

WIZ752SR-120 Datasheet

Supported Languages

- English only



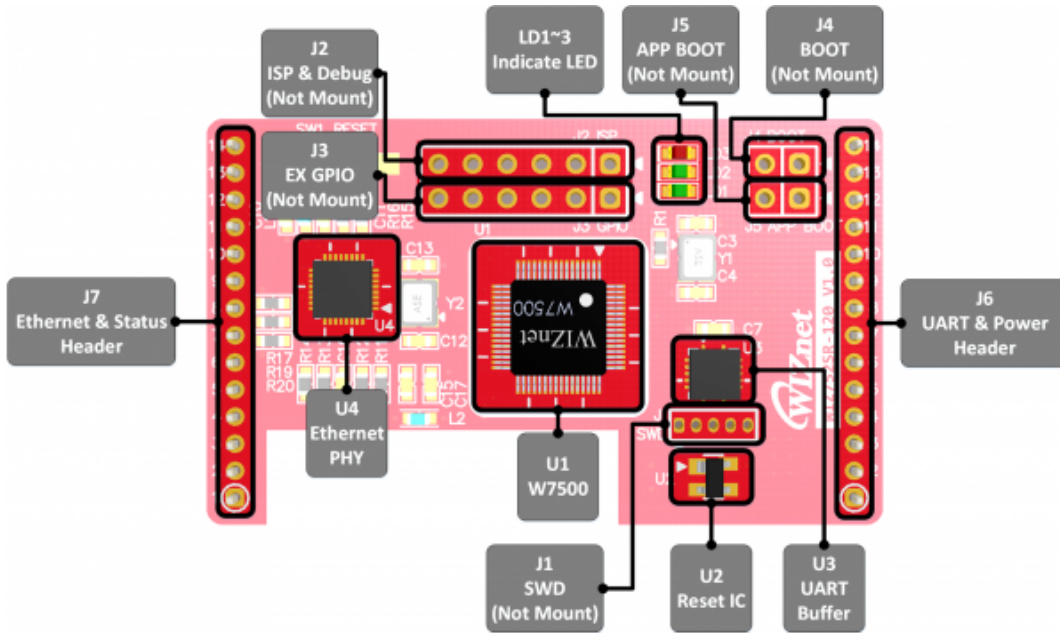
Hardware Specification

Product Spec Table

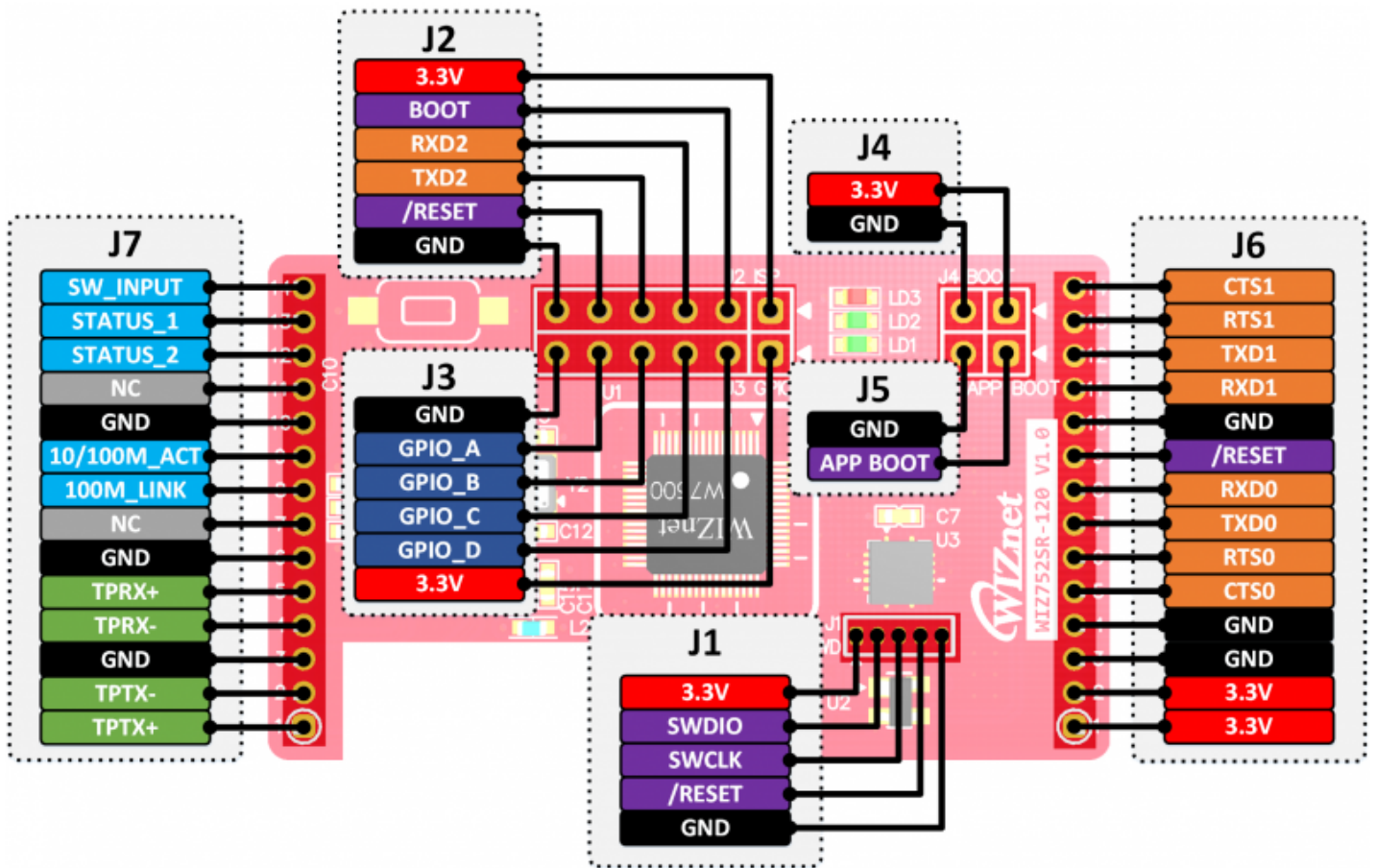
Category		Description
MCU	ARM Cortex-M0 Core	W7500 48Mhz maximum frequency Internal 8Mhz RC Oscillator Flash: 128KB Large flexible-size SRAM buffer for various User Application - Min 16KB available if full 32KB socket buffer used - Max 48KB available if no socket buffer used ROM for boot code: 6 KB
	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	Ethernet Transceiver	IP101GRI Single 10/100M Ethernet Transceiver
Serial	Interface	UART0 UART1
	Signal	TXD0, RXD0, RTS0, CTS0 TXD1, RXD1, RTS1, CTS1
	Parameters	Parity: None, Odd, Even Data bits: 7, 8 bit Flow control: None, RTS / CTS, XON / XOFF
	Speed	Up to 230Kbps
Dimension		50.00(W) x 30.00(L) x 9.00(H) (Unit : mm)

Category	Description
Connector type	2.00mm Pitch 1×14 Pin-header 2EA (Main) 2.54mm Pitch 1×6 Pin-header(Expansion GPIO, Not Mount) 2.54mm Pitch 1×6 Pin-header (ISP & Debug UART, Not Mount) 1.27mm Pitch 1×5 Pin-header (SWD(Serial Wire Debug), Not Mount)
Input Voltage	DC 3.3V
Operation Temperature	-40℃ ~ 85℃ (Operation)

