

- NOTES:
- UNLESS OTHERWISE SPECIFIED: ALL RESISTORS ARE 1/4W, 5%.
 - GATES MARKED WITH A STAR (*) MAY BE "S" OR "LS".
 - 2901 RAM REGISTERS CONFIGURED FOR A 16 BIT ROTATION WHILE THE "Q" REGISTER IS A 16 BIT SHIFT.
 - LITERAL BITS 0-3 CORRESPOND TO BUS SRC 0-3, IOC SEL 0-2 AND SET IOC.
 - NUMBERS SHOWN IN BRACKETS, [], INDICATE LOGIC LEVEL FOR INSTRUCTION ZERO. INC R17-0, R17, LAR 0SCLR

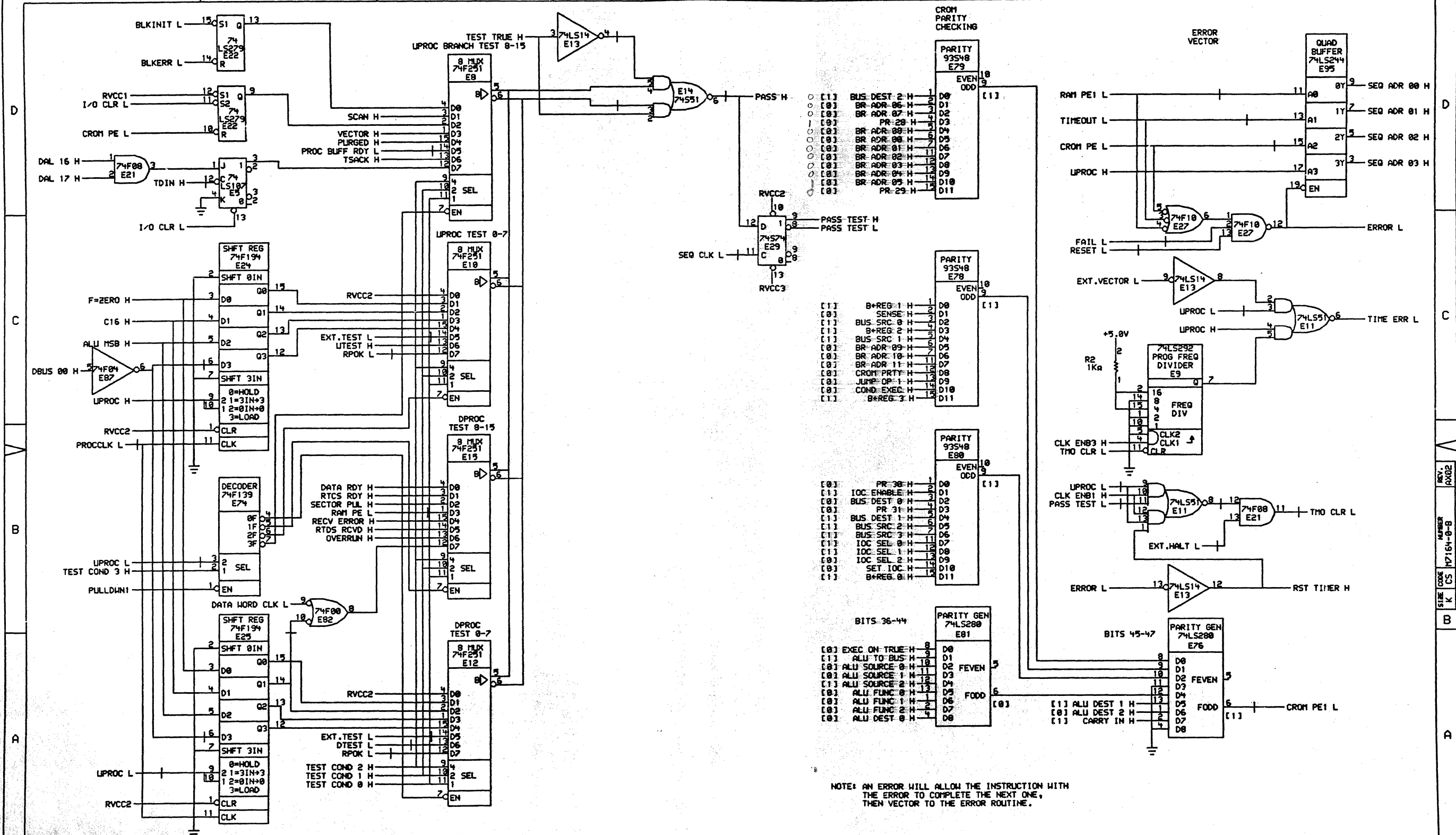
QDA50

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CHK	CHANGE NO.	REV
	QDA-011	A
	R Fuller	2

	DRN. G. SCHNEIDER	DATE 21-SEP-84	ENG. <i>[Signature]</i>	DATE 21-SEP-84	TITLE: QDA PROCESSOR (ALU)
	CHD. <i>[Signature]</i>	DATE BOARD LOCATION: 1 OF 12	SHEET 1 OF 12	SIZE CODE K CS	NUMBER M7164-0-B
COPY: (SCHNEIDER) 0001, DRU121-SEP-84 11:11			NEXT HIGHER ASSEMBLY: B-DD-M7164-0-B		REV. AX02
FIRST USED ON OPTION MODEL: QDA50					

