

. APPLICATIONS BRIEF #4

MPS 6520 VERSUS MC6820/MC6821

The MPS 6520 Peripheral Adapter is a 16 line (2 port) bi-directional I/O device with four peripheral control/interrupt lines. The MPS 6520 is pin and functionally compatible with the MC6820 Peripheral Interface Adapter from Motorola/Hitachi. The MPS 6520 is pin compatible with the MC6821 PIA, but the functional differences are outlined in the table below.

CHARACTERISTIC	MPS 6520 MAX	MC6821 MAX
I _{IL} , Input Low Current	-1.6mAdc	-2.4mAdc
$PAØ-PA7$, $CA2$ ($V_{IL} = 0.4Vdc$)		
I _{LOAD}	1.6mAdc	3.2mAdc
$(v_{CC} = min., v_{OL} = 0.4 Vdc max.)$		

The other functional difference between the MPS 6520 and the MC6821 is that the 6520 has a max. enable cycle time of 25μ sec. while the MC6821 is fully static. If the above differences are not critical to the user, than the MPS 6520 may be substituted for the MC6821 as well as the MC6820.