

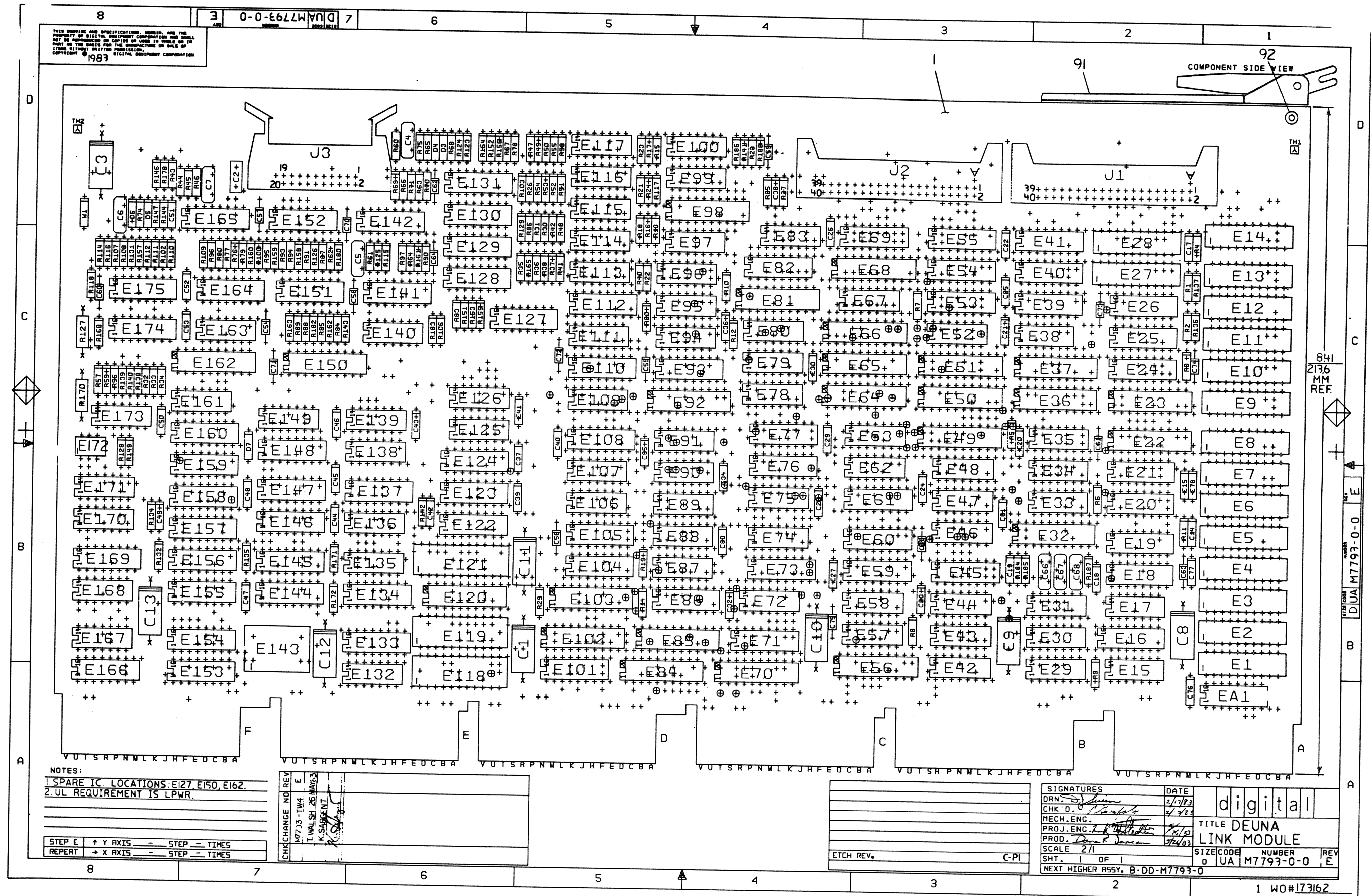
REV

CODE	NUMBER	REV.
CS	117393-0-10	A

8	7	6	5	4	3	2	1																					
<div style="float:right; text-align:right; font-size: small;"> REV. A NUMBER E11-0-TT3 SIZE CODE K CS </div>																												
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>PART NUMBER: 23-070K3-00</p> <p>LOCATION: E101</p> <p>DEVICE TYPE: PAL16RM</p> <p>PIN NUMBER = SYMBOL TABLE:</p> <table style="width:100%; font-size: x-small;"> <tr> <td>1= 10MHZ</td><td>8= NC2 H</td><td>15= ENB RW L</td></tr> <tr> <td>2= RX REQ H</td><td>9= INIT H</td><td>16= NC3 L</td></tr> <tr> <td>3= TX REQ H</td><td>10= GND</td><td>17= MEM DONE L</td></tr> <tr> <td>4= DMA REQ L</td><td>11= GND</td><td>18= T11 ACK L</td></tr> <tr> <td>5= T11 REQ H</td><td>12= RX ACK L</td><td>19= DMA ACK L</td></tr> <tr> <td>6= MEM BUSY H</td><td>13= TX ACK L</td><td>20= VCC</td></tr> <tr> <td>7= NC1 H</td><td>14= ARB STATE L</td><td></td></tr> </table> <p>NOTES: LNKR-B - (PRTP) FOR PAL LNKR-B (LINK MEMORY ARBITER - REV B)</p> </div> <div style="width: 50%;"> <p>PAL PINS: [0][0][0][0][0][0][1][1][1][1][1][1][1][1][1]</p> <p>[2][3][4][5][6][7][8][9][2][3][4][5][6][7][8][9]</p> <p>OUTPIN 19 XXXXXXXXXXXXXXXX VCC L L L H X X X L X X L H X X X X /RX REQ H = /TX REQ H = DMA REQ L = ARB STATE L = /ENB RW L = /INIT H X X L X X X L H H L X X X H L DMA ACK L = DMA REQ L = ARB STATE L = /RX ACK L = /TX ACK L = /T11 ACK L = /INIT H X X X X X X L H H X L X X H L DMA ACK L = ENB RW L = /RX ACK L = /TX ACK L = /T11 ACK L = /INIT H</p> <p>OUTPIN 18 XXXXXXXXXXXXXXXX VCC L L H H X X X L X X L H X X X X /RX REQ H = /TX REQ H = /DMA REQ L = T11 REQ H = ARB STATE L = /ENB RW L = /INIT H X X X H X X L H H L X X X L H T11 ACK L = T11 REQ H = ARB STATE L = /RX ACK L = /TX ACK L = /DMA ACK L = /INIT H X X X X X X L H H X L X X L H T11 ACK L = ENB RW L = /RX ACK L = /TX ACK L = /DMA ACK L = /INIT H</p> <p>OUTPIN 17 