

OPERATOR'S ORGANIZATIONAL,
DIRECT SUPPORT, AND GENERAL SUPPORT
MAINTENANCE MANUAL

CARD READER

UNIT

RP-165/FYA-10 'V',

This copy is a reprint which includes current
pages from Change 1.

CHANGE

No., 1

DEPARTMENTS OF THE ARMY
THE NAVY, AND THE AIR FORCE
WASHINGTON, D.C., 15 April 1973

**OPERATOR'S ORGANIZATIONAL, DIRECT SUPPORT,
GENERAL SUPPORT, MAINTENANCE MANUAL
CARD READER UNIT RP-165/FYA-10(V)**

TM 11 -5895-422-14-2/NAVSRIIPS 0967-301-5370/TO 31S5-2FYA10-111-2,
June 1972, is changed as follows:

1. The Navy number is changed from "NAVSHIPS 0967-301-5370" to "NAVELEX 0967-301-5371".
2. Remove old pages and insert new pages as indicated below:

Remove pages	Insert pages
2	2 Change 1
3	3 Change 1
5	5 Change 1
6	6 Change 1
7	7 Change 1
8	8 Change 1
13	13 Change 1
14	14 Change 1
16	16 Change 1

3. This transmittal sheet should be files in front of the publication for reference purposes.

Technical Manual
No. 11-5895-422-14-2
NAVSHIPS
No. 0967-301-5370
Technical Order
No. 31SS-2FYA10-111-2



DEPARTMENTS OF THE ARMY,
THE NAVY, AND THE AIR FORCE

WASHINGTON, D.C., -6 June 1972

OPERATOR'S ORGANIZATIONAL, DIRECT SUPPORT, GENERAL SUPPORT, MAINTENANCE MANUAL

CARD READER UNIT RP-165/FYA-10(V)

CONTENTS

<i>Drawing No.</i>	<i>Title</i>
9LO-8968	Controller

**This manual supersedes TM 11-589-.422-15/2, NAVSHIPS 0967
-301-5370, and TO 31S5-2FYA10-111-2, 23 September 1965,
including all changes.**

REFERENCES

TM NUMBER	NAME	DRAWING NUMBER	EQUIPMENT NAME
11-5895-402-15/2	PRINTED CIRCUITS FOR ADMS GROUPS AN/FYA- 10(V) I THROUGH AN/FYA-10(V) 7 AND AN/FYA-10(V) TI		
11-5895-403-15/2	CORE MEMORY UNIT MU-530/FYA-10(V)	9L08884	CORE MEMORY UNIT
11-5895-400-15/2	CONSOLE, MAINTENANCE OJ-50/ FYA- 10(V)	9L08674 9L08948	DRUM MAINTENANCE CONSOLE PROCESSOR PANEL AND SUBSYSTEM
11-5895-405-15/2	MONITOR ASSEMBLIES, CONTROL SENSING OK-33/FYA-10(V) AND OK-38/FYA-10(V) AND SWITCHING UNIT, DISTRIBUTION SA-1537/FYA-10(V)	9L08925 9L08930 9L08980 9L09011 9L0100856	CONFIGURATION SWITCH CONTROL SENSE POINT SCANNER MONITOR ASSEMBLY CONFIGURATION SWITCH ACCESS NETWORK CONFIGURATION SWITCH CONTROL EXP.
11-5895-406-15/2	PROCESSOR UNIT OL-91 FYA- 10(V)	9L08687 9L087442 9L08743 9L08744 9L08745 9L08746	AC CONTROLLER PROCESSING ASSEMBLY 1/0 CONTROLLER AND DATA ASSEMBLY 12-WORD MEMORY CHARACTER INTERFACE ASSEMBLY MEMORY CONTROL ASSEMBLY
11-5895-407-15/2	LINE TERMINATION BUFFER UNIT OA-8299(P) /FYA- 10(V)	9L08811 9L08840 9L08885	LTB SYNCHRONOUS LTB ASYNCHRONOUS LIA ASSEMBLY
11-5895-408-15/2	CONTROL GROUPS, MAGNETIC TAPE OK-30/FYA-10(V) AND OK-36/FYA-10(V) TI	9L08856 9L08857	MAGNETIC TAPE CONTROLLER (CTR) MAGNETIC TAPE CONTROLLER (ATCV)
11-5895-420-15/2	CONTROL GROUP, PERIPHERAL INPUT-OUTPUT OK-31/FYA-10(V) AND OK-37/FYA-10(V) TI	9L08867 9L08902 9L08923 9L0B973	PRINTER CONTROLLER 1/0 BUFFER MEMORY SINGLE LINE TERMINATION BUFFER READER PUNCH BUFFER CONTROLLER
11-5895-421-15/2	CARD PUNCH UNIT RO-328/FYA-10(V)	9L08946	CONTROLLER
11-5895-422-1/2	CARD READER UNIT RP-165, FYA- 10(V)	9L08968	CONTROLLER
11-5835-512-5/2	CONSOLE, STATION SUPERVISORY OJ-49/FYA-10(V) AND OJ-51/FYA-10(V)	9L09063 9L09064 9L09069	SYSTEM STATUS AND CONTROL LOGIC CHANNEL STATUS LOGIC (REAR) CHANNEL STATUS LOGIC (FRONT)
11-5895-513-15/2	CONTROL GROUP, MAGNETIC DRUM OK-321 FYA-10(V) AND MAGNETIC DRUM UNIT OA-8285/ FYA- 10(V)	9L08868 9L08877 9L08878 9LD8974	FLOW CHARTS, BLOCK AND TIMING DIAGRAM DRUM MATRIX (FIXED PAGE) DRUM ASSEMBLER (HINGED PAGE) DRUM UNIT
11-5895-554-15/3	PRINTED CIRCUIT CARD TESTER FOR AUTOMATIC DIGITAL MESSAGE SWITCHING GROUPS AN/FYA-10(V) 1 THROUGH AN/FYA-10(V) 7 AND AN/FYA-10(V) TI	9L09425 9L09426 9L09427 9L09428 9L09429 9LG9430 9L09431	CONTROL CONSOLE SIGNAL SOURCE TEST UNIT NO. 1 TEST UNIT NO. 2 TEST UNIT NO. 3 TEST UNIT NO. 4 TEST UNIT NO. 5
11-5895-734-15	CONSOLE MAINTENANCE OJ-175/FYA-10(V)	9L09000	ROLL AROUND CONSOLE
11-5895-747-15/1 11-5895-747-15/2	DATA AND WIRING LIST FOR AUTOMATIC DIGITAL MESSAGE SWITCHING GROUPS AN/FYA-10(V) I THROUGH AN/FYA-10(V) 7 AND AN/FYA-10(V) TI OF AUTOMATIC DIGITAL MESSAGE SWITCHING CENTERS AN/ FYQ-42(V) 1 THROUGH AN/FYQ-42(V) 12 AND AN/FYQ-42(V) T1		
11-5895-773-14/2	SWITCHING UNITS, MEMORY SA-1842(V) 1/FYA-10(V) THROUGH SA-1842(V) 5/FYA-10(V)	9L0100619	MEMORY EXPANSION ADAPTER

TM 11-5895-422-14-2/NAVELEX 0967-301-5371/TO 31S5-2FYA10-111-2

12 11 10 9 7 6 5 4 3 2 1

NOTICE WHEN GOVERNMENT DRAWINGS SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWING SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE USE OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS					REVISIONS				
SYM	ZONE	DESCRIPTION	DATE	APPROVED	SYM	ZONE	DESCRIPTION	DATE	APPROVED
N		REVISED SHEETS 1, 3 THRU 6, 11, 12, 14 MD CORRECTIONS	21 NOV 72	[Signature]			DEVELOPMENT RELEASED 6R-35097 NOV 1 1965	11-12-65	[Signature]
	A	REVISED AND REISSUED SHEETS 3, 4, 5, 8, 10, 11, 12, 14 AND 15 PER 6D6256. JAN 2 1 1966						1-18-66	[Signature]
	B	REVISED AND REISSUED SHEETS 3 THRU 13, 15 & 18 PER 6D6323.						3-10-66	[Signature]
		FORMAL RELEASE 6R 38840 MAR 1 5 1966						3-10-66	[Signature]
	C	REVISED SHEET 17 PER 6D50930. JUN 16 1966						6-7-66	[Signature]
	D	REVISED AND REISSUED SHEETS 3, 5, 13 AND 14 PER 6D51624. AUG 19 1966						8-11-66	[Signature]
	E	REVISED AND REISSUED SHEETS 3, 5, 11 AND 12 PER 6D51625. AUG 19 1966						8-12-66	[Signature]
	F	REVISED SHEETS 3, 5 & 12 PER 6D53075. JAN 5 1967						1-3-67	[Signature]
	G	REVISED SHEETS 4 AND 14 PER 6D53106. JAN 5 1967						1-5-67	[Signature]
	H	SEE 6D54648 JUN 19 1967						6-18-67	[Signature]
	J	SEE 6D55890. OCT 27 1967						10-27-67	[Signature]
	K	REVISED SHEET 9 SEE 6D56616 JAN 3 1968						1-3-68	
	L	REVISED SHEETS 3, 11, 12 SEE 6D57033 MAR 4 1968						2-16-68	
	M	REVISED SHEETS 1, 3 THRU 9, 12, 14 THRU 21. DELETE SHEETS 8 AND 9. PER DCA EMR-106 JAN 72						JAN 72	

FOR LIST OF MATERIALS SEE LM

(AS) (1) (D)

INTERPRET DRAWING IN ACCORDANCE WITH STDS PRESCRIBED BY MIL-D-70327		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES ±0°30' 3 PLACE DECIMALS ±.010 2 PLACE DECIMALS ±.03 ALL SURFACES ✓	CONTRACT NO. K025		PHILCO <small>A Division of Ford Motor Company</small> COMMUNICATIONS AND ELECTRONICS DIVISION PHILA., PA.	
			DRAWN	DATE	LOGIC DIAGRAMS READER CONTROLLER (RC 156)	
		CHECKED		COG IDENT NO. SIZE 46859 B		
		DO NOT SCALE THIS DWG	APPROVED	3/10/66	SCALE SHEET 1 of 18	
		MATERIAL				
NEXT ASSY USED ON		PROTECTIVE FINISH				
APPLICATION						

