

NORD

COMPUTER SYSTEMS

HARDWARE MANUAL

Cambridge Memories

Drawings



A/S NORSK DATA-ELEKTRONIKK

Erich Mogensens vei 38, Oslo 5

NORD-1

COMPUTER SYSTEMS

HARDWARE MANUAL

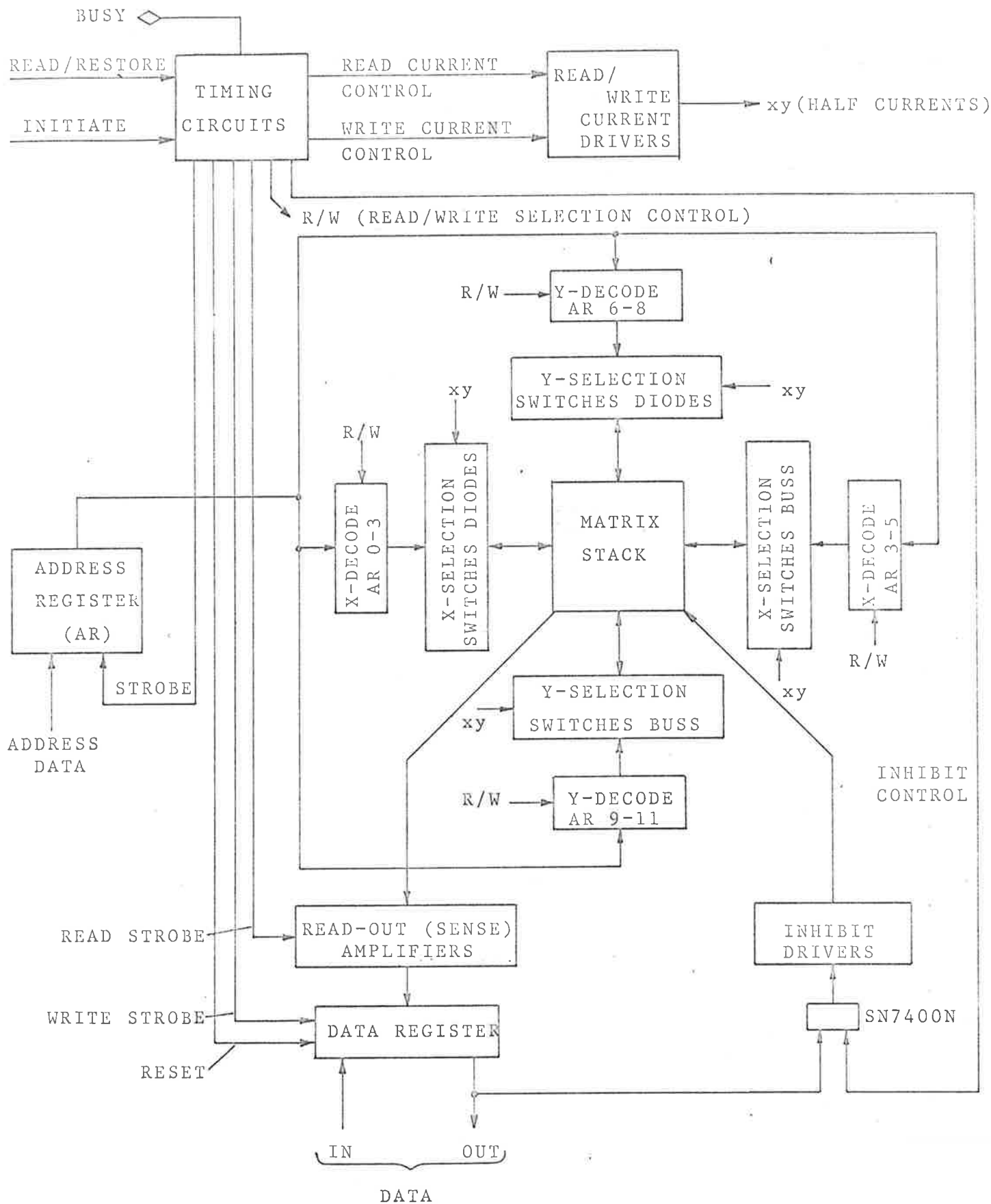
Cambridge Memories

Drawings



A/S NORSK DATA-ELEKTRONIKK

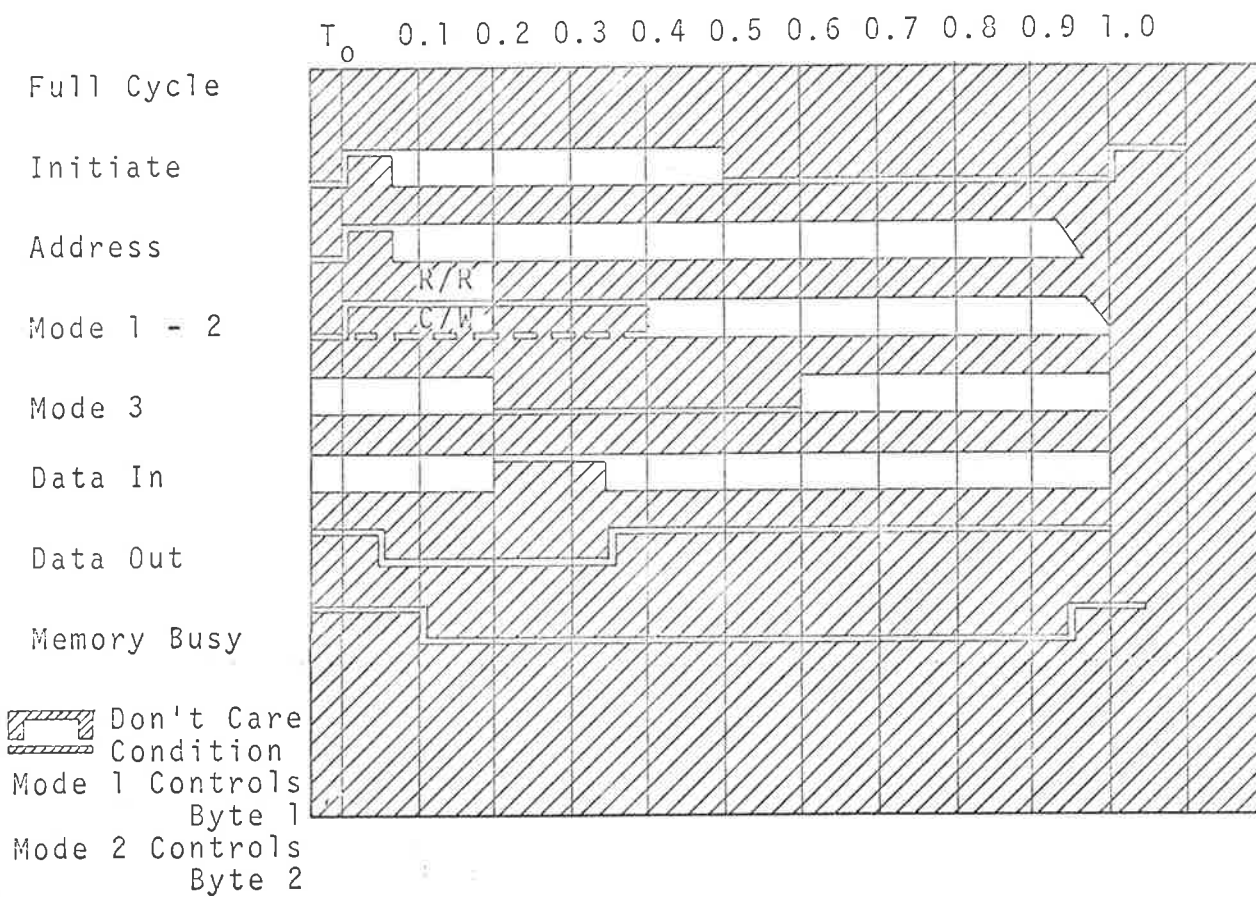
