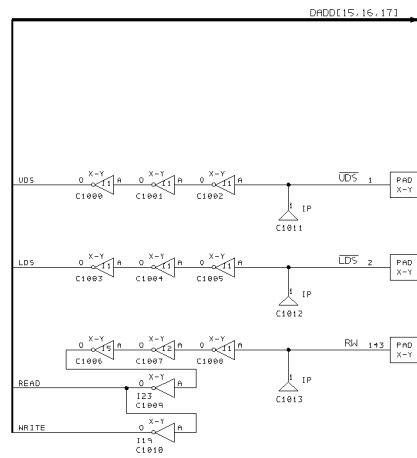
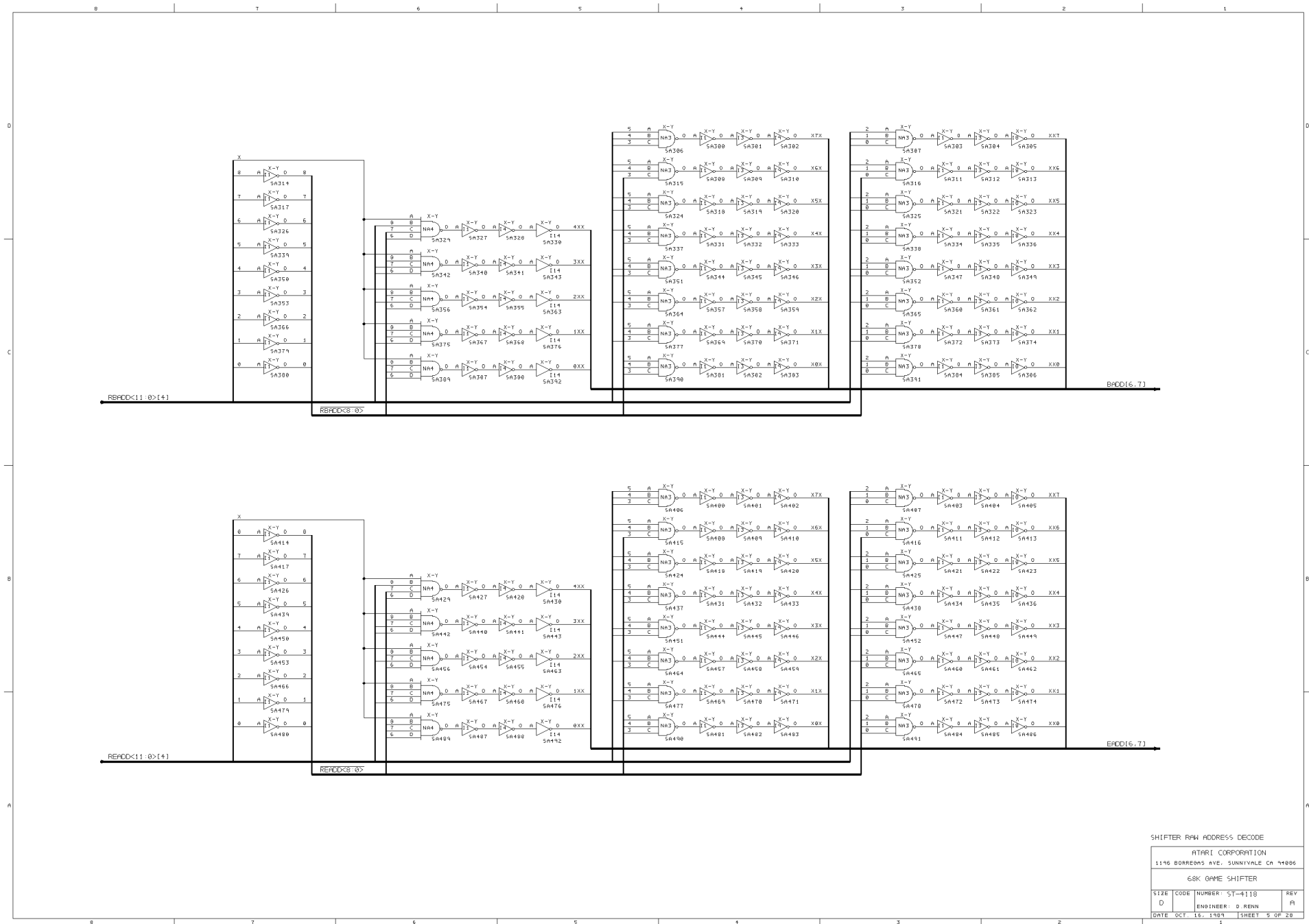
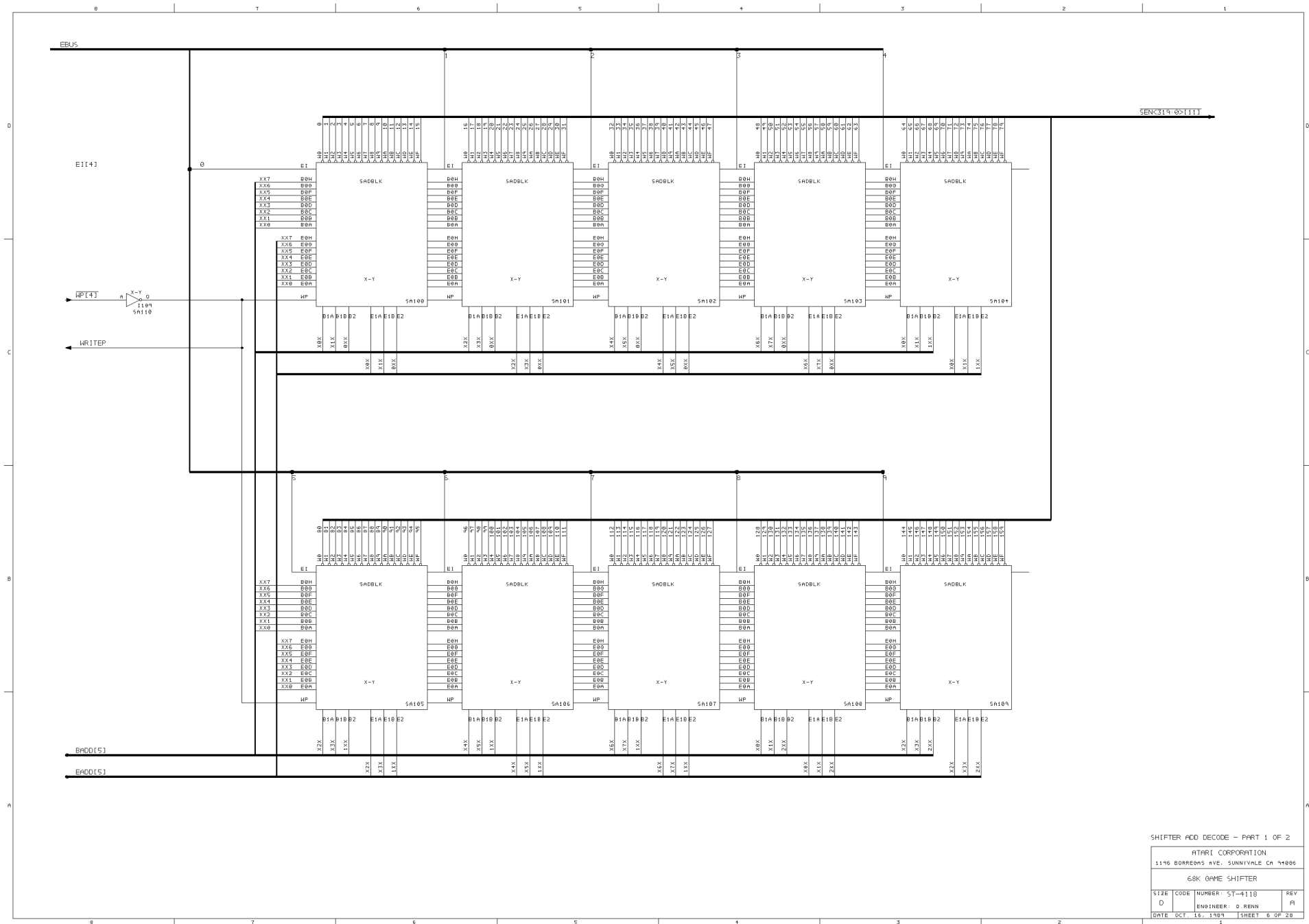


ADDRESS 1/0			
ATARI CORPORATION			
1116 BORREAS AVE. SUNNYVALE CA 91006			
68K GAME SHIFTER			
SIZE	CODE	NUMBER: ST-4118	REV
D		ENGINEER: D. RENN	A
DATE: OCT. 16, 1984	SHEET 2 OF 20		







