

WANG

6104

**VS-15/25/45 COMPUTER SYSTEMS
SCHEMATICS MANUAL**

**Customer Engineering
Product Maintenance Manual**

WANG

LABORATORIES, INC.

ONE INDUSTRIAL AVENUE, LOWELL, MASSACHUSETTS 01851. TEL (617) 459-5000. TWX 710 343-6769. TELEX 94-7421

741-1185

PRINTED IN U.S.A.

PREFACE

This document contains schematics for the Wang VS-15/25/45 Computer System. It is used with the VS-15/25/45 Computer System Standard Maintenance Manual (document no. 741-1404/741-1032) and is organized in accordance with the approved STD outline established at the Field/Home Office Publications meetings conducted on September 14th and 15th, 1982. The scope of these manuals reflect the type of maintenance philosophy selected for this product (swap unit, printed circuit assembly, chip level or any combination thereof).

The purpose of the Standard Maintenance Manual and this Schematics Manual is to provide the Wang-trained Customer Engineer (CE) with instructions to operate, troubleshoot and repair the VS-15/25/45 Computer System. This manual will be updated on a regular schedule.

3rd Edition (November, 1984)

This edition of the VS-15/25/45 Schematics Manual obsoletes documents no. 729-1185-A and 729-1185-A1. The material in this document may only be used for the purpose stated in the Preface above. Updates and/or changes to this document will be published as Publications Update Bulletins (PUB's) or subsequent editions.

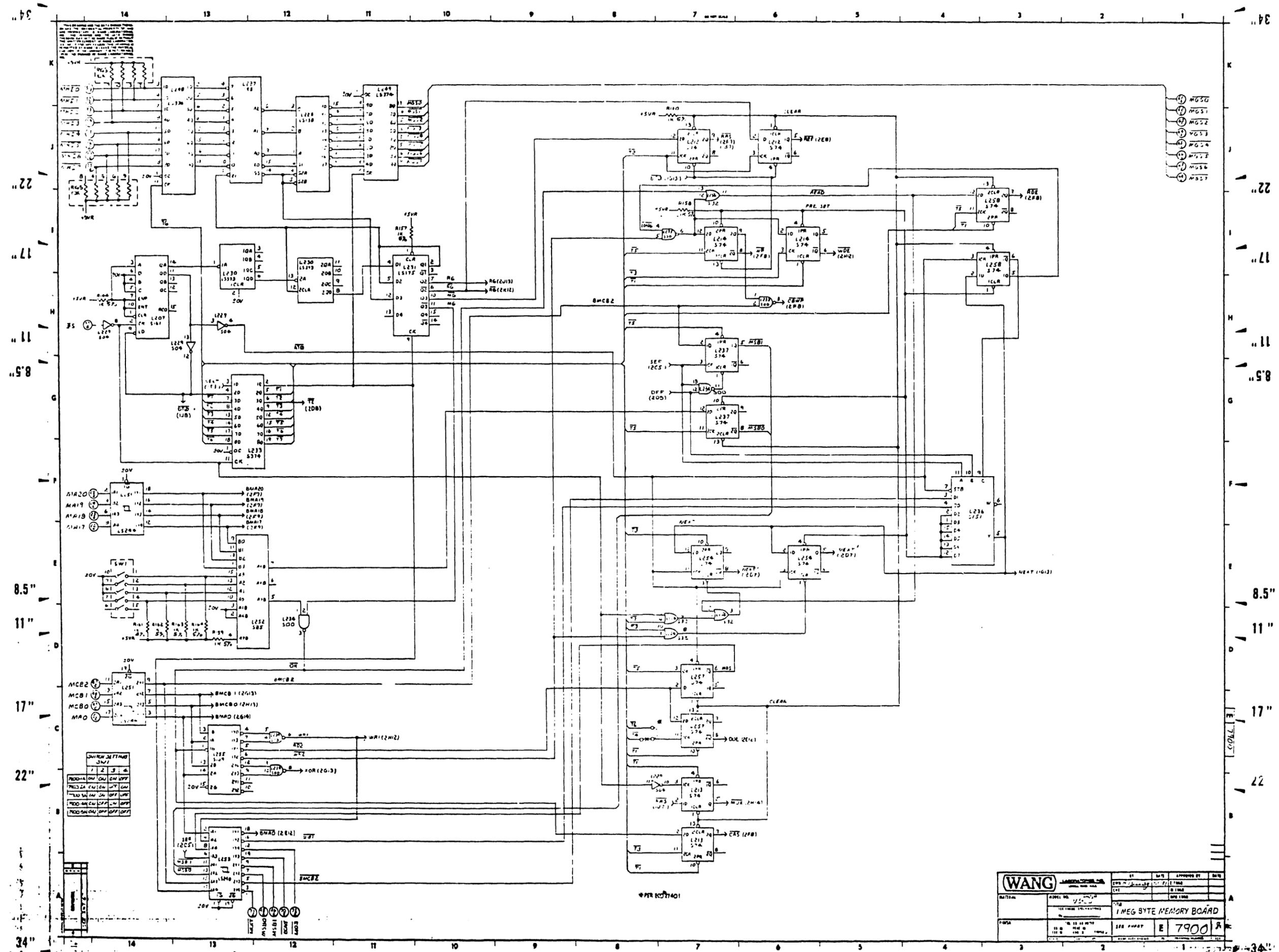
This document is the property of Wang Laboratories, Inc. All information contained herein is considered company proprietary, and its use is restricted solely for the purpose of assisting the Wang-trained CE in servicing this Wang product. Reproduction of all or any part of this document is prohibited without the prior consent of Wang Laboratories, Inc.

VS-15/25/45 SCHEMATICS MANUAL

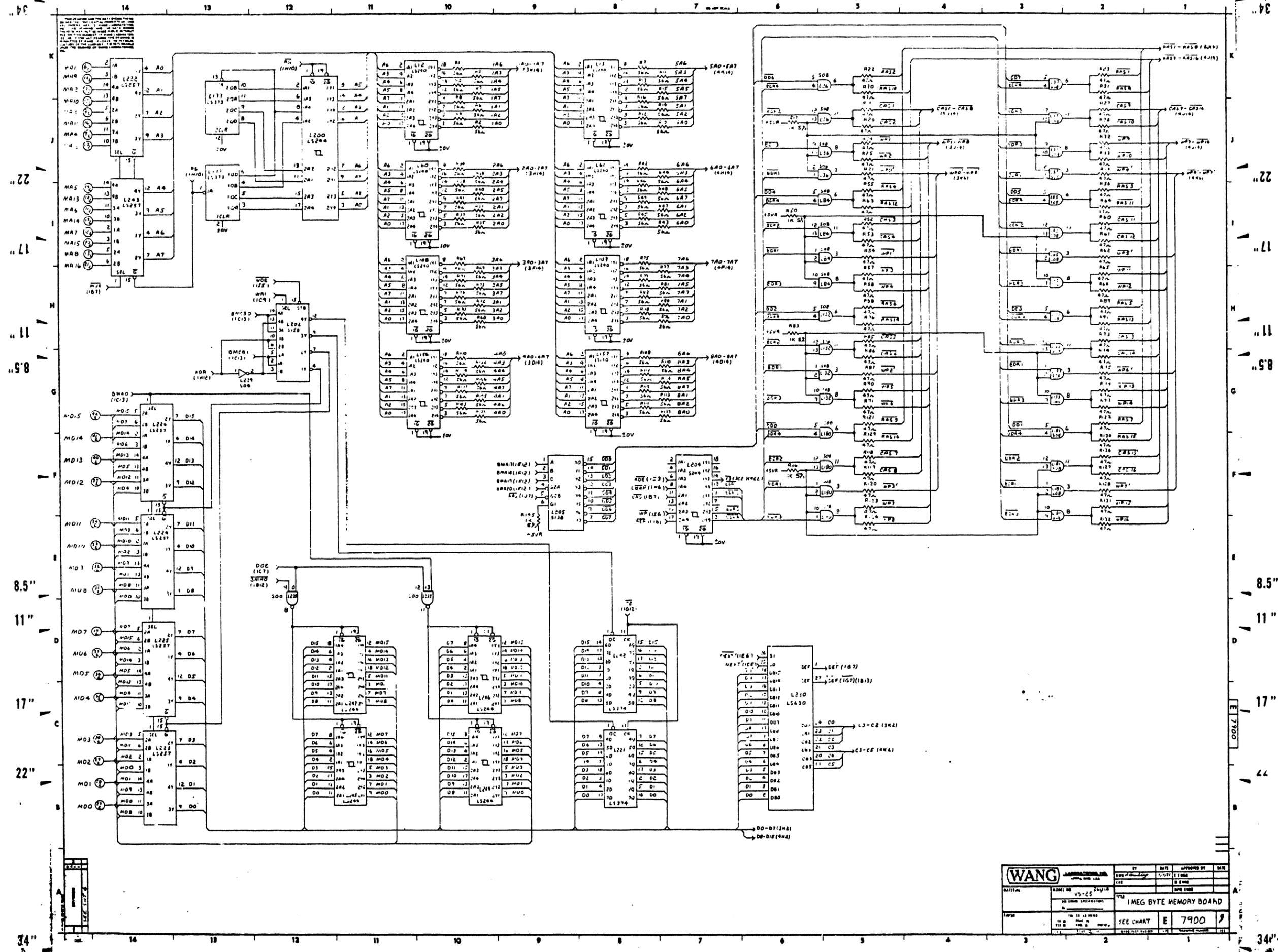
TABLE OF CONTENTS

SCHEMATIC #	TITLE	VS-15	VS-25/45	PAGE #
210-7900	1 MEGABYTE MAIN MEMORY BOARD	X	X	A1-A13
210-7906	16-PORT SIO DEVICE ADAPTER		X	B1-B5
210-7913	FRONT PANEL BOARD		X	C1
210-7945	WORKSTATION/PRINTER CONTROLLER BOARD			D1-D9
210-8010	SPS450 SWITCHING P/S MULTI-INPUT BOARD		X	E1-E3
210-8011	SPS450 SWITCHING P/S MULTI-OUTPUT CONTROL BOARD		X	F1-F4
210-8012	SPS450 SWITCHING P/S +/- 5 VOLT BOARD		X	G1-G3
210-8303	CPU BOARD	X	X	H1-H7
210-8304/1-A	BUS PROCESSOR BOARD (REVISION 3 - 128K/256K)		X	J1-J7
210-8312	1-PORT SMD DISK DEVICE ADAPTER	X	X	K1-K8
210-8313	2-PORT SMD DISK DEVICE ADAPTER		X	L1-L8
210-8314	3-PORT SMD DISK DEVICE ADAPTER		X	M1-M6
210-8315	4-PORT SMD DISK DEVICE ADAPTER		X	N1-N6
210-8325	QUANTUM Q2040 (8") DISK DRIVE ADAPTER		X	P1-P5
210-8337	1-PORT TELECOMMUNICATIONS ADAPTER	X	X	R1-R6
210-8358	BUS PROCESSOR BOARD (256K)	X	X	S1-S10
210-8362	QUANTUM Q540 (5 1/4") DISK DRIVE ADAPTER	X		T1-T8
210-8606	16-PORT SIO DEVICE ADAPTER	X	X	U1-U7
210-8607	MOTHERBOARD	X	X	V1
210-8611	SPS476E SWITCHING P/S 5 VOLT BOARD	X		W1-W2
210-8612	SPS476E SWITCHING P/S 12/24 VOLT BOARD	X		X1-X3
210-8613	FRONT PANEL BOARD	X		Y1-Y2
210-8616	32-PORT INTELLIGENT SIO DEVICE ADAPTER		X	Z1-Z9
210-8637	2-PORT TELECOMMUNICATIONS ADAPTER	X	X	AA1-AA7

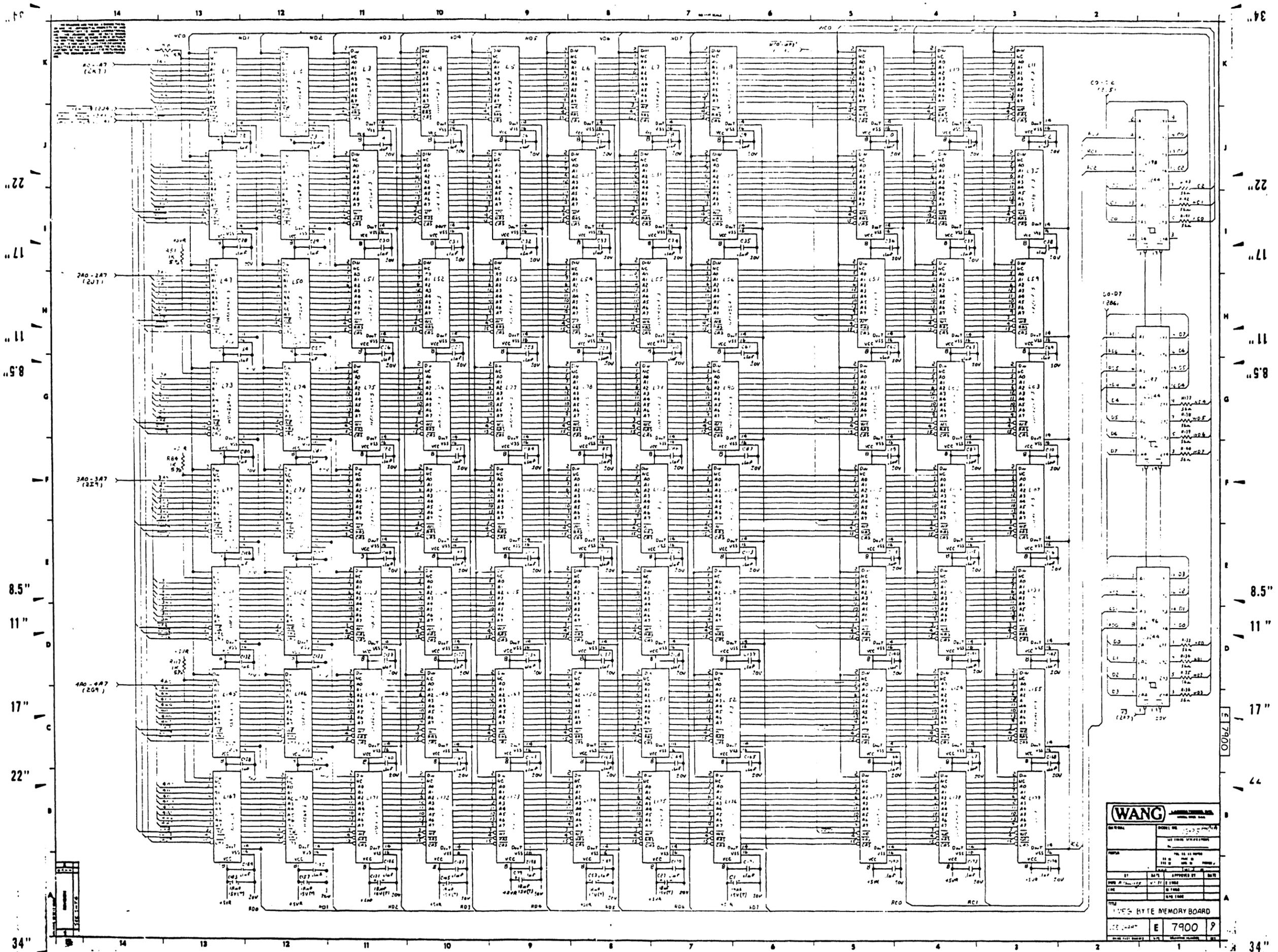
The following electrical schematics are the latest revisions available at the time of publication of this manual. Periodically, as changes, additions, or deletions occur, updates to this manual will be made available to field personnel.



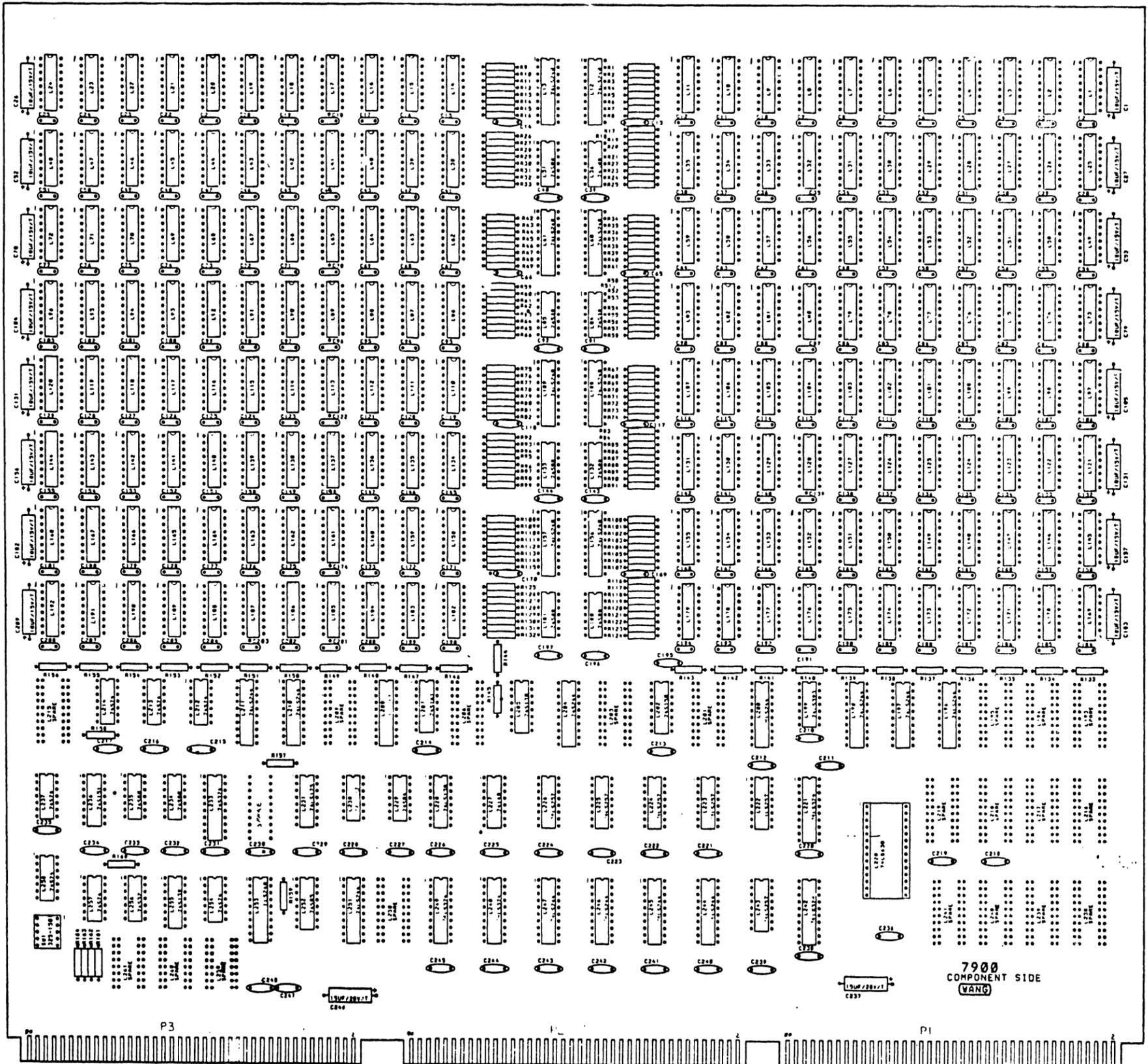
WANG		REV. 01	DATE	APPROVED BY	DATE
INITIAL	DATE	REV. 01	DATE	APPROVED BY	DATE
		1 MEG. BYTE MEMORY BOARD			
FORM	NO. 10-10-60	SEE PART	E 7900		



WANG		BY	DATE	APPROVED BY	DATE
MODEL NO. V5-25		DESIGNED BY	7/27/78	DATE	7/27/78
1 MEG BYTE MEMORY BOARD		DESIGNED BY	DATE	DATE	DATE
SEE CHART E 7900		DATE	DATE	DATE	DATE



WANG	
DATE	NO. 10 11 1968
BY	DESIGNED BY
CHK'D BY	APPROVED BY
DATE	DATE
16K BYTE MEMORY BOARD	
BOARD NO.	E 7900 9



SEE SMT 6

SEE SMT 6

WANG		BY	DATE	APPROVED BY	DATE
REVISED	REVISED	DATE	DATE	DATE	DATE
TITLE		TITLE			
L100 SITE MEMORY BOARD		L100 SITE MEMORY BOARD			
JEE CHART		JEE CHART			
E 7900		E 7900			

11

11

9.9

8.5

11

17

Table with columns: REF. DES., WANG PART NO., VALUE/TYP, DESCRIPTION, DRAWING NO., QTY. Includes parts like C2-C12, C15-C25, C28-C30, C31-C31, C34-C34, C37-C37, C38-C38, C39-C39, C40-C40, C41-C41, C42-C42, C43-C43, C44-C44, C45-C45, C46-C46, C47-C47, C1-C1, C26-C27, C32-C33, C34-C34, C35-C35, C36-C36, C37-C37, C38-C38, C39-C39, C40-C40, C41-C41, C42-C42, C43-C43, C44-C44, C45-C45, C46-C46, C47-C47, C1-C1, C26-C27, C32-C33, C34-C34, C35-C35, C36-C36, C37-C37, C38-C38, C39-C39, C40-C40, C41-C41, C42-C42, C43-C43, C44-C44, C45-C45, C46-C46, C47-C47.

Table with columns: REF. DES., WANG PART NO., VALUE/TYP, DESCRIPTION, DRAWING NO., QTY. Includes parts like L210-L211, L244-L247, L251, L270, L12-L12, L60-L61, L100-L100, L156-L157, L205, L202, L233, L199, L230, L255, L236, L204, L220, L148-L155, L150-L159, L182-L192, 02, 03, 04-05, 01, 06-012, 013-019, 020-026, 027.

