



The BASIC Stamp 2p40 module has 32 I/O pins, more than any other BASIC Stamp! The BASIC Stamp 2p modules (BS2P40 & [BS2P24](#)) have several advantages over all previous BASIC Stamp microcontrollers. They are 3 times faster than a BS2-IC and 20% faster than the BS2SX-IC.

Recommended for customers with previous BASIC Stamp experience or a strong background in programming and electronics.

The combination of impressive processing speed, memory, and special commands really sets the BS2p on a higher level. The total number of PBASIC commands on the BS2p is now at 61 compared to 42 on the BS2-IC. These additional commands provide you with the ability to get the job done with fewer command lines, resulting in more efficient code. The 4 premier additions to the PBASIC command options are listed below:

- o I2CIN and I2COUT - Allows you to use one I/O pin to communicate with I²C devices.
- o LCDIN and LCDOUT - Connecting to a Parallel LCD has never been easier.
- o OWIN and OWOUT - Interface with Dallas Semiconductor 1-Wire parts.
- o POLLIN, POLLOUT, POLLMODE, POLLRUN, POLLWAIT - Polled interrupt capability allows you to monitor I/O pins in between your PBASIC code.

For complete descriptions and examples of the highlighted commands above, please download the BASIC Stamp Manual and read the BASIC Stamp Command Reference section.

Also available in a pin-compatible format to other BS2 variants (BS2p24). The BS2p40 module may be interfaced with the BS2p24/40 Demo Board or the NX1000 24/40 Development Board since they each have a 40-pin socket. Furthermore, both boards include a large breadboard area and special socket connections for the BS2p series.

Technical Specifications

Processor Speed	20 MHz Turbo
Program Execution Speed	~12,000 instructions/sec.
RAM Size	38 Bytes (12 I/O, 26 Variable)
Scratch Pad RAM	128 Bytes
EEPROM (Program) Size	8 x 2K Bytes, ~4,000 instructions
I/O Pins	32 +2 Dedicated Serial
Voltage Requirements	5 - 12 vdc
Current Draw at 5V	40 mA Run / 350 μ A Sleep
PBASIC Commands	61
Size	2.1"x0.6"x0.4"