XXXXXXXXXXX L X X L L X X X X ENB RW L = ARB STATE L = /INIT H</p> <p>OUTPIN 16</p> <p>OUTPIN 15 H X X X X X X L X X L X X X X X RX REQ H = ARB STATE L = /INIT H X H X X X X X L X X L X X X X X TX REQ H = ARB STATE L = /INIT H X X L X X X X L X X L X X X X X DMA REQ L = ARB STATE L = /INIT H X X X H X X X L X X L X X X X X T11 REQ H = ARB STATE L = /INIT H X X X X X X L X X X L X X H X X ENB RW L = /MEM DONE L = /INIT H</p> <p>OUTPIN 14 XXXXXXXXXXX H X X X X X X X X INIT H X X X X X X X L X X L H X X X X X /ENB RW L = ARB STATE L = /INIT H X X X X X X X L X X H L X X X X X ENB RW L = /ARB STATE L = /INIT H X X X X X X L X X X H H X X X X X /ENB RW L = /ARB STATE L = /INIT H</p> <p>OUTPIN 13 XXXXXXXXXXXXXXXX VCC L H X X X X X L X X L H X X X X X /RX REQ H = TX REQ H = ARB STATE L = /ENB RW L = /INIT H X H X X X X X L H L X X X X X H TX ACK L = TX REQ H = ARB STATE L = /RX ACK L = /DMA ACK L = /T11 ACK L = /INIT H X X X X X X L H L X L X X X H H TX ACK L = ENB RW L = /RX ACK L = /DMA ACK L = /T11 ACK L = /INIT H</p> <p>OUTPIN 12 XXXXXXXXXXXXXXXX VCC H X X X X X X L X X L H X X X X X RX REQ H = ARB STATE L = /ENB RW L = /INIT H X H X X X X X L H L X X X X X H RX ACK L = RX REQ H = ARB STATE L = /TX ACK L = /DMA ACK L = /T11 ACK L = /INIT H X X X X X X L L H X L X X X H H RX ACK L = ENB RW L = /TX ACK L = /DMA ACK L = /T11 ACK L = /INIT H</p> </div> </div>								1= 10MHZ	8= NC2 H	15= ENB RW L	2= RX REQ H	9= INIT H	16= NC3 L	3= TX REQ H	10= GND	17= MEM DONE L	4= DMA REQ L	11= GND	18= T11 ACK L	5= T11 REQ H	12= RX ACK L	19= DMA ACK L	6= MEM BUSY H	13= TX ACK L	20= VCC	7= NC1 H	14= ARB STATE L	
1= 10MHZ	8= NC2 H	15= ENB RW L																										
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REVISIONS		DATE	ENG.	DATE	TITLE																							
C-#	C-CHANGE NO.	REV																										
					DEUNA PORT MODULE PAL LISTINGS																							
8	7	6	5	4	3	2	1																					