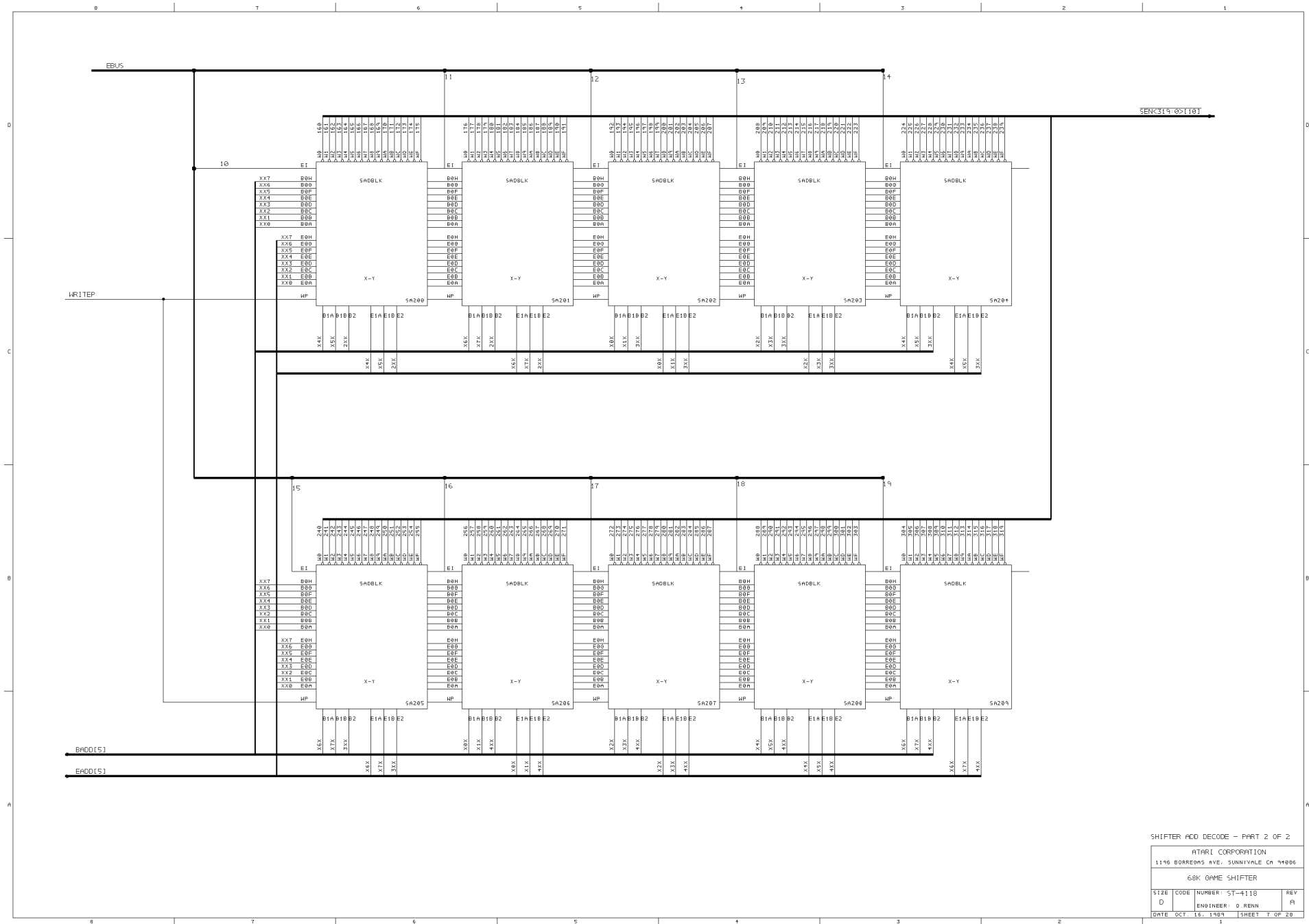
SHIFTER ADD DECODE - PART 1 OF 2

ATARI CORPORATION
1146 BORREAS AVE. SUNNYVALE CA 94086

68K GAME SHIFTER

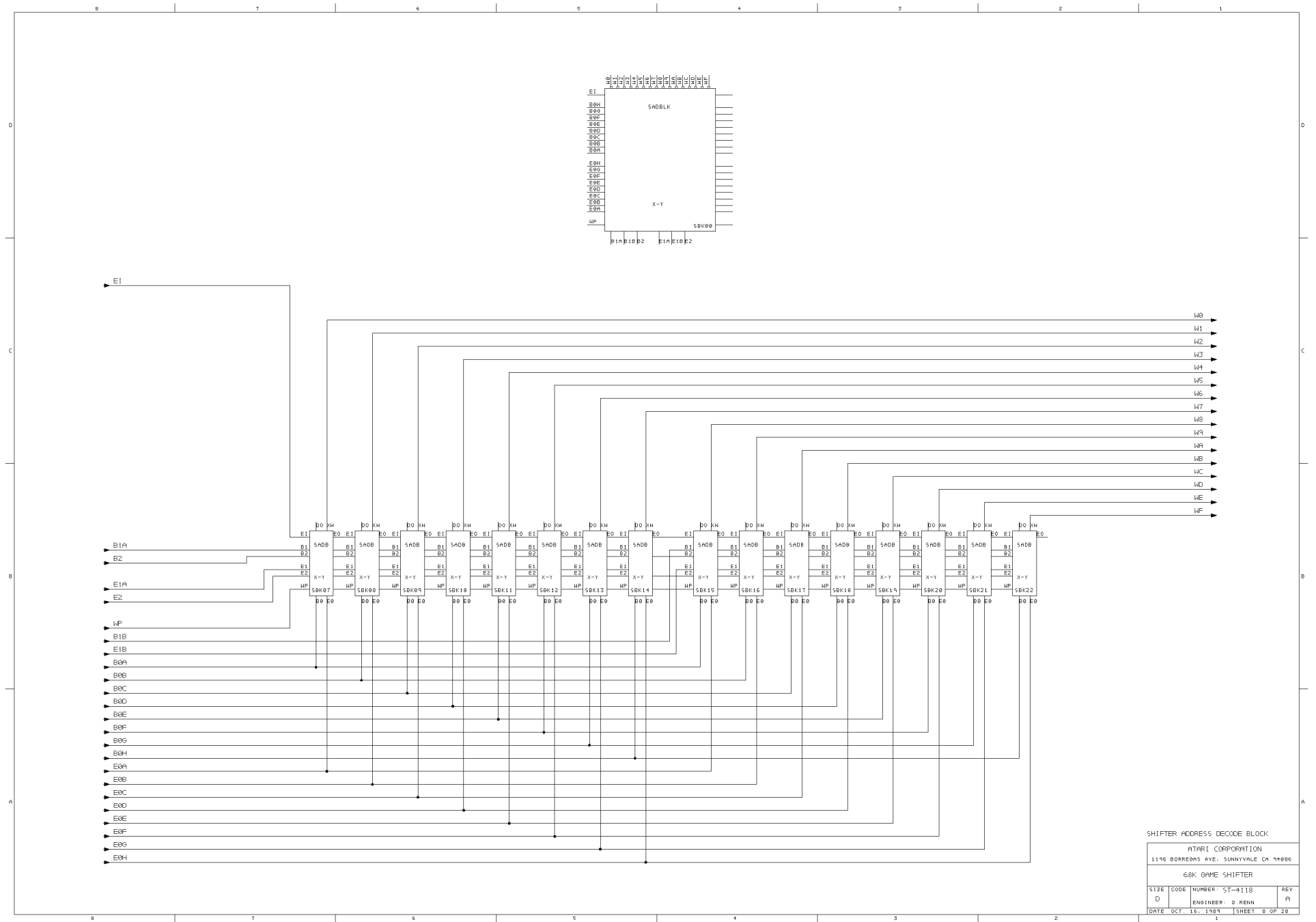
SIZE CODE NUMBER: ST-4118 REV
D ENGINEER: D. RENN A

