

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

<p>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.</p>				<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>SYM</th> <th>ZONE</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPROVED</th> </tr> </thead> <tbody> <tr> <td>N</td> <td></td> <td>REVISED SHEETS 1, 3 THRU 6, 11, 12, 14 MD CORRECTIONS</td> <td>21 NOV 72</td> <td>[Signature]</td> </tr> </tbody> </table>				SYM	ZONE	DESCRIPTION	DATE	APPROVED	N		REVISED SHEETS 1, 3 THRU 6, 11, 12, 14 MD CORRECTIONS	21 NOV 72	[Signature]	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>SYM</th> <th>ZONE</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APPROVED</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>DEVELOPMENT RELEASED 6R-35097 NOV 1 1965</td> <td>11-12-65</td> <td>[Signature]</td> </tr> <tr> <td>A</td> <td></td> <td>REVISED AND REISSUED SHEETS 3, 4, 5, 8, 10, 11, 12, 14 AND 15 PER 6D6256. JAN 2 1 1966</td> <td>1-18-66</td> <td>[Signature]</td> </tr> <tr> <td>B</td> <td></td> <td>REVISED AND REISSUED SHEETS 3 THRU 13, 15 &amp; 18 PER 6D6323.</td> <td>3-10-66</td> <td>[Signature]</td> </tr> <tr> <td></td> <td></td> <td>FORMAL RELEASE 6R 38840 MAR 1 5 1966</td> <td>3-10-66</td> <td>[Signature]</td> </tr> <tr> <td>C</td> <td></td> <td>REVISED SHEET 17 PER 6D50930. JUN 16 1966</td> <td>6-7-66</td> <td>[Signature]</td> </tr> <tr> <td>D</td> <td></td> <td>REVISED AND REISSUED SHEETS 3, 5, 13 AND 14 PER 6D51624. AUG 19 1966</td> <td>8-11-66</td> <td>[Signature]</td> </tr> <tr> <td>E</td> <td></td> <td>REVISED AND REISSUED SHEETS 3, 5, 11 AND 12 PER 6D51625. AUG 19 1966</td> <td>8-12-66</td> <td>[Signature]</td> </tr> <tr> <td>F</td> <td></td> <td>REVISED SHEETS 3, 5 &amp; 12 PER 6D53075. JAN 5 1967</td> <td>1-3-67</td> <td>[Signature]</td> </tr> <tr> <td>G</td> <td></td> <td>REVISED SHEETS 4 AND 14 PER 6D53106. JAN 5 1967</td> <td>1-5-67</td> <td>[Signature]</td> </tr> <tr> <td>H</td> <td></td> <td>SEE 6D54648 JUN 19 1967</td> <td>6-18-67</td> <td>[Signature]</td> </tr> <tr> <td>J</td> <td></td> <td>SEE 6D55890. OCT 27 1967</td> <td>10-27-67</td> <td>[Signature]</td> </tr> <tr> <td>K</td> <td></td> <td>REVISED SHEET 3 SEE 6D56616 JAN 3 1968</td> <td>1-3-68</td> <td></td> </tr> <tr> <td>L</td> <td></td> <td>REVISED SHEETS 3, 11, 12 SEE 6D57033 MAR 4 1968</td> <td>2-16-68</td> <td></td> </tr> <tr> <td>M</td> <td></td> <td>REVISED SHEETS 1, 3 THRU 9, 12, 14 THRU 21. DELETE SHEETS 8 AND 9. PER DCA EMR-106</td> <td>1 JAN 72</td> <td></td> </tr> </tbody> </table>				SYM	ZONE	DESCRIPTION	DATE	APPROVED			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 3 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	1 JAN 72	
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<p>INTERPRET DRAWING IN ACCORDANCE WITH STDS PRESCRIBED BY MIL-D-70327</p>				<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES ±0°30' 3 PLACE DECIMALS ±.010 2 PLACE DECIMALS ±.03 ALL SURFACES ✓</p>				<p>CONTRACT NO. K025</p>				<p>PHILCO A Division of Ford Motor Company COMMUNICATIONS AND ELECTRONICS DIVISION PHILA., PA.</p>																																																																																				
<p>DO NOT SCALE THIS DWG</p>				<p>MATERIAL</p>				<p>DRAWN</p>				<p>DATE</p>																																																																																				
<p>156</p>				<p>PROTECTIVE FINISH</p>				<p>CHECKED</p>				<p>LOGIC DIAGRAMS READER CONTROLLER (RC 156)</p>																																																																																				
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TM 11-5895-422-14-2/NAVSHIPS 0967-301-5370 / TO 31S5-2FYA10-III-2

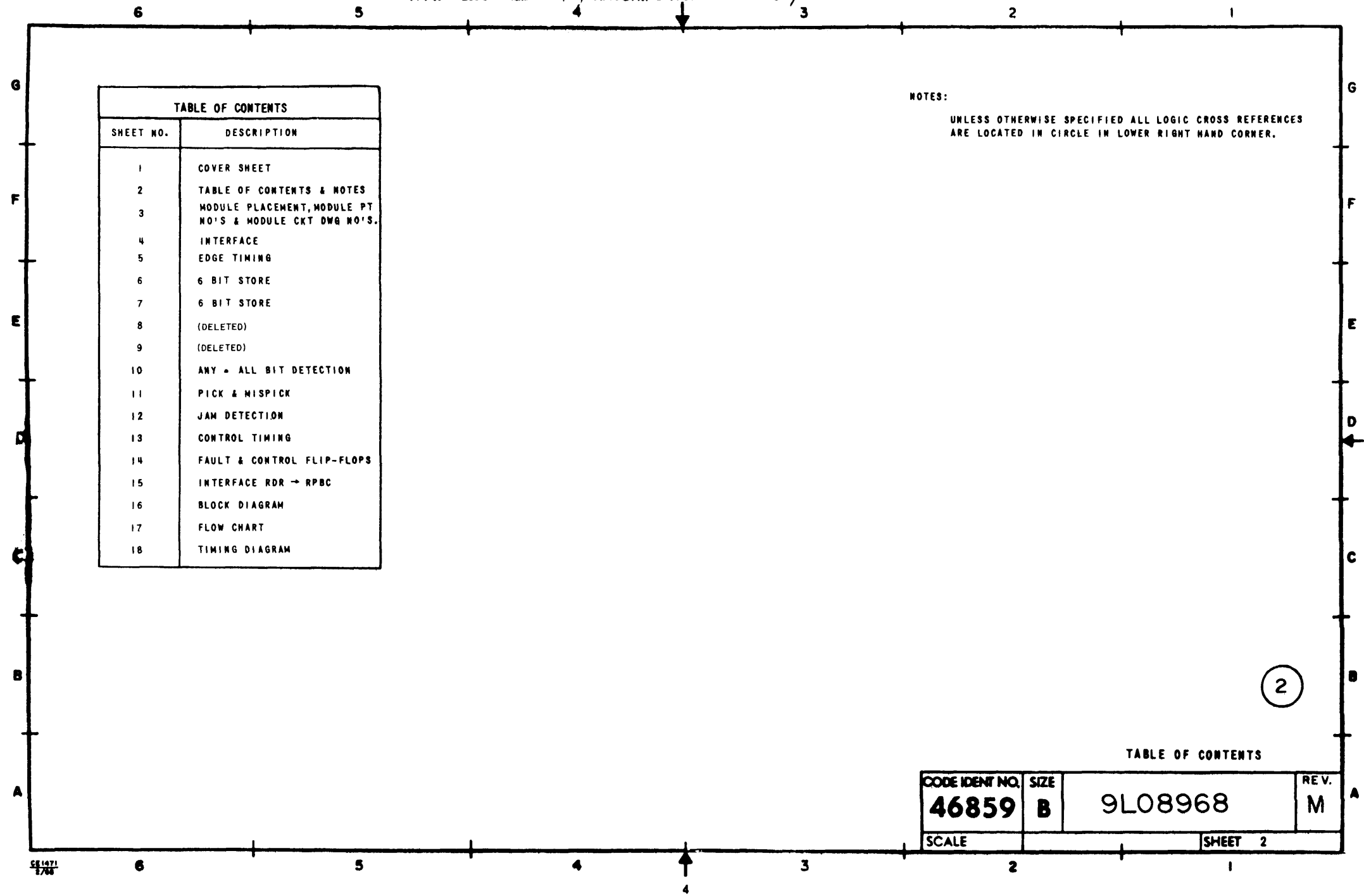


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7	6 BIT STORE
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9	(DELETED)
10	ANY - ALL BIT DETECTION
11	PICK & MISPICK
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13	CONTROL TIMING
14	FAULT & CONTROL FLIP-FLOPS
15	INTERFACE RDR → RPBC
16	BLOCK DIAGRAM
17	FLOW CHART
18	TIMING DIAGRAM

