
Title:

Drawings for
IOC 707



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RCSL No: 44 - RT 1528

Edition: July 1977

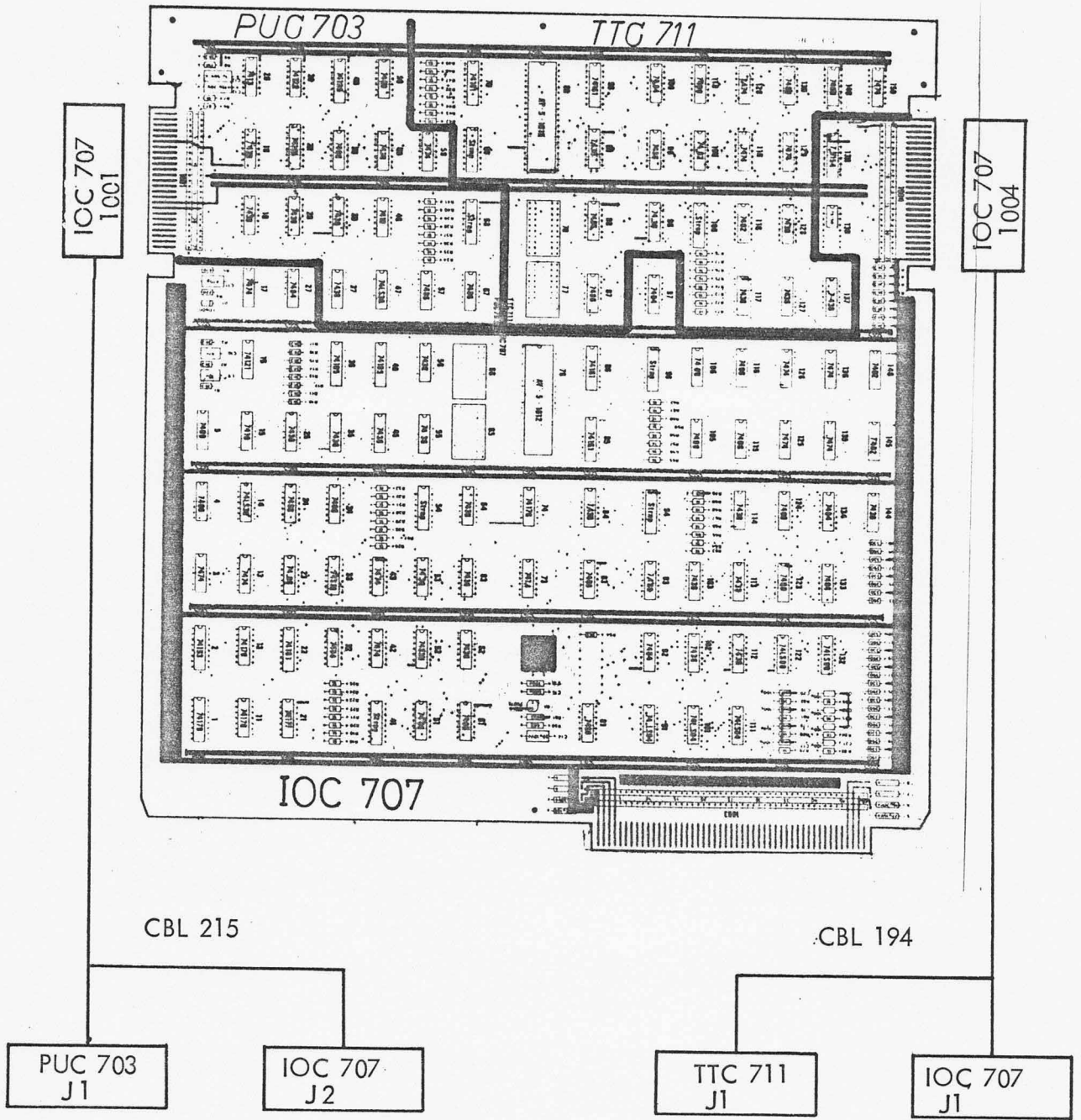
Author: Jesper Johansen

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INTRODUCTION

The IOC 707 is a revised edition of the old IOC 704. The IOC 707 now includes the first teletype controller (formerly the TTC 705), the real time clock (formerly the RTC 702) and the paper tape reader (formerly the TRC 701). The only changes, which has been made, is in the first teletype controller, which now can run upto 9600 BPS. All the other controllers are identically to the former revision, both in hardware and function.

Beside the IOC 707 it is possible to mount a paper tape punch controller PUC 703 (formerly the PUC 702) and a second teletype controller TTC 711 (formerly the TTC 706). The PUC 703 and the TTC 711 cannot be used without the IOC 707 mounted at the PCB.



IOC 707 J1 : Teletype
 IOC 707 J2 : Paper Tape Reader

CONNECTOR:

IOC 707 - 1004 : Edgeconnector 2 x 25 contacts
 IOC 707 - J1 : Cannon DEC - 95
 TTC 711 - J1 : Cannon DEC - 95

First Teletype

IOC 707 1004		IOC 707 J1
A 17	REC DATA	3
A 19	SELSTOP	8
A 21	CTS	5
A 23	XMT DATA	6
B 25	OV	9
A 25	+ 5V	1

Second Teletype

IOC 707 1004		TTC 711 J1
B 1	OV	9
A 3	XMT DATA	6
A 5	CTS	5
A 7	SELSTOP	8
A 9	REC DATA	3
A 1	+ 5V	1

CONNECTOR:

IOC 707 - 1001 : Edgeconnector 2 x 25 contacts

IOC 707 - J2 : Cannon 2 DE 19S

PUC 703 - J1 : Cannon 2 DE 19S

Paper Tape Reader

IOC 707 1001	SIGNAL	IOC 707 J2
A 20	- RDRDY	11
A 21	SPKT	9
A 22	C5	5
A 23	C6	6
A 24	C7	7
A 25	C8	8
B 17	+5V	16
		17
B 18	OV	14
		18
B 19	GO	10
B 20	STOP	12
B 21	FWSTP	13
B 22	C1	1
B 23	C2	2
B 24	C3	3
B 25	C4	4

Paper Tape Punch

IOC 707 1001	SIGNAL	PUC 703 J1
A1	TPOUT	15
A2	PUCN8	7
A3	PUCN7	6
A4	PUCN6	5
A5	PULH	9
A6	PUSG	18
A7	OV	12
B1	PUCN5	4
B2	PUCN4	3
B3	PUCN3	2
B4	PUCN2	1
B5	PUCN1	8
B6	OV	13

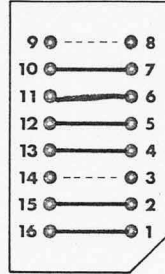
DEVICE CODE (position 94)

TELETYPE controller

1. Teletype

$$TTI \sim 10_8$$

$$TTO \sim 11_8$$

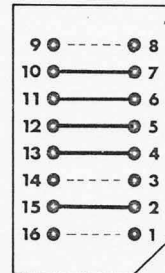


STRAP in a position is giving logic 0, and no strap logic 1 in the device code

2. Teletype

$$TTI \sim 50_8$$

$$TTO \sim 51_8$$



OBS! It is only possible to select the device code for TTI and TTO after the following equations:

$$\left. \begin{aligned} \text{Device code TTI: } &= 2 * N \\ \text{Device code TTO: } &= 2 * N + 1 \end{aligned} \right\} 1_8 \leq N < 40_8$$

Replaced by Dwg. No.

due to ECN

Replaces Dwg. No.

Design Check

Dwg. Office Check

Drawn by

Designed by
77.07.07 MOJ

A/S REGNECENTRALEN

Unit
IOC 707

Dwg. No.

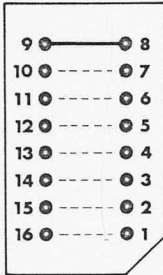
SELECTION OF DEVICE CODE

Strapping form

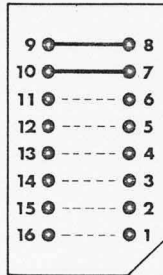
1/1

SPEED (position 96) TELETYPE controller

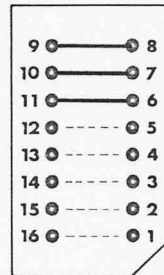
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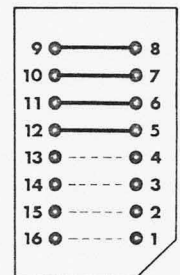
4800 BPS



2400 BPS

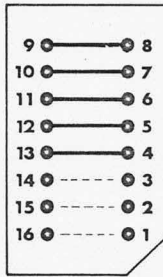


1200 BPS

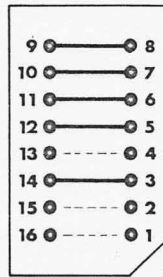


600 BPS

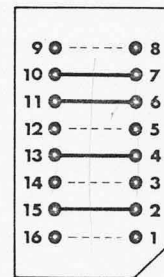
9600 BPS



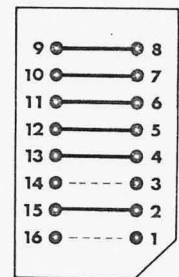
300 BPS



200 BPS



110 BPS



100 BPS

when 9600 BPS is selected position 96 is not used and position 94 is changed: Remove strap 10 - 7 and 11 - 6. Insert strap 9 - 6 - 7.

Unit 10C 707

Dwg. No.

SELECTION OF SPEED
 Strapping form

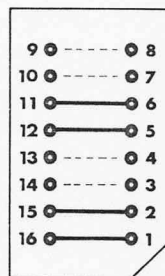
1/1

Selection of device code (position 41)

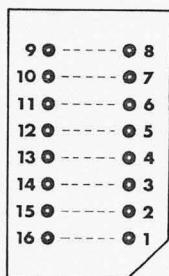
Real time clock

Standard device code

RTC ~ 148



Changing of device code



- ADR 15
- ADR 14
- ADR 13
- ADR 12
- ADR 11
- ADR 10

Strap in a position is giving logic 0, and no strap logic 1 in the device code

when the IOC 704 is used for second paper tape reader or second paper tape punch remove the strapping platform in position 41.

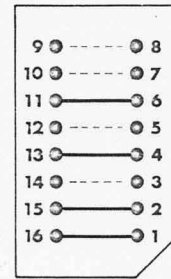
Selection of Device Code
Strapping form.

Selection of device code (position 54)

