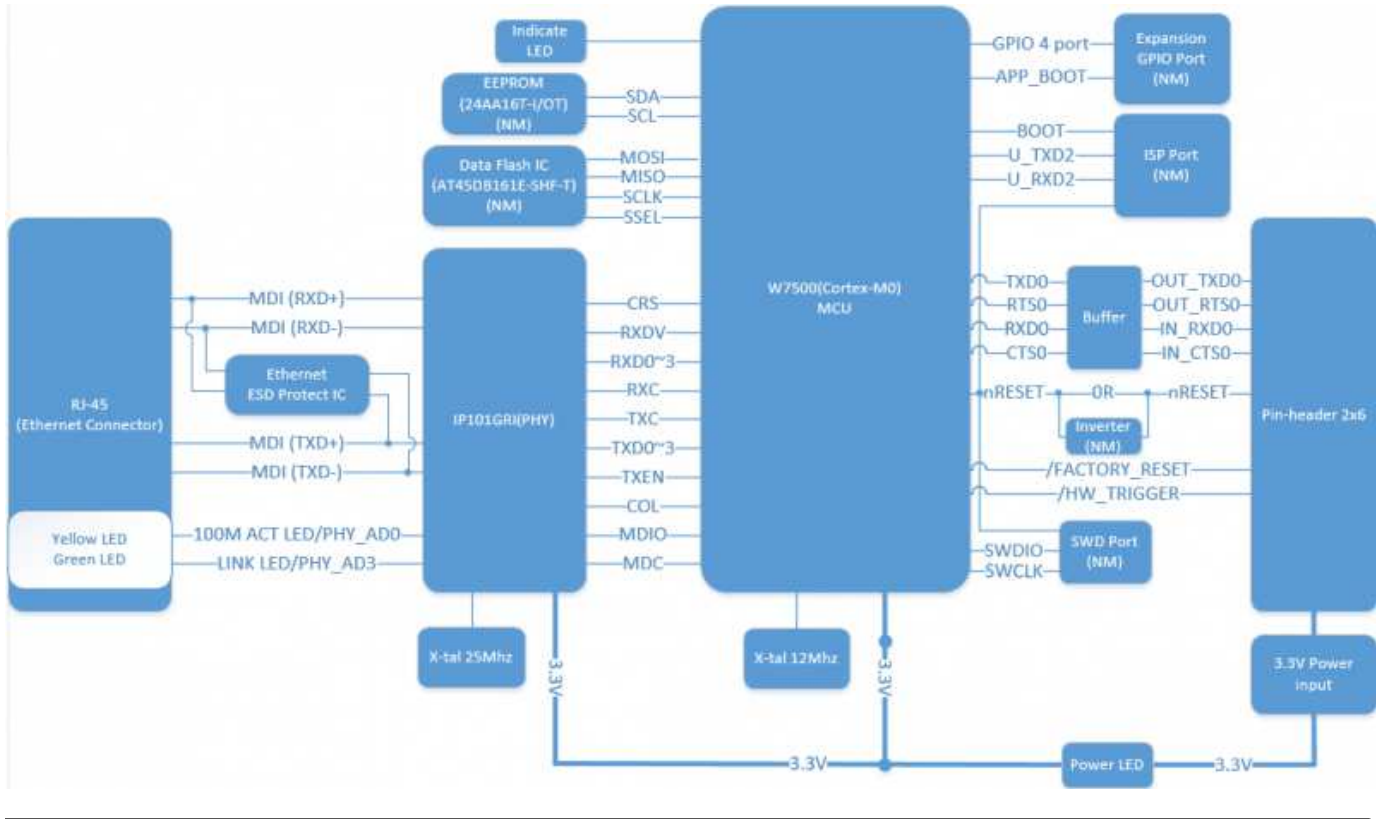
WIZ750SR-105 indicate



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	Power LED	-
6	LD6	STATUS	Not function

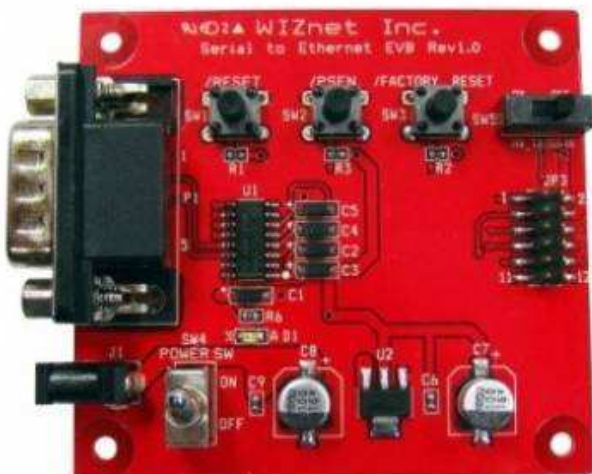
Pin Number	Pin Name	Signal	Description
7	LD7	COL	Collision Detected