SIZE	CODE	NUMBER	REV.
K	CS	M7792-0-TT4	A

[illegible]



AUTOMATED BY PRTLST.4Q(50)

PARTS LIST

SHEET A1 OF A3

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION	REFERENCE DESIGNATOR
1	1	D-MD-5015005-0-0	5015005-00	DRILL AND ETCH CUT	1	
2	2		1010978-36	.1 MFD 50V 10% CER	1	C2
3	3		1002424-00	1200.0 MMF 100V 5%200PPM MICA	2	C4,C6
4	4		1000019-00	150.0 MMF 100V 5%200PPM MICA	2	C5,C7
5	5		1012784-00	.047 MFD 50V +80-20% CER	39	C14,C15,C17,C18,C19,C20,C21,C22, CONT C23,C24,C25,C26,C27,C28,C29,C30, CONT C31,C32,C33,C34,C35,C36,C37,C38, CONT C39,C40,C41,C42,C43,C44,C45,C46, CONT C47,C48,C49,C50,C51,C52,C53 C54,C55,C56,C57,C58,C59,C60,C61., CONT C62,C63,C64,C65,C70-C78 C66,C67 C68 D3,D4,D5,D6,D7 E1,E2,E3,E4,E5,E6,E7,E8,E9,E10, CONT E11,E12,E13,E14,E27,E28 E15 E16,E18,E19,E20,E59,E60,E76, CONT E134,E169 E17 E21,E24,E25,E26,E39,E40,E55, CONT E156,E158 E22,E23,E50,E102,E103 E29,E38,E95,E167 E30,E44 E31,E35,E78,E79,E149 E32,E36,E37,E49,E51,E56,E70,E84, CONT E85,E92 E33,E52,E80 E34,E42,E94,E161
6	6		1001610-00	.01 MFD 50V +80-20% Z5U CER	21	
7	7		1005820-00	22.0 MMF 100V 5%200PPM MICA	2	
8	8		1000010-00	39.0 MMF 100V 5%200PPM MICA	1	
9	9		1100114-00	PIV= 25 IO=135 MA	5	
10	10		2118054-03	16K MOS RAM 55NS 2	16	
11	11		1913340-00	74S32 OR GATE-QUAD 2IN	1	
12	12		1912851-00	LS169 COUNTER,SYNCH. UP/DO	9	
13	13		1912811-00	LS21 AND GATE-DUAL 4IN,PO	1	
14	14		1912849-00	LS161 COUNTER,SYNCHR,4BIT	9	
15	15		23000K4-01	PAL,LOGIC	5	
16	16		1912805-00	LS08 AND GATE-QUAD 2IN,PO	4	
17	17		1912820-00	LS51 A-O-I GATE 2-WIDE 2I	2	
18	18		1912803-00	LS04 INVERTER GATE,HEX	5	
19	19		23000K5-01	PROGRAMMABLE LOGIC ARRAY	10	
20	20		1912799-00	LS00 NAND-GATE-QUAD 2IN,P	3	
21	21		1912824-00	LS74 FF-D DUAL,EDGE TRIGG	4	