Mai 1972



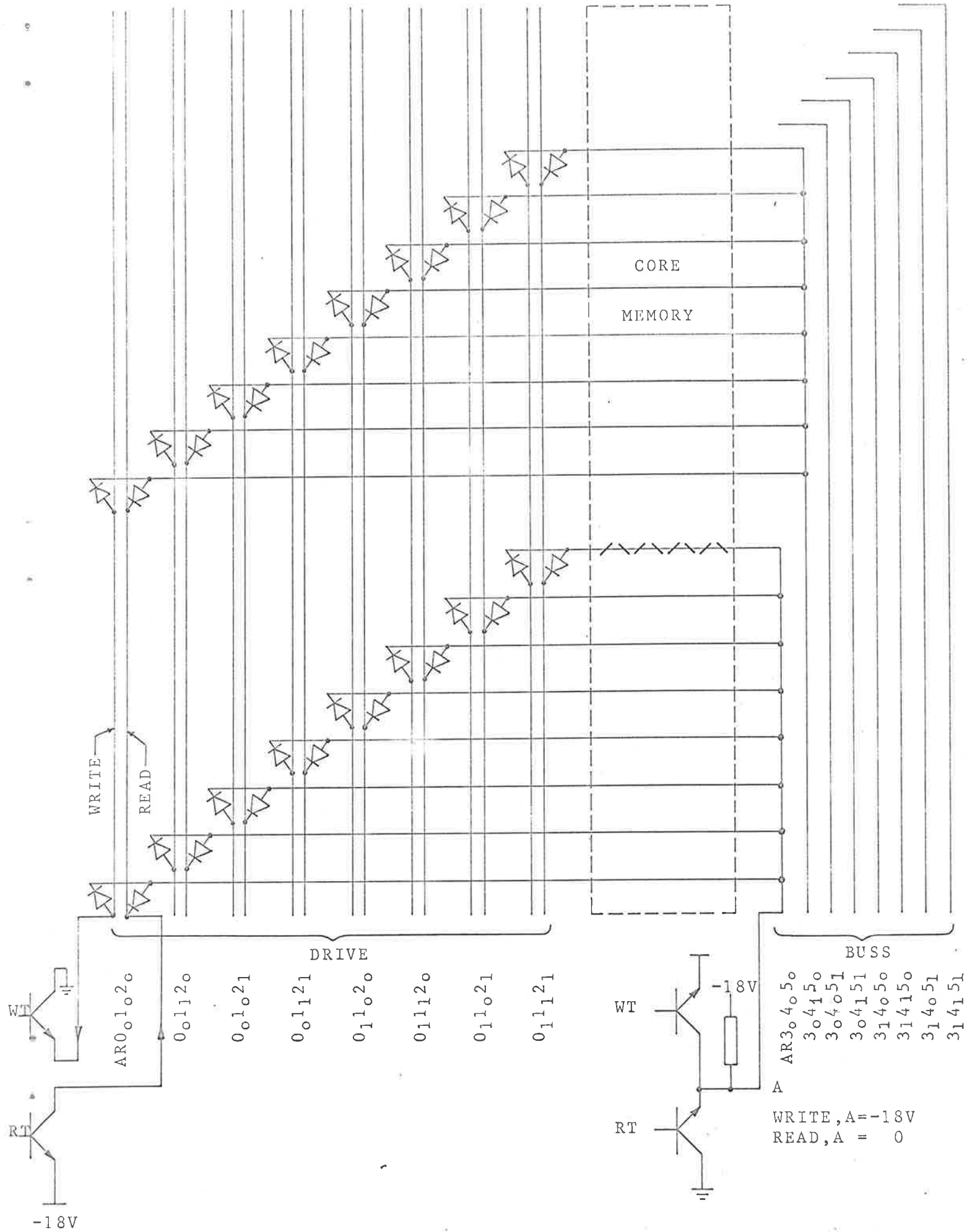
SYSTEM ORGANIZATION OF
CAMBRIDGE MEMORY

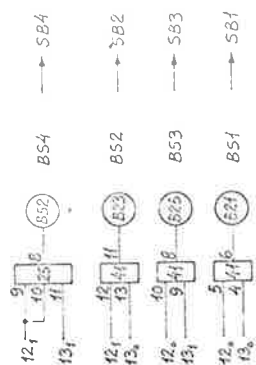
