
Proj_3A_transmit_chars

SENDS CHARACTERS TO THE PC SCREEN

IT INTRODUCES:

1. The askii code in which numbers are used to represent symbols. By incrementing the number from 32 to 126 most of the typewriter symbols from space to ~ are covered.
2. Project subroutine "Char_to_PC()". This is used to send a number of ≤ 255 to the PC which can then be displayed as a character.
3. Subroutine "Num_to_PC_local()". This converts a 3 digit number to symbols and sends them to the PC screen using Char_to_PC().

Note:

The PC treats all data sent by "Char_to_PC()" as symbols.

If it receives the number 65 then the symbol A is displayed.

If we want to display the number 65 we must fist convert it to two symbols '6' and '5' and then send them separately as 54 and 53.

Subroutine Char_to_PC() talks directly to the USART HW.

UCSR0A is the USART control and status register A

UDRE0 is the "USART Data Register Empty" bit.

It is set to 1 when the USART is ready to accept more data.

UDR0 is the I/O Data Register