

DataBoard

4006-10

BESKRIVNING

32 OUT/16 IN TTL TRISTATE

4006-10(C)

oct 84

**DATA
INDUSTRIER AB**

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DESCRIPTION

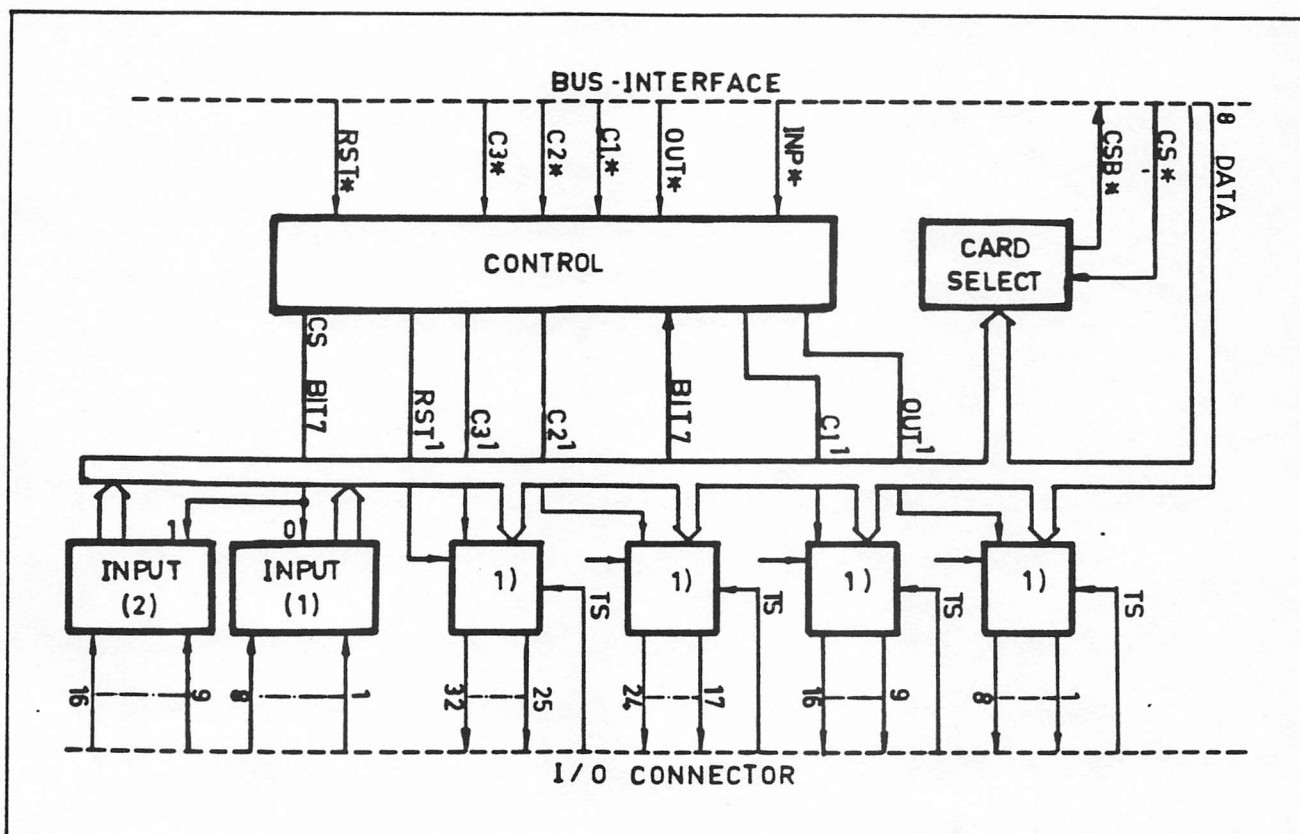
The 4006-10 is an I/O module for TTL compatible signalling, providing 16 inputs and 32 outputs.

The earlier 4006-00 shall only be used in 1043/44 or 1057 or 1062 or ABC80 systems. Otherwise use 4006-10.

BESKRIVNING

4006-10 är en I/O modul för TTL kompatibel signalering, som har 16 ingångar och 32 utgångar.

Tidigare version 4006-00 skall endast användas i 1043/44, 1057 eller 1062 eller ABC80 system. Använd annars 4006-10.