WIZ750SR-105 Block Diagram



WIZ105SR-EVB

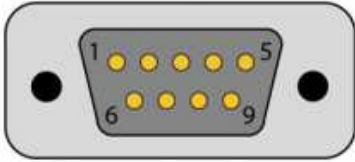
- WIZ750SR-105 Developer Interface Board.
- RESET Tact SW.
- FACTORY RESET SW.
- BOOT0 Slide SW.
- H/W Trig Slide SW.
- RS-232C Transceiver, D-SUB9-MALE.
- 5V DC-JACK (External 4.5pi, internal 1.3pi)
- inside LDO 3.3V (5V to 3.3V)



WIZ750SR-105 EVB is must use the WIZ105SR-EVB Because WIZ750S-105 is a replacement for WIZ105SR.

Serial Interface

DB9M Connector

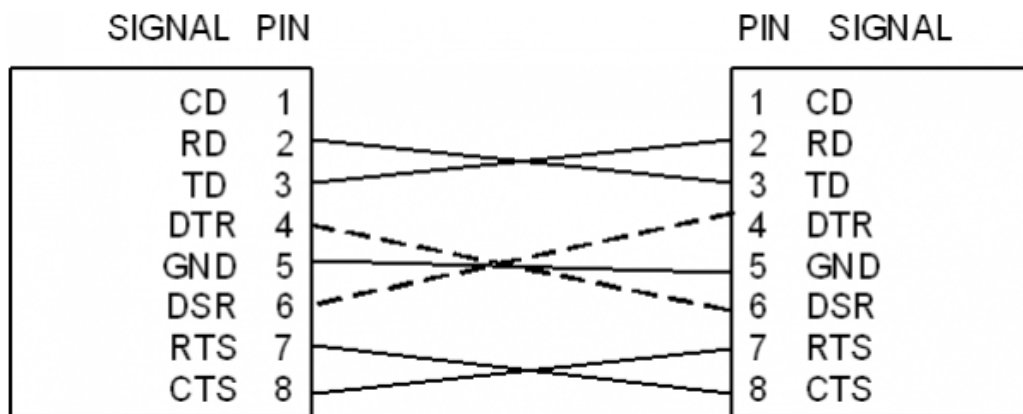


RS-232 Pinout

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
9	RI	NC

- 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





Schematic & Artwork

WIZ750SR-105

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

Part list

WIZ750SR-105

H/W version	Type	Filetype	Download Link	Remarks
1.0	TTL	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
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

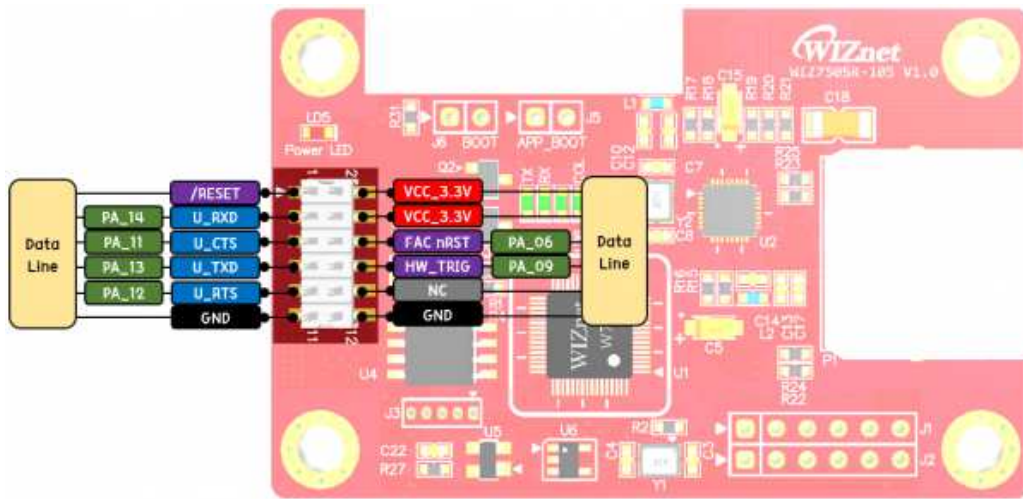
Symbol	Parameter	Min	Unit
N_{END}	Sector Endurance	10,000	Cycles
T_{DR}	Data Retention	10	Years

