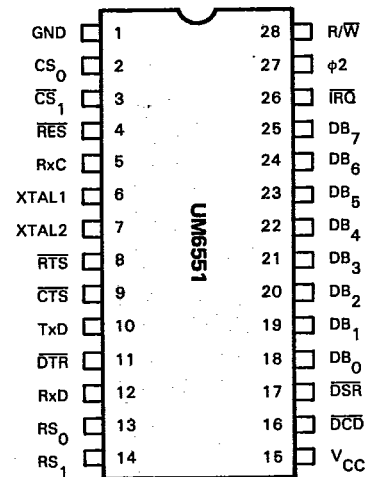## UM6551 Asynchronous Communication Interface Adapter

FEATURES

- On-chip Baud Rate Generator: 15 Programmable Baud Rates Derived from a Standard 1.8432 MHz External Crystal (50 to 19,200 Baud).
- Programmable Interrupt and Status Register to Simplify Software Design.
- Single +5 Volt Power Supply.
- Serial Echo Mode.
- False Start Bit Detection.
- 8-bit Bi-directional Data Bus for Direct Communication with the Microprocessor.
- External 16x Clock Input for Non-standard Baud Rates (up to 125 Kbaud).
- Programmable: Word Lengths; Number of Stop Bits; and Parity Bit Generation and Detection.
- Data Set and Modem Control Signals Provided.
- Parity: (Odd, Even, None, Mark, Space).
- Full-duplex or Half-duplex Operation.
- 5, 6, 7, 8 and 9 Bit Transmission.

PIN CONFIGURATION

Pin	Signal	Pin	Signal
1	GND	28	R/$\overline{W}$
2	CS_0	27	$\phi 2$
3	$\overline{CS}_1$	26	$\overline{IRQ}$
4	$\overline{RES}$	25	DB_7
5	RxC	24	DB_6
6	XTAL1	23	DB_5
7	XTAL2	22	DB_4
8	$\overline{RTS}$	21	DB_3
9	$\overline{CTS}$	20	DB_2
10	TxD	19	DB_1
11	$\overline{DTR}$	18	DB_0
12	RxD	17	$\overline{DSR}$
13	RS_0	16	$\overline{DCD}$
14	RS_1	15	V_{CC}

UM6551

UM68681 Dual Asynchronous Receiver/Transmitter (DUART)

FEATURES

- 68000 Bus Compatible
- Dual Full-duplex Asynchronous Receiver/Transmitter
- Quadruple Buffered Receiver Data Registers
- Programmable Data Format
- Programmable Baud Rate for Each Receiver and Transmitter Selectable
- Parity, Framing, and Overrun Error Detection
- False Start Bit Detection
- Line Break Detection and Generation
- Four Programmable Channel Modes
- Multi-function Programmable 16-bit Counter/Timer
- Multi-function 7-bit Input Port
- Multi-function 8-bit Output Port
- Maximum Data Transfer: 1X — 1MB/sec, 16X—125KB/sec
- Automatic Wake-up Mode for Multidrop Applications
- Start-end Break Interrupt/Status
- Detects Break Which Originates in the Middle of a Character
- On-chip Crystal Oscillator
- TTL Compatible
- Single +5V Power Supply

PIN CONFIGURATION

Pin	Signal	Pin	Signal
1	A0	40	V_{CC}
2	IP3	39	IP4
3	A1	38	IP5
4	IP1	37	IP2
5	A2	36	$\overline{IACK}$
6	A3	35	$\overline{CS}$
7	IP0	34	$\overline{RESET}$
8	$\overline{R/W}$	33	XTALI
9	$\overline{DTACK}$	32	XTAL2
10	RxDB	31	RxDA
11	TxDB	30	TxDA
12	OP1	29	OP0
13	OP3	28	OP2
14	OP5	27	OP4
15	OP7	26	OP6
16	D1	25	D0
17	D3	24	D2
18	D5	23	D4
19	D7	22	D6
20	GND	21	$\overline{INT}$

UM68681

17