11

11

8.5

8.5

11

17

Table with columns: REF. DES., WANG PART NO., VALUE/TYP, DESCRIPTION, DRAWING NO., QTY. Includes parts like C246, S41, R19-R25, R27-R33, R34-R38, R39-R46, R47-R51, R52-R59, R60-R66, R67-R71, R72-R79, R80-R86, R87-R91, R92-R99, R100-R106, R107-R113, R114-R120, R121-R127, R128-R134, R135-R141, R142-R148, R149-R155, R156-R162, R163-R169, R170-R176, R177-R183, R184-R190, R191-R197, R198-R204, R205-R211, R212-R218, R219-R225, R226-R232, R233-R239, R240-R246, R247-R253, R254-R260, R261-R267, R268-R274, R275-R281, R282-R288, R289-R295, R296-R302, R303-R309, R310-R316, R317-R323, R324-R330, R331-R337, R338-R344, R345-R351, R352-R358, R359-R365, R366-R372, R373-R379, R380-R386, R387-R393, R394-R400, R401-R407, R408-R414, R415-R421, R422-R428, R429-R435, R436-R442, R443-R449, R450-R456, R457-R463, R464-R470, R471-R477, R478-R484, R485-R491, R492-R498, R499-R505, R506-R512, R513-R519, R520-R526, R527-R533, R534-R540, R541-R547, R548-R554, R555-R561, R562-R568, R569-R575, R576-R582, R583-R589, R590-R596, R597-R603, R604-R610, R611-R617, R618-R624, R625-R631, R632-R638, R639-R645, R646-R652, R653-R659, R660-R666, R667-R673, R674-R680, R681-R687, R688-R694, R695-R701, R702-R708, R709-R715, R716-R722, R723-R729, R730-R736, R737-R743, R744-R750, R751-R757, R758-R764, R765-R771, R772-R778, R779-R785, R786-R792, R793-R799, R800-R806, R807-R813, R814-R820, R821-R827, R828-R834, R835-R841, R842-R848, R849-R855, R856-R862, R863-R869, R870-R876, R877-R883, R884-R890, R891-R897, R898-R904, R905-R911, R912-R918, R919-R925, R926-R932, R933-R939, R940-R946, R947-R953, R954-R960, R961-R967, R968-R974, R975-R981, R982-R988, R989-R995, R996-R1002, R1003-R1009, R1010-R1016, R1017-R1023, R1024-R1030, R1031-R1037, R1038-R1044, R1045-R1051, R1052-R1058, R1059-R1065, R1066-R1072, R1073-R1079, R1080-R1086, R1087-R1093, R1094-R1100, R1101-R1107, R1108-R1114, R1115-R1121, R1122-R1128, R1129-R1135, R1136-R1142, R1143-R1149, R1150-R1156, R1157-R1163, R1164-R1170, R1171-R1177, R1178-R1184, R1185-R1191, R1192-R1198, R1199-R1205, R1206-R1212, R1213-R1219, R1220-R1226, R1227-R1233, R1234-R1240, R1241-R1247, R1248-R1254, R1255-R1261, R1262-R1268, R1269-R1275, R1276-R1282, R1283-R1289, R1290-R1296, R1297-R1303, R1304-R1310, R1311-R1317, R1318-R1324, R1325-R1331, R1332-R1338, R1339-R1345, R1346-R1352, R1353-R1359, R1360-R1366, R1367-R1373, R1374-R1380, R1381-R1387, R1388-R1394, R1395-R1401, R1402-R1408, R1409-R1415, R1416-R1422, R1423-R1429, R1430-R1436, R1437-R1443, R1444-R1450, R1451-R1457, R1458-R1464, R1465-R1471, R1472-R1478, R1479-R1485, R1486-R1492, R1493-R1499, R1500-R1506, R1507-R1513, R1514-R1520, R1521-R1527, R1528-R1534, R1535-R1541, R1542-R1548, R1549-R1555, R1556-R1562, R1563-R1569, R1570-R1576, R1577-R1583, R1584-R1590, R1591-R1597, R1598-R1604, R1605-R1611, R1612-R1618, R1619-R1625, R1626-R1632, R1633-R1639, R1640-R1646, R1647-R1653, R1654-R1660, R1661-R1667, R1668-R1674, R1675-R1681, R1682-R1688, R1689-R1695, R1696-R1702, R1703-R1709, R1710-R1716, R1717-R1723, R1724-R1730, R1731-R1737, R1738-R1744, R1745-R1751, R1752-R1758, R1759-R1765, R1766-R1772, R1773-R1779, R1780-R1786, R1787-R1793, R1794-R1800, R1801-R1807, R1808-R1814, R1815-R1821, R1822-R1828, R1829-R1835, R1836-R1842, R1843-R1849, R1850-R1856, R1857-R1863, R1864-R1870, R1871-R1877, R1878-R1884, R1885-R1891, R1892-R1898, R1899-R1905, R1906-R1912, R1913-R1919, R1920-R1926, R1927-R1933, R1934-R1940, R1941-R1947, R1948-R1954, R1955-R1961, R1962-R1968, R1969-R1975, R1976-R1982, R1983-R1989, R1990-R1996, R1997-R2003, R2004-R2010, R2011-R2017, R2018-R2024, R2025-R2031, R2032-R2038, R2039-R2045, R2046-R2052, R2053-R2059, R2060-R2066, R2067-R2073, R2074-R2080, R2081-R2087, R2088-R2094, R2095-R2101, R2102-R2108, R2109-R2115, R2116-R2122, R2123-R2129, R2130-R2136, R2137-R2143, R2144-R2150, R2151-R2157, R2158-R2164, R2165-R2171, R2172-R2178, R2179-R2185, R2186-R2192, R2193-R2199, R2200-R2206, R2207-R2213, R2214-R2220, R2221-R2227, R2228-R2234, R2235-R2241, R2242-R2248, R2249-R2255, R2256-R2262, R2263-R2269, R2270-R2276, R2277-R2283, R2284-R2290, R2291-R2297, R2298-R2304, R2305-R2311, R2312-R2318, R2319-R2325, R2326-R2332, R2333-R2339, R2340-R2346, R2347-R2353, R2354-R2360, R2361-R2367, R2368-R2374, R2375-R2381, R2382-R2388, R2389-R2395, R2396-R2402, R2403-R2409, R2410-R2416, R2417-R2423, R2424-R2430, R2431-R2437, R2438-R2444, R2445-R2451, R2452-R2458, R2459-R2465, R2466-R2472, R2473-R2479, R2480-R2486, R2487-R2493, R2494-R2500, R2501-R2507, R2508-R2514, R2515-R2521, R2522-R2528, R2529-R2535, R2536-R2542, R2543-R2549, R2550-R2556, R2557-R2563, R2564-R2570, R2571-R2577, R2578-R2584, R2585-R2591, R2592-R2598, R2599-R2605, R2606-R2612, R2613-R2619, R2620-R2626, R2627-R2633, R2634-R2640, R2641-R2647, R2648-R2654, R2655-R2661, R2662-R2668, R2669-R2675, R2676-R2682, R2683-R2689, R2690-R2696, R2697-R2703, R2704-R2710, R2711-R2717, R2718-R2724, R2725-R2731, R2732-R2738, R2739-R2745, R2746-R2752, R2753-R2759, R2760-R2766, R2767-R2773, R2774-R2780, R2781-R2787, R2788-R2794, R2795-R2801, R2802-R2808, R2809-R2815, R2816-R2822, R2823-R2829, R2830-R2836, R2837-R2843, R2844-R2850, R2851-R2857, R2858-R2864, R2865-R2871, R2872-R2878, R2879-R2885, R2886-R2892, R2893-R2899, R2900-R2906, R2907-R2913, R2914-R2920, R2921-R2927, R2928-R2934, R2935-R2941, R2942-R2948, R2949-R2955, R2956-R2962, R2963-R2969, R2970-R2976, R2977-R2983, R2984-R2990, R2991-R2997, R2998-R3004, R3005-R3011, R3012-R3018, R3019-R3025, R3026-R3032, R3033-R3039, R3040-R3046, R3047-R3053, R3054-R3060, R3061-R3067, R3068-R3074, R3075-R3081, R3082-R3088, R3089-R3095, R3096-R3102, R3103-R3109, R3110-R3116, R3117-R3123, R3124-R3130, R3131-R3137, R3138-R3144, R3145-R3151, R3152-R3158, R3159-R3165, R3166-R3172, R3173-R3179, R3180-R3186, R3187-R3193, R3194-R3200, R3201-R3207, R3208-R3214, R3215-R3221, R3222-R3228, R3229-R3235, R3236-R3242, R3243-R3249, R3250-R3256, R3257-R3263, R3264-R3270, R3271-R3277, R3278-R3284, R3285-R3291, R3292-R3298, R3299-R3305, R3306-R3312, R3313-R3319, R3320-R3326, R3327-R3333, R3334-R3340, R3341-R3347, R3348-R3354, R3355-R3361, R3362-R3368, R3369-R3375, R3376-R3382, R3383-R3389, R3390-R3396, R3397-R3403, R3404-R3410, R3411-R3417, R3418-R3424, R3425-R3431, R3432-R3438, R3439-R3445, R3446-R3452, R3453-R3459, R3460-R3466, R3467-R3473, R3474-R3480, R3481-R3487, R3488-R3494, R3495-R3501, R3502-R3508, R3509-R3515, R3516-R3522, R3523-R3529, R3530-R3536, R3537-R3543, R3544-R3550, R3551-R3557, R3558-R3564, R3565-R3571, R3572-R3578, R3579-R3585, R3586-R3592, R3593-R3599, R3600-R3606, R3607-R3613, R3614-R3620, R3621-R3627, R3628-R3634, R3635-R3641, R3642-R3648, R3649-R3655, R3656-R3662, R3663-R3669, R3670-R3676, R3677-R3683, R3684-R3690, R3691-R3697, R3698-R3704, R3705-R3711, R3712-R3718, R3719-R3725, R3726-R3732, R3733-R3739, R3740-R3746, R3747-R3753, R3754-R3760, R3761-R3767, R3768-R3774, R3775-R3781, R3782-R3788, R3789-R3795, R3796-R3802, R3803-R3809, R3810-R3816, R3817-R3823, R3824-R3830, R3831-R3837, R3838-R3844, R3845-R3851, R3852-R3858, R3859-R3865, R3866-R3872, R3873-R3879, R3880-R3886, R3887-R3893, R3894-R3900, R3901-R3907, R3908-R3914, R3915-R3921, R3922-R3928, R3929-R3935, R3936-R3942, R3943-R3949, R3950-R3956, R3957-R3963, R3964-R3970, R3971-R3977, R3978-R3984, R3985-R3991, R3992-R3998, R3999-R4005, R4006-R4012, R4013-R4019, R4020-R4026, R4027-R4033, R4034-R4040, R4041-R4047, R4048-R4054, R4055-R4061, R4062-R4068, R4069-R4075, R4076-R4082, R4083-R4089, R4090-R4096, R4097-R4103, R4104-R4110, R4111-R4117, R4118-R4124, R4125-R4131, R4132-R4138, R4139-R4145, R4146-R4152, R4153-R4159, R4160-R4166, R4167-R4173, R4174-R4180, R4181-R4187, R4188-R4194, R4195-R4201, R4202-R4208, R4209-R4215, R4216-R4222, R4223-R4229, R4230-R4236, R4237-R4243, R4244-R4250, R4251-R4257, R4258-R4264, R4265-R4271, R4272-R4278, R4279-R4285, R4286-R4292, R4293-R4299, R4300-R4306, R4307-R4313, R4314-R4320, R4321-R4327, R4328-R4334, R4335-R4341, R4342-R4348, R4349-R4355, R4356-R4362, R4363-R4369, R4370-R4376, R4377-R4383, R4384-R4390, R4391-R4397, R4398-R4404, R4405-R4411, R4412-R4418, R4419-R4425, R4426-R4432, R4433-R4439, R4440-R4446, R4447-R4453, R4454-R4460, R4461-R4467, R4468-R4474, R4475-R4481, R4482-R4488, R4489-R4495, R4496-R4502, R4503-R4509, R4510-R4516, R4517-R4523, R4524-R4530, R4531-R4537, R4538-R4544, R4545-R4551, R4552-R4558, R4559-R4565, R4566-R4572, R4573-R4579, R4580-R4586, R4587-R4593, R4594-R4600, R4601-R4607, R4608-R4614, R4615-R4621, R4622-R4628, R4629-R4635, R4636-R4642, R4643-R4649, R4650-R4656, R4657-R4663, R4664-R4670, R4671-R4677, R4678-R4684, R4685-R4691, R4692-R4698, R4699-R4705, R4706-R4712, R4713-R4719, R4720-R4726, R4727-R4733, R4734-R4740, R4741-R4747, R4748-R4754, R4755-R4761, R4762-R4768, R4769-R4775, R4776-R4782, R4783-R4789, R4790-R4796, R4797-R4803, R4804-R4810, R4811-R4817, R4818-R4824, R4825-R4831, R4832-R4838, R4839-R4845, R4846-R4852, R4853-R4859, R4860-R4866, R4867-R4873, R4874-R4880, R4881-R4887, R4888-R4894, R4895-R4901, R4902-R4908, R4909-R4915, R4916-R4922, R4923-R4929, R4930-R4936, R4937-R4943, R4944-R4950, R4951-R4957, R4958-R4964, R4965-R4971, R4972-R4978, R4979-R4985, R4986-R4992, R4993-R4999, R5000-R5006, R5007-R5013, R5014-R5020, R5021-R5027, R5028-R5034, R5035-R5041, R5042-R5048, R5049-R5055, R5056-R5062, R5063-R5069, R5070-R5076, R5077-R5083, R5084-R5090, R5091-R5097, R5098-R5104, R5105-R5111, R5112-R5118, R5119-R5125, R5126-R5132, R5133-R5139, R5140-R5146, R5147-R5153, R5154-R5160, R5161-R5167, R5168-R5174, R5175-R5181, R5182-R5188, R5189-R5195, R5196-R5202, R5203-R5209, R5210-R5216, R5217-R5223, R5224-R5230, R5231-R5237, R5238-R5244, R5245-R5251, R5252-R5258, R5259-R5265, R5266-R5272, R5273-R5279, R5280-R5286, R5287-R5293, R5294-R5300, R5301-R5307, R5308-R5314, R5315-R5321, R5322-R5328, R5329-R5335, R5336-R5342, R5343-R5349, R5350-R5356, R5357-R5363, R5364-R5370, R5371-R5377, R5378-R5384, R5385-R5391, R5392-R5398, R5399-R5405, R5406-R5412, R5413-R5419, R5420-R5426, R5427-R5433, R5434-R5440, R5441-R5447, R5448-R5454, R5455-R5461, R5462-R5468, R5469-R5475, R5476-R5482, R5483-R5489, R5490-R5496, R5497-R5503, R5504-R5510, R5511-R5517, R5518-R5524, R5525-R5531, R5532-R5538, R5539-R5545, R5546-R5552, R5553-R5559, R5560-R5566, R5567-R5573, R5574-R5580, R5581-R5587, R5588-R5594, R5595-R5601, R5602-R5608, R5609-R5615, R5616-R5622, R5623-R5629, R5630-R5636, R5637-R5643, R5644-R5650, R5651-R5657, R5658-R5664, R5665-R5671, R5672-R5678, R5679-R5685, R5686-R5692, R5693-R5699, R5700-R5706, R5707-R5713, R5714-R5720, R5721-R5727, R5728-R5734, R5735-R5741, R5742-R5748, R5749-R5755, R5756-R5762, R5763-R5769, R5770-R5776, R5777-R5783, R5784-R5790, R5791-R5797, R5798-R5804, R5805-R5811, R5812-R5818, R5819-R5825, R5826-R5832, R5833-R5839, R5840-R5846, R5847-R5853, R5854-R5860, R5861-R5867, R5868-R5874, R5875-R5881, R5882-R5888, R5889-R5895, R5896-R5902, R5903-R5909, R5910-R5916, R5917-R5923, R5924-R5930, R5931-R5937, R5938-R5944, R5945-R5951, R5952-R5958, R5959-R5965, R5966-R5972, R5973-R5979, R5980-R5986, R5987-R5993, R5994-R6000, R6001-R6007, R6008-R6014, R6015-R6021, R6022-R6028, R6029-R6035, R6036-R6042, R6043-R6049, R6050-R6056, R6057-R6063, R6064-R6070, R6071-R6077, R6078-R6084, R6085-R6091, R6092-R6098, R6099-R6105, R6106-R6112, R6113-R6119, R6120-R6126, R6127-R6133, R6134-R6140, R6141-R6147, R6148-R6154, R6155-R6161, R6162-R6168, R6169-R6175, R6176-R6182, R6183-R6189, R6190-R6196, R6197-R6203, R6204-R6210, R6211-R6217, R6218-R6224, R6225-R6231, R6232-R6238, R6239-R6245, R6246-R6252, R6253-R6259, R6260-R6266, R6267-R6273, R6274-R6280, R6281-R6287, R6288-R6294, R6295-R6301, R6302-R6308, R6309-R6315, R6316-R6322, R6323-R6329, R6330-R6336, R6337-R6343, R6344-R6350, R6351-R6357, R6358-R6364, R6365-R6371, R6372-R6378, R6379-R6385, R6386-R6392, R6393-R6399, R6400-R6406, R6407-R6413, R6414-R6420, R6421-R6427, R6428-R6434, R6435-R6441, R6442-R6448, R6449-R6455, R6456-R6462, R6463-R6469, R6470-R6476, R6477-R6483, R6484-R6490, R6491-R6497, R6498-R6504, R6505-R6511, R6512-R6518, R6519-R6525, R6526-R6532, R6533-R6539, R6540-R6546, R6547-R6553, R6554-R6560, R6561-R6567, R6568-R6574, R6575-R6581, R6582-R6588, R6589-R6595, R6596-R6602, R6603-R6609, R6610-R6616, R6617-R6623, R6624-R6630, R6631-R6637, R6638-R6644, R6645-R6651, R6652-R6658, R6659-R6665, R6666-R6672, R6673-R6679, R6680-R6686, R6687-R6693, R6694-R6700, R6701-R6707, R6708-R6714, R6715-R6721, R6722-R6728, R6729-R6735, R6736-R6742, R6743-R6749, R6750-R6756, R6757-R6763, R6764-R6770, R6771-R6777, R6778-R6784, R6785-R6791, R6792-R6798, R6799-R6805, R6806-R6812, R6813-R6819, R6820-R6826, R6827-R6833, R6834-R6840, R6841-R6847, R6848-R6854, R6855-R6861, R6862-R6868, R6869-R6875, R6876-R6882, R6883-R6889, R6890-R6896, R6897-R6903, R6904-R6910, R6911-R6917, R6918-R6924, R6925-R6931, R6932-R6938, R6939-R6945, R6946-R6952, R6953-R6959, R6960-R6966, R6967-R6973, R6974-R6980, R6981-R6987, R6988-R6994, R6995-R7001, R7002-R7008, R7009-R7015, R7016-R7022, R7023-R7029, R7030-R7036, R7037-R7043, R7044-R7050, R7051-R7057, R7058-R7064, R7065-R7071, R7072-R7078, R7079-R7085, R7086-R7092, R7093-R7099, R7100-R7106, R7107-R7113, R7114-R7120, R7121-R7127, R7128-R7134, R7135-R7141, R7142-R7148, R7149-R7155, R7156-R7162, R7163-R7169, R7170-R7176, R7177-R7183, R7184-R7190, R7191-R7197, R7198-R7204, R7205-R7211, R721

FINAL PARTS LIST

BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD
 ASSEMBLY LEVEL & TITLE: 209--2 VS25 384K BYTE
 PARTS LIST REVISION (P): 0
 ARTWORK REVISION (R): 02
 ASSEMBLY REVISION (A): 03
 SCHEMATIC REVISION (S): 09
 QWR OR MOST RECENT ECO: 33230

CREATED: 07/23/84 14:22
 LAST MODIFIED: 08/24/84 13:18 BY: WS
 EDITING REVISION: 11

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
C2 - C12	300-1930-	.1U	CAP CERAMIC MONO RAD +80% -20% 50V 25U		176
C18 - C28					
C28 - C38					
C41 - C51					
C54 - C64					
C67 - C77					
C80 - C90					
C93 - C103					
C106 - C116					
C119 - C129					
C132 - C142					
C145 - C155					
C158 - C168					
C171 - C181					
C184 - C194					
C197 - C207					
C13 - C14	300-1966-	.047U	CAP CERAMIC MONO AXIAL +80 -20% 50V 25U		54
C39 - C40					
C65 - C66					
C91 - C92					
C117 - C118					
C143 - C144					
C169 - C170					
C195 - C197					
C210 - C216					
C238 - C245					
C247 - C248					
C1	300-4018-	18U	CAP TANT AXIAL 10% 18V		16
C26 - C27					
C52 - C53					
C78 - C79					
C104 - C108					
C130 - C131					
C156 - C157					
C182 - C183					
C209					
C237	300-4022-	15.0U	CAP TANT AXIAL 10% 20V		2

BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD SCHEMATIC REVISION (S): 09 SHEET OF PAGE 3

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L210 - L211					
L244 - L247					
L251					
L228	376-0294-	74LS138	3-LINE TO 8-LINE DECODER/MULTIPLEXER		1
L12 - L13	376-0297-	74LS240	OCTAL BUFFER/LINE DRIVER/LINE RECEIVER		9
L60 - L61					
L108 - L109					
L156 - L157					
L253					
L205	376-0298-	74S138	3-LINE TO 8-LINE DECODER/MULT USE 376-0671		1
L202	376-0301-	74S158	QUAD 2 TO 1-LINE DATA SELECTO USE 376-0810		1
L233	376-0305-	74S374	OCTAL D-TYPE EDGE-TRIGUSE 376-0614 OR 0758		1
L199	376-0307-	74LS193	DUAL 4-BIT BINARY COUNTER		2
L230					
L255	376-0333-	74S139	2 TO 4-LINE DECODER/MULTIPLEX USE 376-0672		1
L236	376-0336-	74S151	1-OF-8 DATA SEL/MUX USE 376-0613		1
L204	376-0338-	74S244	OCTAL BUFFER/LINE DRIVER/RECE USE 376-0611		1
L220	376-9015-	SKT 28	SOCKET 28 PIN DIL MOUNT		1
L121 - L131	377-0415-	4164	64KX1 DRAM 200NS REF REQUIRE 4MS/256 ROW		66
L134 - L155					
L158 - L179					
L182 - L192					
02	452-2707-	STIFFNER	STIFFNER LOWEF		1
03	452-2708-	STIFFNER	STIFFNER UPPE		1
04 - 05	465-1238-	EXTRACTR	EXTRACTR CARD LON W/ROLL		2
01	510-7900-	PCB	PCB		1
06 - 012	630-2100-	PAN HEAD	4-40 X 1/4 PAN HD PHL HS		7
013 - 019	652-2000-	NUT	40 NUT		7
020 - 026	653-2000-	WASHER	40 NYLON WASHER		7
027	660-0341-	#222	#222 LOCKTITE (7 PLACES)		1

BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD SCHEMATIC REVISION (S): 09 SHEET OF PAGE 2

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
C746					
S01	325-1501-	SWITCH	SLIDE SPST 5 POS OIP		1
R19 - R25	330-1047-	47.000	RES FIXED 1/4W 10% RES FIXED 1/4W 10%		56
R27 - R33					
R52 - R58					
R60 - R66					
R85 - R91					
R93 - R99					
R118 - R124					
R126 - R132					
R1 - R16	330-1057-	56.000	RES FIXED METAL FILM 1/4W 5% 200PPM		66
R34 - R40					
R67 - R82					
R100 - R116					
R133 - R143					
R146 - R156					
R17 - R18	330-3011-	1K	RES FIXED METAL FILM 1/4W 5% 200PPM		22
R26					
R50 - R51					
R59					
R83 - R84					
R92					
R116 - R117					
R128					
R144 - R145					
R157 - R164					
L231	333-0809-	10K	RESISTOR NETWORK TYPE: 10/09/C/SS		1
L227	376-0160-	74LS175	IC QUAD D-TYPE FLIP FLOP		1
L229	376-0171-	74148	IC 8-LINE-TO-3-LINE OCTAL PRIORITY ENCODER		1
L36 - L37	376-0197-	74S04	IC HEX INVERTER USE 376-0666 OR 0772		1
L84 - L85	376-0200-	74S08	IC QUAD 2 INPUT POSITIVE USE 376-0667 OR 0773		8
L132 - L133					
L180 - L181					
L212 - L214	376-0202-	74S74	IC DUAL D-TYPE POS EDGE TUSE 376-0682 OR 0818		7
L237					
L254					
L257 - L258					
L222 - L226	376-0204-	74LS25/A	IC QUAD 2-LINE TO 1-LINE DATA SEL/MUX		6
L243					
L256	376-0205-	74S32	IC QUAD 2-INPUT OR GATE USE 376-0678 OR 0755		1
L234 - L235	376-0228-	74S00	IC QUAD 2-INPUT NAND GATEUSE 376-0644 OR 0770		2
L252	376-0259-	74S85	IC 4-BIT MAGNITUDE COMPARATOR		1
L207	376-0278-	74S161	IC SYN 4-BIT BINARY COUNTER W/DIRECT CLEAR		1
L221	376-0286-	74LS374	IC OCTAL D-TYPE FLIP-FLOP TRI-STATE		4
L242					
L248 - L249					
L196 - L198	376-0288-	74LS244	IC OCTAL BUFFER/LINE DRIVER W/TRE STATE		12
L200					
L208					

BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD SCHEMATIC REVISION (S): 09 SHEET OF PAGE 4

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L210 - L211					
L244 - L247					
L251					
L228	376-0294-	74LS138	3-LINE TO 8-LINE DECODER/MULTIPLEXER		1
L12 - L13	376-0297-	74LS240	OCTAL BUFFER/LINE DRIVER/LINE RECEIVER		9
L60 - L61					
L108 - L109					
L156 - L157					
L253					
L205	376-0298-	74S138	3-LINE TO 8-LINE DECODER/MULT USE 376-0671		1
L202	376-0301-	74S158	QUAD 2 TO 1-LINE DATA SELECTO USE 376-0810		1
L233	376-0305-	74S374	OCTAL D-TYPE EDGE-TRIGUSE 376-0614 OR 0758		1
L199	376-0307-	74LS193	DUAL 4-BIT BINARY COUNTER		2
L230					
L255	376-0333-	74S139	2 TO 4-LINE DECODER/MULTIPLEX USE 376-0672		1
L236	376-0336-	74S151	1-OF-8 DATA SEL/MUX USE 376-0613		1
L204	376-0338-	74S244	OCTAL BUFFER/LINE DRIVER/RECE USE 376-0611		1
L220	376-9015-	SKT 28	SOCKET 28 PIN DIL MOUNT		1
L121 - L131	377-0415-	4164	64KX1 DRAM 200NS REF REQUIRE 4MS/256 ROW		66
L134 - L155					
L158 - L179					
L182 - L192					
02	452-2707-	STIFFNER	STIFFNER LOWEF		1
03	452-2708-	STIFFNER	STIFFNER UPPE		1
04 - 05	465-1238-	EXTRACTR	EXTRACTR CARD LON W/ROLL		2
01	510-7900-	PCB	PCB		1
06 - 012	630-2100-	PAN HEAD	4-40 X 1/4 PAN HD PHL HS		7
013 - 019	652-2000-	NUT	40 NUT		7
020 - 026	653-2000-	WASHER	40 NYLON WASHER		7
027	660-0341-	#222	#222 LOCKTITE (7 PLACES)		1

*** END-OF-REPORT ***

AWANG WANG LABORATORIES, INC. LOWELL, MA U.S.A.		BY	DATE	APPROVED BY	DATE
MATERIAL		DWN		E ENGR	
MODEL NO		CHK		M ENGR	
SEE ENGR SPECIFICATIONS				MFG ENGR	
TITLE		PCA VS-25 MEMORY BD			
FINISH		SEE CHART	C	7900	9
TOL. SH. AS NOTED DR. & DIM. FRAC. 1/16" SEE 8 FOR ANG. & 11 FOR FINISH		SCALE	1:1	DRAWING NUMBER	REV
		SHT	9 OF 13	WANG PART NUMBER	DATE

(FINAL PARTS LIST)

BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD
 ASSEMBLY LEVEL & TITLE: 209--3
 PARTS LIST REVISION (P): 0
 APT/DATE REVISION (R): 02
 SCHEMATIC REVISION (S): 09
 DWR OR MPT RECENT ECO: 33230

CREATED: 07/23/84 14:32
 LAST MODIFIED: 08/24/84 13:18 BY: NS
 EDITING REVISION: 11

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
C2 - C12	300-1930-	.1U	CAP CERAMIC MONO RAD +80% -20% 50V Z5U		176
C13 - C14	300-1966-	.047U	CAP CERAMIC MONO AXIAL +80 -20% 50V Z5U		84
C1 - C1	300-4018-	10U	CAP TANT AXIAL 10% 10V		16
C209 - C237	300-4022-	10.0U	CAP TANT AXIAL 10% 20V		2

BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD SCHEMATIC REVISION (S): 09 SHEET OF PAGE 3

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L210 - L211					
L234 - L247					
L251					
L228	376-0204-	74LS138	IC 3-LINE TO 8-LINE DECODER/MULTIPLEXER		1
L12 - L13	376-0297-	74LS240	IC OCTAL BUFFER/LINE DRIVER/LINE RECEIVER		9
L60 - L61					
L108 - L109					
L156 - L157					
L253					
L205	376-0208-	74LS138	IC 3-LINE TO 8-LINE DECODER/MULT USE 376-0671		1
L202	376-0301-	74LS158	IC QUAD 2 TO 1-LINE DATA SELECTO USE 376-0810		1
L233	376-0308-	74LS374	IC OCTAL D-TYPE EDGE-TRIGUSE 376-0614 OR 0758		1
L199	376-0307-	74LS139	IC DUAL 4-BIT BINARY COUNTER		2
L230					
L258	376-0333-	74LS139	IC 2 TO 4-LINE DECODER/MULTIPLEX USE 376-0672		1
L236	376-0336-	74LS151	IC 1-OF-8 DATA SEL/MUX USE 376-0613		1
L204	376-0338-	74LS244	IC OCTAL BUFFER/LINE DRIVER/RECE USE 376-0611		1
L230	376-9018-	SKT 28	IC SOCKET 28 PIN DIL MOUNT		1
L97 - L107	377-0413-	6164	IC 64KX1 DRAM 200NS REF REQUIRE 4MS/286 ROM		88
L110 - L131					
L134 - L155					
L158 - L179					
L182 - L192					
02	452-2707-	STIFFNER	STIFFNER LOW		1
03	452-2708-	STIFFNER	STIFFNER UPPR		1
04 - 05	463-1238-	EXTRACR	EXTRACTR CARD NYLON W/ROLL		2
01	510-7900-	PCB	PCB		1
06 - 012	650-2100-	PAN HEAD	6-48 X 1/4 PAN HD PHL HS		7
013 - 019	652-2000-	NUT	4# NUT		7
020 - 026	653-2000-	WASHER	#8 NYLON WASHER		7
027	660-0341-	#222	#222 LOCKTITE (7 PLACES)		1

BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD SCHEMATIC REVISION (S): 09 SHEET OF PAGE 2

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
C245					
SW1	325-1801-	SWITCH	SLIDE 3PST 8 POS 01P		1
R19 - R25	330-1047-	47.000	RES FIXED 1/4W 10%		56
R27 - R33					
R32 - R38					
R60 - R66					
R85 - R91					
R93 - R99					
R118 - R124					
R126 - R132					
R1 - R16	330-1057-	56.000	RES FIXED METAL FILM 1/4W 5% 200PPM		86
R34 - R49					
R67 - R82					
R100 - R115					
R123 - R143					
R146 - R156					
R17 - R18	330-3011-	1K	RES FIXED METAL FILM 1/4W 5% 200PPM		22
R26					
R50 - R51					
R59					
R83 - R84					
R92					
R116 - R117					
R125					
R144 - R145					
R157 - R164					
L33 - L39	333-0809-	10K	RESISTOR NETWORK TYPE: 10/09/C/SS		1
L231	376-0160-	74LS175	IC QUAD D-TYPE FLIP-FLOP		1
L227	376-0171-	74148	IC 8-LINE-TO-3-LINE OCTAL PRIORITY ENCODER		1
L229	376-0197-	74S04	IC HEX INVERTER USE 376-0666 OR 0772		1
L36 - L37	376-0200-	74S08	IC QUAD 2 INPUT POSITIVE USE 376-0667 OR 0773		8
L84 - L85					
L132 - L133					
L180 - L181					
L212 - L214	376-0202-	74S74	IC DUAL D-TYPE POS EDGE TUSE 376-0682 OR 0815		7
L237					
L254					
L257 - L258					
L222 - L226	376-0204-	74LS257A	IC QUAD 2-LINE TO 1-LINE DATA SEL/MUX		6
L243					
L256	376-0205-	74S32	IC QUAD 2-INPUT OR GATE USE 376-0678 OR 0755		1
L234 - L235	376-0228-	74S00	IC QUAD 2-INPUT NAND GATEUSE 376-0664 OR 0770		2
L252	376-0259-	74S85	IC 4-BIT MAGNITUDE COMPARTOR		1
L207	376-0278-	74S161	IC 5+M 4-BIT BINARY COUNTER W/DIRECT CLEAR		1
L221	376-0286-	74LS174	IC OCTAL D-TYPE FLIP-FLOP TRI-STATE		4
L242					
L248 - L249					
L195 - L198	376-0288-	74LS244	IC OCTAL BUFFER/LINE DRIVER W/TRI STATE		12
L200					
L208					

BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD SCHEMATIC REVISION (S): 09 SHEET OF PAGE 4

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L210 - L211					
L234 - L247					
L251					
L228	376-0204-	74LS138	IC 3-LINE TO 8-LINE DECODER/MULTIPLEXER		1
L12 - L13	376-0297-	74LS240	IC OCTAL BUFFER/LINE DRIVER/LINE RECEIVER		9
L60 - L61					
L108 - L109					
L156 - L157					
L253					
L205	376-0208-	74LS138	IC 3-LINE TO 8-LINE DECODER/MULT USE 376-0671		1
L202	376-0301-	74LS158	IC QUAD 2 TO 1-LINE DATA SELECTO USE 376-0810		1
L233	376-0308-	74LS374	IC OCTAL D-TYPE EDGE-TRIGUSE 376-0614 OR 0758		1
L199	376-0307-	74LS139	IC DUAL 4-BIT BINARY COUNTER		2
L230					
L258	376-0333-	74LS139	IC 2 TO 4-LINE DECODER/MULTIPLEX USE 376-0672		1
L236	376-0336-	74LS151	IC 1-OF-8 DATA SEL/MUX USE 376-0613		1
L204	376-0338-	74LS244	IC OCTAL BUFFER/LINE DRIVER/RECE USE 376-0611		1
L230	376-9018-	SKT 28	IC SOCKET 28 PIN DIL MOUNT		1
L97 - L107	377-0413-	6164	IC 64KX1 DRAM 200NS REF REQUIRE 4MS/286 ROM		88
L110 - L131					
L134 - L155					
L158 - L179					
L182 - L192					
02	452-2707-	STIFFNER	STIFFNER LOW		1
03	452-2708-	STIFFNER	STIFFNER UPPR		1
04 - 05	463-1238-	EXTRACR	EXTRACTR CARD NYLON W/ROLL		2
01	510-7900-	PCB	PCB		1
06 - 012	650-2100-	PAN HEAD	6-48 X 1/4 PAN HD PHL HS		7
013 - 019	652-2000-	NUT	4# NUT		7
020 - 026	653-2000-	WASHER	#8 NYLON WASHER		7
027	660-0341-	#222	#222 LOCKTITE (7 PLACES)		1

*** END-OF-REPORT ***

WANG WANG LABORATORIES, INC. LOWELL, MA U.S.A.		BY	DATE	APPROVED BY	DATE
MATERIAL		DWH		E ENGR	
MODEL NO		CHK		M ENGR	
W/ ENGR SPECIFICATIONS				MRG ENGR	
FINISH		TITLE PCA VS-25 MEMORY BD			
TOL. EX. AS NOTED HOLE & DIM. FRACTION 1/64 HOLE & DIM. ANG. 0.125° MINIMUM		SEE CHART	C	7900	9
SCALE	SHT 2 OF 13	WANG PART NUMBER	1/28	DRAWING NUMBER	REV

BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD
 ASSEMBLY LEVEL & TITLE: 209--4
 PARTS LIST REVISION (P): 0
 ARTWORK REVISION (R): 02
 ASSEMBLY REVISION (A): 09
 SCHEMATIC REVISION (S): 09
 DNR OR MOST RECENT ECO: 33230

CREATED: 07/23/84 16:22
 LAST MODIFIED: 08/24/84 13:18 BY: MS
 EDITING REVISION: 11

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
C2 - C12	300-1930-	.1U	CM CERAMIC MONO RAD +80% -20% 50V Z5U		176
C18 - C28					
C29 - C30					
C41 - C81					
C84 - C86					
C67 - C77					
C88 - C98					
C99 - C109					
C106 - C116					
C119 - C129					
C132 - C142					
C148 - C158					
C158 - C168					
C171 - C181					
C184 - C194					
C198 - C208					
C13 - C14	300-1966-	.047U	CM CERAMIC MONO AXIAL +80% -20% 50V Z5U		86
C19 - C40					
C48 - C66					
C91 - C92					
C117 - C118					
C143 - C144					
C169 - C170					
C198 - C199					
C210 - C216					
C238 - C246					
C247 - C248					
C1	300-4018-	18U	CM TANT AXIAL 10% 18V		16
C26 - C27					
C31 - C33					
C78 - C79					
C104 - C106					
C130 - C131					
C186 - C187					
C188 - C189					
C200					
C237	300-4022-	15.0U	CM TANT AXIAL 10% 20V		2

BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD
 SCHEMATIC REVISION (S): 09
 SHEET OF PAGE 3

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L210 - L211					
L244 - L247					
L251					
L228	376-0294-	74LS138	3-3-LINE TO 8-LINE DECODER/MULTIPLEXER		1
L12 - L13	376-0297-	74LS240	8-INPUT OCTAL BUFFER/LINE DRIVER/LINE RECEIVER		9
L60 - L61					
L100 - L109					
L156 - L187					
L253					
L208	376-0298-	74LS138	3-LINE TO 8-LINE DECODER/MULT USE 376-0671		1
L202	376-0301-	74LS158	QUAD 2 TO 1-LINE DATA SELECTO USE 376-0810		1
L233	376-0305-	74LS174	OCTAL D-TYPE EDGE-TRIGUSE 376-0614 OR 0758		1
L199	376-0307-	74LS193	DUAL 4-BIT BINARY COUNTER		2
L230					
L256	376-0333-	74LS139	2 TO 4-LINE DECODER/MULTIPLEX USE 376-0672		1
L236	376-0336-	74LS151	1-OF-8 DATA SEL/MUX USE 376-0813		1
L204	376-0338-	74S244	OCTAL BUFFER/LINE DRIVER/RECE USE 376-0611		1
L220	376-9018-		SOCKET 28 PIN DIL MOUNT		1
L49 - L59	377-0418-	4164	64KX1 DRAM 200NS REF REQUIRE 4MS/256 ROW		132
L62 - L83					
L86 - L107					
L110 - L131					
L134 - L188					
L158 - L179					
L182 - L192					
02	482-2707-	STIFFNER	STIFFNER LOWER		1
03	482-2708-	STIFFNER	STIFFNER UPPER		1
04 - 06	465-1238-	EXTRACR	EXTRACR CARD NYLON W/ROLL		2
01	510-7900-	MS	MS		1
06 - 012	610-2100-	PAN HEAD	4-40 X 1/4 PAN HD PHL MS		7
013 - 019	652-2000-	NUT	04 NUT		7
020 - 026	653-2009-	WASHER	04 NYLON WASHER		7
027	660-0341-	WASHER	W222 LOCKTITE (7 PLACES)		1

BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD
 SCHEMATIC REVISION (S): 09
 SHEET OF PAGE 2

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
C246					
SW1					
R19 - R25	325-1801-		SWITCH		1
R27 - R33	330-1047-	47.000	RES FIXED 1/4W 10%		56
R52 - R58					
R60 - R66					
R83 - R91					
R93 - R99					
R118 - R124					
R126 - R132					
R1 - R16	330-1057-	56.000	RES FIXED METAL FILM 1/4W 5% 200PPM		86
R34 - R49					
R67 - R82					
R100 - R115					
R133 - R143					
R146 - R156					
R17 - R18	330-3011-	1K	RES FIXED METAL FILM 1/4W 5% 200PPM		22
R26					
R50 - R51					
R59					
R83 - R84					
R92					
R116 - R117					
R125					
R144 - R146					
R157 - R164					
R165	333-0809-	10K	RESISTOR NETWORK TYPE: 10/09/C/SS		1
L231	376-0160-	74LS175	IC QUAD D-TYPE FLIP-FLOP		1
L227	376-0171-	74148	IC 8-LINE TO 3-LINE OCTAL PRIORITY ENCODER		1
L229	376-0197-	74S04	IC HEX INVERTER USE 376-0666 OR 0772		1
L36 - L37	376-0200-	74S08	IC QUAD 2 INPUT POSITIVE USE 376-0667 OR 0773		8
L84 - L85					
L132 - L133					
L180 - L181					
L212 - L214	376-0202-	74S74	IC DUAL D-TYPE POS EDGE TUSE 376-0682 OR 0815		7
L237					
L254					
L257 - L258					
L222 - L226	376-0204-	74LS257A	IC QUAD 2-LINE TO 1-LINE DATA SEL/MUX		6
L243					
L256	376-0205-	74S37	IC QUAD 2-INPUT OR GATE USE 376-0678 OR 0758		1
L234 - L235	376-0228-	74S00	IC QUAD 2-INPUT OR GATE USE 376-0664 OR 0770		2
L252	376-0259-	74S85	IC 4-BIT MAGNITUDE COMPARATOR		1
L207	376-0278-	74S161	IC 514 4 BIT BINARY COUNTER W/DIRECT CLEAR		1
L221	376-0286-	74LS174	IC OCTAL D-TYPE FLIP-FLOP TRI-STATE		4
L242					
L248 - L249					
L196 - L198	376-0288-	74LS244	IC OCTAL BUFFER/LINE DRIVER W/TRE STATE		12
L200					
L208					

BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD
 SCHEMATIC REVISION (S): 09
 SHEET OF PAGE 4

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L210 - L211					
L244 - L247					
L251					
L228	376-0294-	74LS138	3-3-LINE TO 8-LINE DECODER/MULTIPLEXER		1
L12 - L13	376-0297-	74LS240	8-INPUT OCTAL BUFFER/LINE DRIVER/LINE RECEIVER		9
L60 - L61					
L100 - L109					
L156 - L187					
L253					
L208	376-0298-	74LS138	3-LINE TO 8-LINE DECODER/MULT USE 376-0671		1
L202	376-0301-	74LS158	QUAD 2 TO 1-LINE DATA SELECTO USE 376-0810		1
L233	376-0305-	74LS174	OCTAL D-TYPE EDGE-TRIGUSE 376-0614 OR 0758		1
L199	376-0307-	74LS193	DUAL 4-BIT BINARY COUNTER		2
L230					
L256	376-0333-	74LS139	2 TO 4-LINE DECODER/MULTIPLEX USE 376-0672		1
L236	376-0336-	74LS151	1-OF-8 DATA SEL/MUX USE 376-0813		1
L204	376-0338-	74S244	OCTAL BUFFER/LINE DRIVER/RECE USE 376-0611		1
L220	376-9018-		SOCKET 28 PIN DIL MOUNT		1
L49 - L59	377-0418-	4164	64KX1 DRAM 200NS REF REQUIRE 4MS/256 ROW		132
L62 - L83					
L86 - L107					
L110 - L131					
L134 - L188					
L158 - L179					
L182 - L192					
02	482-2707-	STIFFNER	STIFFNER LOWER		1
03	482-2708-	STIFFNER	STIFFNER UPPER		1
04 - 06	465-1238-	EXTRACR	EXTRACR CARD NYLON W/ROLL		2
01	510-7900-	MS	MS		1
06 - 012	610-2100-	PAN HEAD	4-40 X 1/4 PAN HD PHL MS		7
013 - 019	652-2000-	NUT	04 NUT		7
020 - 026	653-2009-	WASHER	04 NYLON WASHER		7
027	660-0341-	WASHER	W222 LOCKTITE (7 PLACES)		1

*** END-OF-REPORT ***

WANG WANG LABORATORIES, INC. LOWELL, MA U.S.A.		BY	DATE	APPROVED BY	DATE
MATERIAL		CWN		E ENGR	
MODEL NO		CHK		M ENGR	
SEE ENGR SPECIFICATIONS				MFG ENGR	
TITLE		PCA VS-25 MEMORY BD			
FINISH		TOL. UNLESS NOTED ENGR'S DIMS. UNLESS OTHERWISE SPECIFIED SEE DIMS. AND TYP. FINISH		SEE CHART C	7900 9
SCALE		1:1	10 OF 13	WANG PART NUMBER	DATE

17

(FINAL PARTS LIST)
 BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD CREATED: 07/23/84 14:22
 ASSEMBLY LEVEL & TITLE: 210--1A VS28 284K BYTE LAST MODIFIED: 08/24/84 13:18 BY: NS
 PARTS LIST REVISION (P): 0 EDITING REVISION: 11
 ARTWORK REVISION (R): 02
 ASSEMBLY REVISION (A): 08
 SCHEMATIC REVISION (S): 09
 DWR OR MOST RECENT ECO: 33230

REF. DES.	WANG PART NO.	VALUE/TYPE	DESCRIPTION	DRAWING NO.	QTY.
01	209-7900--1	74LS630	PCA IC 16-BIT PARALLEL ERROR DETECT AND CORRECT		1
L220	377-0416-				1

*** END-OF-REPORT ***

11

8.5

17

(FINAL PARTS LIST)
 BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD CREATED: 07/23/84 14:22
 ASSEMBLY LEVEL & TITLE: 210--2A VS28 284K BYTE LAST MODIFIED: 08/24/84 13:18 BY: NS
 PARTS LIST REVISION (P): 0 EDITING REVISION: 11
 ARTWORK REVISION (R): 02
 ASSEMBLY REVISION (A): 08
 SCHEMATIC REVISION (S): 09
 DWR OR MOST RECENT ECO: 33230

REF. DES.	WANG PART NO.	VALUE/TYPE	DESCRIPTION	DRAWING NO.	QTY.
01	209-7900--2	74LS630	PCA IC 16-BIT PARALLEL ERROR DETECT AND CORRECT		1
L220	377-0416-				1

*** END-OF-REPORT ***

11

8.5

(FINAL PARTS LIST)
 BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD CREATED: 07/23/84 14:22
 ASSEMBLY LEVEL & TITLE: 210--3A VS28 284K BYTE LAST MODIFIED: 08/24/84 13:18 BY: NS
 PARTS LIST REVISION (P): 0 EDITING REVISION: 11
 ARTWORK REVISION (R): 02
 ASSEMBLY REVISION (A): 08
 SCHEMATIC REVISION (S): 09
 DWR OR MOST RECENT ECO: 33230

REF. DES.	WANG PART NO.	VALUE/TYPE	DESCRIPTION	DRAWING NO.	QTY.
01	209-7900--3	74LS630	PCA IC 16-BIT PARALLEL ERROR DETECT AND CORRECT		1
L220	377-0416-				1