EEPROM

Symbol	Parameter	Min	Unit
N_{END}	Sector Endurance	1M	Cycles
T_{DR}	Data Retention	200	Years

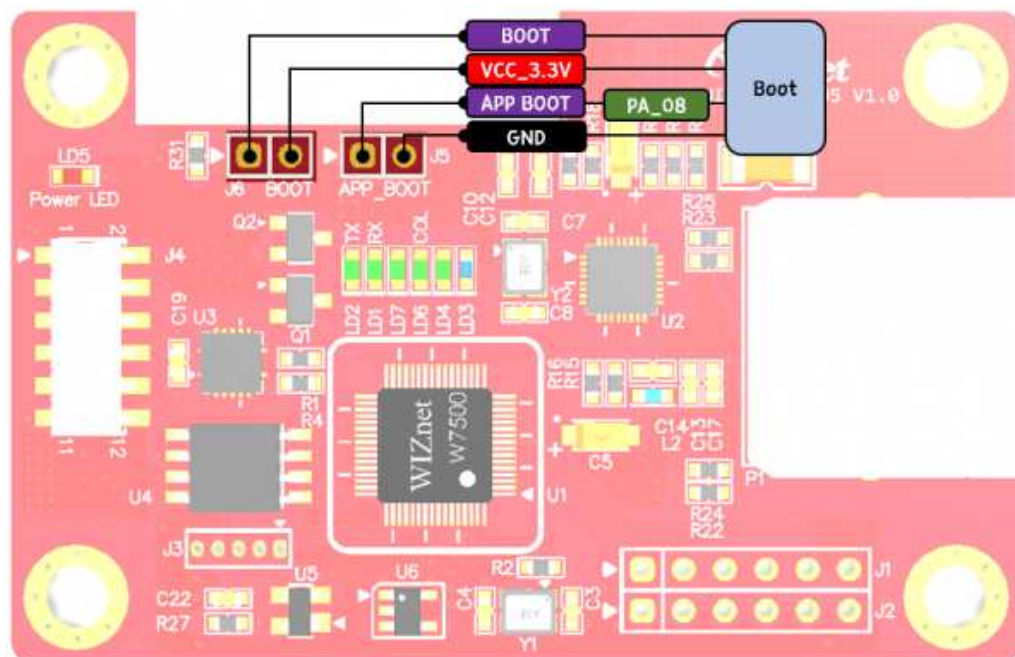
Connector Specification

6x2 Data Pin Connector (J4)



Pin Number	Signal	Description
1	nRESET	System Reset signal (Active Low)
2	VCC	System Power (3.3V)
3	U_RXD0	Receive Data (TTL : 3.3V)
4	VCC	System Power (3.3V)
5	U_CTS0	Clear To Send (TTL : 3.3V)
6	FAC_nRST	System Reset signal (Active Low)
7	U_TXD0	Transmit Data (TTL : 3.3V)
8	HW_TRIG	Hardware Trigger signal (Active Low)
9	U_RTS0	Request To Send (TTL : 3.3V)
10	NC	Not Connect
11	GND	System Ground
12	GND	System Ground

BOOT Pin (J5, J6)