First device code

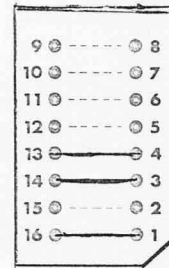
PTR $\sim 12_8$

Paper Tape Reader

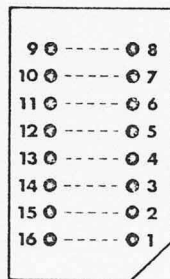


Second device code

PTR $\sim 23_8$



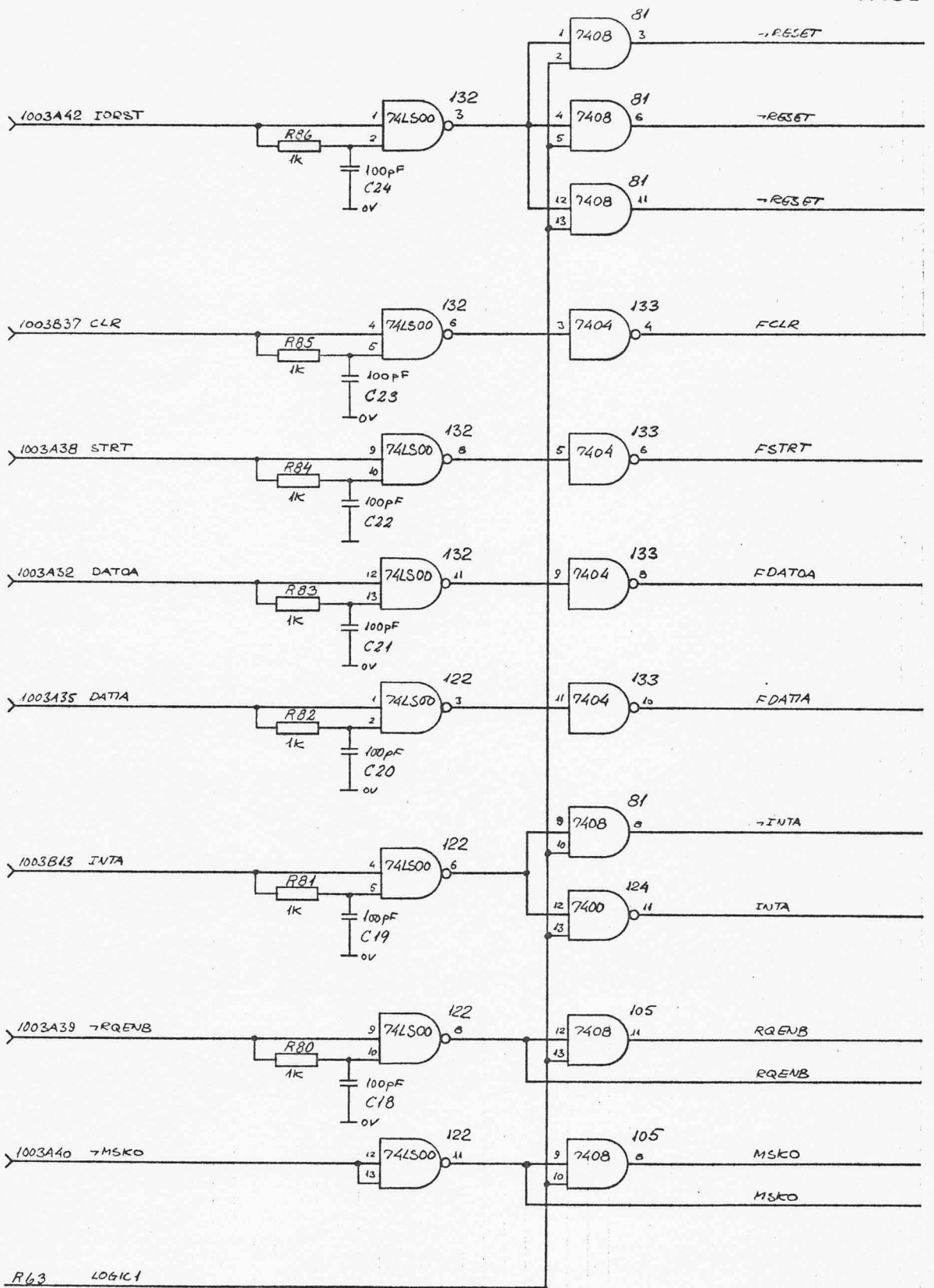
Changing of device code



- ADR 15
- ADR 14
- ADR 13
- ADR 12
- ADR 11
- ADR 10

Strap in a position is giving logic 0, and no strap logic 1 in the device code

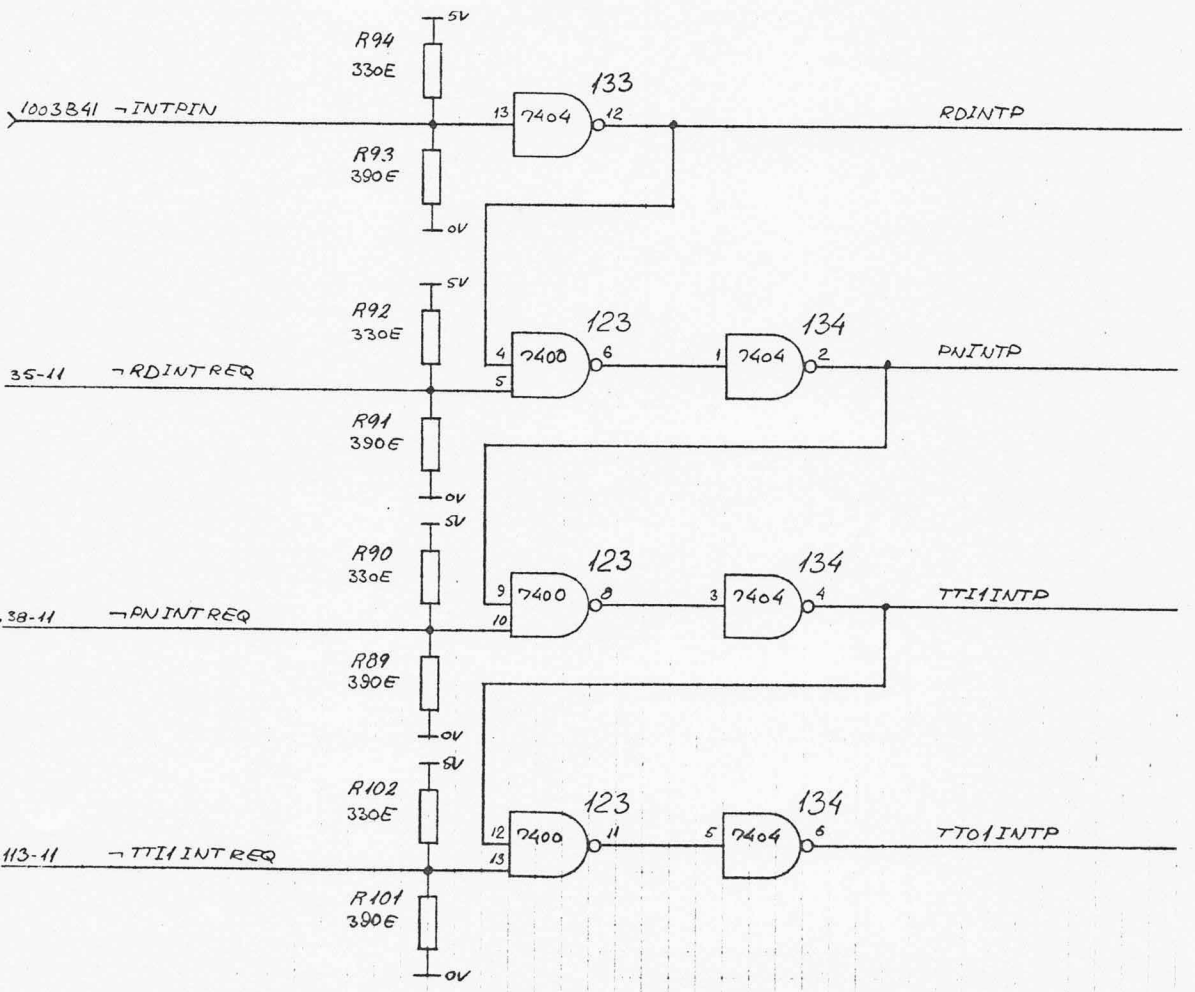
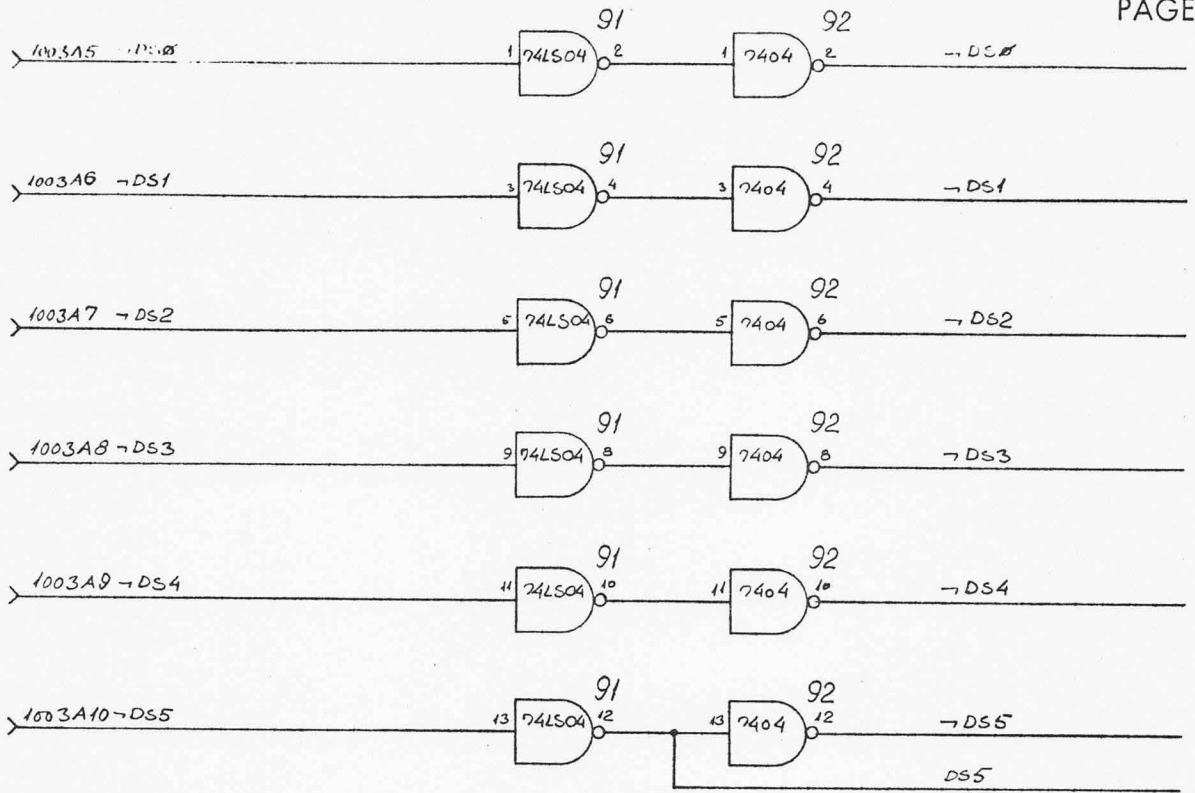
Selection of Device Code
Strapping form



TT1 R63 LOGIC1

Replaced by Dwg. No. R11096
 due to ECN
 Replaces Dwg. No. R11096
 Design Check
 Dwg. Office Check
 Drawn by
 Designed by 75.02.14 JDO

Unit IOC 707	CONTROL SIGNAL RECEIVERS	IOC 1
Dwg. No. R12050		
LOGIC DIAGRAM		



Replaced by Dwg. No. R11097

due to ECN

Design Check

Dwg. Office Check

Drawn by 741205 JDD

Designed by 741205 JDD

A/S REGNENTRALEN

Unit IOC 707	CONTROL SIGNAL RECEIVERS	IOC 2
Dwg. No. R12051		
LOGIC DIAGRAM		

2 134-6 TTO1INTP

TTC3 113-6 -TTO1INTREQ

R100
330E

R99
390E

R98
330E

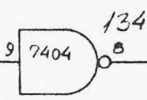
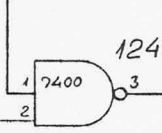
R97
390E

R96
330E

R95
390E

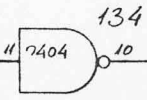
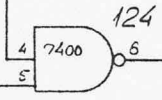
R110
330E

R109
390E



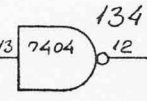
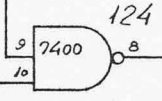
TTO1INTP

