

**NOTES**

- - OFF PAGE REFERENCE
- △ - BUSS ORIENTATION
- ⌋ - BUSSED SIGNALS

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**CPU BOARD: PROCESSOR CIRCUIT**

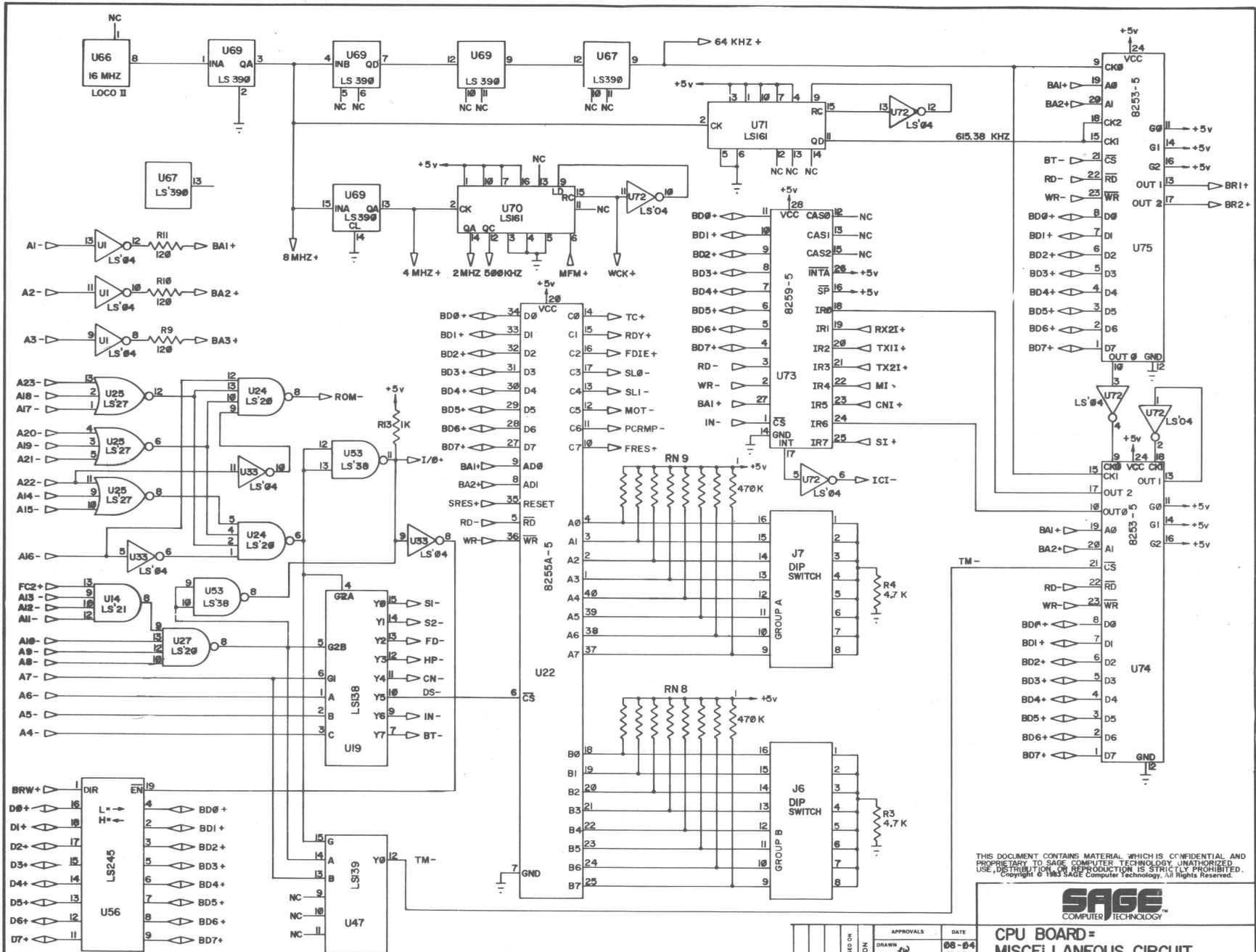
APPROVALS		DATE
DESIGNED	[Signature]	08-01 1983
CHECKED		
FIELD		

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. BREAK OUTSIDE CORNERS. DO NOT SCALE DRAWING. TOLERANCES ARE DECIMALS ANGLES XX - 90 XXX - 90

PART #	REV.
<b>CB0002</b>	

PAGE 1 OF 9

REV	BY	ECO #	DATE	APPR.



REV	BY	ECO #	DATE	APPR

APPROVALS	DATE

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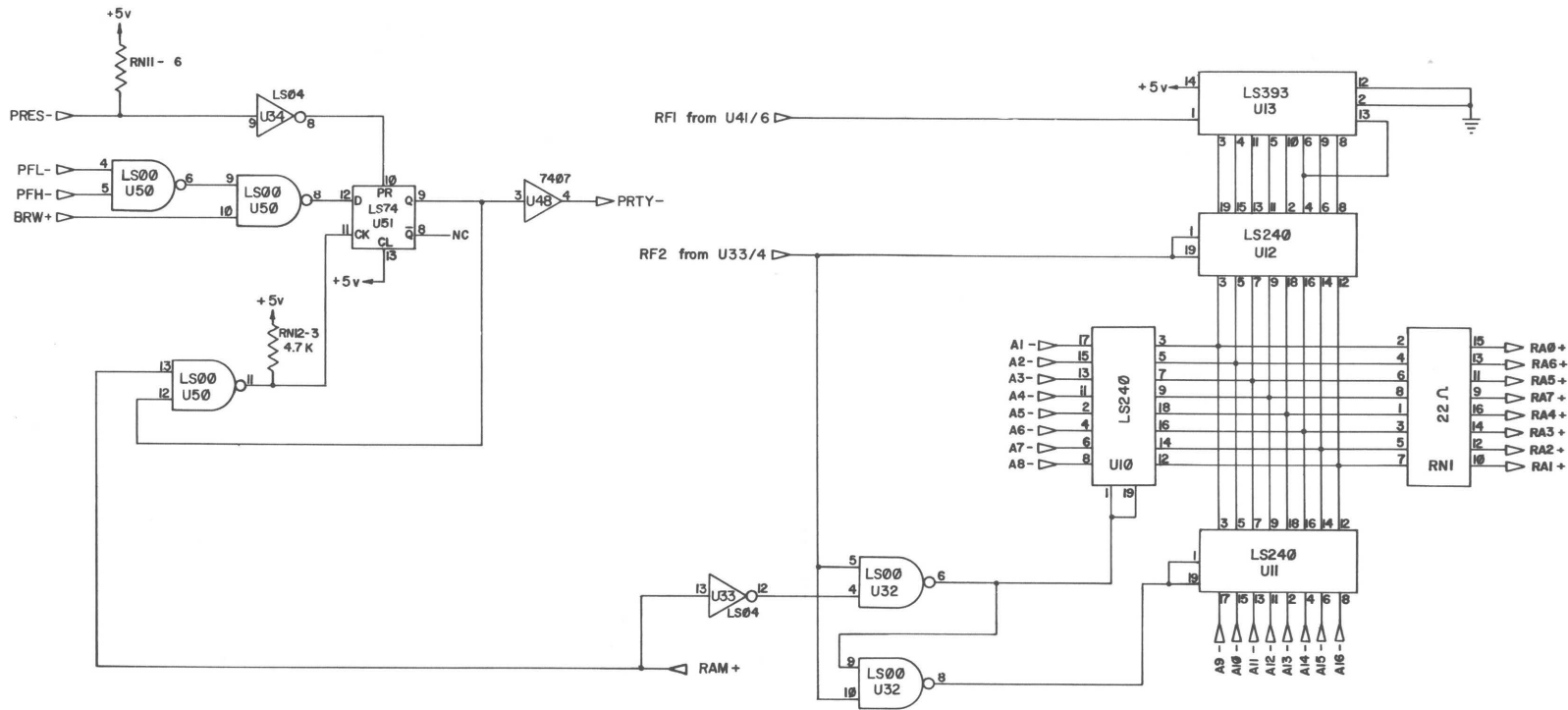
**SAGE**  
COMPUTER TECHNOLOGY

**CPU BOARD = MISCELLANEOUS CIRCUIT**

UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN INCHES. BREAK OUTSIDE CORNERS.  
DO NOT SCALE DRAWING.  
TOLERANCES ARE:  
DECIMALS ANGLES  
XX - .005 2° - 7°  
XX - .005 2° - 7°

PART # **CB0002**

PAGE 2 OF 9



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CPU BOARD = RAS/CAS GENERATION, PAGE 1 of 2

