

EM1202 BASIC-programmable Ethernet Module

RJ1202 Companion Ethernet Connector Module

Introduction

The EM1202 is a third-generation Tibbo Ethernet module built exclusively for use with TAIKO -- Tibbo's rapid programming solution that includes [Tibbo BASIC](#) language, [Tibbo IDE](#) software, and [TiOS](#) operating system.

Despite its miniscule dimensions (17x19x14.6mm), the EM1202 features 4 serial ports, 32 general-purpose I/O lines, and the 512K/1024K flash disk.

When used in combination with an optional RJ1202 companion Ethernet connector, the EM1202 can replace the [EM202](#) Ethernet Module, thus providing a high-performance upgrade path for the EM202.

The EM1202 and the RJ1202 fit perfectly in the board space of the EM202 device. Additionally, RJ1202 face dimensions match those of the EM202 exactly. This provides for a painless upgrade from the EM202 to the EM1202/RJ1202 combination, as fitting into the same PCB is guaranteed and the external housing of your product will require no modification whatsoever.

Powerful Hardware...

- Very compact (17x19x14.6mm).
- 88MHz purpose-built CPU.
- One 100BaseT Ethernet port.
- Works with RJ1202 companion Ethernet connector or any standard RJ45 socket and 100BaseT magnetics.
- 4 high-speed TTL serial ports:
 - Baudrates up to 1.8Mbps;
 - Full- and half-duplex comms*;
 - Support for Wiegand, clock/data i/f;
 - Optional automatic flow control.
- 512/1024K onboard flash disk.
- Real-time clock**.
- 32 general-purpose I/O lines, x24 of them combined into three 8-bit ports.
- 4 status LED control lines.
- Variable-frequency buzzer control pin.
- Low-power (230mA@3.3V).
- Internal firmware is upgradeable through the serial port or network.
- [EM1202-EV Board](#) and [EM1202-SK Starter Kit](#) available.

EM1202



RJ1202



Programmable in Tibbo BASIC

- Executes **your** application written in Tibbo BASIC.
- **Absolute flexibility** - think of the EM1202 as a miniature computing platform.
- Supplied with [TIDE](#) -- a comprehensive development environment featuring seamless cross-debugging.
- Integrated web server (HTTP) with dynamic content generation.
- Numerous high-level objects speed up and simplify coding. Available objects include:
 - **Sock**- up to 16 simultaneous TCP or UDP connections;
 - **Ser**- UART communications;
 - **Io**- control serial port lines;
 - **Stor**- read to and write from the EEPROM;
 - **Romfile**- add static (ROM) data to your project;
 - And [more...](#)
- Learn about programming with Tibbo BASIC [here](#).

RJ1202 Companion Ethernet Connector

- Very compact (15.5x19x15.5mm).
- Standard RJ45 socket.
- 100BaseT magnetics (YCL PH163112A).
- 4 status LEDs built-in.
- In combination with the EM1202 fits in the same board space as the [EM202](#) device.
- Face dimensions match those of the EM202.
- Can be used with any Tibbo module*** except the EM202.

** Full-duplex mode is suitable for RS232 and RS422 comms., half-duplex mode- for RS485 comms. RS232/422/485 transceivers are **not** built in.*

*** This device does not have backup power input. Use the [EM1000](#) if you want to have backup power for the RTC.*

**** The RJ1202 is only available for purchase in combination with any suitable Tibbo module. We do not sell the RJ1202 as a standalone product.*

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