COPY

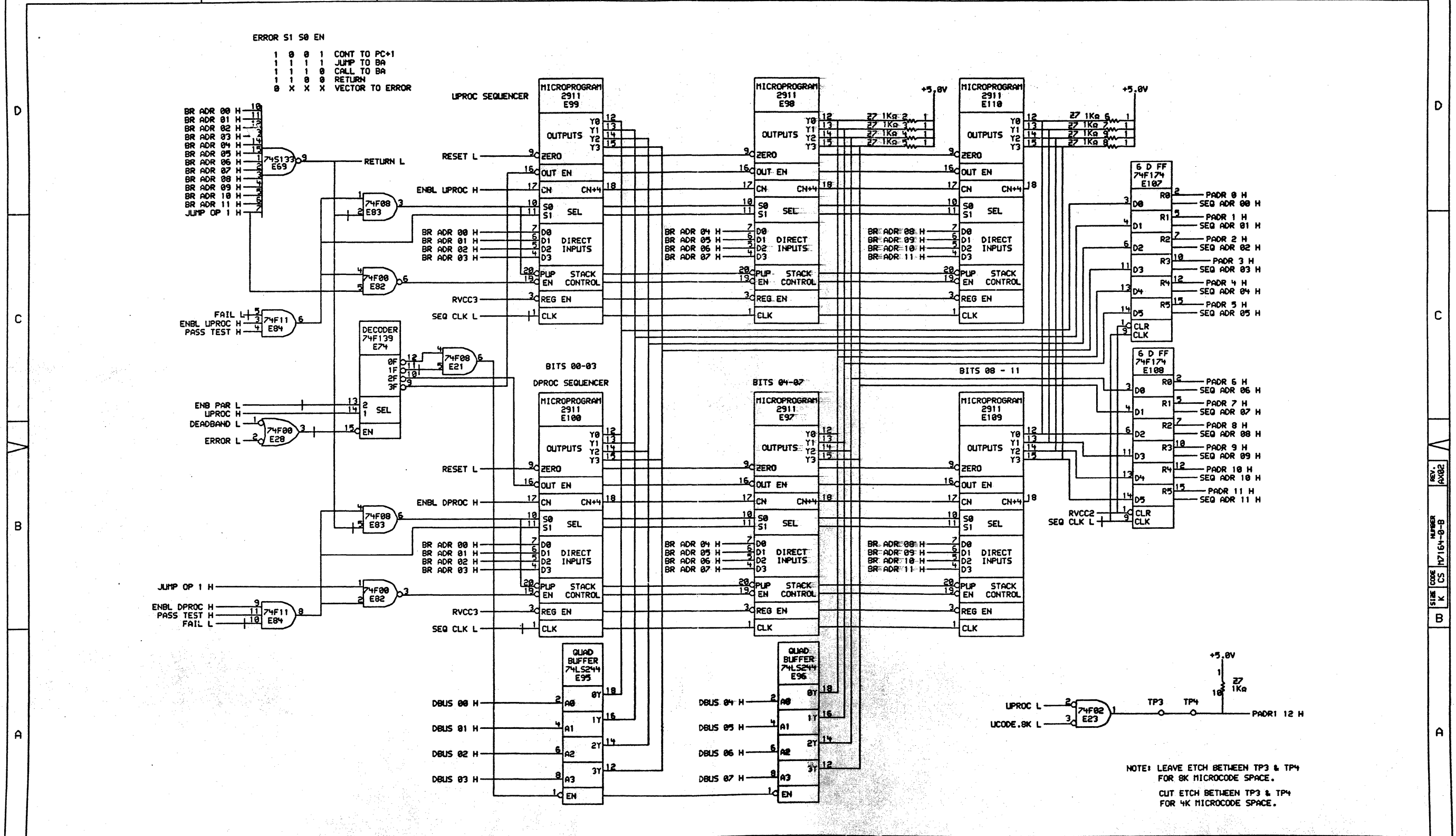


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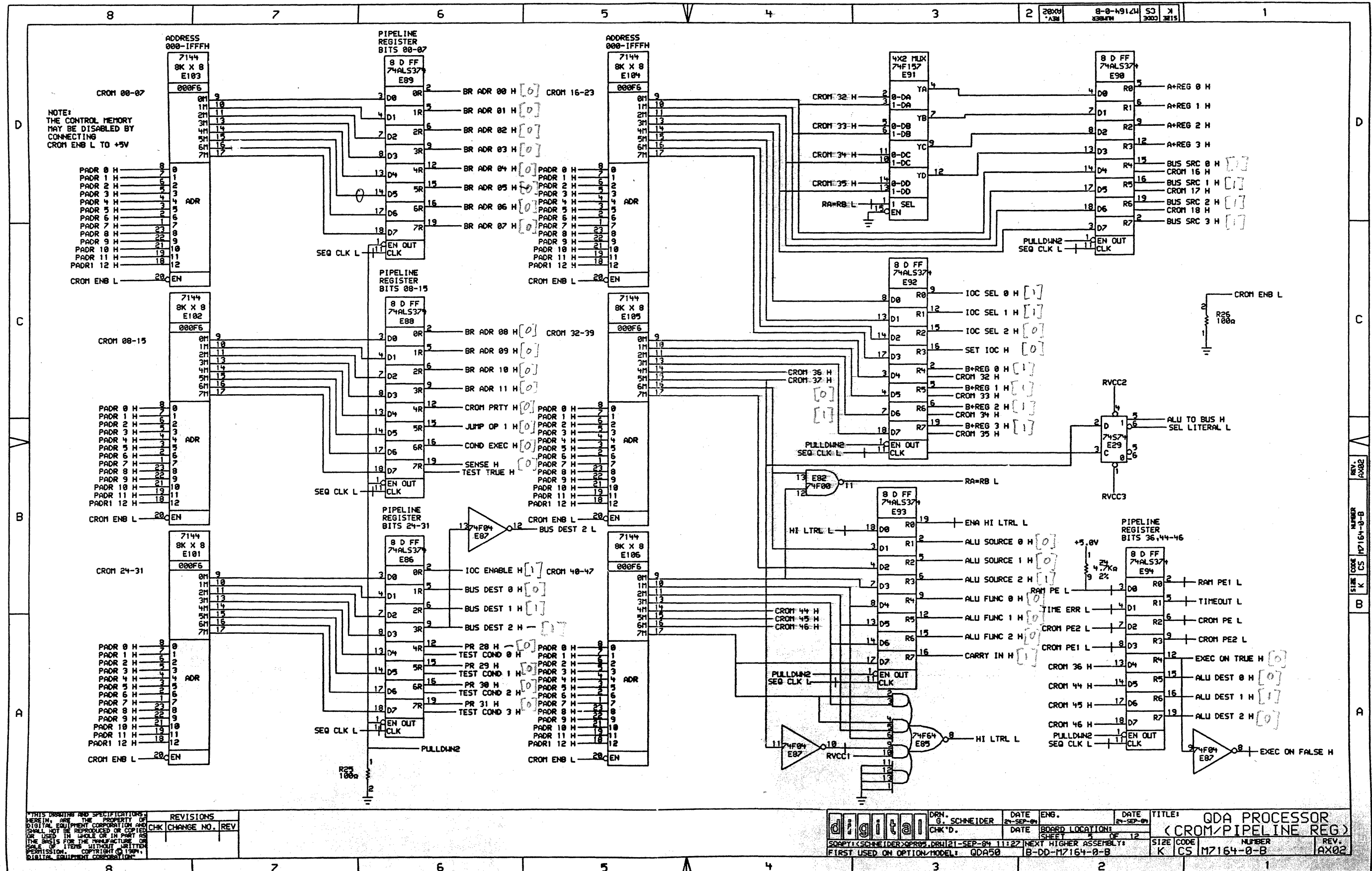
REV.	CHG.	CHANGE NO.	REV.

digital	DRN. G. SCHNEIDER	DATE 21-SEP-84	ENG.	DATE 21-SEP-84	TITLE: QDA PROCESSOR TEST MUX/CROM PARITY
CHK'D.					