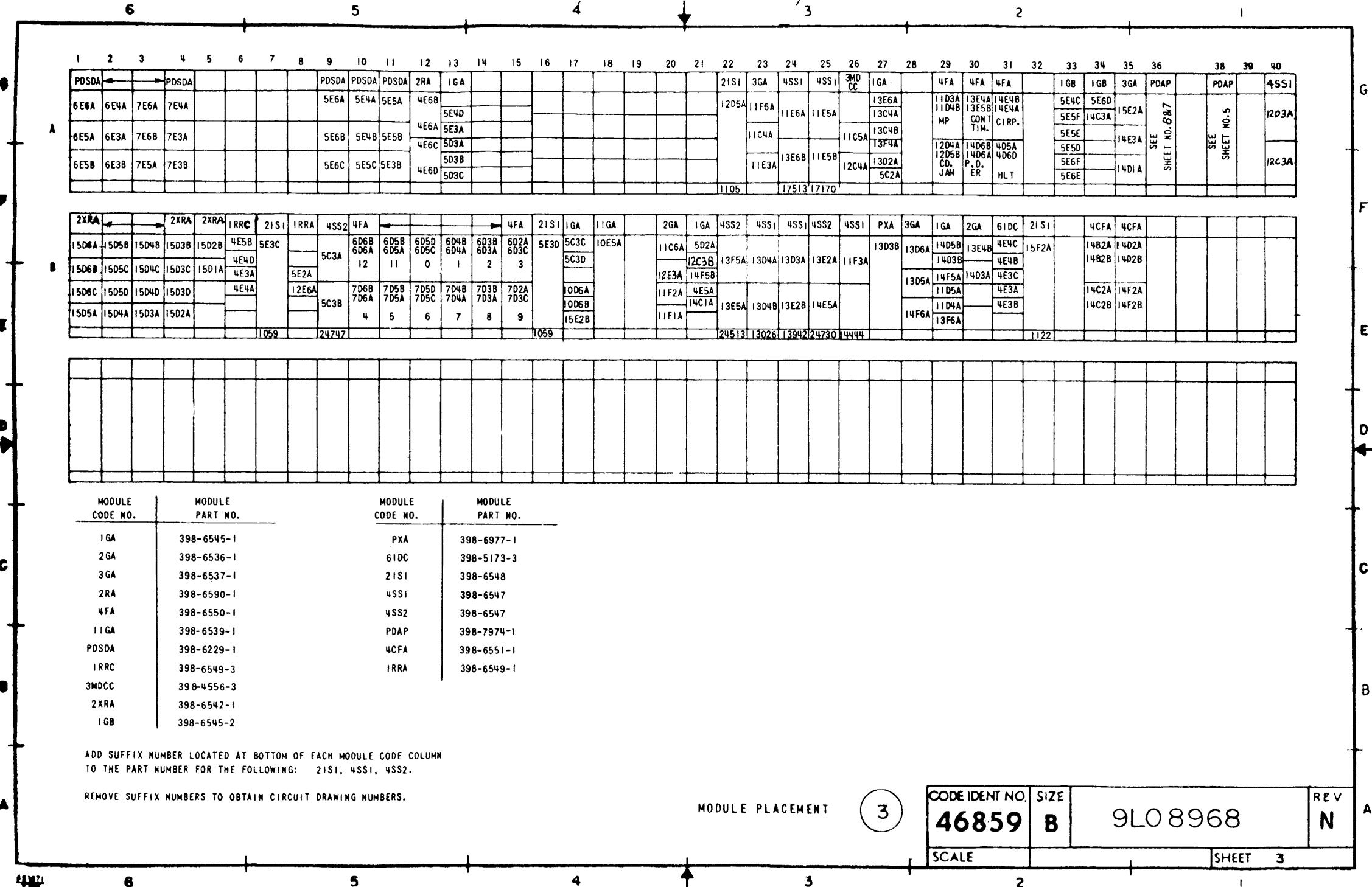
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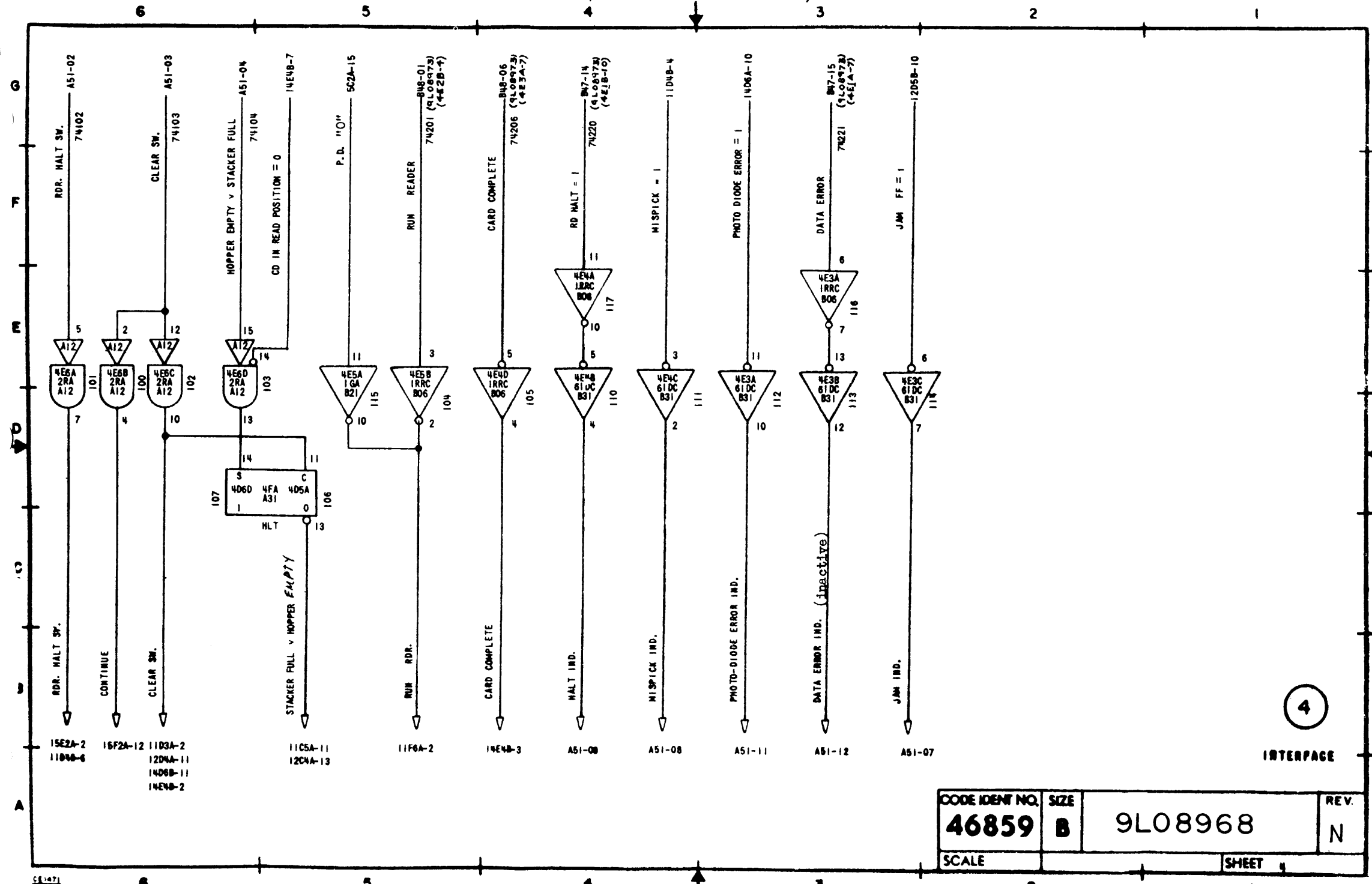
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1/68