DESIGN	APPROVALS	DATE
APPLICATION	CHECKED	07-26-83
	DESIGNED	

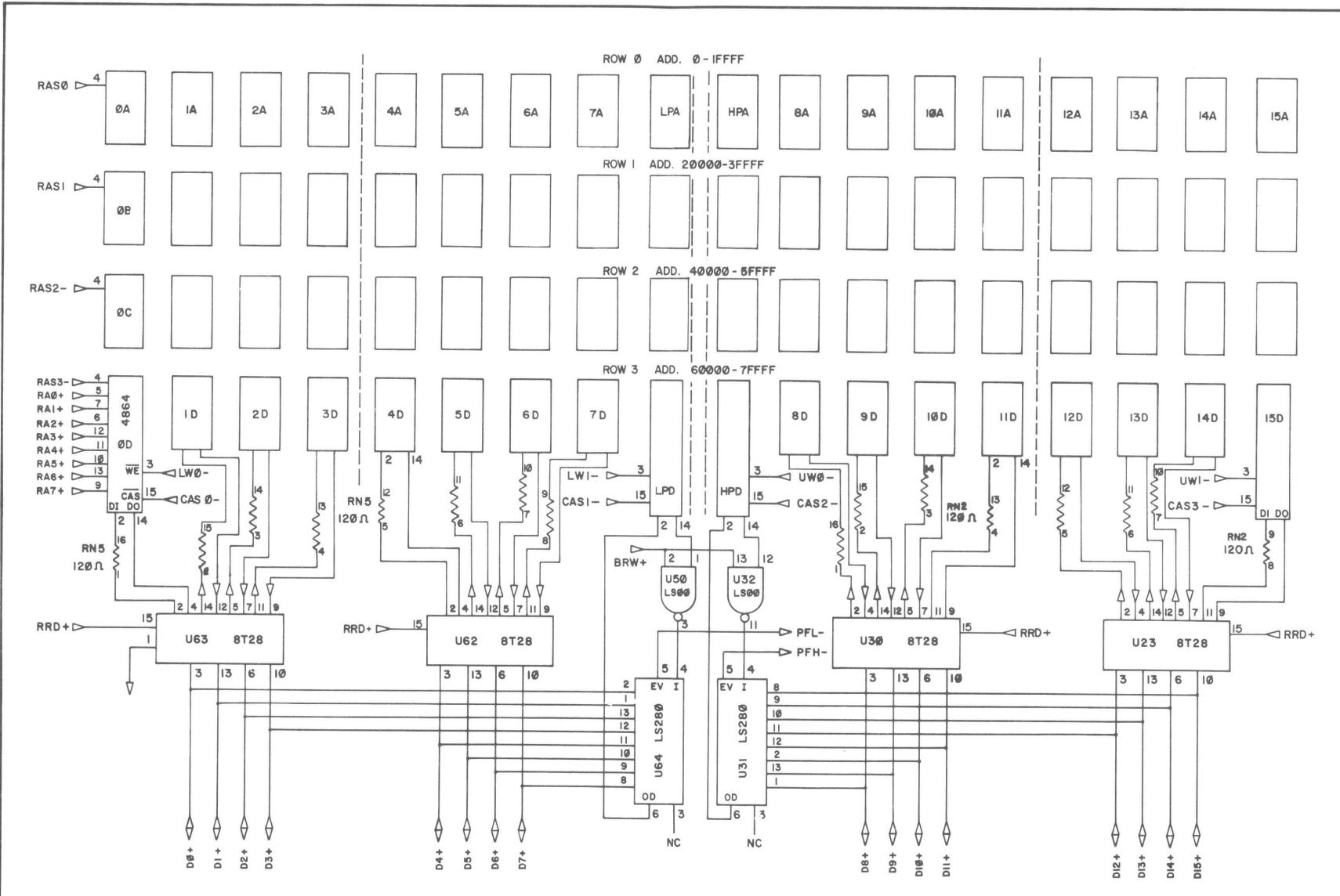
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. REFERENCE TO DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.  
 DECIMALS: XXX - 010  
 ANGLES: ° - 010

PART # **BD0002.B**  
 REV # **1**  
 PAGE 3 OF 9

REV	BY	ECO #	DATE	APPR.







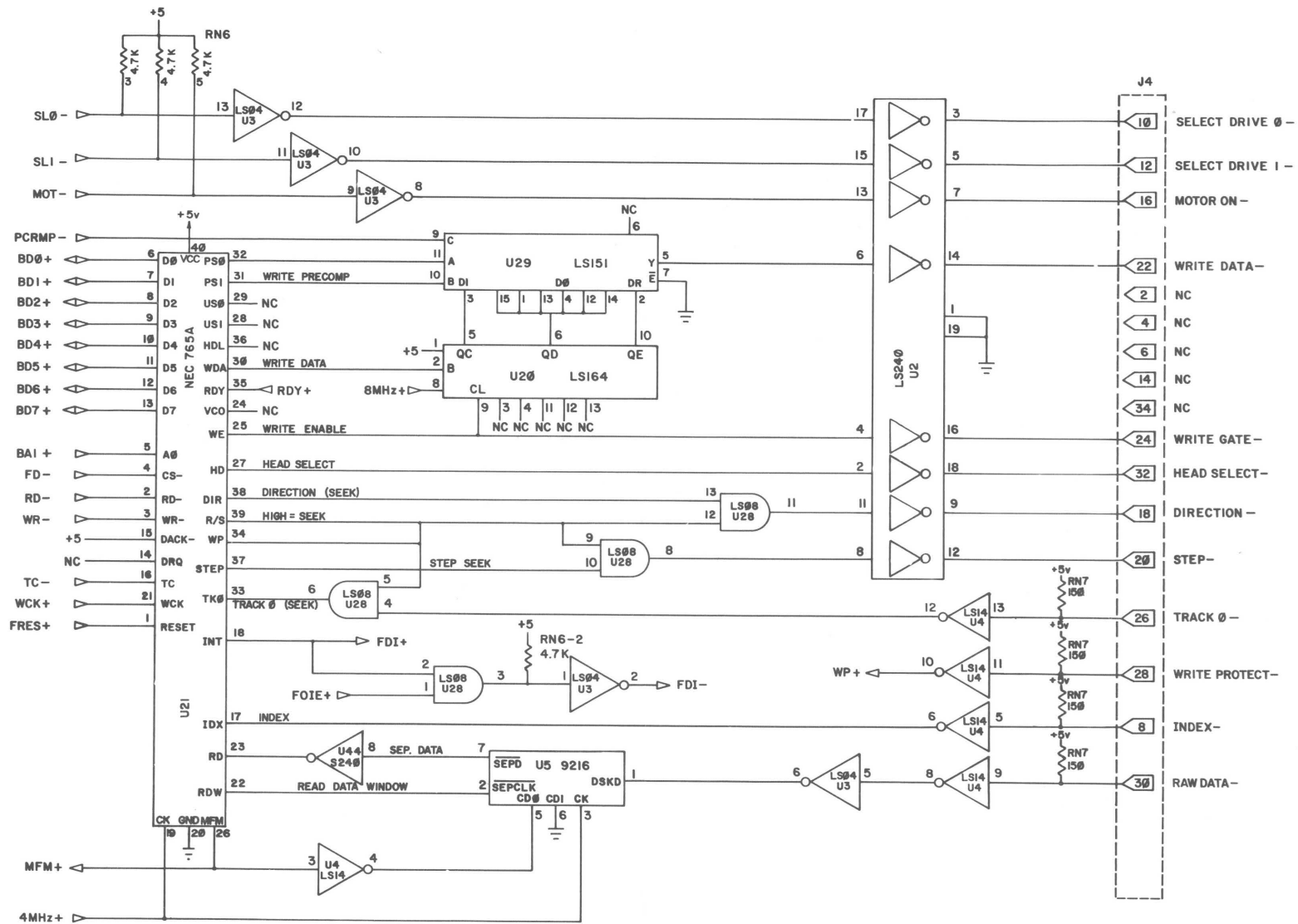
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CPU BOARD = RAM ARRAY		PART #	REV
		BD0002B	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES BREAK OUT CORNERS TO MATCH SCALE DRAWING TO DIMENSIONS		PAGE 5 OF 9	