SOPHYK SCHNEIDER/DR03 DRW/21-SEP-84 11117	NEXT HIGHER ASSEMBLY:	SHEET 3 OF 12	SIZE CODE K CS	NUMBER M7164-0-B	REV. AX02
FIRST USED ON OPTION MODEL: QDA50	B-DD-M7164-0-B				

COPY



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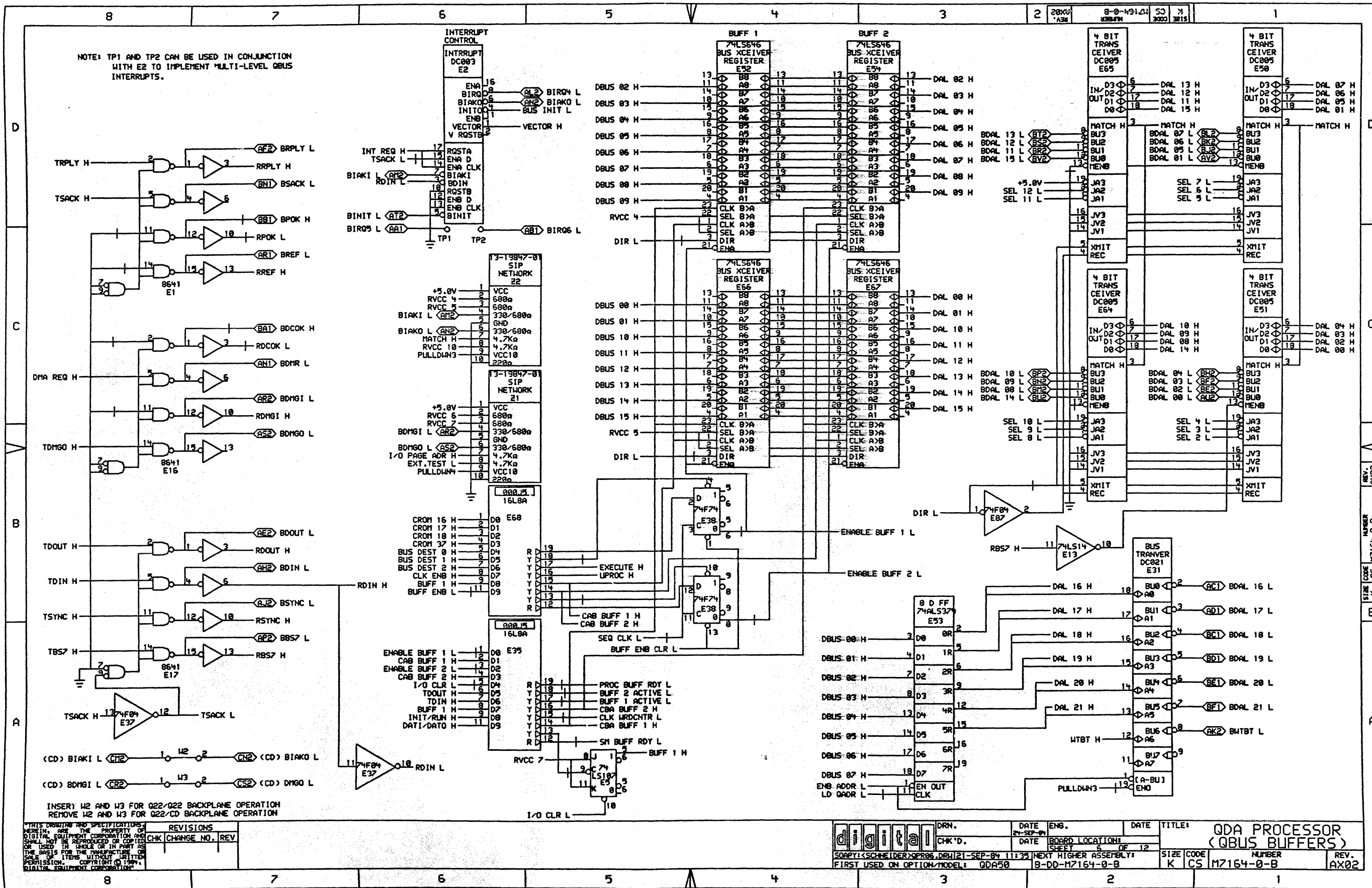


