

SHEET INDEX

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COMPONENT LIST INPUT/OUTPUT INFORMATION CIRCUIT DESCRIPTION	4	1
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RECORD OF CHANGES

DWG ISS	PREV FURN	STD	MFR DISC	SEE NOTE

NOTES:

- GROUND RETURN
- UNLESS OTHERWISE SPECIFIED: RESISTANCE VALUES ARE IN OHMS, CAPACITANCE VALUES ARE IN MICROFARADS. VALUES PRECEDED BY THE SYMBOL +(PLUS) OR -(MINUS) ARE IN VOLTS.
- BATTERY AND GROUND TERMINALS FOR INTEGRATED CIRCUITS.

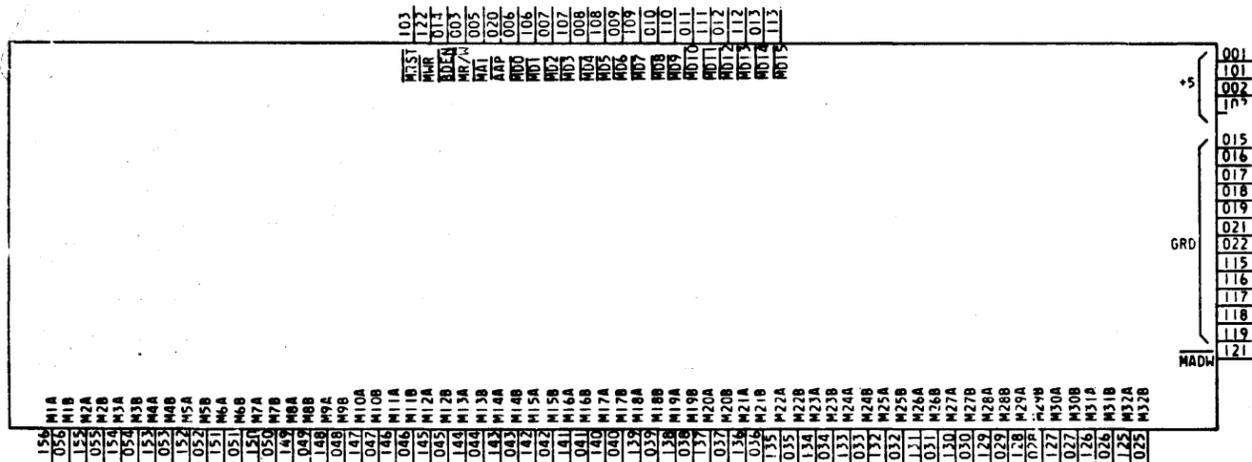
IC CODE	BAT TERM	GRD TERM
	+5	
54LS240	20	10
54LS38	14	7
41BM	16	8
54LS138	16	8
54LS74A	14	7
54LS273	20	10
41MC	16	8

4 BATTERY AND GROUND TERMINALS FOR THIS CIRCUIT PACK ARE:

FUNCTION	TERMINALS
+5	001,002,101,102
GRD	015,016,017,018, 019,021,022,115, 116,117,118,119

5. ALL RESISTORS ARE KS-2C616,1A.

SYMBOL



SYSTEM USED ON	DESIGN CONTROL
COMMON	CB

SUPPORTING INFORMATION

CATEGORY	NO.