APPROVALS	DATE
DRAWN	
CHECKED	
ISSUED	

REV	BY	ECO	DATE	APPR



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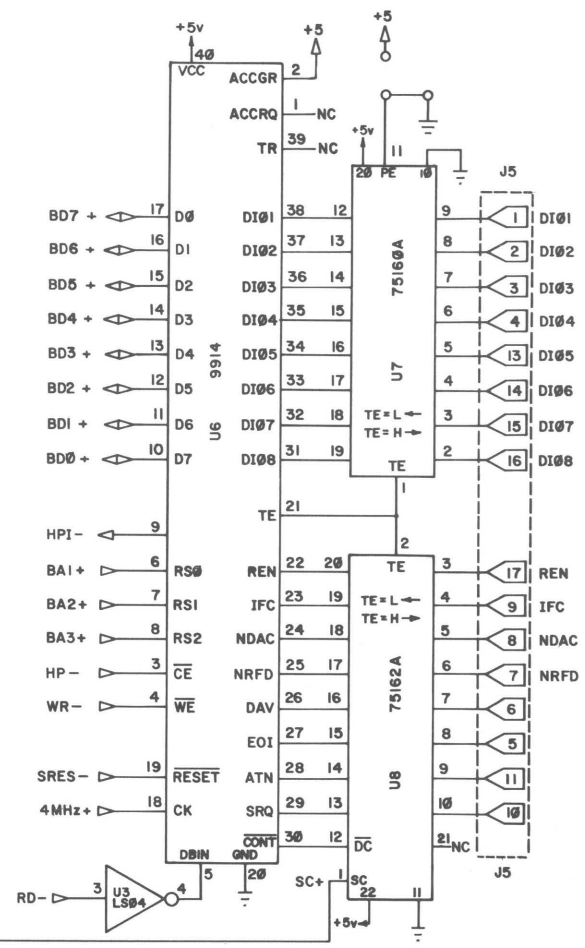
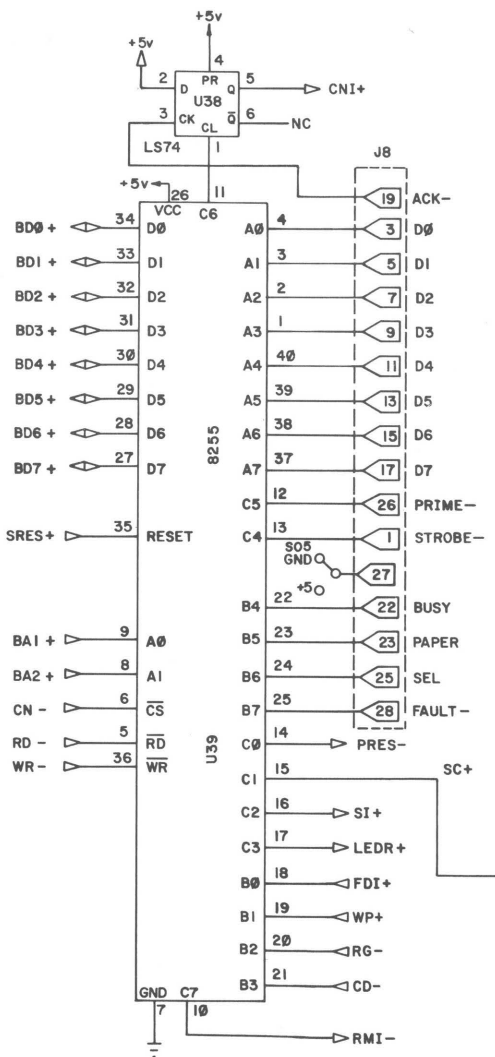


**CPU BOARD- FLOPPY DISK CIRCUIT**

REV	BY	ECO #	DATE	APPR

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. BREAK OUTSIDE CORNERS DO NOT SCALE DRAWING TOLERANCES ARE:  
 DECIMALS .005  
 ANGLES .2°

PART # **BD0002:B** REV. **1**  
 PAGE 6 OF 9



REV	BY	ECO #	DATE	APPR

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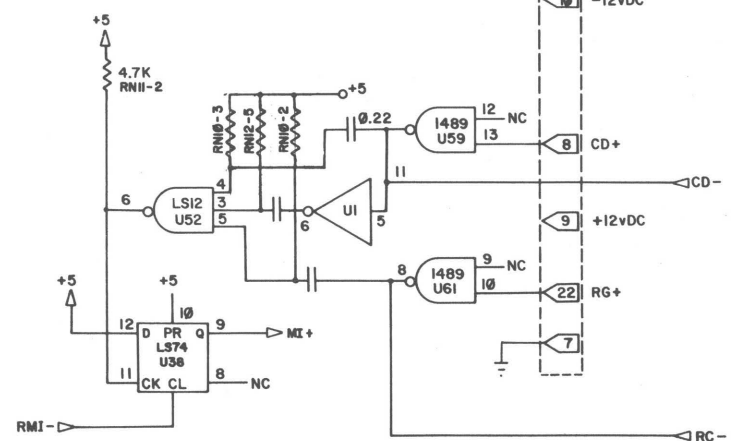
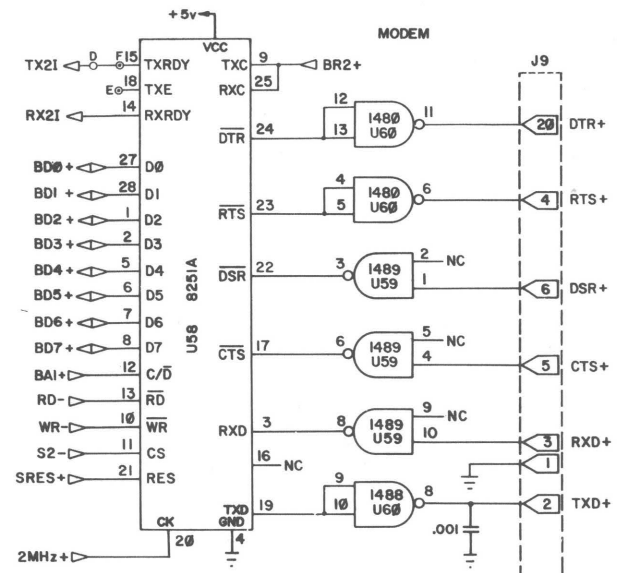
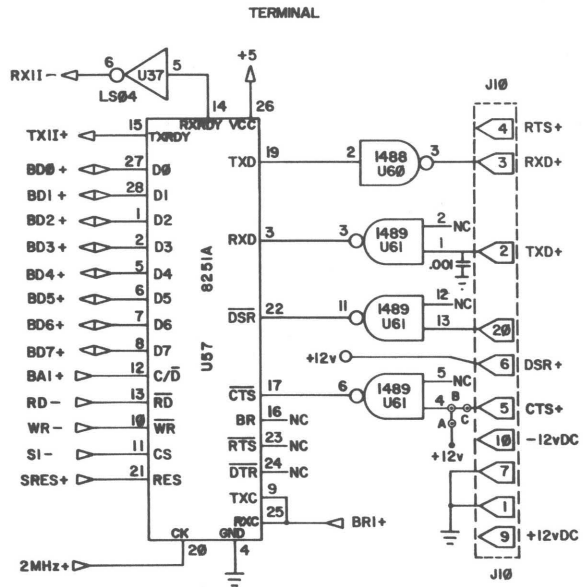
APPROVALS	DATE
DRAWN	
CHECKED	
ISSUED	

**CPU BOARD - COMMUNICATIONS CIRCUIT, Pg. 1 of 2**

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES - BREAK OUTSIDE CORNERS DO NOT SCALE DRAWING TOLERANCES ARE: .030 ± .005 ANGLES ± 3°

PART # **BD00028** REV.

**PAGE 7 OF 9**



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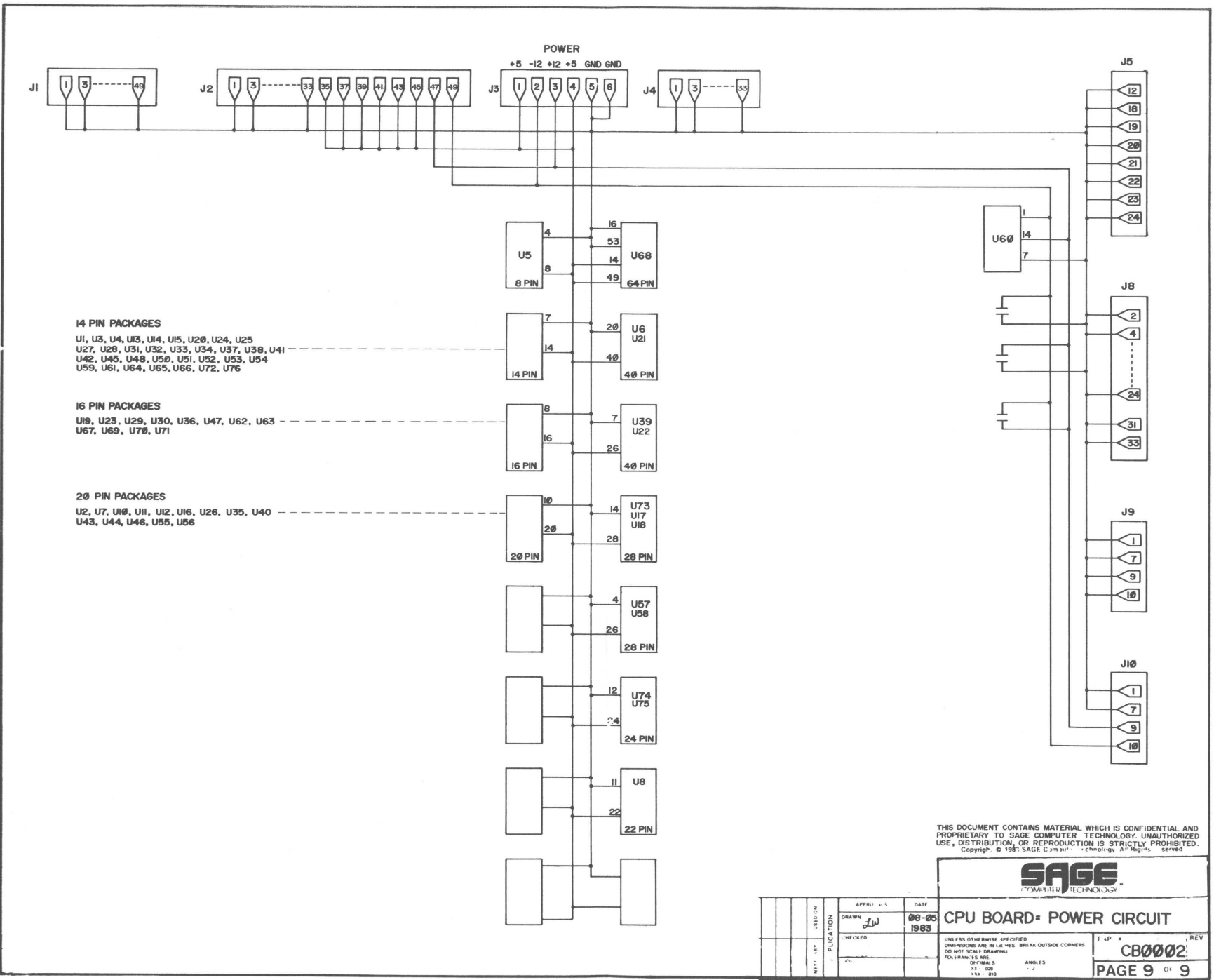
CPU BOARD COMMUNICATIONS CIRCUIT Pg. 2 of 2

UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN INCHES - BREAK OUTSIDE CORNERS  
DO NOT SCALE DRAWING  
TOLERANCES ARE:  
DECIMALS .01 ± .005  
FRACTIONS 1/16 ± .005

PART # REV.  
BD0002:B  
PAGE 8 OF 9

NET LIST	USED ON	APPLICATION	APPROVALS	DATE
			DRAWN	
			CHECKED	
			ISSUED	

REV	BY	ECO #	DATE	APPR.



**14 PIN PACKAGES**  
 U1, U3, U4, U13, U14, U15, U20, U24, U25  
 U27, U28, U31, U32, U33, U34, U37, U38, U41  
 U42, U45, U48, U50, U51, U52, U53, U54  
 U59, U61, U64, U65, U66, U72, U76

**16 PIN PACKAGES**  
 U19, U23, U29, U30, U36, U47, U62, U63  
 U67, U69, U70, U71

**20 PIN PACKAGES**  
 U2, U7, U10, U11, U12, U16, U26, U35, U40  
 U43, U44, U46, U55, U56

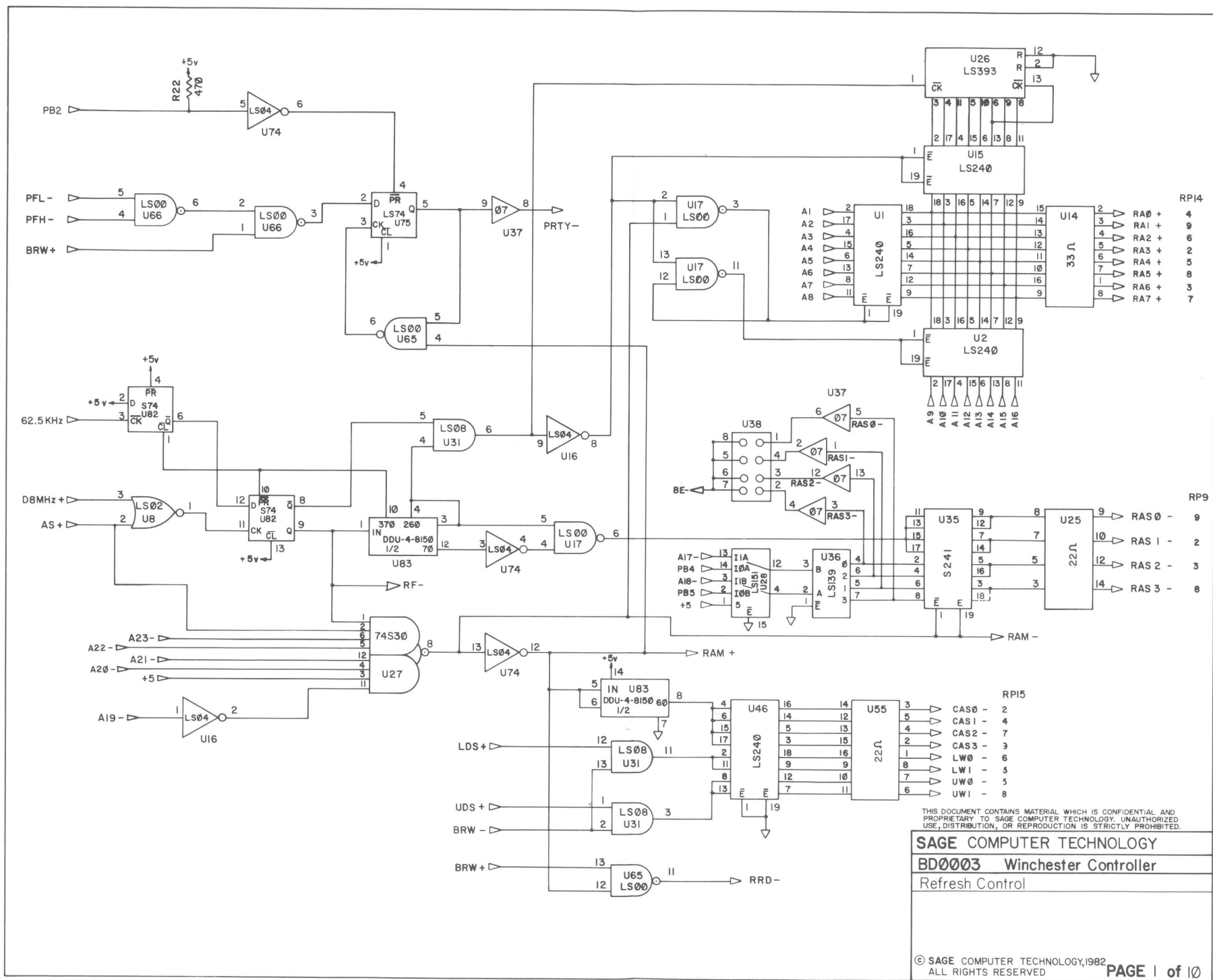
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**CPU BOARD= POWER CIRCUIT**

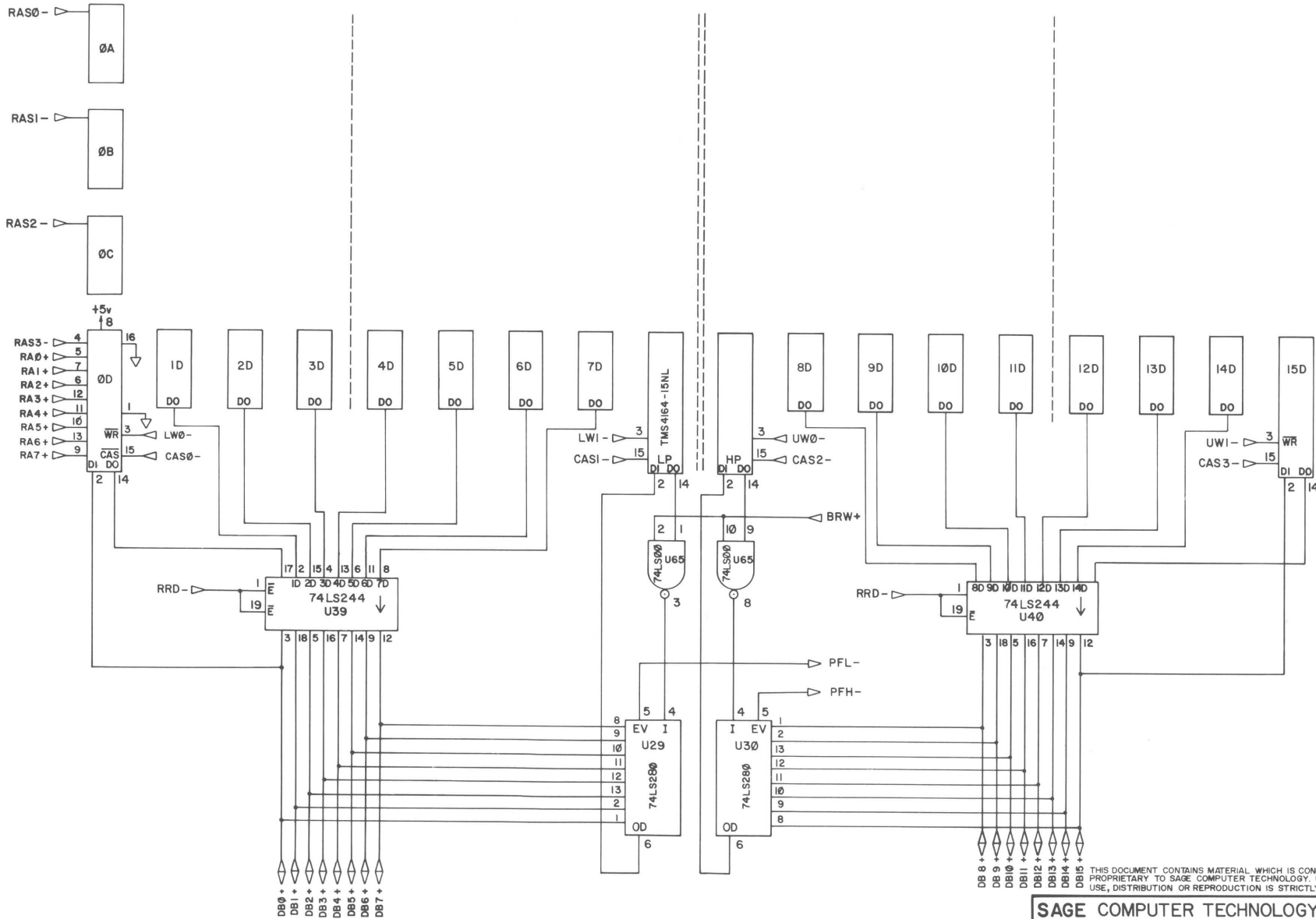
REV	BY	ECO #	DATE	APPR.

