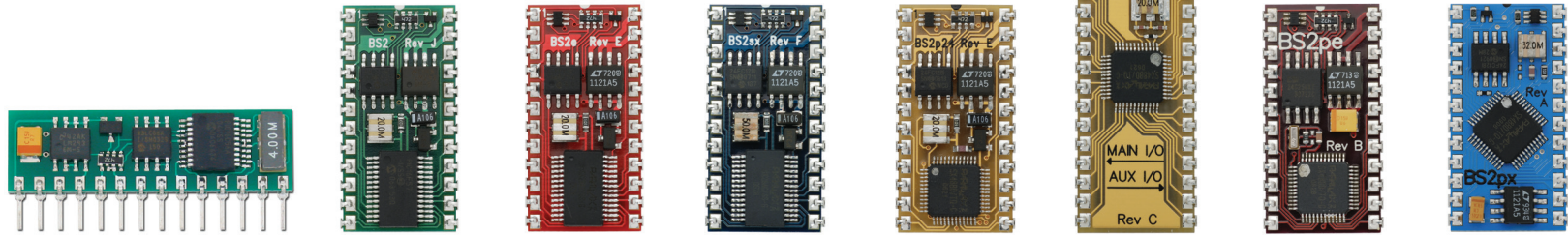


# BASIC Stamp® Module Comparison Chart



Name of module	BASIC Stamp 1	BASIC Stamp 2	BASIC Stamp 2e	BASIC Stamp 2sx	BASIC Stamp 2p24	BASIC Stamp 2p40	BASIC Stamp 2pe	BASIC Stamp 2px
Stock Code	BS1-IC	BS2-IC	BS2E-IC	BS2SX-IC	BS2P24	BS2P40	BS2PE	BS2PX24
Processor Speed	4 MHz	20 MHz	20 MHz	50 MHz	20 MHz Turbo	20 MHz Turbo	8 MHz Turbo	32 MHz Turbo
Execution Speed (instructions/ Sec.)	~2,000	~4,000	~4,000	~10,000	~12,000	~12,000	~6,000	~19,000
RAM Size	16 Bytes (2 I/O, 14 Variable)	32 Bytes (6 I/O, 26 Variable)	32 Bytes (6 I/O, 26 Variable)	32 Bytes (6 I/O, 26 Variable)	38 Bytes (12 I/O, 26 Variable)	38 Bytes (12 I/O, 26 Variable)	38 Bytes (12 I/O, 26 Variable)	38 Bytes (12 I/O, 26 Variable)
Scratchpad RAM	N/A	N/A	64 Bytes	64 Bytes	128 Bytes	128 Bytes	128 Bytes	128 Bytes
EEPROM (Program) Size	256 Bytes, ~80 instructions	2K Bytes, ~500 instructions	8 x 2K Bytes, ~4,000 instructions	8 x 2K Bytes, ~4,000 instructions	8 x 2K Bytes, ~4,000 instructions	8 x 2K Bytes, ~4,000 instructions	16 x 2K Bytes (16K for source), ~4,000 instructions	8 x 2K Bytes (16K for source), ~4,000 instructions
Voltage Requirements	5-15 VDC	5-15 VDC	5-12 VDC	5-12 VDC	5-12 VDC	5-12 VDC	5-12 VDC	5-12 VDC
Current Draw @ 5 V (Run/Sleep)	1 mA/25 µA	3 mA/50 µA	25 mA/200 µA	60 mA/500 µA	40 mA/350 µA	40 mA/350 µA	15 mA/150 µA	55 mA/450 µA
# of I/O Pins	8	16 + 2 Serial	16 + 2 Serial	16 + 2 Serial	16 + 2 Serial	32 + 2 Serial	16 + 2 Serial	16 + 2 Serial
Source/Sink Current per I/O	20 mA/25 µA	20 mA/25 mA	30 mA/30 mA	30 mA/30 mA	30 mA/30 mA	30 mA/30 mA	30 mA/30 mA	30 mA/30 mA
Source/Sink Current per Unit	40 mA/50 µA	40 mA/50 mA per 8 I/O pins	60 mA/60 mA per 8 I/O pins	60 mA/60 mA per 8 I/O pins	60 mA/60 mA per 8 I/O pins	60 mA/60 mA per 8 I/O pins	60 mA/60 mA per 8 I/O pins	60 mA/60 mA per 8 I/O pins
PBASIC Commands	32	42	45	45	61	61	61	63

**BASIC Stamp 1 Module** - Affordable yet capable; perfect for smaller projects or tight spaces.

**BASIC Stamp 2 Module** - Ideal for beginners yet quite powerful, with a vast resource base and sample code. The BS2 is the core of our Stamps in Class program.

**BASIC Stamp 2e Module** - Perfect for those who have experience with the BASIC Stamp 2 and would like more data and program space.

**BASIC Stamp 2sx Module** - Supports the BS2 command set with more data and program space at more than twice the execution speed.

**BASIC Stamp 2p24/40 Modules** - In addition to more speed and data space, special commands support I/O polling, character LCDs, and I<sup>2</sup>C and 1-Wire protocols. The BS2P40 has these features plus 16 additional I/O pins.

**BASIC Stamp 2pe Module** - BS2p command set paired with lower power consumption and more memory for battery-powered data logging applications.

**BASIC Stamp 2px Module** - Our fastest BASIC Stamp microcontroller supports the BS2p command set as well as special I/O configuration features.