

Microprocessor Peripherals (82Cxx)

82C54, CMOS Programmable Interval Timer

Fully compatible with NMOS 8254, enhanced version of NMOS 8253. Three independent 16 bit counters. Six programmable counter modes. Binary or BCD counting. Status read back command. **Static CMOS Design For Low** Power: ICCSB = 10 µA, ICCOP = 10 mA at 8 MHz.

Mfr.'s Type	Operating Frequency (MHz)	Operating Voltage (V)	Package Type	Temperature Range (°C)
CP82C54	8.0	5.0	24 Lead PDIP	0 to +70
CP82C54-12	12.5	5.0	24 Lead PDIP	0 to +70
CS82C54	8.0	5.0	28 Lead PLCC	0 to +70
CS82C54-12	12.5	5.0	28 Lead PLCC	0 to +70
IP82C54	8.0	5.0	24 Lead PDIP	−40 to +85

82C55A, CMOS Programmable Peripheral Interface

Fully compatible with NMOS 8255A. 24 programmable I/O pins. High speed, no wait state operation with 5 MHz and 8 MHz 80C86 and 80C88. Direct bit set/reset compatibility. Enhanced control word read capability. 2.5 mA drive capability on all I/O ports. **Static CMOS Design For Low Power:** ICCSB = 10 µA. Fully TTL compatible.

CP82C55A	8.0	5.0	40 Lead PDIP	0 to +70
CS82C55A	8.0	5.0	44 Lead PLCC	0 to +70

82C59A, CMOS Priority Interrupt Controller

Fully compatible with the NMOS 8259A. Eight level priority controller, expandable to 64 levels. Programmable interrupt modes, individual request mask capability. **Static CMOS Design For Low Power Operation:** ICCSB = 20 µA max., ICCOP = 1 mA/MHz max. Fully TTL compatible.

CP82C59A	8.0	5.0	28 Lead PDIP	0 to +70
CP82C59A-12	12.5	5.0	28 Lead PDIP	0 to +70

Data Communications

HD-4702, CMOS Programmable Bit Rate Generator

Provides 13 commonly used bit rates. Uses a 2.4576 MHz crystal/input for standard frequency Output (16 times bit rate). diagnostic fault isolation. On chip input pull-up circuit. Conforms to EIA RS-404. One HD-4702 controls up to eight transmission channels. Initialization circuit facilitates

Mfr.'s Type	Operating Frequency (MHz)	Operating Voltage (V)	Package Type	Temperature Range (°C)
HD3-4702-9	—	5.0	16 Lead PDIP	−40 to +85

HD-6402, CMOS Universal Asynchronous Receiver/Transmitter (UART)

Lower power CMOS design. Programmable word length, stop bits, and parity. Automatic data formatting and status generation. Compatible with industry standard UARTs. Single 5 V power supply. CMOS/TTL Compatible inputs.

HD3-6402R-9	2.00	5.0	40 Lead PDIP	−40 to +85
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HD-6409, CMOS Manchester Encoder/Decoder

Converter or repeater mode. Independent manchester encoder and decoder operation. Static 1 MBits/s data rate guaranteed. Low bit error rate. Digital PLL clock recovery. On chip oscillator. **Low Operating Power:** 50 mW (typ.) at 5 V.

HD3-6409-9	1.00	5.0	20 Lead PDIP	−40 to +85
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Digital Signal Synthesis

Oscillator

Mfr.'s Type	Description	Size (Bits)	Clock Speed (MHz)	Dynamic Range (dBc)	Output (Bits)	Modulation Techniques	Res. at Max. (Hz)	Package
HSP45102PC-40	Oscillator	12	40	69	12 Sin	QPSK, FSK	0.012	28 PDIP

High Speed Data Converters

Sample and Hold Amplifiers

Mfr.'s Type		Description	Acquisition Time (to 0.01%)	Droop Rate (µV/µS)	Hold Step Error (mV)	Hold Mode Settling Time (ns to ±1 mV)	Aperture Uncertainty (ps)	Gain Bandwidth Product (MHz)	Input Offset Voltage (mV Max.)	Supply Voltage (±VDC)	Supply Current (mA/Amp)	No. of Leads
CDIP Package	PDIP Package											
HA1-2425-5	HA3-2425-5	3.2 µs Acquisition Time Sample and Hold Amplifier	3200	—	10.0	860	5000	2.5	6.0	15.0	3	14

Display Circuits

3½ Digit with LED/LCD Drivers

Mfr.'s Type	Features	Display Type	Display Drive	Conversion Type	Conversion Time (µs)	Technology	Range Min.	Linearity Counts	No. of Leads
ICL7106CPL	Low Noise, Low Power, True Differential Input and Reference	LCD	Direct Drive	Auto-Zero Integrating	333 Typ.	CMOS-JI	±0.2 V	±1	40
ICL7107CPL	Low Noise, Low Power, True Differential Input and Reference	LED	Direct Drive	Auto-Zero Integrating	333 Typ.	CMOS-JI	±0.2 V	±1	40
ICL7117CPL	Display Hold Version of the ICL7107	LED	Direct Drive	Auto-Zero Integrating	333 Typ.	CMOS-JI	±0.2 V	±1	40
ICL7136CPL	Overrange Recovery Version of the ICL7106	LCD	Direct Drive	Auto-Zero Integrating	333 Typ.	CMOS-JI	±0.2 V	±1	40
ICL7137CPL	Overrange Recovery Version of the ICL7107	LED	Direct Drive	Auto-Zero Integrating	333 Typ.	CMOS-JI	±0.2 V	±1	40

Display Drivers

Mfr.'s Type	Description	No. of Digits	No. of Decimal Points	Display Type	Font	Interface	Cycle Time (ns)	Package Type
ICM7211AM1PL	7 Segment Non-MUX LCD Display Outputs with Backplane Driver	4	0	LCD Direct Drive	Code B	Random Access	200	40 Lead PDIP
ICM7212AM1PL	7 Segment Non-MUX LED Display Driver	4	0	LED Common Anode Non-MUX	Code B	Random Access	200	40 Lead PDIP
ICM7218AIJI	8 Digital Universal LED Driver with Common Anode	8	8	LED Common Anode MUX	HEX/Code B	Bit Parallel, Digit Serial	550	28 Lead CERDIP
ICM7218DIJI	8 Digital Universal LED Driver with Common Anode	8	8	LED Common Cathode MUX	HEX/Code B	Random Access	550	28 Lead CERDIP
ICM7228AIPI	8-Digit µProcessor Compatible LED Display Decoder Driver	8	8	LED Common Anode MUX	HEX/Code B	Bit Parallel, Digit Serial	550	28 Lead PDIP

*AlphaNumeric.