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



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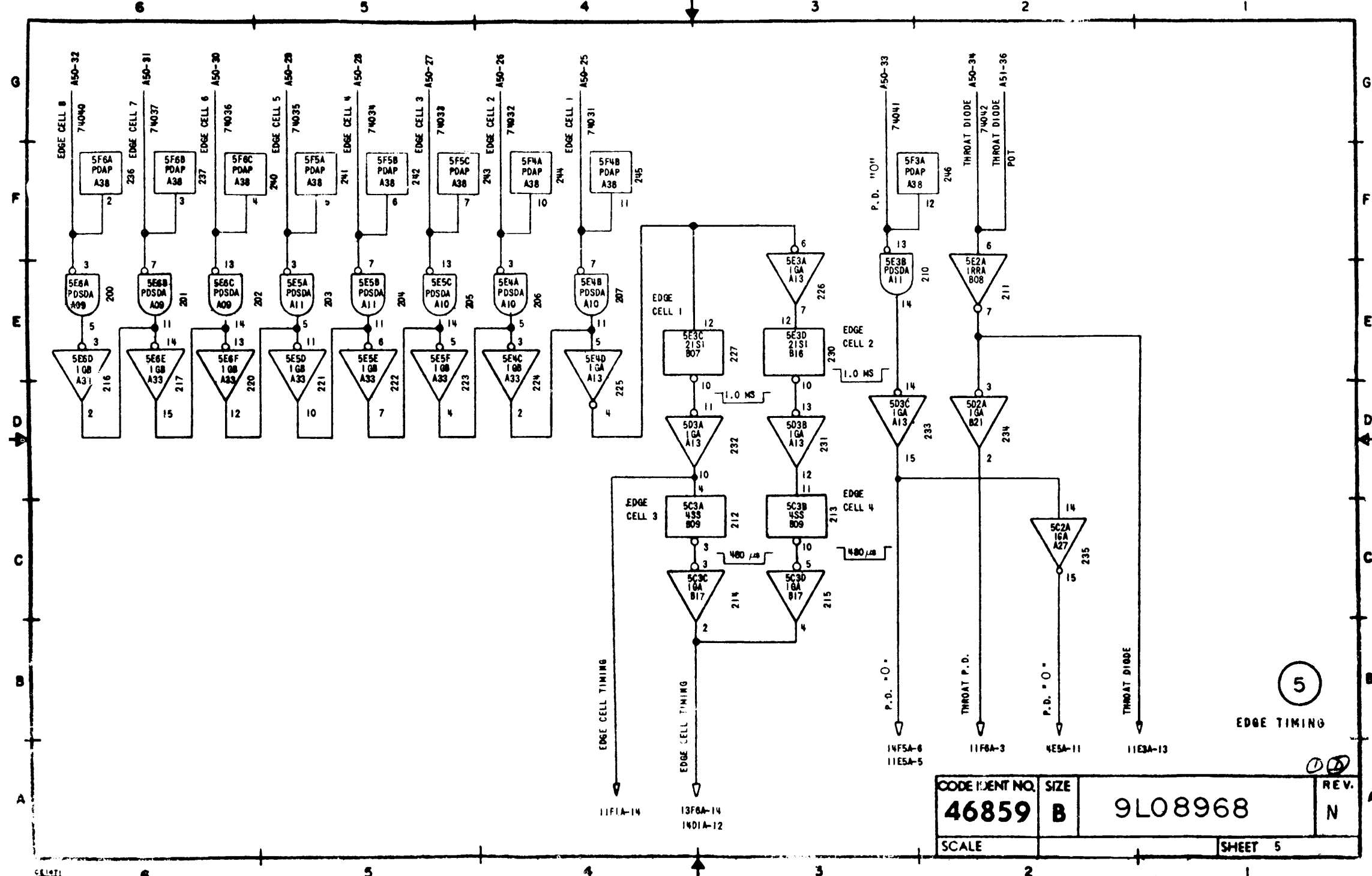
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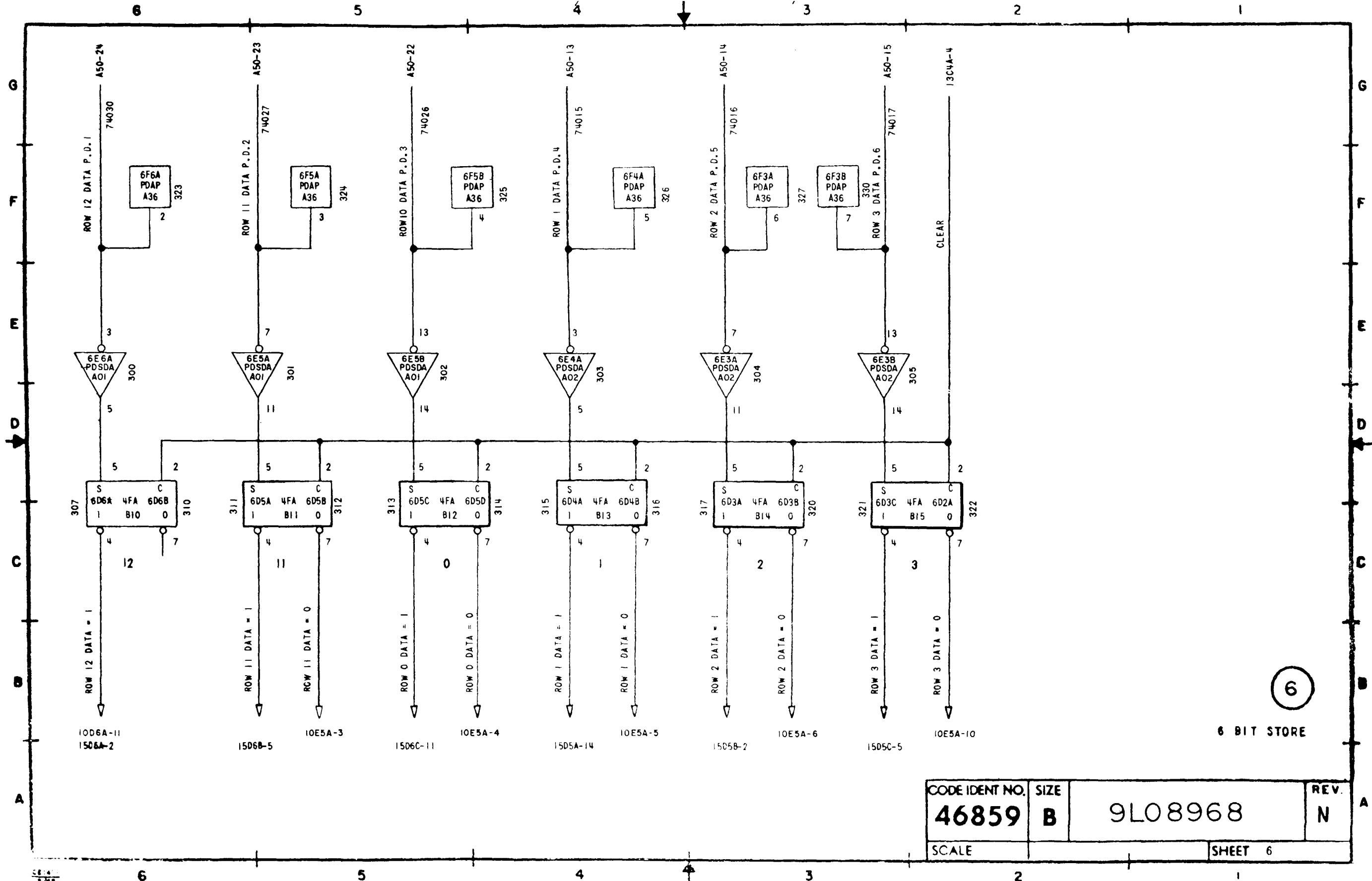