K
J
H
G
F
E
D
C
B
A

K
J
H
G
F
E
D
C
B
A

15 14 13 12 11 10 9 7 6 5 3

TM 11-5895-422-14-2/NAVSHIPS 0967-301-5370 / TO 31S5-2FYA10-III-2

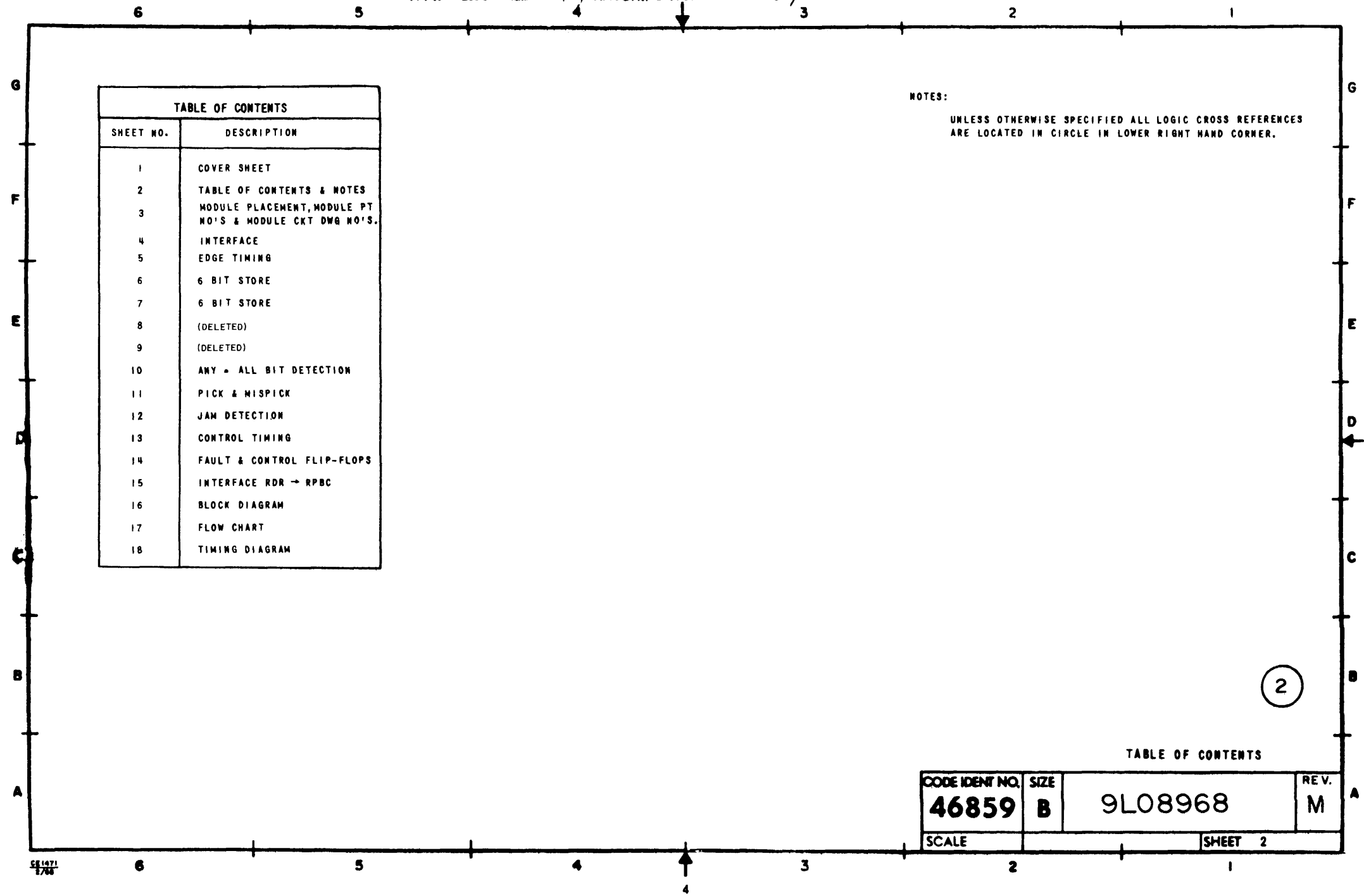


TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	TABLE OF CONTENTS & NOTES
3	MODULE PLACEMENT, MODULE PT NO'S & MODULE CKT DWG NO'S.
4	INTERFACE
5	EDGE TIMING
6	6 BIT STORE
7	6 BIT STORE
8	(DELETED)
9	(DELETED)
10	ANY - ALL BIT DETECTION
11	PICK & MISPICK
12	JAM DETECTION
13	CONTROL TIMING
14	FAULT & CONTROL FLIP-FLOPS
15	INTERFACE RDR → RPBC
16	BLOCK DIAGRAM
17	FLOW CHART
18	TIMING DIAGRAM

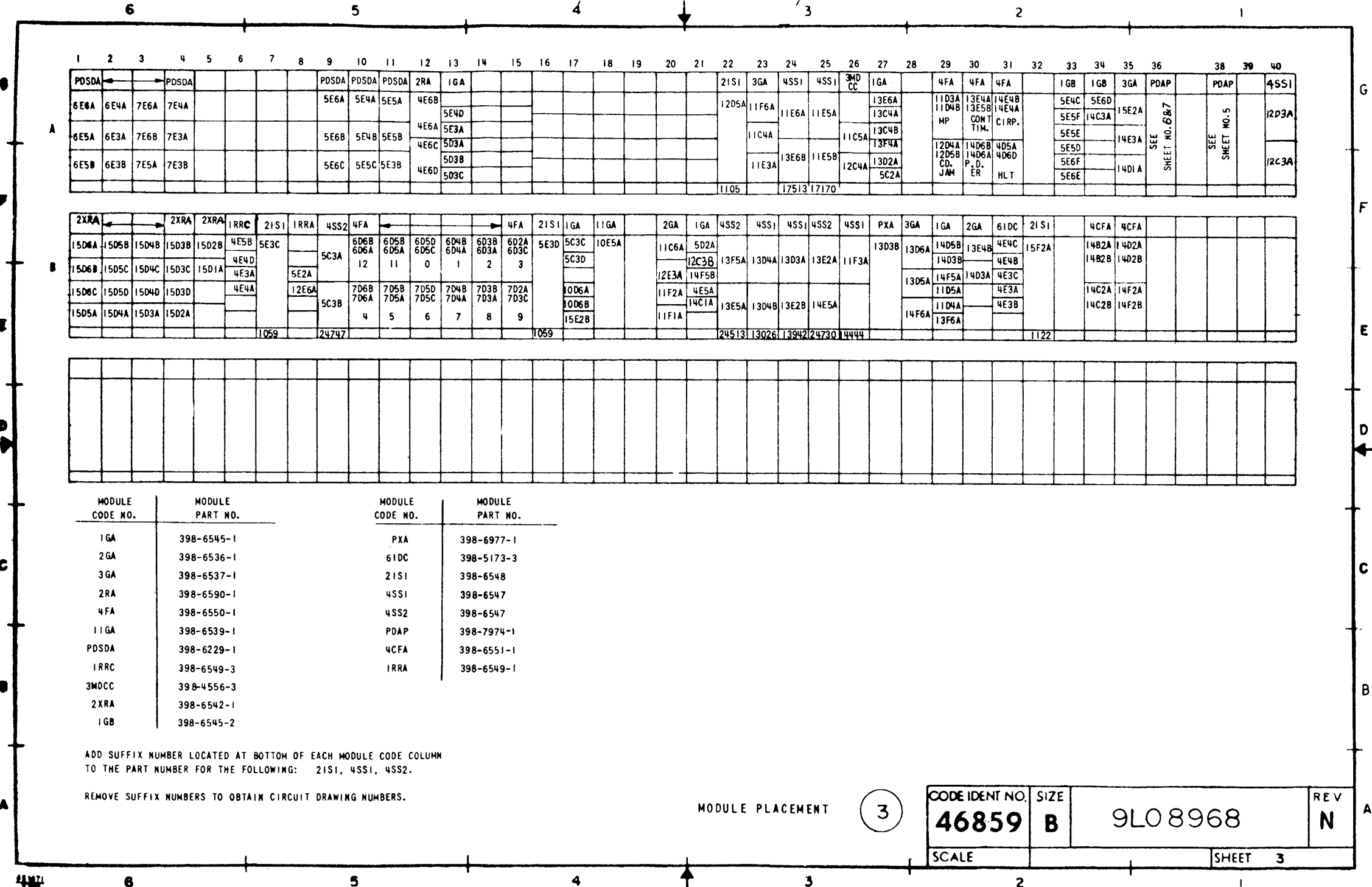
NOTES:
UNLESS OTHERWISE SPECIFIED ALL LOGIC CROSS REFERENCES ARE LOCATED IN CIRCLE IN LOWER RIGHT HAND CORNER.

