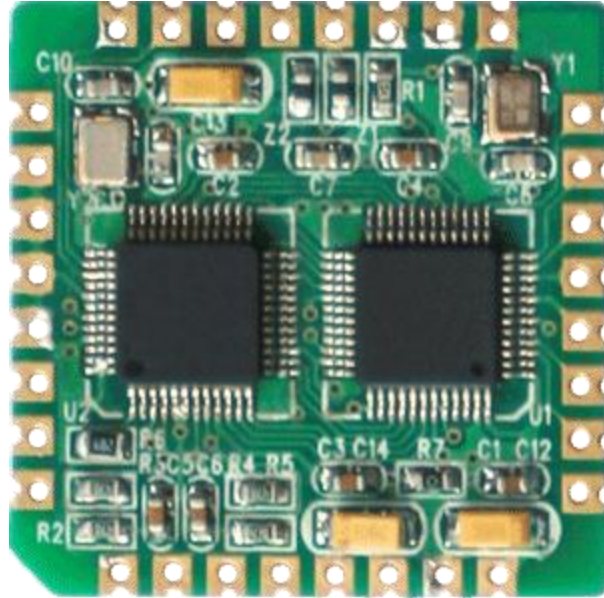


EM-32 Series

10/100 Mbps Embedded Device Networking Module

- Serial (TTL) 10/100M auto-detect Ethernet switch embedded device networking module
- Small size (28 x 28 mm), equivalent to only QFP208 foot chip core size
- Single component, stamp pad hole to support SMT production
- 2 with a flow control UART
- I / O port 5 V-tolerant to simplify the design
- Support network cable Auto MDI/MDIX, straight through, crossover cable can work
- Built-in WDT, to ensure long-term stable and reliable work
- Search by ezConfig or Web browser plug-line parameter configuration
- TCP Server, TCP Client, TCP Mixed, UDP, Real COM operation modes
- Real serial port mode (automatically set the serial port parameters)
- Support for DNS, DHCP, multicast, and broadcast applications
- Supports two TCP connections
- Full transparent data transfer, disconnection detection
- Supported gateway, across the wide area network routing information



Overview

EM-32S Series TCP / IP components are the industry's smallest embedded TCP / IP protocol serial device servers, serial devices to your network immediately. EM-32S volume compact, 28 x 28 mm size is only equivalent to a QFP208 foot chip core size, the use of single-hole chip stamp pad, single 3.3V power supply, a very small PCB footprint, you can easily the EM-32S as a component integrated with your serial device, so that your serial devices to the 10/100M speed networking.

Built-in TCP / IP communication protocol

EM-32S built-in TCP / IP communication protocol for R & D engineers can easily be networked serial devices, no longer need to spend a lot of time and effort writing TCP / IP communication protocol. In this way, engineers can use most of the time in the development of other more important features, so that the company launched the product cycles. 10/100M auto-detect the interface so that you can enjoy the advantages of high-speed transmission, Auto MDI/MDIX feature allows the network cable straight through, crossover cable may work. In addition, EM-32S has two physical UART serial port, so you have more space, more flexibility to develop products according to customer demand function. EM-32S standard 3.3V power supply, I / O port 5 V-tolerant design is better suited for today's equipment, R & D engineers can spend less time and energy in the circuit design.

User-friendly design options

through easy-to-use windows program ezConfig or Web browser to complete the setup, plug and play.

Shorten product launch schedule

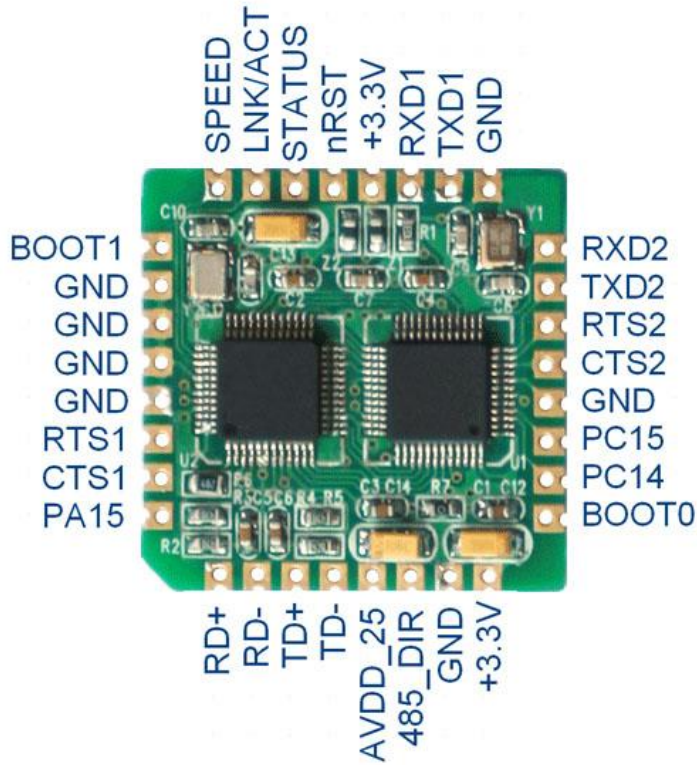
EM-32S with a standard pin spacing (2.54mm) and 32 pin (just a double with one serial port 16 pin) hole or optional stamp design makes its as a TCP component, allowing you to reduce the design cycle, so that products can quickly introduce. In addition, we provide a virtual serial port program, which automatically configure the serial port parameters, the user can not modify the application immediately to achieve network control.