NOTE:
THE CONTROL MEMORY
MAY BE DISABLED BY
CONNECTING
CROM ENB L TO +5V

REVISIONS		
CHK	CHANGE NO.	REV

	DRN. G. SCHNEIDER	DATE 24-SEP-84	ENG.	DATE 24-SEP-84	TITLE: QDA PROCESSOR
	CHK'D.	DATE	BOARD LOCATION:	SHEET 12 OF 12	(CROM/PIPELINE REG)
FIRST USED ON OPTION MODEL: QDA50		NEXT HIGHER ASSEMBLY: B-DD-M7164-0-B		SIZE CODE K CS	NUMBER M7164-0-B
					REV. AX02

COPY



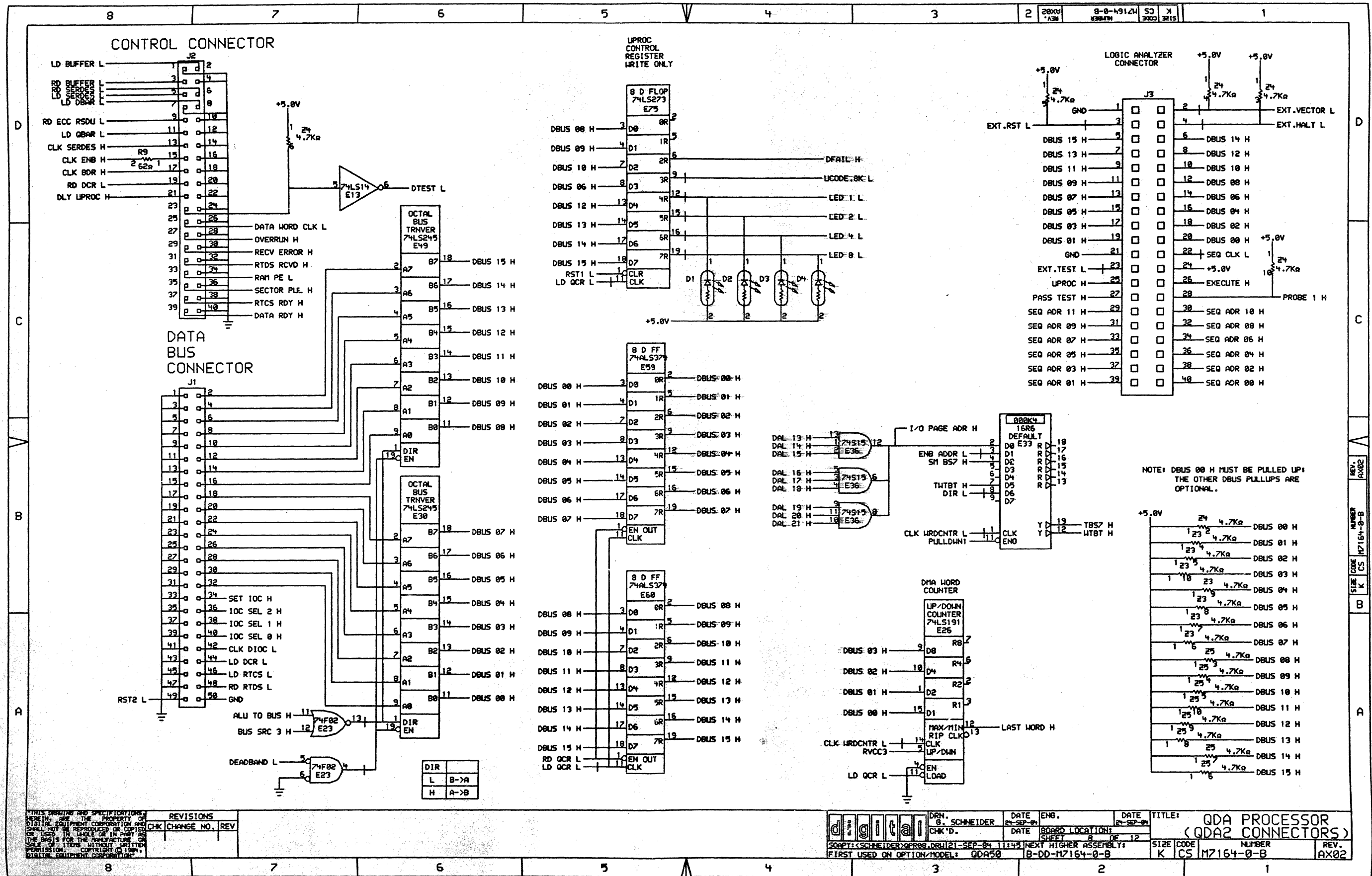
NOTE: TP1 AND TP2 CAN BE USED IN CONJUNCTION WITH E2 TO IMPLEMENT MULTI-LEVEL QBUS INTERRUPTS.