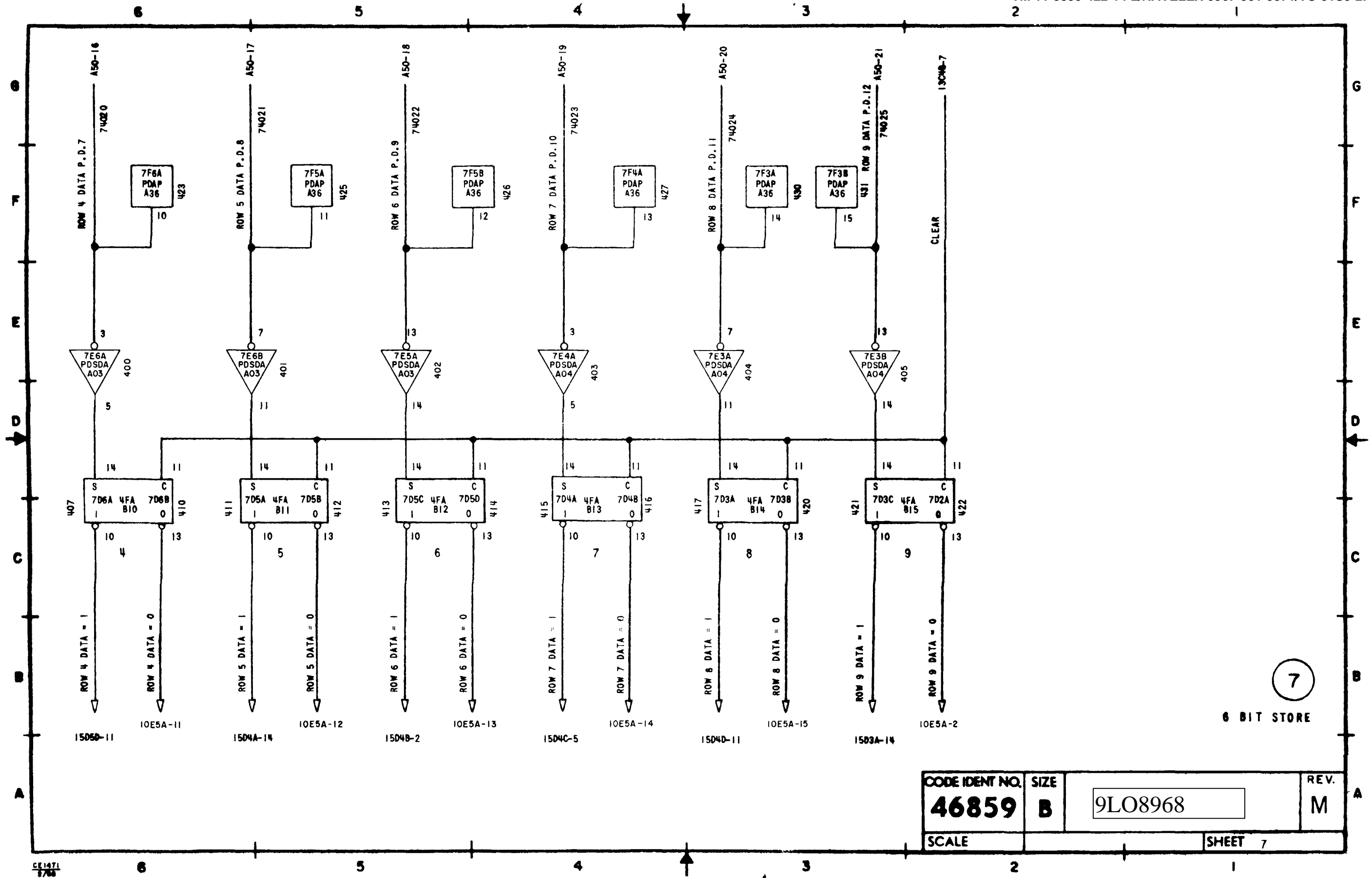
TM 11-5895-422-14-2 / NAVY.PX 0967-301-5371 / TO 31S5-2FYA10-111-2



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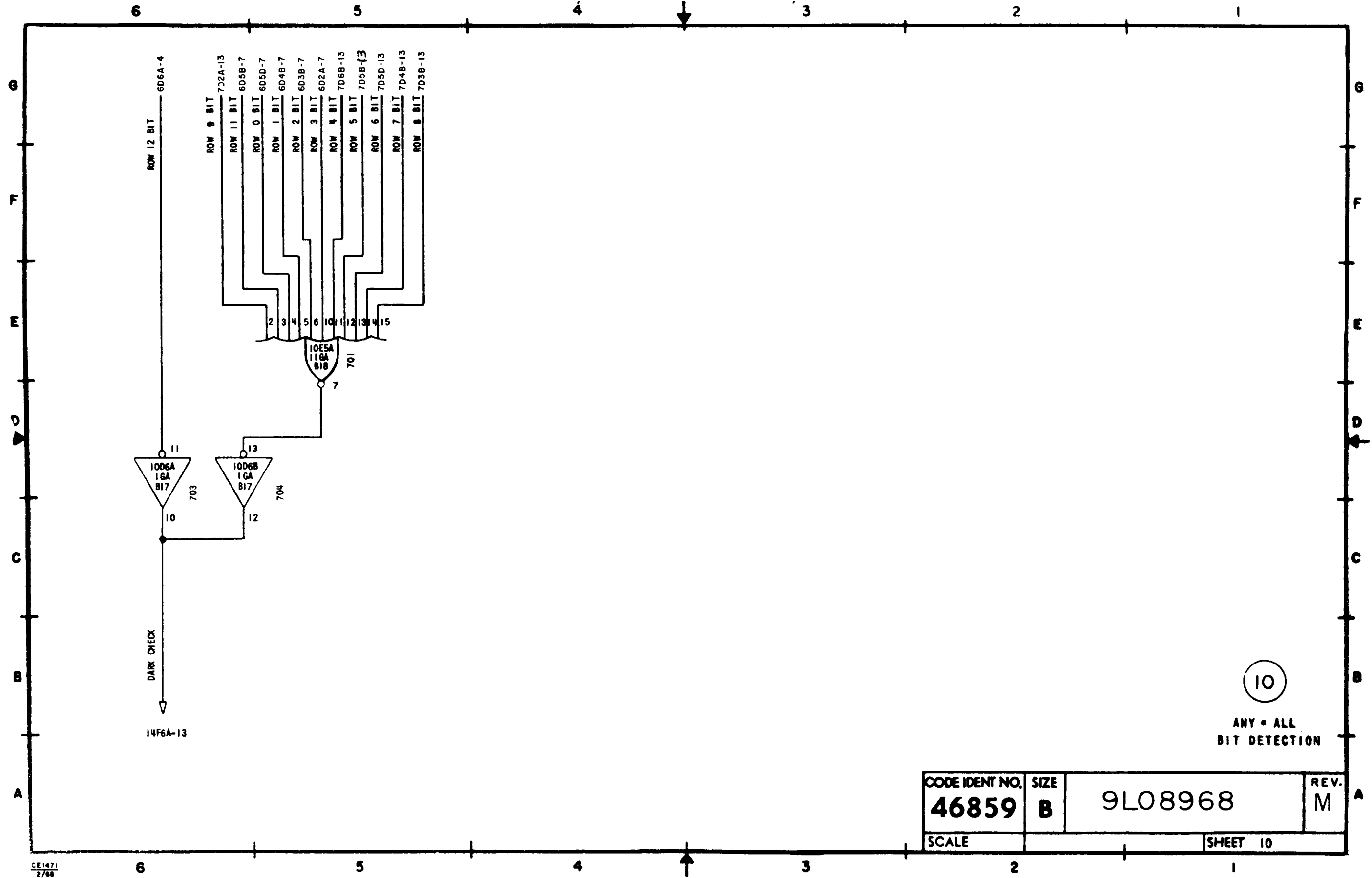