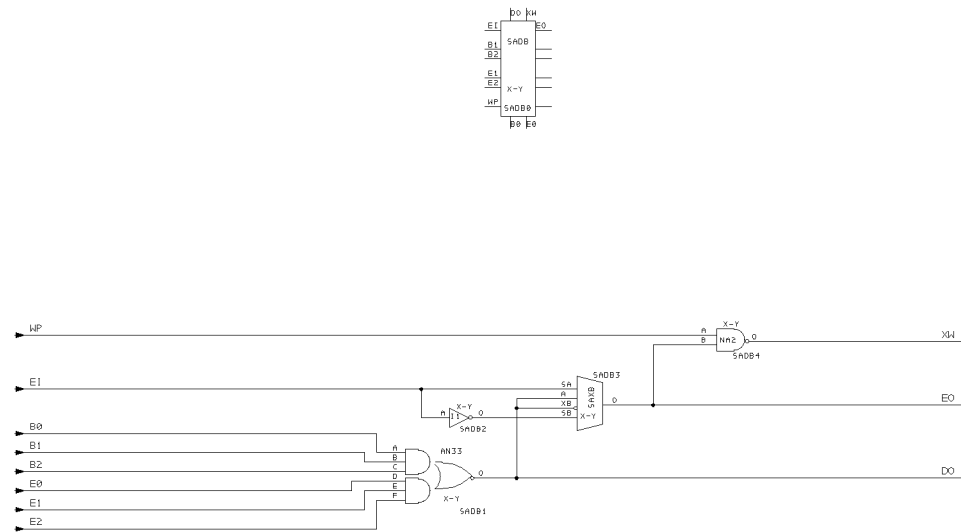
DATE OCT. 16, 1988 SHEET 6 OF 20



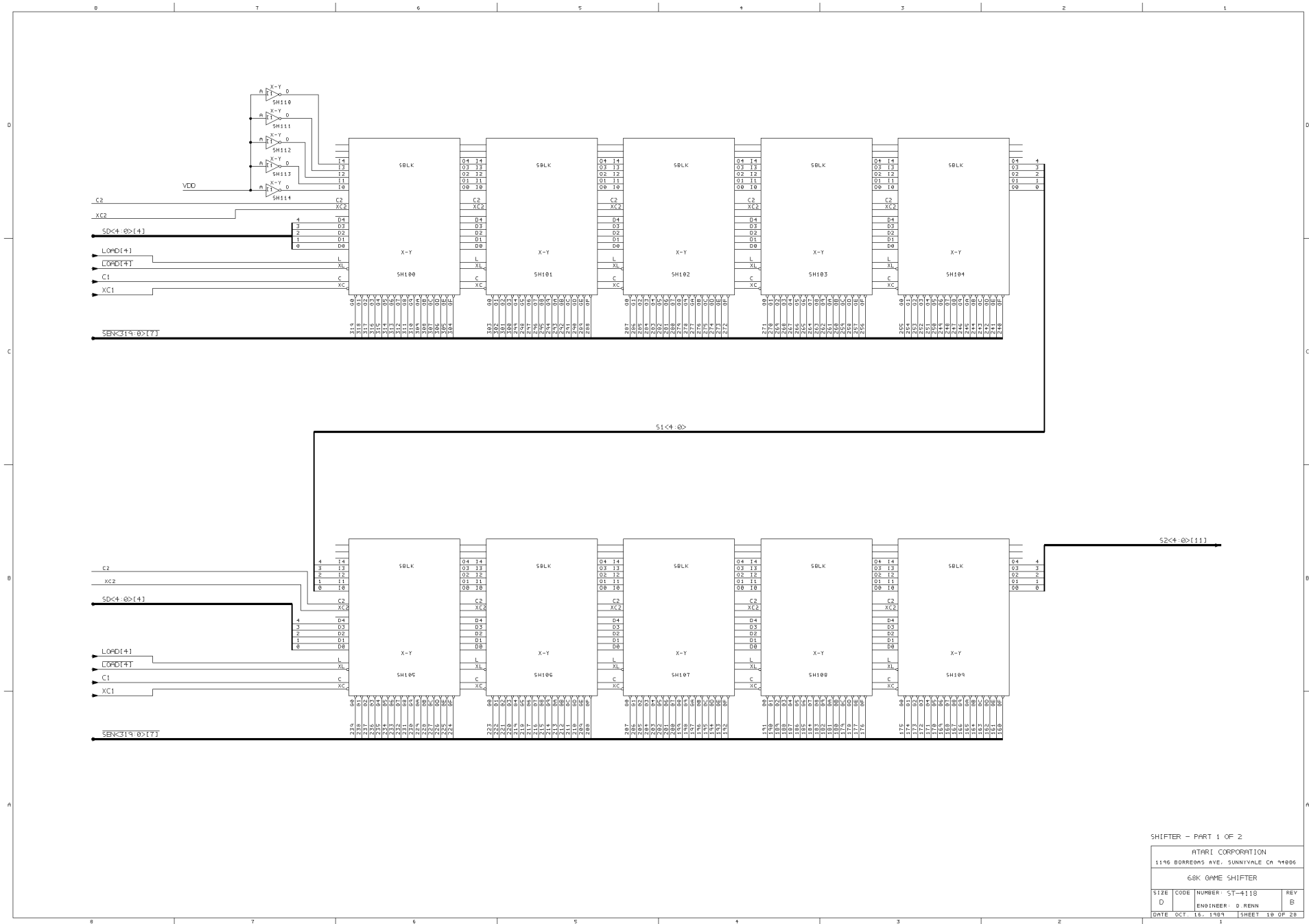
SHIFTER ADD DECODE - PART 2 OF 2

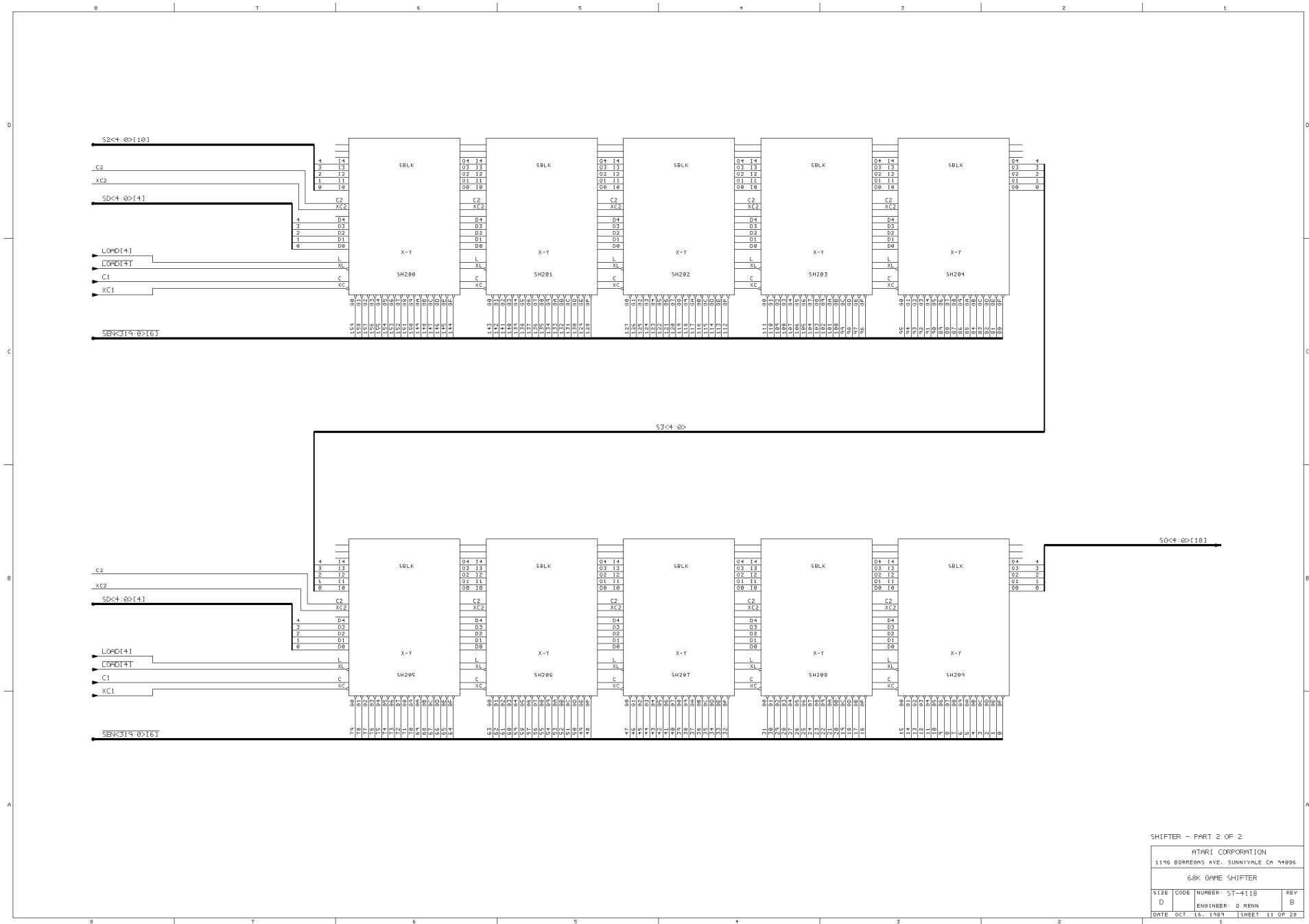
ATARI CORPORATION			
1146 BORREAS AVE. SUNNYVALE CA 94086			
68K GAME SHIFTER			
SIZE	CODE	NUMBER: 5T-4118	REV
D		ENGINEER: D. RENN	A
DATE	OCT. 16, 1988	SHEET	7 OF 20