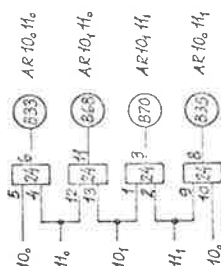
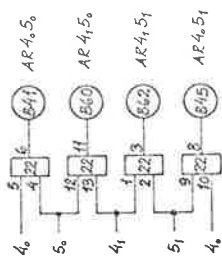
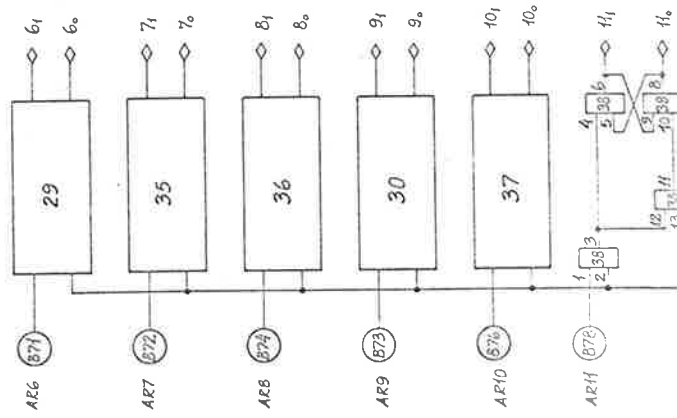
TIMING

(microseconds)



