



HM83450

ASYNCHRONOUS COMMUNICATION ELEMENT

Features

- * Easily interfaces to most popular micro-processors.
- * Adds or deletes standard asynchronous communication bits (start, stop, and parity) to or from serial data stream.
- * Full double buffering eliminates need for precise synchronization.
- * Independently controlled transmit, receive line status, and data set interrupts.
- * Programmable baud generator allows division of any input clock by 1 to ($2^{16}-1$) and generates the internal 16 x clock.
- * Independent receiver clock input.
- * MODEM control functions (CTS, RTS, DSR, DTR, RI, and DCD).
- * Fully programmable serial-interrupt characteristics:
 - 5-, 6-, 7-, or 8-bit characters
 - Even, odd, or no-parity bit
 - Generation and detection
 - 1-, 1/2-, or 2-stop bit generation
 - Baud generation (DC to 56K baud)
- * False start bit detection.
- * Complete status reporting capabilities.
- * TRI-STATE TTL drive capabilities for bidirectional data bus and control bus.
- * Line break generation and detection
- * Internal diagnostic capabilities:
 - Loopback controls for communications link fault isolation
 - Break, parity, overrun, framing error simulation.
- * Full prioritized interrupt system controls.

Pin Assignment

HM 83450		No. / Pin	No. / Pin	No. / Pin	No. / Pin
1	40	1 D0	11 SOUT	21 DISTR	31 OUT2
2	39	2 D1	12 CS0	22 DISTR	32 RTS
3	38	3 D2	13 CS1	23 DDIS	33 DTR
4	37	4 D3	14 CS2	24 CSOUT	34 OUT1
5	36	5 D4	15 BAUDOUT	25 ADS	35 MR
6	35	6 D5	16 XTAL1	26 A2	36 CTS
7	34	7 D6	17 XTAL2	27 A1	37 DSR
8	33	8 D7	18 DOSTR	28 A0	38 DCD
9	32	9 RCLK	19 DOSTR	29 NC	39 RI
10	31	10 SIN	20 V _{ss}	30 INTRPT	40 V _{cc}