

zilog eZ80AcclaimPlus!™ Flash Microcontrollers

C

Flash (KB)	SRAM (KB)	I/O Lines	DMA Controller	Speed (MHz)	16-bit Timers	EMAC	Other Features	IrDA	Operating Voltage	Temperature Range	Package	Digi-Key Part No.	Price Each			Zilog Part No.
													1	25	100	
256K	16K	32	Y	50	4	Y	2 UARTS, SPI, I ² C, PLL, RTC	Y	3.0 - 3.6	-40°C - 105°C	144-LQFP	269-3867-ND◆	12.60	9.45	7.00	EZ80F91AZ050EG
											144-LQFP	269-3868-ND◆	11.46	8.60	6.37	EZ80F91AZ050SG
											144-BGA	269-3250-ND	30.87	23.16	13.72	EZ80F91NA050EC
											144-BGA	269-3869-ND◆	14.01	10.51	7.79	EZ80F91NA050EG
											144-BGA	269-3870-ND◆	12.75	9.57	7.09	EZ80F91NA050SG
256K	8K	32	Y	50	4	Y	2 UARTS, SPI, I ² C, PLL, RTC	Y	3.0 - 3.6	-40°C - 105°C	144-LQFP	269-4563-ND◆	12.60	9.45	7.00	EZ80F91AZA50EG
											144-LQFP	269-4564-ND◆	11.46	8.60	6.37	EZ80F91AZA50SG
											144-BGA	269-4565-ND◆	14.01	10.51	7.79	EZ80F91NAA50EG
											144-BGA	269-4566-ND◆	12.75	9.57	7.09	EZ80F91NAA50SG
											128K	8K	24	—	20	6
100-LQFP	269-3871-ND◆	8.67	6.51	4.81	EZ80F92AZ020EG											
100-LQFP	269-3872-ND	7.86	5.90	4.37	EZ80F92AZ020SG											
64K	4K	24	—	20	6	—	2 UARTS, SPI, I ² C, RTC	Y	3.0 - 3.6	-40°C - 105°C	100-LQFP	269-3201-ND	7.14	5.36	3.96	EZ80F93AZ020EC
											100-LQFP	269-3873-ND◆	7.14	5.36	3.96	EZ80F93AZ020EG
											100-LQFP	269-3164-ND	6.33	4.75	3.51	EZ80F93AZ020SC
											100-LQFP	269-3874-ND◆	6.33	4.75	3.51	EZ80F93AZ020SG
—	—	24	—	20	6	—	2 UARTS, SPI, I ² C	Y	3.0 - 3.6	-40°C - 105°C	100-LQFP	269-3875-ND◆	14.22	10.67	7.90	EZ80L92AZ020EG
											100-LQFP	269-3168-ND	12.36	9.27	6.87	EZ80L92AZ020SC
											100-LQFP	269-3876-ND◆	12.36	9.27	6.87	EZ80L92AZ020SG
—	—	24	—	50	6	—	2 UARTS, SPI, I ² C	Y	3.0 - 3.6	-40°C - 105°C	100-LQFP	269-3169-ND	15.63	11.73	8.69	EZ80L92AZ050EC
											100-LQFP	269-3877-ND	15.63	11.73	8.69	EZ80L92AZ050EG
											100-LQFP	269-3878-ND◆	13.62	10.22	7.56	EZ80L92AZ050SG

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Emulators

Description	Digi-Key Part No.	Price Each
Z8 Encore!		
Z8 Encore! 64K Series 64-pin LQFP Emulator Kit	269-3395-ND	2995.00
Z8 Encore! 64K Series 68-pin PLCC Emulator Kit	269-3396-ND	2995.00
Z8 Encore! 64K Series 80-pin QFP Emulator Kit	269-3397-ND	2995.00
Z8 GP™		
Z8 GP ZGP323 In-Circuit Emulator and Development Platform.....	269-3743-ND	999.00
Z8 GP ZGP323 In-Circuit Emulator	269-3864-ND	499.00
Z8 Encore! MC		
Z8 Encore! MC Z8FMC16100 Emulator	269-3830-ND	1999.01
NEW! Crimzon™ — RoHS Compliant NEW!		
In-Circuit Emulator (ICE) for Crimzon Family Chips (ZCRMZNICE01ZEMG)	269-4685-ND	1125.00

Adapters

Description	Digi-Key Part No.	Price Each
Z8 Encore!		
Z8 Encore! 64K Series 44-pin LQFP ICE Adapter	269-3400-ND	299.00
Z8 Encore! 64K Series 40-pin PDIP ICE Adapter	269-3401-ND	299.00
Z8 Encore! 64K Series 44-pin PLCC ICE Adapter	269-3402-ND	299.00
Z8 Encore! 64K Series 64-pin LQFP ICE Adapter	269-3403-ND	299.00
Z8 Encore! 64K Series 68-pin PLCC ICE Adapter	269-3404-ND	299.00
Z8 Encore! 64K Series 80-pin QFP ICE Adapter	269-3405-ND	299.00
Z8 GP™		
Z8 GP ZGP323 20-pin SSOP Programming Adapter	269-3738-ND	90.00
Z8 GP ZGP323 20-pin SOIC Programming Adapter	269-3739-ND	90.00
Z8 GP ZGP323 28-pin SSOP Programming Adapter	269-3740-ND	90.00
Z8 GP ZGP323 28-pin SOIC Programming Adapter	269-3741-ND	90.00
Z8 GP ZGP323 48-pin SSOP Programming Adapter	269-3742-ND	90.00