APPROVALS	DATE	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES BREAK OUTSIDE CORNERS DO NOT SCALE DRAWING TOLERANCES ARE: DECIMALS .005 FRACTIONS 1/32 ANGLES .1	F.I.P. #	REV
DRAWN	08-05 1983		CB0002	
CHECKED				



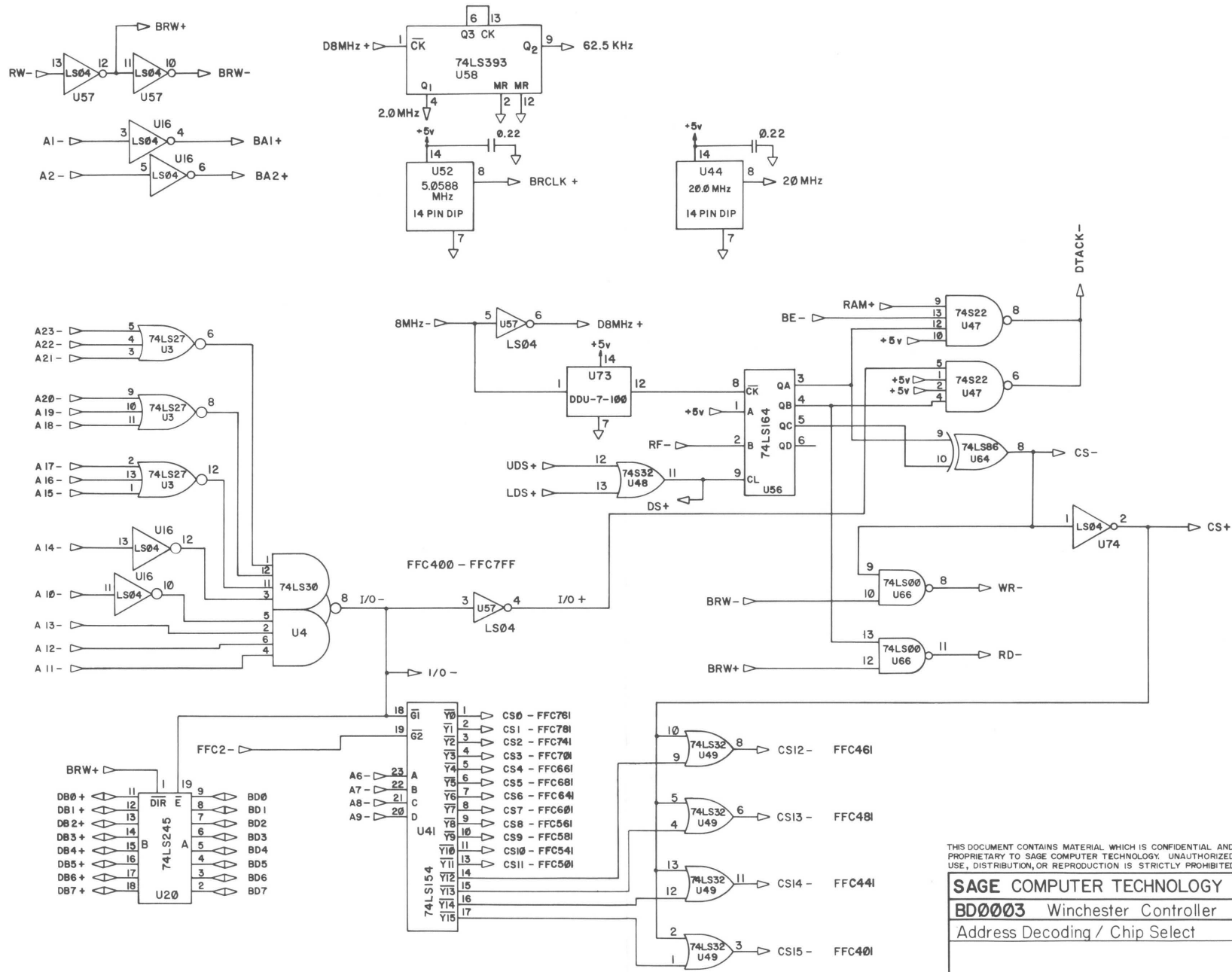
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**SAGE COMPUTER TECHNOLOGY**  
**BD0003 Winchester Controller**  
 Refresh Control



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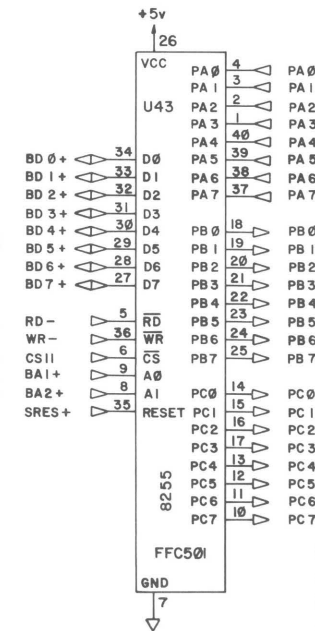
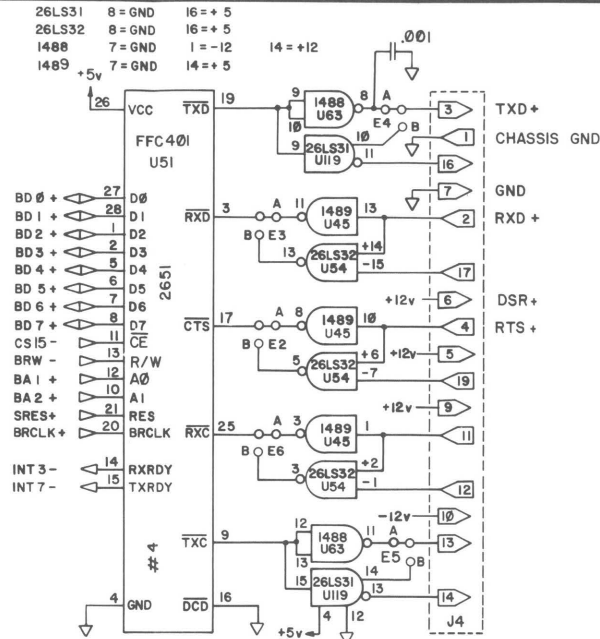
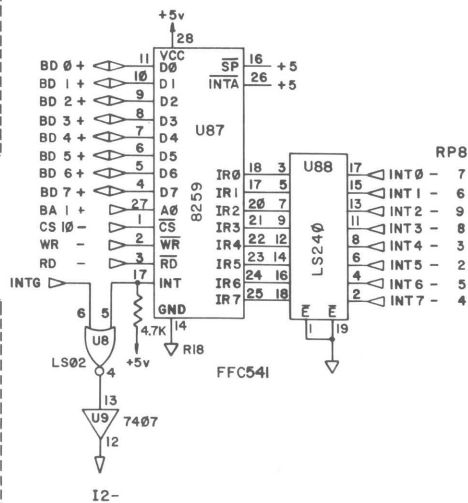
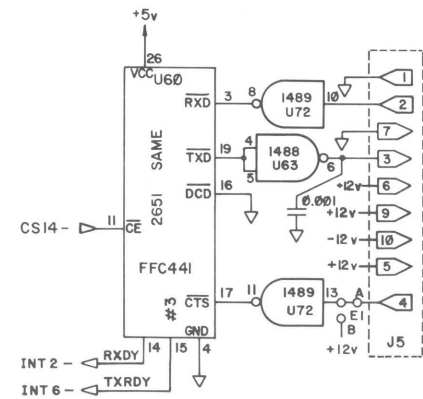
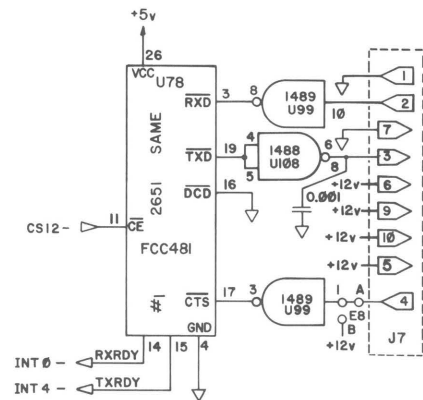
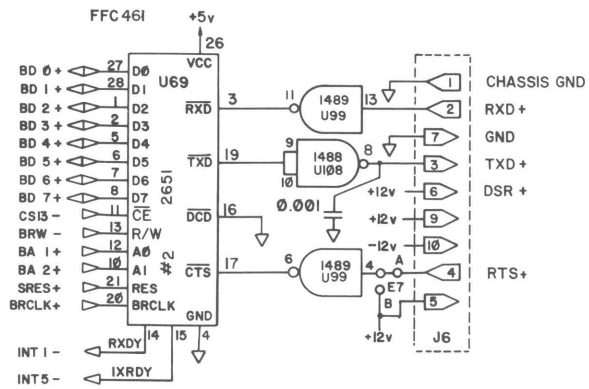
**SAGE COMPUTER TECHNOLOGY**  
**BD0003** Winchester Controller  
 Memory Array



