SEMICONDUCTOR GROUP



APPLICATIONS BRIEF #2

The MPS 6525 Tri-Port Interface Adapter combines three 8-bit I/O ports providing 24 individually programmable I/O lines. The third port is programmable for normal I/O operation or priority interrupt/handshaking control. The 6525 essentially has two basic modes: 1) 24 individually programmable I/O lines; or 2) 16 I/O lines, 2 handshake and 5 priority interrupt inputs.

This device is designed to offer enhancements over similar type circuits through flexibility and greater I/O capabilities. Table 1 compares the MPS 6525 to its competitors.

TABLE 1

	MPS 6525	MC6821	8255A
1/0	24	16	24*
Static	Yes	Yes	Yes
Control Lines	2	4	8**
Priority Interrupt	Yes (5)***	No	No
Frequency	1, 2, 3MHZ	1, 1.5, 2MHZ	***

* Port A and Port B Byte I/O programmable; Port C Nibble I/O programmable. All three ports of MPS 6525 are Bit I/O programmable through data direction registers.

** For control lines Port C is totally dedicated to this function.

*** Port C will be dedicated if priority interrupts are used.

**** Read Access 150 nsec (max.) for 8255A. 100 nsec (Max.) for 8255A-5 from RD high to low.