Development Kits

Description	Digi-Key Part No.	Price Each
eZ80Acclaim!™		
Development Kit for eZ80F91	269-4560-ND◆	99.95
Development Kit for eZ80F91	269-4561-ND◆	279.00
ZDots SBC for Z80Acclaim	269-4671-ND◆	75.00
ZDots SBC for Z80Acclaim	269-3162-ND	399.95
Z8 Encore! XP®		
Z8 Encore! XP 4K Series, (8-pin) Development Kit	269-3638-ND	49.99
Z8 Encore! XP 4K Series, (8-pin) Development Kit	269-4628-ND◆	49.99
Z8 Encore! XP 4K Series, (28-pin) Development Kit	269-4629-ND◆	39.95
Z8 Encore! XP F08xA Series, (28-pin) Development Kit	269-4643-ND◆	39.95
Z8 Encore! XP F083A Series, Development Kit	269-4672-ND◆	39.95
Z8 Encore!		
Z8-Encore! Development Kit (8K/4K)	269-4630-ND◆	39.95
Z8 Encore! Z8F642 MCU Development Kit	269-4540-ND◆	39.95
Z8 Encore! Z8F642 MCU Development Kit (28-Pin Series)	269-4677-ND◆	74.95
Z8 Encore! Z8F642 MCU Development Kit (44-Pin Series)	269-4678-ND◆	99.95
Z8 Encore! Motor Control Development Kit	269-3639-ND	199.95
Z8 Encore! Motor Control Development Kit	269-4660-ND◆	199.95
ZVECTOR Development Kit with Motor	269-4668-ND	800.00
ZVECTOR Development Kit with out Motor	269-4669-ND◆	600.00
Crimzon™		
Crimzon RC Development Platform	269-3398-ND	249.00
Crimzon RC Blaster™ Development Kit	269-4682-ND◆	111.25
Crimzon Development Board Kit for use as a target with ZCRMZNICE01ZEMG (ICE)	269-4683-ND◆ NEW!	125.00

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Modules

Description	Digi-Key Part No.	Price Each
eZ80Acclaim!™		
Multipurpose MCU Module	269-3861-ND◆	180.00
Flash Module for eZ80F91	269-4562-ND◆	75.00
Flash Module for eZ80F92	269-3156-ND	126.15
Ethernet Module for eZ80F92	269-3157-ND	162.00
eZ80® — RoHS Compliant		
Webserver-i Ethernet Module	269-4670-ND	57.38
Mini Ethernet Module	269-3860-ND	105.00
Mini Ethernet Module	269-4666-ND	46.67

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Accessory Kits

Description	Digi-Key Part No.	Price Each
eZ80Acclaim!™		
eZ80Acclaim! Serial Smart Cable Accessory Kit	269-3391-ND	35.00
USB Smart Cable Accessory Kit	269-4539-ND◆	29.95
Ethernet Smart Cable Accessory Kit	269-4661-ND◆	69.99
Z8 Encore! MC™ — RoHS Compliant		
Opto-isolated USB Smart Cable Accessory Kit	269-4664-ND	75.00
NEW! Crimzon™ — RoHS Compliant NEW!		
20-Pin Accessory Kit for use with ZCRMZNICE01ZEMG (ICE)	269-4684-ND	170.00
40/48-Pin Accessory Kit for use with ZCRMZNICE01ZEMG (ICE)	269-4686-ND	500.00

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Programmer

Description	Digi-Key Part No.	Price Each
Z8 GP™		
Z8 GP ZGP323 Ethernet Programming System	269-3390-ND	99.00

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Real-Time, In-Circuit Emulation and Programming for only \$49.95

Z86CCP01ZEM Emulator / Programmer for Zilog's Z8[®] Microcontrollers with up to 32K Program Memory

Digi-Key® Part No. 269-2002-ND
(See Z8 chart for applicable devices.)

GENERAL DESCRIPTION: Zilog's in-circuit emulator/programmer is an interactive, Windows™ based development tool providing a real-time environment for emulation and debugging, which includes a full-featured macro cross assembler to enhance programmer productivity. The Z86CCP01ZEM is a member of Zilog's ICEBOX™ product family of in-circuit emulators providing support for the Z8 microcontrollers. The emulator provides essential timing and I/O circuitry to simplify user emulation of the prototype hardware and software product. The Z8 CCP emulator provides users with a hardware platform to develop and debug software in a real-time environment. In contrast, software simulators provide significantly slower operation making them less practical for code development. The Z8 CCP emulator can be connected to a serial port (COM1, COM2, COM3, and COM4) of the host computer and uses Zilog Developer Studio (ZDS).

