



Overview

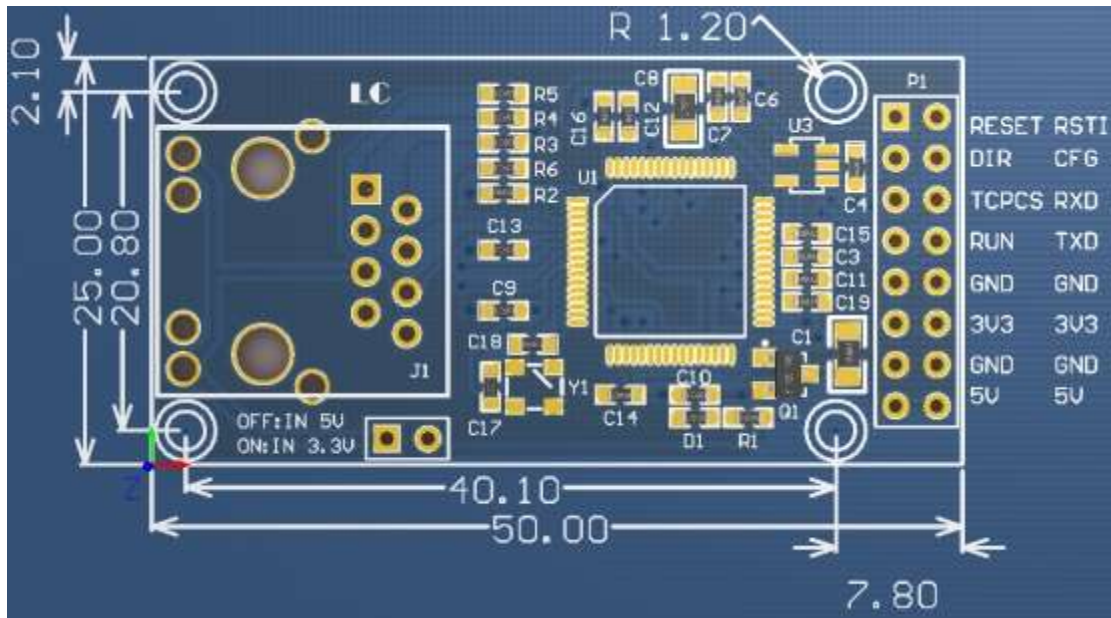
LC CH9121 Serial to Ethernet module carry CH9121 network serial port transmission chip, CH9121 internal integration of TCP/IP protocol stack, can achieve two-way transparent transmission of network data packets and serial port data, have TCP CLIENT、TCP SERVER、UDP CLIENT、UDP SERVER 4 type working modes,serial port baud rate support of highest to 921600bps,It can be easily configured by the upper computer software or serial port command, convenient and quick.

Function

- 1.Internal Ethernet media transport layer (MAC) and physical layer (PHY)
- 2.Can achieve two-way transparent transmission of network data packets and serial port data
- 3.Support 10/100M,full-duplex/half-duplex adaptive Ethernet interface, compatible with the 802.3 protocol
- 4.Support MDI/MDIX line automatically conversion
- 5.Support DHCP automatically got IP address,support DNS domain access
- 6.Through the upper computer software or serial port AT command sets network parameters such as chip working mode, port, and IP
- 7.Working mode support TCP CLIENT、TCP SERVER and UDP CLIENT、UDP SERVER 4 kinds of mode
- 8.Serial port baud rate support 300bps ~ 921600bps.
9. Serial port TTL level compatible 3.3V and 5V
- 10.Serial port support full-duplex/half-duplex Serial communication, support RS485 send and receive automatic switching
- 11.Support DHCP automatic get IP address function.
- 12.Support DNS Domain name system
- 13.Support 0 ~ 2000ms serial port timeout setting
- 14.Support KEEPALIVE mechanism
- 15.Voltage of supply: 3.3V/5V

Hardware introduction and description

- 1.Board size: 50*25 mm, Weight: 12g



2. Interface description

Pin name	type	Pin description
RESET	input	Restore factory settings, chip power-on detection, low level is valid
RSTI	input	External reset input low level is valid
DIR	output	Use control RS485 send and receive switching
CFG	input	Serial port configuration mode setting pin built-in pull-up, enter the serial port configuration mode when low level is detected, high level quit configuration mode.
TCPS	output	TCP client mode, the port is connected to the status indication pin, and the connection is successfully output low level
RXD	input	UART data input ,connect external MCU's TXD
RUN	output	Module running status indication pin, output 2Hz square wave
TXD	output	UART data output ,connect external MCU's TXD
GND	power	Power ground
3V3	power	3.3V power supply and 5Vpower supply pick one of two
5V	power	5V power supply and 3.3Vpower supply pick one of two

