



SNS COLLEGE OF TECHNOLOGY
(An Autonomous Institution)
Coimbatore-35



DEPARTMENT OF BIOMEDICAL ENGINEERING

19BMB303 & Fundamentals of Microprocessors and Microcontrollers

UNIT II – 8251 INTERFACING **III Year/ VI Sem**

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8251 Interface



- The 8251 is a widely used programmable communication interface chip
- Also known as a Universal Asynchronous Receiver/Transmitter (UART).
- It's commonly found in microprocessor-based systems to facilitate serial communication with external devices.
- The 8251 facilitates serial data communication between a microprocessor-based system and external devices such as modems, terminals, printers, etc.
- It supports asynchronous serial communication, where data is transmitted one bit at a time without the need for a separate clock signal.



8251

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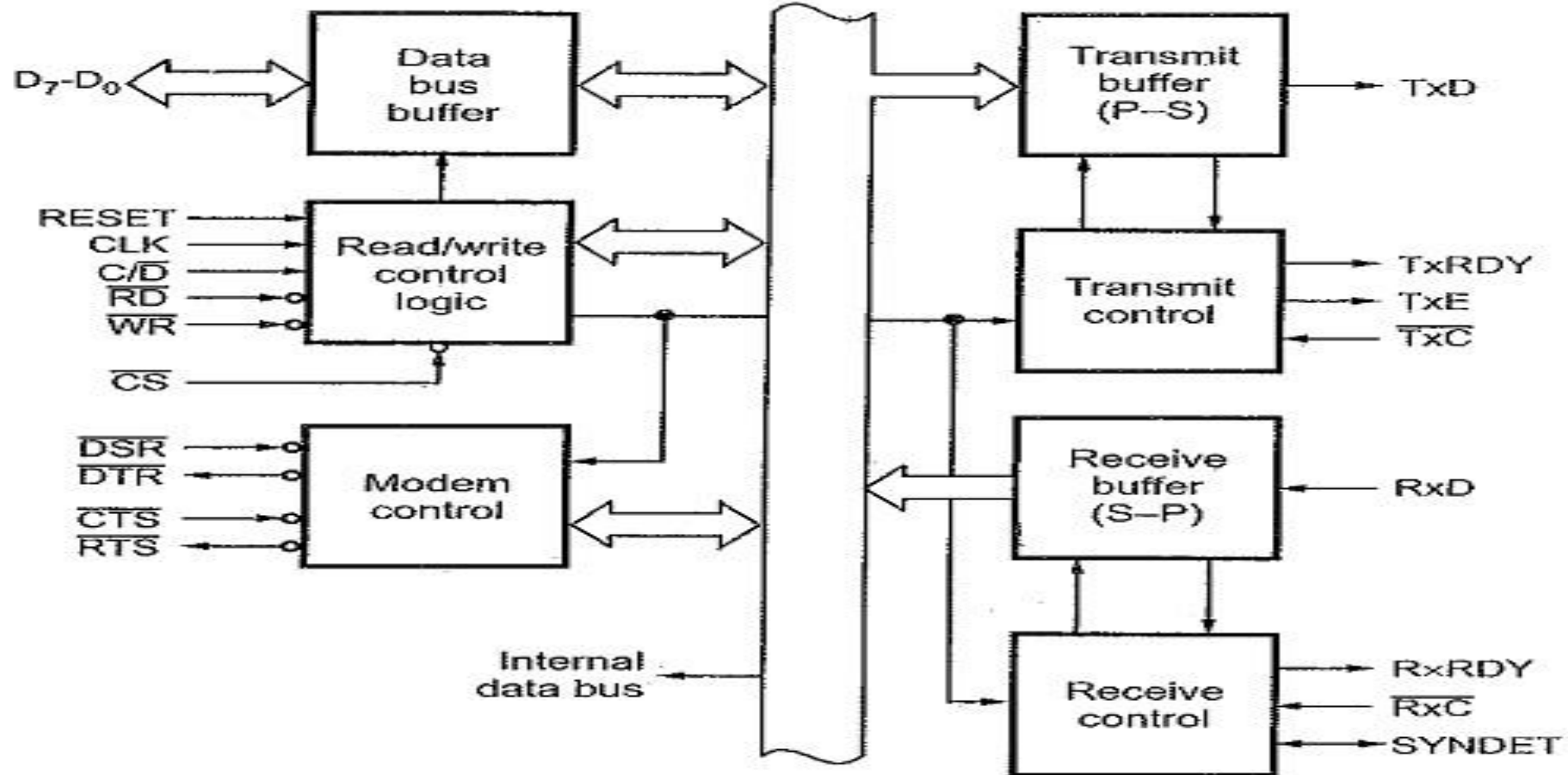


