



# MU9C7201, MU9C7202 MU9C7203, MU9C7204 512 X 9, 1K X 9, 2K X 9, AND 4K X 9 CMOS FIFOs

## PRODUCT INFORMATION

### DISTINCTIVE CHARACTERISTICS

- High-speed First-in, First-out buffers
- 50 ns Access, 65 ns Cycle times (15.4 MHz)
- 512 x 9, 1K X 9, 2K X 9, and 4K X 9 organizations
- Asynchronous/simultaneous operation on both Read and Write ports
- Expandable in depth and width with minimal external logic
- Full, Half-full, Empty flags
- Retransmit capability
- Industry-standard pinouts, packages (0.3-inch and 0.6-inch 28-pin PDIPs and 32-pin PLDCC)

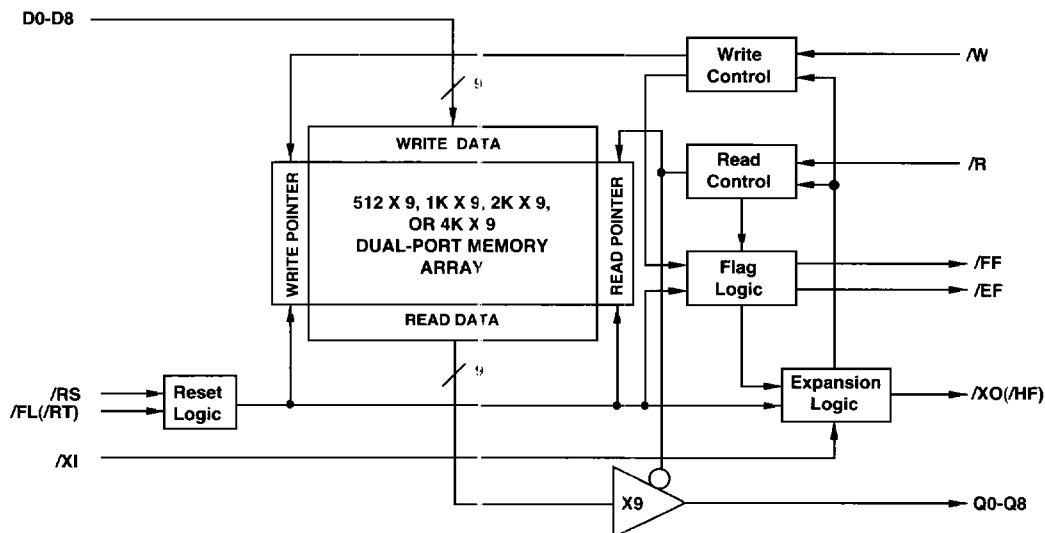
### GENERAL DESCRIPTION

The MU9C7201-MU9C7204 are high-density CMOS First-in, First-out (FIFO) memories with capacities of 512, 1024, 2048, and 4096 nine-bit words, respectively. The nine-bit-word configuration facilitates passing parity information through the FIFOs. The depths of these FIFOs make them ideal for applications which need significant bandwidth elasticity, such as between systems that transfer data at significantly different data rates. Because no address lines are needed for FIFOs, these devices offer both upward and downward pin compatibility. Due to their architecture, these devices offer very high performance and simultaneous and asynchronous

operation of the Read and Write ports. These FIFOs are easily expanded in both width and depth with little or no external logic and without any degradation in performance compared to single-device operation. Each FIFO offers a flexible flag architecture with Full, Empty and Half-full flags.

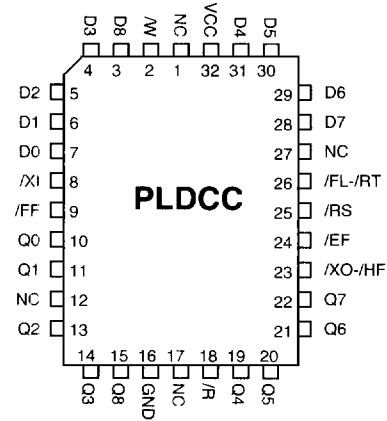
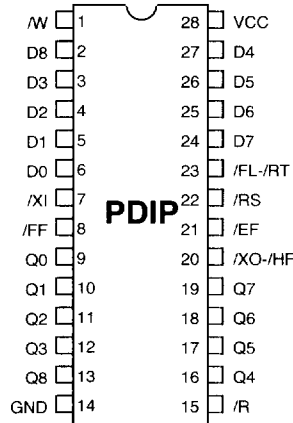
MUSIC Semiconductors offers the MU9C7201-MU9C7204 in the industry-standard narrow-width (0.3 inches) and standard-width (0.6 inches) 28-pin DIP and 32-pin PLDCC package pin configurations. Operation is guaranteed over the commercial temperature range (0 - 70 °C).

### BLOCK DIAGRAM



# MU9C7201, MU9C7202, MU9C7203, MU9C7204

## PINOUT DIAGRAMS



## ORDERING INFORMATION

PART NUMBER	SIZE	ACCESS TIME	PACKAGE	TEMPERATURE RANGE
MU9C7201-XXYC	512 X 9			0-70°C
MU9C7202-XXYC	1K X 9			0-70°C
MU9C7203-XXYC	2K X 9			0-70°C
MU9C7204-XXYC	4K X 9			0-70°C
XX = 50		50ns		
XX = 65		65ns		
XX = 80		80ns		
Y = P			28-PIN PDIP (0.6-inch)	
Y = S			28-PIN PDIP (0.3-inch)	
Y = E			32-PIN PLDCC	

## MUSIC Semiconductors®

**USA Headquarters**  
MUSIC Semiconductors  
1150 Academy Park Loop, Suite 202  
Colorado Springs, CO 80910  
USA  
Tel: (1) 719-570-1550  
Fax: (1) 719-570-1555  
Tel within USA: (1) 800-933-1550

**European Headquarters**  
MUSIC Semiconductors  
Torijnstraat 28  
PO Box 184  
6470 ED Eygelshoven  
The Netherlands  
Tel: +31 45 467878  
Fax: +31 45 467822

**Far East Headquarters**  
MUSIC Semiconductors  
Km. 22, East Service Road  
South Superhighway  
Cupang, Muntinlupa, Metro Manila  
Philippines  
Tel: +63-2-834-2156  
Fax: +63-2-833-3959

MUSIC Semiconductors agent or distributor:

MUSIC Semiconductors reserves the right to make changes to its products and specifications at any time in order to improve on performance, manufacturability, or reliability. Information furnished by MUSIC is believed to be accurate, but no responsibility is assumed by MUSIC Semiconductors for the use of said information, nor for any infringements of patents or of other third-party rights which may result from said use. No license is granted by implication or otherwise under any patent or patent rights of any MUSIC company.

© Copyright 1993, MUSIC Semiconductors