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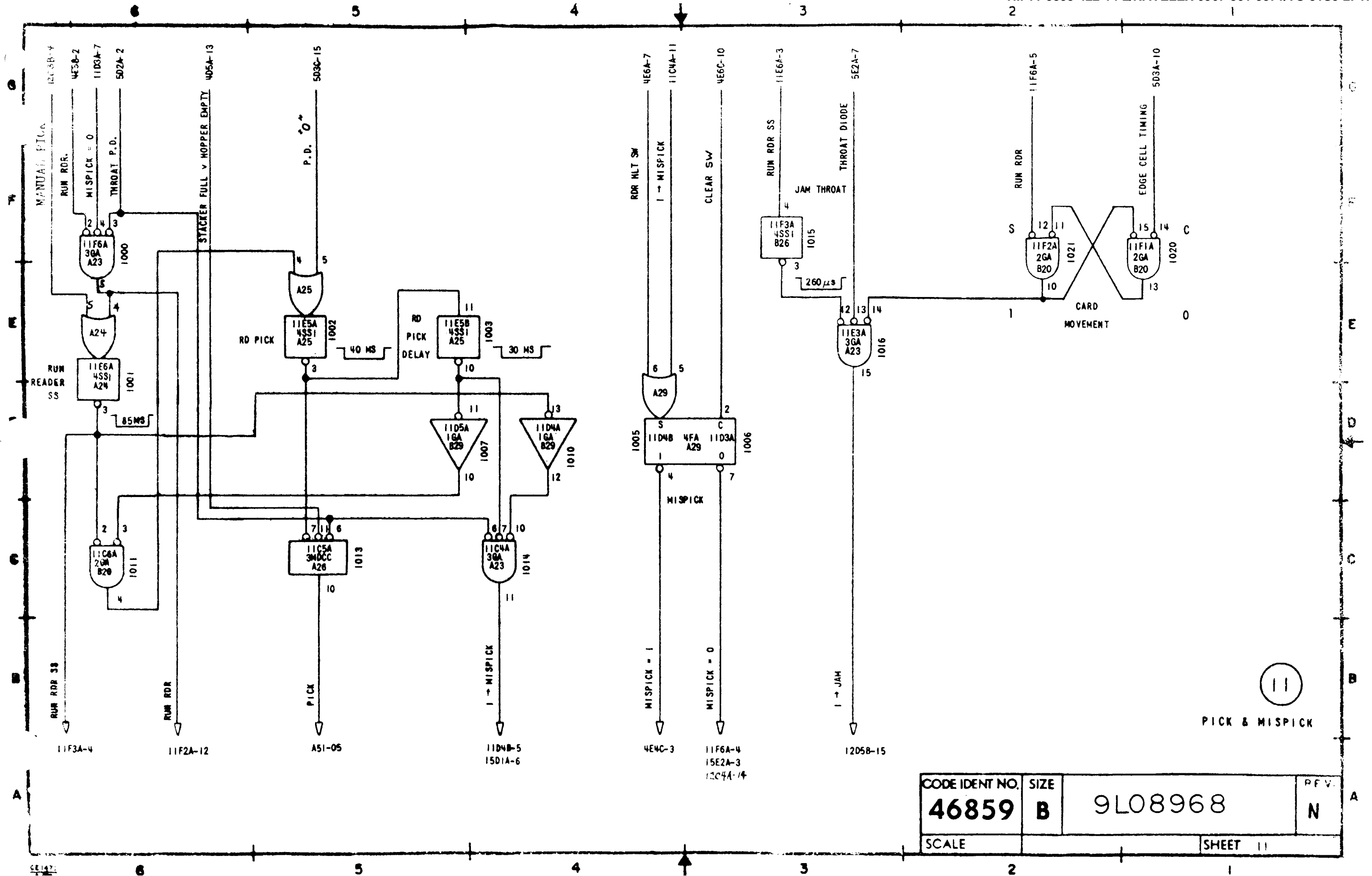
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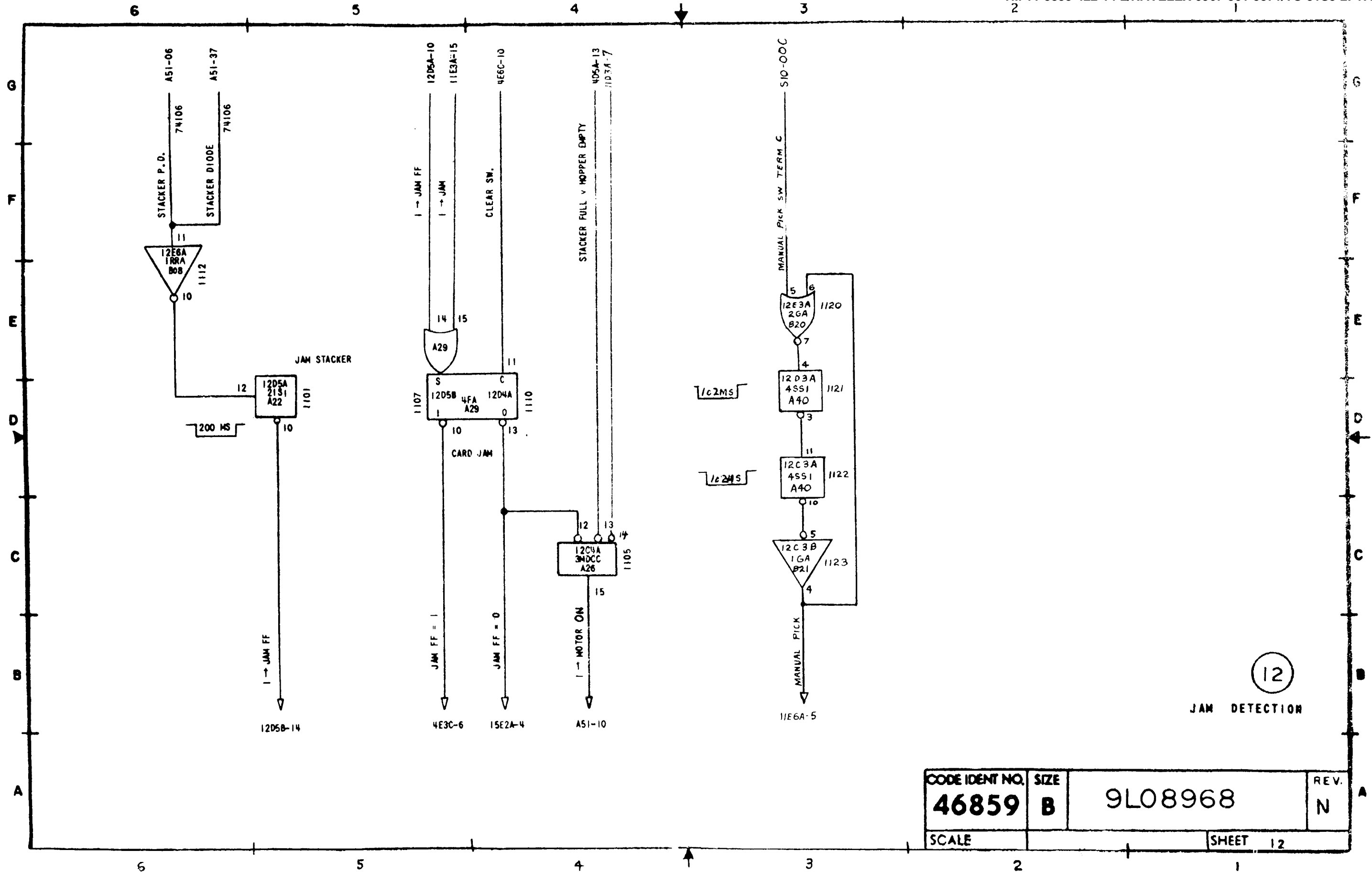
ANY • ALL  
BIT DETECTION

CODE IDENT NO. <b>46859</b>	SIZE <b>B</b>	<b>9L08968</b>	REV. <b>M</b>
SCALE		SHEET 10	



PICK & MISPICK

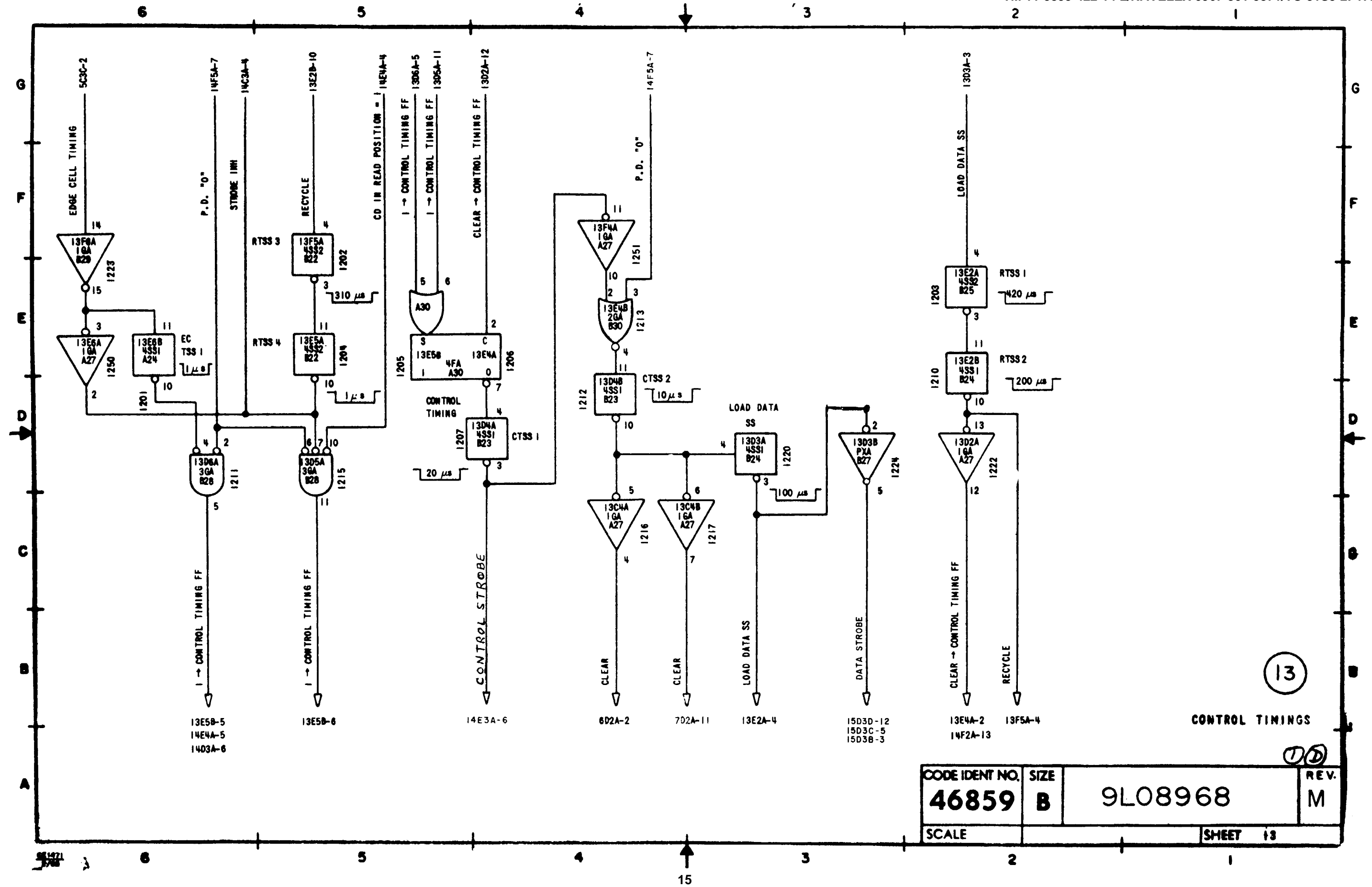
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JAM DETECTION

