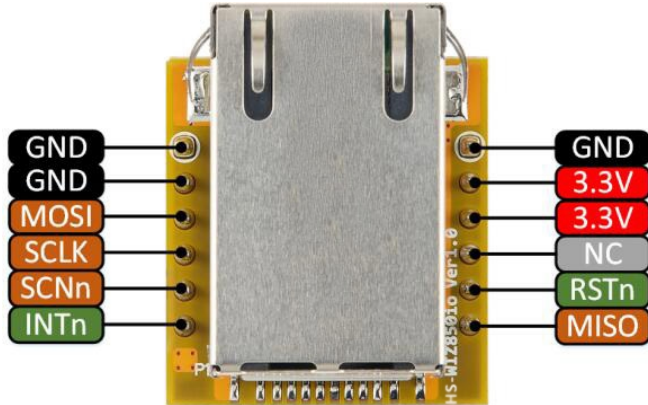


## HS-WIZ850io 模块说明书

### Hardware Specification



### HS-WIZ850io

Plugin Network Module.

Hardware compatible with WIZ820io & WIZ850io .

Usable without H/W design for W5500, Transformer & RJ45.

Fast evaluation for W5500 & MCU in the target board.

Support high speed SPI interface.

Support power down mode and Wake-on-LAN function

Very small form factor : 23mm x 25mm x 18mm

1 x 6, 2.54mm Pin Header x 2

### Pin Description

Pin No.	Pin Type	Pin Name	Description	
J1	1	P	GND	Ground
	2	P	GND	Ground
	3	I	MOSI	SPI Master Out Slave In This pin is used for SPI MOSI signal pin
	4	I	SCLK	SPI Clock This pin is used for SPI Clock Signal pin
	5	I	SCNn	SPI Slave Select This pin is used for SPI Slave Select Signal Pin when using SPI interface

Pin No.	Pin Type	Pin Name	Description
6	I	INTn	<p><b>W5500 Interrupt</b> : Low activity</p> <p>This pin is used for indicating event like socket TCP connection, disconnection, data receiving timeout, WOL(Wake on Lan) and so on occurred in W5500 inside WIZ550io.</p> <p>The interrupt is cleared by writing IR register or Sn_IR. All interrupts are maskable.</p>

Pin No.	Pin Type	Pin Name	Description	
J2	1	P	<b>GND</b>	<b>Ground</b>
	2	P	<b>3.3V</b>	<b>Power</b> : 3.3V power supply
	3	P	<b>3.3V</b>	<b>Power</b> : 3.3V power supply
	4	-	<b>NC</b>	<b>Not Connect</b>
	5	I	<b>RSTn</b>	<p><b>Reset</b> : Low activity</p> <p>Hold at least 500us after asserted to LOW and keep HIGH until next Reset needed.</p>
	6	O	<b>MISO</b>	<p><b>SPI Master In Slave Out</b></p> <p>This pin is used for SPI MISO signal pin</p>

## Characteristic

### DC Charcteristic

Symbol	Parameter	Pins	Min	Typ	Max	Unit
<i>VDD</i>	Supply voltage	3.3V	2.97	3.3	3.63	V
<i>VIL</i>	High level input voltage	ALL	2.0		5.5	V

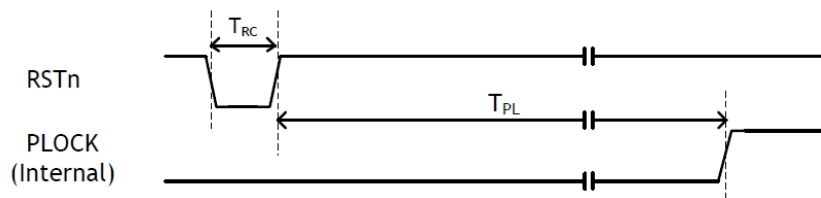
Symbol	Parameter	Pins	Min	Typ	Max	Unit
$V_{IH}$	Low level input voltage	ALL	-0.3		0.8	V
$V_{OL}$	Low level output voltage	ALL			0.4	V
$V_{OH}$	High level output voltage	ALL	2.4			V
$I_{OL}$	Low level output Current	ALL	8.6	13.9	18.9	mA
$I_{OH}$	High level output Current	ALL	12.5	26.9	47.1	mA
$I_{DD}$	Supply Current (Normal operation mode)	3.3V		132		mA
$I_{OH}$	Supply Current (Power Down mode)	3.3V		13		mA

### Power Dissipation

Condition	Min	Typ	Max	Unit
100M Link	-	128	-	mA
10M Link	-	75	-	mA
Un-Link (Auto-negotiation mode)	-	65	-	mA
100M Transmitting	-	132	-	mA
10M Transmitting	-	79	-	mA
Power Down mode	-	13	-	mA

### Timing Diagram

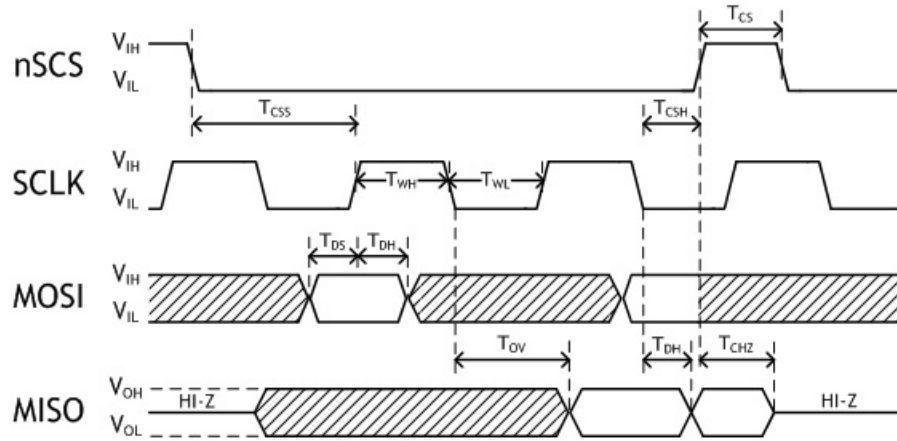
#### Reset Timing



Symbol	Description	Min	Max
TRC	Reset Cycle Time	500us	-

Symbol	Description	Min	Max
TPL	Internal Auto Configuration Time	-	50ms

### SPI Timing



Symbol	Description	Min	Max	Units
Fsck	SCLK Clock Frequency	-	80	MHz
TWH	SCLK High duration	6	-	ns
TWL	SCLK Low duration	6	-	ns
TCS	nSCS High duration	5	-	ns

### Dimension