REVISION HISTORY		BASIC PART NO: M7793		DRN: R LOVE	DATE: 09-14-82	D I G I T A L			
ENG:	ECO NUMBER	REV	SECTION A OF A	CHK'D: C COSTA	DATE: 09-14-82	TITLE PARTS LIST			
---	INITIAL	A	SECTION VARIATION INDEX	DES.ENG: M STECKLAIR	DATE: 09-14-82	DE UNA LINK MODULE			
TE	M7793-TW003	B	[A] 00	RESP.ENG.: M STECKLAIR	DATE: 09-14-82	DOCUMENT NUMBER			
NB	M7793-TW004	C	[B]	MFG.ENG.: DANA DUNCAN	DATE: 09-14-82	SIZE	CODE	NUMBER	REV
			[C]	ASSEMBLY NUMBER:	TOP DOCUMENT NUMBER:	K	PL	M7793-0-DBP	C
			[D]	D-UA-M7793-0-0	B-DD-M7793-0-0			FILE NAME:	EDIT #
			[E]					Z3922C.PLS	16
			[F]	"THIS DRAWING AND SPECIFICATIONS HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT (C) 1983. DIGITAL EQUIPMENT CORPORATION"					
			[G]						
			[H]						
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			[K]						
			[L]						
			[M]						
			[N]						

AUTOMATED BY PRTLST.4Q(50)

P A R T S L I S T

SHEET A2 OF A3

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR
22	22		1910550-00	74S174 FF-D HEX	5	E41,E61,E101,E133,E159
23	23		1912810-00	LS20 NAND GATE-DUAL 4IN	1	E43
24	24		1911911-00	DEC 74S124 OSCILLATOR,DUAL VOLT	1	E45
25	25		1910534-00	74S04 INVERTER GATE-HEX 1I	5	E46,E75,E87,E99,E115
26	26		1910537-00	74S11 AND GATE-TRIPLE 3INP	2	E47,E106
27	27		1912807-00	LS10 NAND GATE-TRIPLE 3IN	1	E48
28	28		1912847-00	LS157 MUX 1 OF 2(QUAD)	2	E53,E82
29	29		1915758-00	LS166 SHIFT REG. 8BIT PARA	2	E54,E69
30	30		1914085-00	74S260 NOR GATE-DUAL,POS	2	E57,E72
31	31		1910539-00	74S20 NAND GATE-DUAL 4INPU	2	E58,E88
32	32		1910536-00	74S10 NAND GATE-TRIPLE 3IN	2	E62,E109
33	33		1912850-00	LS164 SHIFT REG. 8BIT SERI	2	E63,E67
34	34		1914214-00	LS374 FF-D OCTAL EDGE TRIG	5	E64,E65,E66,E68,E98
35	35		1911983-00	74S133 NAND GATE-POSITIVE 1	3	E71,E104,EA1
36	36		1910957-00	74S175 FF-D QUAD COMMON CLO	1	E73
37	37		1910532-00	74S00 NAND GATE-QUAD 2IN	3	E74,E111,E135
38	38		1912646-00	LS253 MUX 1 OF 4 (DUAL)	8	E77,E124,E144,E145,E147,E148, E154,E155
39	39		1913671-00	74S374 FF-D,OCTAL,TR1 STATE	2	CONT E81,E120
40	40		1912746-00	DEC 74S37 NAND GATE-QUAD 2IN	1	E83
41	41		1910548-00	74S157 MUX 1 OF 2 (QUAD)	2	E86,E112
42	42		1911712-00	74S51 AND-OR GATE-INVERT D	1	E89
43	43		1912801-00	LS02 NOR-GATE-QUAD 2IN	2	E90,E139
44	44		1912389-00	74S08 AND GATE-QUAD 2IN,PO	1	E91
45	45		1912697-00	LS174 FF-D HEX W/CLEAR	4	E93,E108,E110,E123
46	46		1912816-00	LS32 OR GATE-QUAD 2IN,POS	2	E96,E138
47	47		1300005-01	R NETWORK 13-1K 5.0 % 14PIN	1	E97
48	48		1915019-00	74S38 NAND BUFFER-QUAD 2IN	1	E100
49	49		1914082-00	74S163 COUNTER,SYNCH UP/DOW	7	CONT E105,E122,E137,E146,E153,E157, E166
50	50		1910544-00	74S74 FF-D DUAL,EDGE TRIGG	5	E107,E136,E168,E170,E171
51	51		1514962-00	TPQ2907 PNP 500MW SI 40 100	4	E113,E114,E116,E117
52	52		1915697-00	RAM 256X4 TRI-STATE	3	E118,E119,E121
53	53		1912813-00	LS27 NOR GATE-TRIPLE 3IN	1	E125
54	54		1912808-00	LS11 AND GATE-TRIPLE 3IN	1	E126
55	55		1918353-00	10231 FF-D MASTER-SLAVE	5	E128,E130,E151,E174,E175
56	56		1911402-00	10105 OR/NOR GATE,2-3-2	4	E129,E131,E141,E152
57	57		1912096-00	DEC 74S86 XOR GATE,QUAD 2IN	1	E132
58	58		1611601-00	DELAY= 50NS,TAPPED LINE	1	E140
59	59		1913220-00	10216 RECEIVER,TRIPLE LINE	2	E142,E165
60	60		1811660-00	OSCILLATOR, XTAL 20.000 MHZ	1	E143
61	61		1911579-00	8641 TRANSCEIVER,BUS,QUA	1	E160
62	62		1619248-00	DELAY= 25/74NS ECL MULTI-LOGIC	1	E163
63	63		1911404-00	10107 XOR/NOR GATE,3-2IN	1	E164
64	64		1913009-00	4N36 OPTO COUPLED ISLTR	1	E172
65	65		1912388-00	74S02 NOR GATE-QUAD 2IN,PO	1	E173
66	66		1209941-02	PCB,HEADER 40PIN(2X20).100CC 90D	2	J1,J2
67	67		1209941-13	PCB,HEADER 19PIN(2X10).100CC 90D	1	J3

