

PARALLAX [®] BASIC Stamp[®] Modules

C

Released Products	Rev. D/BS1-IC	BS2-IC	BS2e-IC	BS2sx-IC	BS2p24-IC	BS2p40-IC	Javelin Stamp
Package	PCB with Proto / 14-pin SIP	24-pin DIP	24-pin DIP	24-pin DIP	24-pin DIP	40-pin DIP	24-pin DIP
Package Size (L x W x H)	2.5" x 1.5" x .5" / 1.4" x 0.6" x 0.1"	1.2" x 0.6" x 0.4"	1.2" x 0.6" x 0.4"	1.2" x 0.6" x 0.4"	1.2" x 0.6" x 0.4"	2.1" x 0.6" x 0.4"	1.24" x 0.6" x 0.45"
Environment*	0°C - 70°C (32°F - 158°F)**	0°C - 70°C (32°F - 158°F)**	0°C - 70°C (32°F - 158°F)	0°C - 70°C (32°F - 158°F)	0°C - 70°C (32°F - 158°F)	0°C - 70°C (32°F - 158°F)	0°C - 70°C (32°F - 158°F)
Microcontroller	Microchip PIC16C56c	Microchip PIC16C57c	Scenix SX28AC	Scenix SX28AC	Scenix SX48AC	Scenix SX48AC	Ubicom SX48AC
Processor Speed	4MHz	20MHz	20MHz	50MHz	20MHz Turbo	20MHz Turbo	25MHz Turbo
Program Execution Speed	~ 2,000 Instruct. / Sec.	~ 4,000 Instruct. / Sec.	~ 4,000 Instruct. / Sec.	~ 10,000 Instruct. / Sec.	~ 12,000 Instruct. / Sec.	~ 12,000 Instruct. / Sec.	~ 8,500 Instruct. / 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)	38 Bytes (12 I/O, 26 Variable)	38 Bytes (12 I/O, 26 Variable)	32,768 Bytes
Scratch Pad RAM	N/A	N/A	64 Bytes	64 Bytes	128 Bytes	128 Bytes	N/A
EEPROM (Program) Size	256 Bytes, ~ 80 instruct.	2K Bytes, ~ 500 Instruct.	8 x 2K Bytes, ~ 4,000 Instruct.	8 x 2K Bytes, ~ 4,000 Instruct.	8 x 2K Bytes, ~ 4,000 Instruct.	8 x 2K Bytes, ~ 4,000 Instruct.	32,768 Bytes
Number of I/O pins	8	16 + 2 Dedicated Serial	16 + 2 Dedicated Serial	16 + 2 Dedicated Serial	16 + 2 Dedicated Serial	32 + 2 Dedicated Serial	16
Voltage Requirements	5 - 15VDC	5 - 15VDC	5 - 12VDC	5 - 12VDC	5 - 12VDC	5 - 12VDC	5VDC (regulated), 6 - 24VDC (unregulated)
Current Draw at 5V	2mA Run / 20µA Sleep	8mA Run / 100µA Sleep	20mA Run / 100µA Sleep	60mA Run / 200µA Sleep	40mA Run / 400µA Sleep	40mA Run / 400µA Sleep	60mA Run / 13mA Sleep
Source / Sink Current per I/O	20mA / 25mA	20mA / 25mA	30mA / 30mA	30mA / 30mA	30mA / 30mA	30mA / 30mA	30mA / 30mA
Source / Sink Current per Unit	40mA / 50mA	40mA / 50mA per 8 I/O pins	60mA / 60mA per 8 I/O pins	60mA / 60mA per 8 I/O pins	60mA / 60mA per 8 I/O pins	60mA / 60mA per 8 I/O pins	60mA / 60mA per 8 I/O pins
PBASIC Commands	32	36	39	39	55	55	0 (Java)
PC Programming Interface	Parallel Port	Serial Port (9600 baud)	Serial Port (9600 baud)	Serial Port (9600 baud)	Serial Port	Serial Port	Serial Port
DOS Text Editor	STAMP.EXE	STAMP2.EXE	STAMP2E.EXE	STAMP2SX.EXE	STAMP2P.EXE	STAMP2P.EXE	N/A
Windows Text Editor	N/A	Stampw.exe (v1.04 and up)	Stampw.exe (v1.096 and up)	Stampw.exe (v1.091 and up)	Stampw.exe (v1.1 and up)	Stampw.exe (v1.1 and up)	Javelin Stamp IDE

* 70% Non-condensing Humidity ** Industrial Models Available, -40°C - 85°C (-40°F - 185°F). Order Part Number BS2-IC-ND.

BASIC Stamp 2 (BS2-IC): The BS2-IC is a popular module for use in hobby, educational and industrial applications. This general purpose computer is programmed in BASIC and has 16 I/O lines.

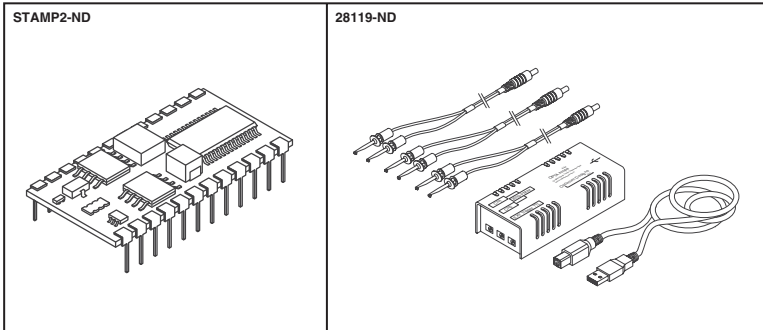
Understanding Signals Parts and Text: This package includes a dual trace Parallax Digital Oscilloscope which connects to a PC with a USB cable (included). This oscilloscope requires no external power supply and all controls are managed through a point and click PC interface. Also included are three pairs of probes, a 144 page Understanding Signals text and the Understanding Signals Parts Kit.