2

TABLE OF CONTENTS			
CODE IDENT NO.	SIZE	REV.	
46859	B	M	9L08968
SCALE	SHEET 2		

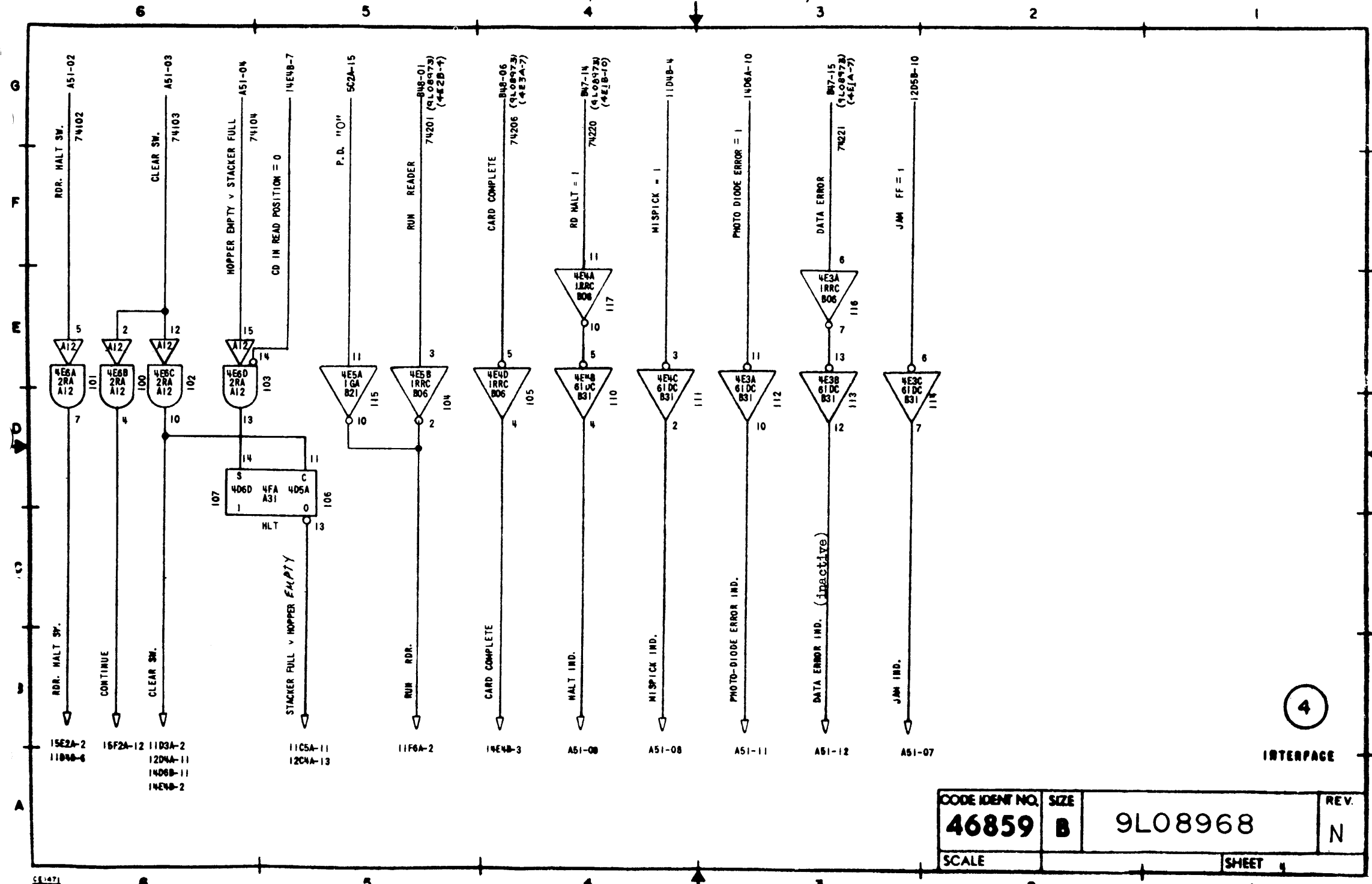
SE 1471
1/68

TM 11-5895-422-14-2 / NAVELEX 0967-301-5371 / TO 31S5-2FYA10-111-2



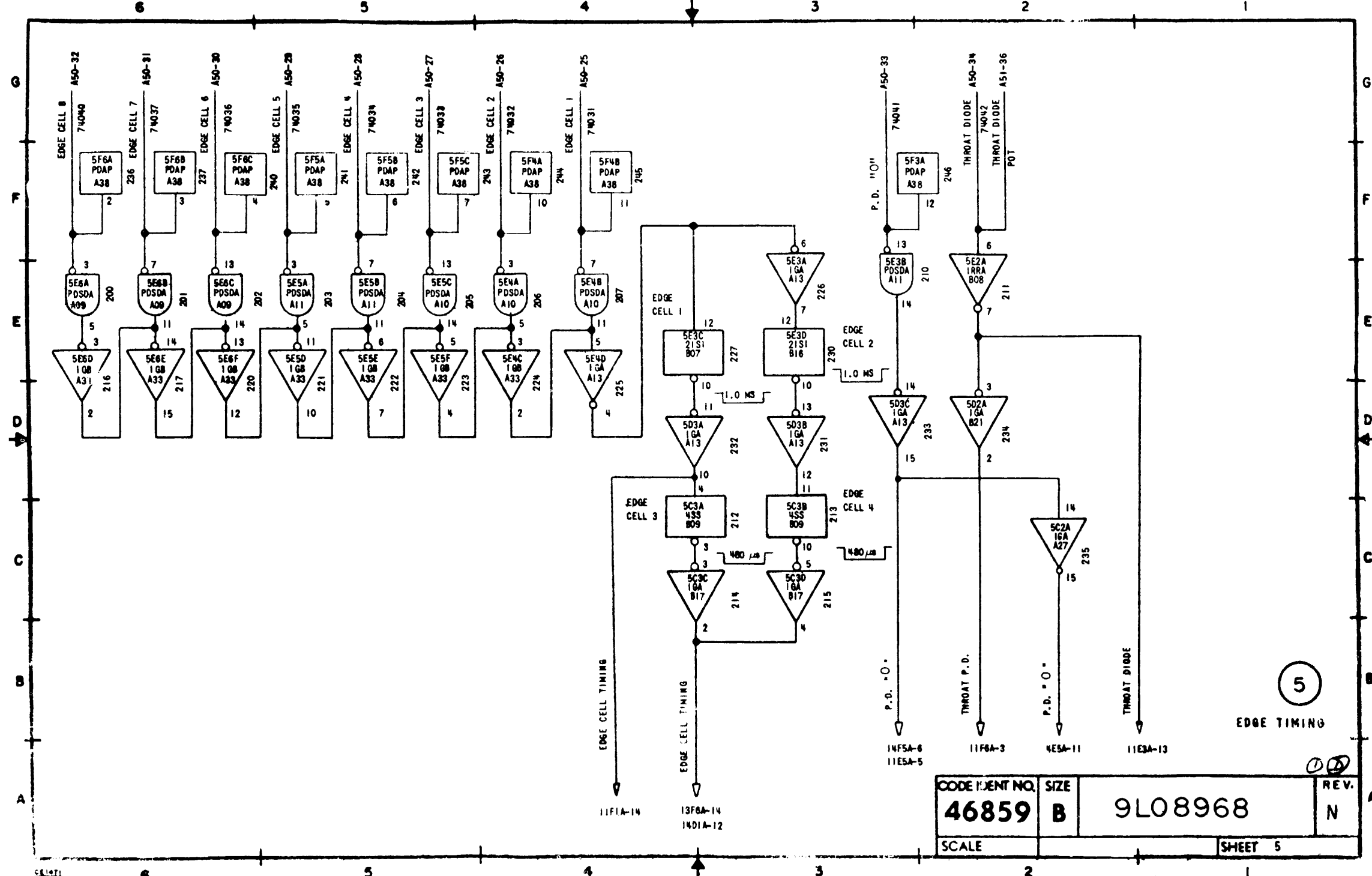
Change1 5

TM 11 - 5895 - 422 - 14-2 / NAVELEX 0967 - 301 - 5371 / TO 31S5 - 2FYA10 - 111- 2