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**SAGE COMPUTER TECHNOLOGY**  
**BD0003** Winchester Controller  
 Address Decoding / Chip Select



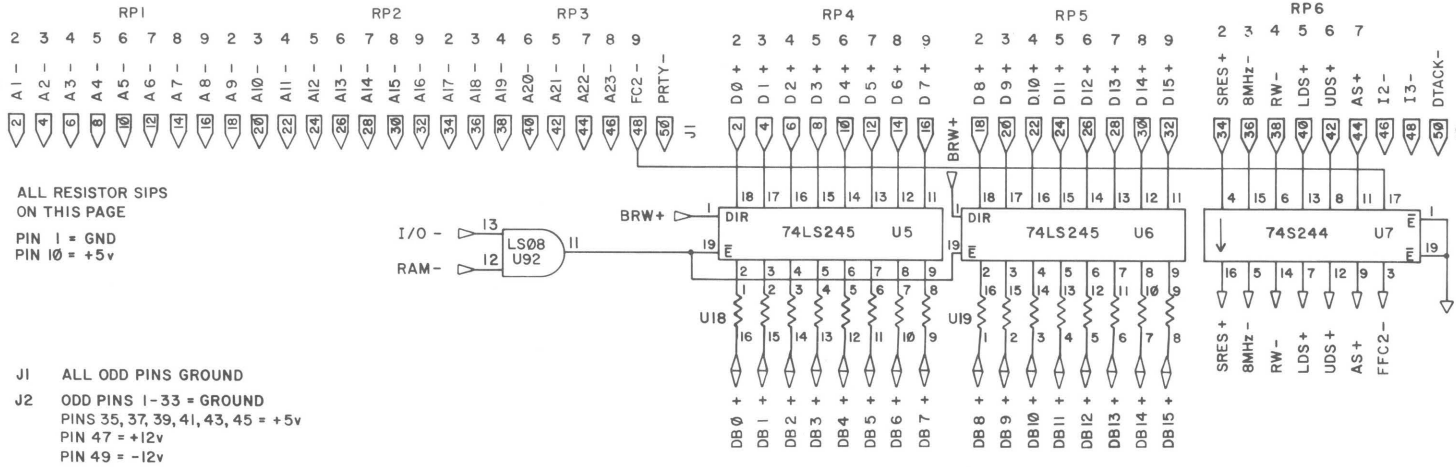


26LS31 8 = GND 16 = +5  
 26LS32 8 = GND 16 = +5  
 1488 7 = GND 1 = -12  
 1489 7 = GND 14 = +5

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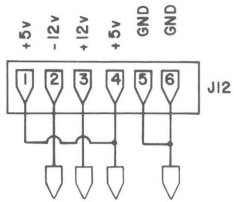
**SAGE COMPUTER TECHNOLOGY**  
 BD0003 Winchester Controller  
 Serial I/O

2/3  
ALL THIS  
PAGE



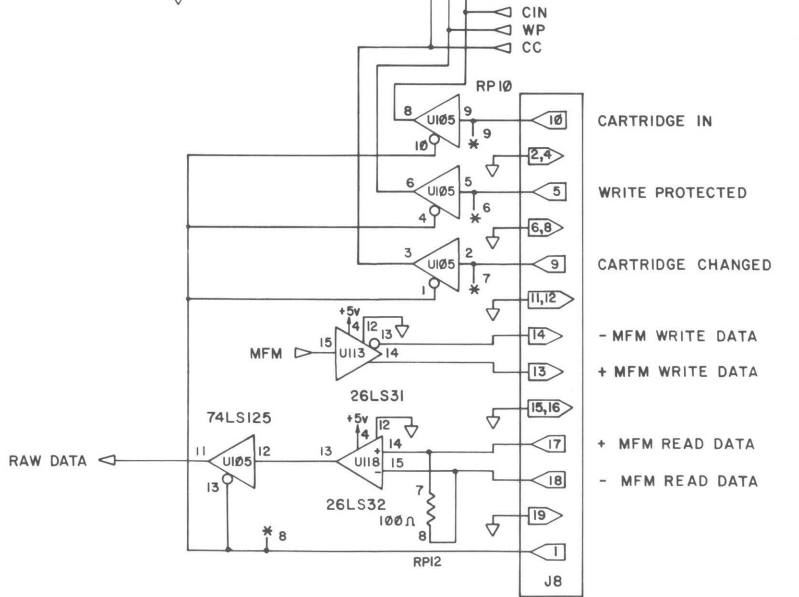
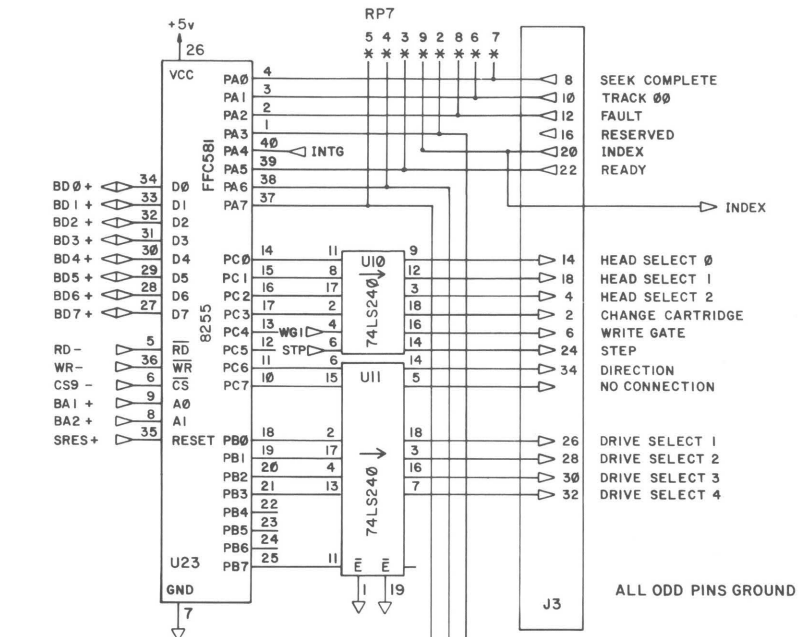
ALL RESISTOR SIPS  
ON THIS PAGE  
PIN 1 = GND  
PIN 10 = +5v

J1 ALL ODD PINS GROUND  
J2 ODD PINS 1-33 = GROUND  
PINS 35, 37, 39, 41, 43, 45 = +5v  
PIN 47 = +12v  
PIN 49 = -12v

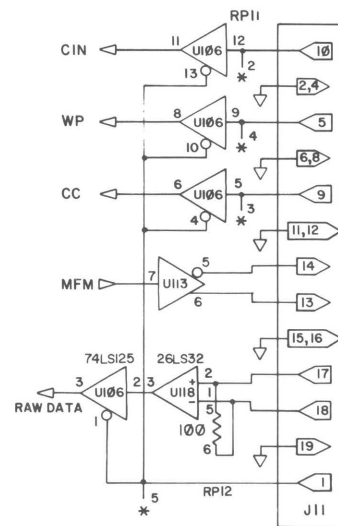
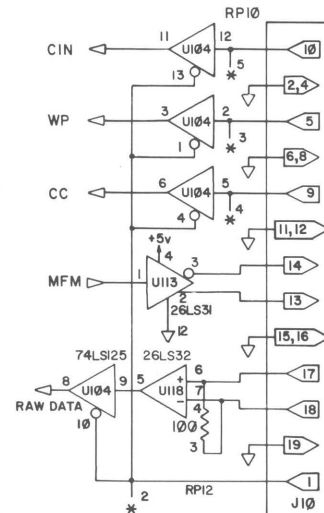
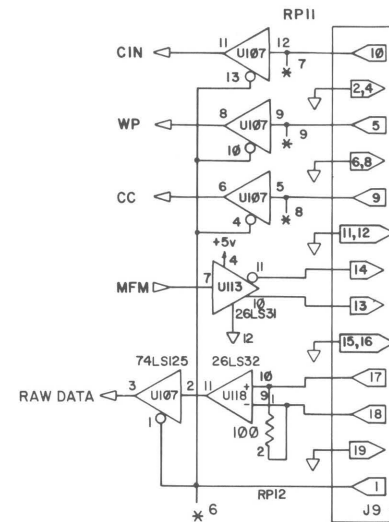