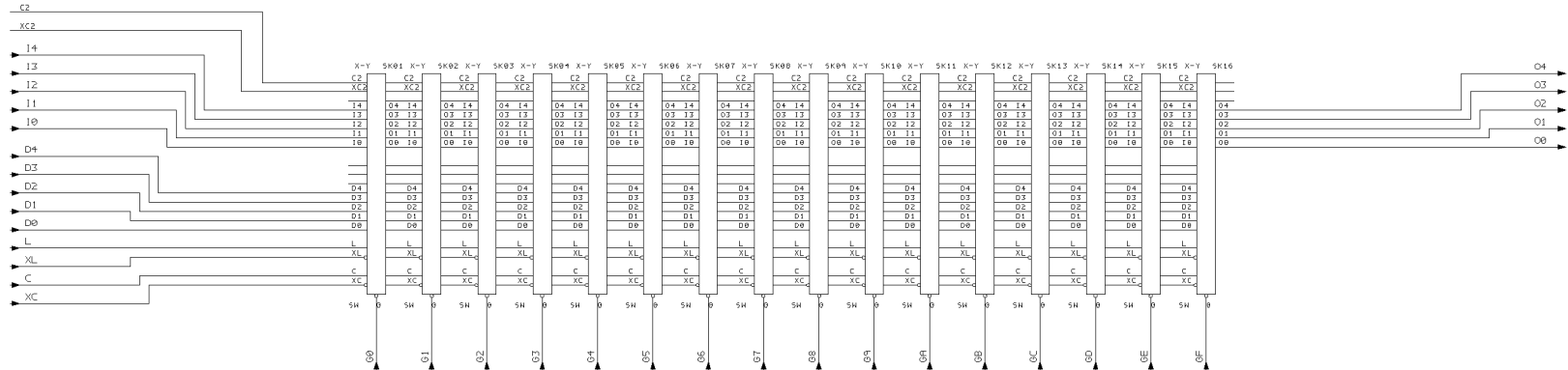
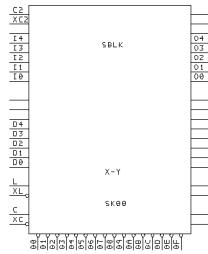




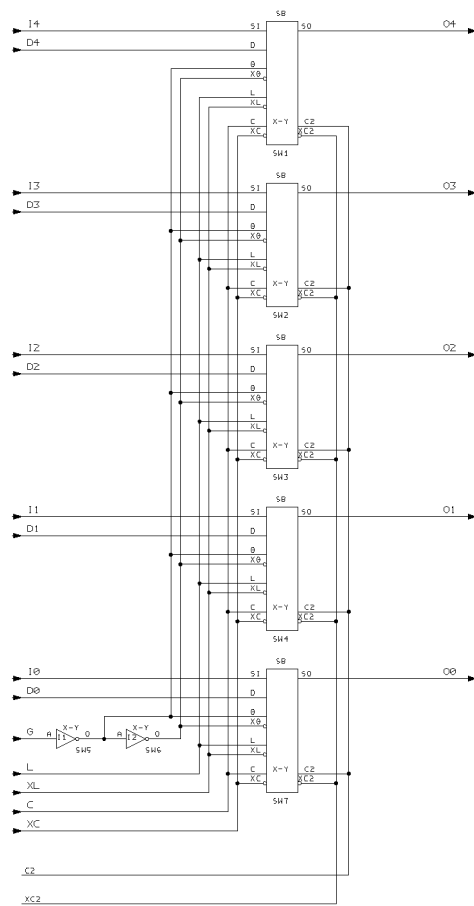
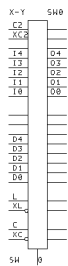
SHIFTER ADDRESS DECODE BIT			
ATARI CORPORATION			
1146 BORREAS AVE. SUNNYVALE CA 94086			
68K OAME SHIFTER			
SIZE	CODE	NUMBER: ST-4118	REV
D		ENGINEER: D. RENN	A
DATE: OCT. 16, 1984		SHEET 9 OF 20	