TTC711-3 128-11 -TTI2INTREQ



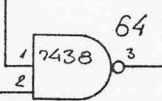
TTO2INTP

TTC711-3 128-6 -TTO2INTREQ



CLKINTP

RTC2 63-11 -CLKINTREQ



R88
330E

R87
390E

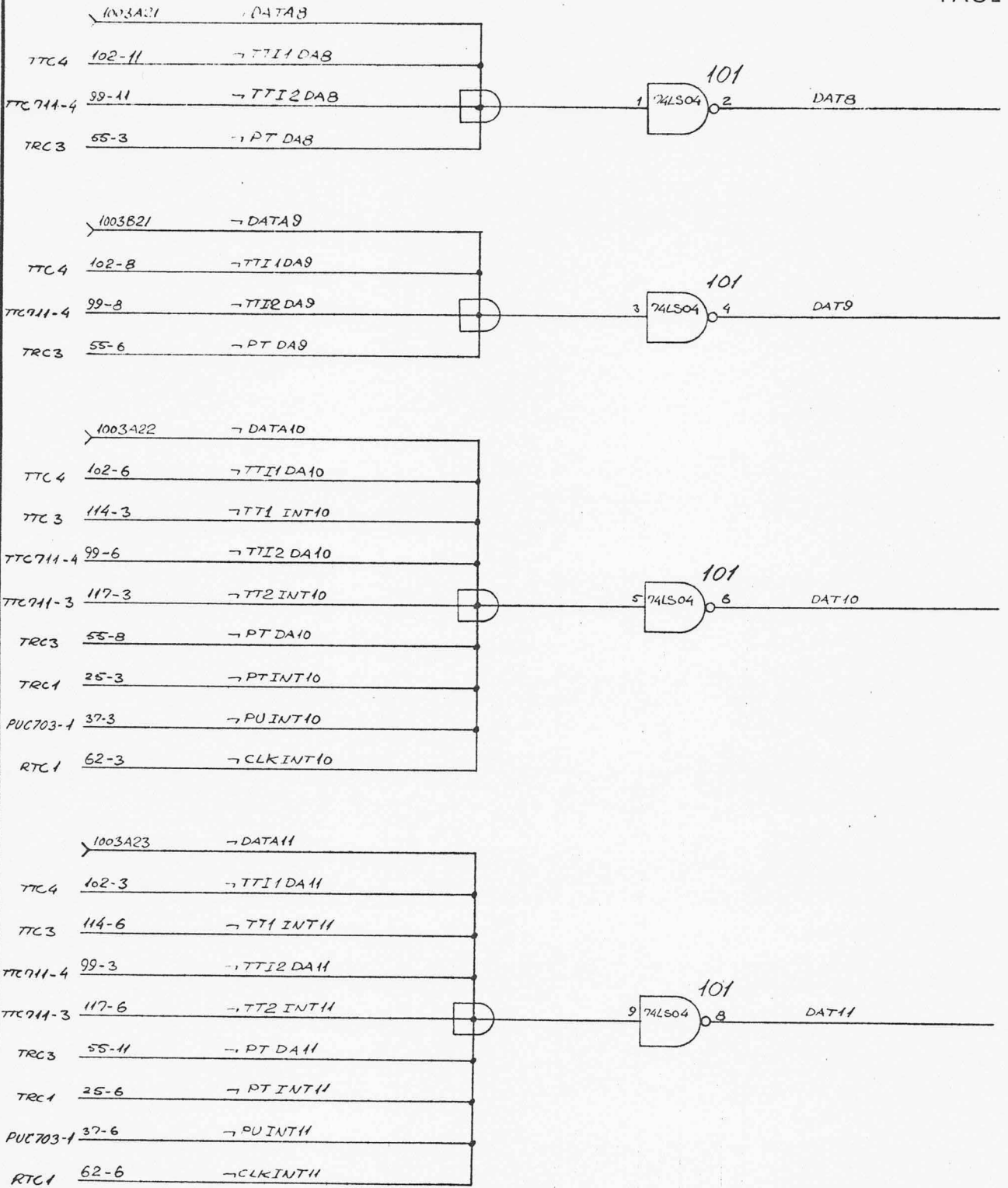
INTP00T 1003A41

1003B45 -DCHPIN

-DCHP00T 1003A45

Replaced by Dwg. No. R 11098
due to ECN
Design Check
Dwg. Office Check
Drawn by JJO
Designed by 74.12.09 JJO

Unit IOC 707	PRIORITY RECEIVERS	IOC 3
Dwg. No. R 12052		
LOGIC DIAGRAM		



Replaced by Dwg. No.

due to ECN

Replaces Dwg. No. R 11099

Design Check

Dwg. Office Check

Drawn by

Designed by 74.12.17 JCO

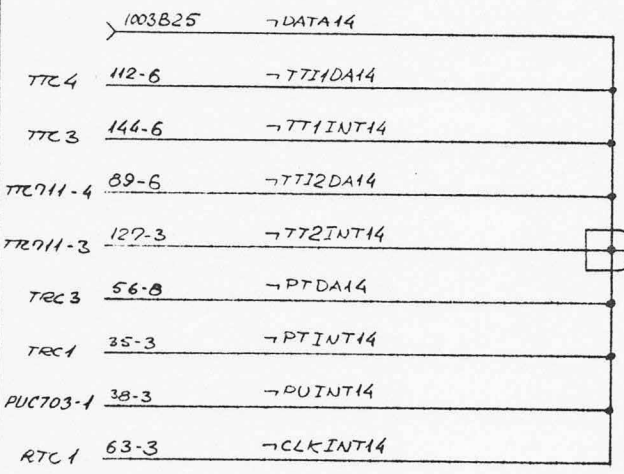
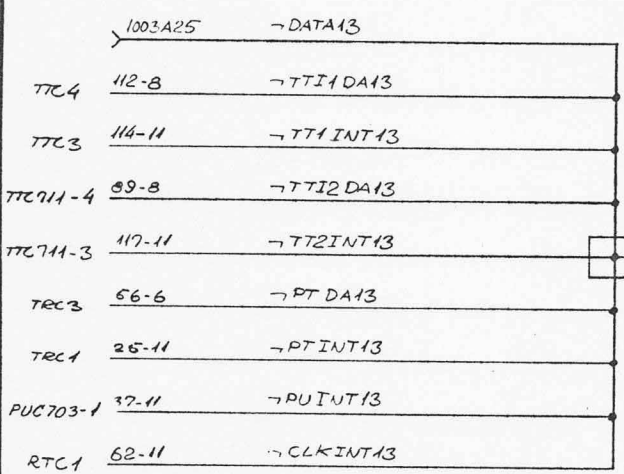
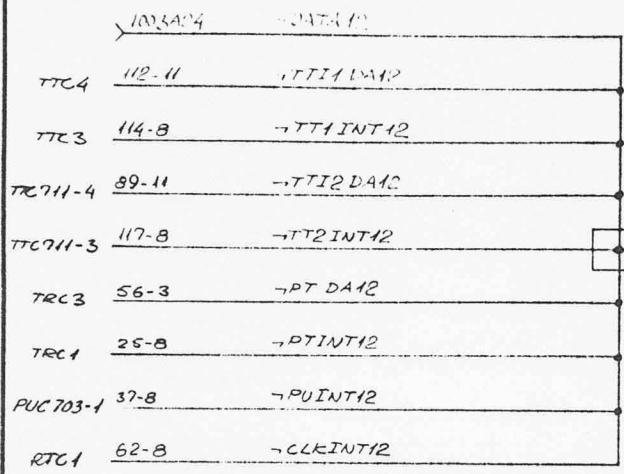
A/S KEGNECENTRALEN

Unit
IOC 707
Dwg. No.
R 12053

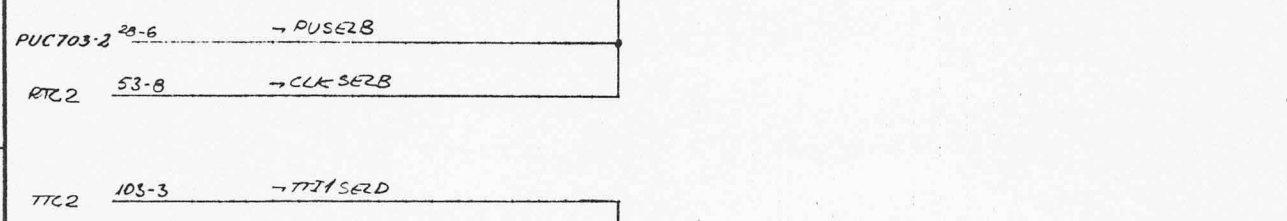
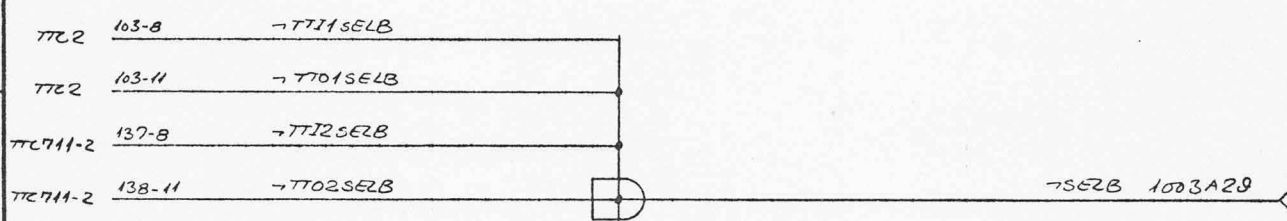
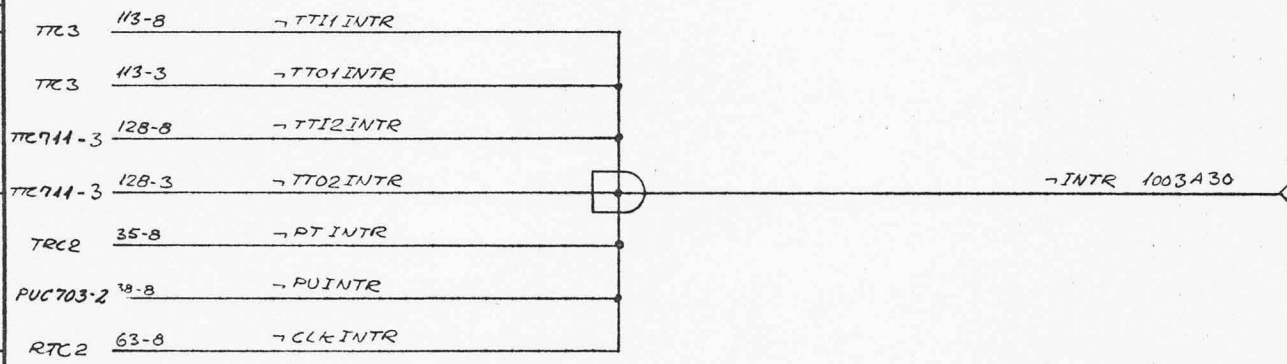
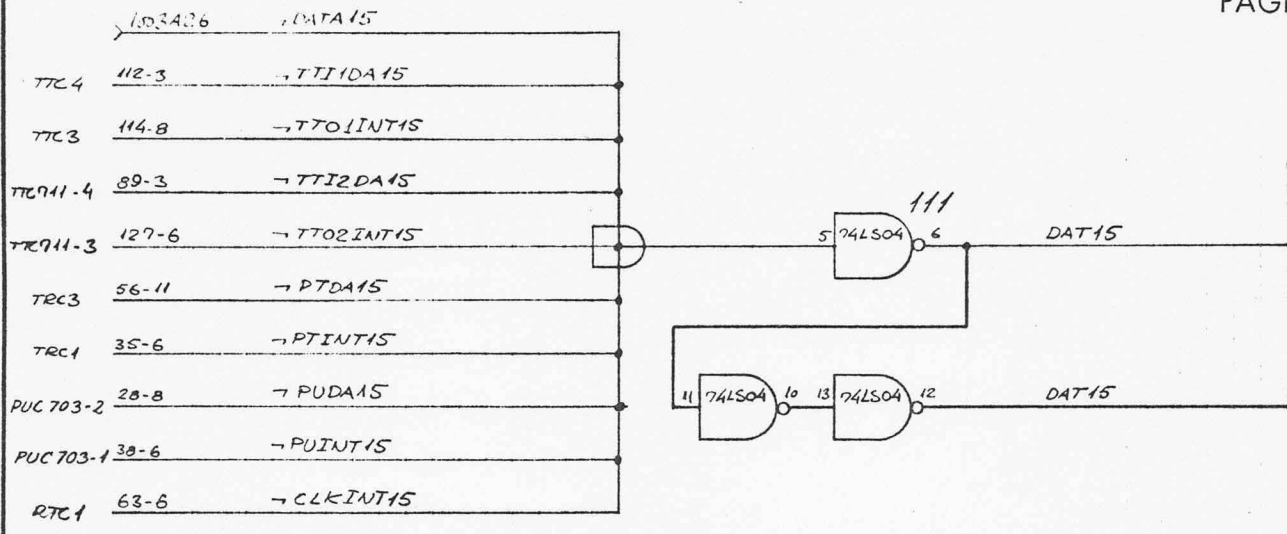
DATA BUS
LOGIC DIAGRAM

IOC
4

A/S K
 NECENTRALEN
 Designed by
 74.12.17 JJO
 Drawn by
 Dwg. Office - neck
 Design Check
 Replaces Dwg. No.
 R11100
 due to ECN
 Rev. by Dwg. No.