Application

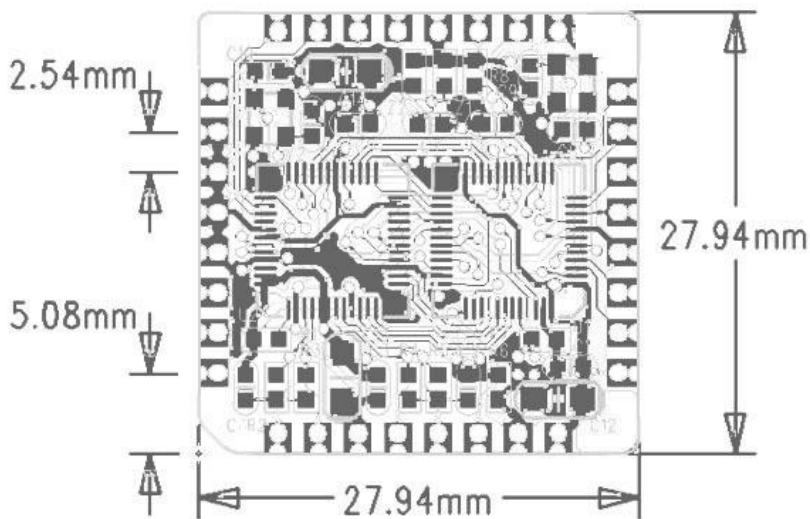
- Access / Security control systems (card readers, biometric identification devices)
- Medical / Healthcare (ECG, ultrasonic detector, blood testing devices)
- Industrial automation (PLC, test equipment)
- Telecommunications room (RTU) control, tank liquid level (CTU) detection
- POS network consumption, LED screen control

- Building automation control systems (HVAC, fire alarms)
- Information appliances (UPS monitoring module)

Pinout



Dimensions



Specs

Form Factor

Type: pin hole type or stamp

Dimensions: 28 x 28 x 3 mm (equivalent to QFP208 foot chip core size)

Weight: 5 g

System Information

CPU: 32-bit ARM Core

Ethernet Interface

Rate: 10/100 Mbps, Auto MDI / MDIX

LEDs: Speed 10/100 M, connection run (LNK / ACT)

Serial Interface

Port 1: TTL signal (5 V-tolerant)

Port 2: TTL signal (3.3V)

Serial Signals

TTL (Port 1): TxD1, RxD1, RTS1, CTS1, GND

TTL (Port 2): TxD2, RxD2, RTS2, CTS2, GND

Serial Communication Parameters

Parity: None, Even, Odd, Space, Mark

Data bits: 7, 8

Stop bits: 1, 2

Flow Control: RTS / CTS

Baud rate: 300 bps ~ 4,500 Kbps (4.5 Mbps) (supports non-standard baud rate)

Software

Network Protocol: ICMP, ARP, IP, TCP, UDP, DHCP, HTTP, DNS, SNMP V1/V2c

Configuration Options: Web browsers or search tools ezConfig

Mode: TCP Server, TCP Client, TCP Mixed, UDP, Real COM mode

Environmental Limits

Operating temperature: -40 ~ 85 °C

Storage Temperature: -65 ~ 150 °C

Ambient Relative Humidity: 5 to 95% (non-condensing)

Power Requirements

Power Input: 3.3 VDC, $\pm 5\%$

Power Consumption: 140 mA@3.3 VDC max.

Reliability Automatic Reboot Trigger: Built-in WDT (watchdog timer)

Warranty Warranty Period: 5 years