

Stamp Specifications (revised 03/04)

Released Products	Rev.D / BS1-IC	BS2-IC	BS2e-IC	BS2sx-IC
Package	PCB w/Proto / 14-pin SIP	24-pin DIP	24-pin DIP	24-pin DIP
Package Size (L x W x H)	2.5" x 1.5" x .5" / 1.4" x .6" x .1"	1.2" x 0.6" x 0.4"	1.2" x 0.6" x 0.4"	1.2" x 0.6" x 0.4"
Environment *	0° - 70° C (32° - 158° F) **	0° - 70° C (32° - 158° F) **	0° - 70° C (32° - 158° F)	0° - 70° C (32° - 158° F)
Microcontroller	Microchip PIC16C56c	Microchip PIC16C57c	Scenix SX28AC	Scenix SX28AC
Processor Speed	4 MHz	20 MHz	20 MHz	50 MHz
Program Execution Speed	~2,000 instructions/sec.	~4,000 instructions/sec.	~4,000 instructions/sec.	~10,000 instructions/sec.
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)
Scratch Pad RAM	N/A	N/A	64 Bytes	64 Bytes
EEPROM (Program) Size	256 Bytes, ~80 instructions	2K Bytes, ~500 instructions	8 x 2K Bytes, ~4,000 inst.	8 x 2K Bytes, ~4,000 inst.
Number of I/O pins	8	16 + 2 Dedicated Serial	16 + 2 Dedicated Serial	16 + 2 Dedicated Serial
Voltage Requirements	5 - 15 vdc	5 - 15 vdc	5 - 12 vdc	5 - 12 vdc
Current Draw @ 5V	2mA Run / 20µA Sleep	8 mA Run / 100 µA Sleep	20 mA Run / 100 µA Sleep	60 mA Run / 200 µA Sleep
Source / Sink Current per I/O	20 mA / 25 mA	20 mA / 25 mA	30 mA / 30 mA	30 mA / 30 mA
Source / Sink Current per unit	40 mA / 50 mA	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
PBASIC Commands	32	36	39	39
PC Programming Interface	Parallel Port	Serial Port (9600 baud)	Serial Port (9600 baud)	Serial Port (9600 baud)
DOS Text Editor	STAMP.EXE	STAMP2.EXE	STAMP2E.EXE	STAMP2SX.EXE
Windows Text Editor	N/A	Stampw.exe (v1.04 and up)	Stampw.exe (v1.096 and up)	Stampw.exe (v1.091 and up)

Released Products	BS2p24 -IC	BS2p40 -IC	BS2pe-IC	Javelin Stamp
Package	24-pin DIP	40-pin DIP	24-pin DIP	24-pin DIP
Package Size (L x W x H)	1.2" x 0.6" x 0.4"	2.1" x 0.6" x 0.4"	1.2" x 0.6" x 0.4"	1.24" x 0.60" x 0.45"
Environment *	0° - 70° C (32° - 158° F)	0° - 70° C (32° - 158° F)	0° - 70° C (32° - 158° F)	0° - 70° C (32° - 158° F)
Microcontroller	Scenix SX48AC	Scenix SX48AC	Ubicom SX48AC	Ubicom SX48AC
Processor Speed	20 MHz Turbo	20 MHz Turbo	8 MHz Turbo	25 MHz Turbo
Program Execution Speed	~12,000 instructions/sec.	~12,000 instructions/sec.	~6000/sec.	~8,500 instructions/sec.
RAM Size	38 Bytes (12 I/O, 26 Variable)	38 Bytes (12 I/O, 26 Variable)	38 Bytes (12 I/O, 26 Variable)	32768 Bytes
Scratch Pad RAM	128 Bytes	128 Bytes	128 Bytes	N/A
EEPROM (Program) Size	8 x 2K Bytes, ~4,000 inst.	8 x 2K Bytes, ~4,000 inst.	16 x 2K Bytes (16 K for source)	32768 Bytes
Number of I/O pins	16 + 2 Dedicated Serial	32 + 2 Dedicated Serial	16 + 2 Dedicated Serial	16
Voltage Requirements	5 - 12 vdc	5 - 12 vdc	5 - 12 vdc	5 vdc (reg), 6-24 vdc (unreg)
Current Draw @ 5V	40 mA Run / 400 µA Sleep	40 mA Run / 400 µA Sleep	15mA Run / 60µA Sleep	60mA Run / 13mA Sleep
Source / Sink Current per I/O	30 mA / 30 mA	30 mA / 30 mA	30 mA / 30 mA	30 mA / 30 mA
Source / Sink Current per unit	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	55	55	55	0 (Java)
PC Programming Interface	Serial Port	Serial Port	Serial Port	Serial Port
DOS Text Editor	STAMP2P.EXE	STAMP2P.EXE	N/A	N/A
Windows Text Editor	Stampw.exe (v1.1 and up)	Stampw.exe (v1.1 and up)	Stampw.exe (v1.33 and up)	Javelin Stamp IDE

* 70% Non-Condensing Humidity

** Industrial Models Available, -40° - 85° C (-40° - 185° F). Order part# BS1I-IC or BS2I-IC.