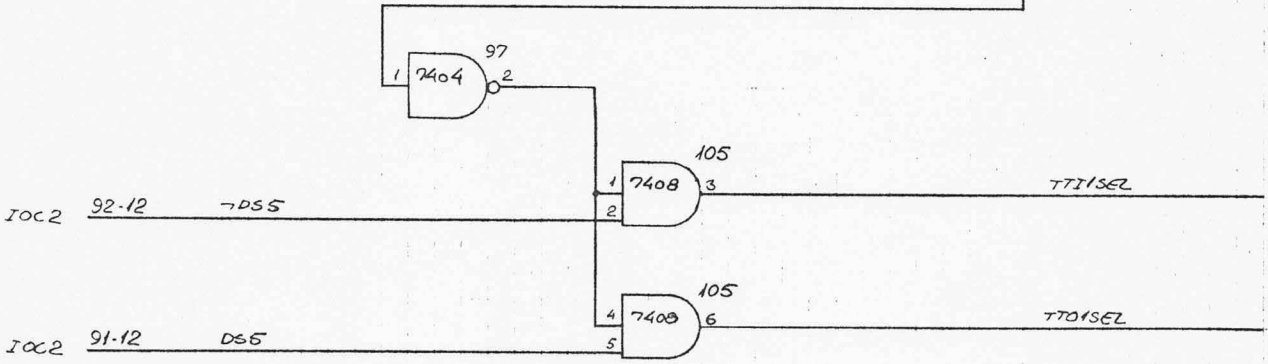
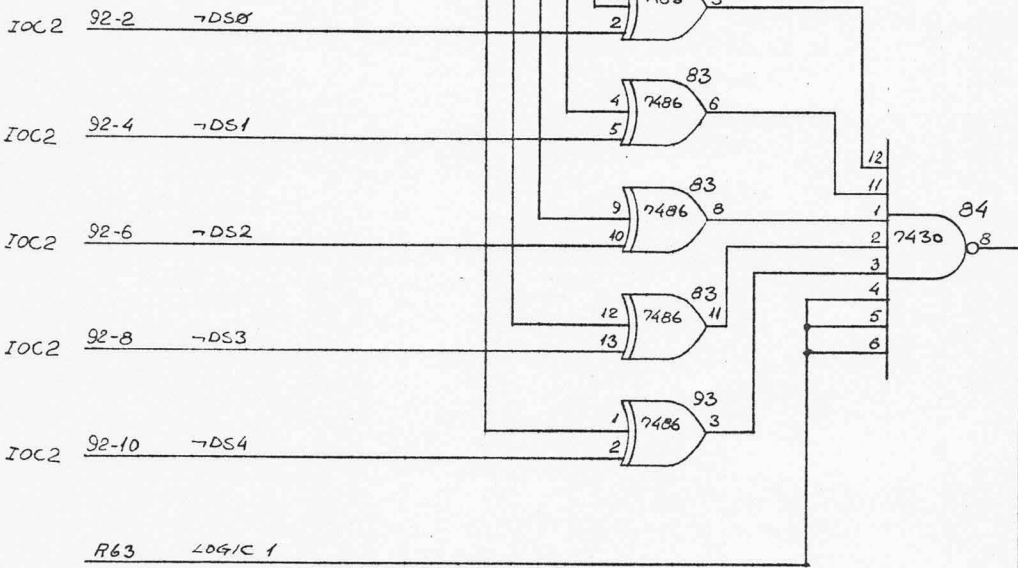
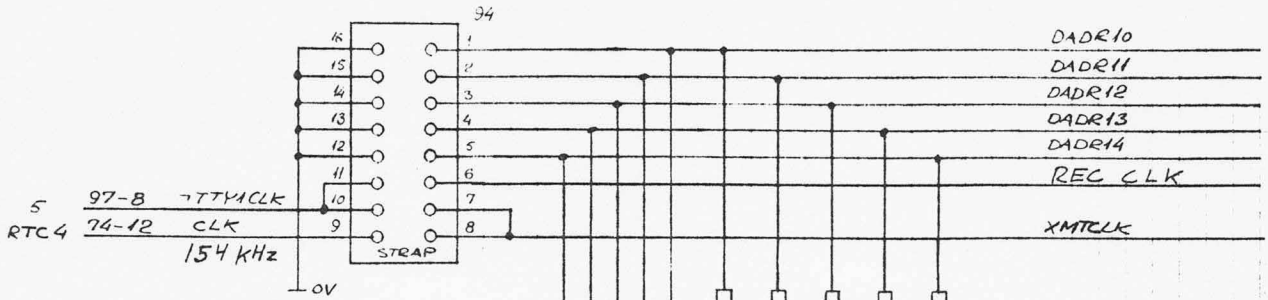


Unit IOC 707	DATA BUS	IOC 5
Dwg. No. R12054		
LOGIC DIAGRAM		



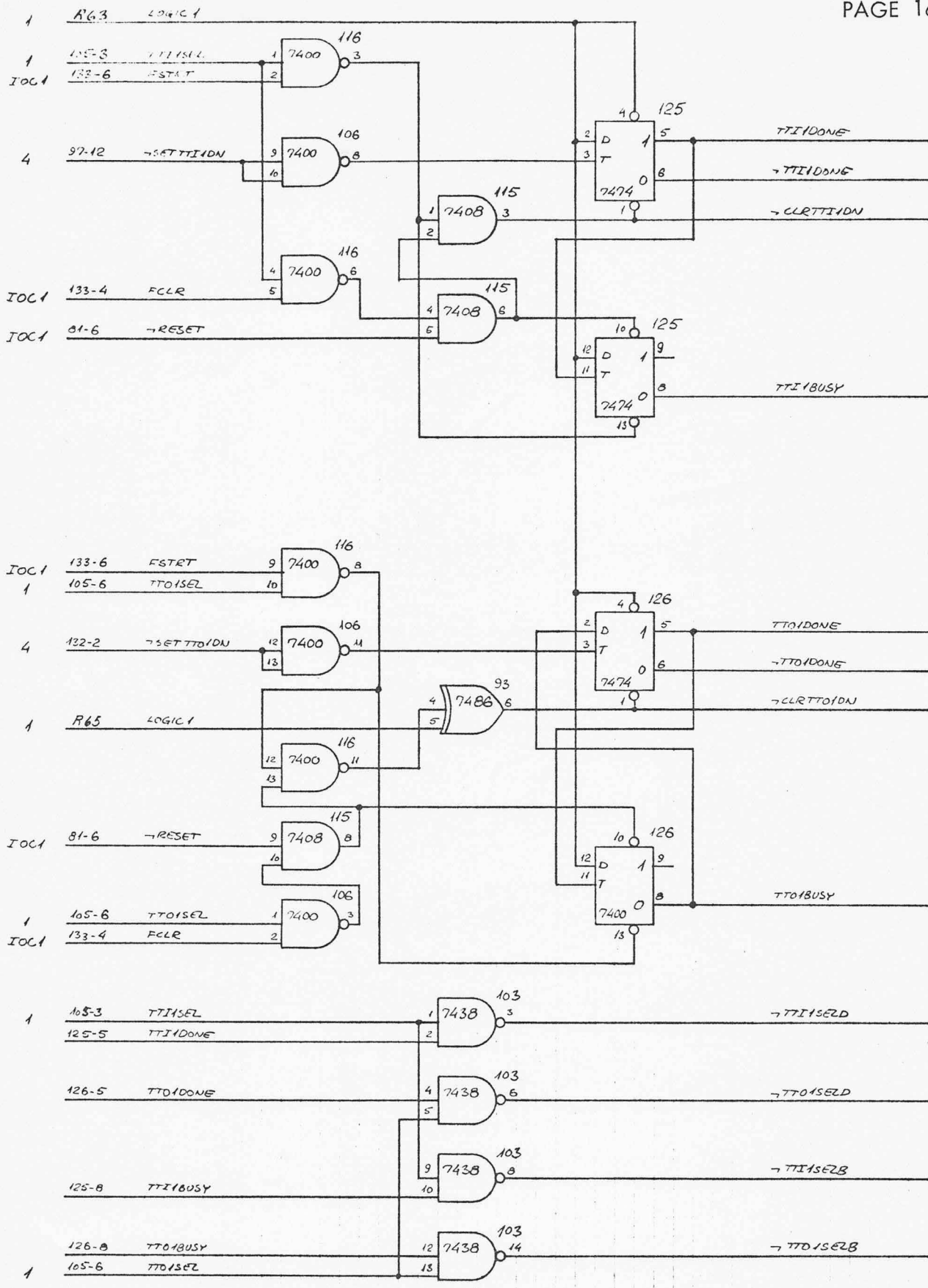
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 due to ECN _____
 Replaces Dwg. No. R 11101
 Design Check _____
 Dwg. Office Check _____
 Drawn by _____
 Designed by 74.12.17 JJO
A/S REGNENTRALEN

Unit 10C 707	DATA BUS	10C 6
Dwg. No. R12055		
LOGIC DIAGRAM		



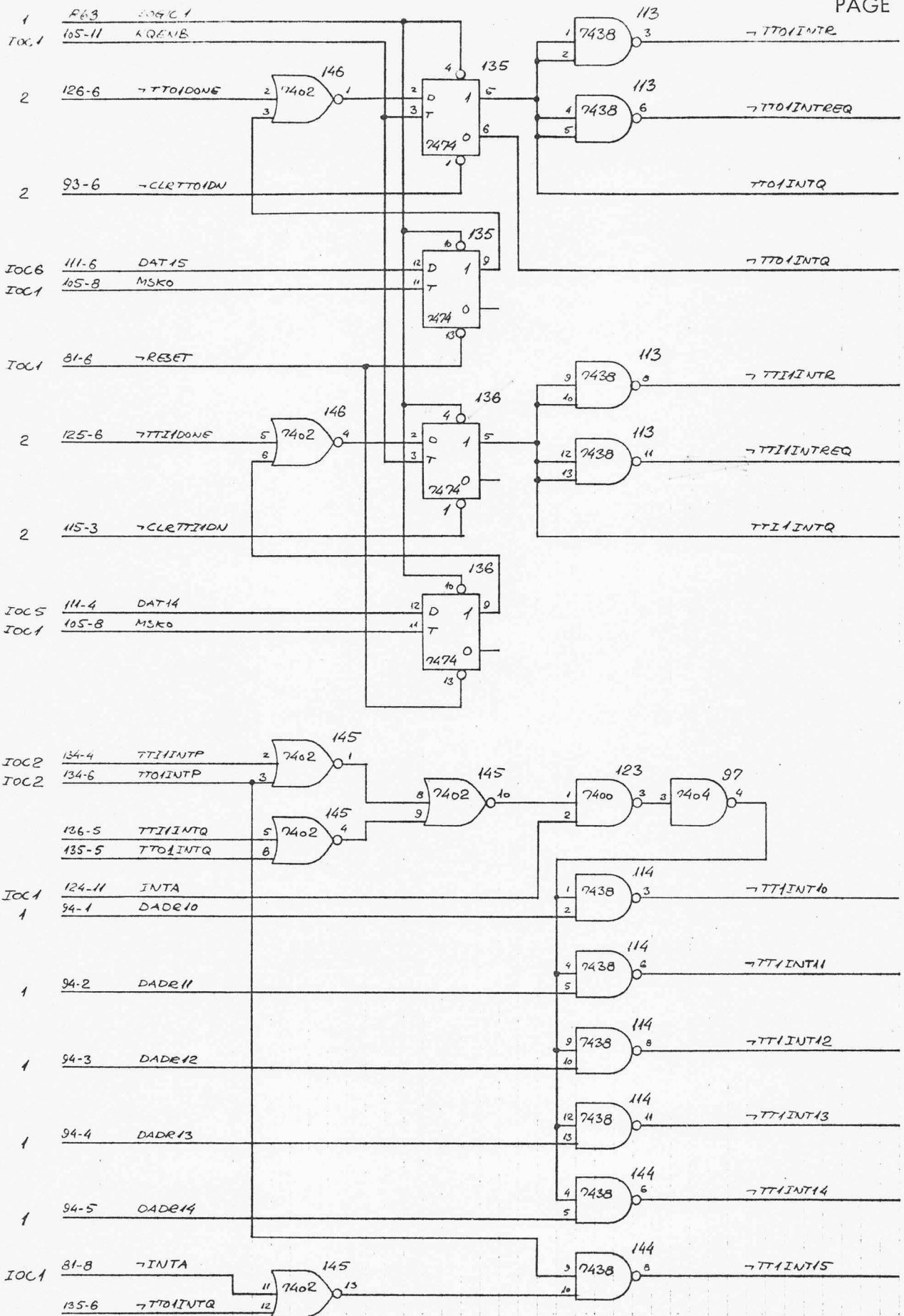
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 due to ECN _____
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 Design Check _____
 Dwg. Office Check _____
 Drawn by _____
 Designed by 74.12.13 JCO