INSERT U2 AND U3 FOR Q22/Q22 BACKPLANE OPERATION
REMOVE U2 AND U3 FOR Q22/CD BACKPLANE OPERATION

REV.	DESCRIPTION
1	INITIAL RELEASE
2	REVISED FOR Q22/CD BACKPLANE OPERATION

digital	DRN.	DATE	ENG.	DATE	TITLE
	CHK'D.	21-SEP-84			QDA PROCESSOR (QBUS BUFFERS)
SOPHY (SCHNEIDER) OPAS, DRW121-SEP-84 11:35 NEXT HIGHER ASSEMBLY:		BOARD LOCATION:		SHEET 6 OF 12	
FIRST USED ON OPTION MODEL: QDA50		B-DD-M7164-0-B		SIZE	NUMBER
				K CS	M7164-0-B
				REV.	AX02

COPY

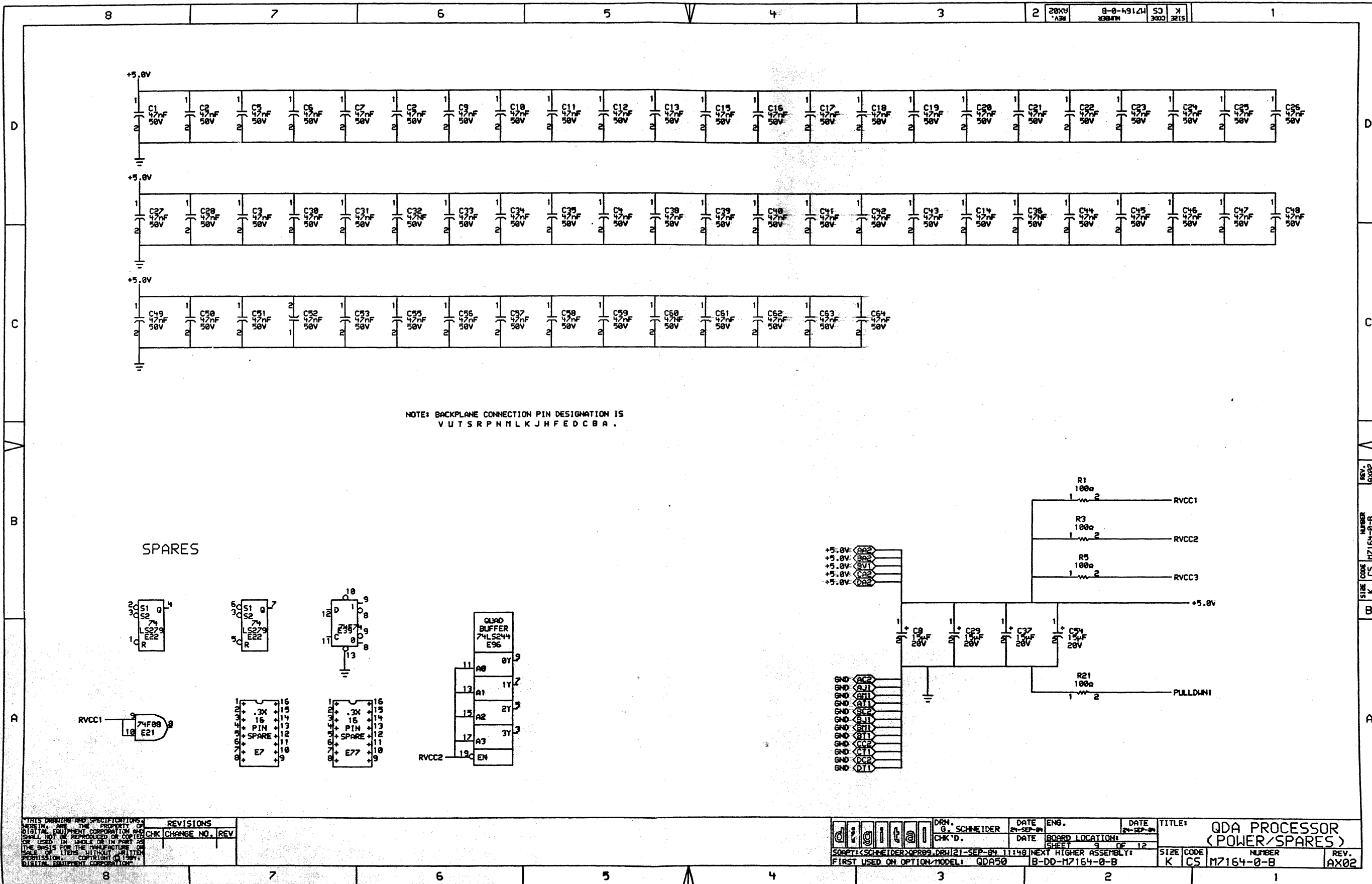


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REV.	NO.	CHG.	NO.	REV.