X DIODE MATRICE

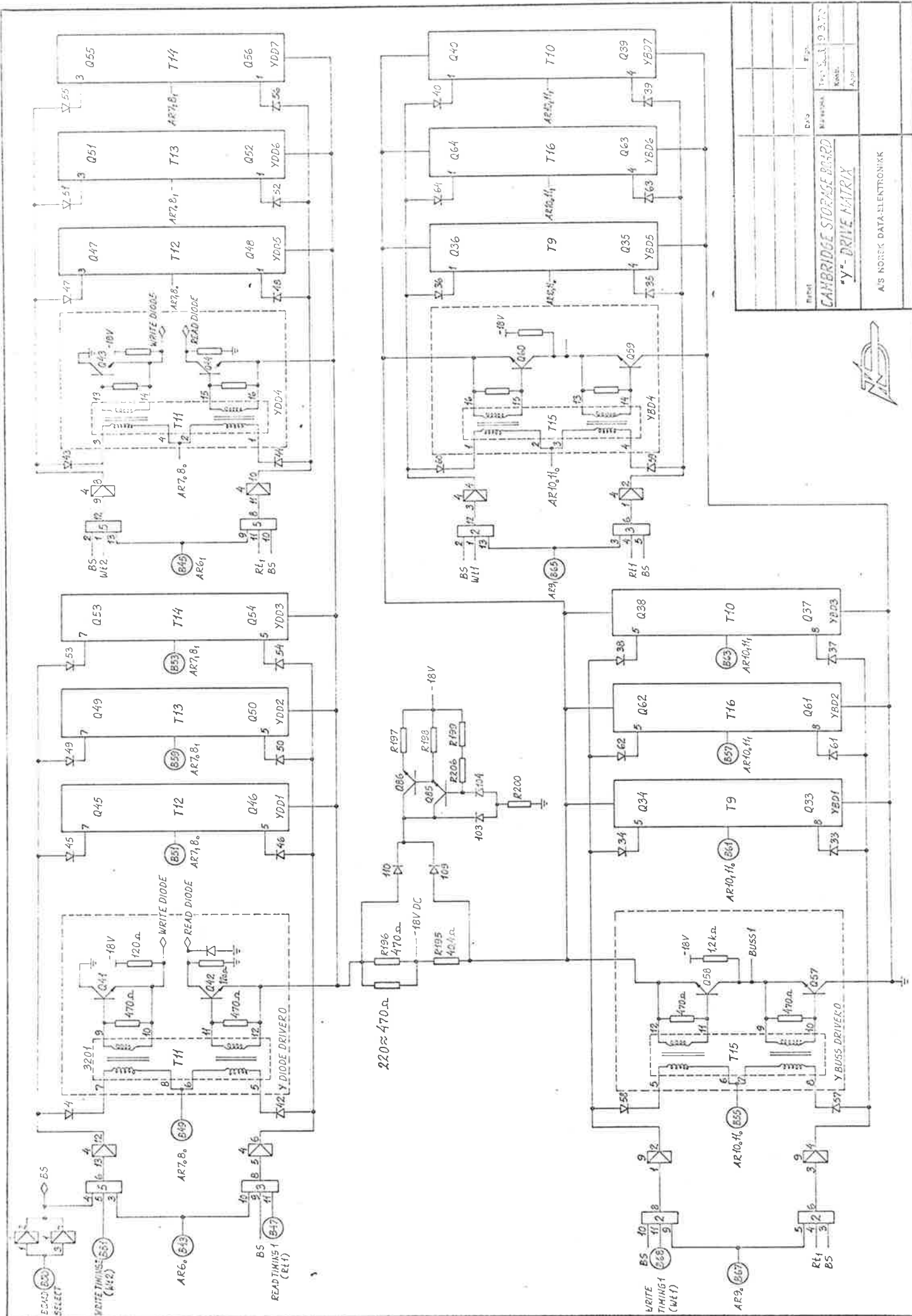




Inhibit Timing

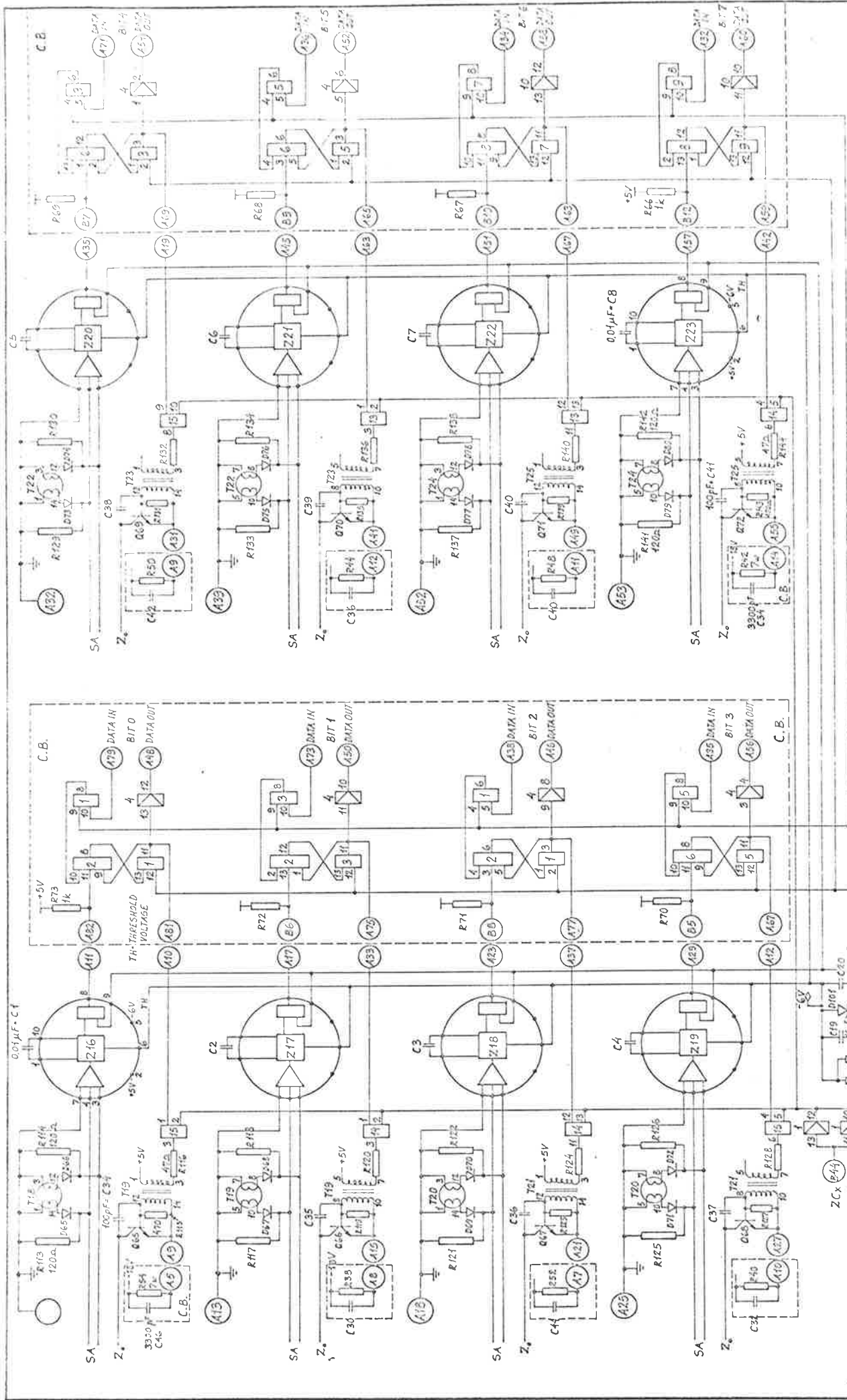
Part	DATE	TYPE	DATE	DATE
CAMBRIDGE CONTROL MANUAL				
REGISTER AND DECODING				
A/S NONSK DATA-ELEKTRON'KK				





DATE	REV	BY	CHK	APP
CAMBRIDGE STORAGE BOARD				
"Y" DRIVE MATRIX				
A/S NORR DATA-ELEKTRONIK				





CAMBRIDGE
SENSE DIODES AND
DATA REGISTER



Spares for 18 bits memory: Q75 and Z24
Q74 - Z25
Diodes 81, 82, 83, 84

SAS 0-7
SENSE AMPLIFIER
STROBE

DATA REGISTER
RESET

DRS 0-7
DATA REGISTER
STROBE

TEXAS	SIGNETICS
SN7400N	N8819A
SN7410N	N8879A
SN7420N	N8889A
SN7480N	N8808A
SN7440N	N8859A
SN7450N	N8840A
SN7460N	N8806A
SN7470N	N8825A
SN7472N	N8829A

MC1440 (0 to +75°C)
MC1540 (-55 to +125°C)