Unit IOC 707	SELECT LOGIC	TTC
Dwg. No. R12056	LOGIC DIAGRAM	1



Replaced by Dwg. No. R 11092
 due to ECN
 Replaces Dwg. No. R 11092
 Design Check
 Dwg. Office Check
 Drawn by
 Designed by 75-02-03 JJO
 A/S REGNENCENTRALEN

Unit	IOU 707		TELETYPE BUSY AND DONE LOGIC	TTC
Dwg. No.	R12057		LOGIC DIAGRAM	2



Replaced by Dwg. No.

due to ECN

Replaces Dwg. No. R 11093

Design Check

Dwg. Office Check

Drawn by

Designed by 7501.06 JJO

A/S REGNENCENTRALEN

Unit IOC 707

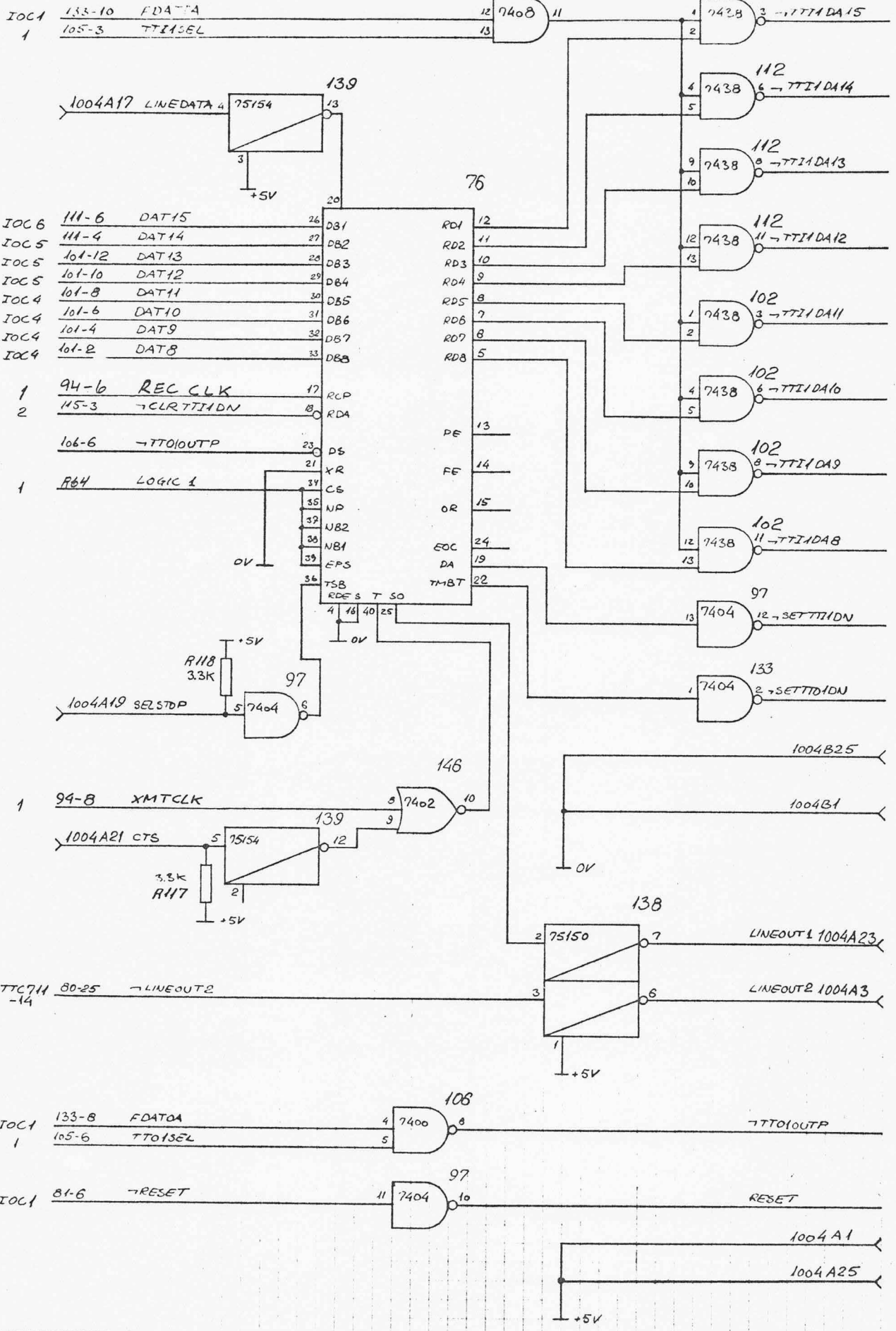
Dwg. No. R12058

INTERRUPT AND INTA LOGIC

LOGIC DIAGRAM

TTC

3

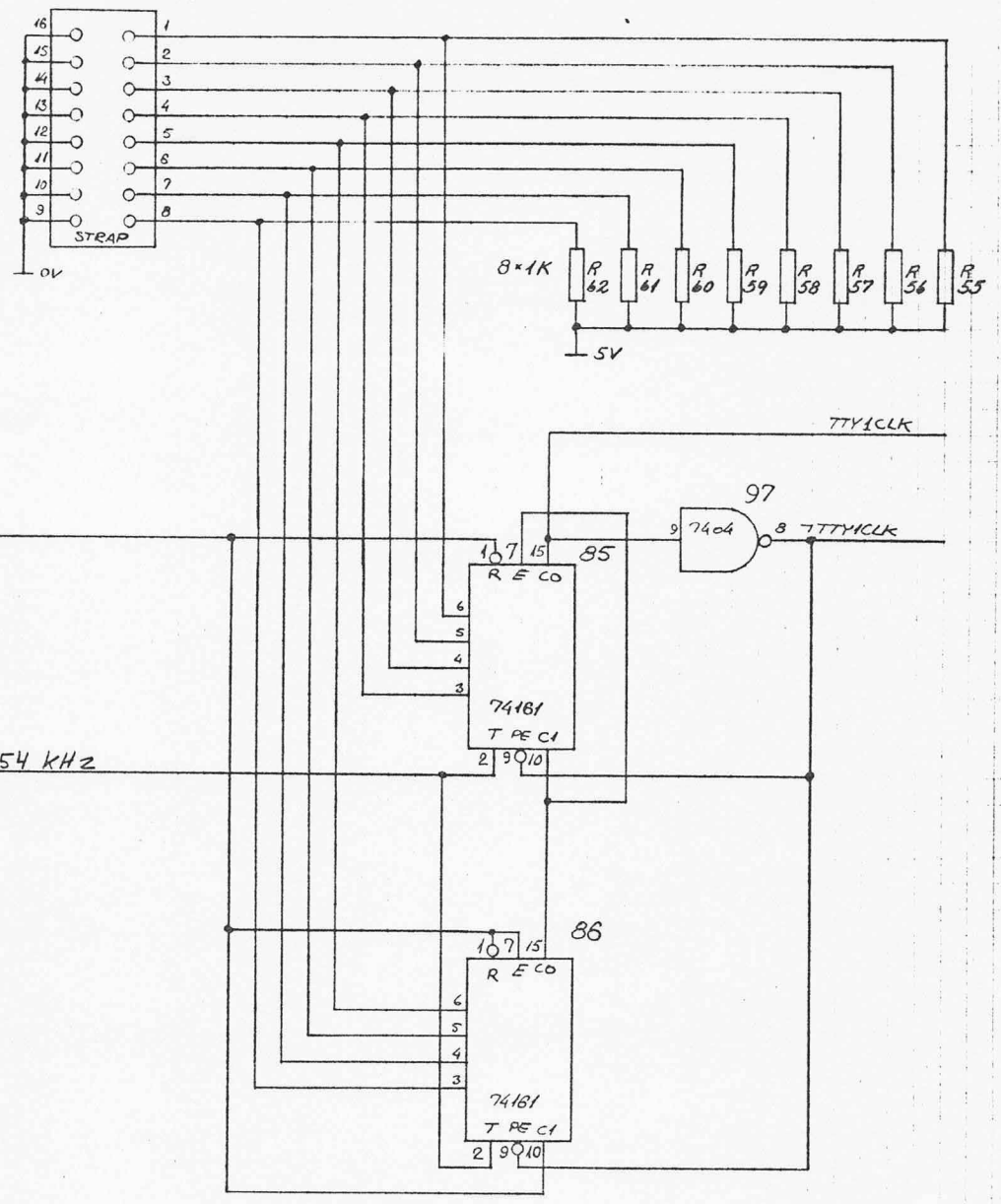


Replaced by Dwg. No. R 11094
 due to ECN
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 Design Check
 Dwg. Office Check
 Drawn by
 Designed by 74.12.18 JJO
 Unit IOC 707
 Dwg. No. R12059
 AIS REGNECENTRALEN

RECEIVER AND TRANSMITTER LOGIC
 LOGIC DIAGRAM

TTC
 4

96



Replaced by Dwg. No. _____
 due to ECN _____
 Replaces Dwg. No. R 11095
 Design Check _____
 Dwg. Office Check _____
 Drawn by _____
 Designed by 741216 JJO

