

COP Development Tools and Microcontrollers — continued

SEM493

COP8SAC

Mfr.	Pins	Description
8SAC720	NSC 20	8-bit CMOS MCU, 4Kb OTP PROM, 128 bytes RAM, 16 I/O lines - 10MHz (IND TEMP) .....
8SAC720	NSC 20	8-bit CMOS MCU, 4Kb OTP PROM, 128 bytes RAM, 16 I/O lines - 10MHz
8SAC720	NSC 20	8-bit CMOS MCU, 4Kb OTP PROM, 128 bytes RAM, 16 I/O lines - 10MHz
8SAC720	NSC 20	8-bit CMOS MCU, 4Kb OTP PROM, 64 bytes RAM, 12 I/O lines - 10MHz .....
8SAC728	NSC 28	8-bit CMOS MCU, 4Kb OTP PROM, 128 bytes RAM, 16 I/O lines - 10MHz (IND TEMP) .....
8SAC728	NSC 28	8-bit CMOS MCU, 4Kb OTP PROM, 128 bytes RAM, 24 I/O lines - 10MHz
8SAC728	NSC 28	8-bit CMOS MCU, 4Kb OTP PROM, 128 bytes RAM, 24 I/O lines - 10MHz (IND TEMP) .....
8SAC728	NSC 28	8-bit CMOS MCU, 4Kb OTP PROM, 128 bytes RAM, 24 I/O lines - 10MHz
8SAC728	NSC 28	8-bit CMOS MCU, 4Kb OTP PROM, 128 bytes RAM, 24 I/O lines - 10MHz
8SAC740	NSC 28	8-bit CMOS MCU, 4Kb OTP PROM, 128 bytes RAM, 36 I/O lines - 10MHz (IND TEMP) .....
8SAC740	NSC 40	8-bit CMOS MCU, 4Kb OTP PROM, 128 bytes RAM, 36 I/O lines - 10MHz
8SAC740	NSC 40	8-bit CMOS MCU, 4Kb OTP PROM, 128 bytes RAM, 36 I/O lines - 10MHz
8SAC744	NSC 44	8-bit CMOS MCU, 4Kb OTP PROM, 128 bytes RAM, 40 I/O lines - 10MHz (PLCC Package) .....

COP8SGE

8SGE	NSC 28	8-bit CMOS MCU, 8Kb OTP PROM, 256 bytes RAM, 24 I/O lines - 10MHz (IND TEMP) .....
8SGE	NSC 40	8-bit CMOS MCU, 8Kb OTP PROM, 256 bytes RAM, 36 I/O lines - 10MHz (IND TEMP) .....
8SGE	NSC 44	8-bit CMOS MCU, 8Kb OTP PROM, 256 bytes RAM, 40 I/O lines - 10MHz (PLCC/IND TEMP) .....
8SGE7	NSC 44	8-bit CMOS MCU, 8Kb OTP PROM, 256 bytes RAM, 40 I/O lines - 10MHz (PLCC/IND TEMP) .....

COP8SGR

8SGR	NSC 28	8-bit CMOS MCU, 32Kb OTP PROM, 512 bytes RAM, 24 I/O lines - 10MHz (IND TEMP) .....
8SGR	NSC 40	8-bit CMOS MCU, 32Kb OTP PROM, 512 bytes RAM, 36 I/O lines - 10MHz (IND TEMP) .....
8SGR	NSC 44	8-bit CMOS MCU, 32Kb OTP PROM, 512 bytes RAM, 40 I/O lines - 10MHz (PLCC/IND TEMP) .....
8SGR7	NSC 44	8-bit CMOS MCU, 32Kb OTP PROM, 512 bytes RAM, 40 I/O lines - 10MHz (PLCC/IND TEMP) .....

COP8FGR

Mfr.	Pins	Description
8FGR	NSC 20/SOIC	8-bit CMOS MCU, 32Kb OTP PROM, 512 bytes RAM, 24 I/O lines - 15MHz. (IND TEMP) .....
8FGR	NSC 28/DIP	8-bit CMOS MCU, 32Kb OTP PROM, 512 bytes RAM, 24 I/O lines - 15MHz. (IND TEMP) .....
8FGR	NSC 44/PLCC	8-bit CMOS MCU, 32Kb OTP PROM, 512 bytes RAM, 40 I/O lines - 15MHz. (IND TEMP) .....