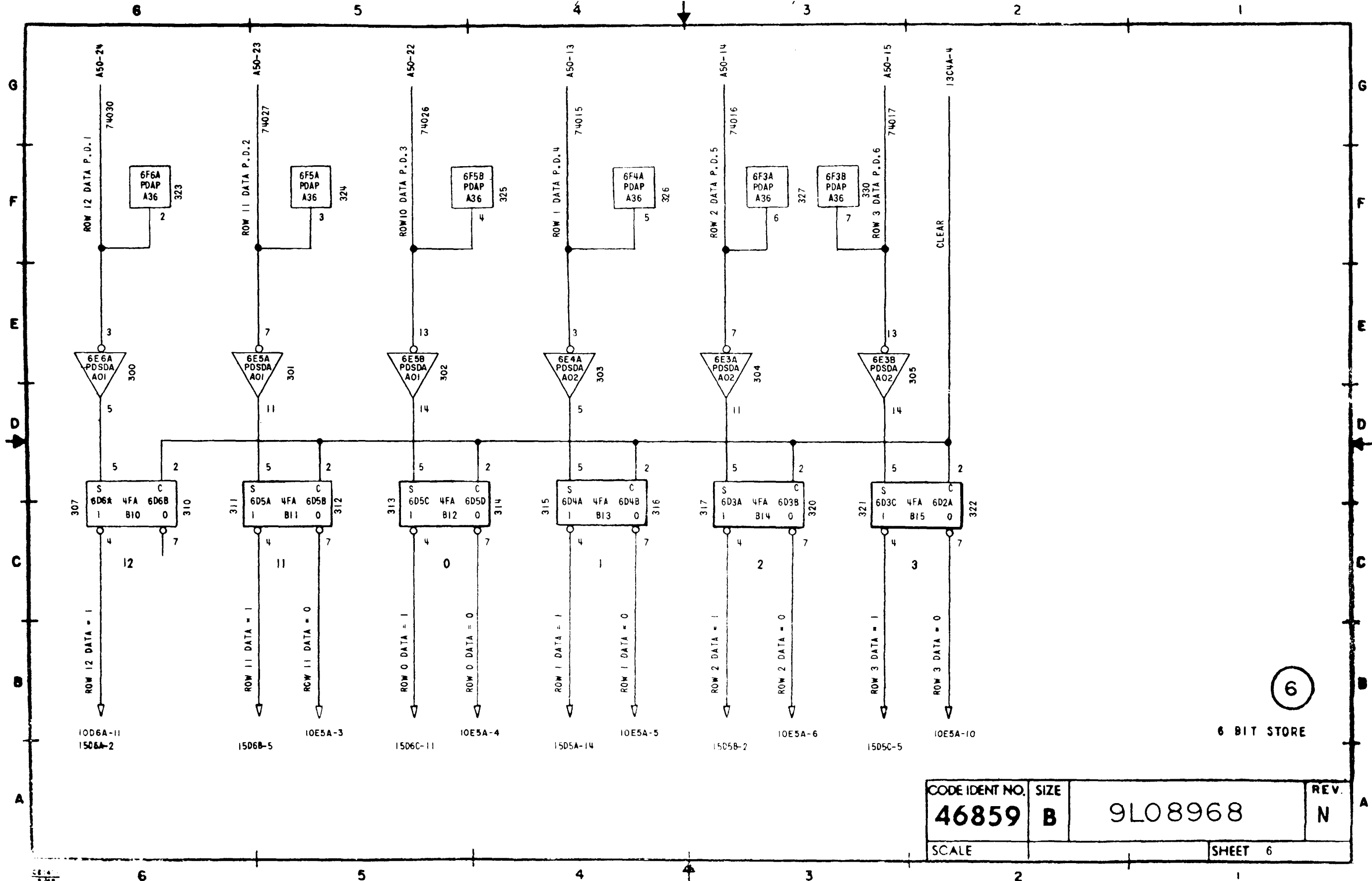
Change 1 6

TM 11-5895-422-14-2 / NAVYEX 0967-301-5371 / TO 31S5-2FYA10-111-2



CODE IDENT NO.	SIZE	REV.
46859	B	N
SCALE		SHEET 5

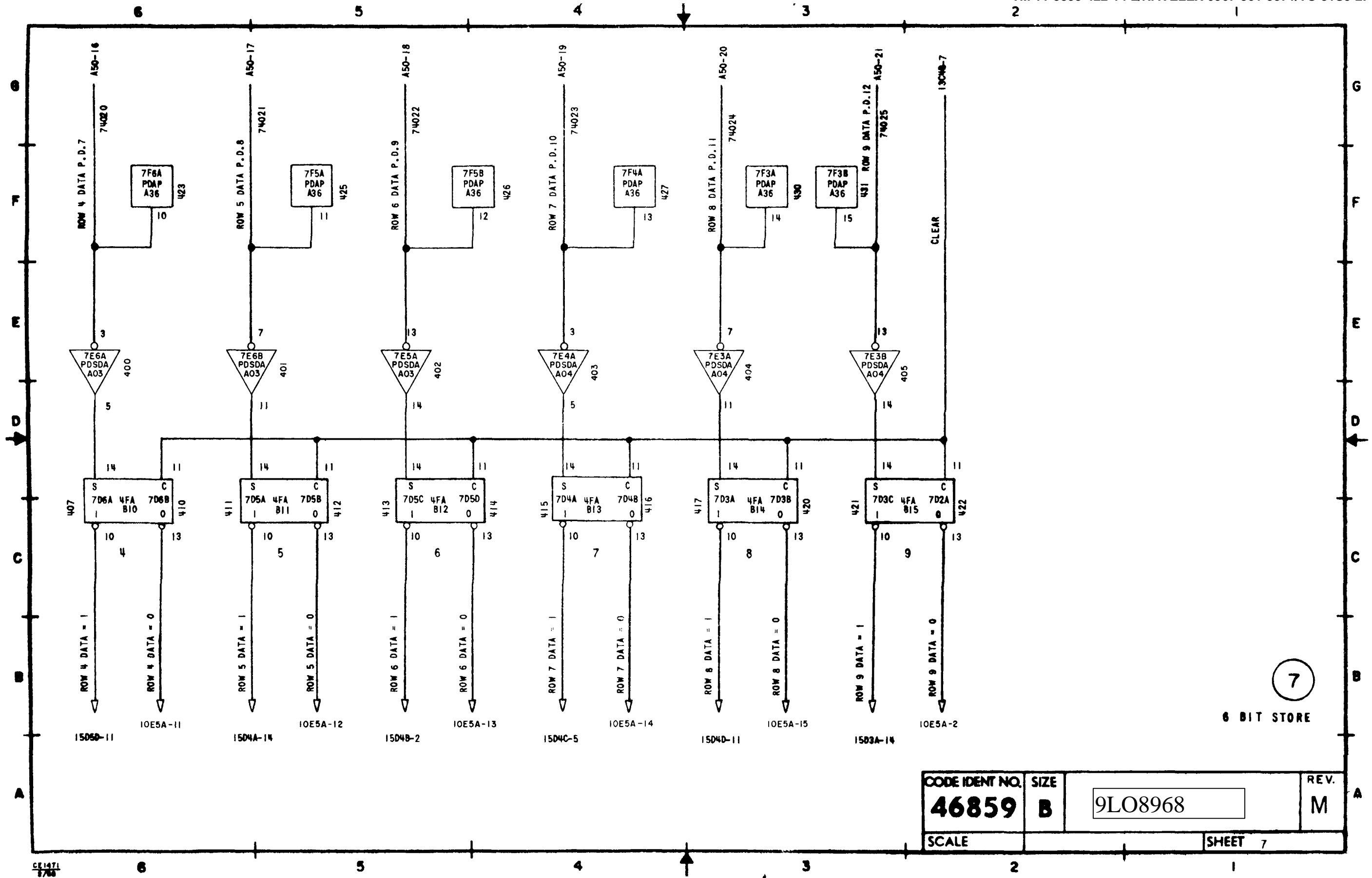
Change 1 7



6

6 BIT STORE

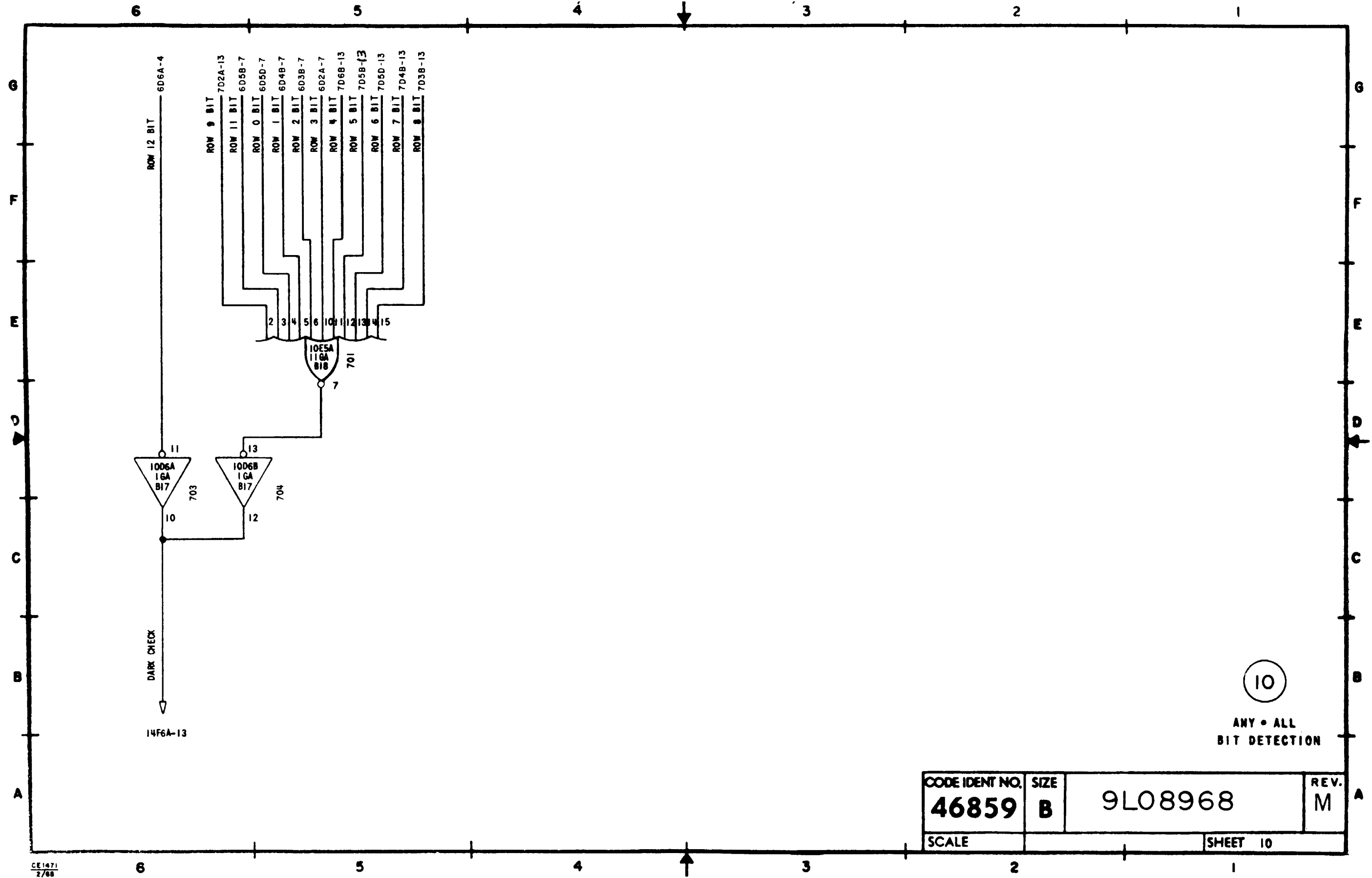
CODE IDENT NO.	SIZE	9L08968	REV.
46859	B		N
SCALE		SHEET 6	