*** END-OF-REPORT ***

8.5

11

17

(FINAL PARTS LIST)
 BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD CREATED: 07/23/84 14:22
 ASSEMBLY LEVEL & TITLE: 210--4A VS28 284K BYTE LAST MODIFIED: 08/24/84 13:18 BY: NS
 PARTS LIST REVISION (P): 0 EDITING REVISION: 11
 ARTWORK REVISION (R): 02
 ASSEMBLY REVISION (A): 08
 SCHEMATIC REVISION (S): 09
 DWR OR MOST RECENT ECO: 33230

REF. DES.	WANG PART NO.	VALUE/TYPE	DESCRIPTION	DRAWING NO.	QTY.
01	209-7900--4	74LS630	PCA IC 16-BIT PARALLEL ERROR DETECT AND CORRECT		1
L220	377-0416-				1

*** END-OF-REPORT ***

8.5

11

17

WANG WANG LABORATORIES, INC. LOWELL, MASSACHUSETTS		BY	DATE	APPROVED BY	DATE
MATERIAL		DWN		E ENGR	
MODEL NO.		CHE		M ENGR	
USE ENG'G SPECIFICATIONS				MFG ENGR	
TITLE		PCA VS-25 MEMORY BD			
FINISH		SEE CHART	C	7900	9
TOL. OR AS NOTED DIM. & DIM. TYP. & TYP. DIM. & DIM. TYP. & TYP. SCALE 1/16" = 1" UNLESS OTHERWISE NOTED		WANG PART NUMBER	1/22	DRAWING NUMBER	REV

(FINAL PARTS LIST)
 BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD CREATED: 07/23/84 14:22
 ASSEMBLY LEVEL & TITLE: 205--5 VS25 1MEG BYTE LAST MODIFIED: 08/24/84 13:18 BY: MS
 PARTS LIST REVISION (P): 0 EDITING REVISION: 11
 ARTWORK REVISION (R): 02
 ASSEMBLY REVISION (A): 08
 SCHEMATIC REVISION (S): 09
 DWR OR MOST RECENT ECO: 33230

REP. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
C2 - C12	300-1930-	.1U	CAP CERAMIC MONO RAD +80% -20% 50V 25U		176
C13 - C28					
C29 - C40					
C41 - C51					
C52 - C64					
C65 - C77					
C78 - C90					
C91 - C103					
C104 - C116					
C117 - C129					
C130 - C142					
C143 - C155					
C156 - C168					
C169 - C181					
C182 - C194					
C195 - C207					
C208 - C220					
C221 - C233	300-1966-	.047U	CAP CERAMIC MONO AXIAL +80 -20% 50V 25U		84
C234 - C246					
C247 - C259					
C260 - C272					
C273 - C285					
C286 - C298					
C299 - C311					
C312 - C324					
C325 - C337					
C338 - C350					
C351 - C363					
C364 - C376					
C377 - C389					
C390 - C402					
C403 - C415					
C416 - C428					
C429 - C441					
C442 - C454					
C455 - C467					
C468 - C480					
C481 - C493					
C494 - C506					
C507 - C519					
C520 - C532					
C533 - C545					
C546 - C558					
C559 - C571					
C572 - C584					
C585 - C597					
C598 - C610					
C611 - C623					
C624 - C636					
C637 - C649					
C650 - C662					
C663 - C675					
C676 - C688					
C689 - C701					
C702 - C714					
C715 - C727					
C728 - C740					
C741 - C753					
C754 - C766					
C767 - C779					
C780 - C792					
C793 - C805					
C806 - C818					
C819 - C831					
C832 - C844					
C845 - C857					
C858 - C870					
C871 - C883					
C884 - C896					
C897 - C909					
C910 - C922					
C923 - C935					
C936 - C948					
C949 - C961					
C962 - C974					
C975 - C987					
C988 - C1000					
C1001 - C1013					
C1014 - C1026					
C1027 - C1039					
C1040 - C1052					
C1053 - C1065					
C1066 - C1078					
C1079 - C1091					
C1092 - C1104					
C1105 - C1117					
C1118 - C1130					
C1131 - C1143					
C1144 - C1156					
C1157 - C1169					
C1170 - C1182					
C1183 - C1195					
C1196 - C1208					
C1209 - C1221					
C1222 - C1234					
C1235 - C1247					
C1248 - C1260					
C1261 - C1273					
C1274 - C1286					
C1287 - C1299					
C1300 - C1312					
C1313 - C1325					
C1326 - C1338					
C1339 - C1351					
C1352 - C1364					
C1365 - C1377					
C1378 - C1390					
C1391 - C1403					
C1404 - C1416					
C1417 - C1429					
C1430 - C1442					
C1443 - C1455					
C1456 - C1468					
C1469 - C1481					
C1482 - C1494					
C1495 - C1507					
C1508 - C1520					
C1521 - C1533					
C1534 - C1546					
C1547 - C1559					
C1560 - C1572					
C1573 - C1585					
C1586 - C1598					
C1599 - C1611					
C1612 - C1624					
C1625 - C1637					
C1638 - C1650					
C1651 - C1663					
C1664 - C1676					
C1677 - C1689					
C1690 - C1702					
C1703 - C1715					
C1716 - C1728					
C1729 - C1741					
C1742 - C1754					
C1755 - C1767					
C1768 - C1780					
C1781 - C1793					
C1794 - C1806					
C1807 - C1819					
C1820 - C1832					
C1833 - C1845					
C1846 - C1858					
C1859 - C1871					
C1872 - C1884					
C1885 - C1897					
C1898 - C1910					
C1911 - C1923					
C1924 - C1936					
C1937 - C1949					
C1950 - C1962					
C1963 - C1975					
C1976 - C1988					
C1989 - C2001					
C2002 - C2014					
C2015 - C2027					
C2028 - C2040					
C2041 - C2053					
C2054 - C2066					
C2067 - C2079					
C2080 - C2092					
C2093 - C2105					
C2106 - C2118					
C2119 - C2131					
C2132 - C2144					
C2145 - C2157					
C2158 - C2170					
C2171 - C2183					
C2184 - C2196					
C2197 - C2209					
C2210 - C2222					
C2223 - C2235					
C2236 - C2248					
C2249 - C2261					
C2262 - C2274					
C2275 - C2287					
C2288 - C2300					
C2301 - C2313					
C2314 - C2326					
C2327 - C2339					
C2340 - C2352					
C2353 - C2365					
C2366 - C2378					
C2379 - C2391					
C2392 - C2404					
C2405 - C2417					
C2418 - C2430					
C2431 - C2443					
C2444 - C2456					
C2457 - C2469					
C2470 - C2482					
C2483 - C2495					
C2496 - C2508					
C2509 - C2521					
C2522 - C2534					
C2535 - C2547					
C2548 - C2560					
C2561 - C2573					
C2574 - C2586					
C2587 - C2599					
C2600 - C2612					
C2613 - C2625					
C2626 - C2638					
C2639 - C2651					
C2652 - C2664					
C2665 - C2677					
C2678 - C2690					
C2691 - C2703					
C2704 - C2716					
C2717 - C2729					
C2730 - C2742					
C2743 - C2755					
C2756 - C2768					
C2769 - C2781					
C2782 - C2794					
C2795 - C2807					
C2808 - C2820					
C2821 - C2833					
C2834 - C2846					
C2847 - C2859					
C2860 - C2872					
C2873 - C2885					
C2886 - C2898					
C2899 - C2911					
C2912 - C2924					
C2925 - C2937					
C2938 - C2950					
C2951 - C2963					
C2964 - C2976					
C2977 - C2989					
C2990 - C3002					
C3003 - C3015					
C3016 - C3028					
C3029 - C3041					
C3042 - C3054					
C3055 - C3067					
C3068 - C3080					
C3081 - C3093					
C3094 - C3106					
C3107 - C3119					
C3120 - C3132					
C3133 - C3145					
C3146 - C3158					
C3159 - C3171					
C3172 - C3184					
C3185 - C3197					
C3198 - C3210					
C3211 - C3223					
C3224 - C3236					
C3237 - C3249					
C3250 - C3262					
C3263 - C3275					

17"
11"
8.5"

17"
11"
8.5"

WANG LABORATORIES, INC. RUN DATE: 08/24/84 13:30
 >>>> ELECTRICAL PARTS LIST <<<< M SHEET 13 OF 13 PAGE 1

(FINAL PARTS LIST)

BOARD NO. & TITLE: C7900 PCA VS-25 MEM. BOARD CREATED: 07/23/84 14:22
 ASSEMBLY LEVEL & TITLE: 210--8A VS25 1MEG BYTE LAST MODIFIED: 08/24/84 13:18 BY: NS
 PARTS LIST REVISION (P): 0 EDITING REVISION: 11
 ARTWORK REVISION (R): 02
 ASSEMBLY REVISION (A): 08
 SCHEMATIC REVISION (S): 09
 DWR OR MOST RECENT ECO: 33230

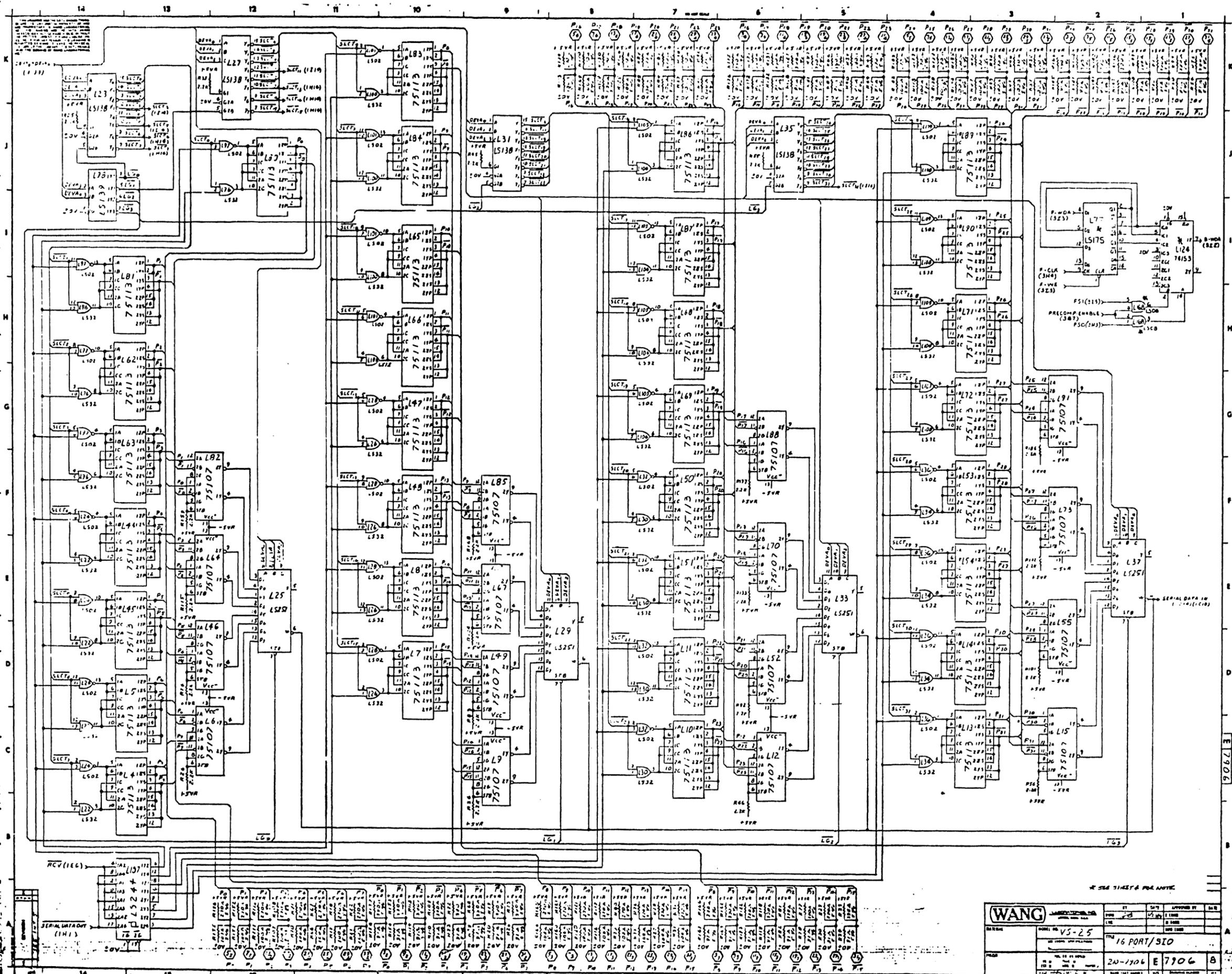
REF. DES.	WANG PART NO.	VALUE/TYPE	DESCRIPTION	DRAWING NO.	QTY.
01 L220	209-7900--8 377-0416--	74LS630	PCA IC 16-BIT PARALLEL ERROR DETECT AND CORRECT		1 1

*** END-OF-REPORT ***

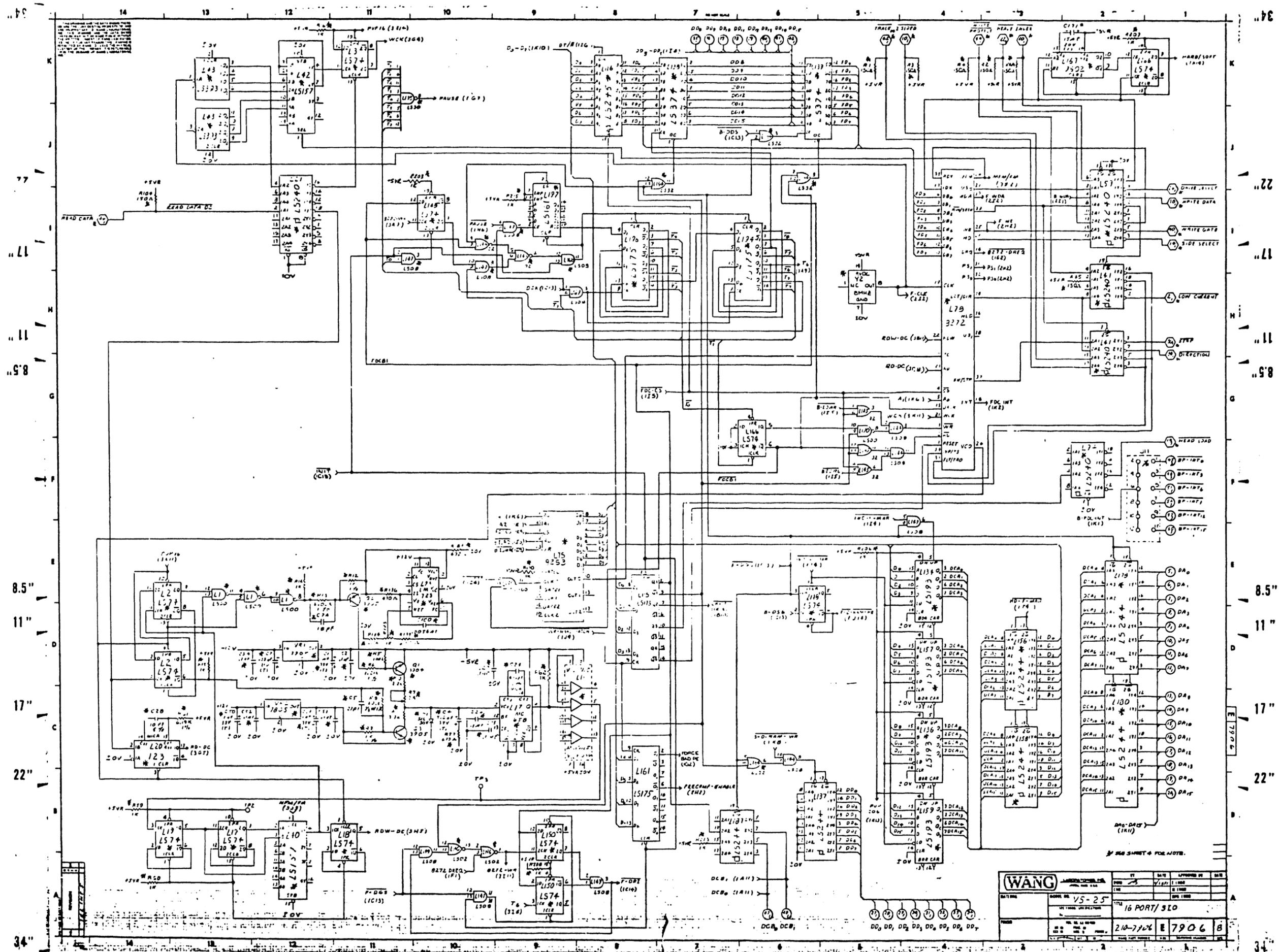
8.5"
11"
17"

8.5"
11"
17"

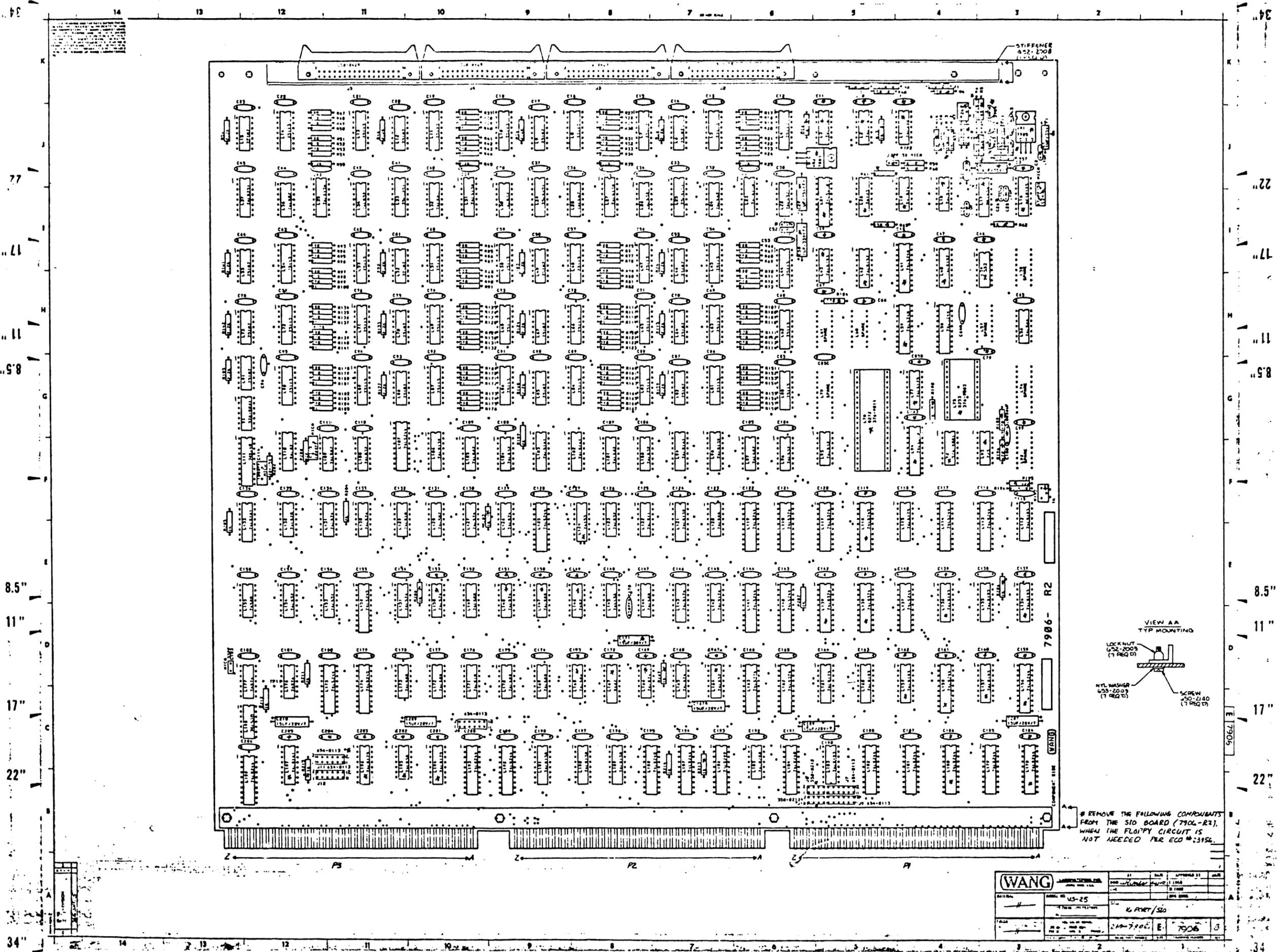
WANG WANG LABORATORIES, INC. LOWELL, MASS. A		BY	DATE	APPROVED BY	DATE
DWN				E ENGR	
CHK				M ENGR	
MFG ENGR					
MATERIAL	MODEL NO.	TITLE			
	SI ENGR SPECIFICATIONS	PCA VS-25 MEMORY BD			
FINISH	TOL. SR. AS NOTED SR ± 0.10 FRAC ± 1/16" SR ± 0.05 ANG ± 1° MP FINISH	SEE CHART	C	7900	9
SCALE	1/16" = 1" 3 OF 13	WANG PART NUMBER	SIZE	DRAWING NUMBER	REV



