Title:

ASYNCHRONOUS OUTPUT DRIVER Description



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Abstract:

This manual is a description of a transparent asynchronous output driver using the second TTY output controller.

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ASYNCHRONOUS OUTPUT DRIVER

General description

Control messages

The driver is reservable and reservation is done by sending a control message with the reservation bit set (1b13) and a non-zero MESS1. The driver is released if a message with same bit set is received with a zero MESS1 or it is breaked, except when the break is caused by a power-failure.

A conversiontable can be set by sending a message with the conversion bit set (1b12), and the conversion table byte-address defined in MESS2.

In MUSIL these messages are send if OPEN and CLOSE (true) are used.

A message with the position-bit set (1b10) will define a new time-out value defined by MESS3 of message. The time-out constant is interpreted in units of 20 ms.

The time-out constant defines the maximum time to wait for interrupt after output of a character.

In MUSIL the statement SETPOSITION, with blocknumber equal the new timeout value, will generate the message.

The time-out constant is undefined until a position message is received.

Input operation

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All input operations are returned with status illegal and bytecount 0.

Output operations

Three modes of operations exists:

- 3: Output binary. The output characters are output after conversion. If no conversion table is defined the characters are output immediately.
- 7: Odd parity. The converted character is augmented by the complement of its parity in the most significant position (bit 0 of the byte).
- 11: Even parity. The converted character is augmented by its parity in the most significant position (bit 0 of the byte).

Status

1b6 Driver reserved, input rejected.

1b14 Time out. Interrupt from the device is not received within the time specified in the last position message.

If status 1b14 (time out) is returned the MUSIL give-up procedure can use the action REPEATSHARE, and if kind of the device is set to characteroriented the non-processed characters can be output.