

CDP1800-Series and CDP6805-Series Peripherals (Continued)

Input Levels: CMOS for All Types

Type	Description and Function	Features	Operating Voltage Range	Operating Temp Range (T _A) †	Fanout (TTL Loads)	No. of Pins* Package
			Volts	°C		
TIMER FUNCTIONS (Continued)						
CDP6818	Real-Time Clock with RAM (MOTEL Bus)**	<ul style="list-style-type: none">• Low-power, high-speed CMOS• Internal time base and oscillator• Counts seconds, minutes and hours of the day• Counts days of the week, date, month and year• Time base input options:<ul style="list-style-type: none">▶ 4.194304MHz▶ 1.048576MHz▶ 32.768kHz• Time base oscillator for parallel resonant crystals• 40 to 200μW typical operating power at low frequency time base• 4.0 to 20mW typical operating power at high frequency time base• Binary or BCD representation of time, calendar and alarm• 12 or 24 hour clock with AM and PM in 12 hour mode• Daylight savings time option• Automatic end of month recognition• Automatic leap year compensation• Microprocessor bus compatible• Selectable between Motorola and competitor bus timing• Multiplexed bus for pin efficiency• Interfaced with software as 64 RAM locations• 14 bytes of clock and control registers• 50 bytes of general purpose RAM• Status bit indicates data integrity• Bus compatible interrupt signals (IRQ)• Three interrupts are separately software maskable and testable<ul style="list-style-type: none">▶ Time-of-day alarm, Once-per-second to Once-per-day▶ Periodic rates from 30.5μs to 500ms▶ End-of-clock update cycle• Programmable square-wave output signal• Clock output may be used as microprocessor clock input at time base frequency ÷ 1 or ÷ 4	3 to 6	0 to +70	1	24 D E
CDP6818A						24 D E 28 Q
INTERRUPT CONTROLLER						
CDP1877 CDP1877C	Programmable Interrupt Controller (PIC)	<ul style="list-style-type: none">• Compatible with CDP1800-series• Programmable long branch vector address and vector interval• 8 levels of interrupt per chip• Easily expandable• Latched interrupt requests• Hard wired interrupt priorities• Memory mapped• Multiple chip select inputs to minimize address space requirements	4 to 10.5 4 to 6.5	-40 to +85	1	28 D E

† T_A indicates operating temperature range over which the published electrical data are specified

* See interpretation guide and packaging section

** MOTEL Bus not included in 'A' version