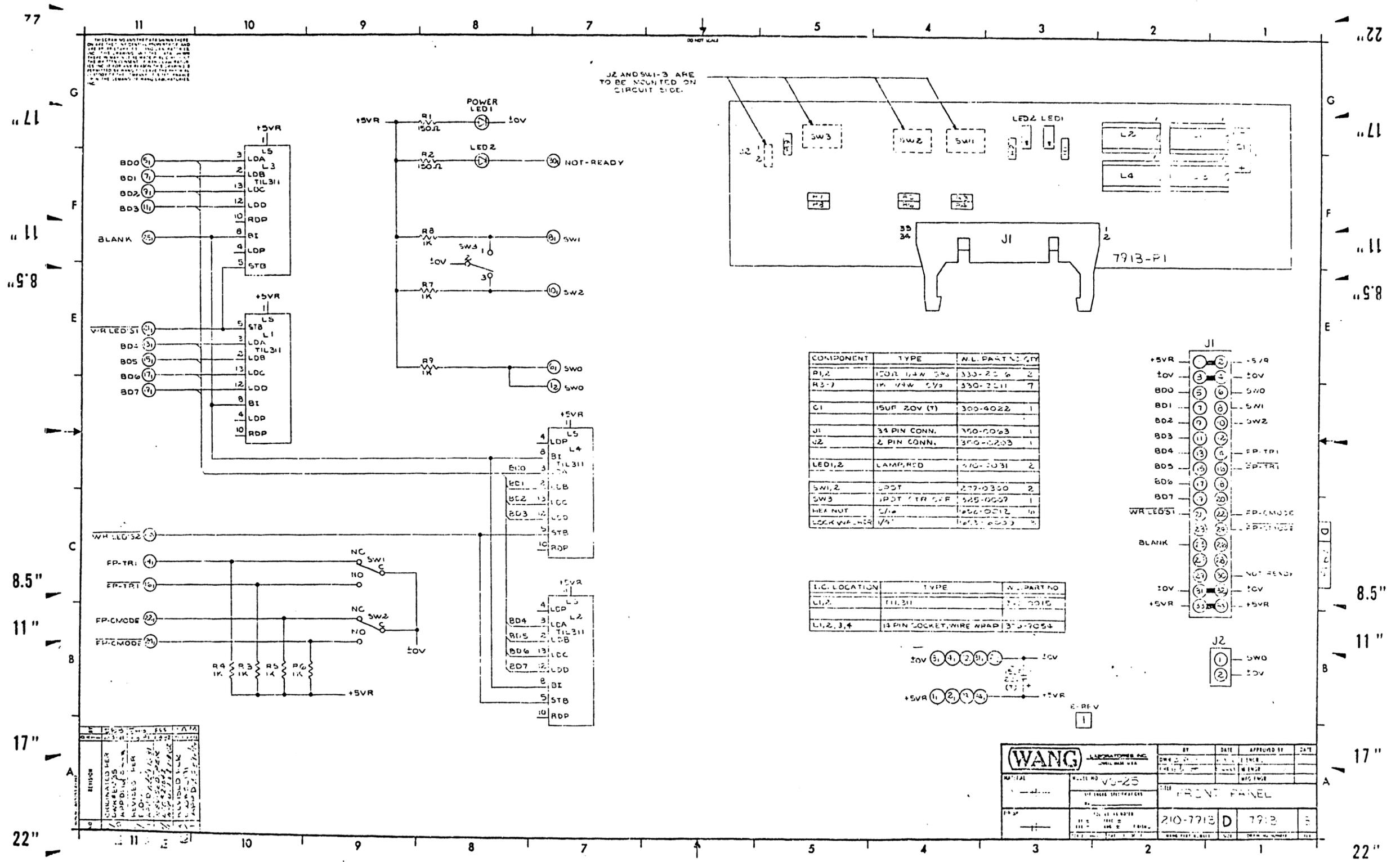
WANG		REV. 1	DATE	APPROVED BY	DATE
MODEL NO.	VS-25	REV. 2	12/78	J. H. HARRIS	
DESCRIPTION	16 PORT/SIO	REV. 3	1/79		
REV. 4		REV. 5			
REV. 6		REV. 7			
REV. 8		REV. 9			
REV. 10		REV. 11			
REV. 12		REV. 13			
REV. 14		REV. 15			
REV. 16		REV. 17			
REV. 18		REV. 19			
REV. 20		REV. 21			
REV. 22		REV. 23			
REV. 24		REV. 25			
REV. 26		REV. 27			
REV. 28		REV. 29			
REV. 30		REV. 31			
REV. 32		REV. 33			
REV. 34		REV. 35			
REV. 36		REV. 37			
REV. 38		REV. 39			
REV. 40		REV. 41			
REV. 42		REV. 43			
REV. 44		REV. 45			
REV. 46		REV. 47			
REV. 48		REV. 49			
REV. 50		REV. 51			
REV. 52		REV. 53			
REV. 54		REV. 55			
REV. 56		REV. 57			
REV. 58		REV. 59			
REV. 60		REV. 61			
REV. 62		REV. 63			
REV. 64		REV. 65			
REV. 66		REV. 67			
REV. 68		REV. 69			
REV. 70		REV. 71			
REV. 72		REV. 73			
REV. 74		REV. 75			
REV. 76		REV. 77			
REV. 78		REV. 79			
REV. 80		REV. 81			
REV. 82		REV. 83			
REV. 84		REV. 85			
REV. 86		REV. 87			
REV. 88		REV. 89			
REV. 90		REV. 91			
REV. 92		REV. 93			
REV. 94		REV. 95			
REV. 96		REV. 97			
REV. 98		REV. 99			
REV. 100		REV. 101			
REV. 102		REV. 103			
REV. 104		REV. 105			
REV. 106		REV. 107			
REV. 108		REV. 109			
REV. 110		REV. 111			
REV. 112		REV. 113			
REV. 114		REV. 115			
REV. 116		REV. 117			
REV. 118		REV. 119			
REV. 120		REV. 121			
REV. 122		REV. 123			
REV. 124		REV. 125			
REV. 126		REV. 127			
REV. 128		REV. 129			
REV. 130		REV. 131			
REV. 132		REV. 133			
REV. 134		REV. 135			
REV. 136		REV. 137			
REV. 138		REV. 139			
REV. 140		REV. 141			
REV. 142		REV. 143			
REV. 144		REV. 145			
REV. 146		REV. 147			
REV. 148		REV. 149			
REV. 150		REV. 151			
REV. 152		REV. 153			
REV. 154		REV. 155			
REV. 156		REV. 157			
REV. 158		REV. 159			
REV. 160		REV. 161			
REV. 162		REV. 163			
REV. 164		REV. 165			
REV. 166		REV. 167			
REV. 168		REV. 169			
REV. 170		REV. 171			
REV. 172		REV. 173			
REV. 174		REV. 175			
REV. 176		REV. 177			
REV. 178		REV. 179			
REV. 180		REV. 181			
REV. 182		REV. 183			
REV. 184		REV. 185			
REV. 186		REV. 187			
REV. 188		REV. 189			
REV. 190		REV. 191			
REV. 192		REV. 193			
REV. 194		REV. 195			
REV. 196		REV. 197			
REV. 198		REV. 199			
REV. 200		REV. 201			
REV. 202		REV. 203			
REV. 204		REV. 205			
REV. 206		REV. 207			
REV. 208		REV. 209			
REV. 210		REV. 211			
REV. 212		REV. 213			
REV. 214		REV. 215			
REV. 216		REV. 217			
REV. 218		REV. 219			
REV. 220		REV. 221			
REV. 222		REV. 223			
REV. 224		REV. 225			
REV. 226		REV. 227			
REV. 228		REV. 229			
REV. 230		REV. 231			
REV. 232		REV. 233			
REV. 234		REV. 235			
REV. 236		REV. 237			
REV. 238		REV. 239			
REV. 240		REV. 241			
REV. 242		REV. 243			
REV. 244		REV. 245			
REV. 246		REV. 247			
REV. 248		REV. 249			
REV. 250		REV. 251			
REV. 252		REV. 253			
REV. 254		REV. 255			
REV. 256		REV. 257			
REV. 258		REV. 259			
REV. 260		REV. 261			
REV. 262		REV. 263			
REV. 264		REV. 265			
REV. 266		REV. 267			
REV. 268		REV. 269			
REV. 270		REV. 271			
REV. 272		REV. 273			
REV. 274		REV. 275			
REV. 276		REV. 277			
REV. 278		REV. 279			
REV. 280		REV. 281			
REV. 282		REV. 283			
REV. 284		REV. 285			
REV. 286		REV. 287			
REV. 288		REV. 289			
REV. 290		REV. 291			
REV. 292		REV. 293			
REV. 294		REV. 295			
REV. 296		REV. 297			
REV. 298		REV. 299			
REV. 300		REV. 301			
REV. 302		REV. 303			
REV. 304		REV. 305			
REV. 306		REV. 307			
REV. 308		REV. 309			
REV. 310		REV. 311			
REV. 312		REV. 313			
REV. 314		REV. 315			
REV. 316		REV. 317			
REV. 318		REV. 319			
REV. 320		REV. 321			
REV. 322		REV. 323			
REV. 324		REV. 325			
REV. 326		REV. 327			
REV. 328		REV. 329			
REV. 330		REV. 331			
REV. 332		REV. 333			
REV. 334		REV. 335			
REV. 336		REV. 337			
REV. 338		REV. 339			
REV. 340		REV. 341			
REV. 342		REV. 343			
REV. 344		REV. 345			
REV. 346		REV. 347			
REV. 348		REV. 349			
REV. 350		REV. 351			
REV. 352		REV. 353			
REV. 354		REV. 355			
REV. 356		REV. 357			
REV. 358		REV. 359			
REV. 360		REV. 361			
REV. 362		REV. 363			
REV. 364		REV. 365			
REV. 366		REV. 367			
REV. 368		REV. 369			
REV. 370		REV. 371			
REV. 372		REV. 373			
REV. 374		REV. 375			
REV. 376		REV. 377			
REV. 378		REV. 379			
REV. 380		REV. 381			
REV. 382		REV. 383			
REV. 384		REV. 385			
REV. 386		REV. 387			
REV. 388		REV. 389			
REV. 390		REV. 391			
REV. 392		REV. 393			
REV. 394		REV. 395			



WANG		DATE	DESIGNED BY	CHKD BY
MODEL NO. VS-25		REV. 1	DATE	DATE
16 PORT/510		DATE	DATE	DATE
2/10-7/76		DATE	DATE	DATE
E 7906 B		DATE	DATE	DATE



WANG		REV. 1	DATE	APPROVED BY
MODEL NO.	7906-25	REV. 1	11/78	J. L. ...
DESCRIPTION	16 PORT / SIO	REV. 1	11/78	
DATE	11/78	REV. 1	11/78	
BY	J. L. ...	REV. 1	11/78	
CHECKED BY	J. L. ...	REV. 1	11/78	
APPROVED BY	J. L. ...	REV. 1	11/78	

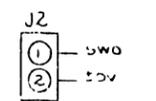
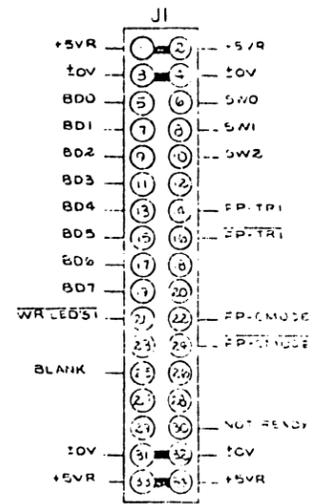


UNLESS SHOWN OTHERWISE
ALL RESISTORS ARE 1/4 WATT 5% TOLERANCE
ALL CAPACITORS ARE 50V UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN INCHES
ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED

J2 AND SW1-3 ARE TO BE MOUNTED ON CIRCUIT SIDE.

COMPONENT	TYPE	N.L. PART NO.	QTY
R1,2	100Ω 1/4W 5% 330-2056	330-2056	2
R3-7	1M 1/4W 5% 330-2011	330-2011	7
C1	15UF 20V (T)	300-6022	1
J1	34 PIN CONN.	350-0063	1
J2	2 PIN CONN.	350-0203	1
LED1,2	LAMP, RED	510-0031	2
SW1,2	1PDT	277-0300	2
SW3	1PDT 7 TR 50V	525-0007	1
HEA NUT	1/4"	856-0012	10
LOCK W/ W/HR	1/4"	163-0033	2

I.C. LOCATION	TYPE	N.L. PART NO.
L1,2	TIL 311	330-0015
L1,2,3,4	13 PIN SOCKET, WIRE WRAP	375-7054



(WANG) ELECTRONICS INC.
1111 W. 10TH ST. OMAHA, NEB. 68102

DATE: 7-25
REV: 1

BY: [Signature]
DATE: 7-25

APPROVED BY: [Signature]
DATE: 7-25

TITLE: FRONT PANEL

PROJECT: 210-7713
DRAWING NO: D
DATE: 7-25

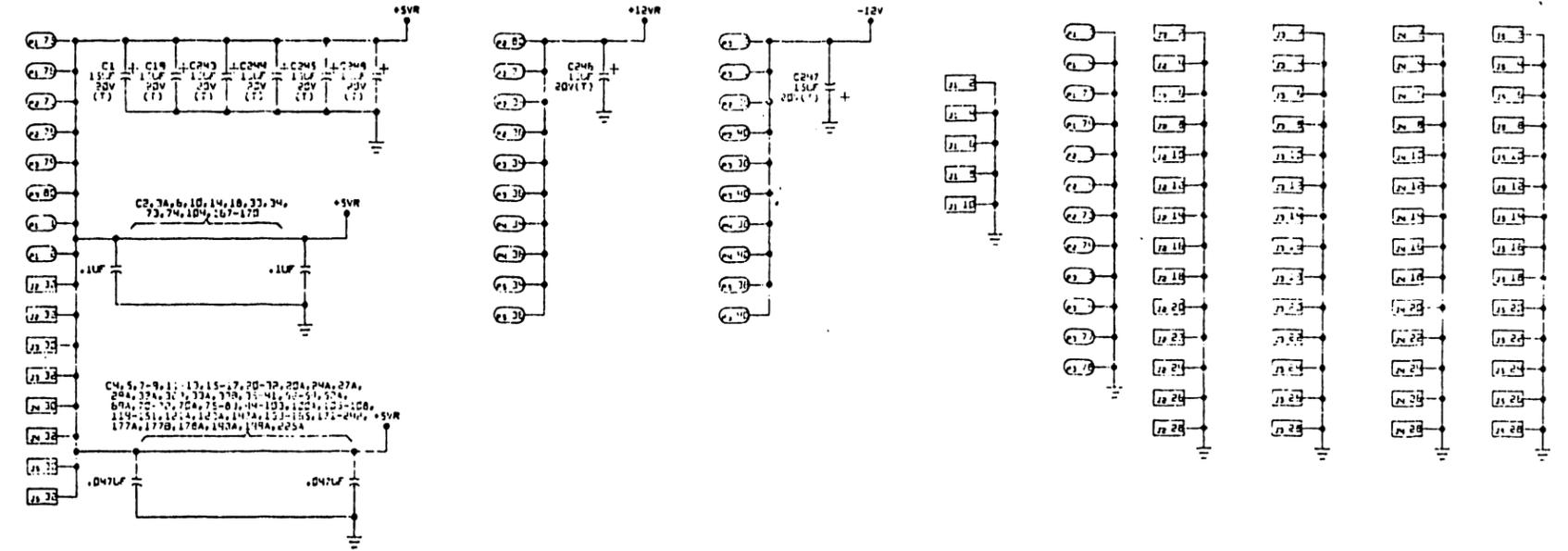
REV	DESCRIPTION	DATE
1	ORIGINAL PER	
2	ADDED PER	
3	REVISED PER	
4	REVISED PER	
5	REVISED PER	
6	REVISED PER	
7	REVISED PER	
8	REVISED PER	
9	REVISED PER	
10	REVISED PER	

34" 14 13 12 11 10 9 8 7 6 5 4 3 2 1

REVISIONS
 1. ORIGINAL DESIGN
 2. REVISED FOR
 3. REVISED FOR
 4. REVISED FOR

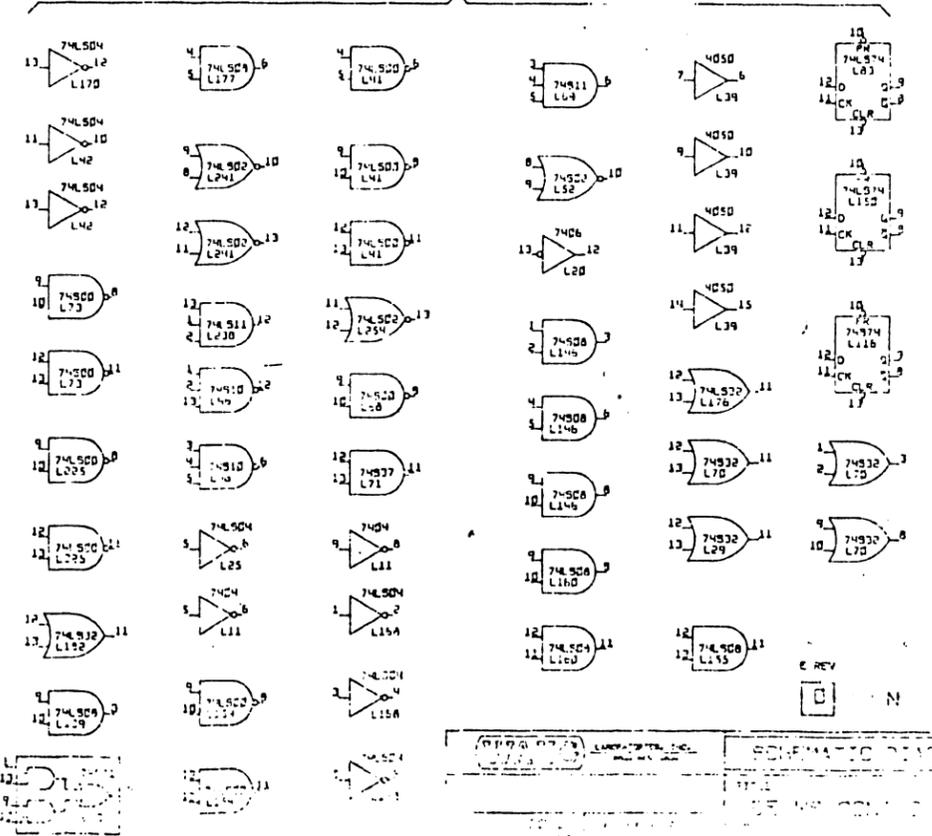
NOTES

1. ALL RESISTOR VALUES IN OHMS.
2. ALL CAPACITOR VALUES IN MICROFARADS UNLESS OTHERWISE INDICATED.
3. ALL RESISTORS 1/4W 5% UNLESS OTHERWISE INDICATED.



PHONONICS	LOCATION	PHONONICS	LOCATION	PHONONICS	LOCATION	PHONONICS	LOCATION
EXTAC1	807	EXTAC2	807	EXTAC3	807	EXTAC4	807
EXTAC5	807	EXTAC6	807	EXTAC7	807	EXTAC8	807
EXTAC9	807	EXTAC10	807	EXTAC11	807	EXTAC12	807
EXTAC13	807	EXTAC14	807	EXTAC15	807	EXTAC16	807
EXTAC17	807	EXTAC18	807	EXTAC19	807	EXTAC20	807
EXTAC21	807	EXTAC22	807	EXTAC23	807	EXTAC24	807
EXTAC25	807	EXTAC26	807	EXTAC27	807	EXTAC28	807
EXTAC29	807	EXTAC30	807	EXTAC31	807	EXTAC32	807
EXTAC33	807	EXTAC34	807	EXTAC35	807	EXTAC36	807
EXTAC37	807	EXTAC38	807	EXTAC39	807	EXTAC40	807
EXTAC41	807	EXTAC42	807	EXTAC43	807	EXTAC44	807
EXTAC45	807	EXTAC46	807	EXTAC47	807	EXTAC48	807
EXTAC49	807	EXTAC50	807	EXTAC51	807	EXTAC52	807
EXTAC53	807	EXTAC54	807	EXTAC55	807	EXTAC56	807
EXTAC57	807	EXTAC58	807	EXTAC59	807	EXTAC60	807
EXTAC61	807	EXTAC62	807	EXTAC63	807	EXTAC64	807
EXTAC65	807	EXTAC66	807	EXTAC67	807	EXTAC68	807
EXTAC69	807	EXTAC70	807	EXTAC71	807	EXTAC72	807
EXTAC73	807	EXTAC74	807	EXTAC75	807	EXTAC76	807
EXTAC77	807	EXTAC78	807	EXTAC79	807	EXTAC80	807
EXTAC81	807	EXTAC82	807	EXTAC83	807	EXTAC84	807
EXTAC85	807	EXTAC86	807	EXTAC87	807	EXTAC88	807
EXTAC89	807	EXTAC90	807	EXTAC91	807	EXTAC92	807
EXTAC93	807	EXTAC94	807	EXTAC95	807	EXTAC96	807
EXTAC97	807	EXTAC98	807	EXTAC99	807	EXTAC100	807

SPARES



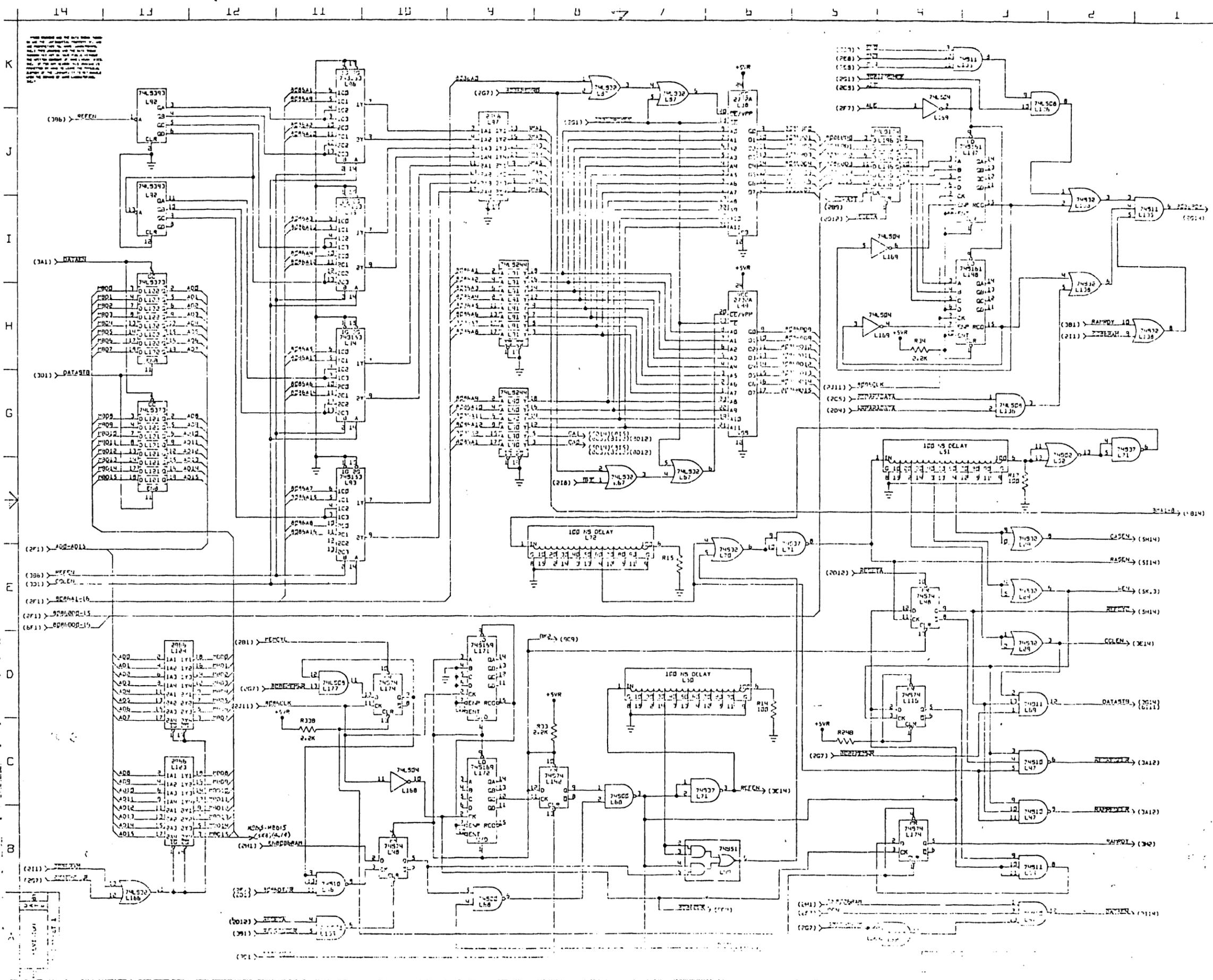
34" 22" 17" 11" 8.5" 11" 17" 22"

8.5" 11" 17" 22"

NO.	DESCRIPTION	REV.
1	INITIAL DESIGN	1
2	REVISED FOR	2
3	REVISED FOR	3
4	REVISED FOR	4

DATE: 01/01/73
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]

34"



22"

17"

11"

8.5"

8.5"

11"

17"

22"

22"

17"

11"