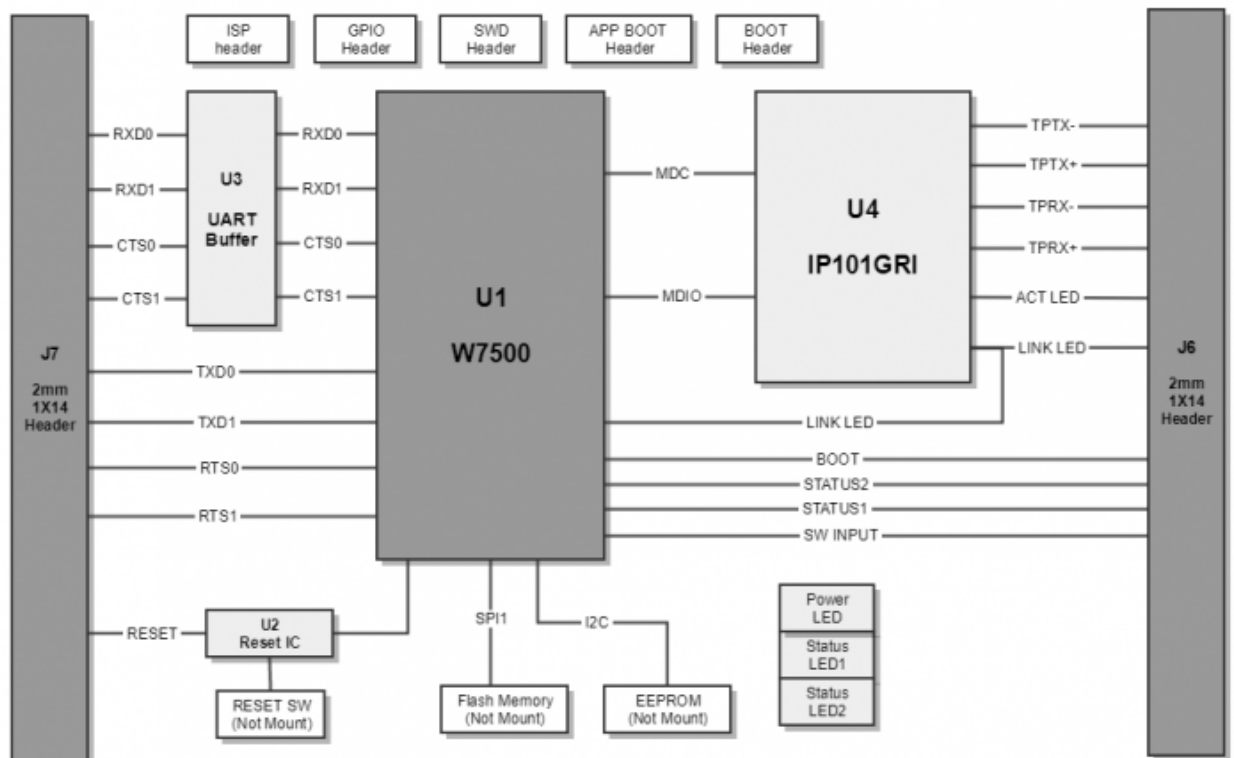
WIZ752SR-120 Callout



WIZ752SR-120 Pinout



WIZ752SR-120 Block Diagram



Schematic & Partlist

- Hardware Files of WIZ752SR-120 in Github Repositories
 - Go to Github [https://github.com/Wiznet/Hardware-Files-of-WIZnet/tree/master/04_Serial_to_Ethernet_Module/WIZ752SR-120/WIZ752SR-120_V100]

WIZ752SR-120

- [WIZ752SR-120 Schematic\(Altium\)](#)
- [WIZ752SR-120 Schematic\(PDF\)](#)

Part list

WIZ752SR-120

- [WIZ752SR-120 Partlist\(Excel\)](#)
- [WIZ752SR-120 Partlist\(PDF\)](#)

Electrical Characteristics

Operating Conditions

Symbol	Parameter	Pins	Min	Typ	Max	Unit
V_{cc}	Operating Voltage	3.3V	2.7	3.3	3.6	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	2.145			V
V_{IL}	Input low voltage	ALL			1.155	V
V_{OH}	Output high voltage (High driving strength Current load = 6mA) (Low driving strength Current load = 3mA)	ALL	2.5			V
V_{OL}	Output high voltage (High driving strength Current load = 6mA) (Low driving strength Current load = 3mA)	ALL			0.5	V

Ethernet Power Dissipation

Condition	Min	Typ	Max	Tol	Unit
100M Link	-	TBD	-		mA
10M Link	-	TBD	-		mA
Unlink (Auto-negotiation mode)		TBD			mA
100M Transmitting	-	TBD	-		mA
10M Transmitting	-	TBD	-		mA