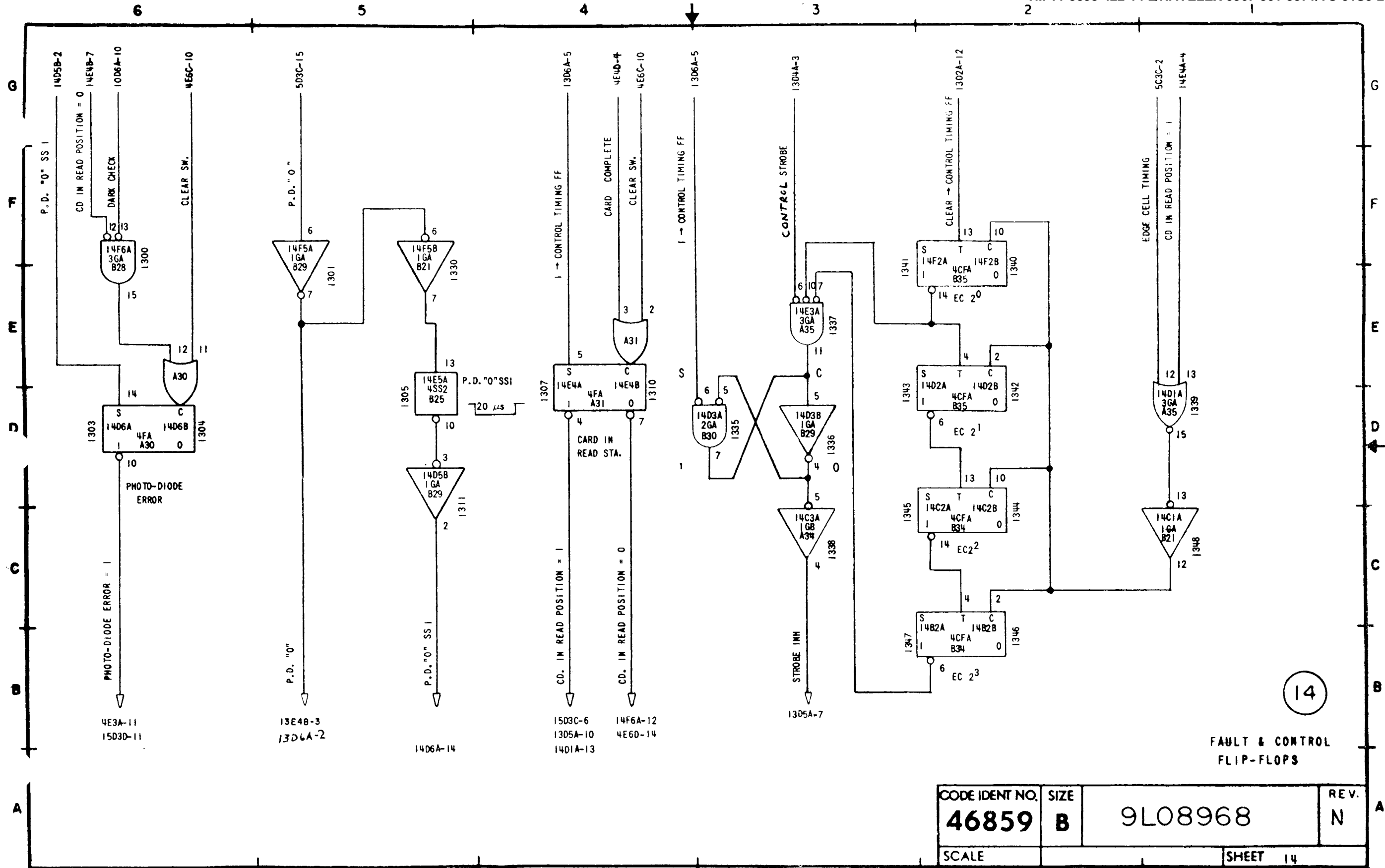
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CONTROL TIMINGS

