MU9C0591, MU9C1902, MU9C2903, MU9C4904 0.5K X 9, 1K X 9, 2K X 9, AND 4K X 9 CMOS FIFOs

PRODUCT INFORMATION

DISTINCTIVE CHARACTERISTICS

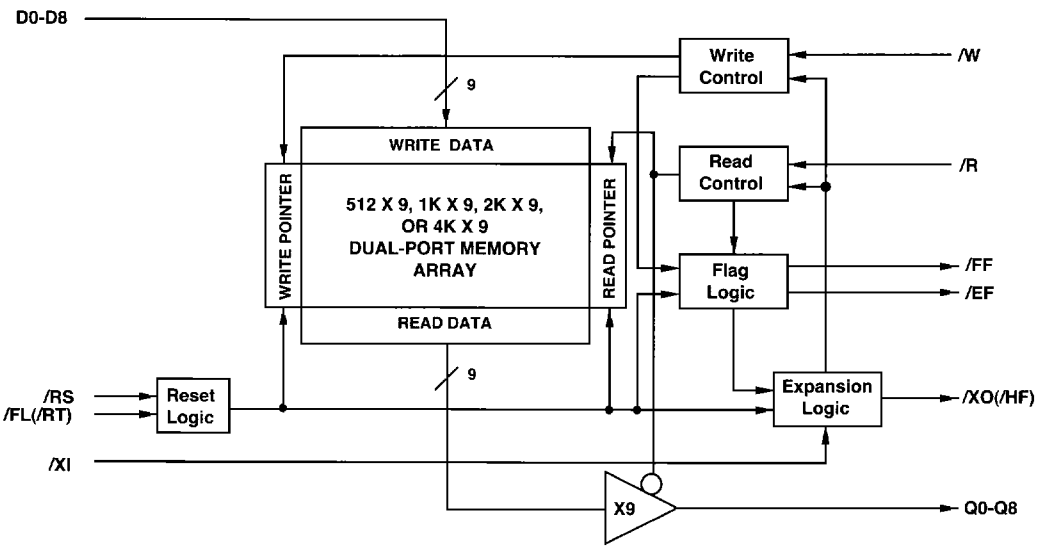
- **High-speed First-in, First-out buffers**
- **20 ns Access, 30 ns Cycle times (33 MHz)**
- **512 X 9, 1K X 9, 2K X 9, and 4K X 9 organizations**
- **Asynchronous/simultaneous operation on both Read and Write ports**
- **Expandable in depth and width with minimal external logic**
- **Full, Half-full, 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 MU9C0591, MU9C1902, MU9C2903, and MU9C4904 are high-speed 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 this FIFO family in 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



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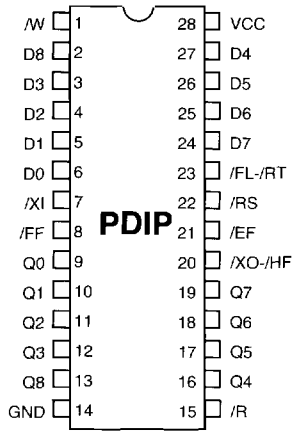
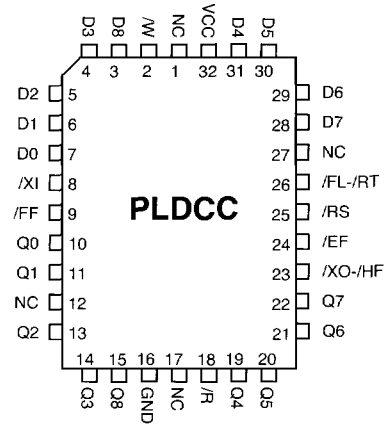
MU9C0591, MU9C1902, MU9C2903, MU9C4904

PINOUT DIAGRAMS





ORDERING INFORMATION

PART NUMBER	SIZE	ACCESS TIME	PACKAGE	TEMPERATURE RANGE
MU9C0591-**XX**Y**C**	512 X 9			0-70°C
MU9C1902-**XX**Y**C**	1K X 9			0-70°C
MU9C2903-**XX**Y**C**	2K X 9			0-70°C
MU9C4904-**XX**Y**C**	4K X 9			0-70°C
XX = 20		20ns		
XX = 25		25ns		
XX = 35		35ns		
Y = P			28-PIN PDIP (0.6-inch)	
Y = S			28-PIN PDIP (0.3-inch)	
Y = E			32-PIN PLDCC	

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