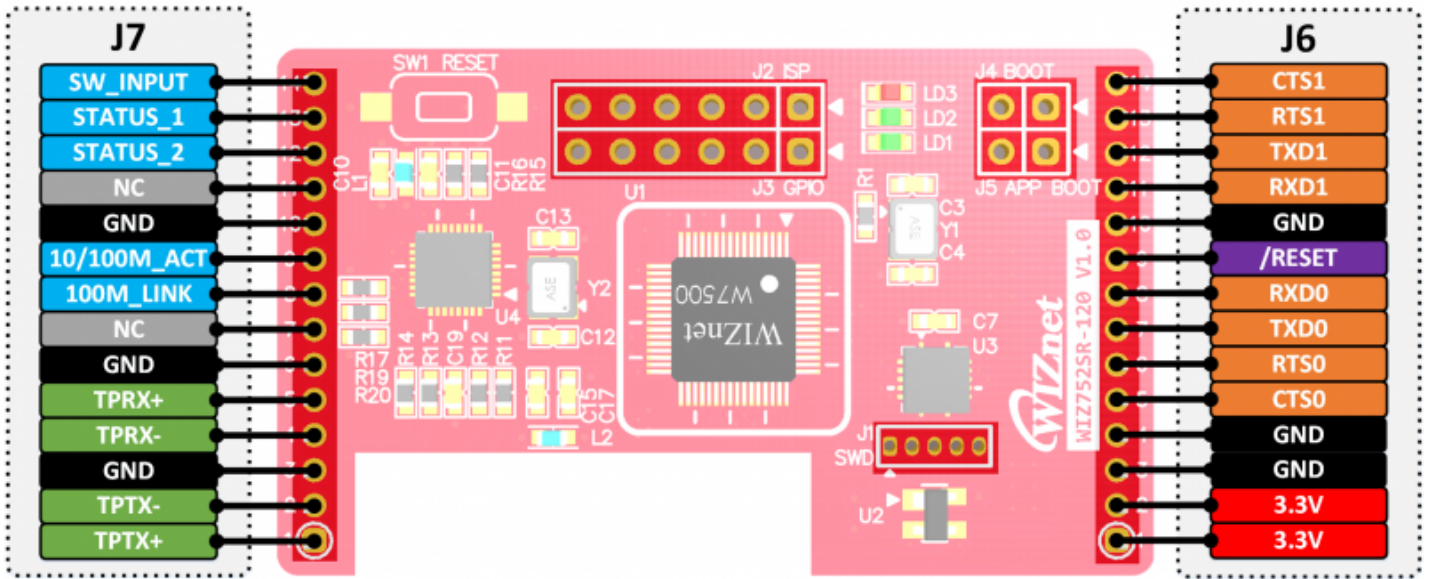
※ Refer to WIZ752SR-120 Power Dissipation information (below Link)

[WIZ750SR_Power dissipation](#)

Connectors Specification

Mount Connectors

- These are pins associated with data communication and basic operation of the WIZ752SR-120.
 - Power, UART, Ethernet, System, Indicate