SHEET INDEX NOTES

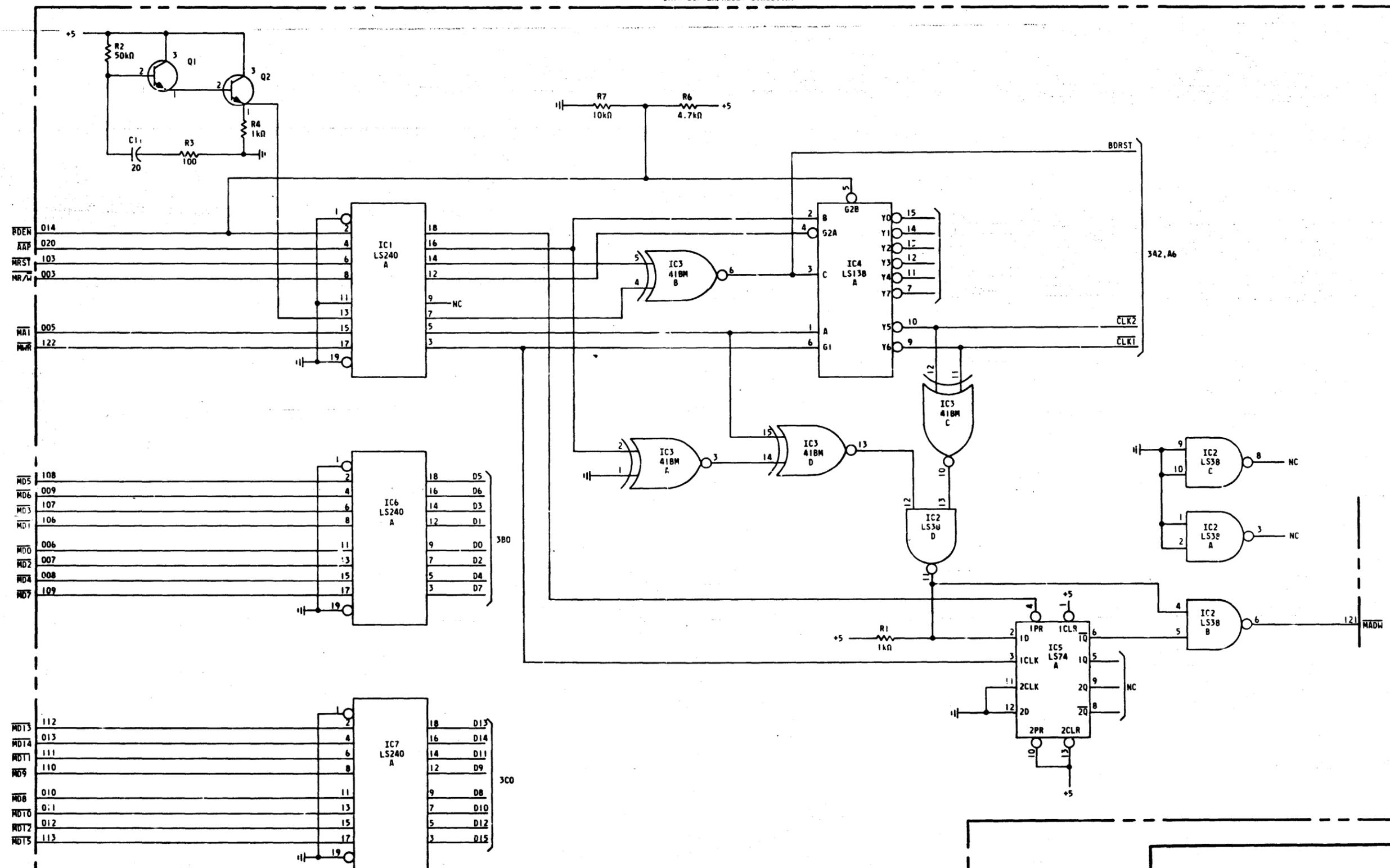
- ONLY THE LATEST ISSUE, OR ISSUES IF CONCURRENT, ARE SHOWN IN THE INDEX.
- FOR REISSUES, A CHANGED OR NEW SHEET IS ASSIGNED THE SAME ISSUE NUMBER AS SHEET 1.
- THE ISSUE NUMBER OF SHEET 1 IS RECOGNIZED AS THE ISSUE NUMBER OF THE WHOLE DRAWING.

NOTICE - NOT FOR USE OR DISCLOSURE OUTSIDE THE BELL SYSTEM EXCEPT UNDER WRITTEN AGREEMENT.