Comment: 1) LATCHED DRIVE

TS FÖR "TRISTATE"-CONTROL

The interface is controlled on byte level, divided into 8-bit groups of inputs and outputs. The input group is selected when the card is selected, using bit 7. Separate commands are used for the four output groups. The outputs are latched on-board and are switched ON or OFF by setting the corresponding bit in the command: 1 -> 5V, 0 -> OV.

Interfacet styrs på byte-nivå. Ingångs- och utgångsgrupper med 8 bitar parallellt används. Ingångsgruppen väljs med bit 7, då kortet väljs. Separata kommandon används för de fyra utgångsgrupperna. Utgångarna är buffrade på kortet och ställs om genom att sätta motsvarande bit: 1->5V, 0->OV i kommandot för gruppen.

The outputs are of the type TRI-STATE, either 5V, OV or passive high impedance out. For each of the four output groups, an external signal sets the group passive or active. To enable the outputs, the tri-state control inputs shall be OV. Without external signals, the tri-state control may be wired to OV in the connector.

Utgångarna är av typ TRI-STATE, antingen 5V, OV eller passivt högimpediva. (TTL) Vardera av de fyra utgångsgrupperna väljs passiva eller aktiva genom externa signaler. För att ge ut signaler, skall motsvarande tri-state styringång vara OV. Utan externa signaler kan den bygglas till OV i kontakten.

The RST* command resets all output lines to OV.

Kommandot RST* återställer alla ut signaler till OV.

A code strip is mounted on the I/O connector to protect the module from being inserted with the wrong end into the backplane. The user may code the cables for the right card.

En kodplugg finns på I/O-kontakten för att förhindra insättning fel väg i databussen. Pluggen kan kodas och I/O-kablarna likaså för att endast passa till rätt kort.

INSTALLATION

1. Select the card address by a code plug in position 2C. An open jumper means binary "1". Note that the least significant bit is to the left.

INSTALLATION

1. Välj kortadressen med en kodplugg i position 2C. En öppen bygel ger binärt "1". Notera att minst signifikanta bit är till vänster.

| | | | | | | | |
|-------------|---|---|---|---|---|---|---|
| Bit | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| (Stift) Pin | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Example= 05 Octal
= 0 000 101 Binary

2. Wire the tristate control signals in the I/O-connector. An output group is activated by pulling the control to OV. Alternatively external signals are used for the control.

2. Vira tristate-styrsignalerna i I/O-kontakten. En utgångsgrupp aktiveras genom att dra signalen till OV. Alternativt kan externa signaler styra tristate.

I/O-COMMANDS

I/O-KOMMANDON

```

-----
Signal CS*          Select card and define group to be input at
ASSEMB OUT 1        the next INP* command. Data bit 7 selects
FORTR OUTPUT(1)=A   the group. Bit 7 = 0 Select group 0.(0-7)
PASCAL OUT (1,A)     Bit 7 = 1 Select group 1.(8-15)
BASIC OUT 1,A

Välj kort och definiera grupp för inläsning
för efterföljande INP* kommando.
          Bit 7 = 0 Välj grupp 0.(0-7)
          Bit 7 = 1 Välj grupp 1.(8-15)
-----

Signal INP*          Read the channels 0-7 (group 0) or 8-15
ASSEMB INP 0         (group 1), as selected by the previous CS*
FORTR A=INPUT(0)     command. INP* always reads the inputs
PASCAL A=INP(0)       momentarily. OV in gives logical 0.
BASIC A=INP(0)

Läser kanalerna 0-7 (grupp 0) eller 8-15
(grupp 1), enligt val i tidigare CS* kommando.
INP* läser alltid momentant. OV in ger logisk 0.
-----

Signal RST*          Reset all I/O-cards. Sets all output = 0.
ASSEMB INP 7
FORTR A=INPUT(7)     Återställer alla I/O-kort. Sätter alla
PASCAL A=INP(7)      utgångar = 0.
BASIC A=INP(7)
-----

Signal OUT*          Sets the output latches for output group OUT.
ASSEMB OUT 0         Logic 0 gives OV out.
FORTR OUTPUT(0)=A
PASCAL OUT (0,A)     Sätter utgångsbuffrarna för grupp OUT.
BASIC OUT 0,A        Logisk 0 ger OV ut.
-----

Signal C1*           Sets the output latches for output group C1.
ASSEMB OUT 2         Logic 0 gives OV out.
FORTR OUTPUT(2)=A
PASCAL OUT (2,A)     Sätter utgångsbuffrarna för grupp C1.
BASIC OUT 2,A        Logisk 0 ger OV ut.
-----

Signal C2*           Sets the output latches for output group C2.
ASSEMB OUT 3         Logic 0 gives OV out.
FORTR OUTPUT(3)=A
PASCAL OUT (3,A)     Sätter utgångsbuffrarna för grupp C2.
BASIC OUT 3,A        Logisk 0 ger OV ut.
-----

Signal C3*           Sets the output latches for output group C3.
ASSEMB OUT 4         Logic 0 gives OV out.
FORTR OUTPUT(4)=A
PASCAL OUT (4,A)     Sätter utgångsbuffrarna för grupp C3.
BASIC OUT 4,A        Logisk 0 ger OV ut.
-----