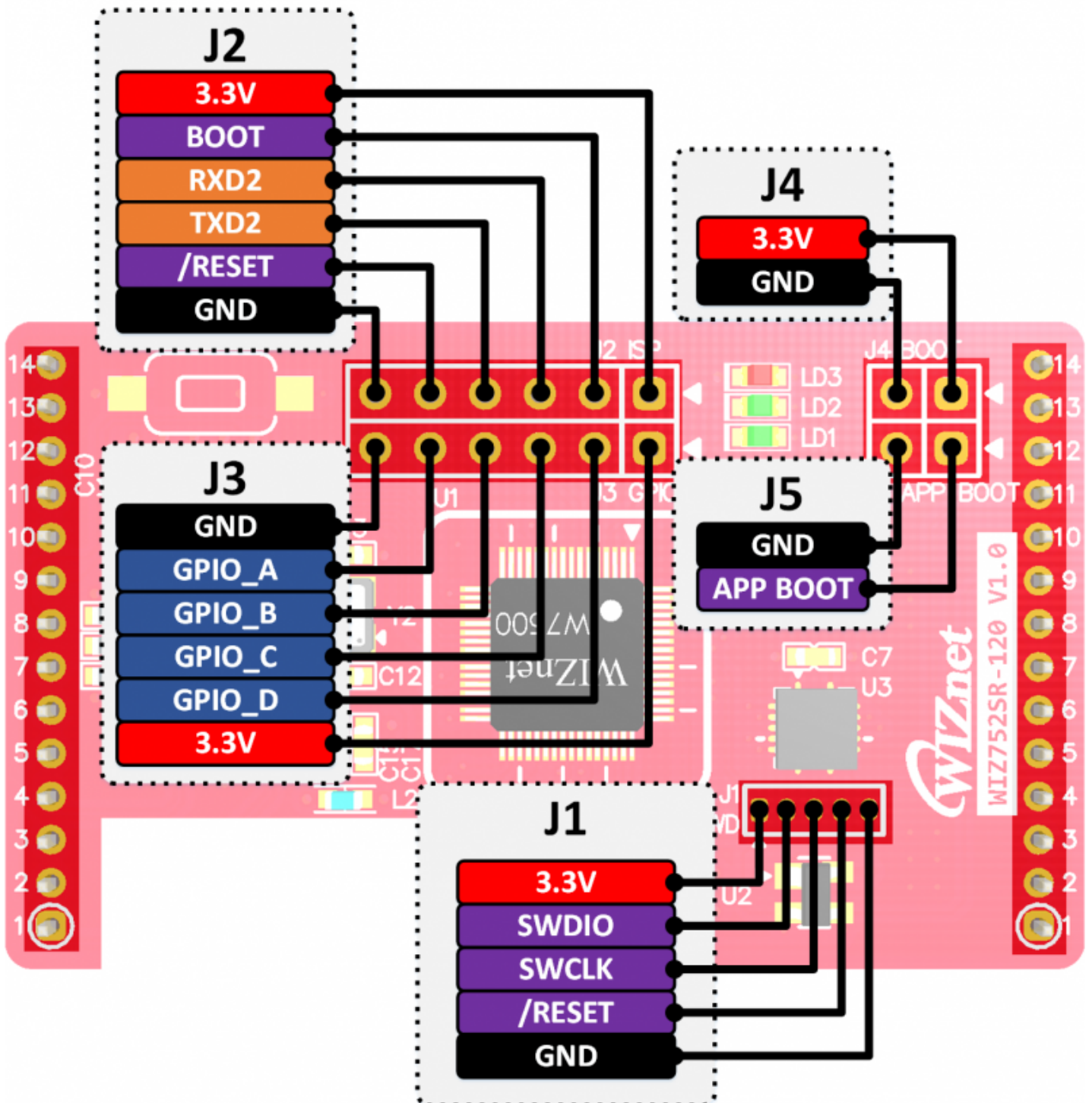
Connector	Pin Number	Signal	I/O!	Description
J6 UART Data Connector	1	3.3V	P	System Power input (3.3V)
	2	3.3V	P	System Power input (3.3V)
	3	GND	P	System Ground
	4	GND	P	System Ground
	5	CTS0	I	UART0 Clear To Send
	6	RTS0	O	UART0 Request To Send
	7	TXD0	O	UART0 Transmit Data
	8	RXD0	I	UART0 Receive Data
	9	/RESET	I	System Reset signal (Active Low), Included 4.7k Pullup
	10	GND	P	System Ground
	11	RXD1	I	UART1 Receive Data
	12	TXD1	O	UART1 Transmit Data
	13	RTS1	O	UART1 Request To Send
	14	CTS1	I	UART1 Clear To Send

Connector	Pin Number	Signal	I/O	Description
J7 Ethernet & Indicate	1	TPTX+	O	Ethernet Differential Output+
	2	TPTX-	O	Ethernet Differential Output-
	3	GND	P	System Ground
	4	TPRX-	I	Ethernet Differential Input+
	5	TPRX+	I	Ethernet Differential Input-
	6	GND	P	System Ground
	7	NC	-	Not Connected
	8	100M_LINK	O	Ethernet 100M LINK Status High : Link down Low : Link up
	9	10/100M_ACT	O	Ethernet 10/100M ACT Status Blink : Data communication No Blink : No Data communication

Connector	Pin Number	Signal	I/O	Description
	10	GND	P	System Ground
	11	NC	-	Not Connected
	12	STATUS_1	O	UART0 Connected Status High : Not Connected Low : Connected
	13	STATUS_2	O	UART1 Connected Status High : Not Connected Low : Connected
	14	SW_INPUT	I	Reserved I/O

Not Mount Connectors

- These are pins associated with the separate functions of the WIZ752SR-120.



Connector	Pin Number	Signal	I/O	Description
J1 SWD (Serial Wire Debug)	1	3.3V	P	System Power input (3.3V)
	2	SWDIO	I/O	SWD Data I/O
	3	SWCLK	I	SWD Clock
	4	/RESET	I	System Reset
	5	GND	P	System Ground

Connector	Pin Number	Signal	I/O	Description
J2 ISP & Debug UART	1	3.3V	P	System Power input (3.3V)
	2	BOOT	I	System BOOT 4.7k Pull down When booting(Power on or Reset), High : Boot operating Low : Application operating
	3	RXD2	I	UART2 Receive Data
	4	TXD2	O	UART2 Transmit Data
	5	/RESET	I	System Reset signal (Active Low), 4.7k Pullup
	6	GND	P	System Ground