Z8 CCP Emulator Kit Contents: Circuit Board: CMOS Z86C9320VSC, 20MHz CMOS Z86C5020FSE ICE Chip, 32K x 8 Static RAM (for Code Memory) 18-Pin DIP ZIF Programming Socket, Holes Available for 28/40-Pin ZIF Programming Sockets, Sockets for 28/40-Pin Target Cables, 25-pin RS-232C Interface Connector: 18-Pin DIP Target Cable, Power Cable **Documentation:** Emulator User's Manual

NOTE: Power Supply RS-232C not included with Z86CCP01ZEM (recommended wall transformer T404-ND)

FEATURES: • In-Circuit Debug Emulation • Real-Time Emulation • Z8 GUI ZDS Emulator Software • Window-Based User Interface • On-Line Help • One-Time Programmable (OTP) Support • Selectable Baud Rates: 9600 to 57.6 Kbps • Bistync Error-Correcting Communications Protocol • Source-Level Debugging • Symbolic Disassembly in the Debug Window • Zilog Developer Studio (ZDS): – ZMASM, – Structured Assembly and Data Code, – Source-Level Debug Support, – Built-In Register Equates, – Linker, – Windows 95™ Integrated Editor

SPECIFICATIONS: Operating Temperature: 20°C ± 10°C Supply Voltage: +7.5 VDC to 10VDC Minimum Emulation Speed: 1MHz internal SCLK Maximum Emulation Speed: 6MHz internal SCLK12 MHz external Crystal (shipped with 8MHz crystal) Operating Humidity: 10-90% RH (non-condensing) Power Requirements: +8VDC @ 0.5A typical, 0.8A maximum Dimensions: Width: 7.0 in. (17.7cm) Length: 9.0 in. (22.9cm) Height: 0.9 in. (2.3cm) Serial Interface: RS-232C @ 9600, 19200 (default), 28800, or 57600 Baud



Z8[®] Series Microcontrollers

Z8 MCU Family

OVERVIEW: Zilog MCU products are targeted for cost-sensitive, high-volume applications including consumer, automotive, security, and HVAC. One-time programmable (OTPs) for prototyping as well as volume production where time to market or code flexibility is critical. A variety of packaging options are available. The same on-chip peripherals are used across the MCU product line with the primary differences being the amount of ROM/RAM, number of I/O lines present, and packaging/temperature ranges available. This allows code written for one MCU device to be easily ported to another family member.

FEATURES: • General-Purpose Register (GPR) File Architecture: Every RAM register acts like an accumulator, speeding instruction execution and maximizing coding efficiency. Working registers allow fast context switching. • Flexible I/O: I/O byte, nibble, and/or bit programmable as inputs or outputs. Outputs are software programmable as open-drain or push-pull on a port basis. Inputs are Schmitt-triggered with auto latches to hold unused inputs at a known voltage state. • Analog Inputs: Three input pins are software programmable as digital or analog inputs. When in the analog mode, two comparator inputs are provided with a common reference input. • Timer/Counter (T/C): The T/C consists of a programmable 6-bit prescaler and

8-bit downcounter, with maskable interrupt upon end-of-count. • Interrupts: There are six vectored interrupt sources with software-programmable enable and priority for each of the six sources. • Watch-Dog Timer (WDT): An internal WDT circuit is included as a fail-safe mechanism so that if software strays outside the bounds of normal operation, the WDT will timeout and reset the MCU. • Auto Reset: All family devices have internal Power-On Reset. • Low-EMI Operation: Mode is programmable via software or as a mask option. This new option provides for reduced radiated emission via clock and output drive circuit changes. • Low-Power: CMOS with two standby modes: STOP and HALT. • Full Z8 Instruction Set: Forty-eight basic instructions, supported by six addressing modes with the ability to operate on bits, nibbles, bytes, and words.

ACCESSORY KIT

The Z86CCP00ZAC is the accessory kit for the Z86CCP01ZEM. The kit contains all accessories to fully populate and operate all functions of the Z86CCP01ZEM.