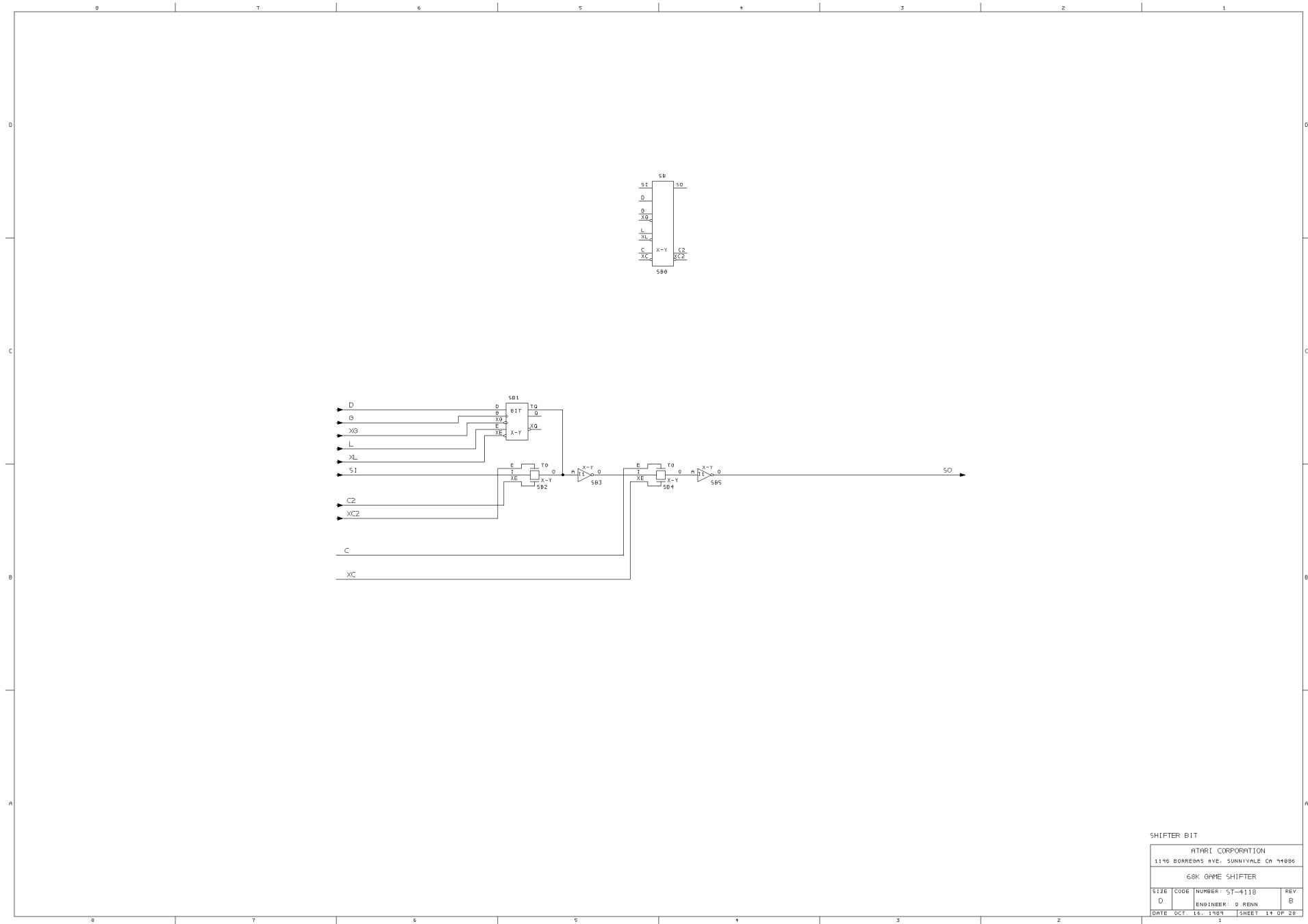


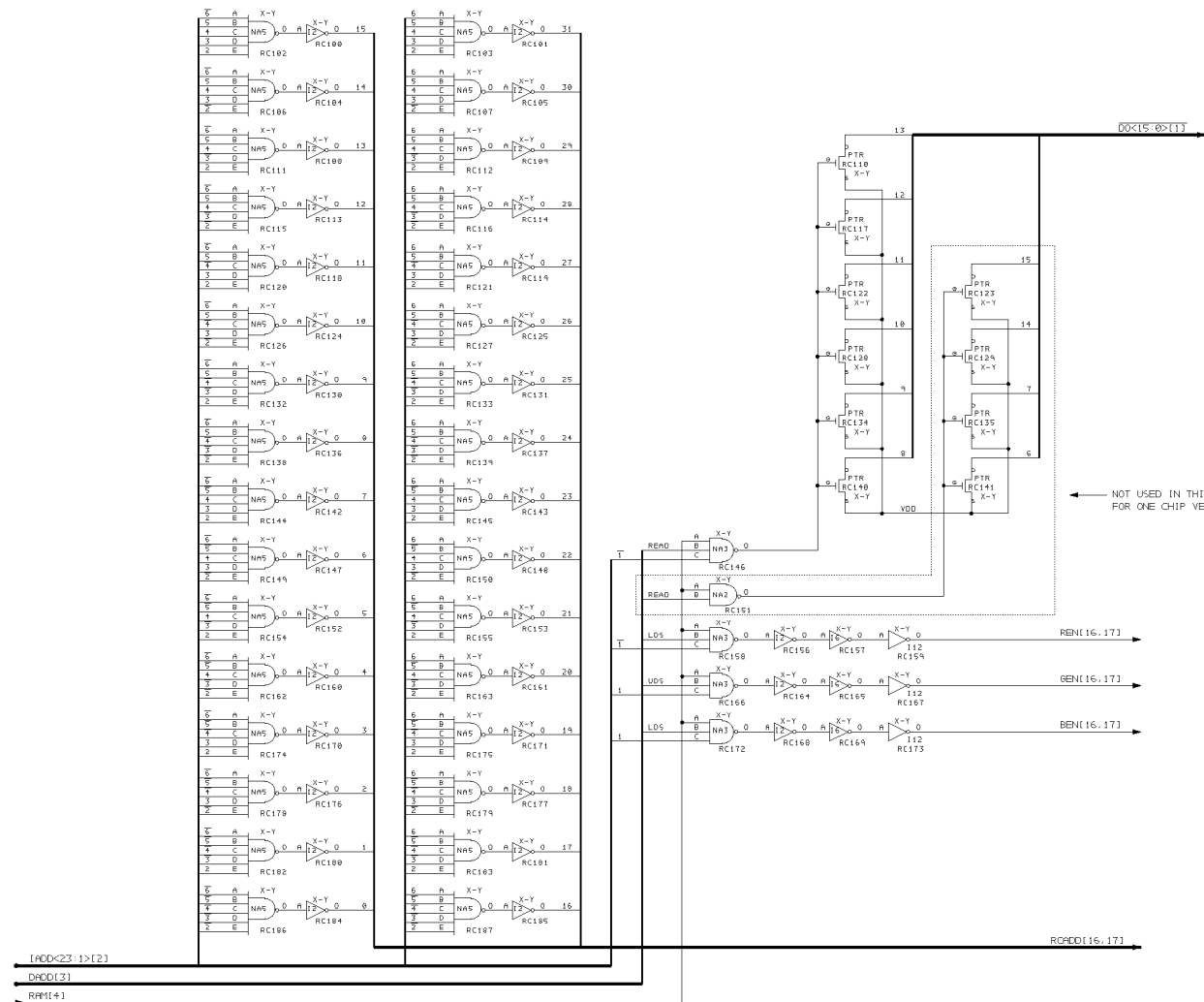


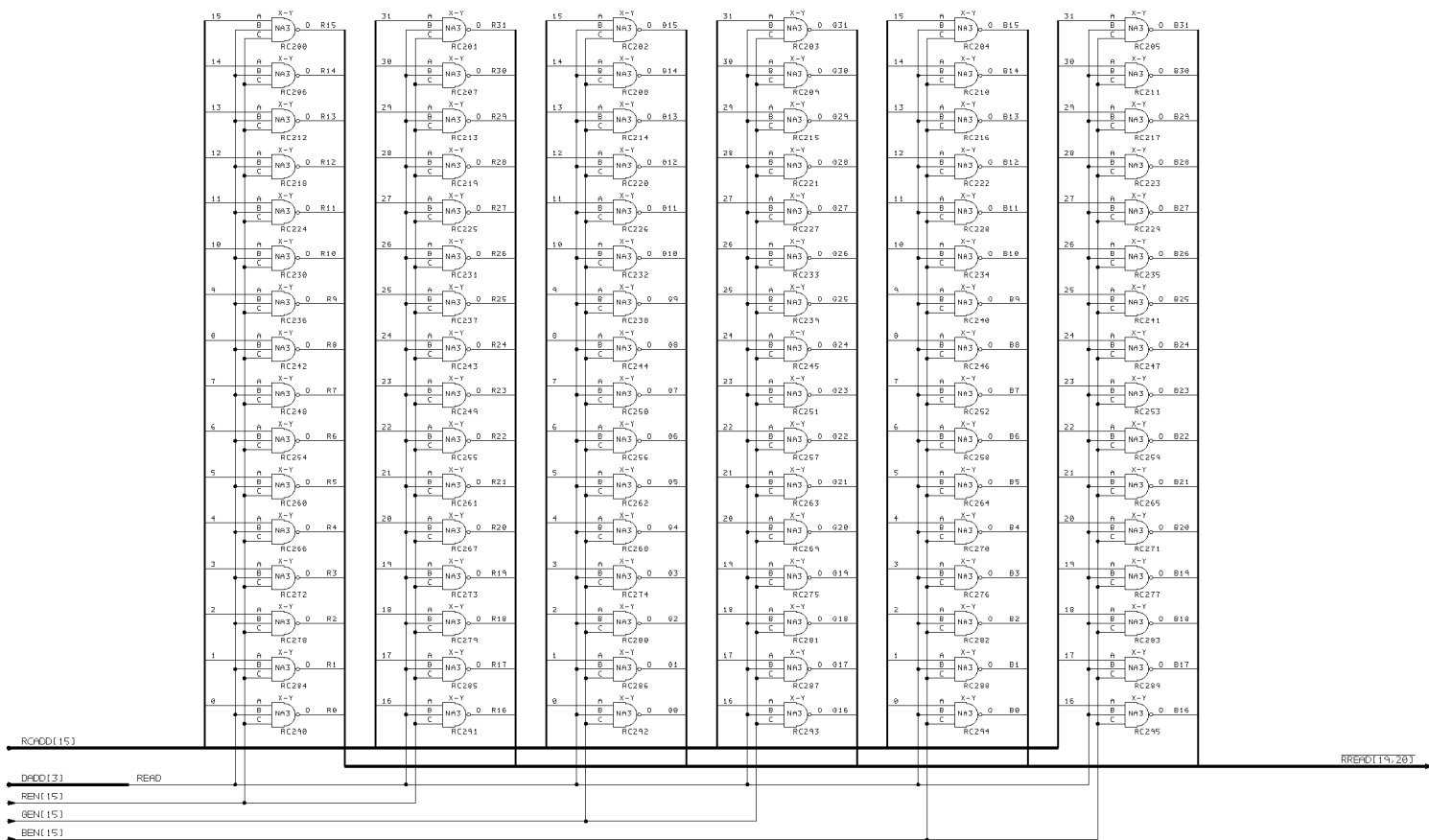
SHIFTER BLOCK			
ATARI CORPORATION			
1146 BORREAS AVE. SUNNYSIDE CA 94086			
68K GAME SHIFTER			
SIZE	CODE	NUMBER: ST-4118	REV
D		ENGINEER: D. RENN	B
DATE OCT. 16, 1988		SHEET 12 OF 28	



SHIFTER WORD			
ATARI CORPORATION			
1146 BORREDAIS AVE. SUNNYVALE CA 94086			
68K GAME SHIFTER			
SIZE	CODE	NUMBER: ST-4118	REV
D		ENGINEER: D. RENN	B
DATE	OCT. 16, 1988	SHEET	13 OF 28