7

6 BIT STORE

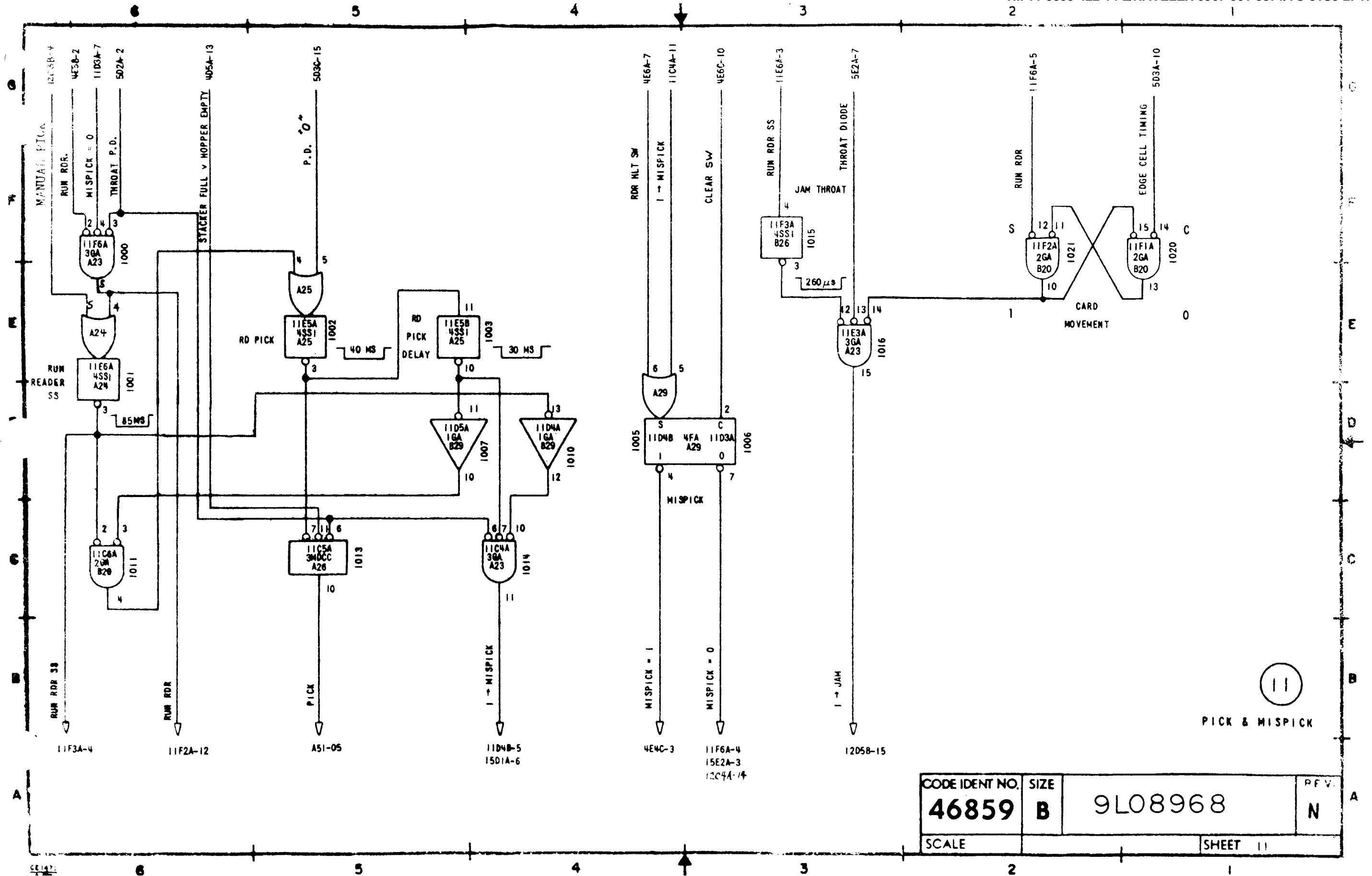
CODE IDENT NO. 46859	SIZE B	REV. M
9LO8968		
SCALE	SHEET 7	



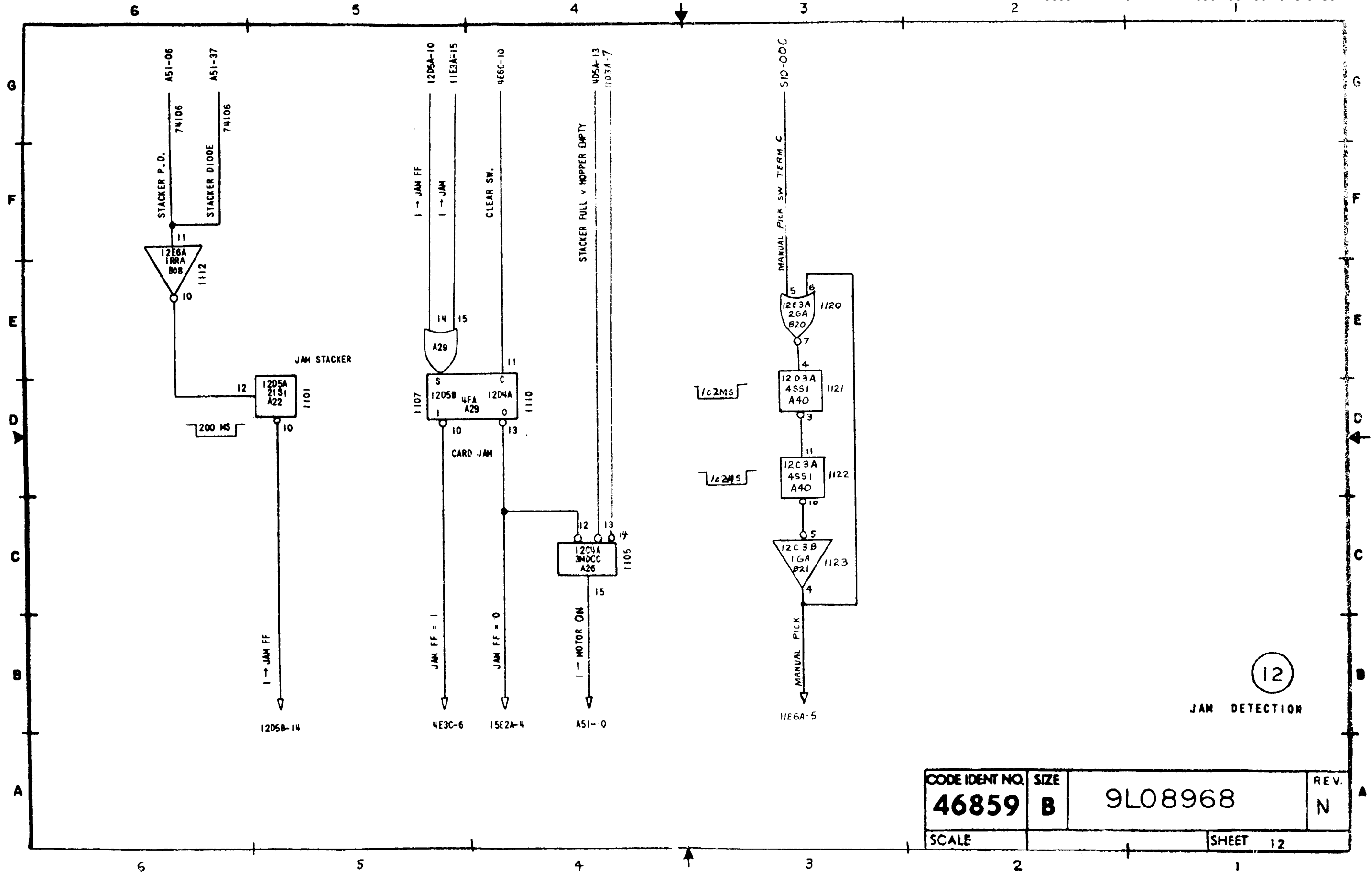
10

ANY • ALL
BIT DETECTION

CODE IDENT NO. 46859	SIZE B	9L08968	REV. M
SCALE		SHEET 10	



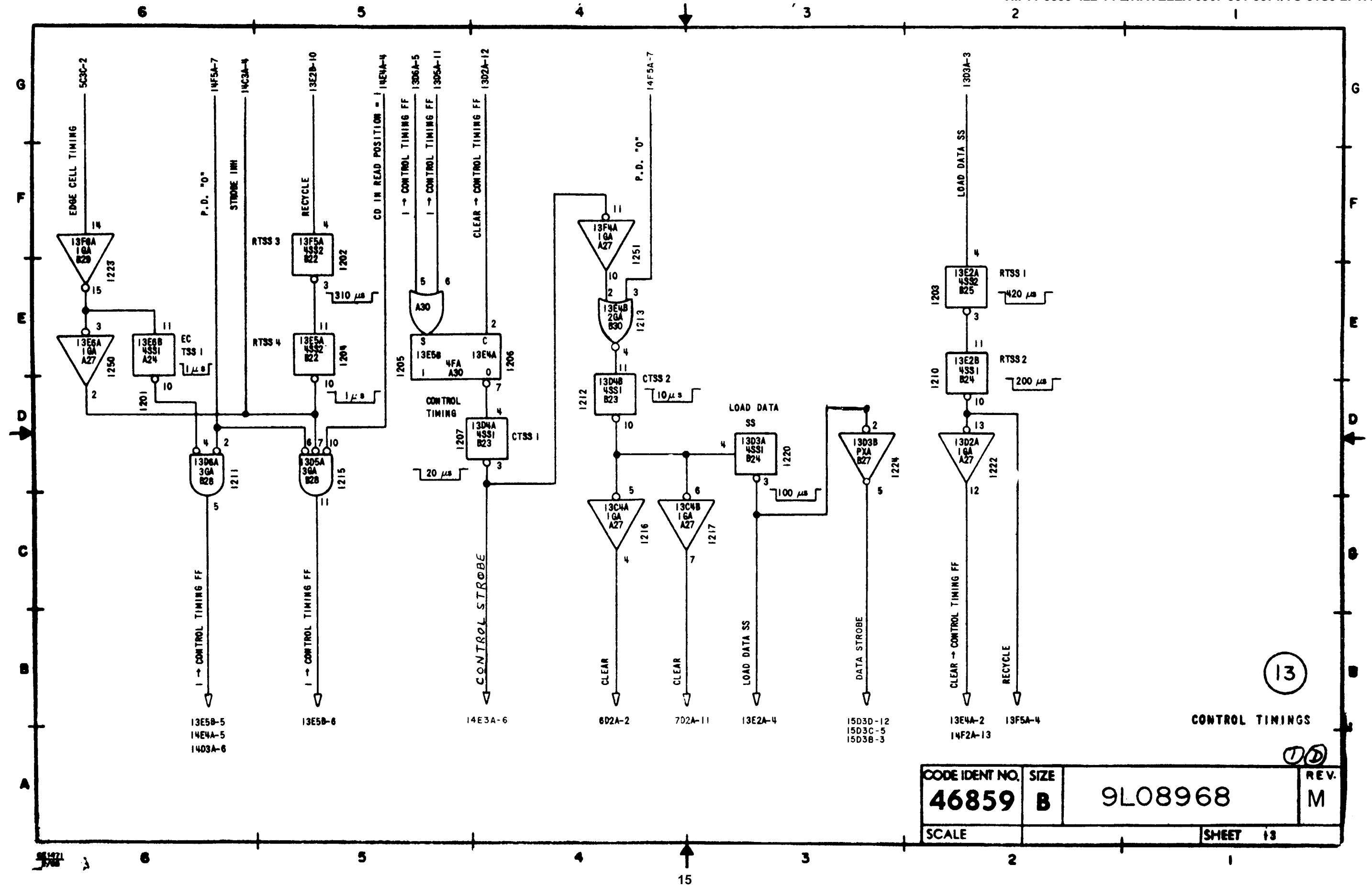
CODE IDENT NO.	SIZE	REV.
46859	B	N
SCALE		SHEET 11
9L08968		