```


I/O-CONNECTOR

Seen from outside.

I/O-KONTAKT

Sedd utifrån.

| | | 2P | | | |
|----------------------------|----------------------|-------|----|---|----------------------------|
| | | A | | B | |
| | | ----- | | | |
| | OV for input | o | 32 | o | OV for input |
| Input group(CS:7=1), Bit 6 | | o | 31 | o | Bit 7, Input group(CS:7=1) |
| Input group(CS:7=1), Bit 4 | | o | 30 | o | Bit 5, Input group(CS:7=1) |
| Input group(CS:7=1), Bit 2 | | o | 29 | o | Bit 3, Input group(CS:7=1) |
| Input group(CS:7=1), Bit 0 | | o | 28 | o | Bit 1, Input group(CS:7=1) |
| | OV for input | o | 27 | o | OV for input |
| | OV for input | o | 26 | o | OV for input |
| | OV for input | o | 25 | o | OV for input |
| Input group(CS:7=0), Bit 6 | | o | 24 | o | Bit 7, Input group(CS:7=0) |
| Input group(CS:7=0), Bit 4 | | o | 23 | o | Bit 5, Input group(CS:7=0) |
| Input group(CS:7=0), Bit 2 | | o | 22 | o | Bit 3, Input group(CS:7=0) |
| Input group(CS:7=0), Bit 0 | | o | 21 | o | Bit 1, Input group(CS:7=0) |
| | OV for input | o | 20 | o | OV for input |
| | OV for output return | o | 19 | o | OV for output return |
| Tri-state Group C2* | | o | 18 | o | Tri-state Group C3* |
| Tri-state Group OUT* | | o | 17 | o | Tri-state Group C1* |
| Output group C3*, Bit 6 | | o | 16 | o | Bit 7, Output group C3* |
| Output group C3*, Bit 4 | | o | 15 | o | Bit 5, Output group C3* |
| Output group C3*, Bit 2 | | o | 14 | o | Bit 3, Output group C3* |
| Output group C3*, Bit 0 | | o | 13 | o | Bit 1, Output group C3* |
| Output group C2*, Bit 6 | | o | 12 | o | Bit 7, Output group C2* |
| Output group C2*, Bit 4 | | o | 11 | o | Bit 5, Output group C2* |
| Output group C2*, Bit 2 | | o | 10 | o | Bit 3, Output group C2* |
| Output group C2*, Bit 0 | | o | 9 | o | Bit 1, Output group C2* |
| Output group C1*, Bit 6 | | o | 8 | o | Bit 7, Output group C1* |
| Output group C1*, Bit 4 | | o | 7 | o | Bit 5, Output group C1* |
| Output group C1*, Bit 2 | | o | 6 | o | Bit 3, Output group C1* |
| Output group C1*, Bit 0 | | o | 5 | o | Bit 1, Output group C1* |
| Output group OUT*, Bit 6 | | o | 4 | o | Bit 7, Output group OUT* |
| Output group OUT*, Bit 4 | | o | 3 | o | Bit 5, Output group OUT* |
| Output group OUT*, Bit 2 | | o | 2 | o | Bit 3, Output group OUT* |
| Output group OUT*, Bit 0 | | o | 1 | o | Bit 1, Output group OUT* |

TECHNICAL DATA

TEKNISKA DATA

Power supply:

Kraftförsörjning:

+5V +-5% 570 mA + Load

+5V +-5% 570 mA + Yttre last

Bus connection:

Busanslutning:

I/O-side of DataBoard bus

I/O-sidan av DataBoard bussen

Connectors:

Kontakter:

Type B, 64pin two-row plug
Euroconnectors DIN 41612 on
I/O and bus side. Code strip
on I/O-side.

Typ B, 64stifts, tvåradiga, hane,
Europakontakter på I/O och buss-
sida. Kodplugg på I/O-sidan.