D	I	G	I	T	A	L	TITLE	SECTION A OF A	SIZE	CODE	DOCUMENT NUMBER	REV
							DE UNA LINK MODULE		K	PL	M7793-0-DBP	C

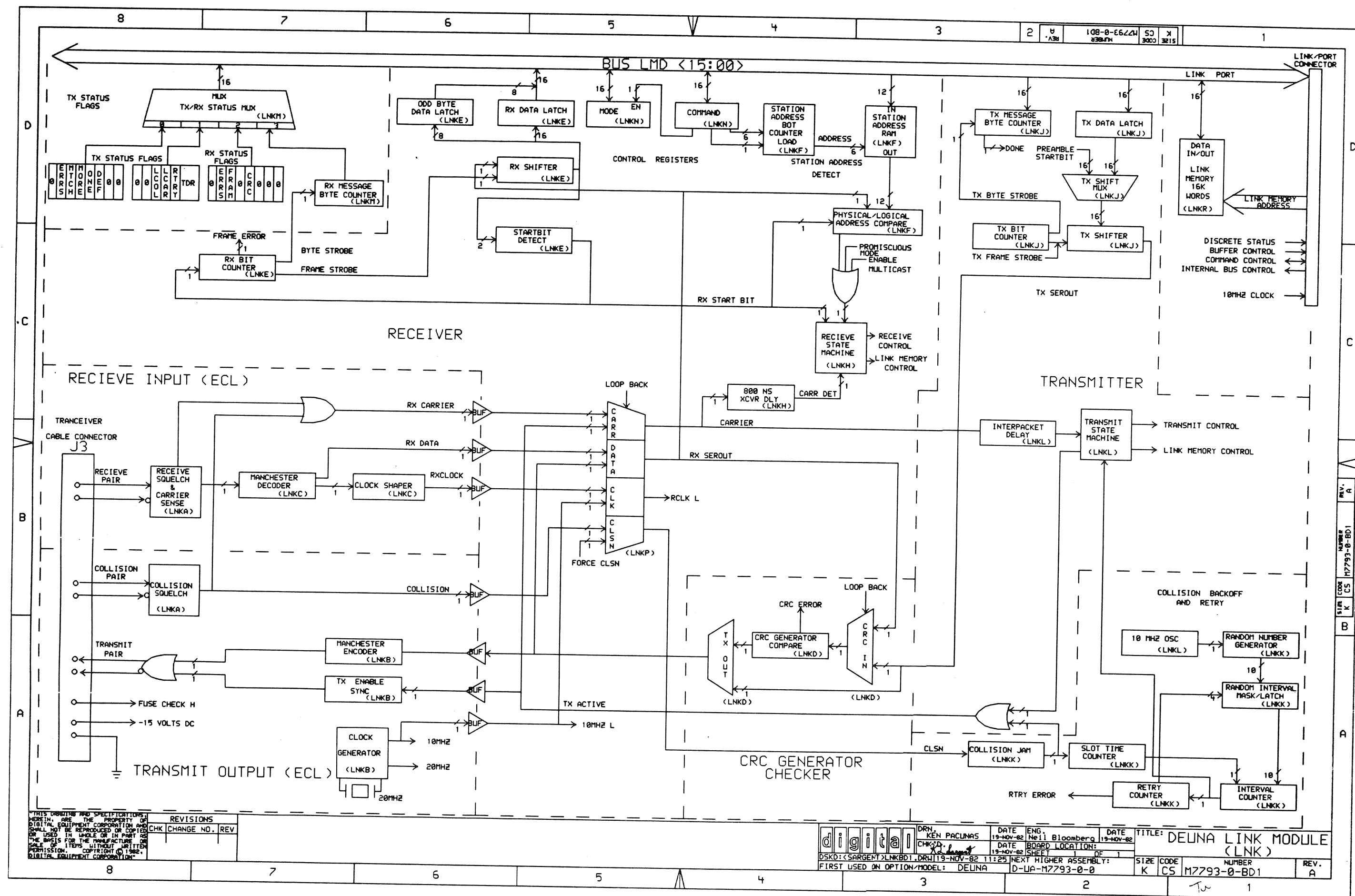
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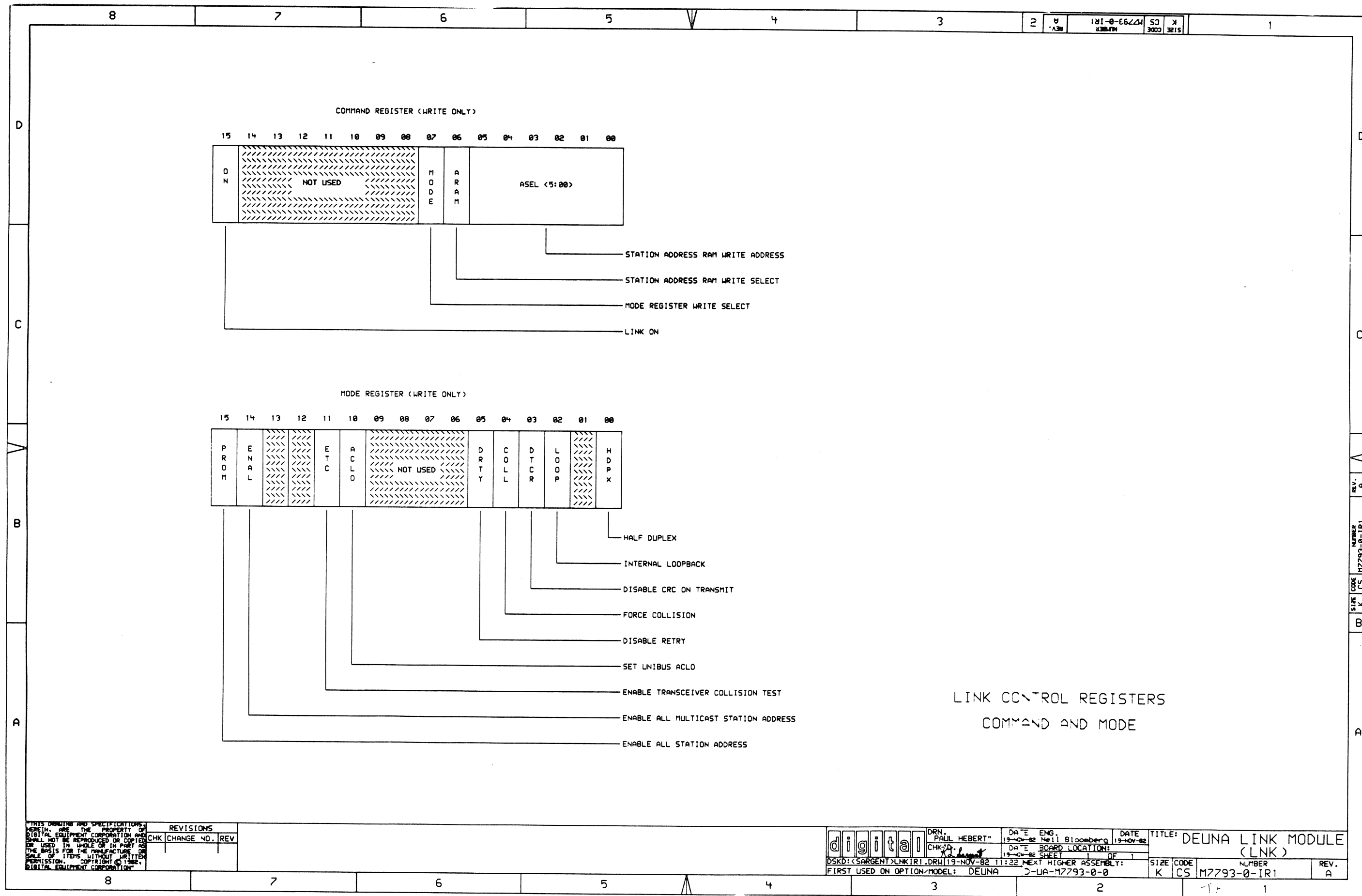
PARTS LIST