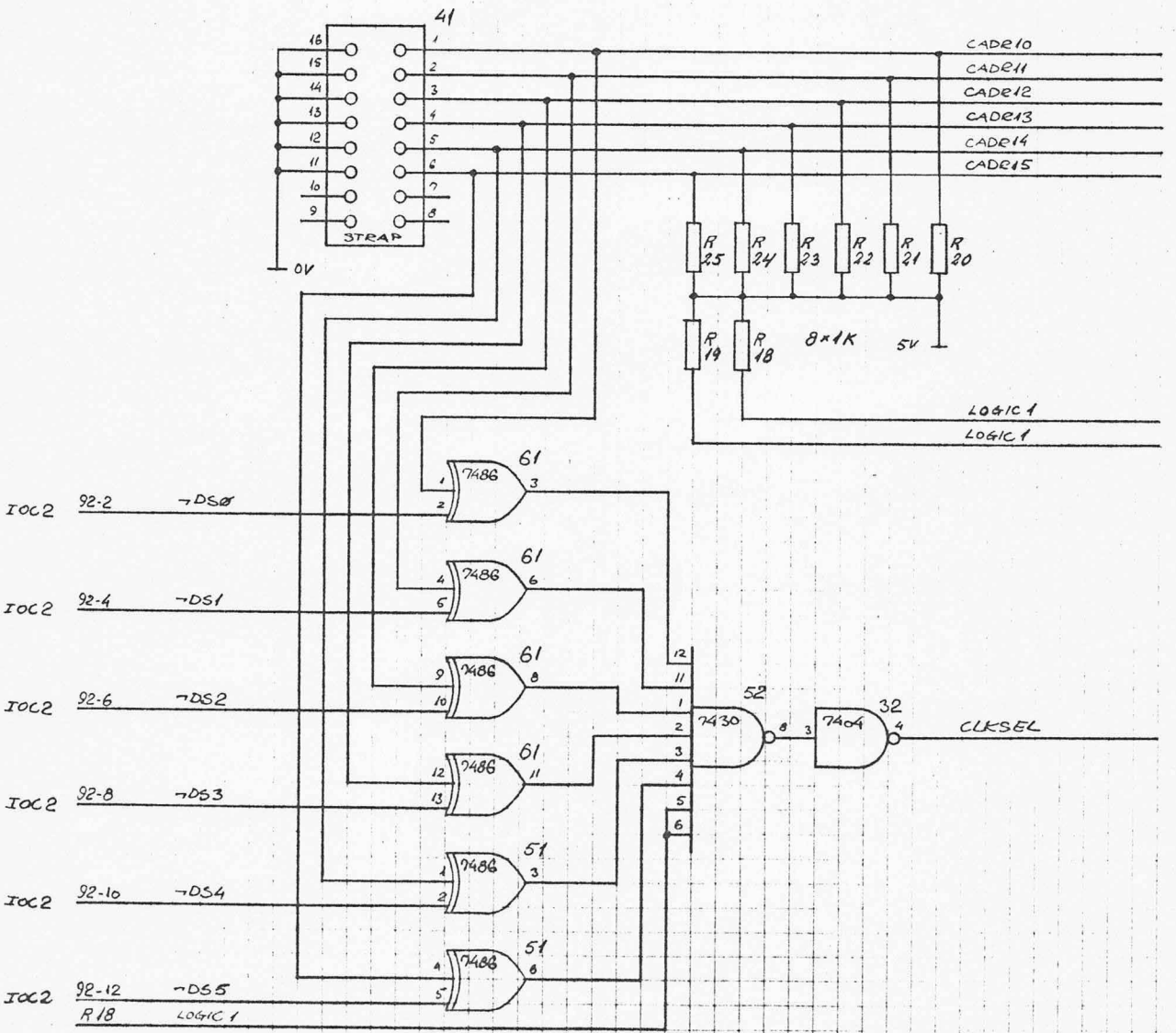
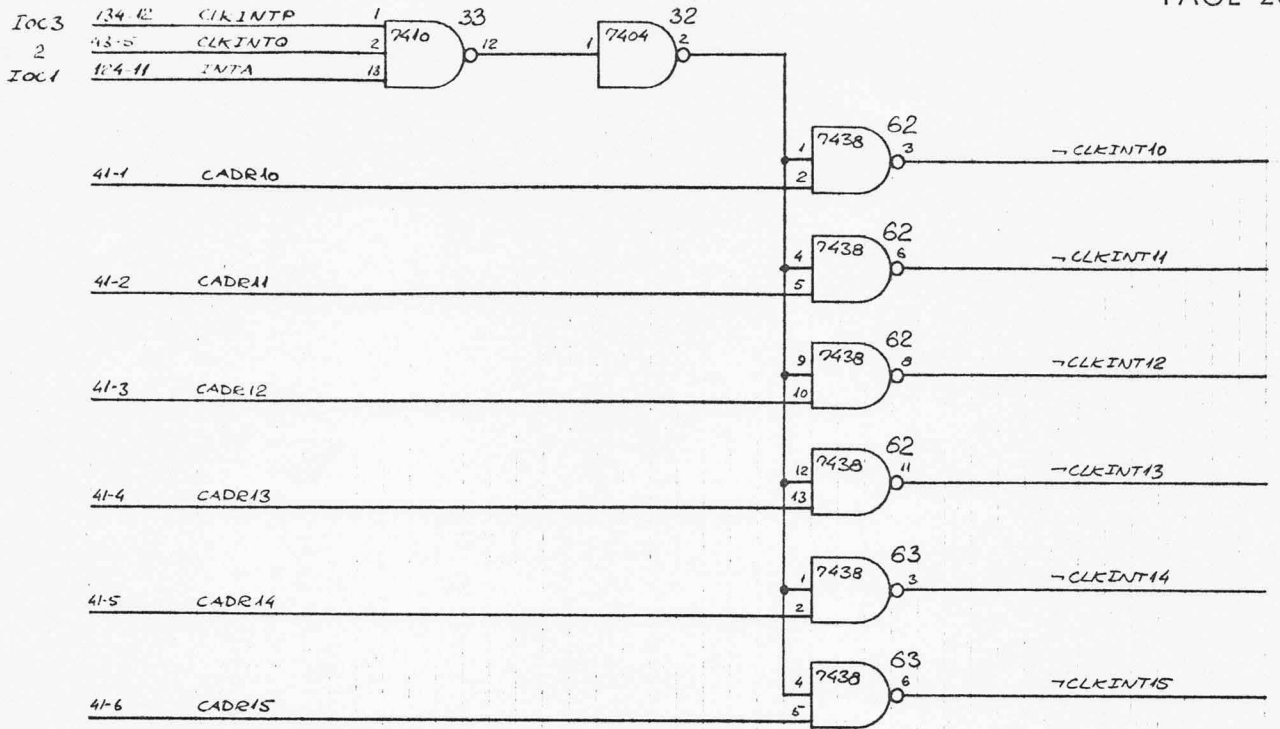
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Unit
 IOC 707
 Dwg. No.
 R 12060

CLOCK AND OSCILLATOR CIRCUIT

LOGIC DIAGRAM

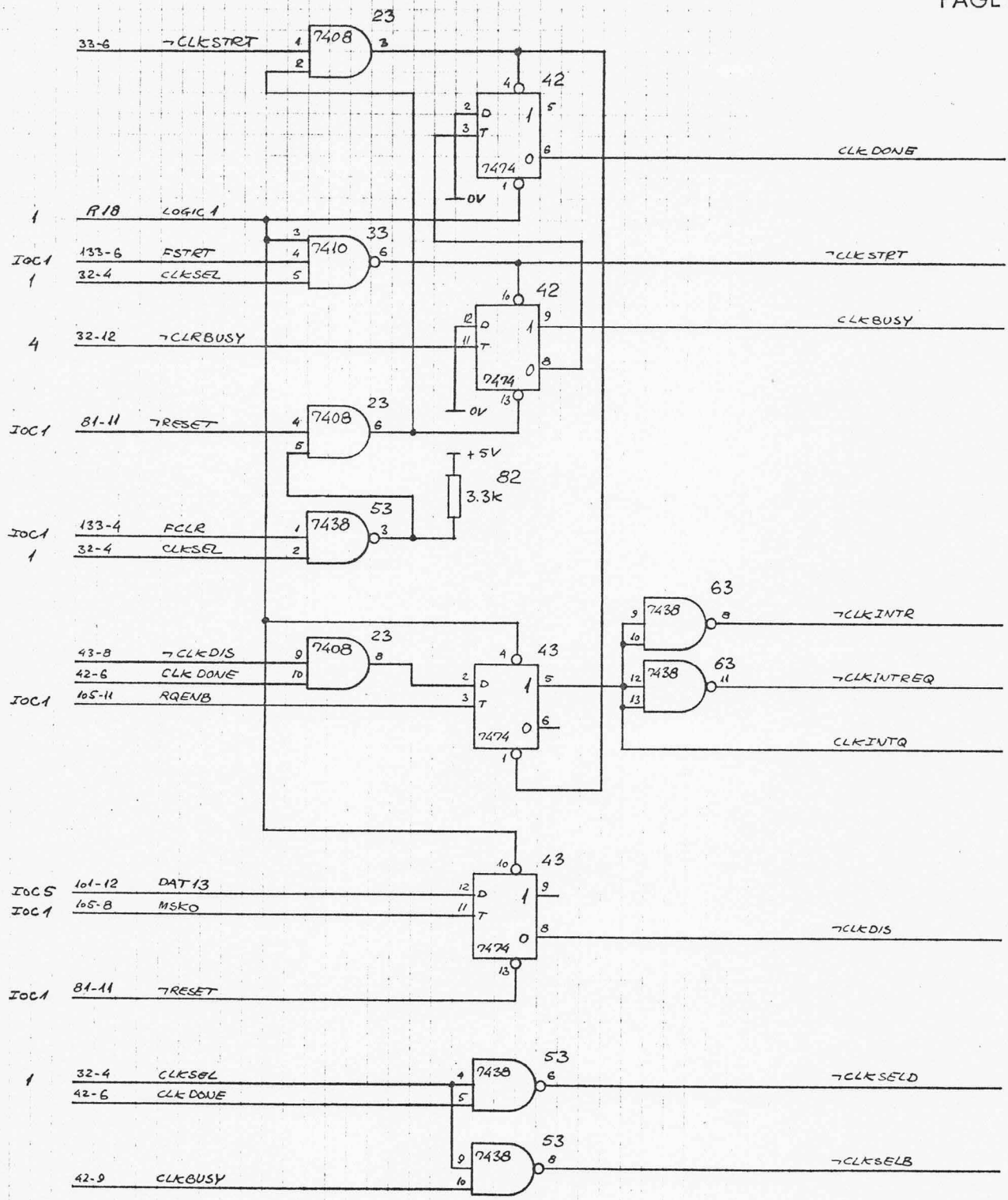
TTC
 5



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 due to ECN
 Replaces Dwg. No. R11193
 Design Check
 Dwg. Office Check
 Drawn by
 Designed by 75.04.13 JDO
A/S REGNENTRALEN

Unit IOC 707	INTA AND SELECT LOGIC	RTC 1
Dwg. No. R12061		
LOGIC DIAGRAM		

Replaced by Dwg. No. **R1119H**
 due to ECN
 Replaces Dwg. No. **R1119H**
 Design Check
 Dwg. Office Check
 Drawn by
 Designed by **750113 JJO**
A/S REGNENCENTRALEN