KIT CONTENTS: • 28-Pin DIP ZIF Socket • 28-Pin Target Connector Cable • 40-Pin DIP ZIF Socket • 40-Pin Target Connector Cable • RS-232 Cable • Power Cable

Memory Size		I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Supply Voltage Range	Operating Temperature (°C)	Package	Digi-Key Part No.	Price Each			Zilog Part No.			
EPROM	RAM								1	25	100				
0.5K	61	14	XTAL/RC	DC-8MHz	3.5 - 5.5	0 - 70	18-DIP	269-1012-ND	1.56	1.17	.86	Z86E0208PSC1925			
			XTAL/RC	DC-8MHz	3.5 - 5.5	0 - 70	18-DIP	269-3948-ND◆	1.56	1.17	.86	Z86E0208PSG1925			
			XTAL/RC	DC-8MHz	3.5 - 5.5	0 - 70	18-SOIC	269-1014-ND	1.56	1.17	.86	Z86E0208SSC1925			
			XTAL	DC-8MHz	3.5 - 5.5	0 - 70	20-SSOP	269-3069-ND	2.13	1.60	1.19	Z86E0208HSC1925			
			XTAL	DC-8MHz	3.5 - 5.5	0 - 70	20-SSOP	269-3946-ND◆	2.13	1.60	1.19	Z86E0208HSG1925			
			XTAL/RC	DC-8MHz	4.5 - 5.5	-40 - 105	18-DIP	269-3947-ND◆	2.13	1.60	1.19	Z86E0208PEG1925			
			XTAL/RC	DC-8MHz	4.5 - 5.5	-40 - 105	18-SOIC	269-3949-ND◆	2.13	1.60	1.19	Z86E0208SEG1925			
			XTAL	DC-8MHz	4.5 - 5.5	-40 - 105	20-SSOP	269-3068-ND	2.34	1.76	1.30	Z86E0208HEC1925			
			XTAL	DC-8MHz	4.5 - 5.5	-40 - 105	20-SSOP	269-3945-ND◆	2.34	1.76	1.30	Z86E0208HEG1925			
			1K	125	14	RC	DC-12MHz	4.5 - 5.5	0 - 70	18-DIP	269-1096-ND	2.31	1.74	1.29	Z86E0412PSC1903
						XTAL	DC-12MHz	4.5 - 5.5	0 - 70	20-SSOP	269-3076-ND	3.21	2.41	1.79	Z86E0412HSC1866
						XTAL	DC-12MHz	4.5 - 5.5	0 - 70	20-SSOP	269-3952-ND◆	3.21	2.41	1.79	Z86E0412HSG1866
RC	DC-12MHz	4.5 - 5.5				0 - 70	20-SSOP	269-3077-ND	3.21	2.41	1.79	Z86E0412HSC1903			
RC	DC-12MHz	4.5 - 5.5				0 - 70	20-SSOP	269-3953-ND◆	3.21	2.41	1.79	Z86E0412HSG1903			
XTAL	DC-12MHz	4.5 - 5.5				-40 - 105	18-DIP	269-1093-ND	3.36	2.52	1.86	Z86E0412PEC			
XTAL	DC-12MHz	4.5 - 5.5				-40 - 105	18-DIP	269-3954-ND◆	3.36	2.52	1.86	Z86E0412PEG			
XTAL	DC-12MHz	4.5 - 5.5				-40 - 105	18-SOIC	269-1097-ND	3.36	2.52	1.86	Z86E0412SEC			
XTAL	DC-12MHz	4.5 - 5.5				-40 - 105	18-SOIC	269-3955-ND◆	3.36	2.52	1.86	Z86E0412SEG			
XTAL	DC-12MHz	4.5 - 5.5				-40 - 105	20-SSOP	269-3074-ND	3.54	2.66	1.97	Z86E0412HEC1866			
XTAL	DC-12MHz	4.5 - 5.5				-40 - 105	20-SSOP	269-3950-ND◆	3.54	2.66	1.97	Z86E0412HEG1866			
RC	DC-12MHz	4.5 - 5.5				-40 - 105	20-SSOP	269-3075-ND	3.54	2.66	1.97	Z86E0412HEC1903			
RC	DC-12MHz	4.5 - 5.5				-40 - 105	20-SSOP	269-3951-ND◆	3.54	2.66	1.97	Z86E0412HEG1903			
2K	125	14				XTAL	DC-12MHz	4.5 - 5.5	0 - 70	18-DIP	269-3961-ND◆	2.70	2.03	1.50	Z86E0812PSG1866
						RC	DC-12MHz	4.5 - 5.5	0 - 70	18-DIP	269-1026-ND	2.70	2.03	1.50	Z86E0812PSC1903
						RC	DC-12MHz	4.5 - 5.5	0 - 70	18-DIP	269-3962-ND◆	2.70	2.03	1.50	Z86E0812PSG1903
						XTAL	DC-12MHz	4.5 - 5.5	0 - 70	18-SOIC	269-1029-ND	2.70	2.03	1.50	Z86E0812SSC1866
						RC	DC-12MHz	4.5 - 5.5	0 - 70	20-SSOP	269-3089-ND	3.90	2.93	2.16	Z86E0812HSC1903
			RC	DC-12MHz	4.5 - 5.5	0 - 70	20-SSOP	269-3959-ND◆	3.90	2.93	2.16	Z86E0812HSG1903			
			XTAL/RC	DC-16MHz	3.5 - 5.5	0 - 70	28-SOIC	269-1055-ND	5.46	4.10	3.04	Z86E3116SSC			
			XTAL/RC	DC-16MHz	3.5 - 5.5	0 - 70	28-SOIC	269-3968-ND◆	5.46	4.10	3.04	Z86E3116SSG			
			XTAL	DC-12MHz	4.5 - 5.5	-40 - 105	18-DIP	269-3960-ND◆	4.08	3.06	2.27	Z86E0812PEG			
			XTAL	DC-12MHz	4.5 - 5.5	-40 - 105	18-SOIC	269-3963-ND◆	2.94	2.21	1.64	Z86E0812SEG			
			XTAL	DC-12MHz	4.5 - 5.5	-40 - 105	20-SSOP	269-3086-ND	4.29	3.22	2.39	Z86E0812HEC1866			
			XTAL	DC-12MHz	4.5 - 5.5	-40 - 105	20-SSOP	269-3957-ND◆	4.29	3.22	2.39	Z86E0812HEG1866			
			RC	DC-12MHz	4.5 - 5.5	-40 - 105	20-SSOP	269-3087-ND	4.29	3.22	2.39	Z86E0812HEC1903			
			RC	DC-12MHz	4.5 - 5.5	-40 - 105	20-SSOP	269-3958-ND◆	4.29	3.22	2.39	Z86E0812HEG1903			
			XTAL/RC	DC-16MHz	4.5 - 5.5	-40 - 105	28-DIP	269-3966-ND◆	6.06	4.55	3.36	Z86E3116PEG			
			XTAL/RC	DC-16MHz	4.5 - 5.5	-40 - 105	28-SOIC	269-1054-ND	6.06	4.55	3.36	Z86E3116SEC			
			XTAL/RC	DC-16MHz	4.5 - 5.5	-40 - 105	28-SOIC	269-3967-ND◆	6.06	4.55	3.36	Z86E3116SEG			

