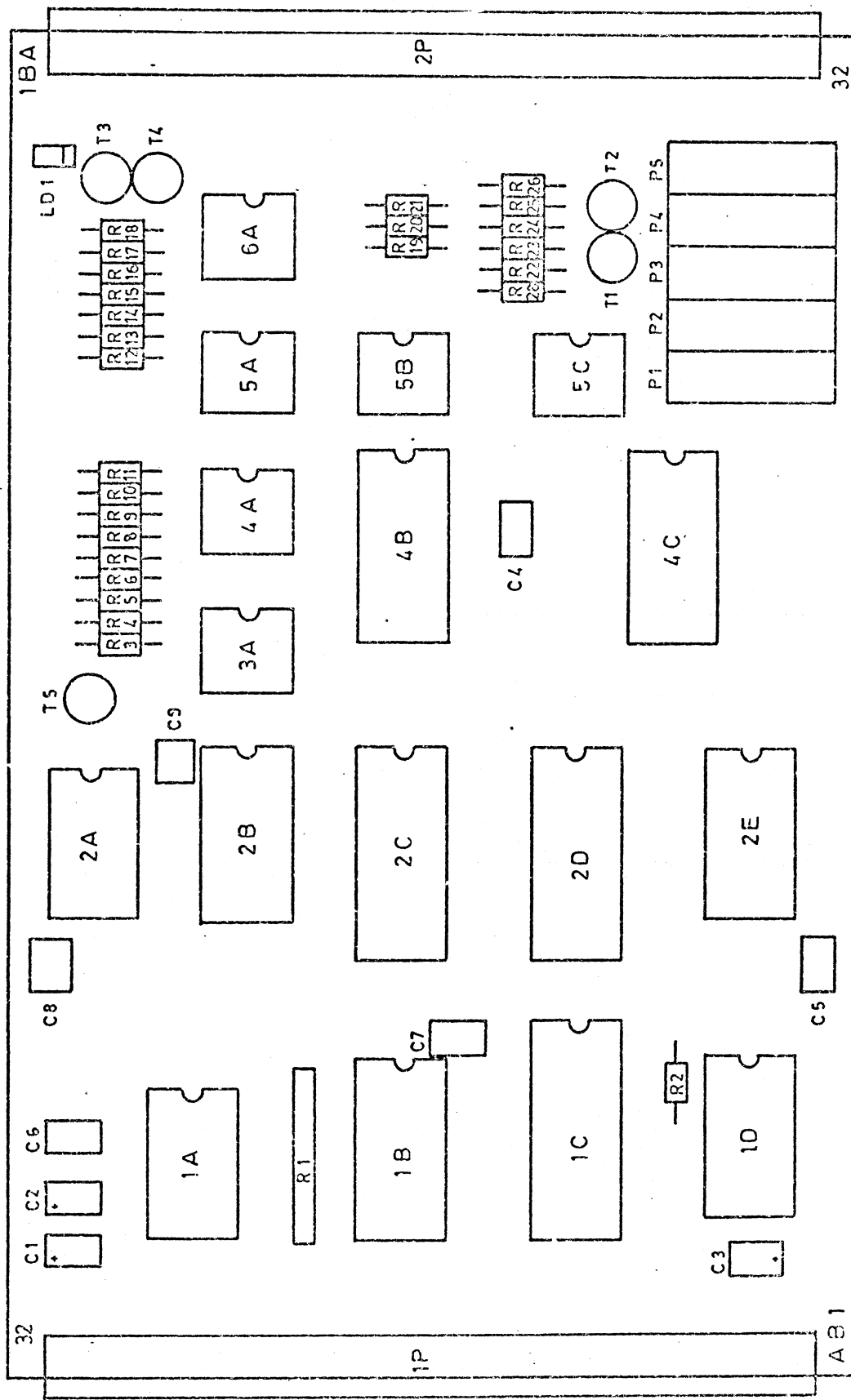


1 2 3 4 5 6



COMMENT: 1A = CODE SWITCH FOR CHANNEL SELECTION

THE OUTPUT ARE ADJUSTED BY POTENTIOMETERS AS FOLLOWS

P1 - REFERENCE VOLTAGE ADJUSTMENT

P2 - V2 OUT

P3 - V1 OUT

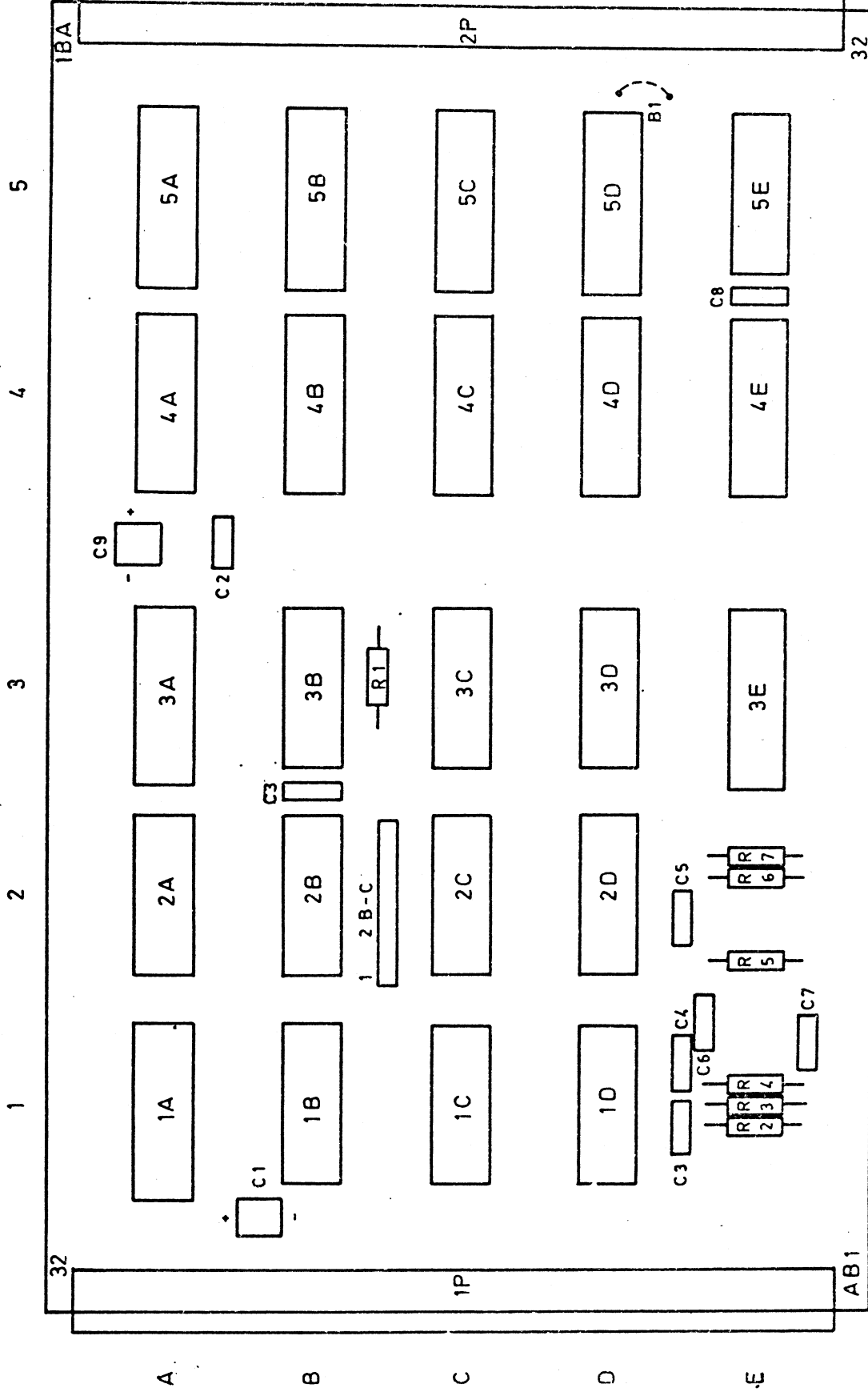
P4 - I2 OUT

P5 - I1 OUT

4083

B	REV. NR	DATAINDUSTRIER AB	D/A CONVERTER	2*12	4680- 83
79.03	DATUM	TÄBY SWEDEN			



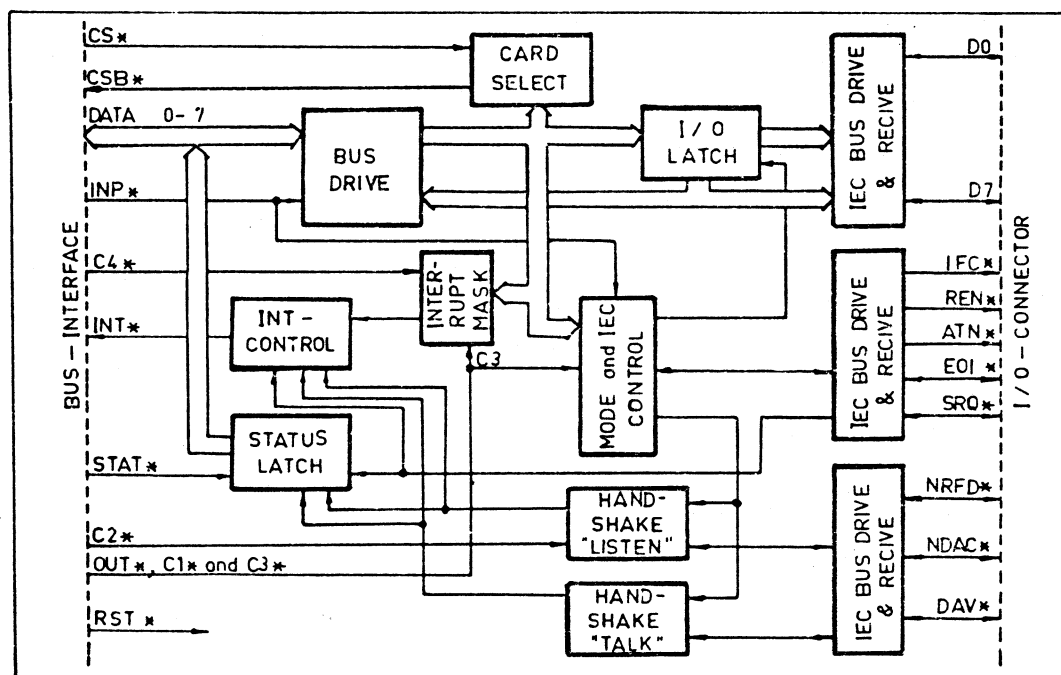


COMMENT: 2B = CODE PLUG FOR CHANNEL SELECTION.
 JUMPER B1 NOT INSTALLED = SHIELD NOT CONNECTED TO 4680 SYSTEM 0V.

4025

C	REV NR	DATAINDUSTRIER AB	IEC - BUS
7903	DATUM	TÄBY SWEDEN	INTERFACE

4680 - 25



4025 IEC - BUS

4025 provides DATABOARD 4680 users interfacing to the IEC-bus.

It conforms fully to the specification with respect to the three basic functional elements:

- 1) listener
- 2) talker
- 3) controller

These basic functions are defined as subsets C1, C2, C3, C4 and C25 of the standard. 4025 acts as the supreme controller of the connected IEC-bus.

- C1= System Controller
- C2= Send IFC and Take Charge
- C3= Send REN
- C4= Respond to SRQ
- C25= Send I.F. Messages
Parallel Poll
Take Control Synchronously

Software Support is available through options in Extended Basic and Basic for ABC 80.