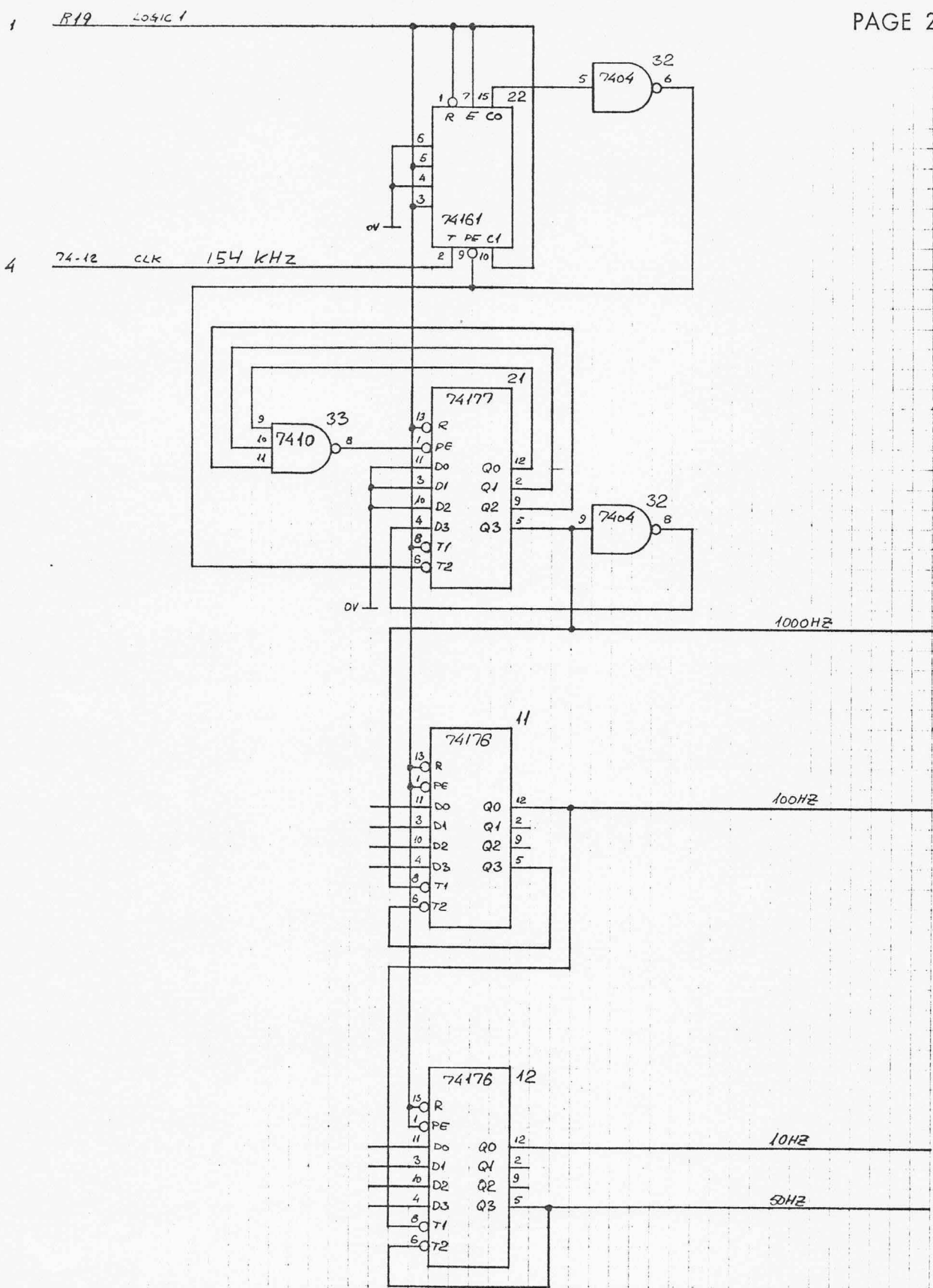


Unit
IOC707
 Dwg. No.
R12062

RTC BUSY, DONE AND INTERRUPT LOGIC

LOGIC DIAGRAM

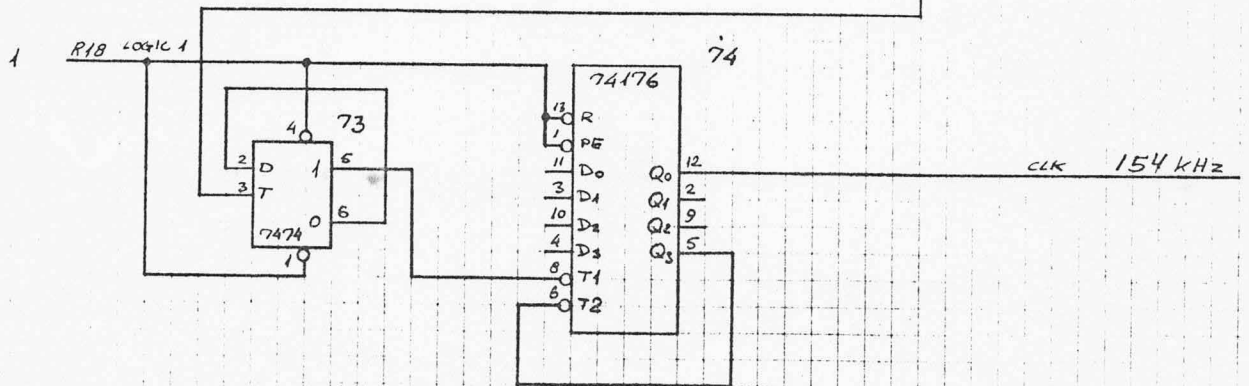
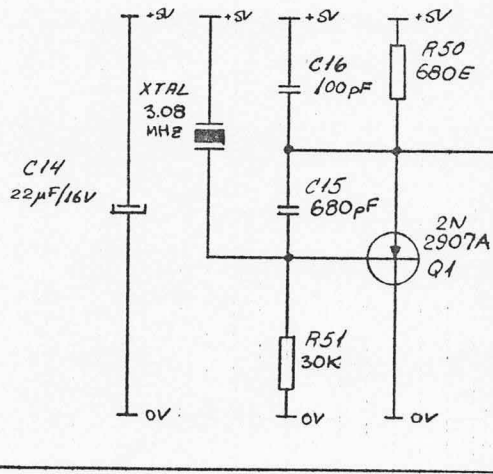
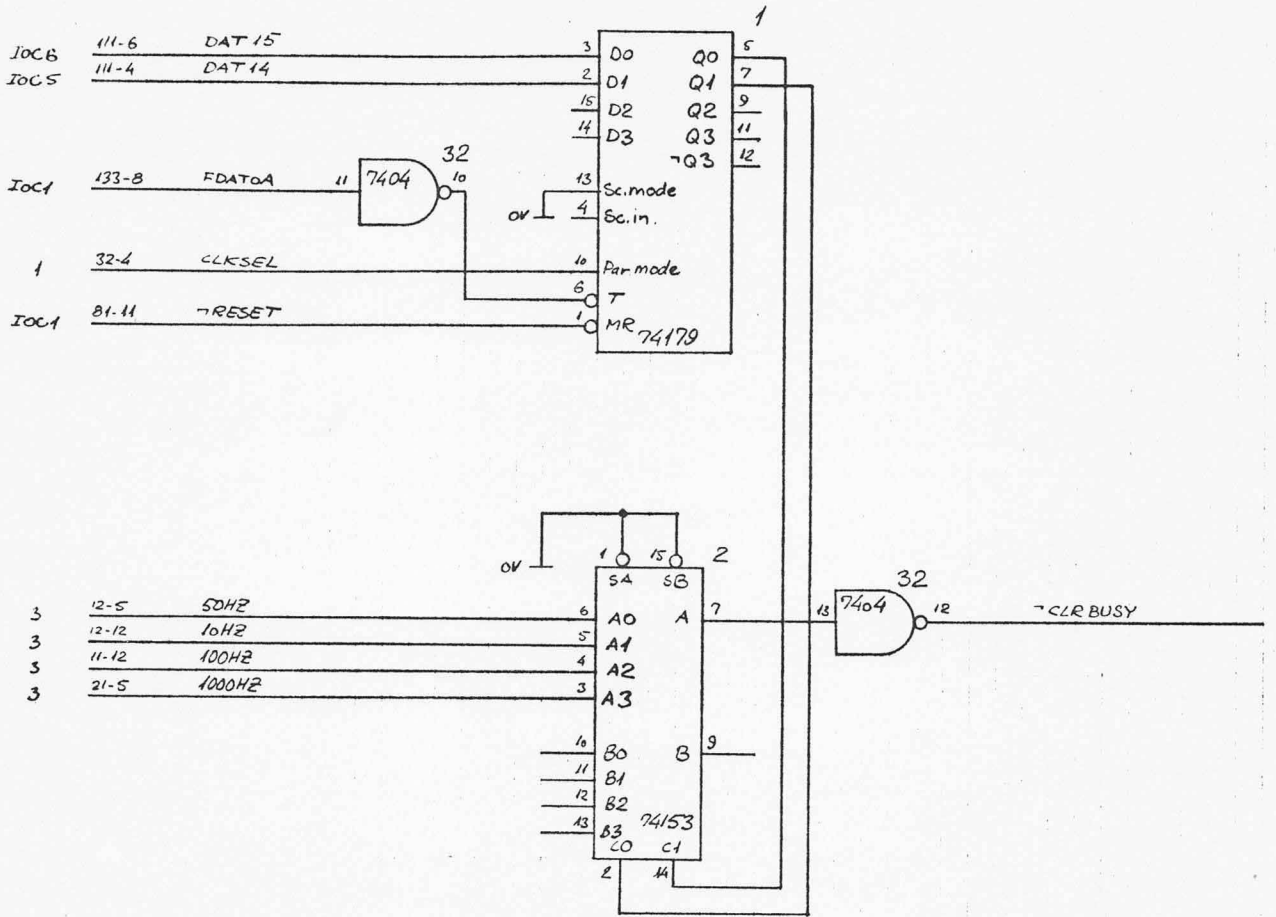
RTC
2



Replaced by Dwg. No.	
due to ECN	
Replaces Dwg. No.	R 11195
Design Check	
Dwg. Office Check	
Drawn by	
Designed by	JJO
	75.01.10
A/S REGNENTRALEN	

Unit	10C707	FREQUENCY DIVIDER	RTC
Dwg. No.	R12063	LOGIC DIAGRAM	3

AC doc: VB 140

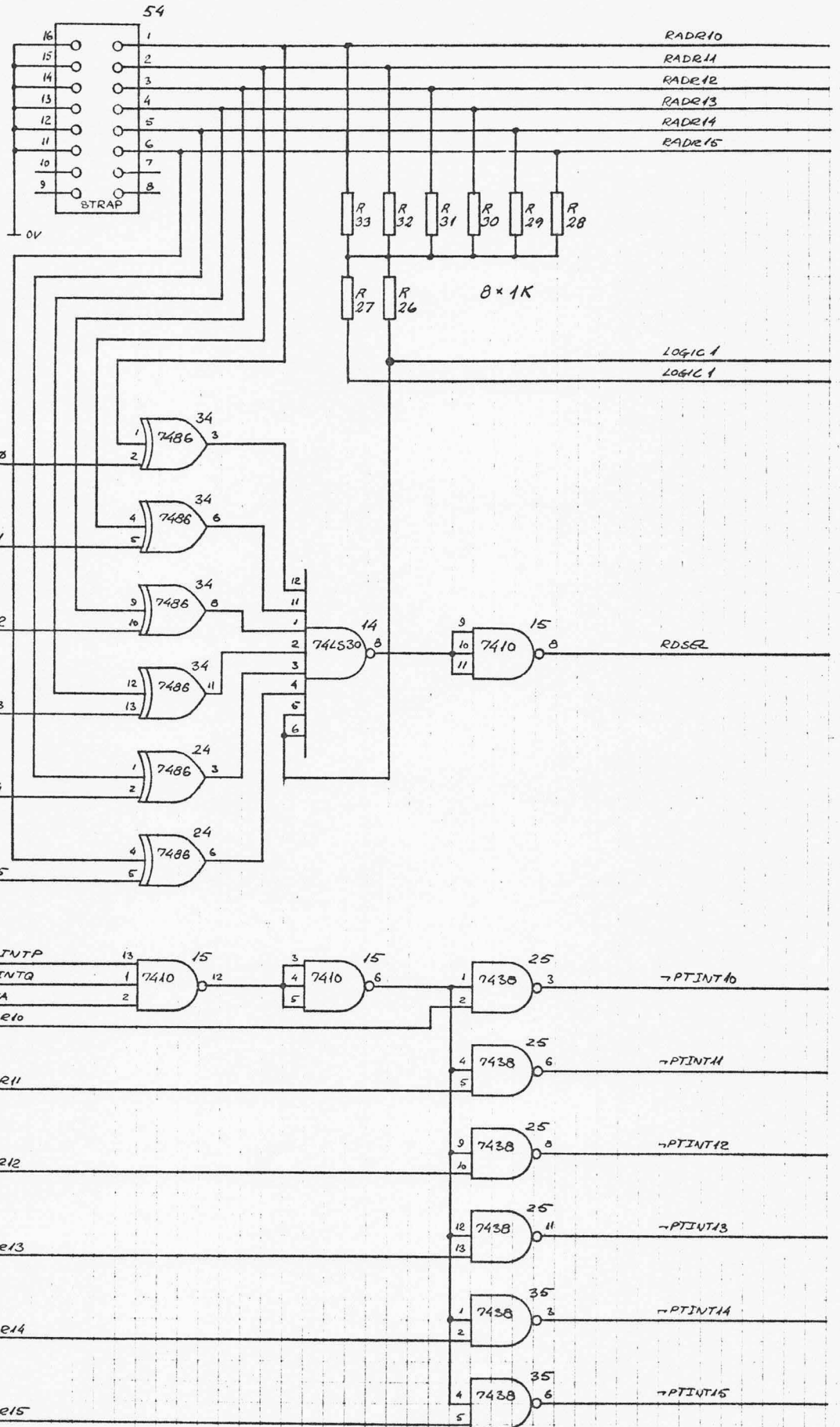


Replaced by Dwg. No. due to ECN Replaces Dwg. No. Design Check Dwg. Office Check Drawn by Designed by

