M5M82C54FP,-6

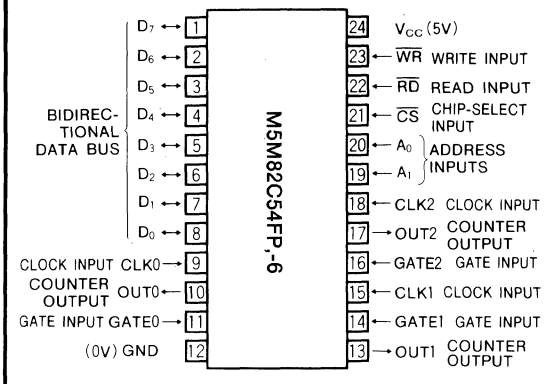
CMOS PROGRAMMABLE INTERVAL TIMER

DESCRIPTION

The M5M82C54FP is a programmable general-purpose timer device developed by using the silicon-gate CMOS process. It offers counter and timer functions in systems using an 8-bit parallel-processing CPU. The use of the M5M82C54FP frees the CPU from the execution of looped programs, count-operation programs and other simple processing involving many repetitive operations, thus contributing to improved system throughputs. The M5M82C54FP works on a single power supply, and both its input and output can be connected to a TTL circuit.

Parameter	M5M82C54FP	M5M82C54FP-6
Clock high pulse width (Min.)	60ns	55ns
Clock low pulse width (Min.)	60ns	110ns
Clock cycle time (Min.)	125ns	165ns
Access time (Max.)	120ns	170ns

PIN CONFIGURATION (TOP VIEW)



Outline 24P2W

FEATURES

- Single 5V supply voltage
- TTL compatible
- Pin connection compatible with M5L8253P-5
- Clock period : M5M82C54FP-6 ..... DC~6MHz
  M5M82C54FP ..... DC~8MHz
- 3 independent bult-in 16-bit down counters
- 6 counter modes freely assignable for each counter
- Binary or decimal counts
- Read-back command for monitoring the count and status
- Package in flat small outline package

APPLICATION

Delayed-time setting, pulse counting and rate generation in microcomputers.

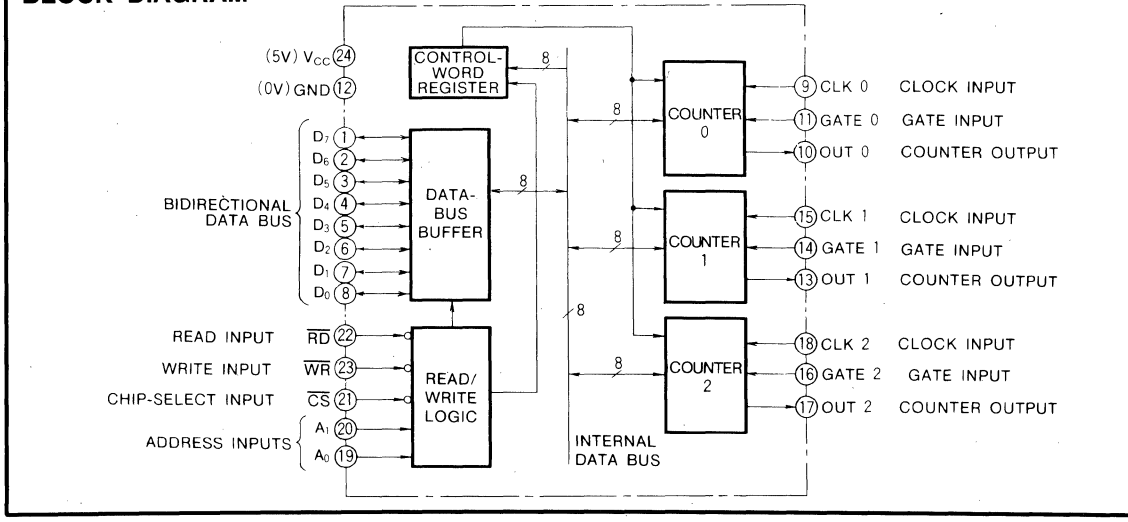
FUNCTION

Three independent 16-bit counters allow free programming based on mode-control instructions from the CPU. When roughly classified, there are 6 modes (0~5). Mode 0 is mainly used as an interruption timer and event counter, mode 1 as a digital one-shot, modes 2 and 3 as rate generators, mode 4 for a software triggered strobe, and mode 5 for a hardware triggered strobe.

The count can be monitored and set at any time. Besides the count, the status of the counter can be monitored by Read-back command. The counter operates with either the binary or BCD system.

Refer to M5M82C54P/P-6 for detail information. M5M82C54FP/FP-6's specification are fully compatible with M5M82C54P/P-6. Only package outline is different.

BLOCK DIAGRAM



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