1999	
SL63 CIRCUIT PACK DISTRIBUTE BOARD	AT&TCO STANDARD
DWG SIZE 65	ISSUE 1
BELL LABORATORIES CPS-SL63	
5 SHEETS	

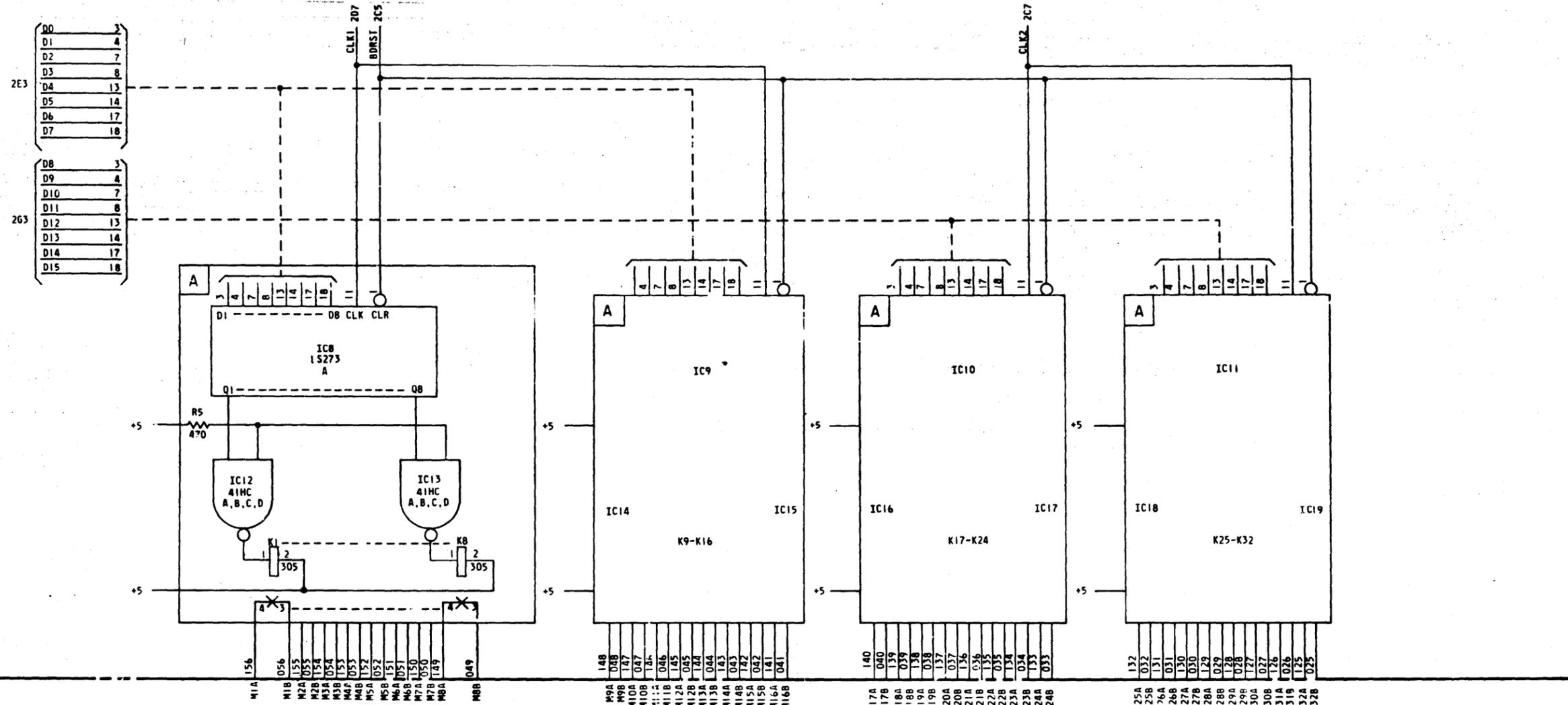
PART OF CPS SL63

DISTRIBUTE BOARD
DATA BUFFER/RESET CIRCUITRY



SL63 CIRCUIT PACK		DWG SIZE	ISSUE
		65	1
BELL LABORATORIES		CPS - SL63	
		SHEET 2	

PART OF CPS SL63
DISTRIBUTE BOARD
LATCHES AND DRIVERS



D0	3
D1	4
D2	7
D3	8
D4	13
D5	14
D6	17
D7	18

D8	3
D9	4
D10	7
D11	8
D12	13
D13	14
D14	17
D15	18

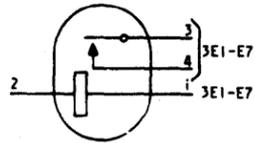
SL63 CIRCUIT PACK		DWG SIZE	ISSUE
		6S	1
BELL LABORATORIES	CPS-SL63	SHEET 3	

PART OF CPS SL63

DISTRIBUTE BOARD

COMPONENT LIST

RELAY
345B



DESIG	K1-K32			
CODE	[32]345B			
OPTION				
TERM NO.	LOC	LOC	LOC	LOC
4	3E1-E7			
3	3E1-E7			
2	3E1-E7			
1	3E1-E7			

INPUT/OUTPUT INFORMATION

CAPACITOR

DESIG	CODE
C1	601B, 10
[9] C2-C10	KS-20736, L4, 0.1
C11	602C, 20

CIRCUIT, INTEGRATED

DESIG	CODE
[3] IC1, 6, 7	WA-LS240 OR SMS4LS240J-00(TI)
IC2	SMS4LS38J-00(TI) OR KS-21736, L25