12

JAM DETECTION

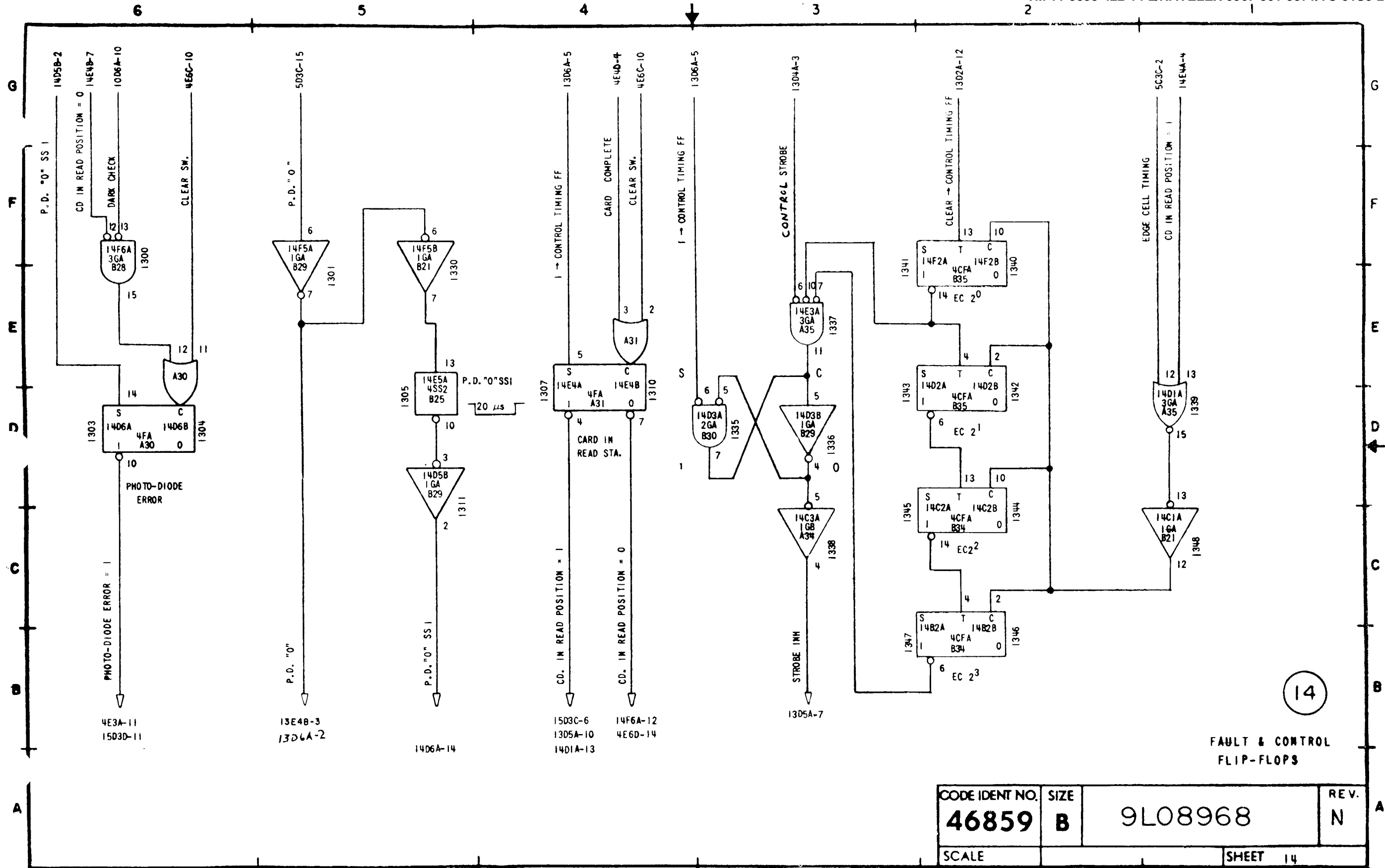
CODE IDENT NO. 46859	SIZE B	9L08968	REV. N
SCALE		SHEET 12	



13

CONTROL TIMINGS

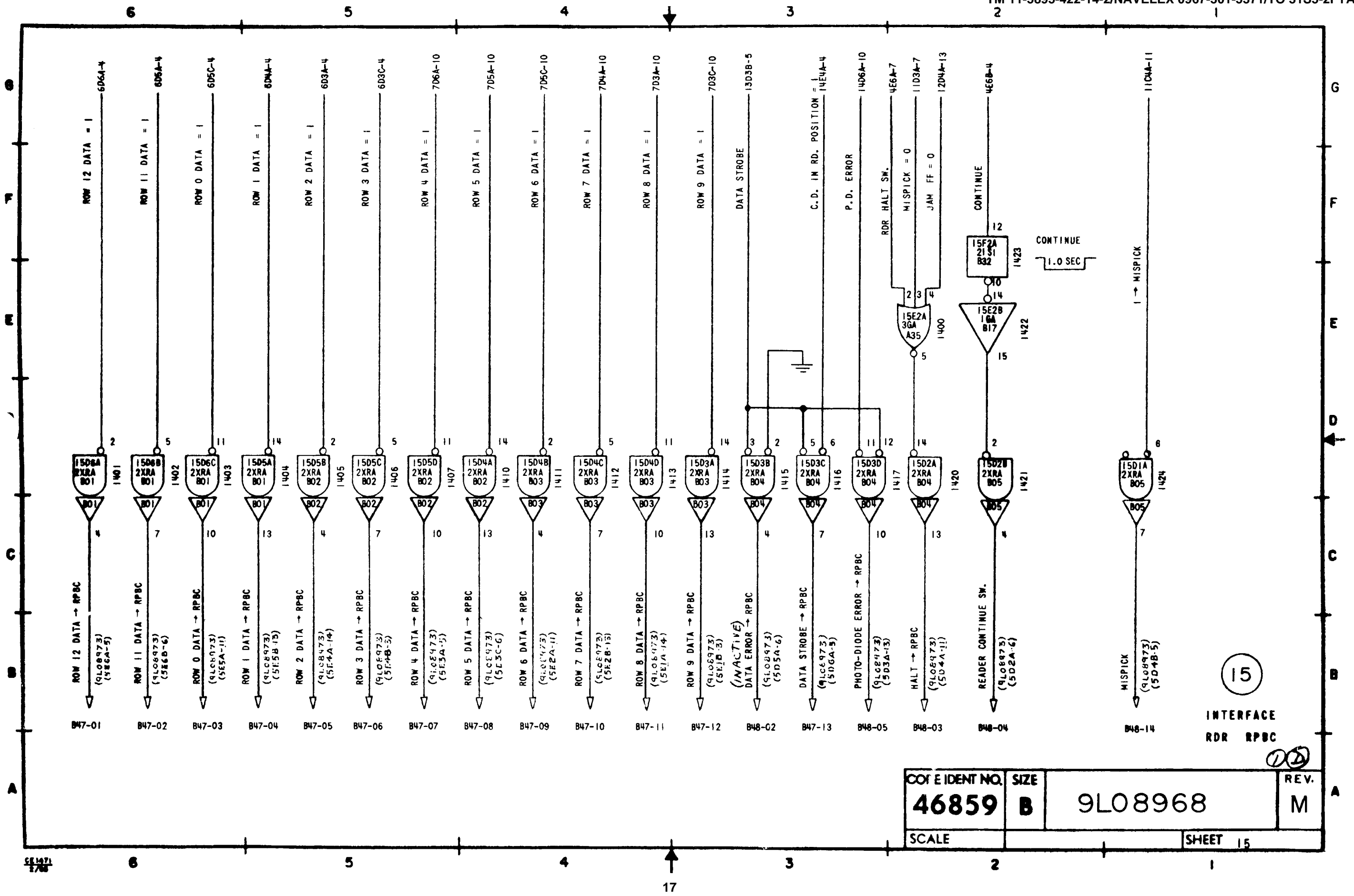
CODE IDENT NO.	SIZE	9L08968	REV.
46859	B		M
SCALE	SHEET 13		