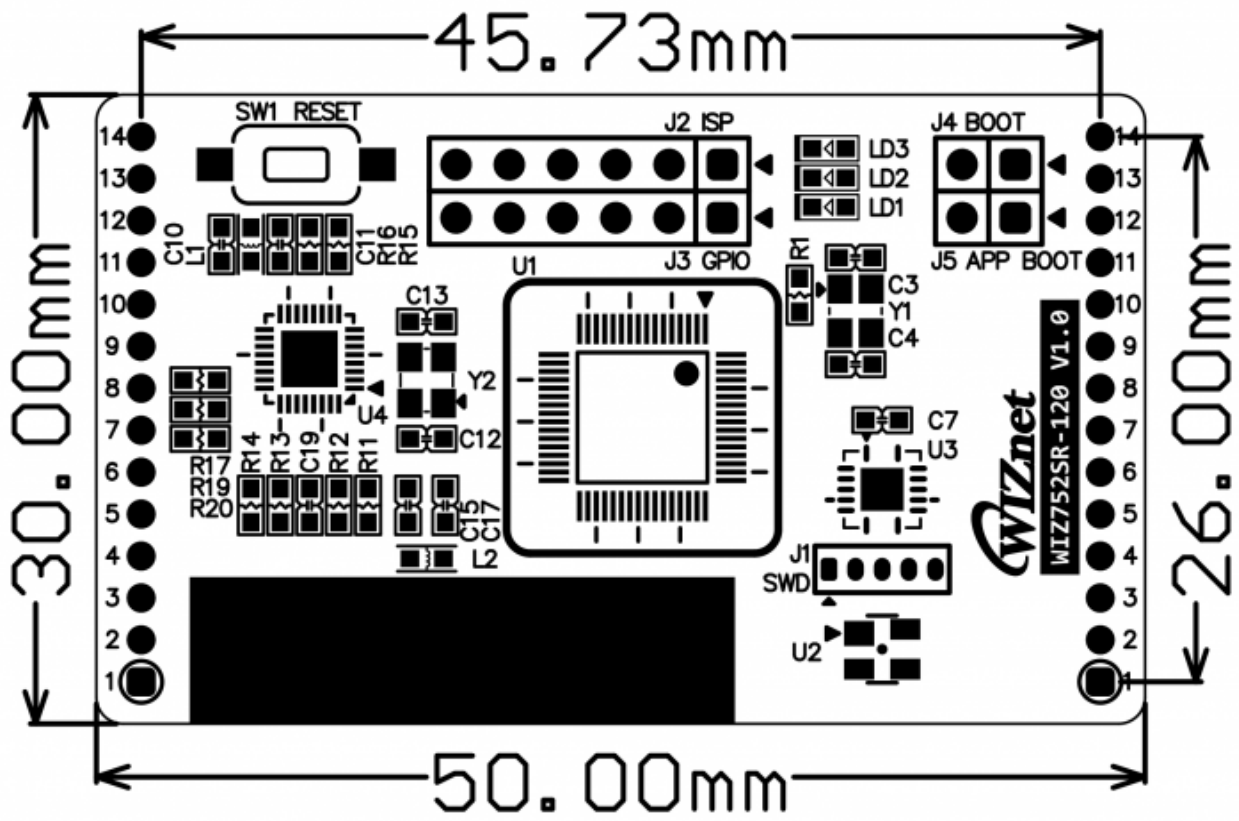
Connector	Pin Number	Signal	I/O	Description
J3 Expansion GPIO	1	3.3V	P	System Power input (3.3V)
	2	GPIO_D	I/O	Expansion User's depend on GPIO port
	3	GPIO_C	I/O	
	4	GPIO_B	I/O	
	5	GPIO_A	I/O	
	6	GND	P	System Ground

Connector	Pin Number	Signal	I/O	Description
J4 System BOOT	1	3.3V	P	System Power input (3.3V)
	2	BOOT	I	System BOOT 4.7k Pull down When booting(Power on or Reset), High : System Boot operating Low : Application operating

Connector	Pin Number	Signal	I/O	Description
J5 Application BOOT	1	APP_BOOT	I	Application BOOT 4.7k Pull up When booting(Power on or Reset), High : Normal Application operating Low : Boot Application operating
	2	GND	P	System Ground

Dimension

- WIZ752SR-120 V1.0 Dimension :
 - 50.00(W) x 30.00(L) x 9.00(H) (Unit : mm)



1)

“I/O” Description - P:Power, I:Input, O:Output