◆ RoHS Compliant

(Continued)

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zilog Z8® Series Microcontrollers (Cont.)

C

Memory Size		I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Supply Voltage Range	Operating Temperature (°C)	Package	Digi-Key Part No.	Price Each			Zilog Part No.	
EPROM	RAM								1	25	100		
4K	237	24	XTAL/RC	DC-16MHz	3.5 - 5.5	0 - 70	28-DIP	269-3965-ND◆	6.60	4.95	3.67	Z86E3016PSG	
			XTAL/RC	DC-16MHz	3.5 - 5.5	0 - 70	28-SOIC	269-4539-5-ND◆	6.60	4.95	3.67	Z86E3016SSG	
			XTAL/RC	DC-16MHz	3.5 - 5.5	0 - 70	28-PLCC	269-1045-ND	6.60	4.95	3.67	Z86E3016VSC	
			XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	28-DIP	269-1036-ND	6.84	5.13	3.80	Z86E3312PSC	
			XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	28-DIP	269-3969-ND◆	6.84	5.13	3.80	Z86E3312PSG	
			XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	28-SOIC	269-1103-ND	6.84	5.13	3.80	Z86E3312SSC	
			XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	28-SOIC	269-3970-ND◆	6.84	5.13	3.80	Z86E3312SSG	
			XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	28-PLCC	269-1104-ND	6.84	5.13	3.80	Z86E3312VSC	
	XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	28-PLCC	269-3971-ND◆	6.84	5.13	3.80	Z86E3312VSG			
	236	32	XTAL/RC	DC-16MHz	3.5 - 5.5	0 - 70	40-DIP	269-3975-ND◆	7.86	5.90	4.37	Z86E4016PSG	
			XTAL/RC	DC-16MHz	3.5 - 5.5	0 - 70	44-PLCC	269-3976-ND◆	7.86	5.90	4.37	Z86E4016VSG	
			XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	40-DIP	269-3977-ND◆	8.34	6.26	4.64	Z86E4312PSG	
			XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	44-PLCC	269-3978-ND◆	8.34	6.26	4.64	Z86E4312VSG	
			XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	44-PQFP	269-1108-ND	10.17	7.63	4.95	Z86E4312FSC	
			XTAL/RC	DC-16MHz	4.5 - 5.5	0 - 70	44-PQFP	269-1107-ND	9.57	7.18	4.42	Z86E4016FSC	
	237	24	XTAL/RC	DC-16MHz	4.5 - 5.5	-40 - 105	28-DIP	269-3964-ND◆	7.26	5.45	4.04	Z86E3016PEG	
	236	32	XTAL/RC	DC-16MHz	4.5 - 5.5	-40 - 105	40-DIP	269-1071-ND	8.64	6.48	4.80	Z86E4016PEG	
	236	32	XTAL/RC	DC-16MHz	4.5 - 5.5	-40 - 105	40-DIP	269-3974-ND◆	8.64	6.48	4.80	Z86E4016PEG	
	8K	237	24	XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	28-SOIC	269-3940-ND◆	8.34	6.26	4.63	Z8673312SSG
		237	24	XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	28-DIP	269-3939-ND◆	8.34	6.26	4.63	Z8673312PSG
		236	32	XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	44-PLCC	269-1048-ND	9.66	7.25	5.37	Z8674312VSC
		236	32	XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	44-PLCC	269-3942-ND◆	9.66	7.25	5.37	Z8674312VSG
		236	32	XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	40-DIP	269-3941-ND◆	9.66	7.25	5.37	Z8674312PSG
	16K	237	24	XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	28-DIP	269-3972-ND◆	11.01	8.26	6.11	Z86E3412PSG
236		32	XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	40-DIP	269-3980-ND◆	12.36	9.27	6.87	Z86E4412PSG	
236		32	XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	44-PLCC	269-3981-ND◆	12.36	9.27	6.87	Z86E4412VSG	
236		32	XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	44-PQFP	269-1109-ND	14.82	11.12	6.59	Z86E4412FSC	
236		32	XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	44-PQFP	269-3979-ND◆	14.82	11.12	6.59	Z86E4412FSG	
236		32	XTAL/RC	DC-12MHz	3.5 - 5.5	0 - 70	44-LQFP	269-4577-ND◆	12.72	9.54	7.06	Z86E4412ASG	
236		32	XTAL	DC-16MHz	4.5 - 5.5	0 - 70	44-PQFP	269-3982-ND◆	23.01	17.26	10.23	Z86E6116FSG	
236	32	XTAL	DC-16MHz	4.5 - 5.5	0 - 70	44-LQFP	269-4578-ND◆	19.74	14.81	10.96	Z86E6116ASG		
32K	236	32	XTAL	DC-16MHz	4.5 - 5.5	0 - 70	44-PQFP	269-1111-ND	29.22	21.92	12.99	Z86E6316FSC	
			XTAL	DC-16MHz	4.5 - 5.5	0 - 70	44-PQFP	269-3983-ND◆	29.22	21.92	12.99	Z86E6316FSG	
			XTAL	DC-16MHz	4.5 - 5.5	0 - 70	44-LQFP	269-4579-ND◆	25.05	18.79	13.91	Z86E6316ASG	