SHEET A3 OF A3

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY	PER VARIATION	REFERENCE DESIGNATOR
					00		
68	68		1301322-00	180.0 .25 W 5.0 % CF	27		R1,R32,R56,R78,R85,R86,R87,R89, R90,R91,R95,R100,R108,R111,R112, CONT R114,R115,R118,R124,R137,R138, CONT R146,R151,R152,R183,R171,R188, CONT R2,R67,R102,R116,R125,R126,R129, CONT R136,R157,R158,R159,R160,R161, CONT R162,R163,R168,R178,R172,R4 R3,R5,R6,R8,R14,R19,R20,R128 R7,R9,R11,R12,R132,R134,R135, CONT R141,R142,R186,R187 R10,R43,R45,R61,R63,R185 R13,R16,R21,R22,R27,R28,R37,R40, CONT R41,R52 R15,R23,R24 R17,R48,R51 R18,R26,R30,R33,R36,R38,R47,R49, CONT R50,R54,R57,R58,R107,R123,R140, CONT R153,R154 R25,R31,R42 R29 R34,R59,R117,R131,R139,R155,R156 R35,R64,R65,R83,R84,R88,R96,R97, CONT R103,R109,R110,R143,R147,R165, CONT R180,R182 R44,R46,R60,R62,R66,R70,R77,R80, CONT R93,R94 R53,R55,R69,R71,R76,R79
69	69		1300247-00	120.0 .25 W 5.0 % CF	19		
70	70		1300229-00	100.0 .25 W 5.0 % CF	8		
71	71		1300365-00	1.0 K .25 W 5.0 % CF	11		
72	72		1302388-00	2.0 K .25 W 5.0 % CF	6		
73	73		1302957-00	121.0 .25 W 1.0 % RN55D-F10	10		
74	74		1302872-00	681.0 .25 W 1.0 % RN55D-F1	3		
75	75		1303036-00	56.20 .25 W 1.0 % RN55D-F10	3		
76	76		1301972-00	270.0 .25 W 5.0 % CF	17		
77	77		1301421-00	15.0 .25 W 5.0 % CF	3		
78	78		1300479-00	10.0 K .25 W 5.0 % CF	1		
79	79		1301775-00	820.0 .25 W 5.0 % CF	7		
80	80		1300316-00	470.0 .25 W 5.0 % CF	16		
81	81		1313150-00	430.0 .25 W 5.0 % CF	10		
82	82		1305121-00	38.30 .25 W 1.0 % RN55D-F10	6		
83	83	BLANK		*** THIS ITEM IS NOT USED ***	-		
84	84		1303179-00	8.20 K .25 W 5.0 % CF	1		R74
85	85		1300271-00	220.0 .25 W 5.0 % CF	1		R106
86	86		1300356-00	820.0 .50 W10.0 % CF	2		R127,R170
87	87		1300309-00	390.0 .25 W 5.0 % CF	1		R149
88	88		1300432-00	3.0 K .25 W 5.0 % CF	1		R184
89	89		9009185-00	JUMPER, WIRE, INSULATED, BLACK B	1		W1
90	90		1012084-01	8 MFD 25V +75-10% AL EL	8		C1,C3,C8,C9,C10,C11,C12,C13
91	91		1216988-02	HANDLE,MODULE,HEX TWO EJECTORS	1		
92	92		9009000-00	EYELET,ROLLED 0.1210DX0.156	12		
93	93		1302391-00	20.0 K .25 W 5.0 % CF	1		R144
94	94		1304837-00	24.0 K .25 W 5.0 % CF	1		R68
95	95		1300488-00	12.0 K .25 W 5.0 % CF	1		R75
96	96		9105740-55	WIRE(WRAP) 30AWG KYNAR UL14 A/R			