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FAULT & CONTROL FLIP-FLOPS

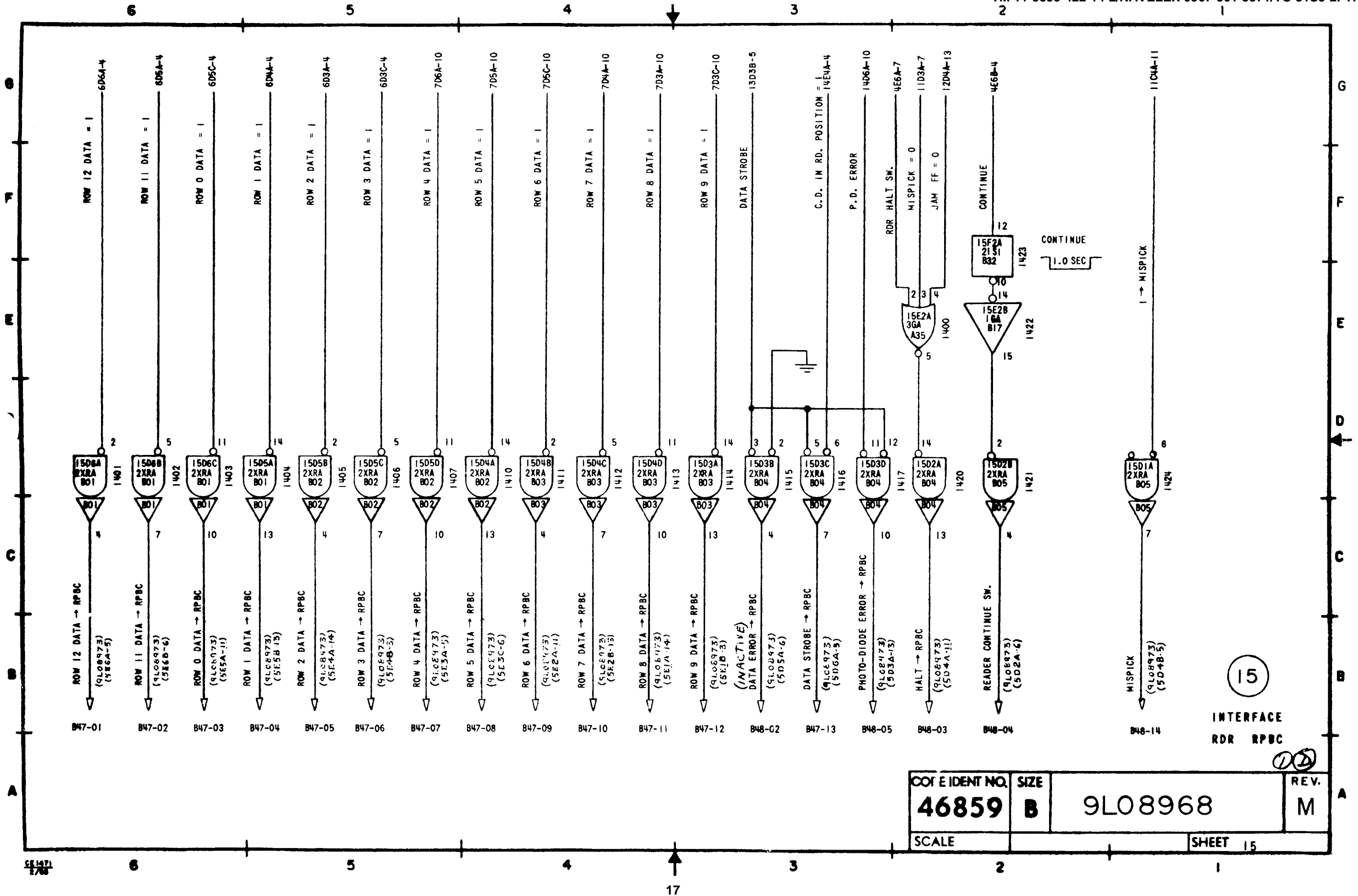
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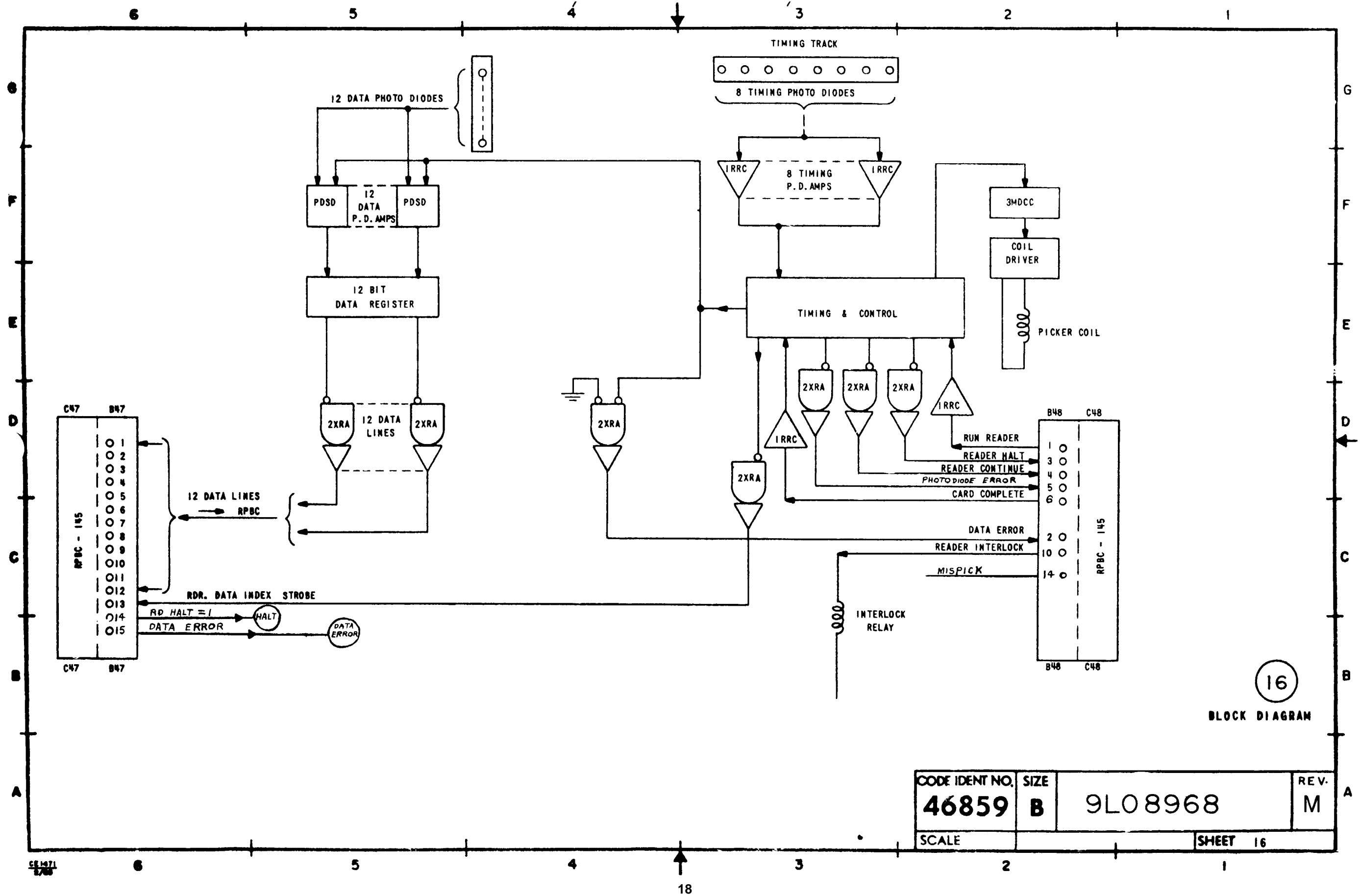




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INTERFACE  
RDR RPBC

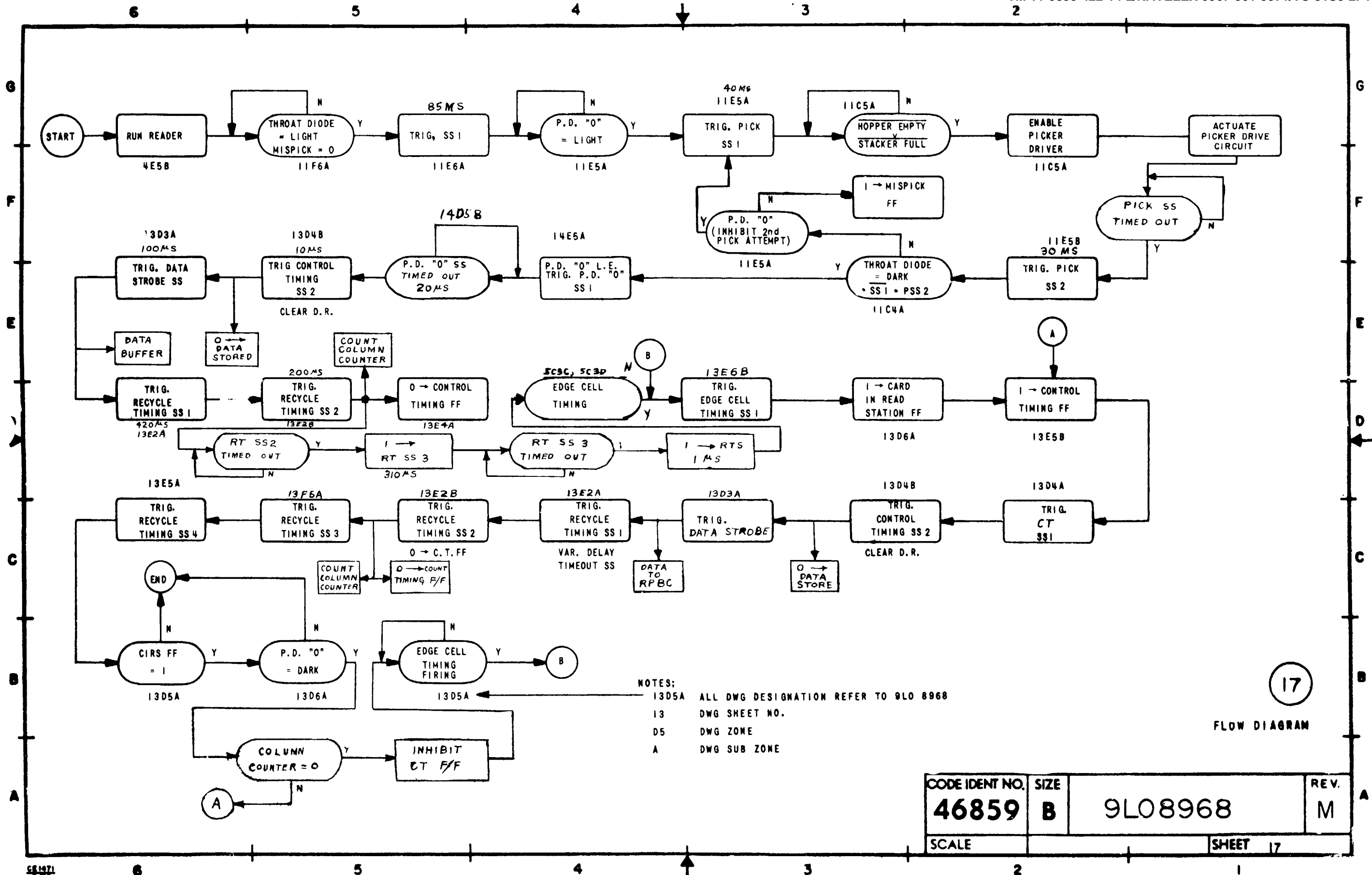
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BLOCK DIAGRAM