Size:

Storlek:

100 * 160 mm Eurocard

100 * 160 mm Eurocard

Bus pin numbering:

Bus stiftsnumrering:

Standard DataBoard I/O-bus.
The CSB* signal for bus
expansion is available.

Standard DataBoard I/O-buss.
CSB* signalen för buss-expansion
finns.

I/O-connector pin numbering:

I/O-kontakt stiftsnumrering:

See below.

Se nedan.

Outputs/ Inputs:

Utgångar/ Ingångar:

TTL compatible
Output capacity: 10 TTL
Input load: 1 TTL

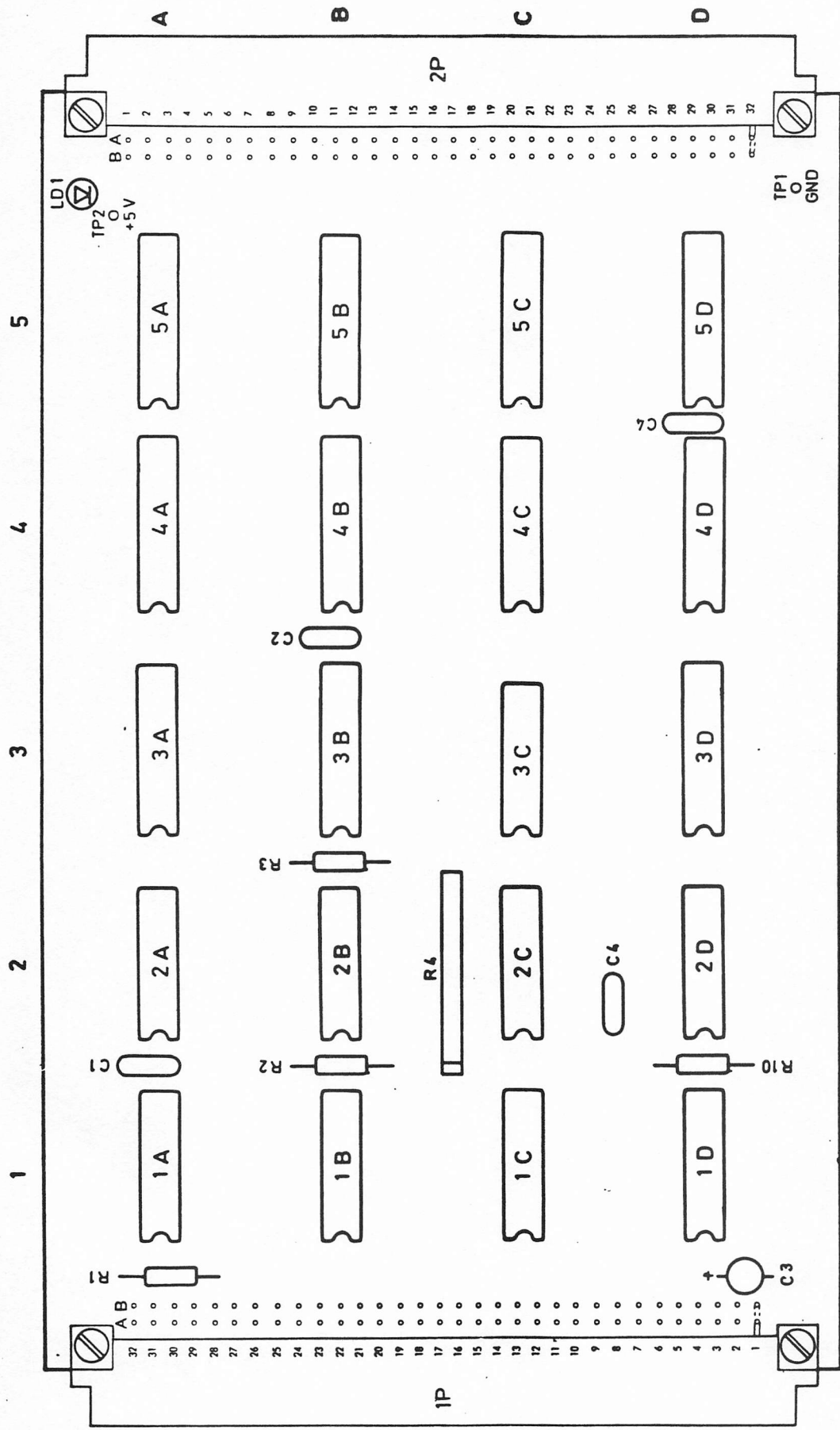
TTL kompatibla
Utgångskapacitet: 10 TTL
Ingångsbelastning: 1 TTL