Propeller™ Demo Board Kit: Includes a Propeller Demo Board, and a USB A to Mini B Cable.

Propeller Starter Kit: Includes a Propeller Manual, Propeller Demo Board, and a USB A to Mini B Retractable Cable.

Propeller PropSTICK Kit: Includes a Propeller P8X32A-D40 chip, 24LC256 EEPROM, serial programming interface, 3.3V voltage regulator, and a reset circuitry that you assemble yourself into a handy DIP module. Developed and manufactured by Bueno Systems. *Please note: Assembly is required.*

Propeller Accessories Kit: Includes a 2.5" LCD A/V Display, Parallax PS/2 Mini Keyboard, and a Parallax PS/2 Optical Mouse.



Description	Digi-Key Part No.	1	5	10	25
BASIC Stamp Modules					
BS1-IC BASIC Stamp Module	STAMP1-ND	29.00	27.55	26.10	24.65
BS2-IC BASIC Stamp Module	STAMP2-ND	49.00	46.55	44.10	41.65
BASIC Stamp 2E Module	BS2E-IC-ND	54.00	51.30	48.60	45.90
BASIC Stamp 2SX Module	BS2SX-IC-ND	59.00	56.05	53.10	50.15
BASIC Stamp 2P24 pin Module	BS2P24-IC-ND	79.00	75.05	71.10	67.15
BASIC Stamp 2P40 pin Module	BS2P40-IC-ND	89.00	84.55	80.10	75.65
BASIC Stamp Javelin Module	JS1-IC-ND	89.99	85.49	81.00	76.50
BASIC Stamp Collection Module	020-78267-ND	199.99	—	—	—
BASIC Stamp Starter Kits					
BASIC Stamp 1 Starter Kit	27205-ND	79.99	75.99	72.00	68.00
BASIC Stamp 2OEM Module Kit	27291-ND	30.99	29.44	27.90	—
Javelin Stamp Starter Kit	27237-ND	249.99	237.49	225.00	212.50
Prototype and Development Boards					
BASIC Stamp Super Carrier Board	27130-ND	19.99	18.99	18.00	17.00
BASIC Stamp 1 Project Board	27112-ND	14.99	14.24	13.50	12.75
Board of Education	28150-ND	69.99	66.49	63.00	59.50
BS1-IC Carrier Board	STAMP1C-ND	4.99	4.74	4.50	4.25
BS2-IC Carrier Board	STAMP2C-ND	15.99	15.19	14.40	13.60
BASIC Stamp Accessory Modules					
BASIC Stamp 1 Serial Adapter	27111-ND	4.99	—	—	—
Motor Mind B	27961-ND	29.99	—	—	—
PWMPAL 4 Output Channels	28020-ND	29.99	—	—	—
DS2760 Thermocouple Kit	28022-ND	34.99	—	—	—
Application Kits					
Stache Field Programmer	27330-ND	112.49	—	—	—

Description	Digi-Key Part No.	1	5	10	25
Parallax Standard Servo Motor	900-00005-ND	12.99	—	—	—
Little Step U-Stepper Motor Controller	27938-ND	69.99	66.49	62.99	—
16 Servo Motor Controller	28023-PAR-ND	39.99	37.99	36.00	34.00
Books					
BASIC Stamp Manual Ver. 2.0	27218-ND	25.99	24.69	23.40	22.10
Parallax CD-ROM	27000-ND	3.99	3.79	3.60	3.40
Stamps in Class Educational Kits†					
Understanding Signals Kit	28119-ND	159.99	151.99	144.00	136.00
"What's a Microcontroller?" Parts Kit and Text	28152-ND	69.99	66.49	63.00	59.50
"Earth Measurements" Parts Kit and Text	28153-ND	75.99	72.19	68.40	64.60
"Robotics!" Parts Kit and Text	28154-ND	89.99	85.49	81.00	76.50
Boe-Bot Full Kit	28132-ND	159.99	151.99	144.00	136.00
"Basic Analog and Digital" Parts Kit and Text	28155-ND	49.99	47.49	45.00	42.50
Propeller™ Processors — RoHS Compliant					
IC, 8 32-bit COGs, 40-DIP	P8X32A-D40-ND	12.99	12.34	11.69	11.04
IC, 8 32-bit COGs, 44-LQFP (10mm x 10mm)	P8X32A-Q44-ND	12.99	12.34	11.69	11.04
IC, 8 32-bit COGs, 44-QFN (10mm x 10mm)	P8X32A-M44-ND	12.99	12.34	11.69	11.04
Propeller™ Kits					
Demo Board Kit	32100-PAR-ND	79.99	75.99	—	69.99
Starter Kit	32300-ND	99.99	94.99	—	87.49
Accessories Kit	32311-ND	112.49	—	—	—
Propeller Education Kit	32305-ND	99.99	—	—	—
FTDI USB-Serial — RoHS Compliant					
FT232RL 28-SSOP	604-00043-ND	3.99	—	—	—
FT232RQ 32-QFN	604-00047CT-ND	6.95	—	—	—
FT232L 48-LQFP	604-00033G-ND	6.95	—	—	—

† RoHS Compliant † Requires the Board of Education Full Kit or BASIC Stamp II Starter Kit