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Description	Digi-Key Part No.	Price Each	Zilog Part No.
OTP Programming Adapters			
18 Pin SOIC Adapter	269-2006-ND	95.00	Z86E0700ZDP
Z8 Accessory Kit (28-DIP, 40-DIP) for Z86CCP01ZEM	269-2001-ND	46.43	Z86CCP00ZAC
44 Pin PLCC Adapter	269-2008-ND	74.83	Z86E4001ZDV
28 Pin Dip Adapter	269-2009-ND	33.75	Z86E3400ZDP
28 Pin SOIC Adapter	269-2010-ND	50.63	Z86E3400ZDS
44 Pin PQFP to 40 Dip Adapter	269-2021-ND	198.00	Z86E2101ZDF
44 Pin PQFP to 40 Dip Adapter	269-2022-ND	118.83	Z86E4001ZDF

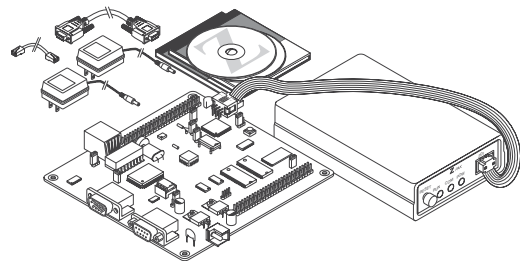
eZ80 - The Next Generation

EZ80190AZ050EC AND EZ80190AZ050SC

Just as the Z80 revolutionized the semiconductor industry, the next generation eZ80 is revolutionizing the way that communications are happening today. This elegant system-on-a-chip can serve web pages over a TCP/IP network, allowing easy system monitoring and control, effortless processor code updates, and system compatibility. This solution enables any browser with access to your network the ability to control and monitor a network application. The eZ80 executes Z80 code four times faster than traditional Z80s at the same clock speed, and can operate at speeds up to 50MHz. Unlike most 8-bit microprocessors, which can only address 64KB, the eZ80 can address 16MB without a Memory Management unit. The eZ80 Webserver also features an Embedded Internet Software Suite that enables the transmission and reception of HTML form data and the dynamic generation of web pages.

FEATURES:

- 50MHz Processor
- Multiply and Accumulate Engine
- 16MB Linear Addressing
- 3.3V Operation
- 2 DMA Channels
- Universal Zilog Interface (selectable UART, IIC, SPI)
- 6 PRTs with Prescalers
- 8KB SRAM
- 32-Bit GPIO with Interrupt Support
- On-Chip Oscillator
- Optimized Pipeline Architecture
- Zilog Debug Interface



Description	Package	Digi-Key Part No.	1	Price Each	100	Zilog Part No.
Webserver IC, Ext. Temperature	100-LQFP	269-3123-ND	21.18	15.89	11.76	EZ80190AZ050EC
Webserver IC, Ext. Temperature	100-LQFP	269-3865-ND◆	21.18	15.89	11.76	EZ80190AZ050EG
Webserver IC	100-LQFP	269-3124-ND	18.42	13.82	10.23	EZ80190AZ050SC
Webserver IC	100-LQFP	269-3866-ND◆	18.42	13.82	10.23	EZ80190AZ050SG

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zilog[®] Z8Plus™ Microcontrollers

Employing the experience gained from the industry-standard Z80 and Z8 cores, the Z8Plus offers increased functionality, significantly higher performance, lower power requirements, and greater cost savings over other 8-bit microcontrollers. The Z8Plus is designed to be easy to use, even for designers who have never used a microcontroller before.