IC3	41BM
IC4	WA-LS138 OR SMS4LS138J-00(TI)
IC5	WA-LS74 OR SMS4LS74AJ-00(TI)
[4] IC8-IC11	SMS4LS273J-00(TI)
[8] IC12-IC19	41HC

RESISTOR

DESIG	CODE
[2] R1, R4	KS-20616, L1A, 1kΩ, .25 WATT, ±5%
R2	KS-20616, L1A, 50, 5kΩ, .25 WATT, ±5%
R3	KS-20616, L1A, 100, .25 WATT, ±5%
R5	KS-20616, L1A, 470, .25 WATT, ±5%
R6	KS-20616, L1A, 4.7kΩ, .25 WATT, ±5%
R7	KS-20616, L1A, 10kΩ, .25 WATT, ±5%

TRANSISTOR

DESIG	CODE
[2] Q1, Q2	66S

CIRCUIT DESCRIPTION

THE SL63 IS THE DISTRIBUTE BOARD FOR THE CDT SYSTEM. IT PROVIDES FOR 3x 345B MERCURY RELAYS TO CONTROL ELECTROMECHANICAL EQUIPMENT. THE RELAYS ARE OPERATED VIA FOUR EIGHT BIT LATCHES (IC8-IC11), AND EIGHT FOUR BIT RELAY DRIVERS (IC12-IC19). AN ADDRESS DECODER CIRCUIT (IC4) ENABLES EITHER THE LOWER OR UPPER TWO LATCHES TO BE WRITTEN INTO VIA THE 16 BIT DATA BUS (IC6 AND IC7).

ALL LATCHES ARE CLEARED AND ALL RELAYS RELEASED THROUGH EITHER THE POWER ON RESET CIRCUIT (Q1, Q2) OR THE SYSTEM RESET LEAD (MRST).