Fig. 14.37 Block diagram

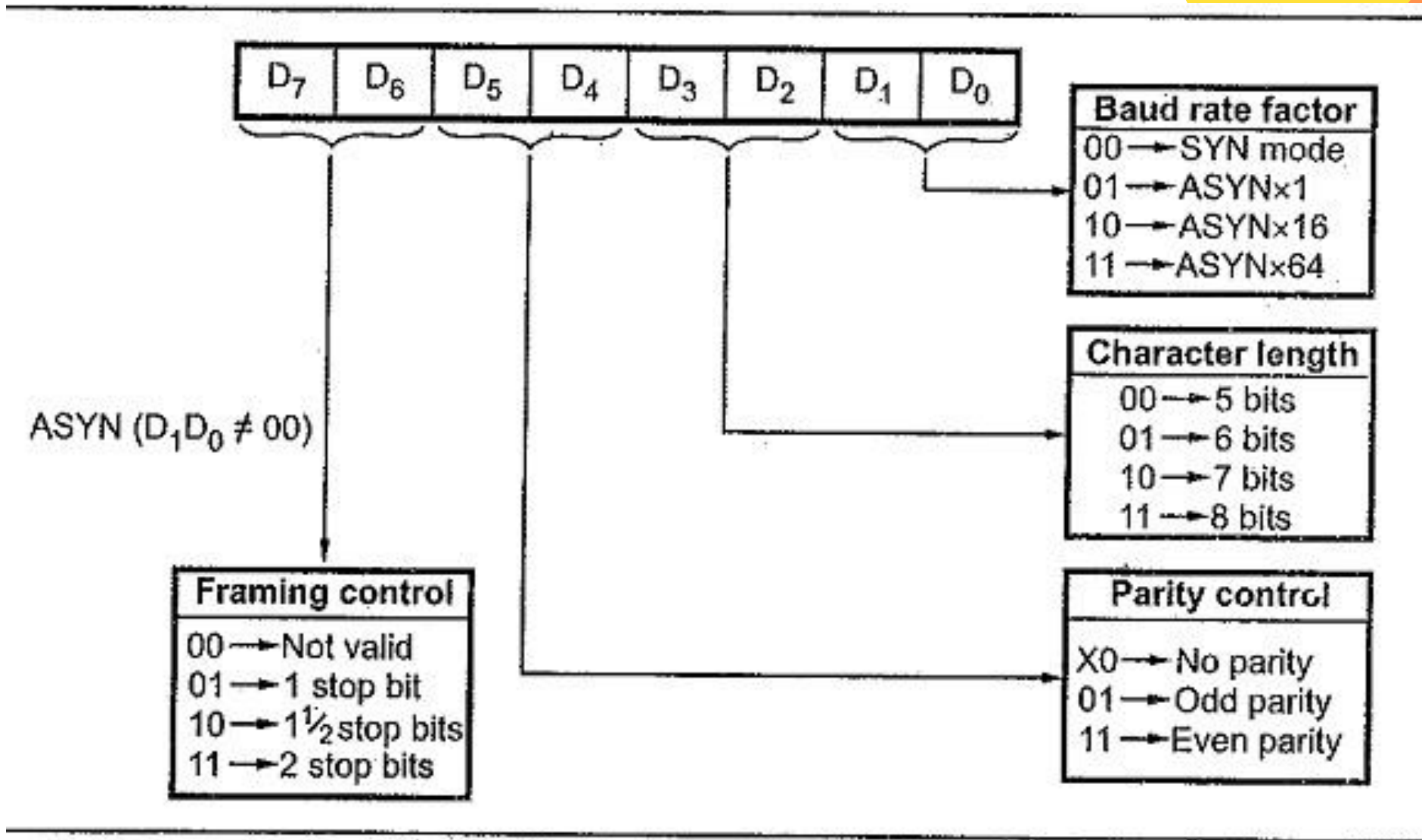
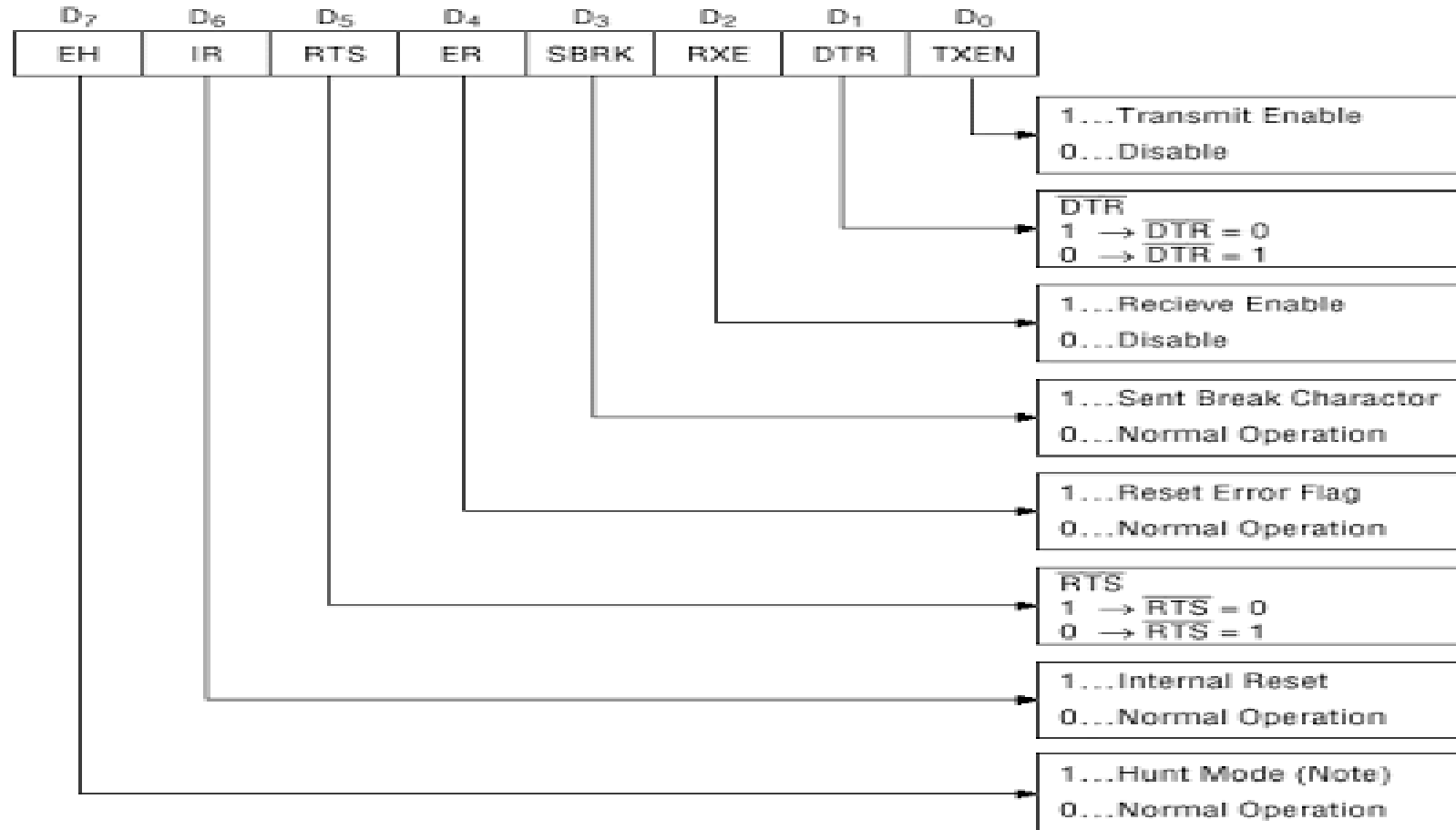


Fig. 14.38 Mode instruction format



Note: Search mode for synchronous characters in synchronous mode.