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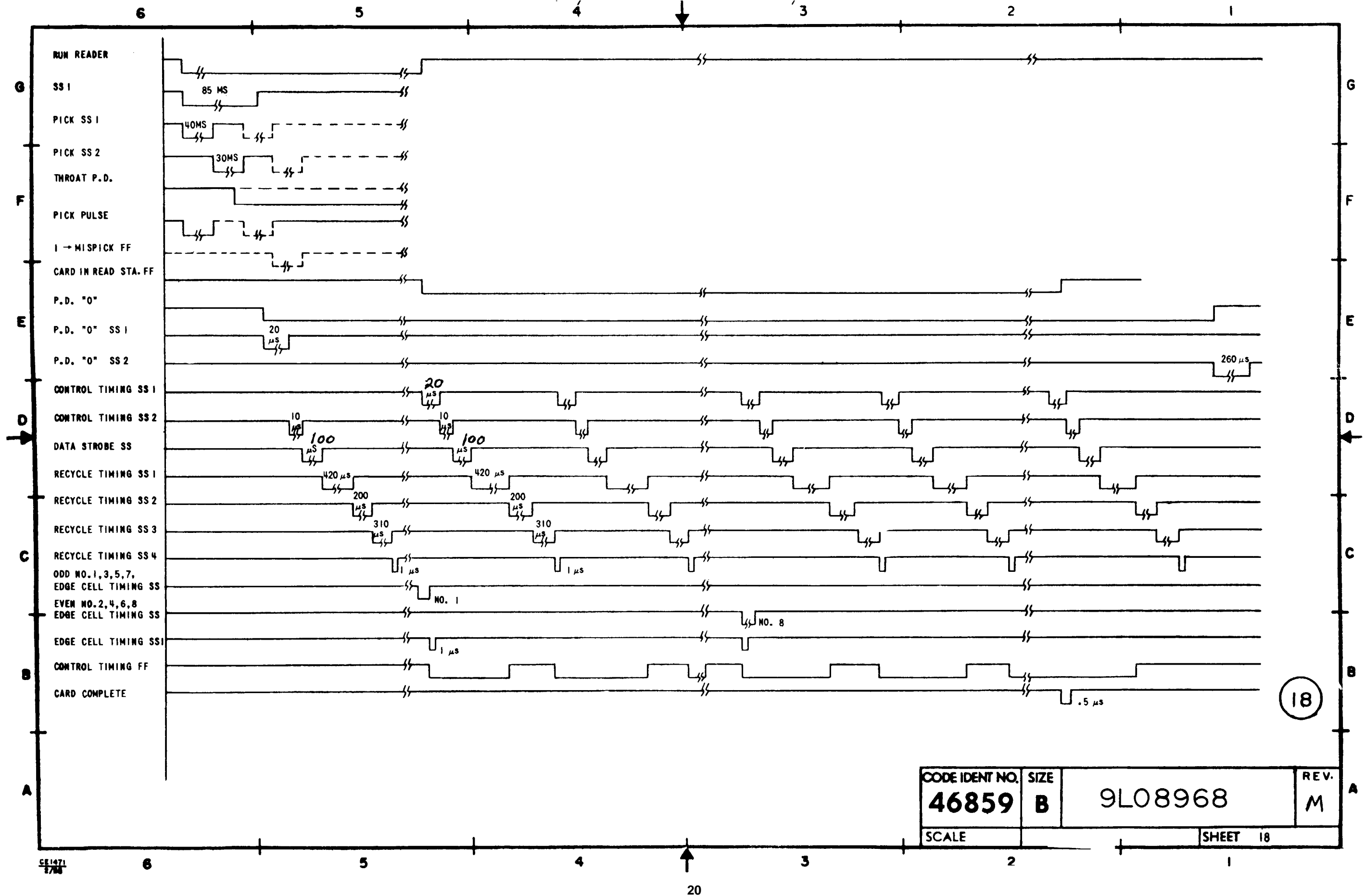


NOTES:  
 13D5A ALL DWG DESIGNATION REFER TO 9L0 8968  
 13 DWG SHEET NO.  
 D5 DWG ZONE  
 A DWG SUB ZONE

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FLOW DIAGRAM

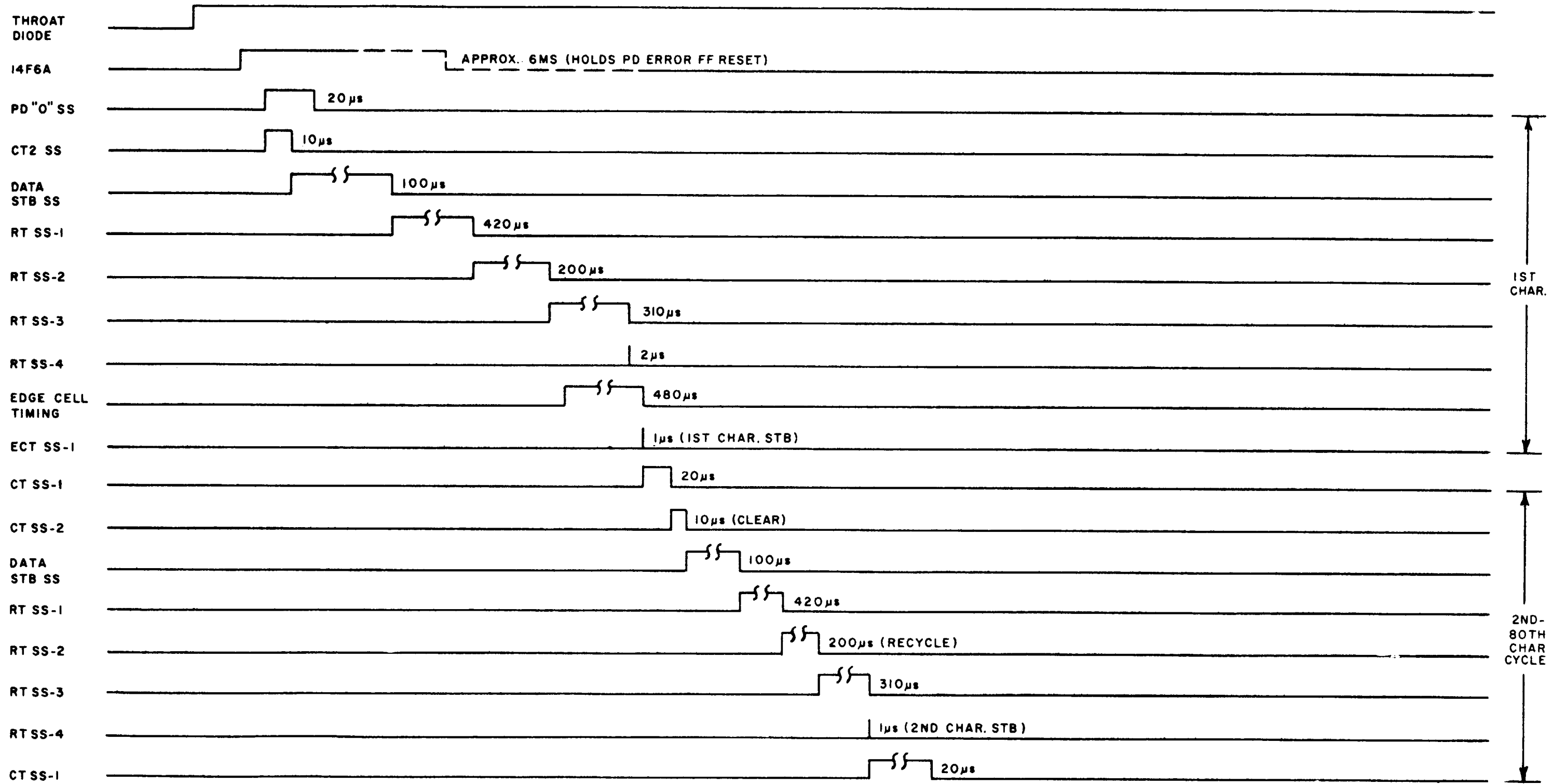
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18

CODE IDENT NO. <b>46859</b>	SIZE <b>B</b>	<b>9L08968</b>	REV. <b>M</b>
SCALE		SHEET 18	

SE 1471  
1/70



CABLE READER TIMING

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

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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  
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USACDCCEA (1)  
USACDCCEA Ft Huachuca (1)  
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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.