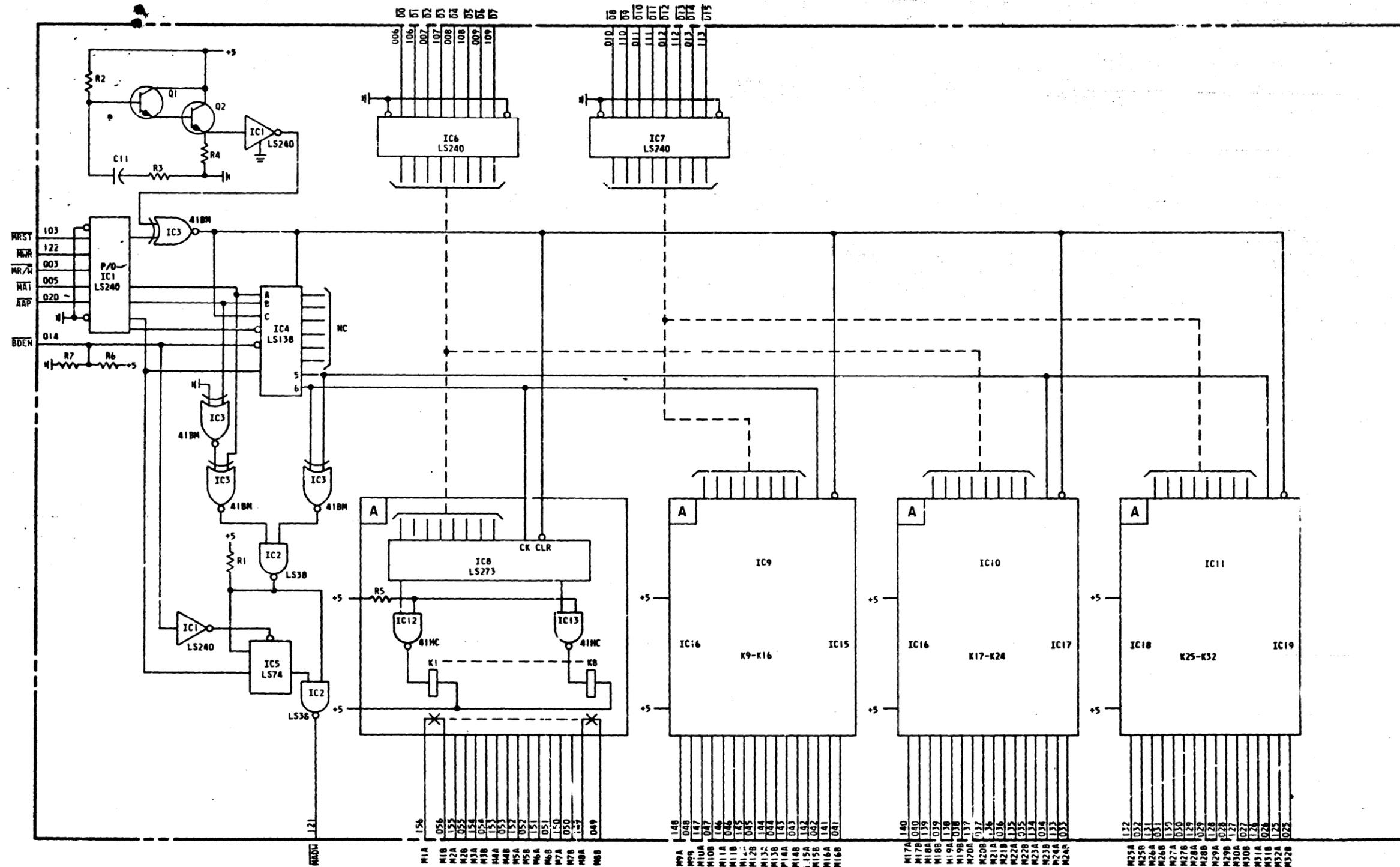
AN ERROR DETECTING CIRCUIT (IC'S 2, 3, 5) IS PROVIDED TO VERIFY THE ADDRESS DECODING (PARITY) AND THE PRESENCE OF A WRITE PULSE (MRW). ERROR FREE OPERATIONS WILL RETURN AN MADM SIGNAL VIA IC2. A TEST OF THE ERROR CIRCUIT IS PERFORMED BY ADDRESSING THE BOARD WITH FALSE PARITY.

A BLOCK DIAGRAM OF THE CIRCUIT IS SHOWN TO SUPPLEMENT THE CIRCUIT DESCRIPTION, ON SHEET 5.

SL63 CIRCUIT PACK		DWG SIZE	ISSUE
		65	1
BELL LABOR/RIES	CPS-SL63		SHEET 4

PART OF CPS SL63

BLOCK DIAGRAM



SL63 CIRCUIT PACK		DWG SIZE	ISSUE
		4S	1
BELL LABORATORIES		CPS - SL63	
		SHEET 5	