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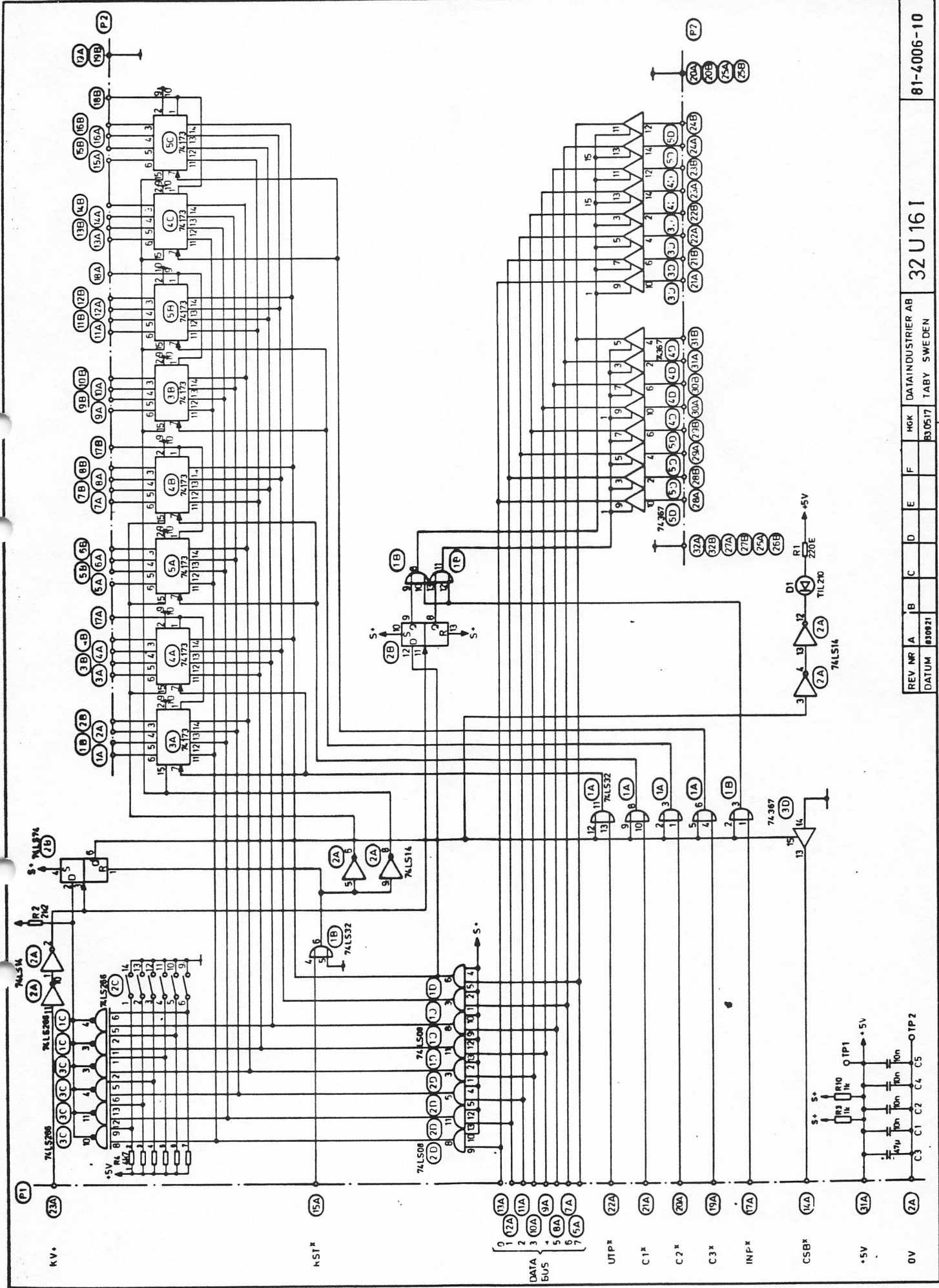
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COMMENT: 2C=CODE PLUG FOR CHANNEL SELECTION

| | | | | | | | |
|-----|-----|-----|---------|-----------------------------|--|----------|------------|
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| REV | RIT | HGK | DATUM | | | | |
| | | | 8305.17 | | | | |



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