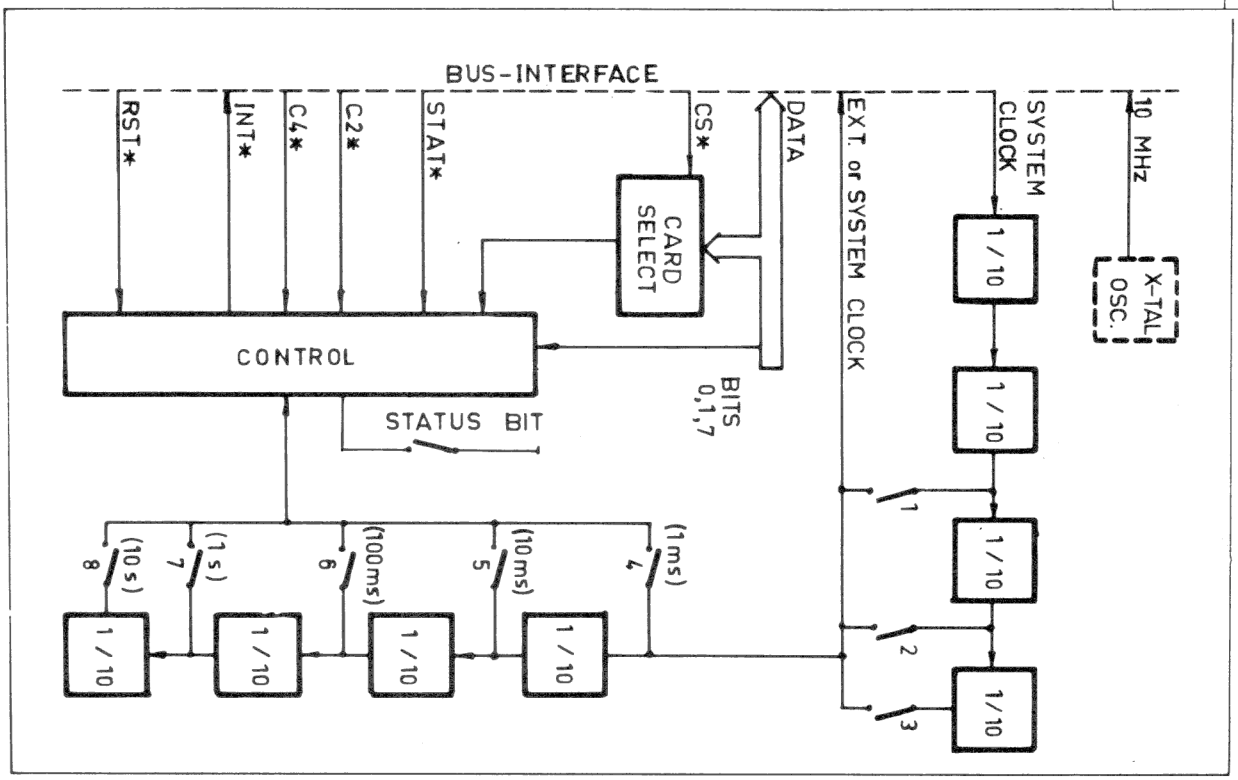


DESCRIPTION

5018 is a system module for double board computer applications to service system interval timing. It is used to control periodic program monitoring and in general to supply real time to the software system. Optional on-board crystal oscillator is available for the users that require rigid timing. The option grants an accuracy of 1. PPM.

Alternative intervals for most application requirements are available. The user selects the timing interval on an on-board jumper plug. The selection depends on the incoming clock frequency. A direct time-base (pin 25A) or a system clock (pin 4A) is used. The time-base goes straight to the interval selection - the secondary frequency divider. The system clock is connected to a primary frequency divider, which is the case when using the 1. MHz clock of the bus or the on-board crystal controlled clock. Refer to the block diagram. Normally systems make use of the 1. MHz clock, which is prewired and ready to be used at the first I/O slot position of the standard backplanes. The on-board 10 MHz clock is jumpered on the backplane from pin 3A to 4A at the slot position used (the 1. MHz clock must be removed if the first I/O slot).

The block diagram shows the intervals to your disposal when using the 10 MHz or 1 MHz clocks. In the former case you use four divider steps i.e. cut the jumpers 1 and 2. In the latter case you cut the jumpers 1 and 3. Select, as shown, the interval from the secondary divider group.

The interval timing is provided by interrupt or status reading. If status reading is used, you have option to get the interval status on every STAT-command (not dependable on channel selection) or interlocked by channel selection. The interval timing must be reset on each interrupt. It is done with the C2-command. Selective interrupt is available through enable/disable-logic.