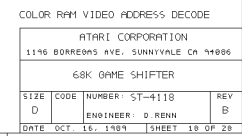


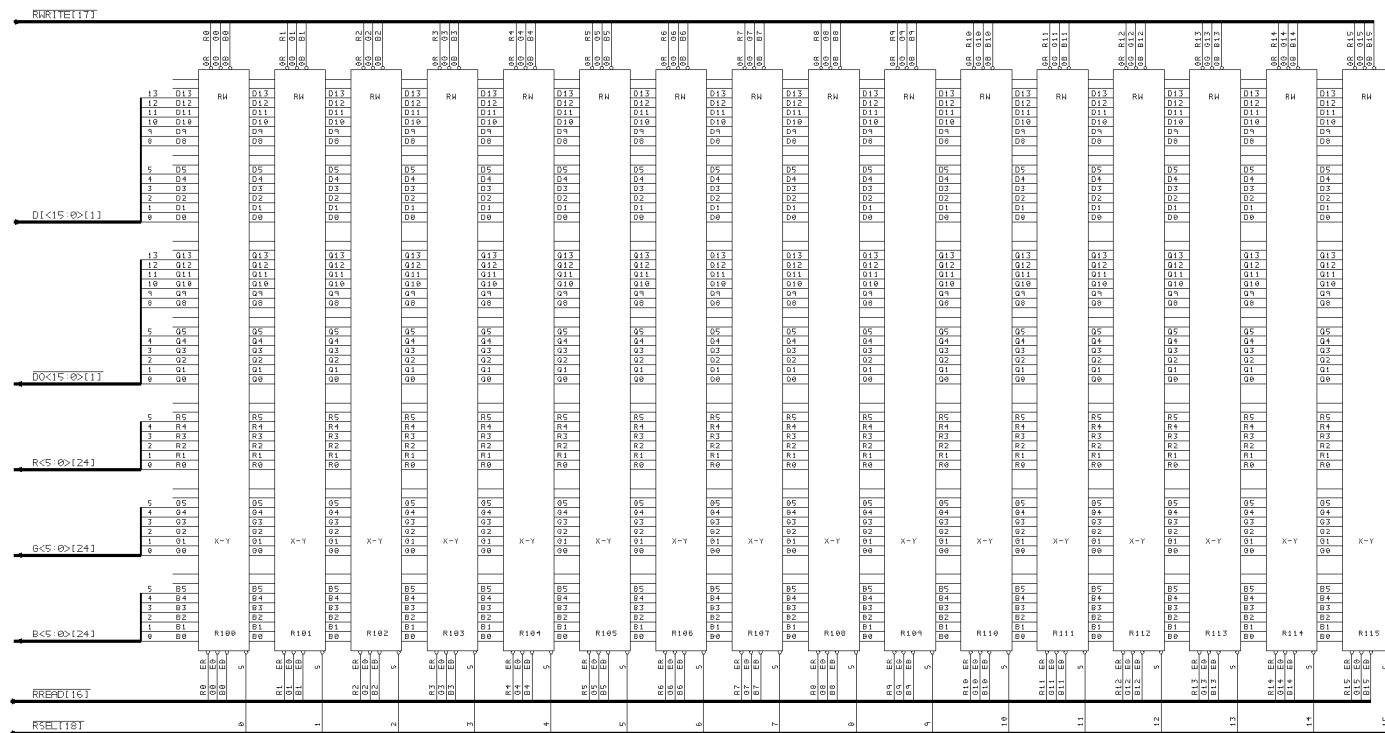




COLOR RAM CPU ADD DECODE - 2 / 3

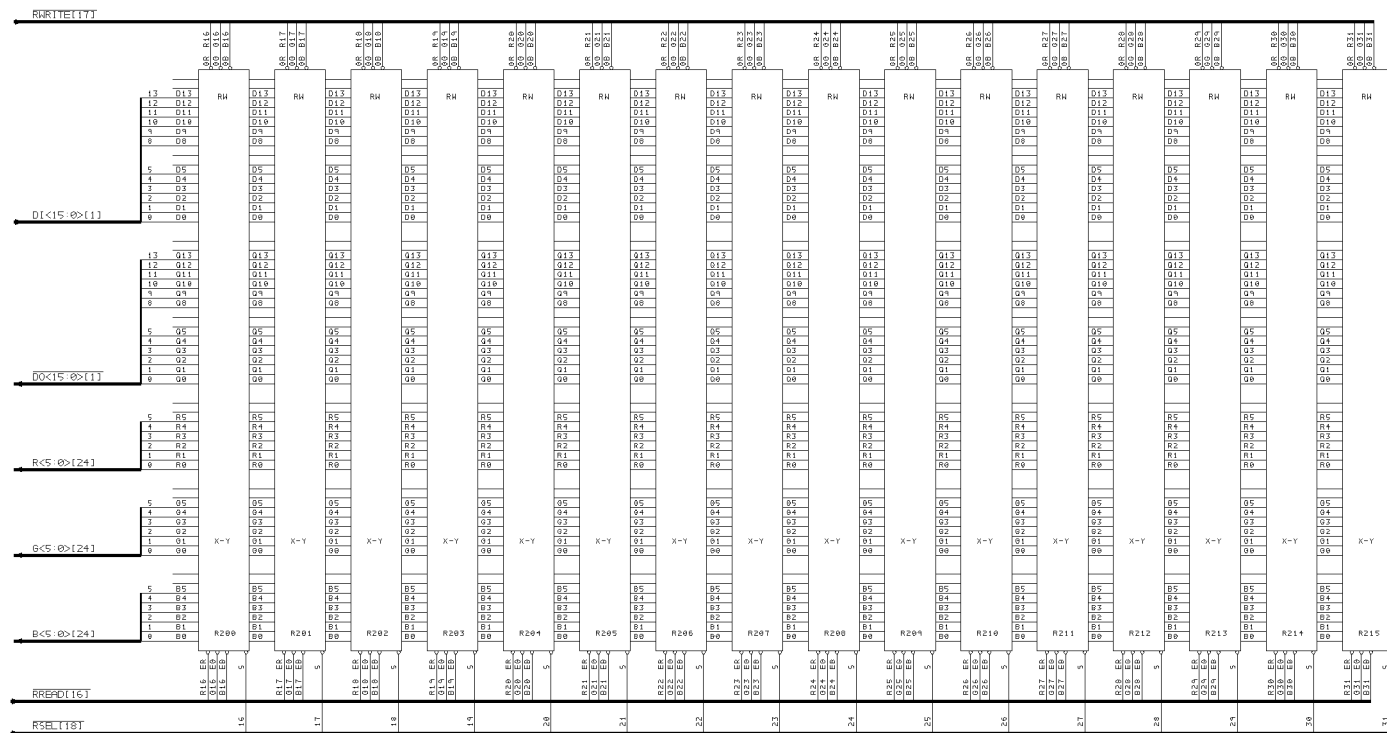
ATARI CORPORATION			
1116 BORREAS AVE. SUNNYVALE CA 94086			
68K GAME SHIFTER			
SIZE	CODE	NUMBER: ST-4118	REV
D		ENGINEER: D. RENN	A
DATE	OCT. 16, 1988	SHEET	16 OF 28

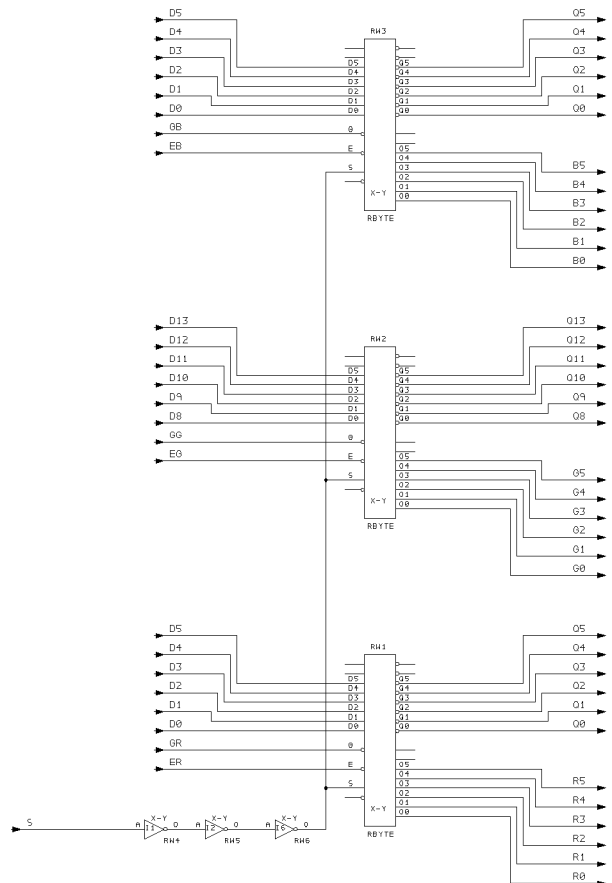
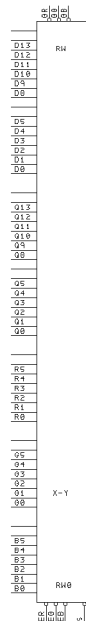