digital	DRN.	G. SCHNEIDER	DATE	24-SEP-84	ENG.		DATE	24-SEP-84	TITLE:	QDA PROCESSOR
	CHK'D.		DATE		BOARD LOCATION:		SHEET	8 OF 12	(QDA2 CONNECTORS)	
SOPRY: <SCHNEIDER>OPROB.DRW121-SEP-84 11:45		NEXT HIGHER ASSEMBLY:		SIZE		CODE	NUMBER	REV.		
FIRST USED ON OPTION MODEL: QDA50		B-DD-M7164-0-B		K	CS	M7164-0-B	AX02			

COPY



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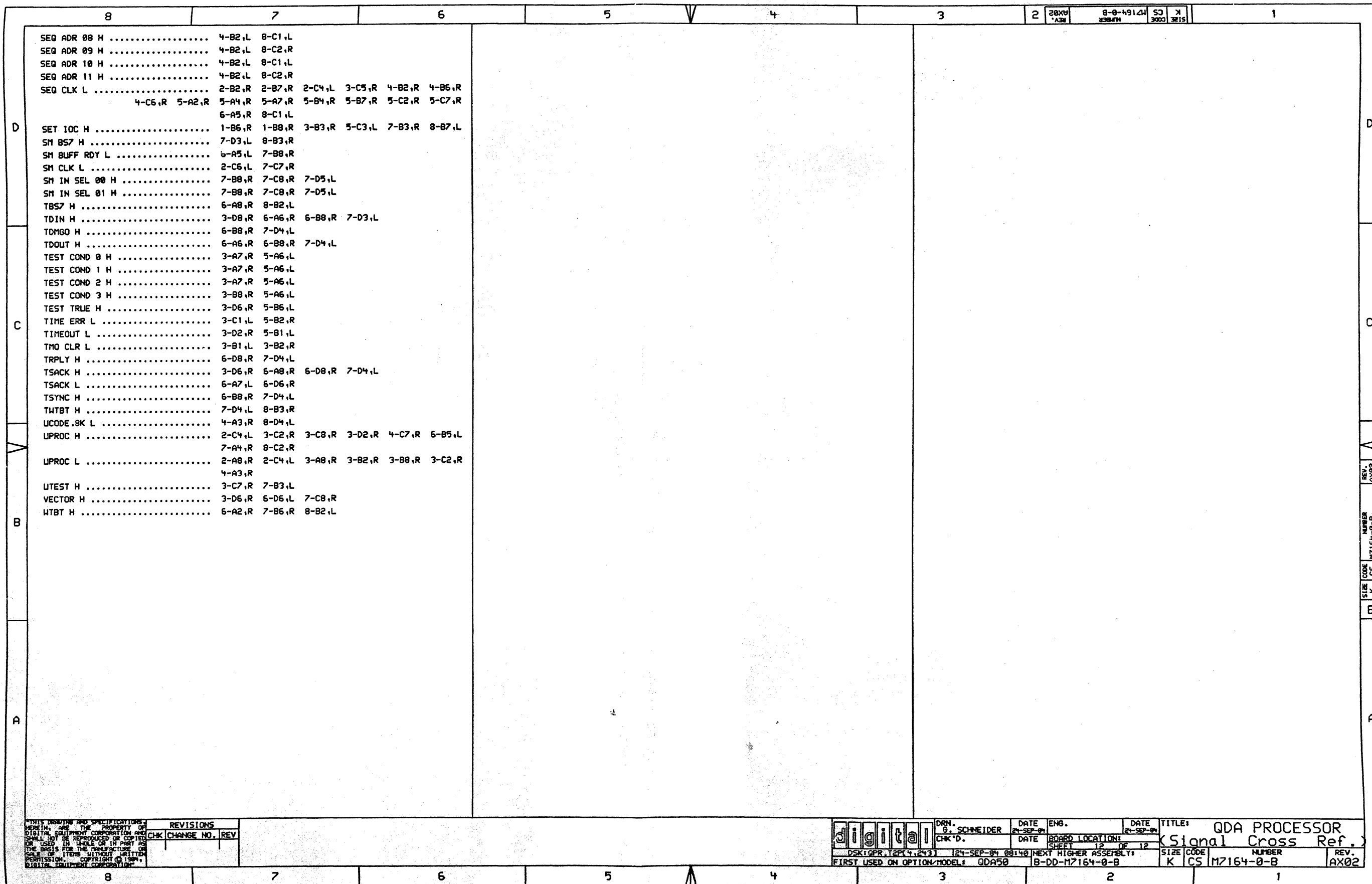
REVISIONS	
CHK	CHANGE NO. REV

digital	DRN. G. SCHNEIDER	DATE 21-SEP-84	ENG.	DATE 21-SEP-84	TITLE: QDA PROCESSOR (POWER/SPARES)
	CHK'D.	DATE	BOARD LOCATION: SHEET 9 OF 12	SIZE CODE K CS	NUMBER M7164-0-B
FIRST USED ON OPTION/MODEL: QDA50		NEXT HIGHER ASSEMBLY: B-DD-M7164-0-B		REV. AX02	