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

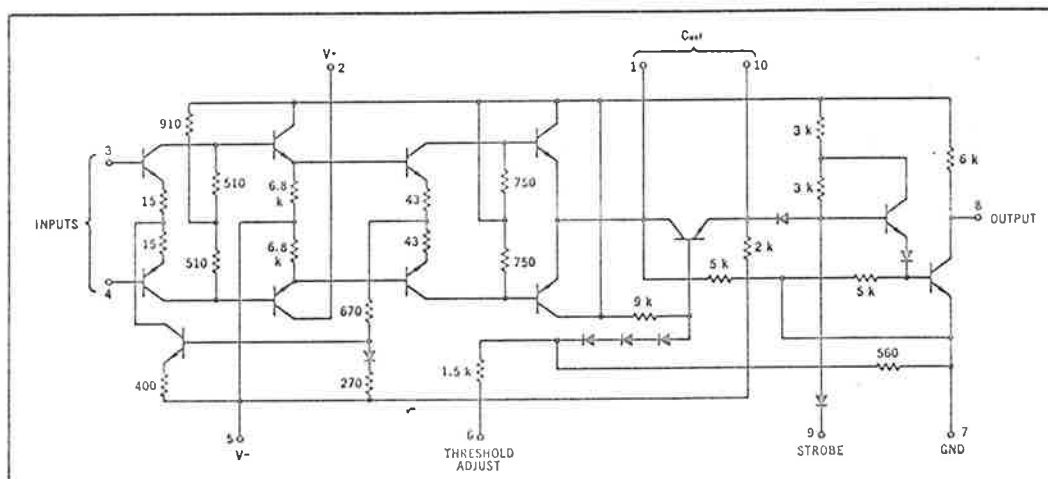
RATING	SYMBOL	VALUE	UNIT
Power Supply Voltage	V ⁺ V ⁻	+10 -10	V _{dc} V _{dc}
Differential Input Signal	V _{in}	±5	V _{dc}
Common Mode Input Voltage	CMV _{in}	±5	V _{dc}
Load Current	I _L	25	mA
Power Dissipation (Package Limitation) Derate above 25°C	P _D	680 4.6	mW mW/°C
Operating Temperature Range	T _A	-55 to +125	°C
Storage Temperature Range	T _{stg}	-65 to +150	°C

- **Differential Threshold Characteristics:**
Adjustable Threshold — 10-25 mV
Nominal Threshold — 17 mV @ $V_s = -6V$
Input Offset Voltage — 2 mV
Threshold Drift — +10 V/°C
- **Fast Response Time — 40 ns**
- **Short Recovery Time**
50 ns @ $e_{in} = 2V$ Common Mode
80 ns @ $e_{in} = 400mV$ Differential Mode

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

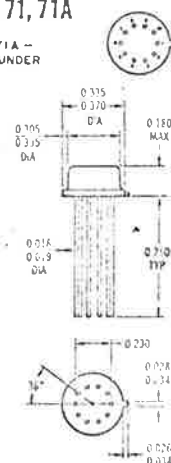
TYPE	V ₊ (Vdc)	V ₋ (Vdc)	V _{is} * (mV)	A _v (V/V)	V _{OH} (Vdc)	V _{OL} (Vdc)	t _{pd} (ns)	t _r (ns)	C _{MLV} (VpK)	T _{CVIS} (mV/°C)
MC1540	+6.0	-6.0	17	85	5.9	0.35	30	60	±2.0	10
MC1440	+6.0	-6.0	17	85	5.9	0.4	40	70	±2.0	10