SPECIFICATION

Power supply	+5V \pm 5 %
Peripheral interface	Conforms fully to the specification IEC 66.22 of the "IEC-bus".
Connectors	B 64 pin two-row Europe connector on the bus as well as on the I/O sides.
Bus connection	On the I/O side of the 4680-bus, provides the signal CSB ^X for use at bus expansion.
Size	Standard Europe card 100 x 160 mm.

JUMPERS

None

CARD SELECT

Is done by code plug – position 2B on board.
See System Manual about the coding. Standard = 61Q(031H).

COMMANDS

INP DATA	Reads 8 bits received data. Data is valid only when statusbit 7 is active.
INP STAT	Reads status. The bits have the following significance:
D0	not used
D1	not used
D2	NRFD (Not Ready For Data). Active 0.
D3	NDAC (Not Data Accepted). Active 0.
D4	EOI (End Or Identify). Active 0.
D5	SRQ (Service ReQuest). Active 0.
D6	Data accepted ("talk"-mode). Active 0.
D7	Data valid ("listen"-mode). Active 0.
OUT DATA	Output 8 bits of data for transmission. The command is allowed only in "talk"-mode.
OUT C1	Controls mode of activity and control-signalling. The data-byte is used in the following way: D0 - D2 = Address D7 Controls the state of the concerned function: D7 = 0 = Reset D7 = 1 = Set

Address

0	Not IFC (InterFace Clear).
1	REN (Remote ENable).
2	EOI.
3	ATN.
4	"talk"-mode.
5	"listen"-mode.
6	"Not automatic ready" in "listen"-mode.
7	not used.

Note: "talk"- and "listen"-modes are not allowed to be active at the same time. If both are commanded actives the "talk"-mode is set up.

OUT C2 Controls the handshake in "listen"-mode when "Not automatic ready" is activated. Next transfer will follow.

OUT C3 Clear interface. Has the same function as RST-command but is controlled by the cardselection.

OUT C4 Selective INTERRUPT ENABLE. The data-byte is evaluated as follows:

D0	not used
D1	not used
D2	not used
D3	not used
D4	= 1, interruptsignal if EOI is active.
D5	= 1, interruptsignal if SRQ is active.
D6	= 1, interruptsignal if "Data accepted" is active ("talk"-mode).
D7	= 1, interruptsignal if "Data valid" is active ("listen"-mode).

IEC-CABLE, PRODUCT NUMBER 7225

A special adaptor cable is supplied. It connects to 4025 and provides a standard IEC-bus connector (Amphenol 17-20250) ready to connect to the first instrument to be interfaced. Other equipment is connected in daisy-chain.

Length = 2 m.

The following table shows the interchange between IEC-cable and 4025 I/O-connector.

The colour-code is the same as specified for the Philips IEC-cable.

IEC4025 (DIN 41612)

1	white		3B	D0*
2		green	4B	D1*
3	gray		5B	D2*
4		blue	6B	D3*
5	white/brown		7B	REN*
6		grey/rose	8B	EOI*
7	white/green		9B	DAV*
8		white/yellow	10B	NRFD*
9	white/grey		11B	NDAC*
10		white/orange	12B	IFC*
11	white/blue		13B	SRQ*
12		white/red	14B	ATN*
13	screen		15B	
14		brown	16B	D4*

Contd. IEC

4025 (DIN 41612)

15	yellow		17B	D5*
16		rose	18B	D6*
17	red		19B	D7*
18		yellow/green	7A	
19	blue/red		8A	
20		brown/green	9A	
21	yellow/brown		10A	
22		grey/brown	11A	
23	rose/brown		12A	
24		brown/blue	13A	
25	brown/red		14A	

REFERENCES

IEEE Standard Digital Interface for Programmable Instrumentation.
IEEE Standard 488 - 1975.

Datorteknik "Datoranvändning med IEC-buss" Sune Windisch,
Liberförlaget (lärobok för användning av 4025 genom IEC-optionerna
i Basic).