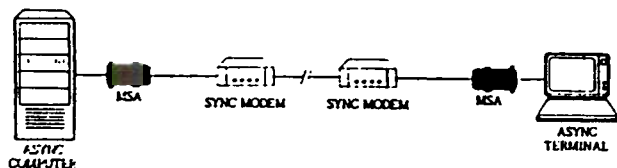


FEATURES

- Enables asynchronous terminals to use synchronous modems
- 7 or 8 bit code
- 160 bits elastic buffer
- Operates without AC power
- Miniature, easy to install and configure

APPLICATION



15

IC932

19.4.91

DESCRIPTION

■ The MSA provides the interface between an asynchronous terminal or computer port and a synchronous modem, allowing the asynchronous terminal to operate within the timing control of the synchronous modem. The data format is that of the asynchronous terminal, i.e., start bit, 7 or 8 data bits, and a stop interval of one or more bits.

■ The MSA contains an elastic buffer to compensate for differences in baud rates between terminal and modem. The buffer size is 160 bits. Under normal clock deviations, this is sufficient to accommodate block length of up to 800,000 bits without bit loss. If the modem clock is faster than the asynchronous terminal bit rate, additional stop bits are added. If the modem clock is slower than the asynchronous terminal bit rate, the buffer memory stores the extra bits. If the difference between modem clock and terminal bit rate is large, then the memory capacity may be exceeded. Such an event, which is most unlikely to occur in normal operating conditions, would cause bits to be lost and character error to occur.

■ Data from the asynchronous source is fed into the MSA buffer memory and then read out of memory under the control of the modem's transmit clock. It is transparent in the sense that the start and stop bits are read out along with the 8 information bits. The MSA has RTS override feature which will empty the buffers before dropping the RTS to the modem, thereby allowing use in a polled environment.

■ The MSA operates without AC power deriving ultra low power from the standard EIA RS-232-C/CCITT V.24 data and control signals.

SPECIFICATIONS

- **Transmission Format**
Async to sync conversion
Transparent to protocol
- **Data Rate**
Strap Selectable: 150, 300, 600, 1200,
2400, 4800, 9600, 19200
- **Number of Data Bits**
Selectable: 7 or 8 bits (including parity)
- **Buffer**
160 bits
- **Interface**
RS-232-C/CCITT V.24
- **Connectors**
Two 25 pin D-type, female
- **Power**
No AC power is required; uses ultra low
power derived from data and control
signals on both the sync and async sides
Sync: pins 15 & 17
Async: pins 2 & 4
- **Physical**
Length: 135 mm/5.3 in
Width: 49 mm/2.0 in
Height: 30 mm/1.2 in
Weight: 100 gm/3.5 oz
- **Environment**
Temperature: 0-50°C (32-122°F)
Humidity: Up to 95% non-condensing

INSTALLATION

1. Open the unit by pressing the marked places on the sides. If this is difficult, insert a small screwdriver into the slot, where there is a small opening. Lift the handle, gently levering the tip of the screwdriver down. The cover will separate without pressure.
Note: Do not insert the screwdriver straight into the middle of the slot, as this may break off the prongs which snap the cover together.
2. Select the data rate (factory strapped to 9,600 bps), and the number of bits (factory strapped to 8 bits).
3. Close the covers by simply snapping them together. Make sure that the ASYNC and SYNC labels on the cover match the markings on the PC board.
4. Connect the MSA to the modem and terminal using cables prepared in accordance with Figure 1.

Figure-1