Fig. 4 Bit Configuration of Command

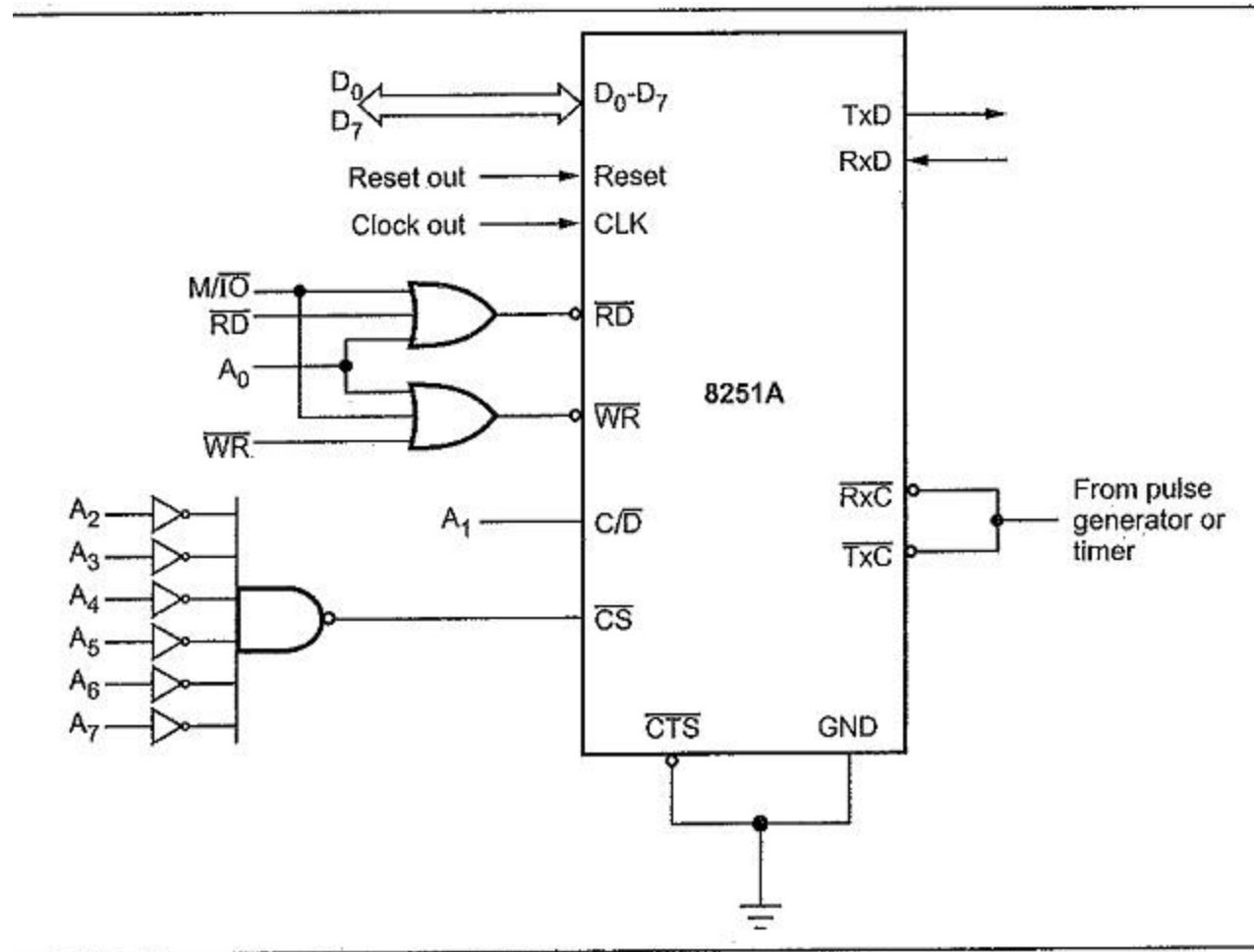


Fig. 14.46 Interfacing of 8251A with 8086 in I/O mapped I/O