



SNS COLLEGE OF TECHNOLOGY



Coimbatore-36.

An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

COURSE NAME : 19ITT201 – Computer Organization and Architecture

II YEAR/ III SEMESTER

Interface Circuits

Mr. Selvakumar N

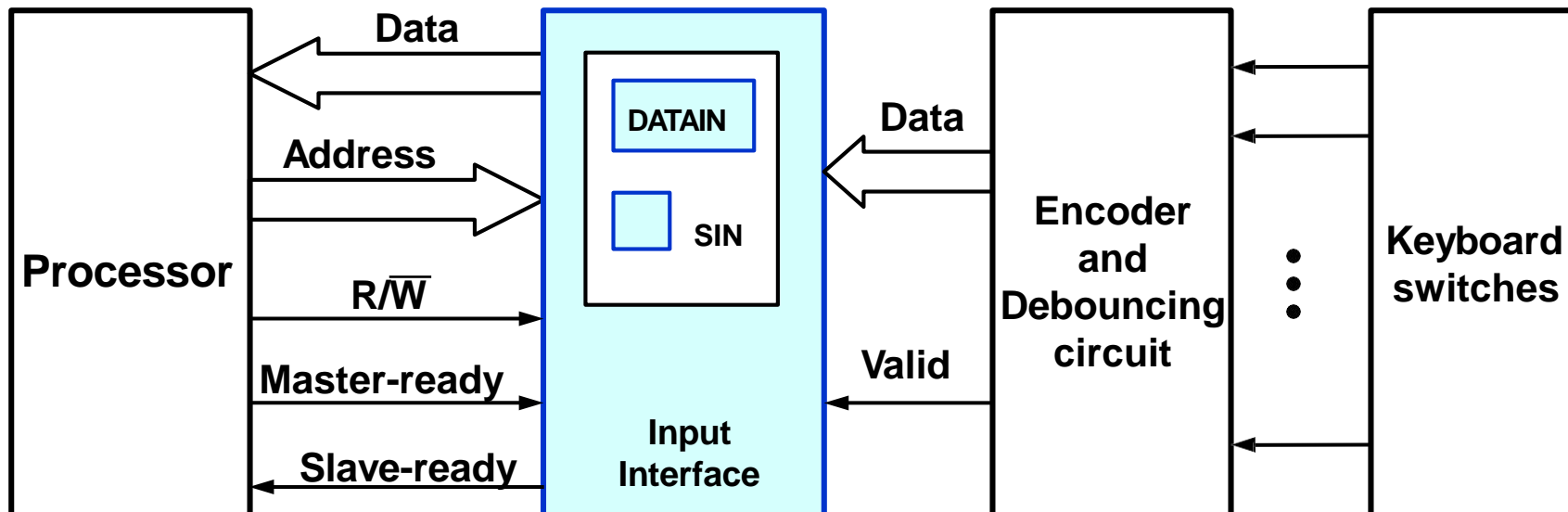
Assistant Professor

Department of Computer Science and Engineering



Interface Circuits

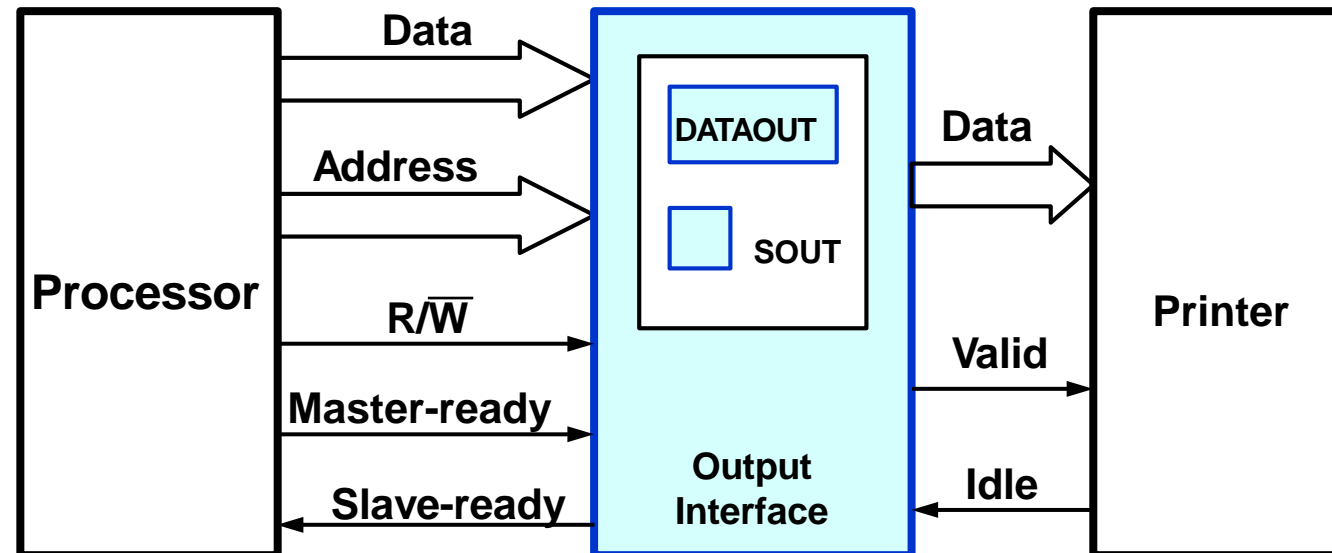
- Keyboard to processor connection
 - ◆ When a key is pressed, the Valid signal changes from 0 to 1, causing the ASCII code to be loaded into DATAIN and SIN to be set to 1
 - ◆ The status flag SIN is cleared to 0 when the processor reads the contents of the DATAIN register