14

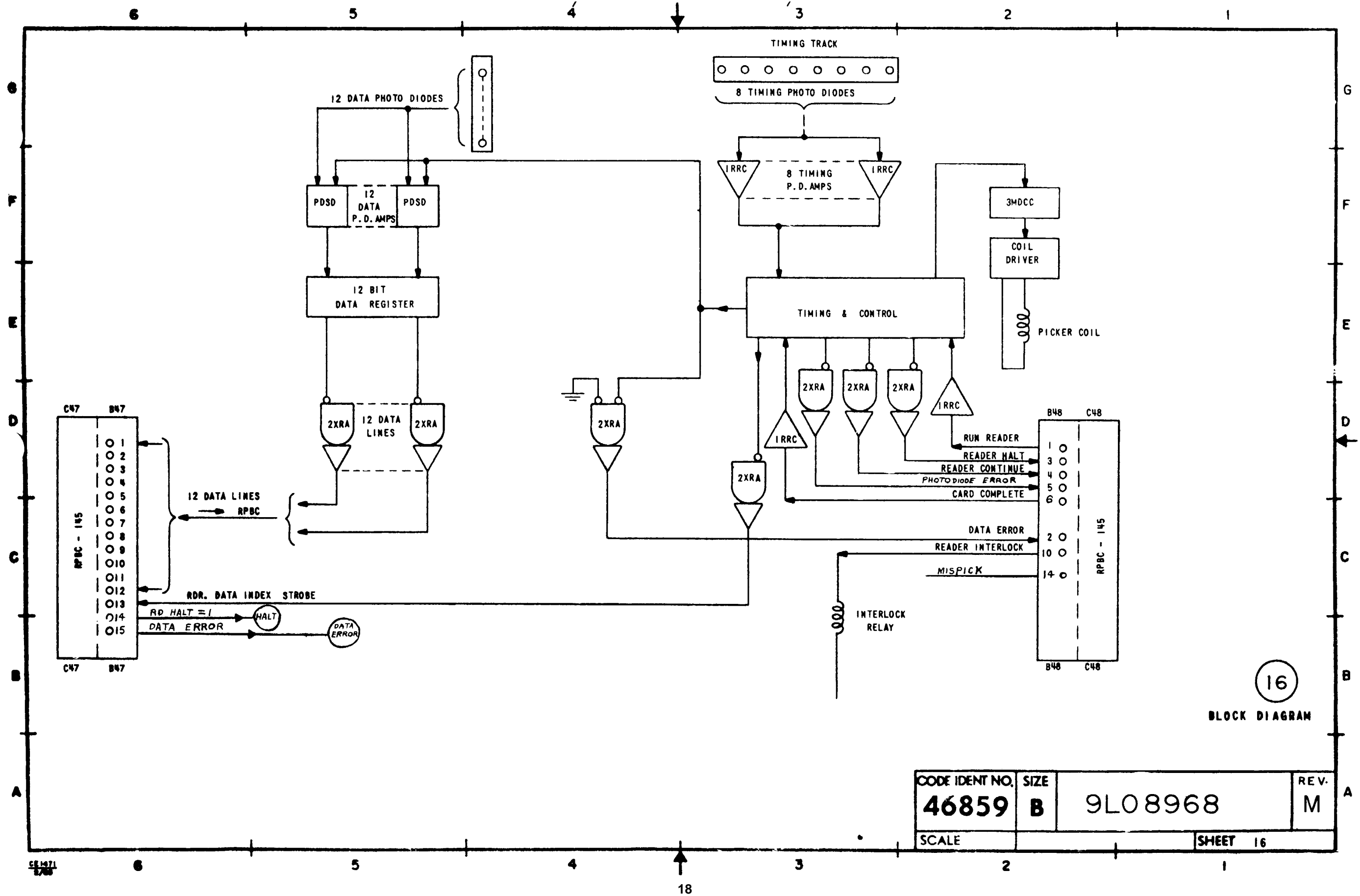
FAULT & CONTROL FLIP-FLOPS

CODE IDENT NO. 46859	SIZE B	9L08968	REV. N
SCALE	SHEET 14		



15
INTERFACE
RDR RPBC

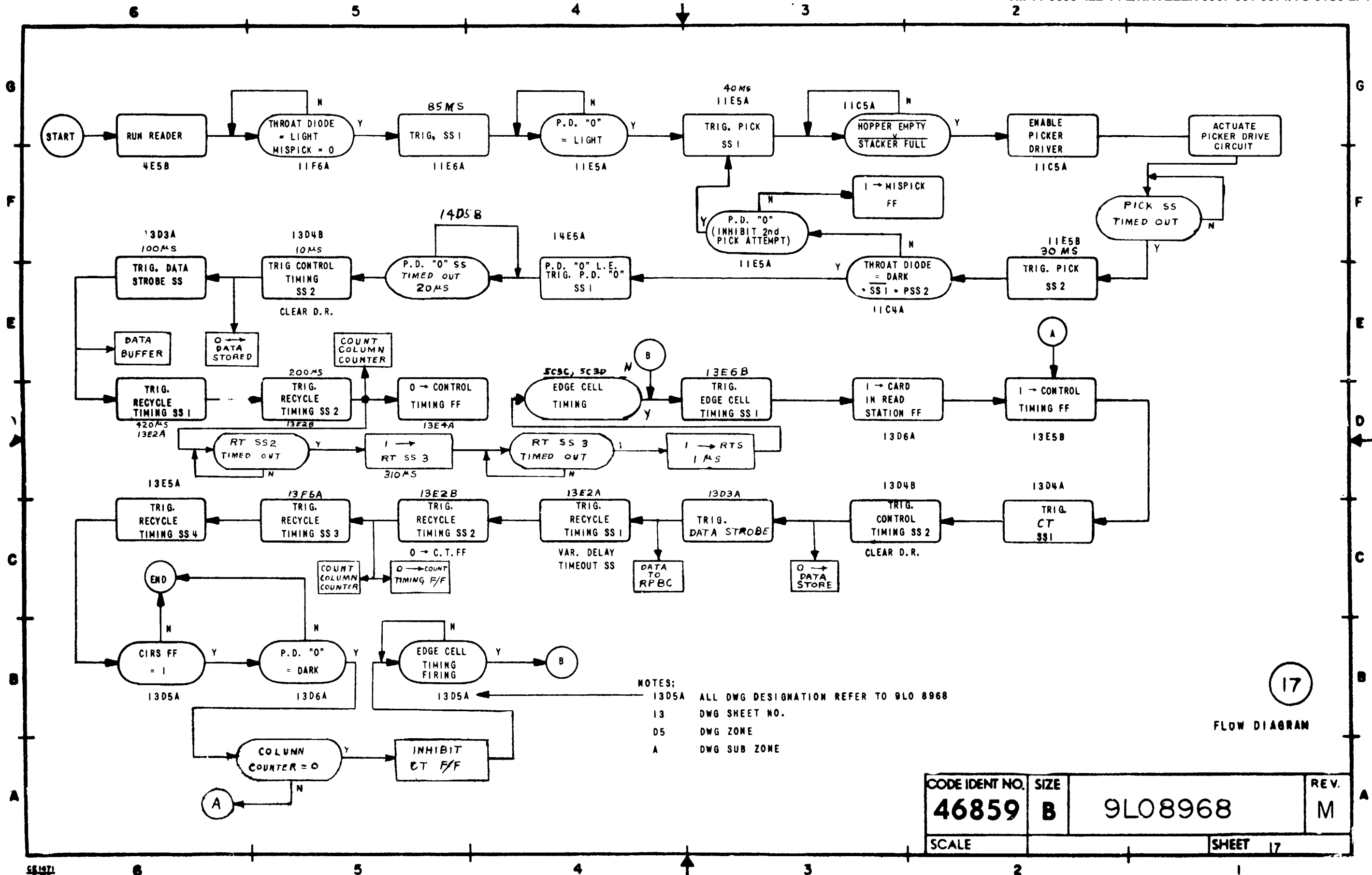
COF E IDENT NO. 46859	SIZE B	9L08968	REV. M
SCALE		SHEET 15	