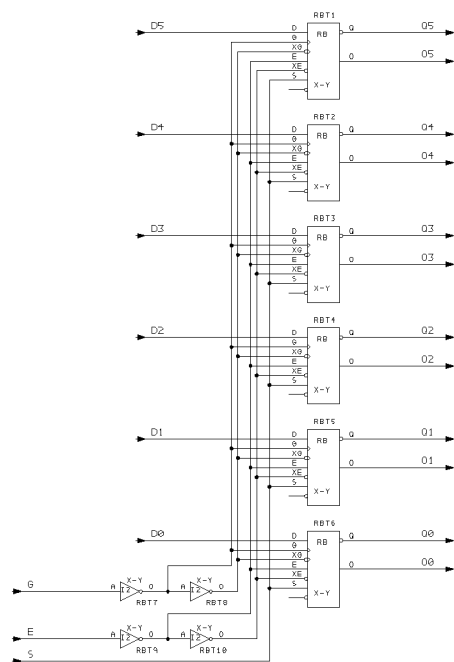
COLOR PALLETTE - PART 1 OF 2

ATARI CORPORATION			
1146 BORREAS AVE. SUNNYVALE CA 94086			
68K GAME SHIFTER			
SIZE	CODE	NUMBER: ST-4118	REV
D		ENGINEER: D. RENN	A
DATE: OCT. 16, 1988		SHEET 14 OF 28	

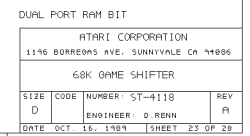


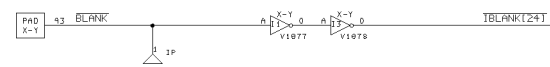
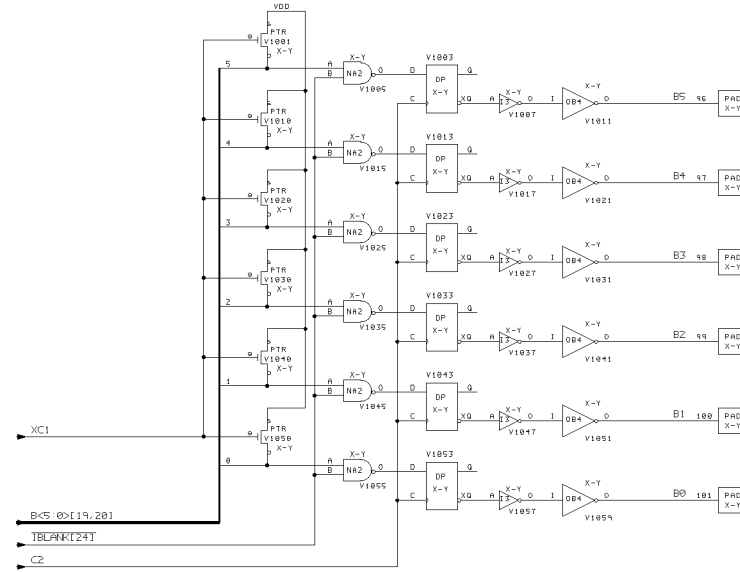
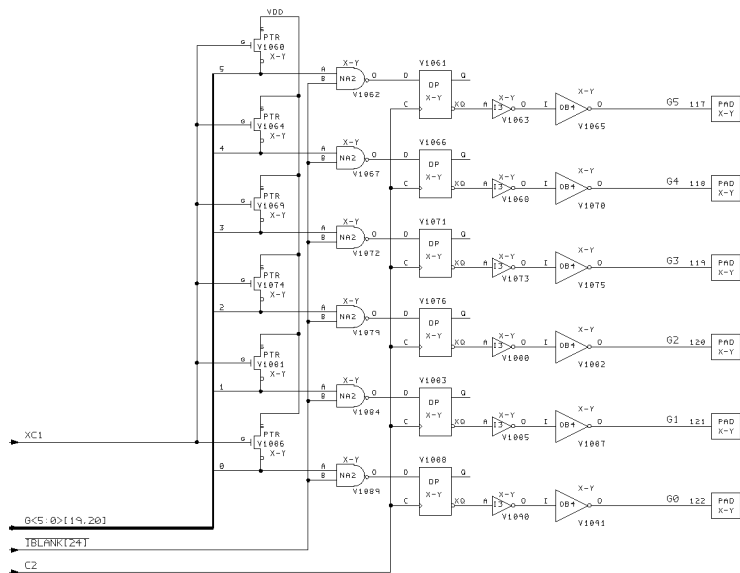
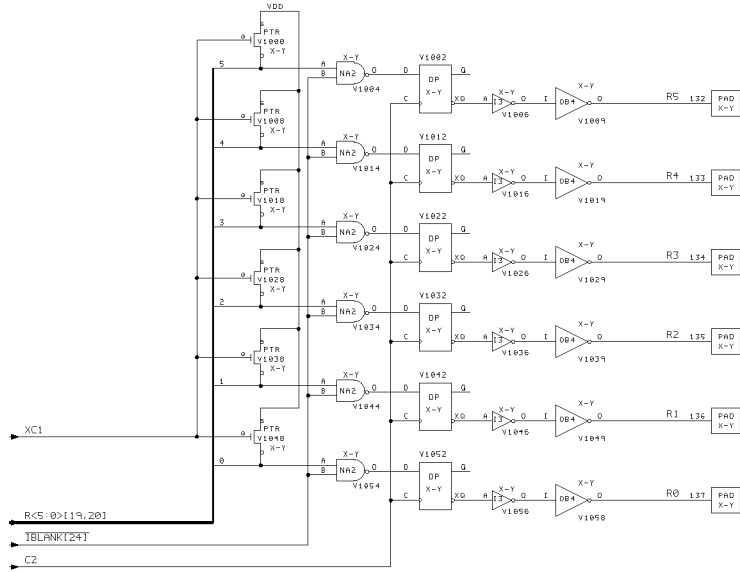


RAM WORD			
ATARI CORPORATION			
1146 BORREAS AVE. SUNNYSIDE CA 94086			
68K GAME SHIFTER			
SIZE	CODE	NUMBER: ST-4118	REV
D		ENGINEER: D. RENN	A
DATE	OCT. 16, 1988	SHEET 21	OF 28



RAM BYTE			
ATARI CORPORATION			
1146 BORREAS AVE. SUNNYVALE CA 94086			
68K GAME SHIFTER			
SIZE	CODE	NUMBER: ST-4118	REV
D		ENGINEER: D. RENN	A
DATE	OCT. 16, 1984	SHEET	22 OF 28