Printer to Processor Connection

- The interface contains a data register, DATAOUT, and a status flag, SOUT
 - ◆ The SOUT flag is set to 1 when the printer is ready to accept another character, and it is cleared to 0 when a new character is loaded into DATAOUT by the processor
 - ◆ When the printer is ready to accept a character, it asserts its idle signal



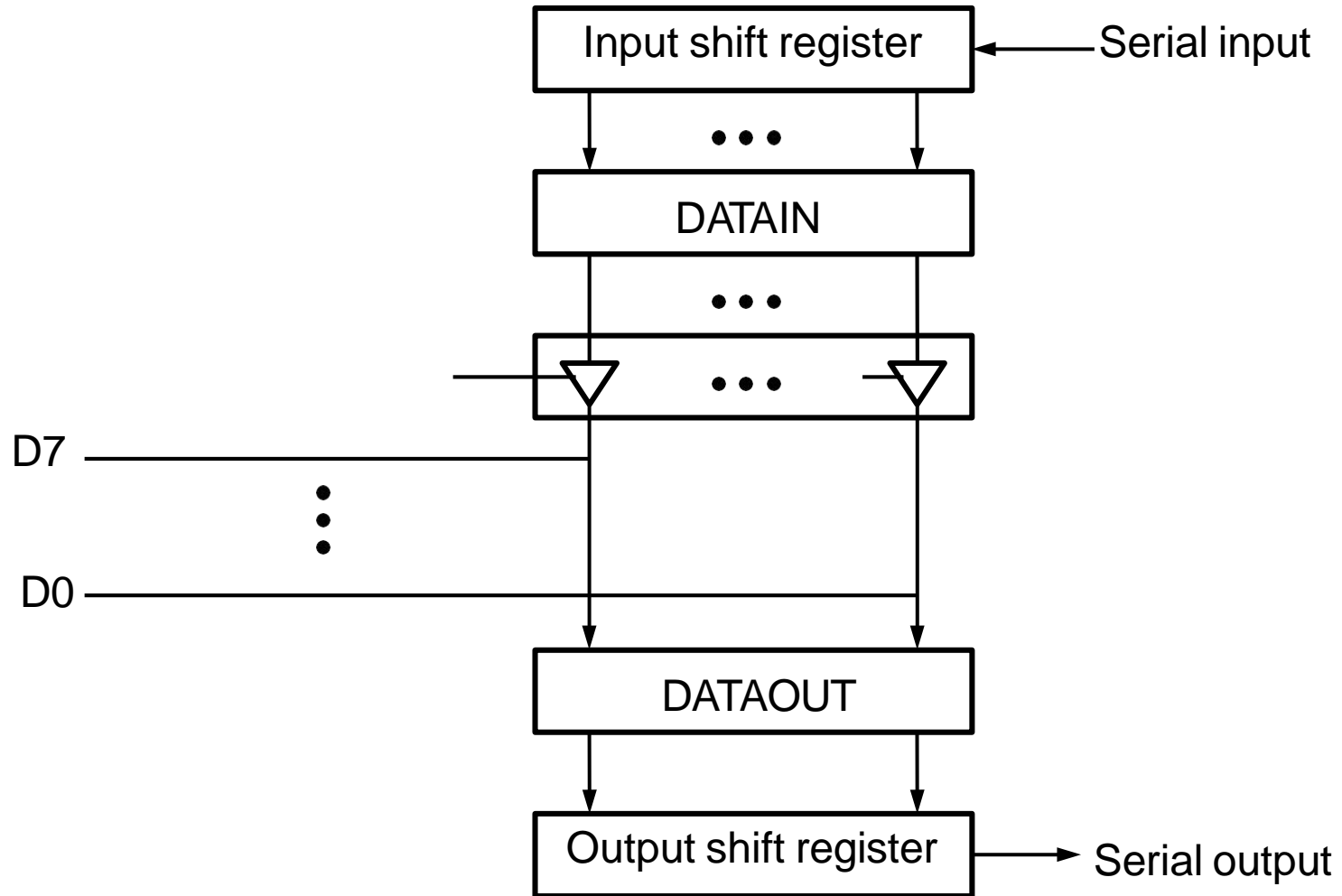


Serial Port

- A serial port is used to connect the processor to I/O devices that require transmission of data one bit at a time
- The key feature of an interface circuit for a serial port is that it is capable of communicating in a bit-serial fashion on the device side and in a bit-parallel fashion on the bus side
- The transformation between the parallel and serial formats is achieved with shift registers that have parallel access capability



A Serial Interface





Thank
you

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