Unit I0C 707
Dwg. No. R12064

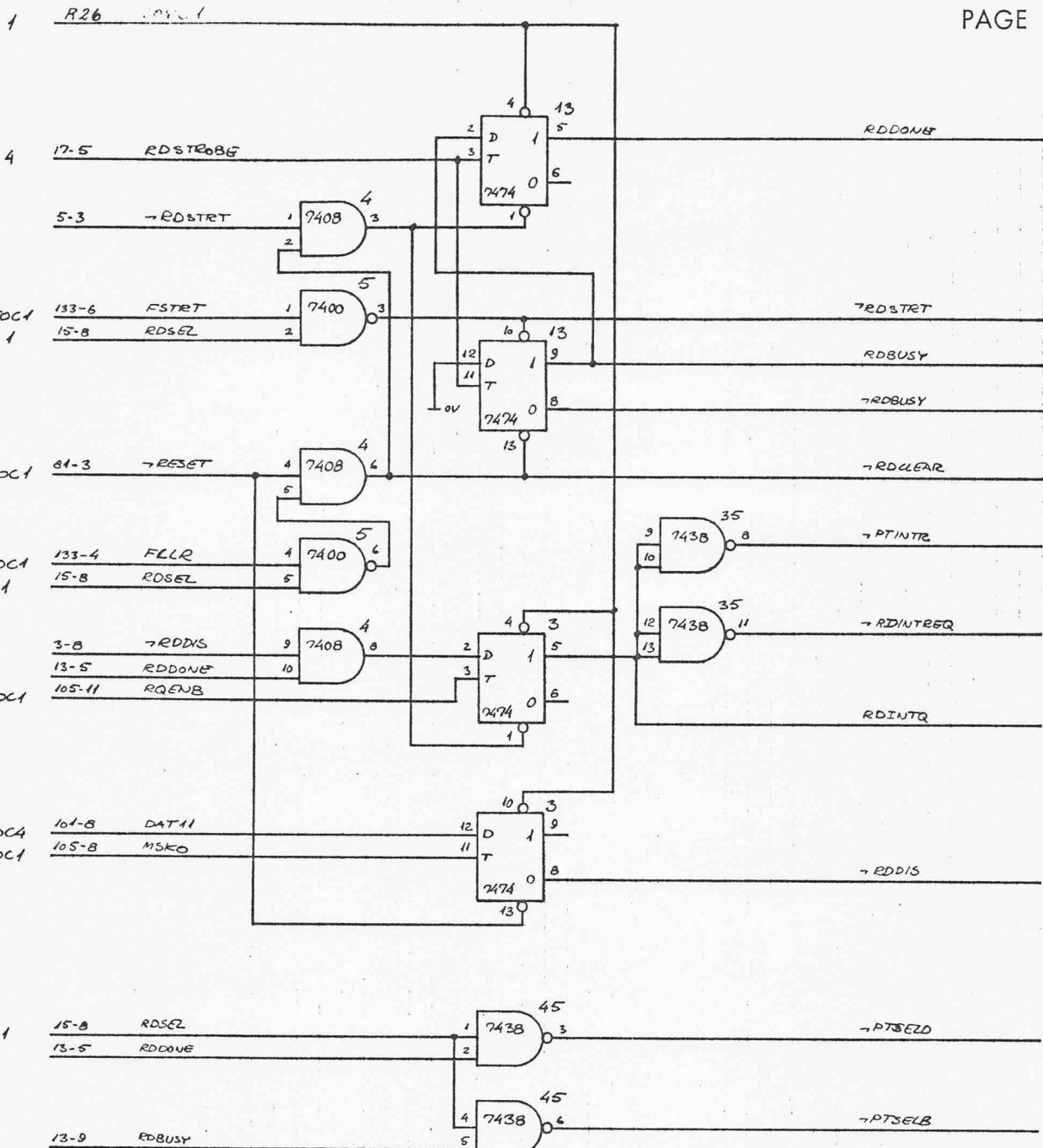
FREQUENCY SELECTION
LOGIC DIAGRAM

RTC
4



Replaced by Dwg. No. R 11087
 due to ECN
 Replaces Dwg. No. R 11087
 Design Check
 Dwg. Office Check
 Drawn by
 Designed by 7503.19

Unit IOC 707	SELECT AND INTA LOGIC	TRC 1
Dwg. No. R12065	LOGIC DIAGRAM	



Replaced by Dwg. No.

due to ECN

Replaces Dwg. No. R11088

Design Check

Dwg. Office Check

Drawn by

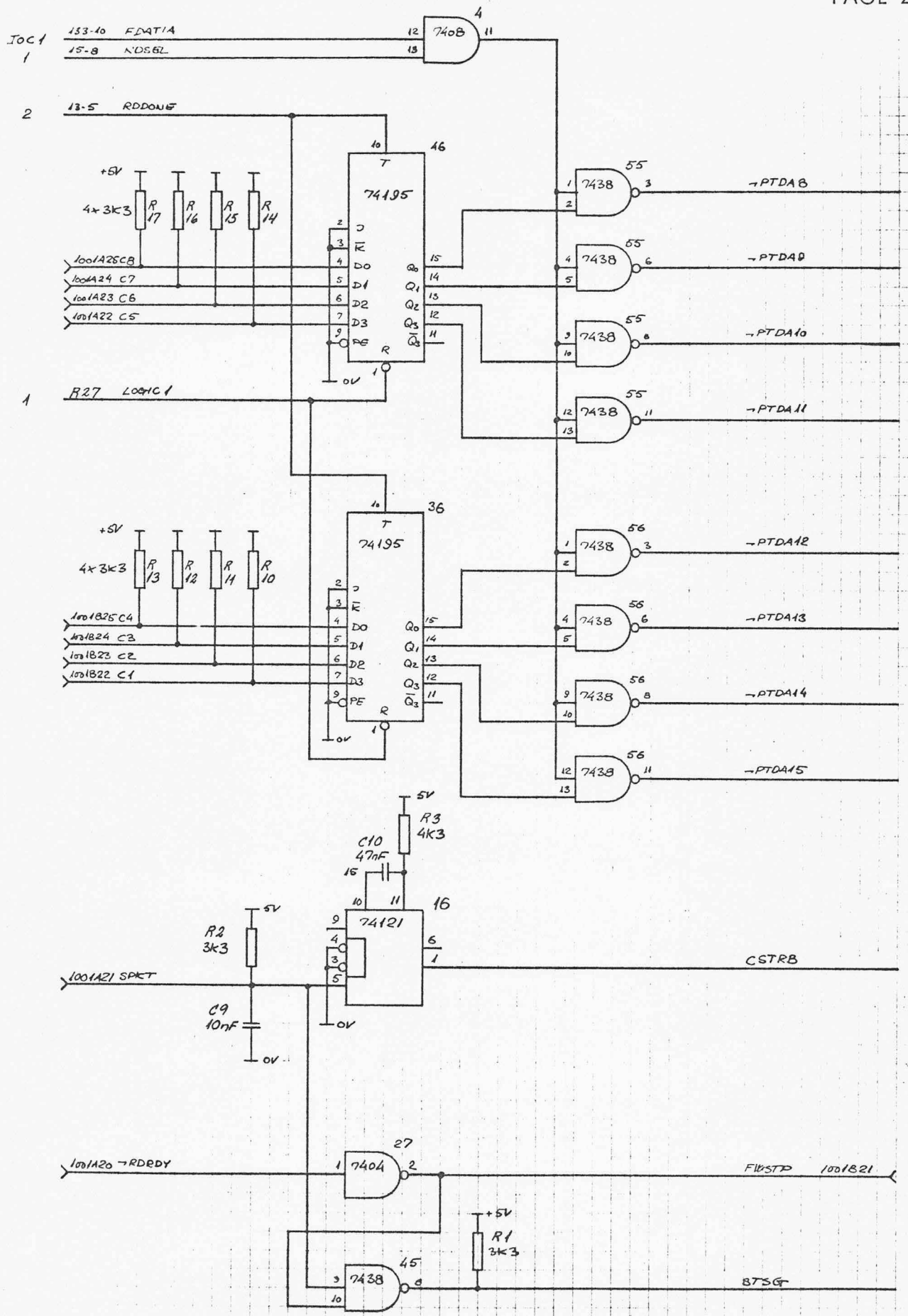
Designed by 570 75.03.19

A/S REGNENSTRALEN

Unit IOC 707
Dwg. No. R12066

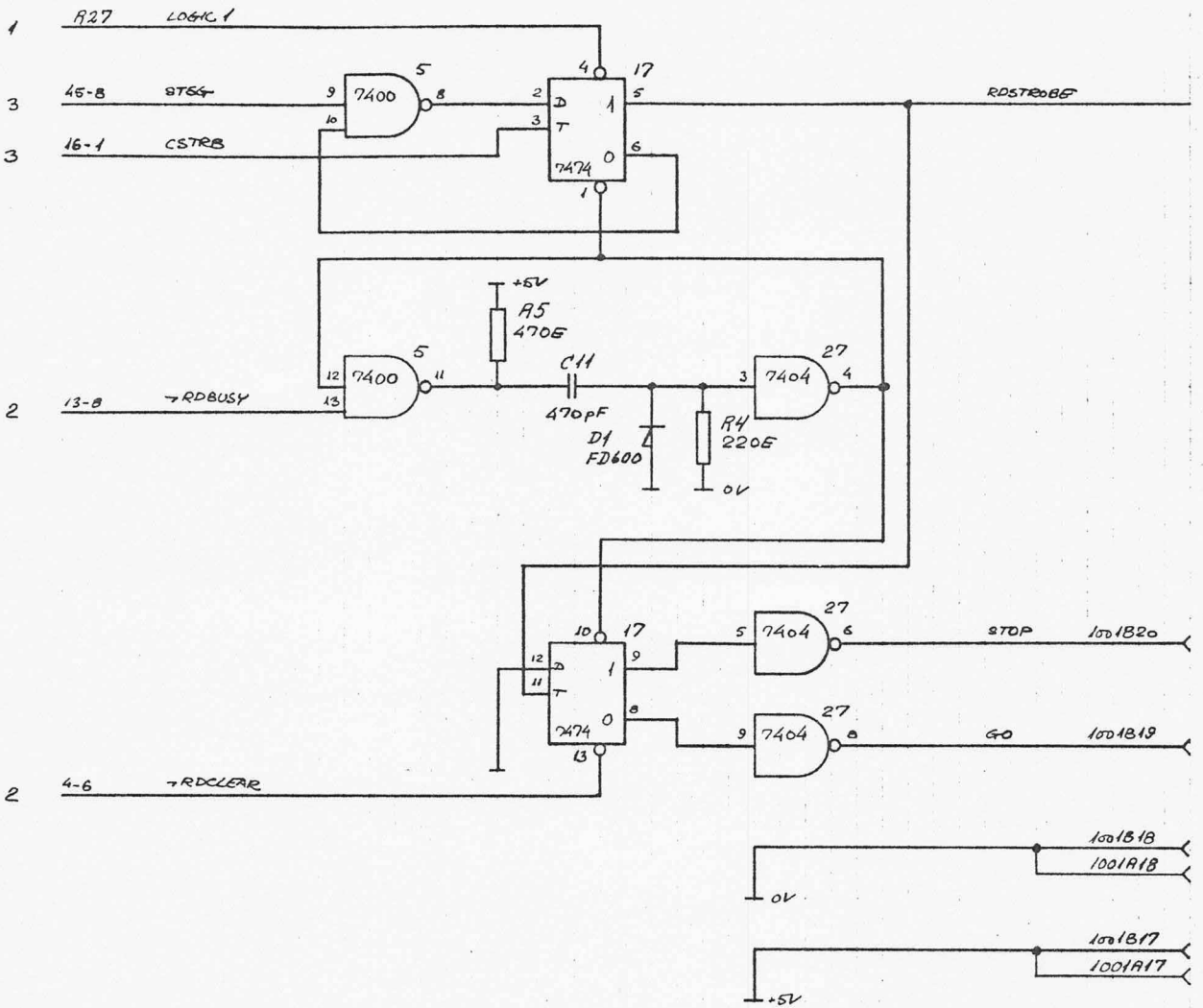
TRC BUSY, DONE AND INTERRUPT LOGIC
LOGIC DIAGRAM

TRC 2



Replaced by Dwg. No. R 11089
 due to ECN
 Replaces Dwg. No. R 11089
 Design Check
 Dwg. Office Check
 Drawn by
 Designed by JJO 75.03.20
A/S REGNENTRALEN

Unit IOC 707	DATA BUFFER AND CONTROL LOGIC	TRC 3
Dwg. No. R 12067		
LOGIC DIAGRAM		



Replaced by Dwg. No.	
due to ECN	
Replaces Dwg. No.	R 11090
Design Check	
Dwg. Office Check	
Drawn by	
Designed by	JJO 75.03.20
A/S REGNENCENTRALEN	

Unit	IOC 707	CONTROL LOGIC	TRC
Dwg. No.	R 12068	LOGIC DIAGRAM	4

RC doc: V8 140

IOC707:

RESISTORS:

R 87 to R 110
2% 0,4W Metalfilm

All other resistors
5% 1/8W Carbonresistors

Pos 41 STRAP:

Real Time Clock Device Code

Pos 54 STRAP:

Paper Tape Reader Contr.
Device Code

Pos 94 STRAP:

First Teletype Contr. Device Code

Pos 96 STRAP:

First Teletype Contr.
Selection of Speed

PUC703:

Pos 68 STRAP:

Paper Tape Punch Contr.
Device Code

TTC711:

Pos 108 STRAP:

Second Teletype Contr.
Device Code

Pos 69 STRAP:

Second Teletype Contr.
Selection of Speed

All Strappings:

Strap = logic 0
No Strap = logic 1

77.7.20.