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SAGE COMPUTER TECHNOLOGY  
BD0003 Winchester Controller  
Buss Connectors / Buffers

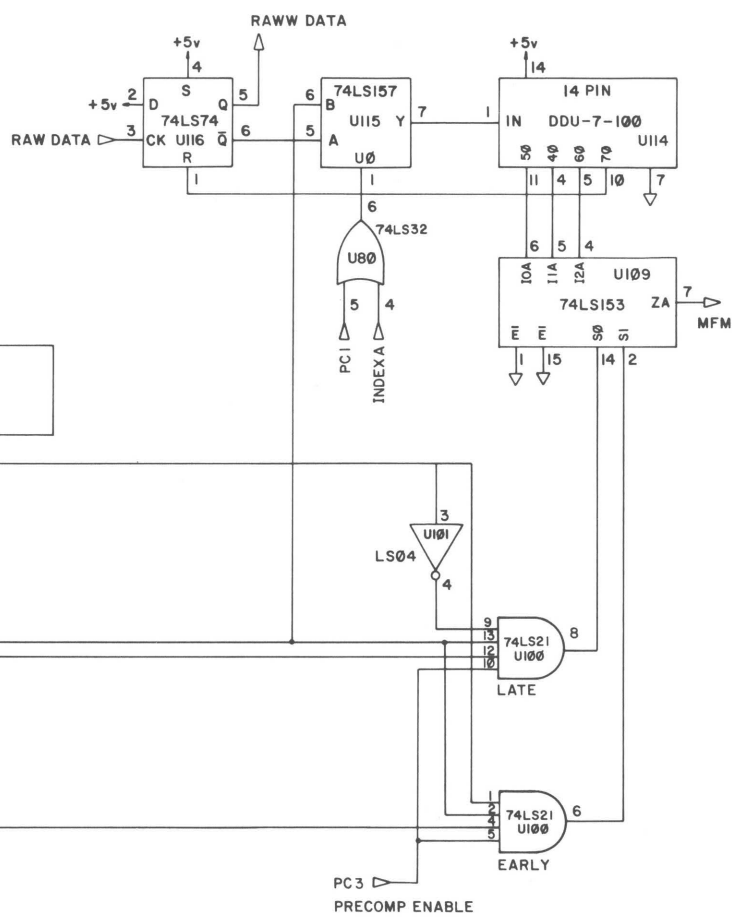
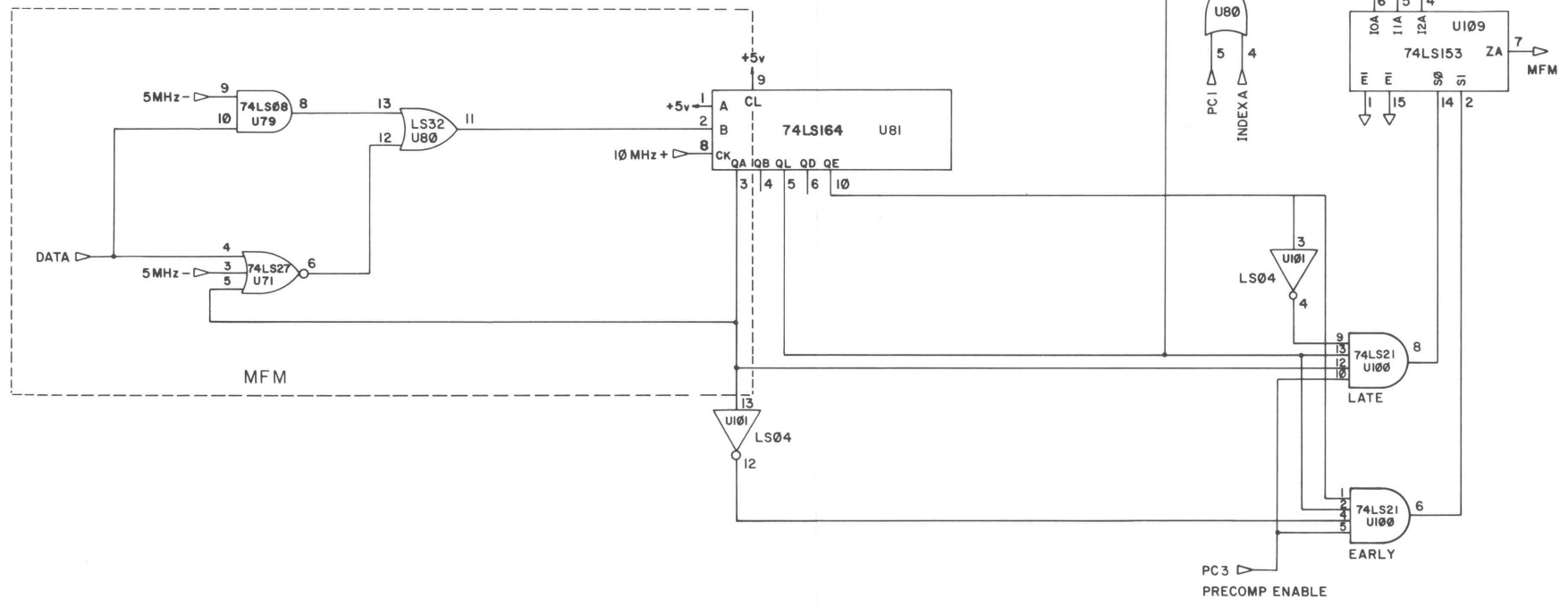
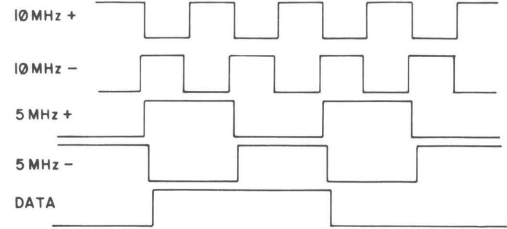


4-20 PIN CONNECTORS TOTAL



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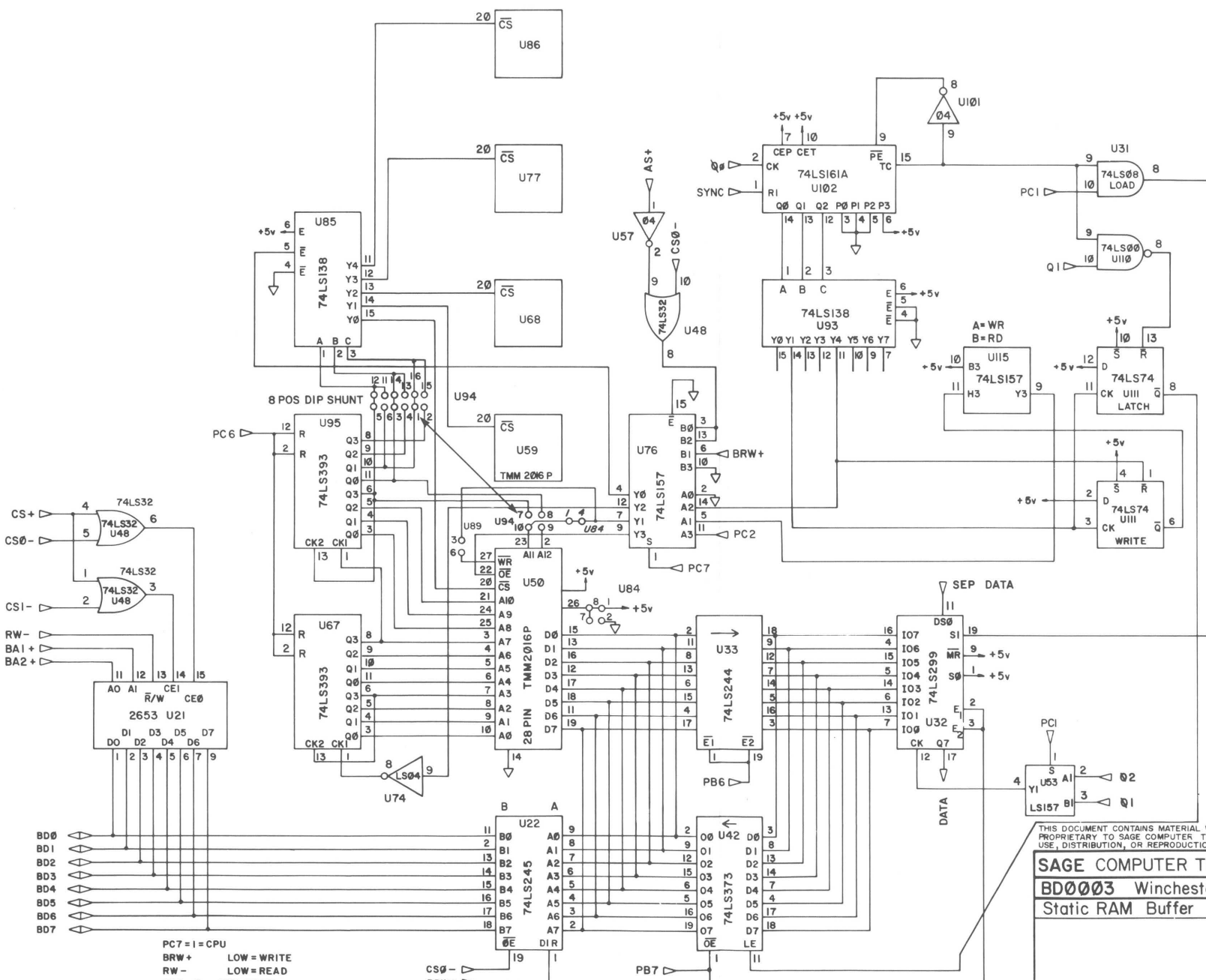
SAGE COMPUTER TECHNOLOGY  
BD0003 Winchester Controller  
Winchester Connectors/ Buffers