The module provides status on an on-board switch, which can be used for optional application requirements. If you use a DATABOARD 4680 standard Bootstrap Loader, this switch is occupied to deliver information on, whether loading is done from disk or paper tape.

SPECIFICATION

POWER SUPPLY	+ 5 V $\pm$ 5 %, 240 mA
BUS CONNECTION	On the I/O-side of the 4680-bus, use slot position INT CLO of the standard backplanes if 1. MHz clock is utilized.
CONNECTOR	B 64 pin Standard Europe connector (DIN 41612)
SIZE	Standard Europe card, 100 x 160 mm.

BUS PIN NUMBERING

10 MHz	Output of the internal 1 PPM clock	Pin 3A
SYSTEM CLOCK	Input of the 10 MHz or 1 MHz clocks	Pin 4A
EXTERNAL CLOCK	Input of direct time-base	Pin 25A

Refer further to the System Manual.

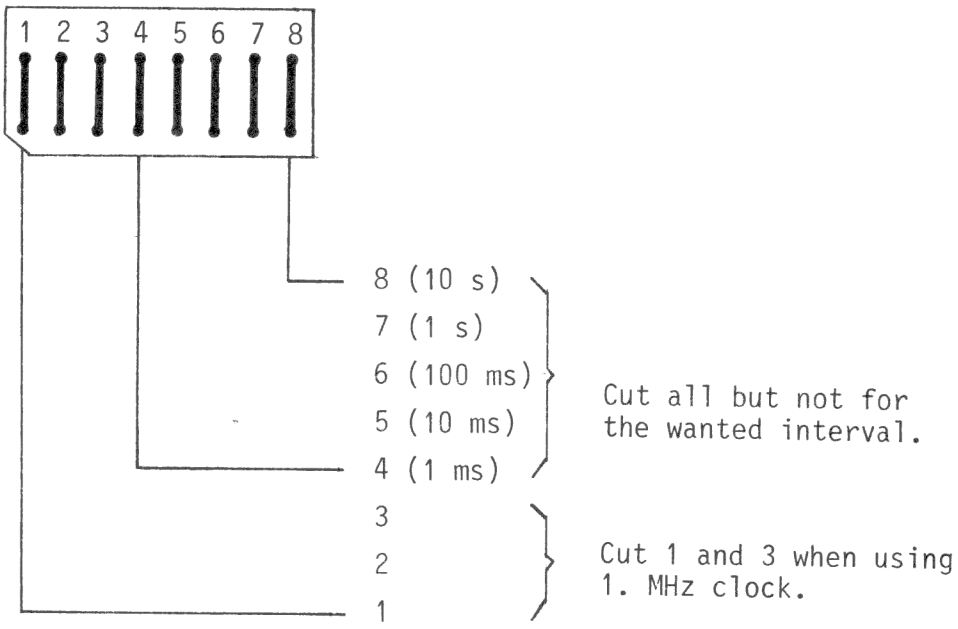
COMMANDS

STAT		Reads status. The bit assignment is as follows:
	D0	Interval pulse. Active 0 until next pulse is initiated or C2-command is received.
	D1	State of the on-board switch.
	D2 - D7	Not used.
C2		Resets the interval pulse and statusbit D0 (= not active).
C4		Selective interrupt enable/disable.
	D7	= 1 = ON = Enable
	D7	= 0 = OFF = Disable

Note. The interrupt signal is initiated when statusbit D0 becomes active. If C2-command is not ordered, then D0 is active until the next interval pulse when it is reset (= not active) and so on.

OPTIONAL FUNCTIONS

The interval timing is selected by jumpers on the on-board jumper plug, location 3B.



STATUSBIT D0

The jumper B1 provides alternative D0 reading as follows:

Jumper B1/a) The interval status is read on every STAT-command.

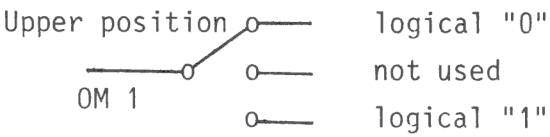
Jumper B1/b) The interval status is available only when the appropriate channel selection is valid.

No jumper) The interval timing is not available in the statusword.

The jumper B1 is located at the crosspoint of the IC:s 1A - 2B and 1B - 2A.