D	I	G	I	T	A	L	TITLE	DE UNA LINK MODULE	SECTION A OF A	SIZE	CODE	DOCUMENT NUMBER	REV
										K	PL	M7793-0-DBP	C





8

7

6

5

4

3

2

A

NUMBER
M7793-0-IR2SIZE
K

CS

1

TRANSMIT STATUS WORD 0 (LINK MEMORY BUFFER)

15	14	13	12	11	10	09	08	07	06	05	04	03	02	01	00
0	E	M	M	O	D										
R	T	M	O	N	E										
S	C	R	E	F											

TRANSMISSION DEFERRED

ONE COLLISION

MORE THAN ONE COLLISION

STATION ADDRESS MATCH ON TRANSMISSION

ERROR SUMMARY

RECEIVE STATUS WORD 0 (LINK MEMORY BUFFER)

15	14	13	12	11	10	09	08	07	06	05	04	03	02	01	00
0	E	F		C											
R	R	R		R											
S	A	A		C											

CRC ERROR

FRAMING ERROR

ERROR SUMMARY

TRANSMIT STATUS WORD 1 (LINK MEMORY BUFFER)

15	14	13	12	11	10	09	08	07	06	05	04	03	02	01	00
0	0	0	L	L	R										
			C	C	T										
			O	A	R										
			L	R	Y										

TDR

CABLE FAULT DISTANCE COUNT

TRANSMISSION ABORTED-16 ATTEMPTS

LOSS OF CARRIER

TRANSMISSION ABORTED-LATE COLLISION

RECEIVE STATUS WORD 1 (LINK MEMORY BUFFER)

15	14	13	12	11	10	09	08	07	06	05	04	03	02	01	00
0	0	0	0												

MLEN <11:00>

MESSAGE LENGTH

LINK STATUS REGISTER FORMAT
(WORDS 0 AND 1 OF LINK MEMORY BUFFER)

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REVISIONS

CHK CHANGE NO. REV

digital

DRN. PAUL HEBERT

DATE 19-NOV-82

ENG. Neil Bloomberg

DATE 19-NOV-82

TITLE: DEUNA LINK MODULE

CHK'D. [Signature]

DATE 19-NOV-82

SHEET 1 OF 1

DSKD: <SARGENT>LNKIR2.DRW

19-NOV-82 11:23 NEXT HIGHER ASSEMBLY:

FIRST USED ON OPTION/MODEL: DEUNA

D-UA-M7793-0-0

SIZE CODE NUMBER

REV. A

8

7

6

5

4

3

2

1