With single-cycle execution, powerful I/O capabilities and register-to-register architecture, the Z8Plus offers state-of-the-art flexibility and freedom for any designer in search of a low-cost solution for a variety of microcontroller applications.

The Z8Plus core offers several significant advantages compared to the current Z8 core. Foremost is performance improvement due to a reduced system clock division and a fixed instruction cycle time. The improvement is nearly 50%, depending upon instruction mix. For example, a Z8Plus-based part at 10MHz has performance comparable to a 16MHz part in production today. This, along with significant design improvements, leads to lower power and lower noise operation.

The Z8PE002 and Z8PE003 microcontrollers are the newest members of the popular Z8E001 Z8 Plus 8-bit microcontroller family. New features include voltage brown-out protection and power-on reset. Additionally, the "RESET" pin has been replaced with a general purpose I/O pin and oscillator circuitry to support RC configurations. These new parts are targeted at customers who require a powerful, yet small OTP microcontroller for use in general purpose applications.

EMULATOR/PROGRAMMER

FEATURES: • In-Circuit Program Debug Emulation • Real-Time Emulation • ZDS Emulator Software • Window-Based User Interface • On-Line Help • One-Time Programmable (OTP) Support • Selectable Baud Rates: 9600 to 57.6 Kbps • Bistync Error-Correcting Communications Protocol

SPECIFICATIONS: OPERATING TEMPERATURE: 20°C ± 10°C
POWER REQUIREMENT: +9.0 VDC @ 0.5A Minimum (Typical).

DIMENSIONS: • Width: 6.75 in. (17.15 cm) • Length: 7.50 in. (19.05 cm) • Height: 0.90 in. (2.30 cm) **SERIAL INTERFACE:** RS-232C @ 9600, 19200 (default), 28800, or 57600 Baud

HOST COMPUTER: Minimum Requirements: IBM PC (or 100% Compatible) 386-Based Machine: • 33 MHz • 4 MB RAM • VGA Video Adapter • Hard Disk Drive (2.5 MB Free Space) • 3.5-inch, High-Density (HD) Floppy Disk Drive • RS-232C Com Port • Mouse or Pointing Device • Microsoft Windows 3.1

KIT CONTENTS (One of Each): Z8M001 Emulator Board; • **Cable/Pods:** 18-Pin Emulation Pod Cable; 9-Pin M-F Serial Cable (6 ft.) • **Host Software:** Z8 Graphical User Interface (GUI); Zilog Macro Cross Assembler (ZMASM)/Zilog Developer Studio (ZDS) • **Documentation:** Zilog 1999 Technical Library CD ROM, which contains Z8 device data sheets, user manuals, application notes; Z8M001 Emulator User's Manual



Memory Size		I/O Lines	Oscillator Type External	Frequency Range Min/Max	Supply Voltage Range	Operating Temp. (°C)	Package	Required Emulator Tools	Required OTP Programming Tools	Digi-Key Part No.	Price Each			ZiLOG Part No.
Eprom	Ram										1	25	100	
512	32	13	XTAL/LC	DC - 10MHz	3.5 - 5.5	0 - 70	18-DIP	D	D	269-1117-ND	1.80	1.35	1.00	Z8E00010PSC
										269-3984-ND◆	1.80	1.35	1.00	Z8E00010PSG
1K	64	13	XTAL/LC	DC - 10MHz	3.5 - 5.5	0 - 70	18-DIP	D	D	269-1121-ND	2.28	1.71	1.26	Z8E00110PSC
							18-DIP	D	D	269-3986-ND◆	2.28	1.71	1.26	Z8E00110PSG
							18-SOIC	*	D, 2	269-1123-ND	2.28	1.71	1.26	Z8E00110SSC
							18-SOIC	*	D, 2	269-3987-ND◆	2.28	1.71	1.26	Z8E00110SSG
				4.5 - 5.5	-40 - 105	18-DIP	D	D	269-3985-ND◆	2.49	1.87	1.39	Z8E00110PEG	
Z8PE002 / Z8PE003 Series														
512	64	14	XTAL/LC	DC - 10MHz	3.0 - 5.5	0 - 70	18-DIP	D	D	269-4290-ND◆	1.92	1.44	1.07	Z8PE002PZ010SG
							20-SSOP	*	D, 17	269-1132-ND	2.10	1.58	1.16	Z8PE002HZ010SC
							20-SSOP	*	D, 17	269-4289-ND◆	2.10	1.58	1.16	Z8PE002HZ010SG
							20-SSOP	*	D, 17	269-1135-ND	2.28	1.71	1.27	Z8PE002HZ010EC
				4.5 - 5.5	-40 - 105	20-SSOP	*	D, 17	269-4288-ND◆	2.28	1.71	1.27	Z8PE002HZ010EG	
1K	64	14	XTAL/LC	DC - 10MHz	3.0 - 5.5	0 - 70	18-DIP	D	D	269-1136-ND	2.67	2.01	1.49	Z8PE003PZ010SC
							18-DIP	D	D	269-4293-ND◆	2.67	2.01	1.49	Z8PE003PZ010SG
							18-SOIC	*	D, 2	269-1137-ND	2.67	2.01	1.49	Z8PE003SZ010SC
							18-SOIC	*	D, 2	269-4295-ND◆	2.67	2.01	1.49	Z8PE003SZ010SG
							20-SSOP	*	D, 17	269-1138-ND	2.82	2.12	1.57	Z8PE003HZ010SC
							20-SSOP	*	D, 17	269-4291-ND◆	2.82	2.12	1.57	Z8PE003HZ010SG
				4.5 - 5.5	-40 - 105	18-SOIC	*	D, 2	269-1140-ND	2.94	2.21	1.63	Z8PE003SZ010EC	
						18-SOIC	*	D, 2	269-4294-ND◆	2.94	2.21	1.63	Z8PE003SZ010EG	