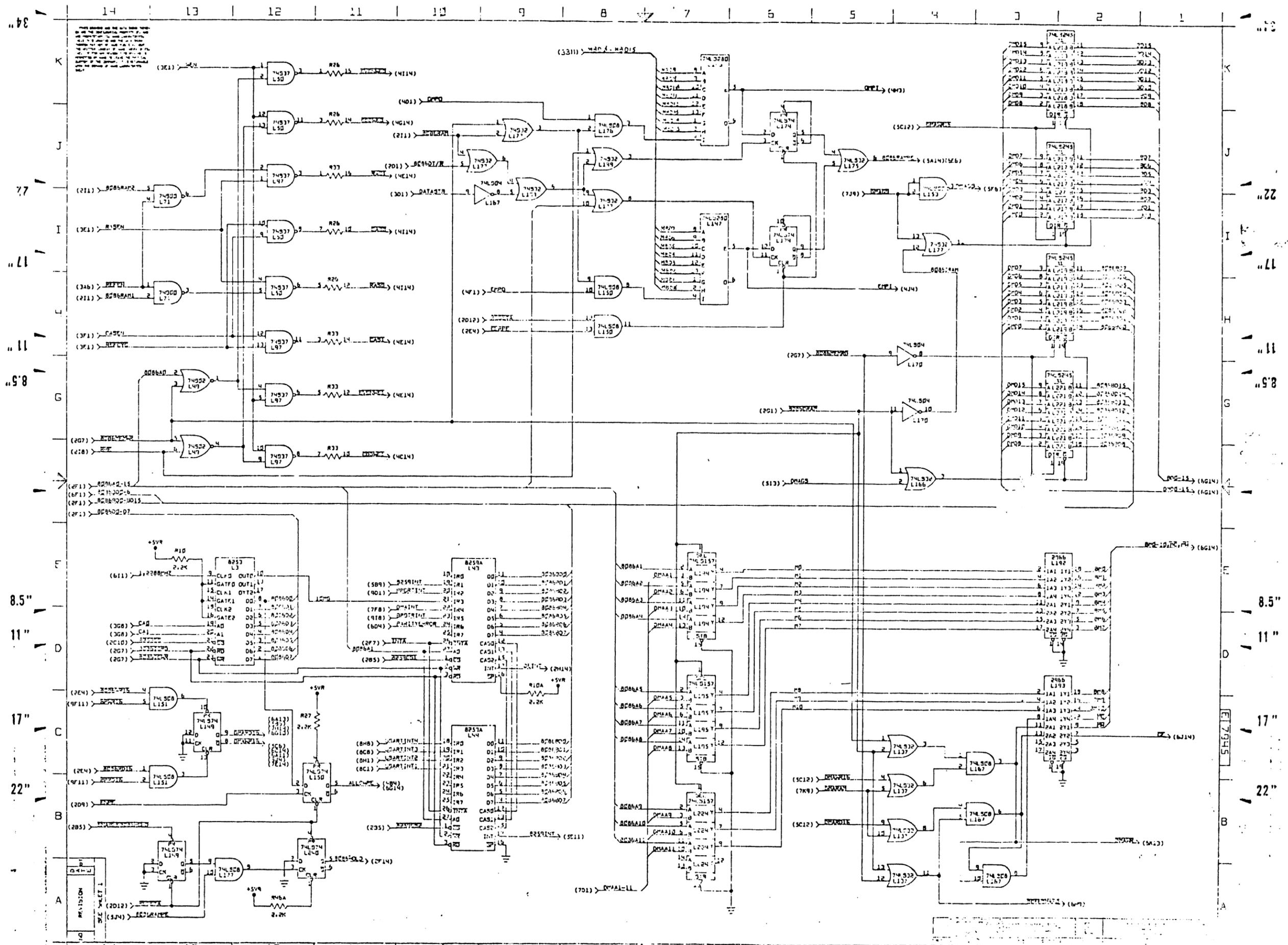
8.5"

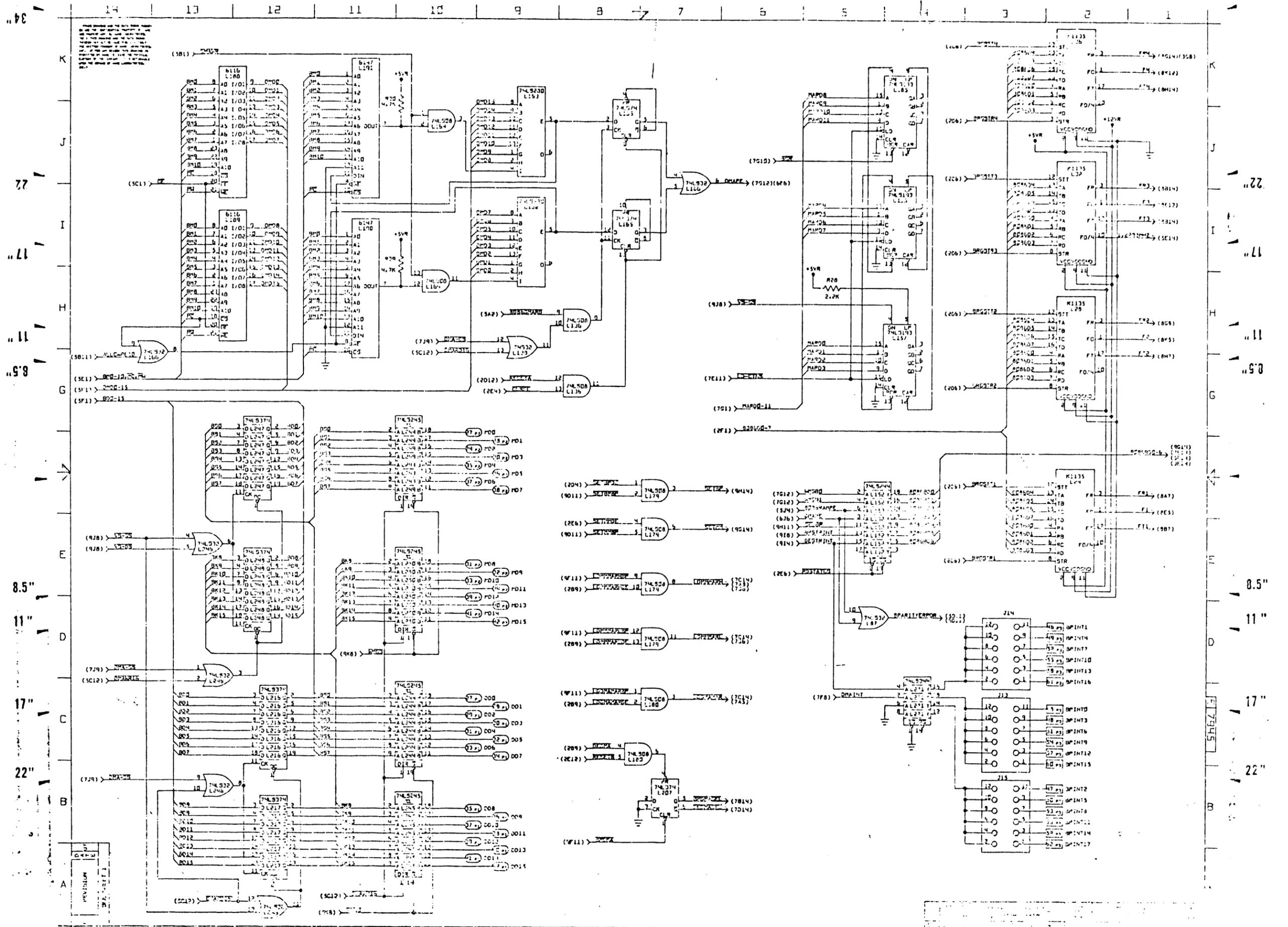
8.5"

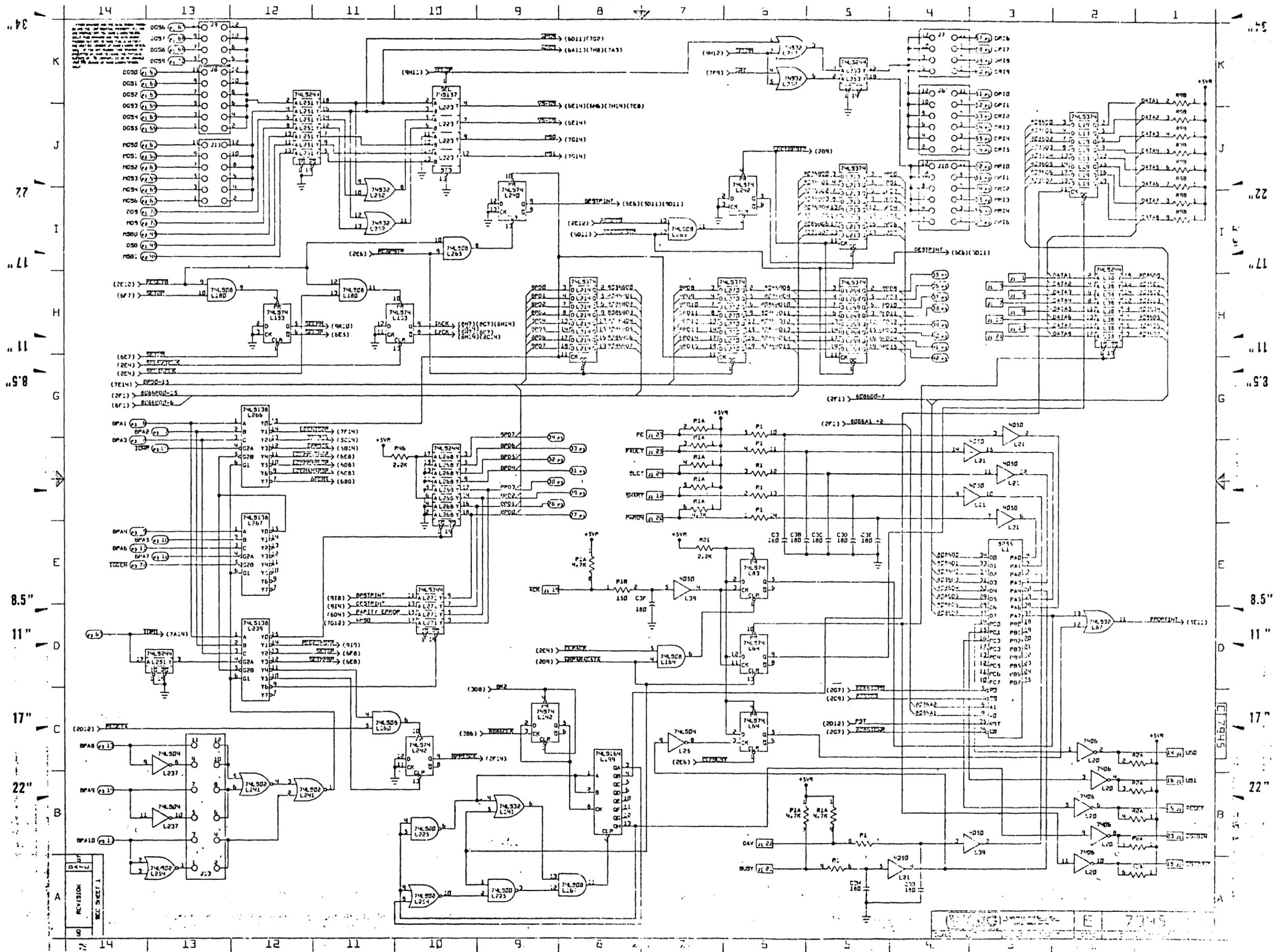
11"

17"

22"

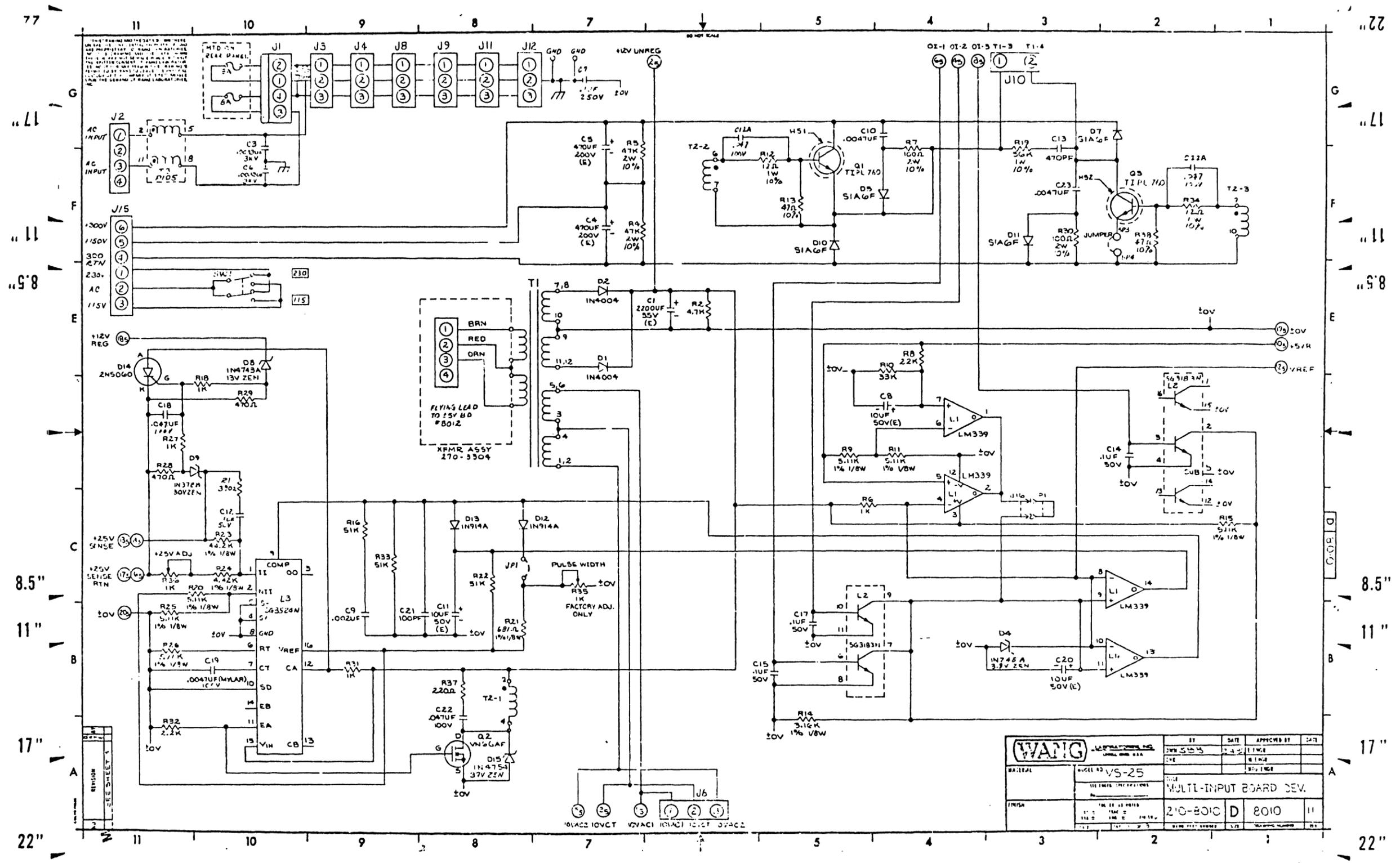




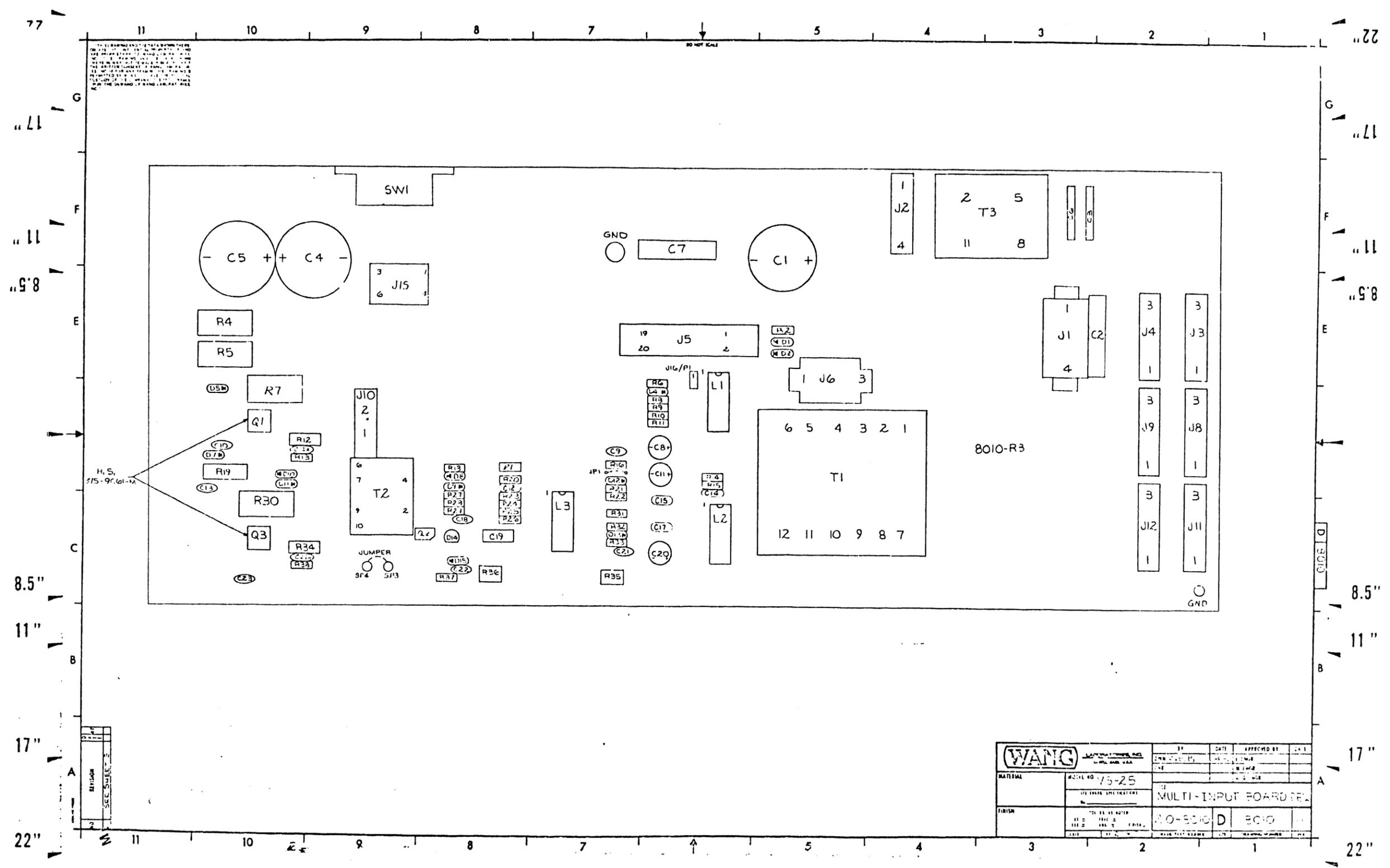


REVISION
SHEET 1

74LS



WANG		REV	DATE	APPROVED BY	DATE
PROJECT NO VS-25		REV 303	7-3-53	W. W. B.	
TITLE		MULTI-INPUT BOARD DEV.			
DESIGNER	DATE	REV	DATE	APPROVED BY	DATE
W. W. B.	7-3-53	1	7-3-53	W. W. B.	
FINISH	DATE	REV	DATE	APPROVED BY	DATE



WANG		BY	DATE	APPROVED BY	24-1
MATERIAL	WANG	DATE	DATE	DATE	DATE
PROJECT NO.	15-25				
DESCRIPTION	MULTI-INPUT BOARD REL.				
REVISION					

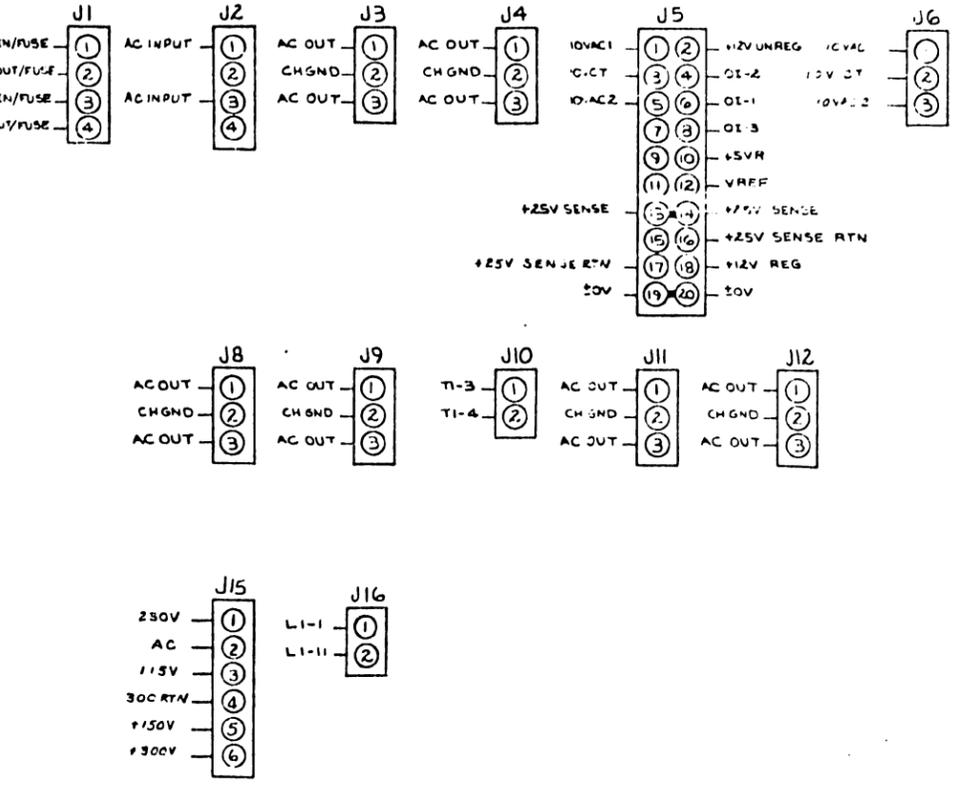
THIS DRAWING AND THE DATA THEREON ARE THE PROPERTY OF WANG COMMUNICATIONS INC. NO PART THEREOF IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF WANG COMMUNICATIONS INC.