REV. AX02
NUMBER M7164-0-B
SIZE CODE K CS

COPY

8		7		6		5		4		3		2		1	
Vertical location (A-D)		Direction of line (Left, Right, Up, Down)		or electrical (Input, Output, Both)		or backplane pin (Pin)									
KEY:		SS: VH,D													
Schematic Sheet		Horizontal location (1-8)													
(CD) BDMGI L	6-A8,R <CR2>														
(CD) BIAKI L	6-A8,R <CM2>														
(CD) BIAKO L	6-A7,L <CN2>														
(CD) DMGO L	6-A7,L <CS2>														
+5.0V	1-D4,D 2-C1,D 3-C2,D 4-A2,D 4-D2,D 4-D3,D														
	5-B2,D 6-C6,R 6-C5,R 6-D2,R 8-B2,D 8-C1,D 8-C1,L 8-C5,R														
	8-D1,D 8-D1,D 8-D2,D 8-D7,D 9-B2,L 9-C8,D 9-D8,D 9-D8,D														
	9-B3,R <AA2> 9-B3,R <BA2> 9-B3,R <BV1> 9-B3,R <CA2>														
	9-B3,R <DA2>														
ALU DEST 0 H	1-C8,R 3-A3,R 5-A1,L														
ALU DEST 1 H	1-C8,R 3-A2,R 5-A1,L														
ALU DEST 2 H	1-C8,R 3-A2,R 5-A1,L														
ALU FUNC 0 H	1-C8,R 3-A3,R 5-B3,L														
ALU FUNC 1 H	1-C8,R 3-A3,R 5-A3,L														
ALU FUNC 2 H	1-C8,R 3-A3,R 5-A3,L														
ALU MSB H	1-C7,L 3-C8,R														
ALU SOURCE 0 H	1-C8,R 3-A3,R 5-B3,L														
ALU SOURCE 1 H	1-C8,R 3-A3,R 5-B3,L														
ALU SOURCE 2 H	1-C8,R 3-A3,R 5-B3,L														
ALU TO BUS H	1-C8,R 2-C3,R 3-A3,R 5-B2,L 8-A7,R														
A+REG 0 H	1-B8,R 5-D2,L														
A+REG 1 H	1-B8,R 5-D2,L														
A+REG 2 H	1-B8,R 5-D2,L														
A+REG 3 H	1-B8,R 5-D2,L														
BBS7 L	6-A7,L <AP2>														
BDAL 00 L	6-C1,R <AU2>														
BDAL 01 L	6-D1,R <AV2>														
BDAL 02 L	6-C1,R <BE2>														
BDAL 03 L	6-C1,R <BF2>														
BDAL 04 L	6-C1,R <BH2>														
BDAL 05 L	6-D1,R <BJ2>														
BDAL 06 L	6-D1,R <BK2>														
BDAL 07 L	6-D1,R <BL2>														
BDAL 08 L	6-C2,R <BM2>														
BDAL 09 L	6-C2,R <BN2>														
BDAL 10 L	6-C2,R <BP2>														
BDAL 11 L	6-D2,R <BR2>														
BDAL 12 L	6-D2,R <BS2>														
BDAL 13 L	6-D2,R <BT2>														
BDAL 14 L	6-C2,R <BU2>														
BDAL 15 L	6-D2,R <BV2>														
BDAL 16 L	6-B1,L <AC1>														
BDAL 17 L	6-B1,L <AD1>														
BDAL 18 L	6-A1,L <BC1>														
BDAL 19 L	6-A1,L <BD1>														
BDAL 20 L	6-A1,L <BE1>														
BDAL 21 L	6-A1,L <BF1>														
BDCOK H	6-C7,L <BA1>														
BDIN L	6-B7,L <AH2>														
BDMGI L	6-B6,R <AR2> 6-C7,L <AR2>														
BDMGO L	6-B6,R <AS2> 6-B7,L <AS2>														
BDMR L	6-C7,L <AN1>														
BDOUT L	6-B7,L <AE2>														
BIAKI L	6-C6,R <AM2> 6-D6,R <AM2>														
BIAKO L	6-C6,R <AN2> 6-D6,L <AN2>														
BINIT L	6-D6,R <AT2>														
BIRQ4 L	6-D6,L <AL2>														
BIRQ5 L	6-D6,R <AA1>														
BIRQ6 L	6-C6,L <AB1>														
BLKERR L	3-D8,R 7-D3,L														
BLKINIT L	3-D8,R 7-D3,L														
BLOCK H	7-B3,L 7-D8,R														
BPOK H	6-D7,L <BB1>														
BR ADR 00 H	3-D3,R 4-B6,R 4-C6,R 4-D7,R 5-D6,L														
BR ADR 01 H	3-D3,R 4-B6,R 4-C6,R 4-D7,R 5-D6,L														
BR ADR 02 H	3-D3,R 4-B6,R 4-C6,R 4-D7,R 5-D6,L														
BR ADR 03 H	3-D3,R 4-B6,R 4-C6,R 4-D7,R 5-D6,L														
