

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)**	• 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: ▶ 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 ▶ 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)	• 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