COMPONENT	TYPE	WL PART NO.
R1	300Ω 5% 1/4W	330-2037
R2	47K 5% 1/4W	330-3048
R4,5	47K 10% 2W	337-4047
R5,11,20,22,23	511K 1% 1/8W	333-0088
R7,30	100Ω 10% 2W	337-2010
R8	2.2K 5% 1/4W	330-4024
R10	33K 5% 1/4W	330-4034
R12,34	12Ω 10% 1W	332-1012
R13,38	47Ω 5% 1/4W	330-1044
R14	3.16K 1% 1/8W	333-0210
R21	681Ω 1% 1/8W	333-0058
R15,22,32	51K 5% 1/4W	330-4052
R18,27,31,6	1K 5% 1/4W	330-3011
R19	56K 10% 1W	332-4056
R21	1K 1% 1/8W	333-0033
R24	4.42K 1% 1/8W	330-0170
R25	2.2K 1% 1/8W	333-0146
R28,29	470Ω 5% 1/4W	330-2043
R32	2.2K 5% 1/4W	330-2023
R35,36	1K SIDE ADJ.	336-1014
R37	220Ω 5% 1/4W	330-2023
C1	2200UF 35V (E)	300-3323
C3,6	.0032UF 3KV	300-1934
C4,5	470UF 200V (E)	300-3324
C7,7	.1UF 250V	300-2430
C8,11,20	.10UF 50V (E)	300-3321
C9	.002UF 500V	300-1913
C12,14,15,17	.1UF 50V	300-3325
C10,23	.0047UF 500V	300-1910
C13	470PF 500V	300-1470
C17,18,21,22A	.047UF 100V	300-1919
C19	.0047UF 50V (L/R)	300-2075
C21	100PF 500V	300-1100
D1,2	1N4004	330-4000
D4	1N749A 3.9V ZEN	330-2032
D5,7,9,11	51A ZEP	330-4003
D8	1N4733A 13V ZEN	330-2113
D9	1N2733 13V ZEN	330-2157
D12,15	1N914A	330-1012
D14	2N5060	330-4001
D15	1N4734 39V ZEN	330-1019

COMPONENT	TYPE	WL PART NO.
Q1,3	TIPL760	375-1116
Q2	VN166AF	375-1125
T1	AFMR ASSY	270-3303
T2	PLICE, 30X16 60AC	410-0200
T3	P105 FILTER	320-0711
J1,2	6 PIN CONN.	350-0213
J3,4,8,9,11,12	3 PIN HEADER	350-0217
J5	20 PIN CONN.	350-0226
J10	2 PIN HEADER	350-0216
J15	6 PIN 20AW	350-0218
J16	2 PIN CONN	350-0203
P1	2 PIN SHUNT	350-4006
SW1	SLIDE, DPDT 90°	325-2119
J*	TRAIL. WHITE STANDARD	600-0209
H31,2	HEATSINK	375-1011M
QTY 4	#40x1/4 SCREW	550-2120
QTY 4	#4 FLAT WASHER	653-2001
QTY 2	632x1/2 SCREW	650-3140
QTY 1	CHANNEL INSULATOR	654-0033

IC LOCATION	TYPE	WL PART NO.
L1	LM339	375-0240
L2	SG3183N	375-1121
L3	SG2524N	374-0033

MNEMONICS	COORD
A.C. INPUT	1G1
A.C.	1E1
O1-1	1G4
O1-2	1G4
O1-3	1G4
Q2-D	1A8
Q3-C	1F1
Q3-E	1F1
T1-3	1G3
T1-4	1G3
VREF	1E1
±50V	1B11,1A8
±5VR	1E1
10VAC1	1A6,1A7
10VAC2	1A6,1A7
10VCT	1A6,1A7
±12VREG	1E1
±12UNREG	1A7,1G6
±25V SENSE	1C11
±25V SENSE RTN	1G11
±15V	1E11
±150V	1F11
±300V	1F11,1G6
±300V RTN	1F11,1G6

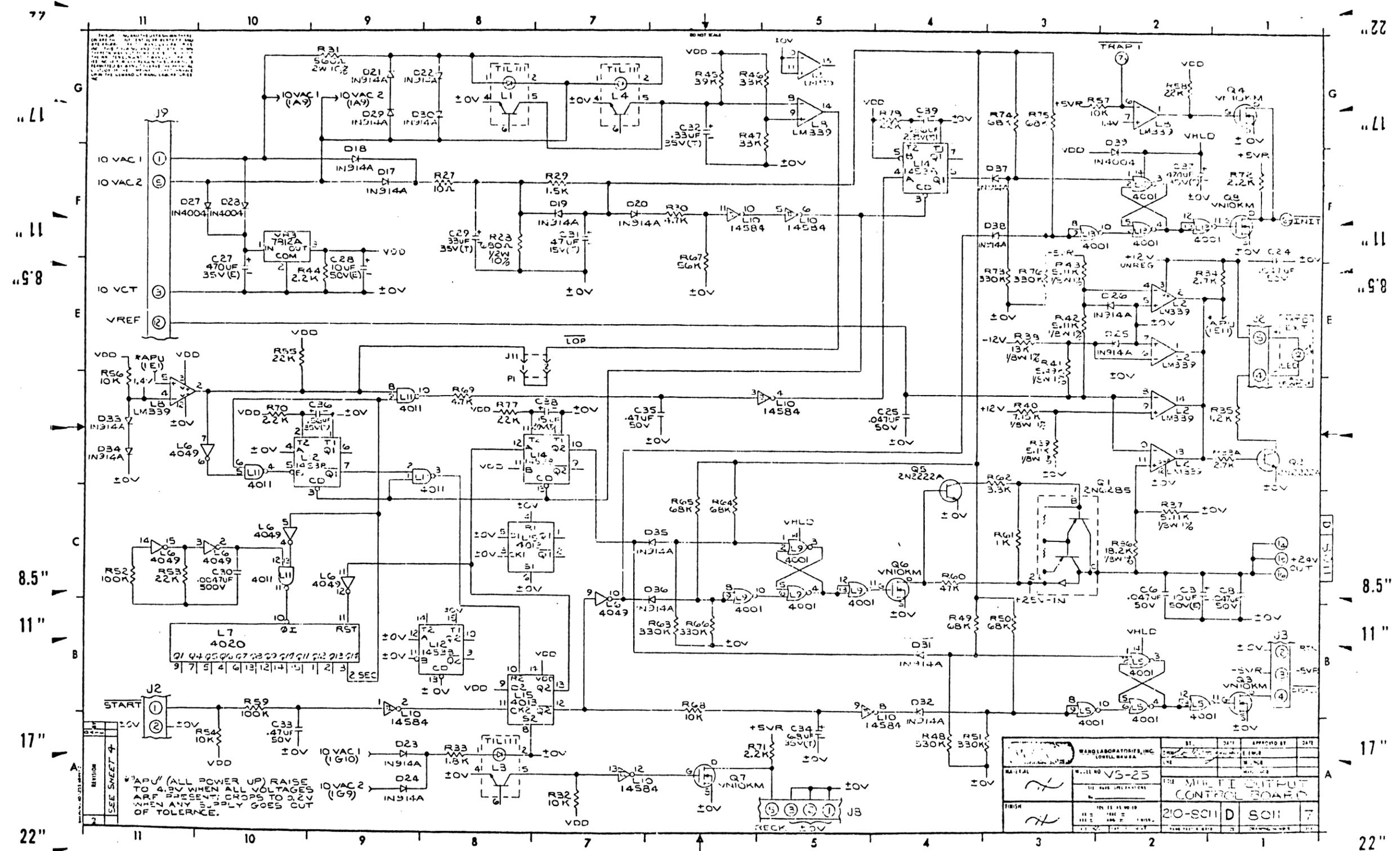


NOTE:
1. ALL RESISTOR ARE 5% 1/4W
UNLESS OTHERWISE SPECIFIED

E-REV
2

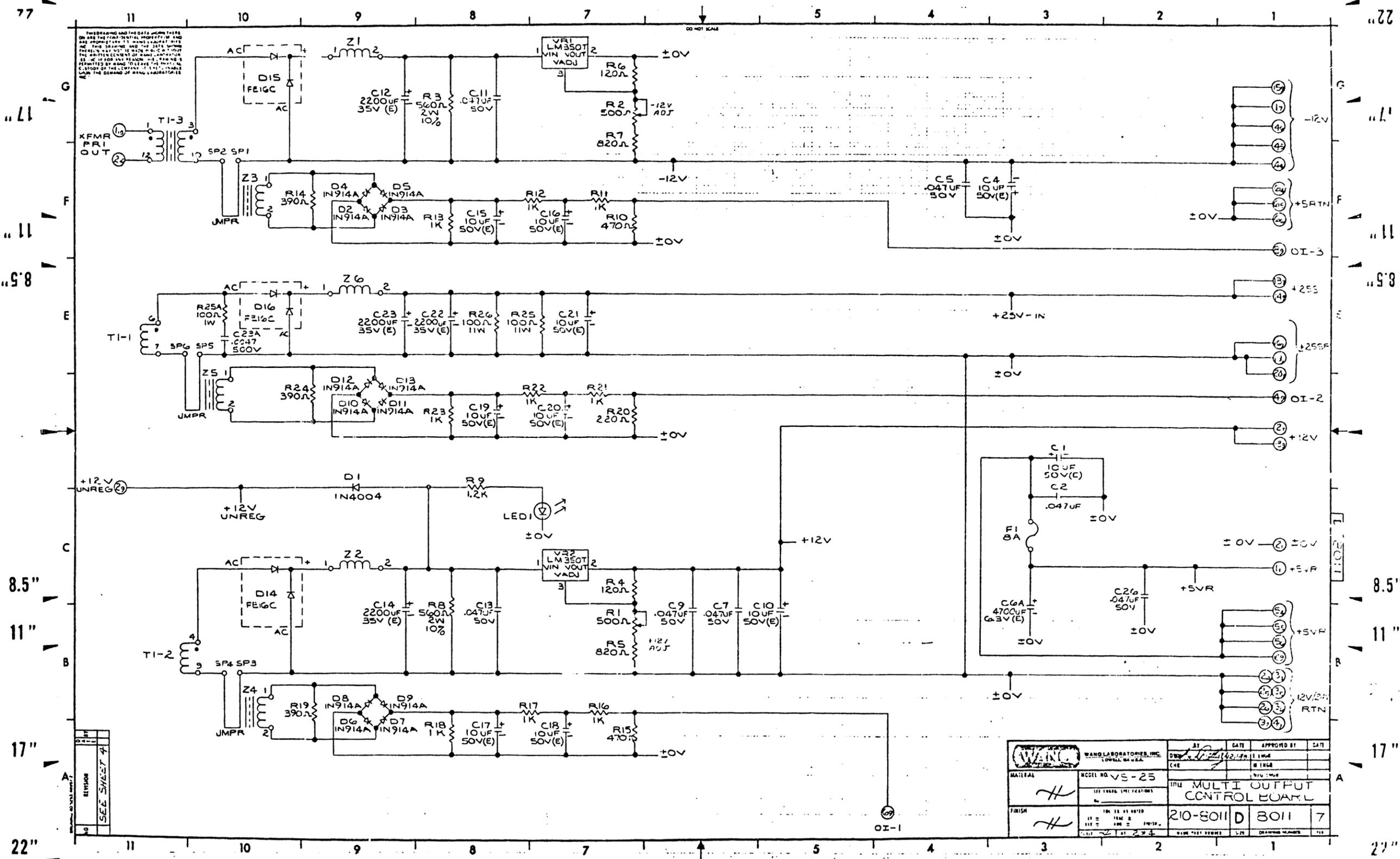
REVISION	DATE	BY	DESCRIPTION
1	10/1/77	...	...
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

WANG COMMUNICATIONS INC.		BY	DATE	APPROVED BY	DATE
MODEL NO. VS-25		...			
MULTI-INPUT BOARD DEV.		...			
Z10-8010		D	8C10	11	



*APU (ALL POWER UP) RAISE TO 4.5V WHEN ALL VOLTAGES ARE PRESENT; DROPS TO 0.2V WHEN ANY SUPPLY GOES OUT OF TOLERANCE.

WANG LABORATORIES, INC. LOCAL BRANCH		ST.	DATE	APPROVED BY	DATE
MULTI OUTPUT CONTROL BOARD					
REV. 11 11 69					
210-SC11 D SC11 7					

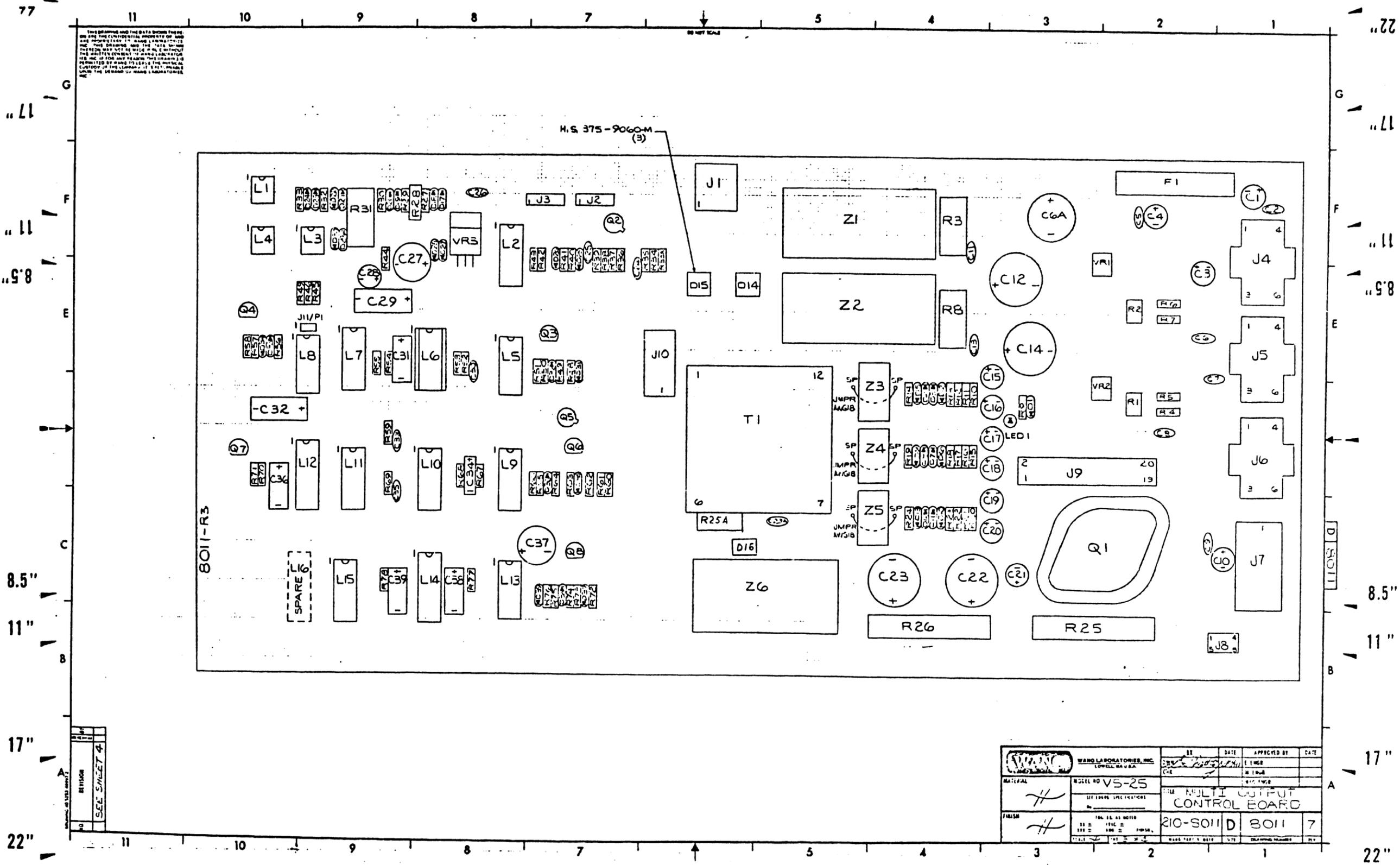


THESE DRAWINGS AND THE DATA CONTAINED THEREIN ARE THE PROPERTY OF WANG LABORATORIES, INC. AND ARE LOANED TO YOU BY WANG LABORATORIES, INC. FOR YOUR INFORMATION AND USE ONLY. YOU ARE NOT TO REPRODUCE, COPY, OR TRANSMIT THESE DRAWINGS OR THE DATA CONTAINED THEREIN IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF WANG LABORATORIES, INC. THE USE OF THESE DRAWINGS OR THE DATA CONTAINED THEREIN FOR ANY OTHER PURPOSE IS STRICTLY PROHIBITED. THE USER ASSUMES ALL LIABILITY FOR ANY DAMAGE TO PERSONS OR PROPERTY, INCLUDING REPUTATION, ARISING FROM THE USE OF THESE DRAWINGS OR THE DATA CONTAINED THEREIN. WANG LABORATORIES, INC. ACCEPTS NO LIABILITY FOR ANY SUCH DAMAGE.

DATE: 11/10/64
 BY: [Signature]
 CHECKED: [Signature]
 APPROVED: [Signature]
 TITLE: MULTI OUTPUT CONTROL BOARD

WANG LABORATORIES, INC. LOVELL, MASSACHUSETTS		DATE: 11/10/64	APPROVED BY: [Signature]	DATE: 11/10/64
MATERIAL: #	MODEL NO: VS-25	TITLE: MULTI OUTPUT CONTROL BOARD		
FINISH: #	REV: 1	210-8011 D	8011	7

This drawing and the data herein are the property of Wang Laboratories, Inc. and are to be used only for the purpose specified. No part of this drawing is to be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of Wang Laboratories, Inc. This drawing is the property of Wang Laboratories, Inc. and is to be used only for the purpose specified. No part of this drawing is to be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of Wang Laboratories, Inc.



8011-R3
SEE SHEET 4

WANG LABORATORIES, INC. LOWELL, MA 01450		DATE	APPROVED BY	DATE
MATERIAL	MODEL NO VS-25	DATE	ENGINEER	
	SEE DRAWING SPECIFICATIONS		DATE	
			TITLE MULTI OUTPUT CONTROL BOARD	
FURNISH	TO: AS NOTED	210-5011 D	8011	7
	SEE DRAWING SPECIFICATIONS			

THIS DRAWING AND THE DATA HEREON ARE THE PROPERTY OF WANG LABORATORIES, INC. AND ARE TO BE USED ONLY FOR THE PROJECT AND FOR THE PURPOSES SPECIFIED THEREON. NO PART OF THIS DRAWING OR THE DATA HEREON IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF WANG LABORATORIES, INC.

COMPONENT	TYPE	W.L. PART NO.
R1,2	500Ω 1/4W 5%	330-1024
R3,8,31	560Ω 1/4W 5%	337-2056
R4,6	120Ω 1/4W 5%	330-2012
R5,7	200Ω 1/4W 5%	330-2020
R9,35	1.2K 1/4W 5%	330-3013
R10,15	470Ω 1/4W 5%	330-2047
R20	220Ω 1/4W 5%	330-2022
R11-13,16-18, 21-23,61	1K 1/4W 5%	330-3011
R14,19,24	370Ω 1/4W 5%	330-2040
R25,26	100Ω 1/4W 5%	337-2007
R27	10Ω 1/4W 5%	330-1011
R28	100Ω 1/4W 5%	332-2011
R28	680Ω 1/4W 5%	331-2068
R29	1.5K 1/4W 5%	330-3016
R30,69	4.7K 1/4W 5%	330-3048
R54,56,32,57, 68	10K 1/4W 5%	330-4011
R33	1.9K 1/4W 5%	330-3019
R34,33A	2.7K 1/4W 5%	330-3028
R36	13.2K 1/4W 5%	333-0103
R37,32,42,43	5.1K 1/4W 5%	333-0059
R38	13K 1/4W 5%	333-0144
R40	7.15K 1/4W 5%	333-0163
R41	5.49K 1/4W 5%	333-0167
R44,10-72	2.2K 1/4W 5%	330-3023
R45	39K 1/4W 5%	330-4040
R46,47	33K 1/4W 5%	330-4034
R48,51,53,66, 73,76	330K 1/4W 5%	330-5034
R49,50,64,65, 74,75	68K 1/4W 5%	330-4069
R52,59	100K 1/4W 5%	330-5011
R53,55,53,71,73	2.2K 1/4W 5%	330-4023
R60	4.7K 1/4W 5%	330-4048
R62	3.3K 1/4W 5%	330-3034
R67	56K 1/4W 5%	330-4057

NOTES:
1. ALL RESISTORS ARE 1/4W 5% UNLESS OTHERWISE SPECIFIED.

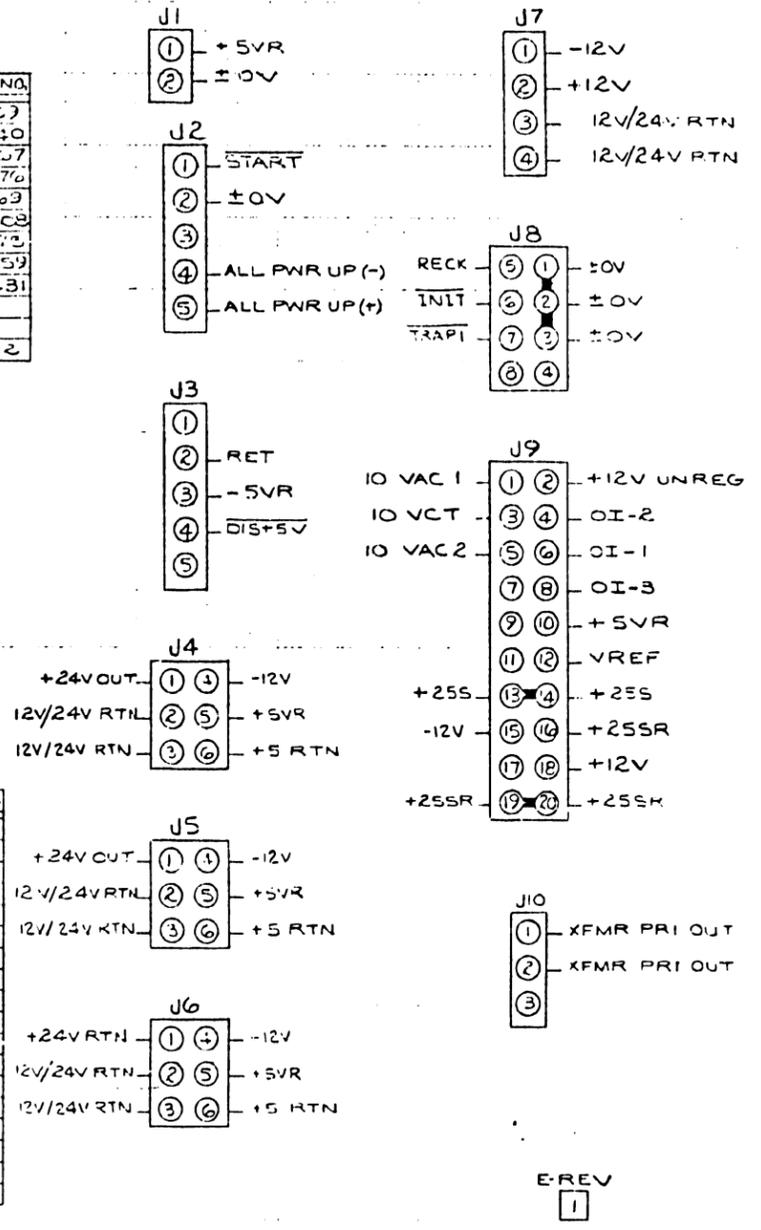
COMPONENT	TYPE	W.L. PART NO.
C1,3,4,10,17,21,22,23	100UF 50V(E)	300-3321
C2,5-9,26	.047UF 50V	300-1926
C11,13,24,25		
C12,14,22,23	220NF 35V(E)	300-3323
C27,37	.47UF 35V(E)	300-3322
C28	.47UF 35V(E)	300-3325
C29	.33UF 35V(T)	300-4029
C31	.47UF 15V(T)	300-4020
C33,35	.47UF 50V	300-1923
C34	.47UF 35V(T)	300-4039
C32	.33UF 35V(T)	300-4033
C36,39	.56UF 35V(T)	300-4010
C38	.15UF 25V(T)	300-4022
C23A,30	.0047UF 500V	300-1910
D1,2,7,23,39	1N4004	380-4000
D2-5,6-9, 10-13,17-21, 23-24	1N914A	380-1012
D4,15,16	FE16C	380-4022
Q2,Q5	TRANS. PNP	375-9004
Q1	2N1623S	375-1047
Q2,5	2N2222A	375-1005
Q3,4,6,7,8	VN10KM	375-1115
LED1	MV514 CHN	370-0027
VRI,2	LM333T	374-0044
VIR,3	7812A	374-0035
Z1,2,6	40V OUTPUT	320-0720
Z3,4,5	SHORT CIRCUIT	320-0124
QTY 2	FUSE 5A	150-0025
F1	2A	360-1030
T1	OUTPUT	410-0207
J1	2 PIN CONN	350-0216
J2,3	5 PIN CONN	350-0227
J4,5,6	6 PIN CONN	350-0215
J7	4 PIN CONN	350-0215
J8	8 PIN CONN	350-0212
J9	20 PIN CONN	350-0439
J10	3 PIN CONN	350-0217
J11	2 PIN CONN	350-0203
P1	SHUNT	350-4556
QTY 5	#6-32 x 1/4	650-3033
QTY 1	#4-40 LOCKWASH	652-2005
QTY 2	#3-32 x 3/8	650-3120
QTY 2	HEATSINK	375-9037-M
QTY 3	HEATSINK	375-9000-M
QTY 1	HEATSINK	375-9033
QTY 1	SCREW	650-2100

