





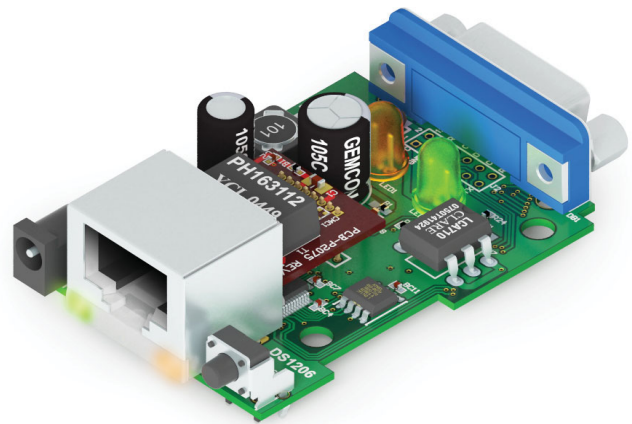


Features

-  10/100BaseT Ethernet port
-  Compact (52.6x38.0mm)
-  Up to 3.5 serial channels
-  Superior upgrade to EM1202EV
-  Power input/output through the serial connector
-  Free serial-over-IP Tibbo BASIC application available



About

The DS1206N is a BASIC-programmable board designed primarily for serial-over-IP and serial control applications. Being small enough to fit inside your product, the board offers a rapid development alternative to using modules, which require designing a new host PCB.

Like the DS1206 controller, the DS1206N features a multi-channel serial port. The device has a single serial port connector and is priced as a single-port device, yet packs four independent serial channels. Have no use for those DSR and DTR lines? Turn them into RX and TX of an additional serial channel. Don't want CTS and RTS either? That's one more channel! In total, there are 15 different configurations to choose from.

The board is supplied in three versions offering various serial port and power options. It comes preloaded with a fully functional serial-over-IP application.

Specifications

- Three options: DS1206N-RS, DS1206N-TM, and DS1206N-TS.
- Superior upgrade to the EM1202EV board.
- Based on high-performance purpose-built 88MHz T1000 IC.
- 10/100BaseT, auto-MDIX Ethernet port.
- Up to 1024KB flash memory for firmware, application, and data.
- 2KB EEPROM for data storage.
- Four LEDs:
 - Green and red status LEDs on top of the device;
 - Link and speed Ethernet status LEDs on the RJ45 jack.
- Software-controlled onboard PLL.
- Up to 3.5 serial channels:
 - DS1206N-RS: RS232 port (DB9M connector);
 - DS1206N-TM, "-TS": TTL serial port ("pin header" connector);
 - Baudrates of up to 921,600bps;
 - None/even/odd/mark/space parity modes;
 - 7/8 bits/character modes;
 - Full-duplex mode with optional flow control;
 - DS1206N-TM and "-TS": half-duplex mode with direction control;
 - Flexible mapping with 15 different options, such as:

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Specifications (continued)

- Up to 3.5 serial channels (continued):
 - A single channel: RX, TX, CTS, RTS, DSR, and DTR lines;
 - 3.5 channels: RX, TX, RX2, TX2, RX3, TX3, and RX4 lines.
 - DS1206N-RS: optional “12V” power output on DB9M connector;
 - DS1206N-TM: optional “12V” power input from the serial port.
- Power:
 - DS1206N-RS, “-TM”: onboard regulator, 10-24V (12V nominal);
 - DS1206N-TS: direct 3.3V input (must be regulated to +/- 5%).
- Board dimensions: 52.6x38.0mm.
- Firmware is upgradeable through the serial port or network.

Options

Available models and their features	DS1206N-RS (RS232)	DS1206N-TM (TTL master)	DS1206N-TS (TTL slave)
Setup button	YES		
Status LEDs	YES		
RS232 Transceiver and DB9M connector	YES	NO	
TTL interface connector	NO	YES	
Power switch	YES	NO	
Power jack and 12V-to-3.3V regulator	YES		NO

Programming

Platform Objects

- Sock — socket comms (up to 16 UDP, TCP, and HTTP sessions).
- Net — controls Ethernet port.
- Ser — up to 4 serial channels (UART, Wiegand, and clock/data modes).
- IO — handles I/O lines, ports, and interrupts.
- Fd — manages flash memory file system and direct sector access.
- Stor — provides access to the EEPROM
- Romfile — facilitates access to resource files (fixed data).
- Pat — “plays” patterns on up to five LED pairs.
- Button — monitors MD line (setup button).
- Sys — in charge of general device functionality.

Function Groups

String functions (27 in total!), date/time conversion functions (8), encryption/hash calculation functions (AES128, RC4, MD5, SHA-1), and more.

Variable Types

Byte, char, integer (word), short, dword, long, real, string, plus user-defined arrays and structures.

PC Software

This product is provided with a free, complete IDE.

For more information, see <http://basic.tibbo.com/product/tide.html>