PC1 = LOW = READ  
PC3 = LOW = PRECOMP DISABLED

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**SAGE COMPUTER TECHNOLOGY**  
**BD0003 Winchester Controller**  
**MFM / Write Precomp**



PC7 = 1 = CPU  
 BRW+      LOW = WRITE  
 RW-        LOW = READ  
 PB6 = 0    FOR WRITE  
 PB7 = 0    FOR READ

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**SAGE COMPUTER TECHNOLOGY**

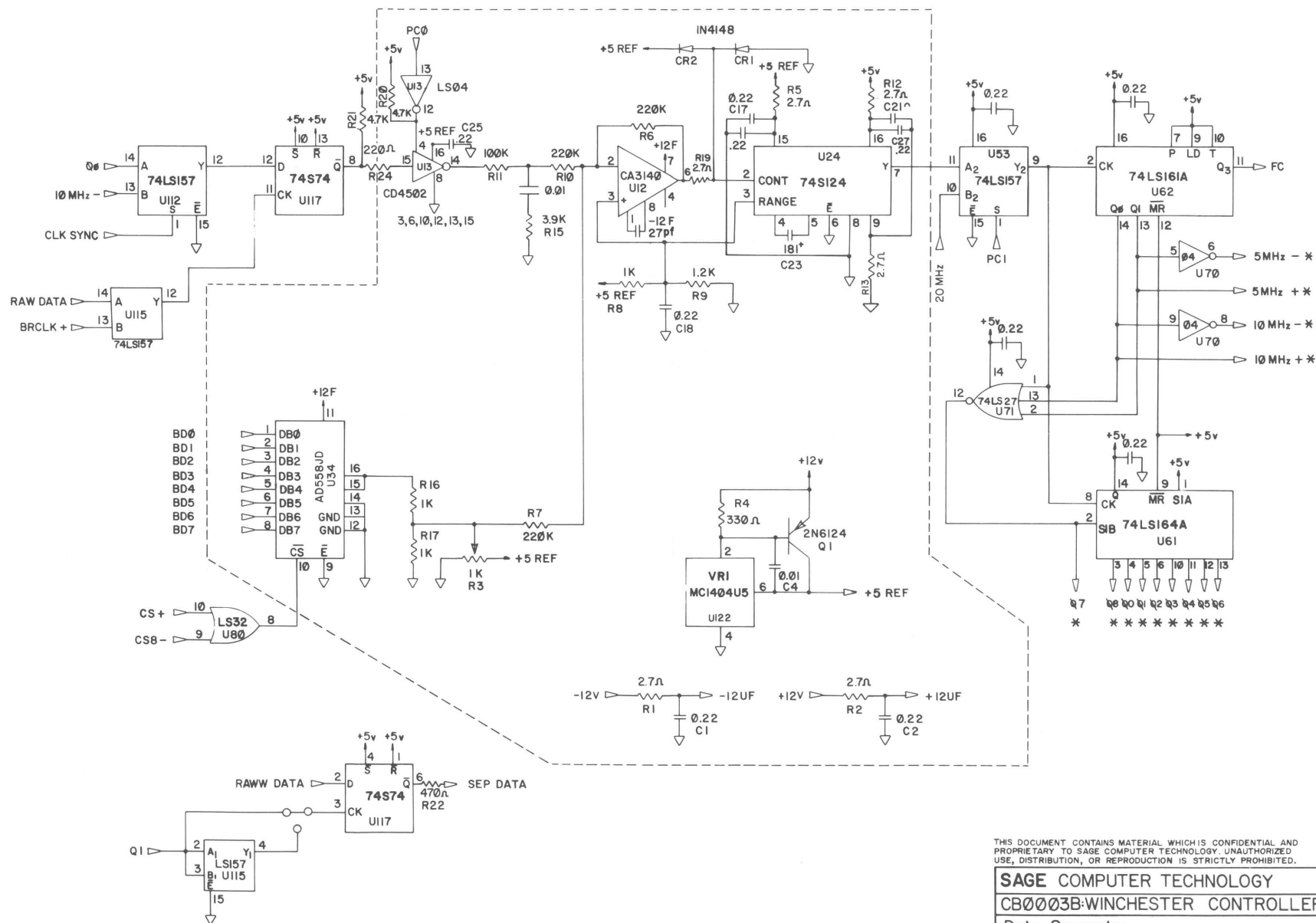
**BD0003 Winchester Controller**

**Static RAM Buffer**

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**PAGE 8 of 10**

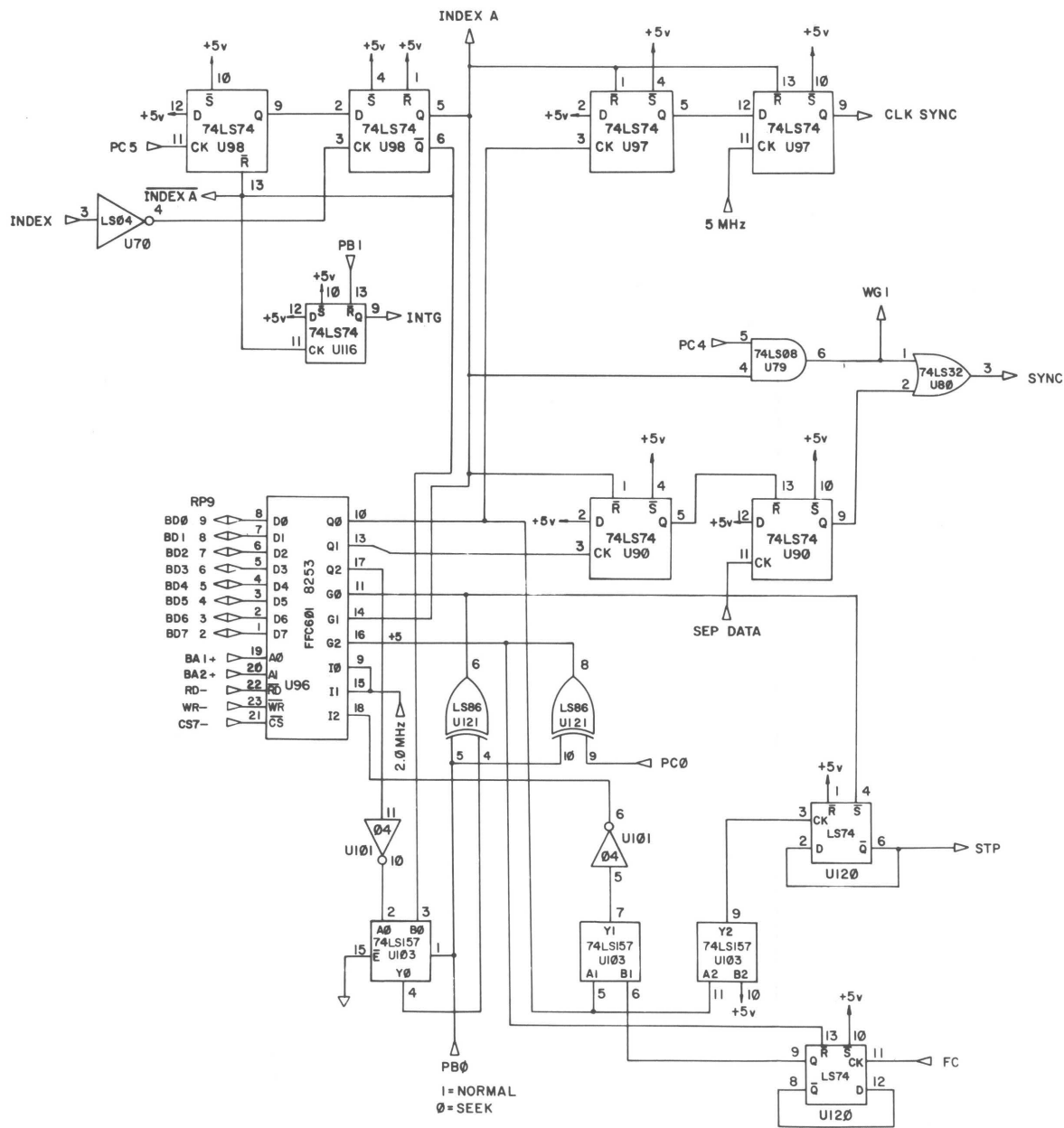


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**SAGE COMPUTER TECHNOLOGY**  
**CB0003B:WINCHESTER CONTROLLER**  
**Data Separator**

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**CB0003 Winchester Controller**  
 Buffered Seek Logic