16

BLOCK DIAGRAM

CODE IDENT NO.	SIZE	9L08968	REV.
46859	B		M
SCALE		SHEET 16	

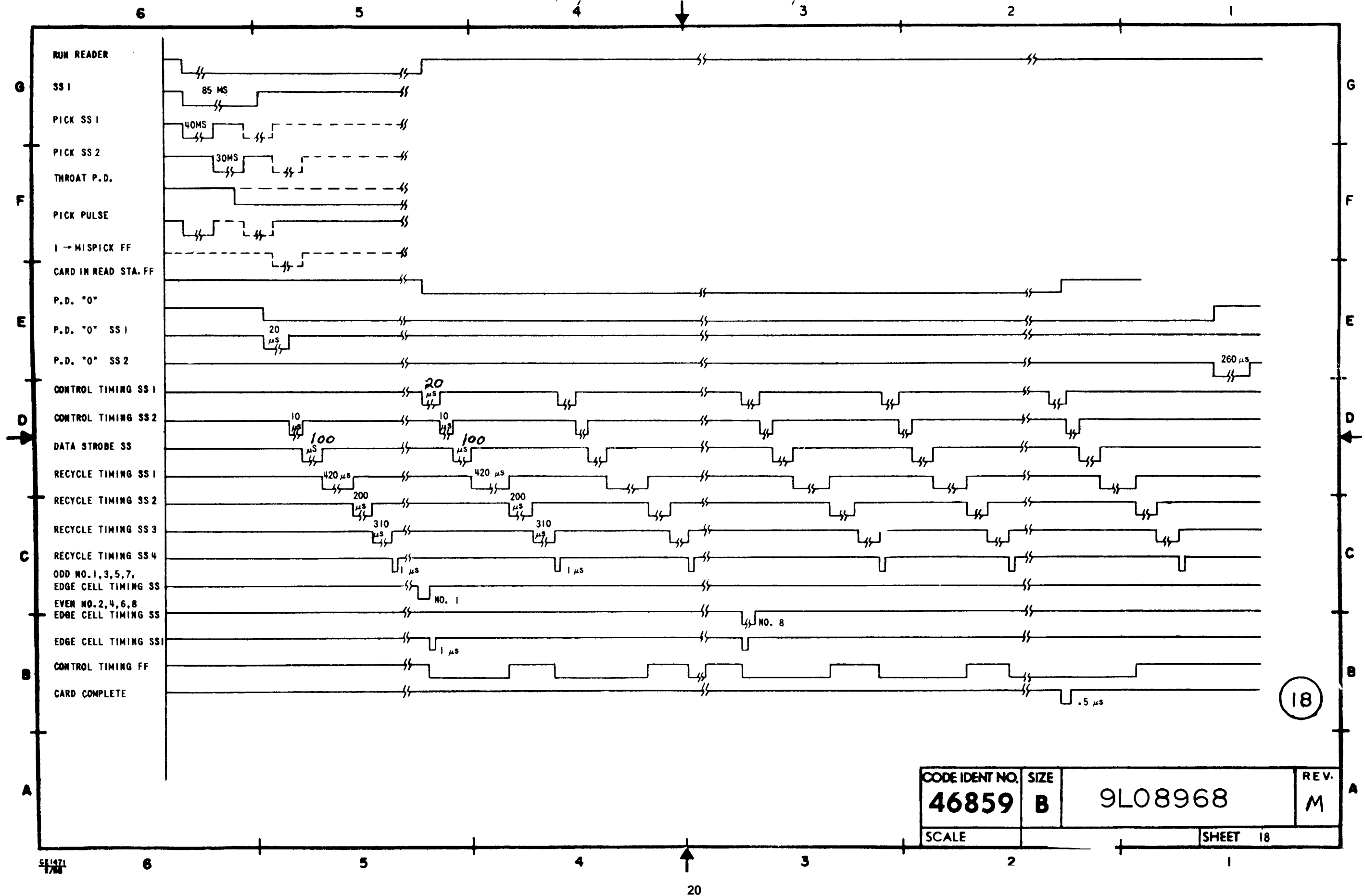


NOTES:
 13D5A ALL DWG DESIGNATION REFER TO 9L0 8968
 13 DWG SHEET NO.
 D5 DWG ZONE
 A DWG SUB ZONE

17

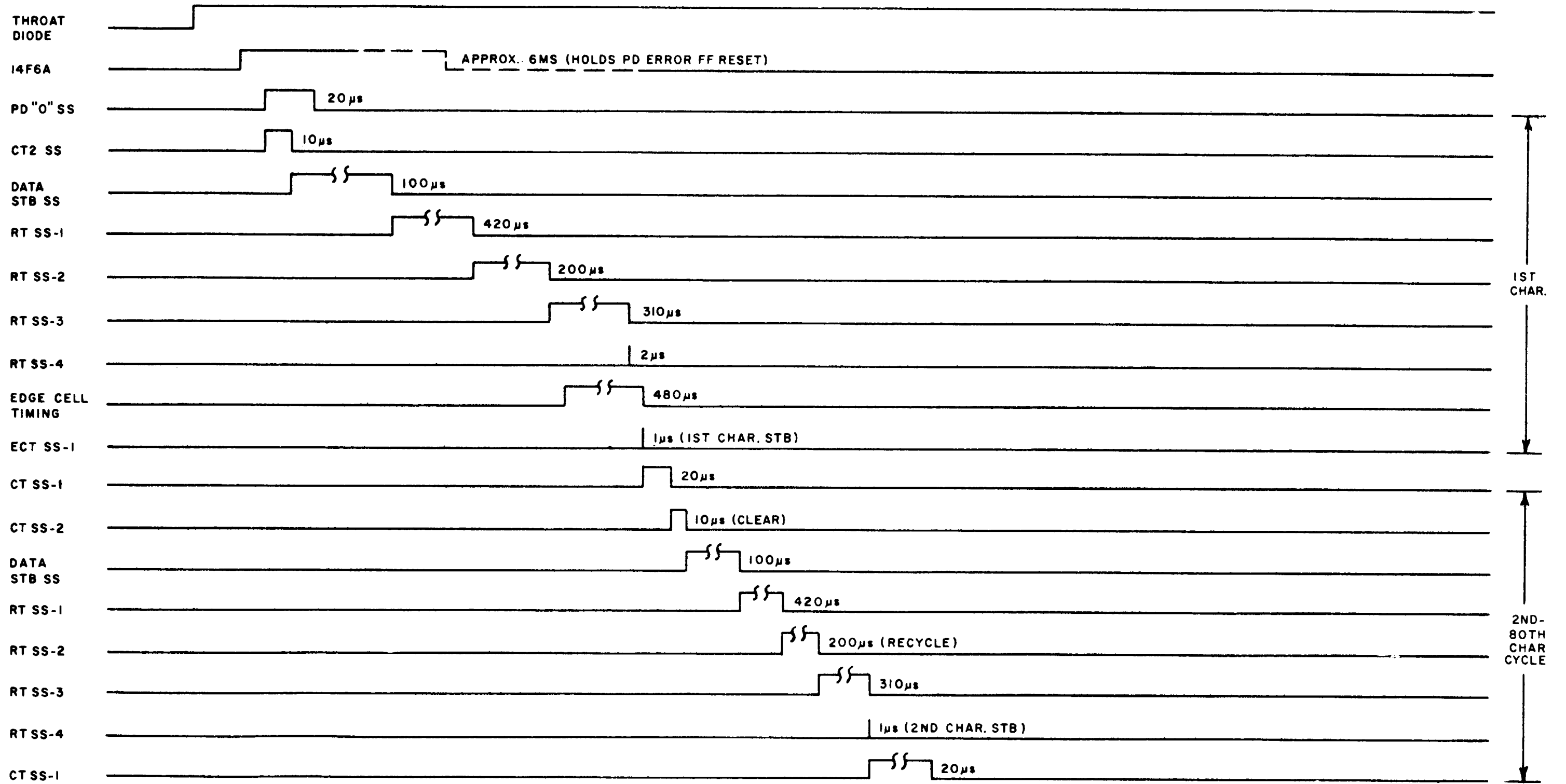
FLOW DIAGRAM

CODE IDENT NO. 46859	SIZE B	9L08968	REV. M
SCALE		SHEET 17	



18

CODE IDENT NO.	SIZE	REV.
46859	B	M
9L08968		
SCALE	SHEET 18	



CABLE READER TIMING

By order of the Secretaries of the Army, the Navy, and the Air force:

Official

VERNE L. BOWERS,
Major General, United States Army
The Adjutant (General).

W. (C. WESTMORELAND,
General, United States Army
Chief of Staff

JOSEPH E. RICE
Rear Admiral, U.S. Navy
Commander Naval Electronics Systems
Command

Official

DWIGHT W. COVELL, Colonel, USAF
Director of Administration

JOHN D. RYAN, General, USAF
Chief of Staff

Distribution

Active Army:

CNGB (1)
USASA (2)
USASA (Pac) (1)
USASAE (1)
ACSC-E (2)
ACSFOR (2)
USAMB (10)
USACDC (2)
USACDCCEA (1)
USACDCCEA Ft Huachuca (1)
AMC (1)
CONARC (2)
LOGCOMD (2)
OS Maj Comd (2)
USARV (3)
USARJ (2)
USARYIS (3)
USACOMZEUR (3)
USAREUR (3)
CINCPAC (3)
USARPAC (2)
TECOM (2)
MICOM (2)
USASTRATCOM (5)
USASTRATCOM-PAC (.5)
USASTRATCOM-EUR (5)
USASTRATCOM-SO (3)
USASTRATCOM-A (3)
USASTRATCOM SIG (GP-T) (3)
USASTRATCOM-CONUS (3)
SATCOM (2)
USACSA (4)
USACDCEC (10)

USASESS (3)
USAINTS (3)
USASCS (5)
7th & 8th Armies (4)
Sig Bde (USASTRATCOM) Korea (1)
Sig Gp (USASTRATCOM) Japan (1)
Sig Gp (USASTRATCOM) Taiwan (1)
Army Depots (2) except
ATAD (5)
LBAD (5)
LEAD (5)
SAAD (15)
TOAD (10)
USA Dep (2) except
Pirmasens (10)
Sig Dep (2)
Sig Sec USA Dep (2)
Sig FLDMS (1)
USAERDAA (1)
USAERDAW (1)
ICC (1)
1st Sig Bde (2)
Fort Carson (2)
Ft Richardson (ECOM Ofc) (2)
Units org under fol TOE:
(1 copy each)
11-75
11-85
11-95
11-158
11-302
29-134
29-136

NG: None

USAR: None

For explanation of abbreviations used, see AR 310-50.

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN... JOT DOWN THE DOPE ABOUT IT ON THIS FORM, CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

PUBLICATION DATE

PUBLICATION TITLE

BE EXACT... PIN-POINT WHERE IT IS

PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.
----------	------------	------------	-----------

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

TEAR ALONG PERFORATED LINE

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE:

This fine document...

Was brought to you by me:



[Liberated Manuals -- free army and government manuals](#)

Why do I do it? I am tired of sleazy CD-ROM sellers, who take publicly available information, slap “watermarks” and other junk on it, and sell it. Those masters of search engine manipulation make sure that their sites that sell free information, come up first in search engines. They did not create it... They did not even scan it... Why should they get your money? Why are not letting you give those free manuals to your friends?

I am setting this document FREE. This document was made by the US Government and is NOT protected by Copyright. Feel free to share, republish, sell and so on.

I am not asking you for donations, fees or handouts. If you can, please provide a link to liberatedmanuals.com, so that free manuals come up first in search engines:

<A HREF=<http://www.liberatedmanuals.com/>>Free Military and Government Manuals

- Sincerely
Igor Chudov
<http://igor.chudov.com/>
- [Chicago Machinery Movers](#)