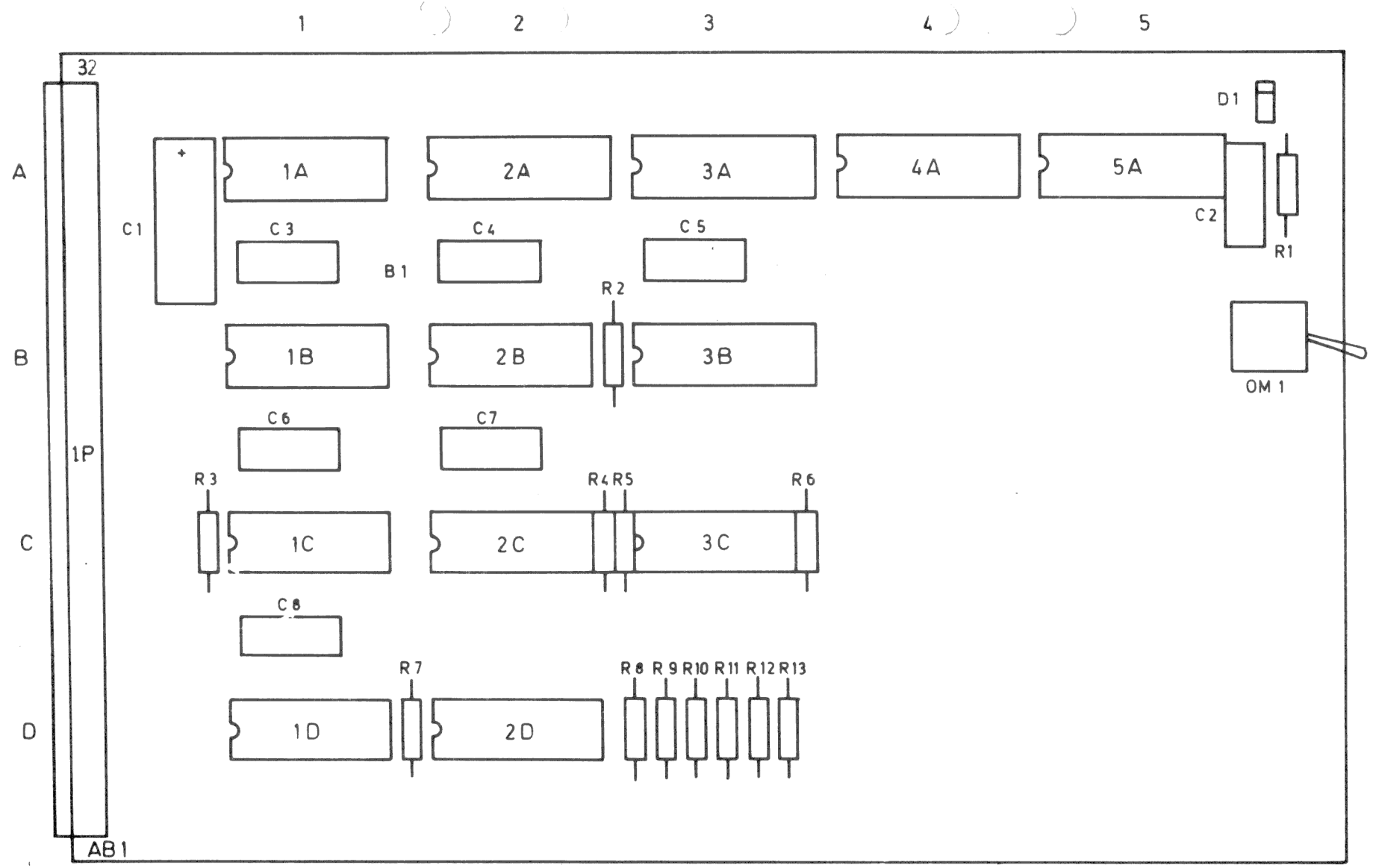
PROGRAMSWITCH - OM1

The state of the switch is indicated by D1 in the statusword.