Mfrs. List No.	Order Code	Price Each				
		1+	10+	100+	250+	500+
COP8SAC720M8	<b>SMD 949-620</b>					
COP8SAC720M9	<b>SMD 789-987</b>					
COP8SAC720N9	<b>789-975</b>					
COP8SAC720Q3	<b>302-3783</b>					
COP8SAC728M8	<b>SMD 302-3795</b>					
COP8SAC728M9	<b>SMD 790-000</b>					
COP8SAC728N8	<b>949-644</b>					
COP8SAC728N9	<b>789-999</b>					
COP8SAC728Q3	<b>302-3801†</b>					
COP8SAC740N8	<b>949-668</b>					
COP8SAC740N9	<b>790-011</b>					
COP8SAC740Q3	<b>302-3813†</b>					
COP8SAC744V9	<b>SMD 790-023</b>					
COP8SGE728M8	<b>SMD 121-850</b>					
COP8SGE740N8	<b>121-861</b>					
COP8SGE744V8	<b>SMD 121-873</b>					
COP8SGE7VEJ8	<b>SMD 302-3825</b>					
COP8SGR728M8	<b>SMD 121-885</b>					
COP8SGR740N8	<b>121-897</b>					
COP8SGR744V8	<b>SMD 121-903</b>					
COP8SGR7VEJ8	<b>SMD 302-3837†</b>					

† Available until stocks are exhausted

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Mfrs. List No.	Order Code	Price Each		
		1+	10+	100+
COP8FGR728M8	<b>SMD 332-6846</b>			
COP8FGR728N8	<b>332-6858</b>			
COP8FGR744V8	<b>SMD 332-6860</b>			

ACE Development Tools and Microcontrollers

ACE Development Tools



The ACEx range of devices is supported by starter kits and an In-Circuit Emulator to aid understanding, development and design-ins. The starter kits include a programmer, simulator and samples while the Emulator includes an ICE Board and emulation software. Common to both are the cross-assembler, guide to development tools and datasheets.

Starter kits are not supplied with European power supplies.

The ACE (Arithmetic Controller Engine) 8-bit microcontrollers are dedicated programmable circuits for high performance and low power applications in small packages integrating EEPROM on chip for easy reprogramming. The devices are ideal for low power/bat-

Features:

- 1K and 2Kbytes versions on-board code EEPROM
- 64 bytes data EEPROM
- 64 bytes RAM
- Watchdog
- Multi-input wake-up
- 16-bit multifunction timer
- On-chip oscillator (no external components, 1µs instruction cycle time)
- On-chip power on reset
- Programmable read and write disable functions
- Memory mapped I/O
- Multifunction low voltage detection
- Low power HALT mode
- Power saving IDLE mode
- Single supply operation
- Software selectable I/O options
- 40 years data retention
- 1,000,000 erase write cycles
- In-Circuit Programming

The Simulator and Emulator are Windows based programs. These are simple to use as tutorials whilst comprehensive enough for evaluation and development of applications. The Simulator/Emulator can simulate any program created by the cross-assembler or simple programs can be directly coded into them by assembly command. All commands may be executed in multi-ways using debug/menu/button bar commands or mouse operation.

The ACE programming utility, included in the Starter Kits, is designed specifically to program and configure the ACE micros. It programs and reads the code data EEPROM arrays, verifies programmed data, adjusts the internal oscillator, loads the Intel Hex file from the cross assembler as data, supports comms ports switching, saves directly to a file and offers Graphical User Interface for easy manipulation of the utility.

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ACESTART1101 Starter kit.....	Order Code 314-9560	each
ACESTART1202 Starter kit.....	Order Code 314-9572	each
ACE In-Circuit Emulator.....	Order Code 314-9559	each

tery powered applications such as wireless designs, consumer products, automotive security and controller sub systems.

Mfrs. List No.	Code EEPROM	Pins/Package	Price Each			
			Order Code	1+	10+	100+
ACE1101N	1Kbytes	8 DIL	<b>314-9481</b>			
ACE1101MT8	1Kbytes	8 TSSOP	<b>SMD 314-9493</b>			
ACE1101N14	1Kbytes	14 DIL	<b>314-9500</b>			
ACE1202N	2Kbytes	8 DIL	<b>314-9511</b>			
ACE1202M8	2Kbytes	8 SOIC	<b>SMD 314-9523</b>			
ACE1202N14	2Kbytes	14 DIL	<b>314-9535</b>			
ACE1202M	2Kbytes	14 SOIC	<b>SMD 314-9547</b>			