

# PARALLAX BASIC Stamp® Modules

C

Released Products	Rev. D/BS1-IC	BS2-IC	BS2e-IC	BS2s-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)	32 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 BS2I-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.

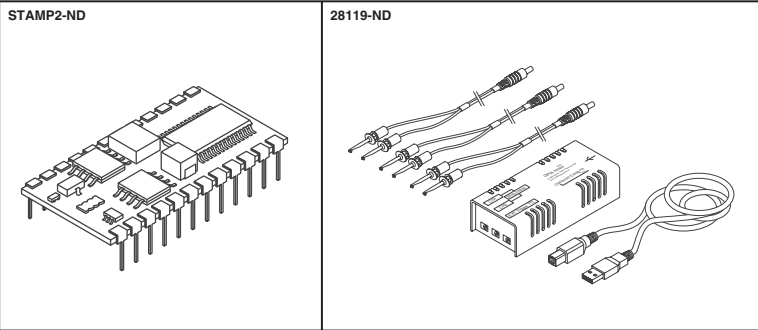
**Understanding Signals Parts and Text:** This package includes a dual trace Parallax Digital Oscilloscope which connects to a PC with a USB cable (included). This oscilloscope requires no external power supply and all controls are managed through a point and click PC interface. Also included are three 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
<b>BASIC Stamp Modules</b>					
BS1-IC BASIC Stamp Module .....	STAMP1-ND	21.05	20.01	18.95	17.90
BS2-IC BASIC Stamp Module .....	STAMP2-ND	35.57	33.80	32.02	30.24
BASIC Stamp 2E Module .....	BS2E-IC-ND	39.20	37.25	35.29	33.33
BASIC Stamp 2SX Module .....	BS2SX-IC-ND	42.83	40.70	38.56	36.41
BASIC Stamp 2P24 pin Module .....	BS2P24-IC-ND	57.35	54.49	51.62	48.76
BASIC Stamp 2P40 pin Module .....	BS2P40-IC-ND	64.61	61.39	58.16	54.93
BASIC Stamp Javelin Module .....	JS1-IC-ND	65.33	62.07	58.80	55.54
BASIC Stamp Collection Module .....	020-78267-ND	145.19	—	—	—
<b>BASIC Stamp Starter Kits</b>					
BASIC Stamp 1 Starter Kit .....	27205-ND	58.07	55.17	52.27	49.37
BASIC Stamp 2OEM Module Kit .....	27291-ND	22.50	21.38	20.25	—
Javelin Stamp Starter Kit .....	27237-ND	181.49	172.42	163.35	154.27
<b>Prototype and Development Boards</b>					
BASIC Stamp Super Carrier Board .....	27130-ND	14.51	13.79	13.07	12.34
BASIC Stamp 1 Project Board .....	27112-ND	22.69	21.55	20.42	19.29
Board of Education .....	28150-ND	50.81	48.28	45.74	43.20
BS1-IC Carrier Board .....	STAMP1C-ND	3.62	3.45	3.26	3.08
BS2-IC Carrier Board .....	STAMP2C-ND	11.61	11.03	10.45	9.87
<b>BASIC Stamp Accessory Modules</b>					
BASIC Stamp 1 Serial Adapter .....	27111-ND	3.62	—	—	—
Motor Mind B .....	27961-ND	21.77	—	—	—
PWMPAL 4 Output Channels .....	28020-ND	21.77	—	—	—
DS2760 Thermocouple Kit .....	28022-ND	25.40	—	—	—
<b>Application Kits</b>					
Stache Field Programmer .....	27330-ND	81.67	—	—	—

Description	Digi-Key Part No.	1	5	10	25
Parallax Standard Servo Motor .....	900-00005-ND	9.43	—	—	—
Little Step U-Stepper Motor Controller .....	27938-ND	50.81	48.28	45.73	—
16 Servo Motor Controller .....	28023PAR-ND	29.03	27.58	26.13	24.68
<b>Books</b>					
BASIC Stamp Manual Ver. 2.0 .....	27218-ND	18.87	17.93	16.99	16.04
Parallax CD-ROM .....	27000-ND	2.90	2.76	2.61	2.47
<b>Stamps in Class Educational Kits†</b>					
Understanding Signals Kit .....	28119-ND	116.15	110.35	104.54	98.73
"What's a Microcontroller?" Parts Kit and Text .....	28152-ND	50.81	48.28	45.74	43.20
"Earth Measurements" Parts Kit and Text .....	28153-ND	55.17	52.41	49.66	46.90
"Robotics!" Parts Kit and Text .....	28154-ND	65.33	62.07	58.80	55.54
Boe-Bot Full Kit .....	28132-ND	116.15	110.35	104.54	98.73
"Basic Analog and Digital" Parts Kit and Text .....	28155-ND	36.29	34.48	32.67	30.85
<b>Propeller™ Processors — RoHS Compliant</b>					
IC, 8 32-bit COGs, 40-DIP .....	P8X32A-D40-ND	9.43	8.96	8.49	8.02
IC, 8 32-bit COGs, 44-LQFP (10mm x 10mm) .....	P8X32A-Q44-ND	9.43	8.96	8.49	8.02
IC, 8 32-bit COGs, 44-QFN (10mm x 10mm) .....	P8X32A-M44-ND	9.43	8.96	8.49	8.02
<b>Propeller™ Kits</b>					
Demo Board Kit .....	32100PAR-ND	58.07	55.17	—	50.82
Starter Kit .....	32300-ND	72.59	68.97	—	63.52
Accessories Kit .....	32311-ND	81.67	—	—	—
Propeller Education Kit .....	32305-ND	72.59	—	—	—
<b>FTDI USB-Serial — RoHS Compliant</b>					
FT232RL 28-SSOP .....	604-00043-ND	2.90	—	—	—
FT232RQ 32-QFN .....	604-00047CT-ND	5.05	—	—	—
FT232L 48-LQFP .....	604-00033G-ND	5.05	—	—	—

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

**Free shipping on orders over £50! All prices are in British pound sterling and include duties.**

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