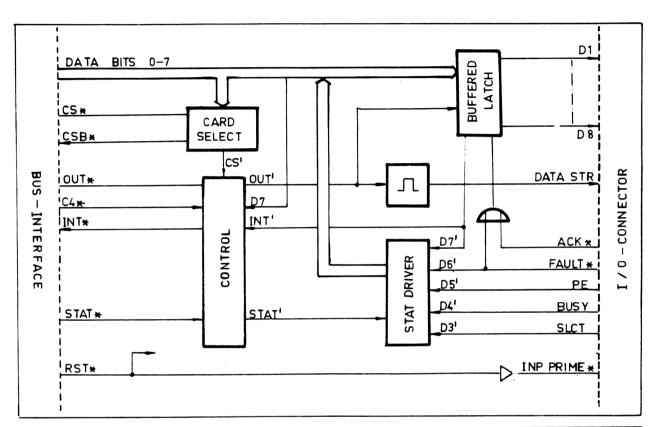
DATABOARD 4680

PRINTER INTERFACE CENTRONICS

4038

JAN 80 1 5



4038 CENTRONICS
PRINTER

DESCRIPTION

4038 is an I/O module for parallel unidirectional data transfer. It is designed to interface Centronic printers. 4038 contains no character coding or interpreting logic.

The module provides interrupt signalling with enable/disable - logic for fast response to the next character in turn to be transferred.



Statusword provides the following device information:

- paper end
- local select by the operator
- busy and fault.

The statusword must be checked before every OUT-command.

The RST* command, which initiates 4038, controls also the INP PRIME* line for initiating the peripheral logic.

The module supplies the CSB* signal that allows the user to configurate 4038 in an expansion rack. A code strip mounted on the I/O-connector protects the card from being plugged with the wrong end into the backpanel.

The interface module sends data and control characters as commended by the driver program. Signalling uses the hand-shake signals ACK* and DATA STR*. An outgoing character is strobed by DATA STR* and when accepted the device logic sends the receipt signal ACK*.

Character transfer timing is designed to adapt to Centronic requirements. DATA STR* is sent 0,5 microseconds after that data is set steady on the outgoing lines. DATA STR* is an one-shot pulse with the duration 0,5 microseconds.

C O M M A N D S 4 0 3 8

STAT

Reads the status word

The bit assignement and active state (= "1")

is as follows:

D3 SLCT; printer is powered ON and

selected

D4 BUSY; device is busy, meanwhile

no output is allowed

D5 PE; paper end

D6 FAULT; device fault,

printer is not working

or busy

D7 READY; ready for next character

output

OUT DATA

Outputs byte (8bits) of data

C 4

Selctive interrupt enable

D7 = 0 disable

D7 = 1 enable

Note!

The interrupt signal and corresponding status

are automatically reset by OUT command.

CHANNEL SELECTION

Is done with a code plug on location 1B.

See system manual about coding.

SPECIFICATION

Power supply

 $+ 5 V \pm 5 \% 250 \text{ mA}$

Peripheral interface

TTL-compatible

Bus connection

On the I/O-side of the 4680-bus

Provides the signal CSB* for

bus expansion

Connectors

B64 two-row Europe connector on

both the bus- and the peripheral

side

Size

Standard Europe card

100 x 160 mm

Bus pin numbering

See system manual

I / O CONNECTOR

Optional I/O-cable is provided.

The I/O-cable is terminated on the device side with a $36~\mathrm{pin}$ Amphenol connector type $57~\mathrm{series}$.

PIN NUMBERING - I / O - C O N N E C T O R

Data bit		1	2	3	4	5	6	7	8
4038	signal	22A	23A	24A	25A	26A	27A	28A	29A
	return	22B	23B	24B	25B	26B	27B	28B	29B
Periph side	signal	2	3	4	5	6	7	8	9
	return	20	21	22	23	24	25	26	27

	4 0	3 8	Periph	side	
	signal	return	signal	return	
ACK*	17A	17B	10	28	
DATA STR*	18A	18B	1	19	
FAULT*	16A	16B	32	16, 14	
PE	15A	15B	12	16	
BUSY	14A	14B	11	29	
SLCT	21A	21B	13	14	
INP PRIME *	19A	19B	31	30	

No connection of 1A-B, 2A-B, 31A-B, and 32A-B.