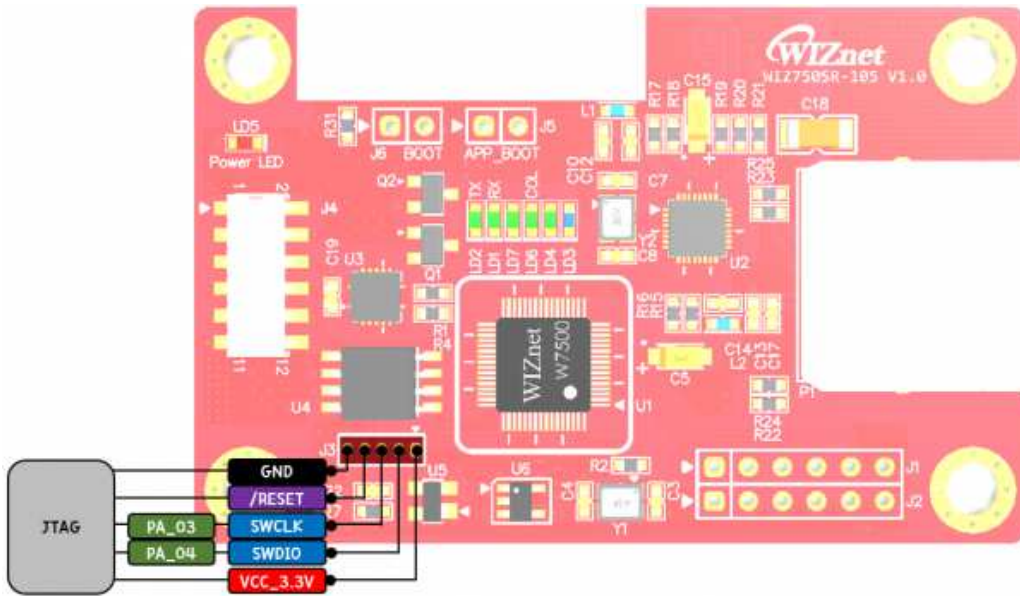


Parts	Pin Number	Signal	Description
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Parts	Pin Number	Signal	Description
J5	1	APP_BOOT	Application Jump at BOOT mode
	2	GND	System Ground

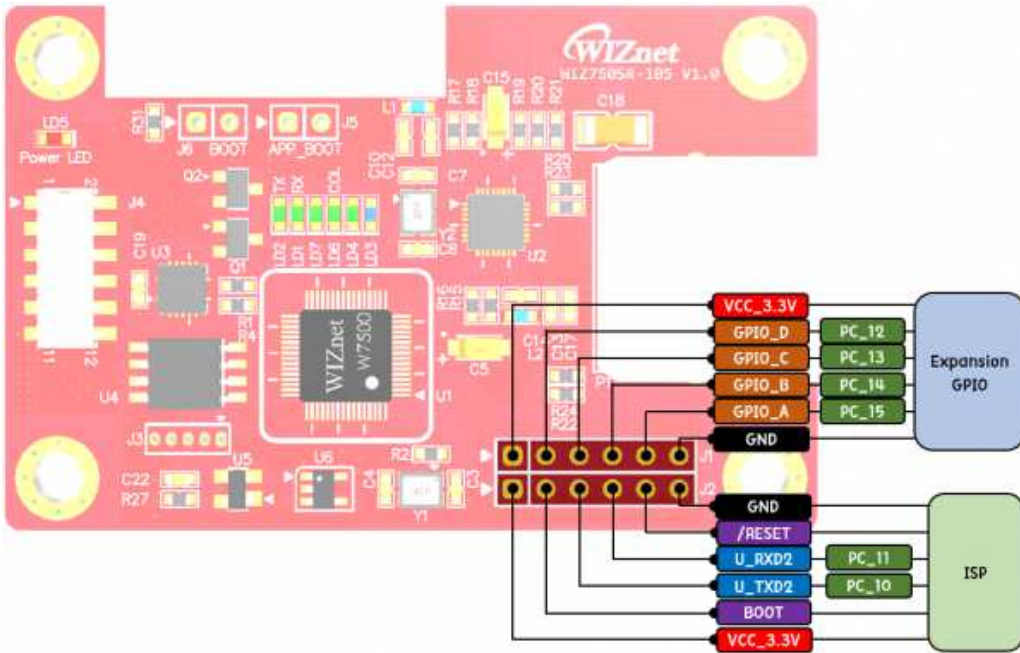
Parts	Pin Number	Signal	Description
J6	1	BOOT	System Ground
	2	VCC	System Power (3.3V)

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

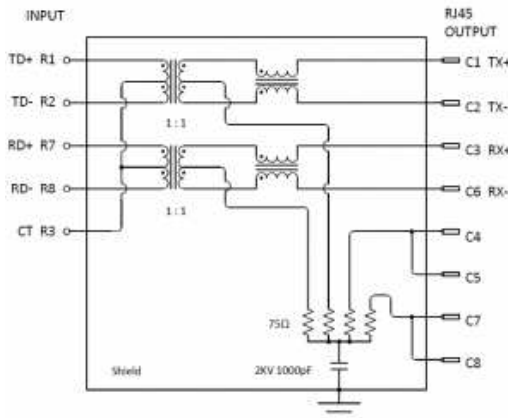
ISP Port & Expansion GPIO (J1, J2)



Parts	Pin Number	Signal	Description
J1	1	VCC	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 (nm)	Vf @If=20mA	Ir @Vf=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
8	L3+(LINK LED)	Anode
9	L4- (LINK LED)	Cathode

Dimension

- WIZ750SR-105 Rev1.0 Dimension :
 - 62mm x 40mm (PCB board size)
 - 62mm x 40mm x 18mm (Included part size)