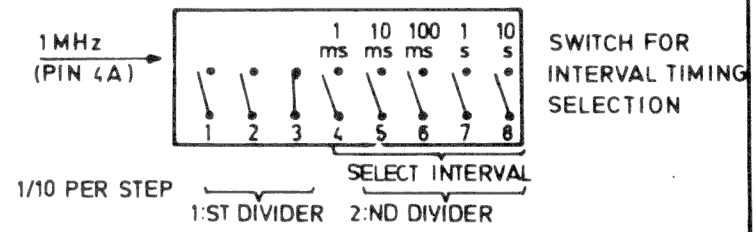


CHANNEL SELECTION

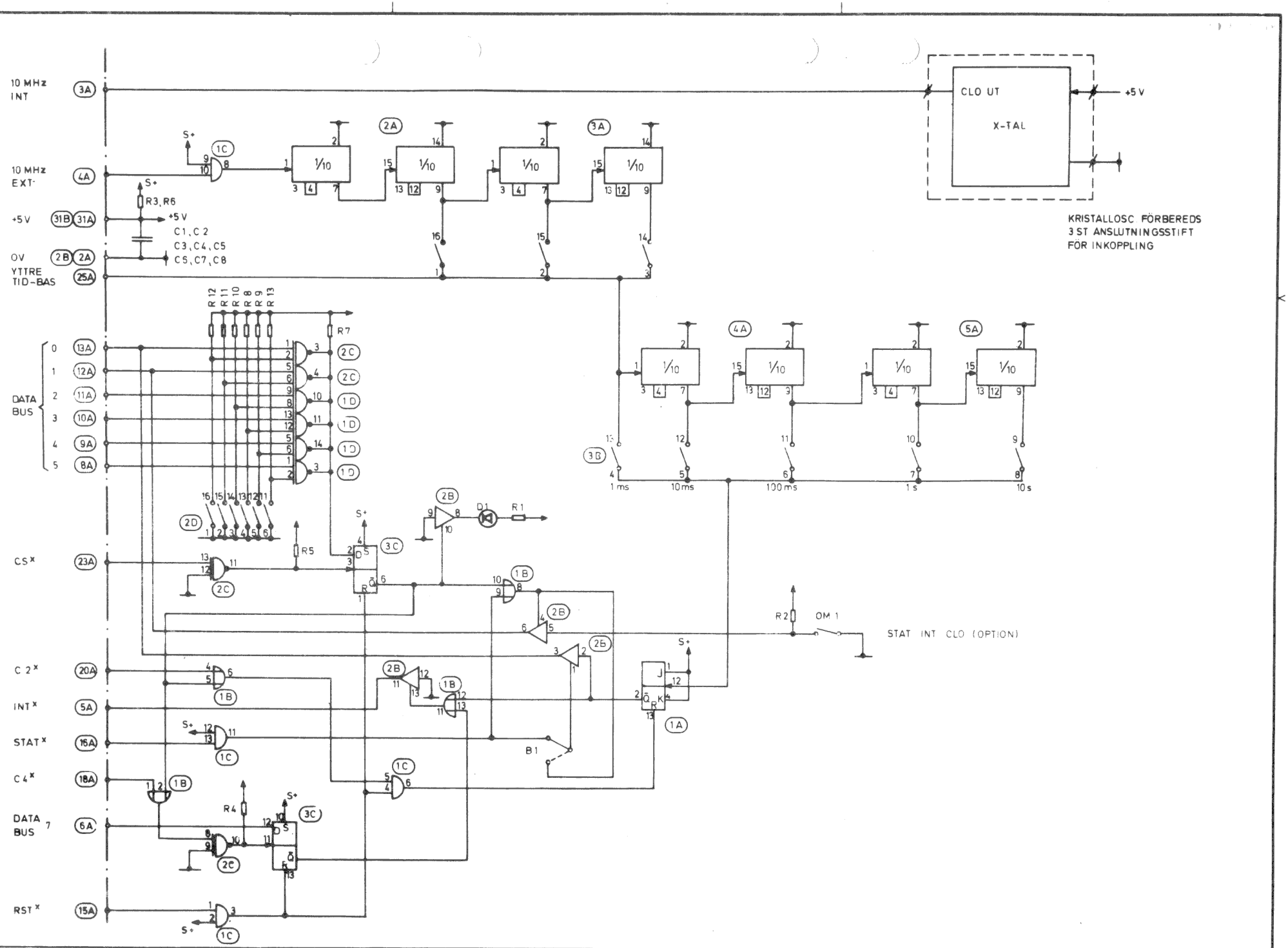
The channel selection, performed by the CS-command, is determined by the card identity code, which is selected on the code plug - location 2D. See further about coding in System Manual.



COMMENT: 2D = CODE PLUG FOR CHANNEL SELECTON
3B = FOR INTERVAL TIMING SELECTION
JUMPER B1/b INSTALLED: COMMAND STAT REQUIRES NO CHANNEL SELECTON
OM 1 CONTROLS STATUSWORD: BIT 1



	A	REV. NR	DATAINDUSTRIER AB	INT CLO	4680- 18
	79 03	DATUM	TÄBY SWEDEN		



REV NR	A	B	C	D	E	F	G	DATAINDUSTRIER AB	INTERV KLOCKA	4680 A.18
DATUM								TÄBY SWEDEN		