*Input Offset Voltage = 2.0 mV; V_{IN} is adjustable



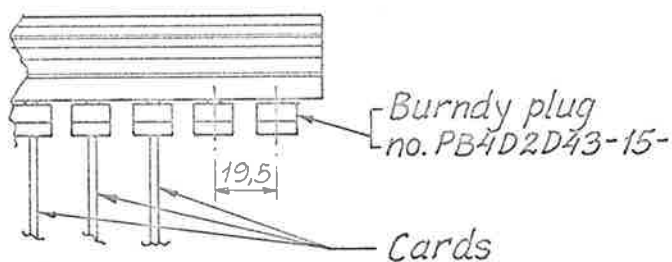
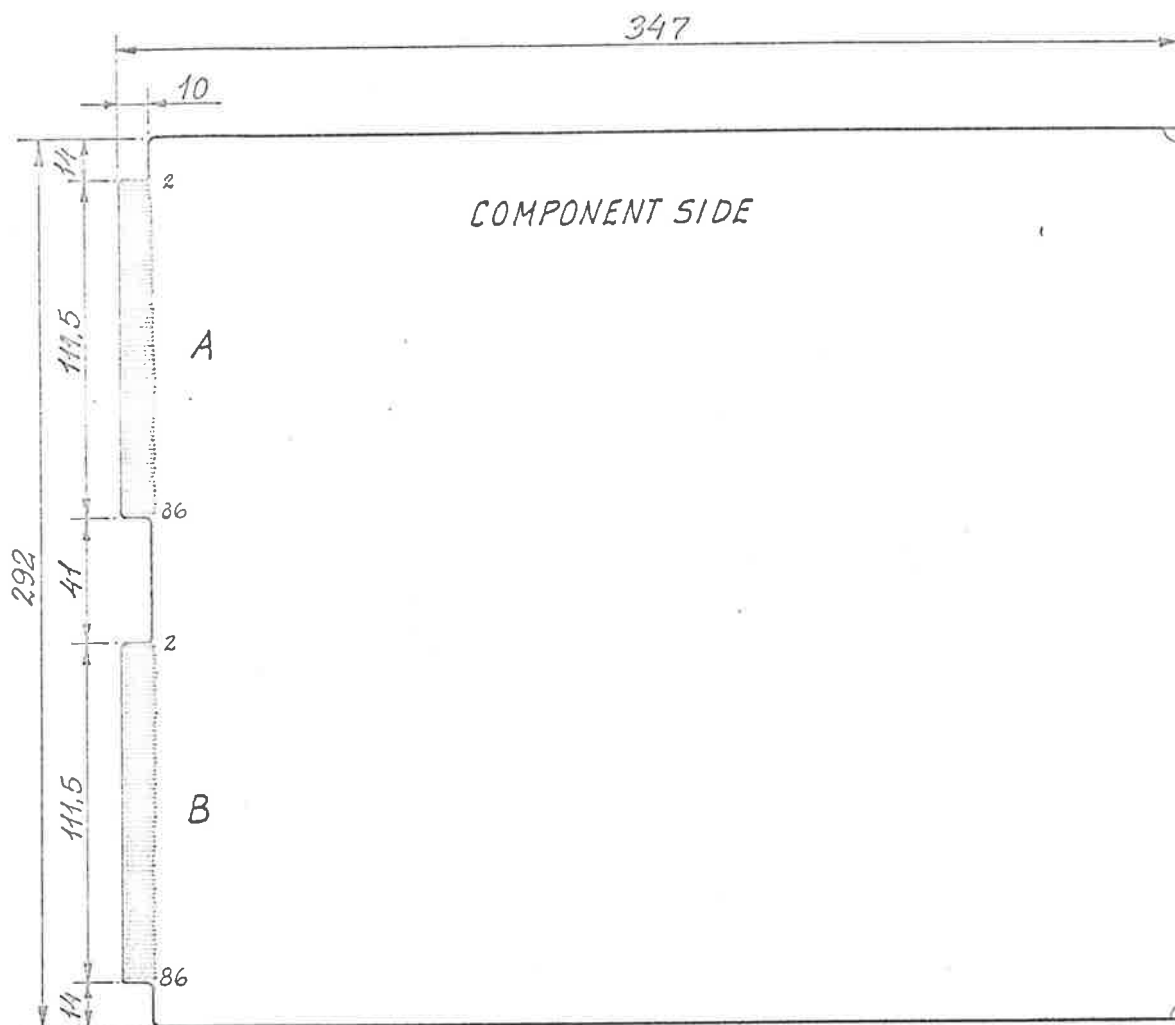
CASE 71, 71A

CASE 71A -
PIN 10 UNDER
TAB -



[illegible]





CARD MOUNTING

DRAWN BY Eeml

APPROVED BY

DATE 18.2.70

Remarks

Measures in mm.

Replacement for: Date

Replaced by: Date

A/S NORSK DATA-
ELEKTRONIKK

Title

36 PINS CONTACT
(COMREC)

Drawing no.

1	2
3	4
5	6
7	8
9	10
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13	14
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77	78
79	80
81	82
83	84
85	86

DRAWN BY PK/eml

Remarks

Replacoment for Date

APPROVED BY

Replaced by Date

DATE 21.1.70