BR ADR 04 H	3-D3,R 4-B5,R 4-C5,R 4-D7,R 5-D6,L														
BR ADR 05 H	3-D3,R 4-B5,R 4-C5,R 4-D7,R 5-D6,L														
BR ADR 06 H	3-D3,R 4-B5,R 4-C5,R 4-D7,R 5-D6,L														
BR ADR 07 H	3-D3,R 4-B5,R 4-C5,R 4-D7,R 5-D6,L														
BR ADR 08 H	3-D3,R 4-B3,R 4-C3,R 4-D7,R 5-C6,L														
BR ADR 09 H	3-C3,R 4-B3,R 4-C3,R 4-D7,R 5-C6,L														
BR ADR 10 H	3-C3,R 4-B3,R 4-C3,R 4-D7,R 5-C6,L														
BR ADR 11 H	3-C3,R 4-B3,R 4-C3,R 4-D7,R 5-C6,L														
BREF L	6-C7,L <AR1>														
BRPLY L	6-D7,L <AF2>														
BSACK L	6-D7,L <BN1>														
BSYNC L	6-B7,L <AJ2>														
BUFF 1 ACTIVE L	6-A5,L														
BUFF 1 H	6-A5,L 6-A6,R 6-B6,R														
BUFF 2 ACTIVE L	6-A5,L														
BUFF ENB CLR L	6-A5,R 7-D3,L														
BUFF ENB L	6-B6,R 7-D4,L														
BUS DEST 0 H	2-B3,R 3-B3,R 5-B6,L 6-B6,R														
BUS DEST 1 H	2-B3,R 3-B3,R 5-B6,L 6-B6,R														
BUS DEST 2 H	2-C3,R 3-D3,R 5-A6,L 6-B6,R														
BUS DEST 2 L	2-A4,R 5-B5,L														
BUS INIT L	6-D6,L 7-A6,R 7-B3,R 7-C6,R														
BUS RST L	2-B7,R 7-B3,L														
BUS SRC 0 H	1-A5,R 1-A7,R 2-C3,R 3-C3,R 5-D2,L														
BUS SRC 1 H	1-A5,R 1-A7,R 2-C3,R 3-C3,R 5-D2,L														
BUS SRC 2 H	1-B5,R 1-B7,R 2-D3,R 3-B3,R 5-D2,L														
BUS SRC 3 H	1-B5,R 1-B7,R 3-B3,R 5-D2,L 8-A7,R														
BWTBT L	6-A1,L <AK2>														
B+REG 0 H	1-B8,R 3-B3,R 5-C3,L														
B+REG 1 H	1-B8,R 3-C3,R 5-C3,L														
B+REG 2 H	1-B8,R 3-C3,R 5-C3,L														
B+REG 3 H	1-B8,R 3-C3,R 5-B3,L														
C12 IN H	1-C8,R 1-D2,L														
C16 H	1-C7,L 3-C8,R														
C4 IN H	1-C6,R 1-D2,L														
C8 IN H	1-C6,R 1-D2,L														
CAB BUFF 1 H	6-A6,R 6-B5,L														
CAB BUFF 2 H	6-A5,L 6-A6,R														
CARRY IN H	1-C3,R 1-C4,R 3-A2,R 5-A3,L														
CBA BUFF 1 H	6-A5,L														
CBA BUFF 2 H	6-A5,L														
CLK BDR H	2-D4,L 8-D8,R														
CLK DI0C L	2-B3,L 8-A7,L														
CLK ENB H	2-D4,L 6-B6,R 8-D8,R														
CLK ENB1 H	2-B3,R 2-D4,L 3-B2,R														
CLK ENB2 H	2-D5,L 7-A3,R														
CLK ENB3 H	2-D4,L 3-B2,R														
CLK SERDES H	2-B4,L 8-D8,R														
CLK WRDCNTR L	6-A5,L 8-A3,R 8-B3,R														
COND EXEC H	2-B6,R 3-C3,R 5-B6,L														
CROM 16 H	5-D2,L 6-B6,R														
CROM 17 H	5-D2,L 6-B6,R														
CROM 18 H	5-D2,L 6-B6,R														
CROM 32 H	5-C3,L 5-D3,R														
CROM 33 H	5-C3,L 5-D3,R														
CROM 34 H	5-C3,L 5-D3,R														
CROM 35 H	5-B3,L 5-D3,R														
CROM 36 H	5-A2,R 5-C4,L														
CROM 37 H	5-C4,L 6-B6,R														
CROM 44 H	5-A2,R 5-B4,L														
CROM 45 H	5-A2,R 5-A4,L														
CROM 46 H	5-A2,R 5-A4,L														



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REVISIONS		
CHK	CHANGE NO.	REV

digital	DRN. G. SCHNEIDER	DATE 21-SEP-84	ENG.	DATE 21-SEP-84	TITLE: QDA PROCESSOR
	CHK'D.	DATE	BOARD LOCATION:	SHEET 12 OF 12	(Signal Cross Ref.)
DSKTOPR, T2PC4, 2431		124-SEP-84	08140	NEXT HIGHER ASSEMBLY:	SIZE CODE
FIRST USED ON OPTION MODEL: QDA50		B-DD-M7164-0-B		K CS	NUMBER M7164-0-B
					REV. AX02

COPY