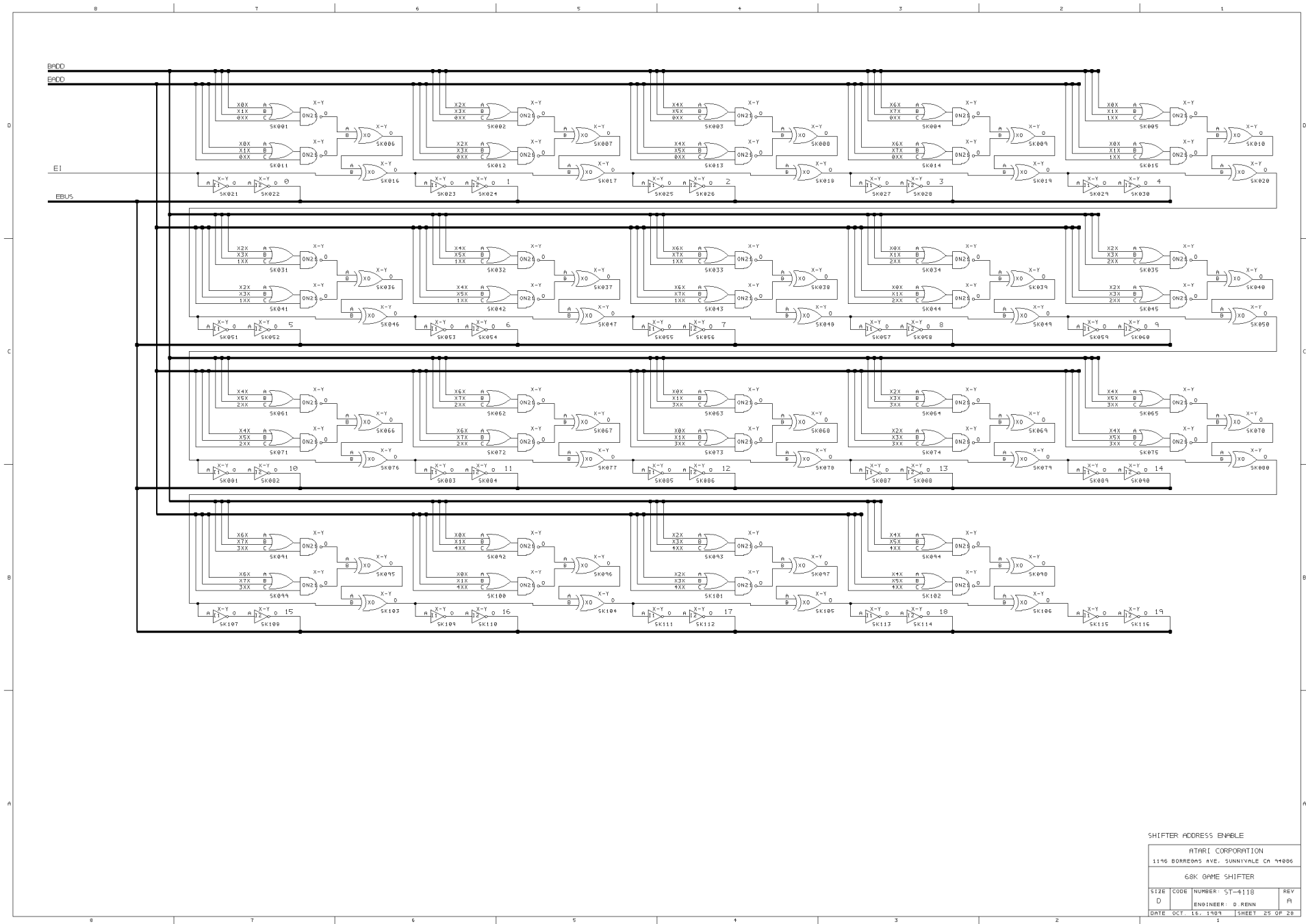
DIGITAL VIDEO OUT

ATARI CORPORATION
1196 BORDEAUX AVE. SUNNYVALE CA 94086

68K GAME SHIFTER

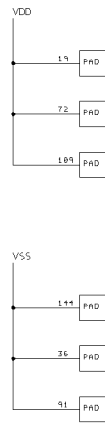
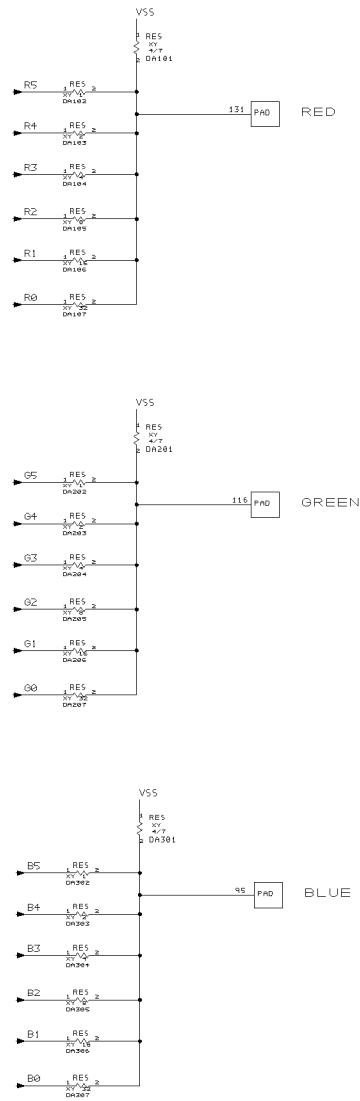
SIZE	CODE	NUMBER: 5T-4118	REV
D		ENGINEER: D. RENN	B

DATE: OCT. 16, 1988 SHEET 24 OF 28



SHIFTER ADDRESS ENCODE			
ATARI CORPORATION			
1146 BORREAS AVE. SUNNYVALE CA 94086			
68K GAME SHIFTER			
SIZE	CODE	NUMBER	REV
D		5T-4118	A
ENGINEER		O. RENN	
DATE		OCT. 16, 1984	
		SHEET 25 OF 28	

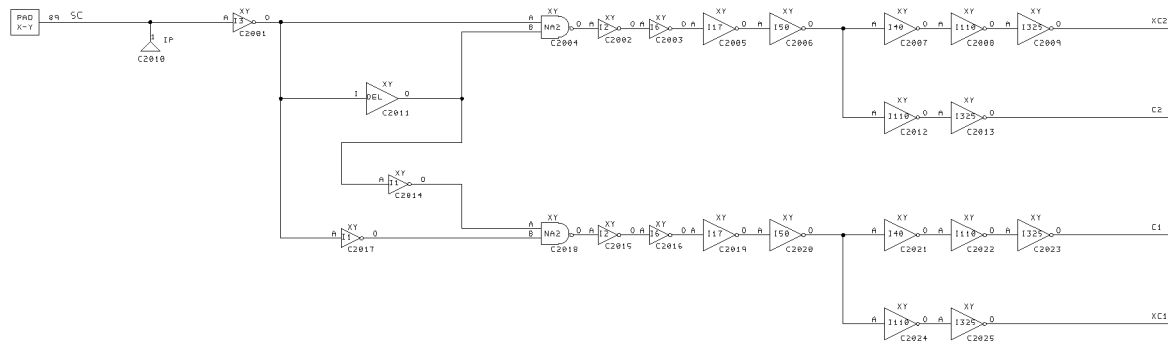
DO NOT INCLUDE THIS PAGE WHEN CREATING A NET LIST



PKG PIN	DIE PAD	SIGNAL NAME
1	121	G1
2	122	G0
3	131	RED
4	132	R5
5	133	R4
6	134	R3
7	135	R2
8	136	R1
9	137	R0
10	143	RA
11	144	VSS
12	1	UD5
13	2	UD5
14	3	UD5
15	5	D0
16	7	D1
17	9	D2
18	11	D3
19	13	D4
20	15	D5
21	17	D6
22	19	VDD
23	21	D7
24	23	D8
25	25	D9
26	27	D10
27	29	D11
28	31	D12
29	33	D13
30	35	D14
31	37	D15
32	39	VSS
33	41	RBADD0
34	43	RBADD1
35	45	RBADD2
36	47	RBADD3
37	49	RBADD4
38	51	RBADD5
39	53	RBADD6
40	55	RBADD7
41	57	RBADD8
42	59	RBADD9
43	61	RBADD0
44	63	RBADD1
45	65	RBADD2
46	67	RBADD3
47	69	RBADD4
48	71	RBADD5
49	73	RBADD6
50	75	RBADD7
51	77	RBADD8
52	79	RBADD9
53	81	RBADD0
54	83	RBADD1
55	85	RBADD2
56	87	RBADD3
57	89	RBADD4
58	91	RBADD5
59	93	RBADD6
60	95	RBADD7
61	97	RBADD8
62	99	RBADD9
63	101	RBADD0
64	103	RBADD1
65	105	RBADD2
66	107	RBADD3
67	109	RBADD4
68	111	RBADD5
69	113	RBADD6
70	115	RBADD7
71	117	RBADD8
72	119	RBADD9
73	121	RBADD0
74	123	RBADD1
75	125	RBADD2
76	127	RBADD3
77	129	RBADD4
78	131	RBADD5
79	133	RBADD6
80	135	RBADD7
81	137	RBADD8
82	139	RBADD9
83	141	RBADD0
84	143	RBADD1

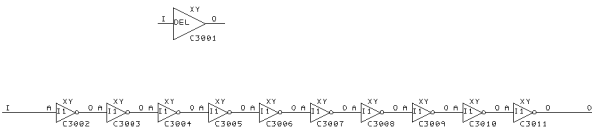
DAC, VSS, VDD

ATARI CORPORATION		
1146 BORREAS AVE. SUNNYSIDE CA 94086		
68K GAME SHIFTER		
SIZE	CODE	NUMBER
D	5T	4118
ENGINEER	O. RENN	
DATE	OCT. 16, 1988	SHEET 26 OF 28



CLOCK GENERATOR MODIFICATIONS

ATARI CORPORATION			
1116 BORREAS AVE. SUNNYVALE CA 94086			
68K GAME SHIFTER			
SIZE	CODE	NUMBER: ST-4118	REV
D		ENGINEER: R. POUNDERS	B
DATE	NOV. 27, 1988	SHEET	27 OF 28



DELAY CELL FOR CLOCK GEN			
ATARI CORPORATION			
1116 BORREAS AVE. SUNNYVALE CA 91006			
68K GAME SHIFTER			
SIZE	CODE	NUMBER: ST-4118	REV
D		ENGINEER: D. RENN	B
DATE	NOV. 27, 1978	SHEET 28 OF 28	

