

## CMOS Peripheral Circuits

## 80C86/88 and 80C286 Peripherals

Type	Function	Features	Package No. of Pins*
82C37A	DMA Controller	<ul style="list-style-type: none"> <li>• Compatible with NMOS 8237A</li> <li>• Provides control for direct memory access operation</li> <li>• Up to 4Mb/s transfer rate with 8MHz clock</li> <li>• Four independently programmable DMA channels</li> <li>• Low power operation</li> <li>• 12.5MHz operation with 0 wait state DMA transfers</li> <li>• 16-bit DMA transfer capability</li> </ul>	40 CH FE BN NF
82C50A	Asynchronous Communication Element	<ul style="list-style-type: none"> <li>• Complete serial communication interface <ul style="list-style-type: none"> <li>▶ UART</li> <li>▶ Baud rate generator</li> </ul> </li> <li>• 80C86/88 Compatible</li> <li>• DC to 10MHz operation (DC to 625Kbaud)</li> <li>• Modem interface control lines</li> <li>• Low CMOS power dissipation</li> <li>• Compatible with NMOS 8250A</li> </ul>	40 CJ FE NF
82C52	Serial Controller Interface	<ul style="list-style-type: none"> <li>• UART/Baud rate generator in a single 28-pin package</li> <li>• Operates from DC to 1Mbaud with an asynchronous 16X clock</li> <li>• 72 programmable baud rates</li> <li>• Low power operation: <ul style="list-style-type: none"> <li>▶ 1mA/MHz operating current, typical</li> </ul> </li> <li>• 40-pin version available (HD-6406)</li> </ul>	28 1M FJ BK NE
82C54	Programmable Interval Timer	<ul style="list-style-type: none"> <li>• Compatible with NMOS 8254</li> <li>• Enhanced version NMOS 8253</li> <li>• Three independent 16-bit counters</li> <li>• Six programmable counter modes</li> <li>• Completely TTL compatible</li> <li>• 8MHz count frequency</li> <li>• Low power operation: <ul style="list-style-type: none"> <li>▶ ICCOP: 10mA @ 8MHz count frequency</li> <li>▶ ICCSB: 10<math>\mu</math>A maximum</li> </ul> </li> </ul>	24 SF FG BM NE
82C55A	Programmable Peripheral Interface	<ul style="list-style-type: none"> <li>• Three independent programmable 8-bit I/O ports</li> <li>• High speed, no "wait state" operation with 5MHz/8MHz 80C86/88</li> <li>• Fully TTL compatible</li> <li>• 2.5mA drive capability on all I/O port outputs</li> <li>• Compatible with NMOS 8255A</li> <li>• 24 programmable I/O pins</li> <li>• Enhanced control word read capability</li> <li>• High darlington drive outputs on all ports</li> <li>• Standby current: 10<math>\mu</math>A, maximum</li> </ul>	40 CH FD BP NH
82C59A	Priority Interrupt Controller	<ul style="list-style-type: none"> <li>• Compatible with NMOS 8259A</li> <li>• Eight maskable interrupt inputs</li> <li>• Cascade operation allows up to 64 interrupt inputs with no additional circuitry</li> <li>• Supports both 8080/85 and 80C86/88 formats</li> <li>• Standby current: 10mA, maximum</li> <li>• Fully TTL compatible</li> <li>• Programmable interrupt modes</li> </ul>	28 1M FJ BK ND

\* See interpretation guide and package availability chart