Key	Description	Digi-Key Part No.	Price Each	ZiLOG Part No.
Emulator / Programmer †				
D	Z8 Plus Emulator/Programmer (Power supply sold separately T405-P5P-ND recommended)	269-2033-ND	161.33	Z8ICE001ZEM

◆ **RoHS Compliant** * ZiLOG's emulators support this part, but the in-circuit target cable is configured for DIP only. For designs that require a surface mount package, accommodations will have to be made to use the emulator for in-circuit DIP emulation. † For OTP programming adapters, please refer to Z8 Series.

Turnkey Universal Remote Control Kit

The Crimzon RC Bullet™ Reference Design Kits are ideally suited for Universal Remote Control applications. These kits feature both learning and non-learning models with both three-in-one (Cable/Satellite, DVD/VCR, and TV) and six-in-one feature sets (Cable, Satellite, Audio, TV, DVD/VCR) for the North American and European marketplaces. Built on the Z8-based ZLx16300 and ZLx32300 IR MCU, and competitively priced, the kits give you everything needed to start manufacturing branded universal remote controls today.

269-3380-ND	USA, 3-Function, Non-Learning.....	\$129.00
269-3381-ND	European, 3-Function, Non-Learning.....	\$129.00
269-3382-ND	USA, 6-Function, Non-Learning.....	\$129.00
269-3383-ND	European, 6-Function, Non-Learning.....	\$129.00
269-3384-ND	USA, 6-Function, Learning.....	\$159.00
269-4665-ND◆	USA, 6-Function, Learning.....	\$160.00
269-3385-ND	European, 6-Function, Learning.....	\$159.00

◆ **RoHS Compliant**

Thermostat Application Module Kit

Thermostat Application Module provides a flexible platform for training and experimentation on a number of microcontroller and microprocessor devices. The module contains no processor. It is designed to attach to the eZ80 development platforms, which contain both the processors and the control programs that make the development function.

Features:

- Simple bit-I/O (LEDs, switches, lamp, and fan)
- Alphanumeric LCD display via the GPIO interface
- Temperature sensor via the PC interface
- EEPROM data storage via the PC interface
- Flash program storage for eZ80 family devices

269-3198-ND\$85.00

Z86L99 with IR Solutions

In-circuit emulators are interactive, Windows-oriented development tools, providing a real-time environment for emulation and debugging. Provides essential timing and I/O circuitry to simplify user emulation of prototype hardware and software products.

Features: • Supports up to 32K of ROM • Varies the operating voltage from 3.0-4.0V • Supports incircuit emulation on target systems that operate at 3.0-4.0V • Powers the In-Circuit Emulator (ICE) chip from either the emulator or target board • Supports IR devices that operate at up to 8MHz • Emulates 28-pin DIP and 40-pin DIP • Provides OTP programming for 28-pin DIP and SOIC packages, 40-pin PDIP, 48-pin SSOP • Multi-tasks with other Windows applications while Zilog Developer Studio (ZDS) is running

269-3241-ND	Z86L99 In-Circuit Emulator.....	\$850.00
269-3238-ND	Z86D990; 48-SSOP.....	\$15.42
269-3943-ND◆	Z86D990; 48-SSOP.....	\$15.42
269-3239-ND	Z86D990; 40-DIP.....	\$14.61
269-3944-ND◆	Z86D990; 40-DIP.....	\$14.61

◆ **RoHS Compliant**

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