I.C. LOCATION	TYPE	W.L. PART NO.
L1,3,4	TIL III	375-2109
L2,8	LM339	376-0240
L5,9,13	CD4001AE	376-0307
L6	F1047BP	376-0376
L7	CD4026AE	376-0369
L10	MC14554	376-0408
L11	F4011BP	376-0373
L12,14	MC14538	376-0459
L15	CD4013AE	376-0431
L16	SPARE	
L6	16 PIN SOCKET	376-9002

TYPE	I.C. LOC.	SPARE
LM339	L8	1

MINEMONICS	COORD
ALL PWR UP	1E1
DIS+5V	1B1
INIT	1F1
OI-1	2A1
OI-2	2D1
OI-3	2F1
RECK	1A5
START	1B11
TRAP1	1G2
VREF	1E11
±5V	1A11
±0V	1A5
±0V	2C1

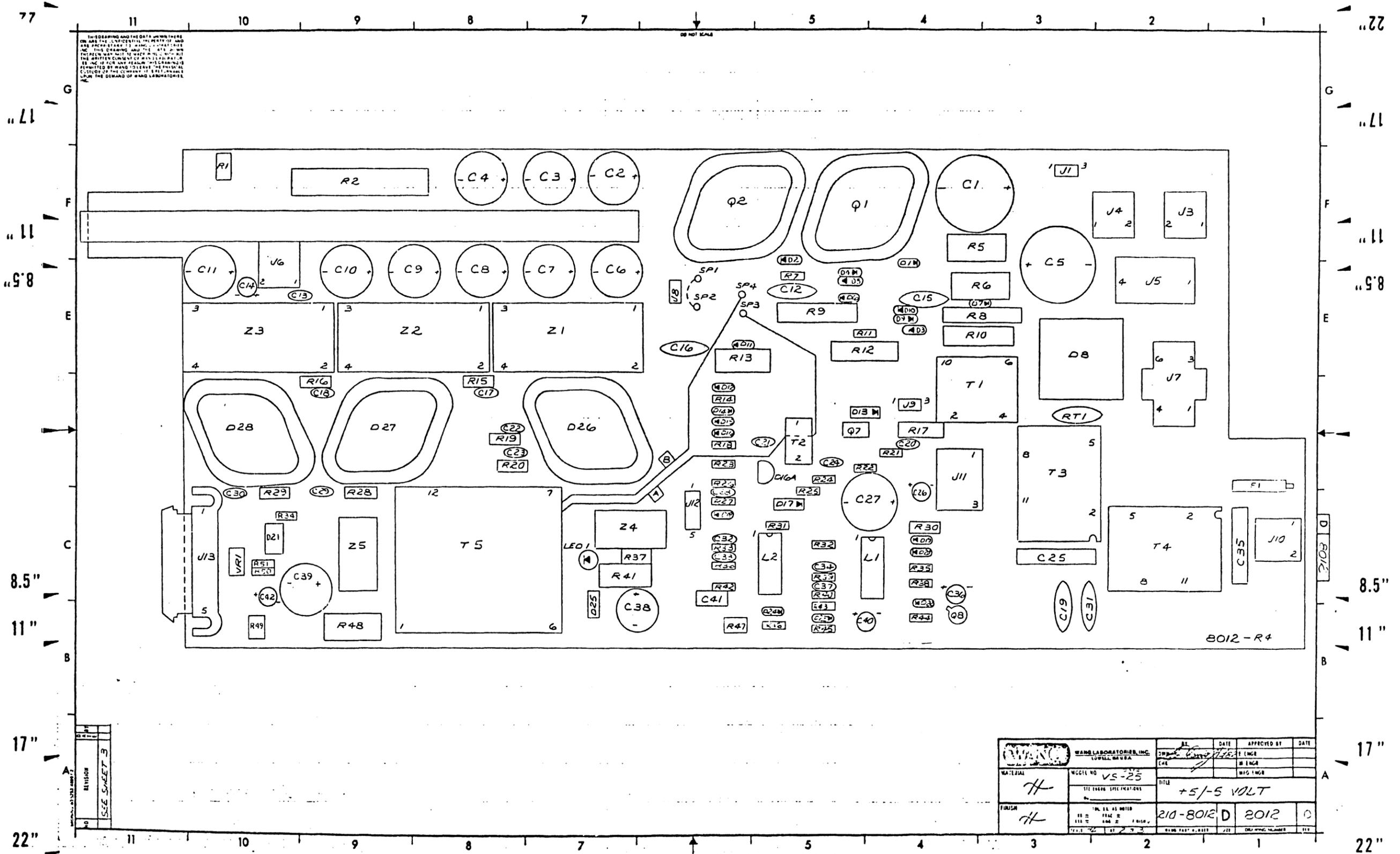
MINEMONICS	COORD
+5VR	2C1
+5VR	2B1
-5VR	1B1
+5 RTN	2F1
10 VAC 1	1F11
10 VCT	1E11
+12V	2D1
-12V	2G1
+25S	2E1
+12V UNREG	2D11
12V/24V RTN	2B1
+24V CUT	1C1
+25SR	2E1



REV	DATE	BY	DESCRIPTION
1			ORIGINAL PER ENG
2			REVISED PER ENG
3			REVISED PER ENG
4			REVISED PER ENG
5			REVISED PER ENG
6			REVISED PER ENG
7			REVISED PER ENG
8			REVISED PER ENG
9			REVISED PER ENG
10			REVISED PER ENG
11			REVISED PER ENG

WANG LABORATORIES, INC.		DATE	APPROVED BY	DATE
MATERIAL	W.L. NO. VS-25			
FINISH				
TITLE: MULTI OUTPUT CONTRL BOARD		210-8011 D	801	7

THIS DRAWING AND THE DATA CONTAINED THEREIN ARE THE CONFIDENTIAL PROPERTY OF WANG LABORATORIES, INC. AND ARE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF WANG LABORATORIES, INC. NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF WANG LABORATORIES, INC.



REV	DESCRIPTION
1	SEE SHEET 3

WANG LABORATORIES, INC.		DATE	APPROVED BY	DATE
MATERIAL	WCC# NO VS-25	DATE	APPROVED BY	DATE
FINISH	TITLE +5/-5 VOLT	DATE	APPROVED BY	DATE
210-8012 D		2012		

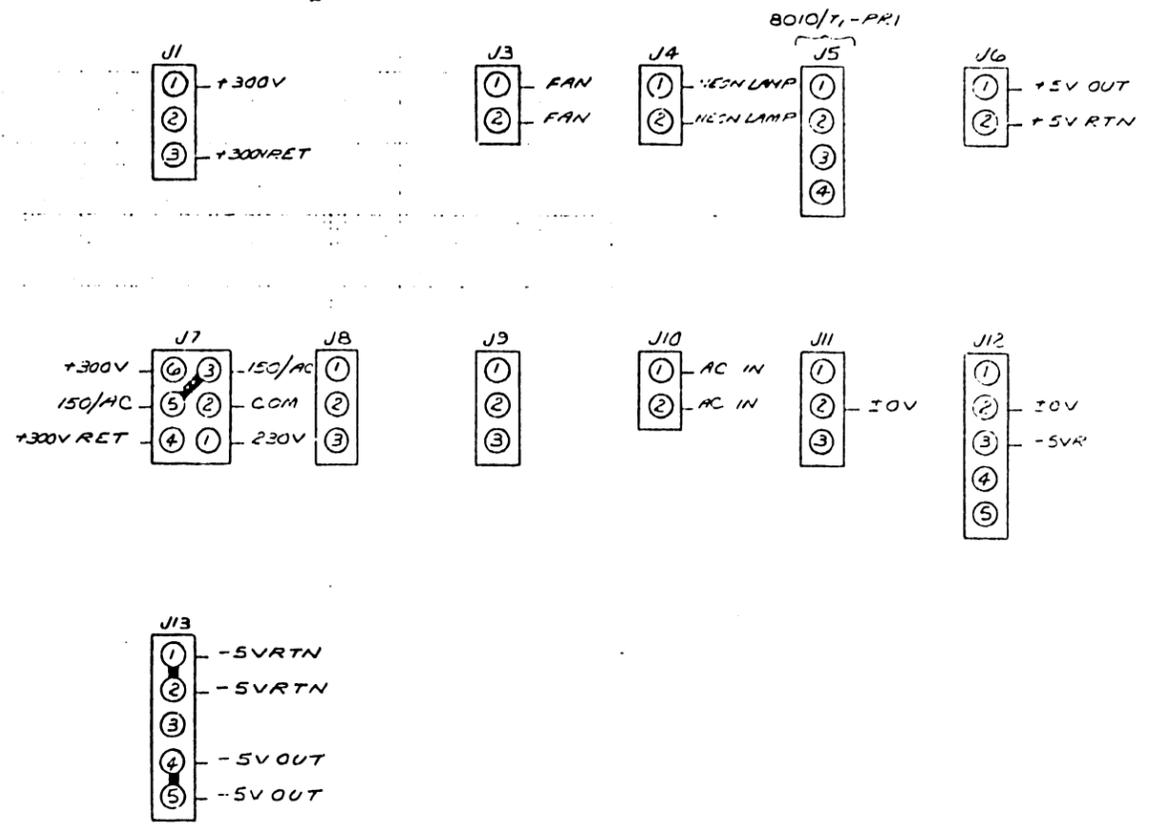
THIS DRAWING AND THE DATA ON IT ARE THE PROPERTY OF WANG LABORATORIES, INC. AND ARE LOANED TO YOU BY WANG LABORATORIES, INC. FOR YOUR INFORMATION AND USE ONLY. YOU ARE NOT TO REPRODUCE OR TRANSMIT THIS DRAWING OR THE DATA ON IT IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF WANG LABORATORIES, INC. IF YOU ARE NOT A WANG LABORATORIES, INC. EMPLOYEE, YOU ARE NOT TO DISCLOSE THIS DRAWING OR THE DATA ON IT TO ANY OTHER PERSON WITHOUT THE WRITTEN CONSENT OF WANG LABORATORIES, INC.

IC LOCATION	TYPE	W.L. PART NO.
L1	LM339	374-0340
L2	SG 3524	374-0033

TYPE	IC LOCATION	SPARE
LM339	L1	2

COMPONENT	TYPE	W.L. PART NO.
R1,3	1K SIDE ADJ	330-1014
R2	5A 11W	334-0023
R5,6,13	47K 2W 10%	337-4047
R7,11	27K 1/4W 5%	330-1043
R8,9	100K 5W	334-0020
R10,12	75K 5W 3%	334-0003
R14	330K 1/4W 5%	330-2040
R15,13,30,39,23	19K 1/2W 5%	331-1011
R17	220K 1W 10%	332-2022
R16	3.0K 2W 1%	333-0063
R18,22,24,26,27	1K 1/4W 5%	330-3011
R21	180K 1/4W 5%	330-3019
R23	2.2K 1/8W 1%	333-0001
R30	15K 1/2W 10%	331-3015
R31,33,12	5.1K 1/3W 1%	333-0088
R32	100K 1/4W 5%	330-3011
R35	2.2K 1/4W 5%	330-3023
R34	220K 1/4W 5%	330-2023
R37	1.2K 1/2W 10%	331-3012
R38,39,40,14	51K 1/4W 5%	330-4052
R44,48	560K 2W 10%	337-2056
R43,46	1.00K 1/8W 1%	333-0087
R25	330K 1/4W 5%	330-2024
R45	10K 1/4W 5%	330-4011
R27	1K TOP ADJ	330-1027
R50	422K 1/3W 1%	332-0056
R51	220K 1/4W 1%	333-0136
RT1	CL-50	330-3502
VR1	LM350T	374-0044
LED 1	ORANGE	374-0027

COMPONENT	TYPE	W.L. PART NO.
C1,5	170UF 250V(E)	300-3324
C2,3,6-11	4700UF 6.3V(E)	300-3325
C12,15,16	.01UF 1KV	300-1353
C13,21,24,28,32	.1UF 50V	300-1330
C4,20,36,40,42	10UF 50V(C)	300-3321
C17,18,22,23,21,30	.047UF 50V	300-1366
C19,31	.0133UF 3KV	300-1394
C20	.0047UF 100V	300-1320
C25,35	.1UF 250V(M)	300-2430
C27,39	2200UF 35V(E)	300-3323
C33,34	.047UF 50V	300-1366
C37	100 PF	300-1100
C38	470UF 35V(E)	300-3322
C41	.0047UF 100V(M)	300-2075
D1-7,9-11	51A6F	380-4008
D9	KBP10-06	380-4023
D12,14-16,23,24	1N914A	380-1012
D13	1N5306 30V ZEN	380-2141
D16A	2N5060	380-4001
D17	1N852	380-3012
D18	1N752A 50V ZEN	380-2056
D19,20	1N4004	380-4000
D21,25	FE16C	380-4022
D22	1N230C 47V ZEN	380-2043
D26-28	5D241	380-1016
Q1,2	2N6675	375-1124
Q5	2N2222A	375-1005
Q7	2N3811	375-1131
F1	10 AMP	300-1100
Z1-3	CHOKES	300-0121
Z4	50V	300-0752
Z5	205UH INDUCTOR	320-0746
T1	1/2 POWER DRIVER	410-0202
T2	S/C COIL	320-0124
T3,4	EMI COIL	320-0721
T5	OUTPUT TRANSFORMER	410-0209
J1,8,9	3 PIN CONN	654-0104
J3,4,6,10	2 PIN CONN	350-0210
J5	4 PIN CONN	350-0215
J7	6 PIN CONN	350-0218
J11	3 PIN CONN	350-0217
J12	5 PIN CONN	350-0227
J13	5 PIN CONN	350-0234

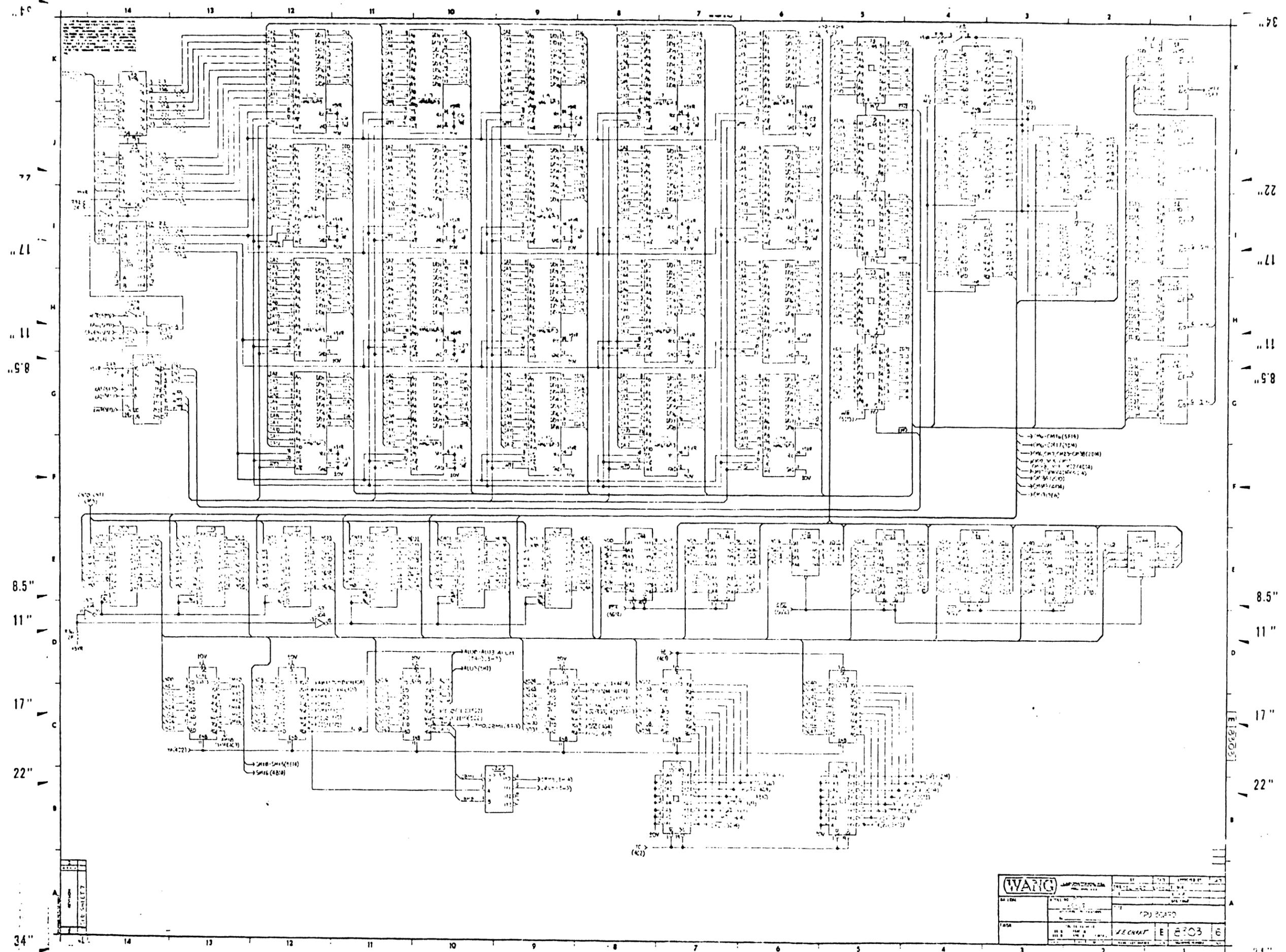


NOTE: ALL RESISTORS ARE 1/4W 5% UNLESS OTHERWISE SPECIFIED

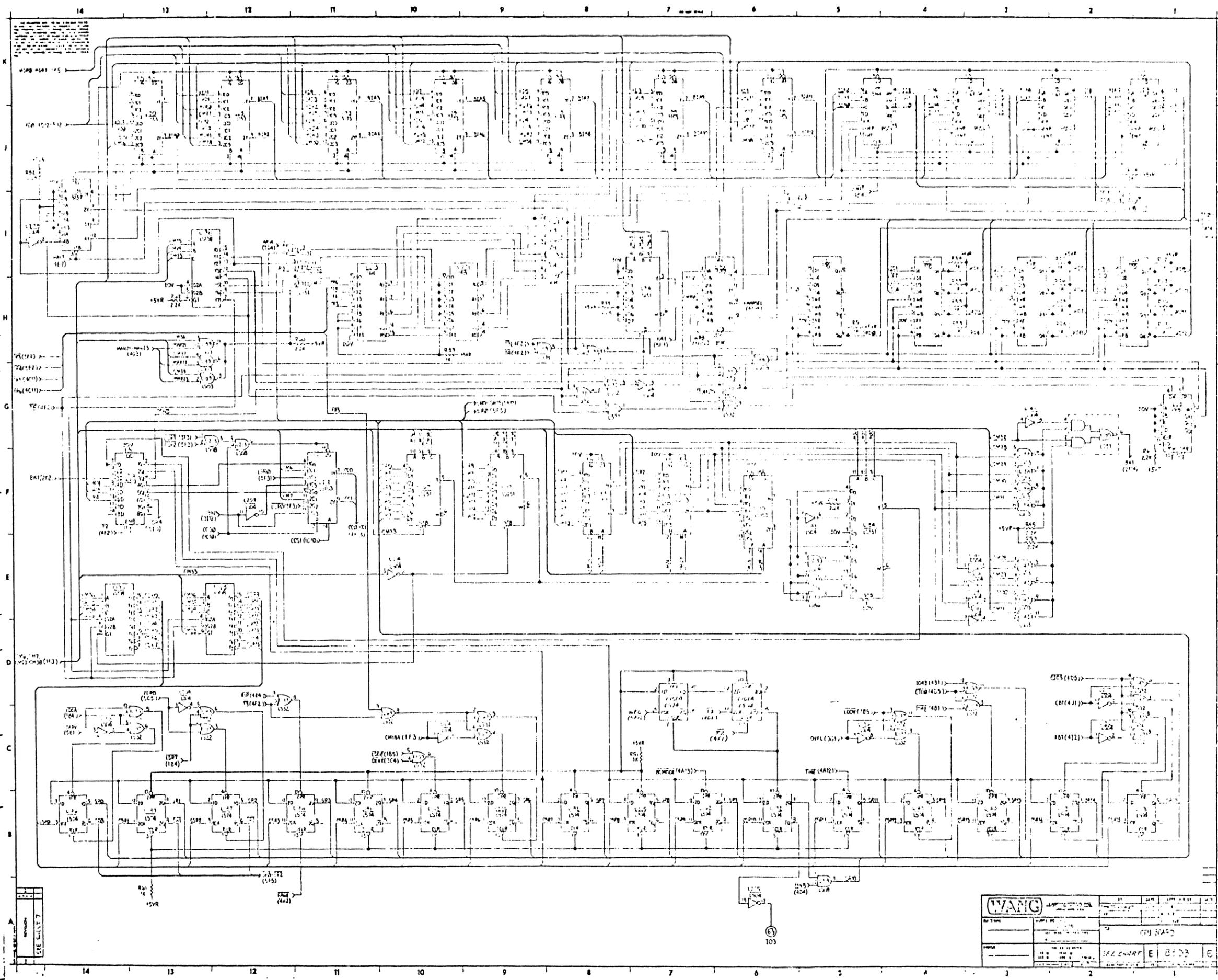
E REV 5

REV	DATE	BY	DESCRIPTION
1			INITIAL DESIGN
2			REVISED FOR...
3			REVISED FOR...
4			REVISED FOR...
5			REVISED FOR...
6			REVISED FOR...
7			REVISED FOR...
8			REVISED FOR...
9			REVISED FOR...
10			REVISED FOR...

		BY: [Signature] DATE: [Date] APPROVED BY: [Signature] DATE: [Date]
MATERIAL: [Signature] W.L. NO. VS-25 REVISED SPECIFICATIONS	TITLE: +E/-5 VOLT	W.L. NO. 3012 DATE: 10/12/68 BY: [Signature]

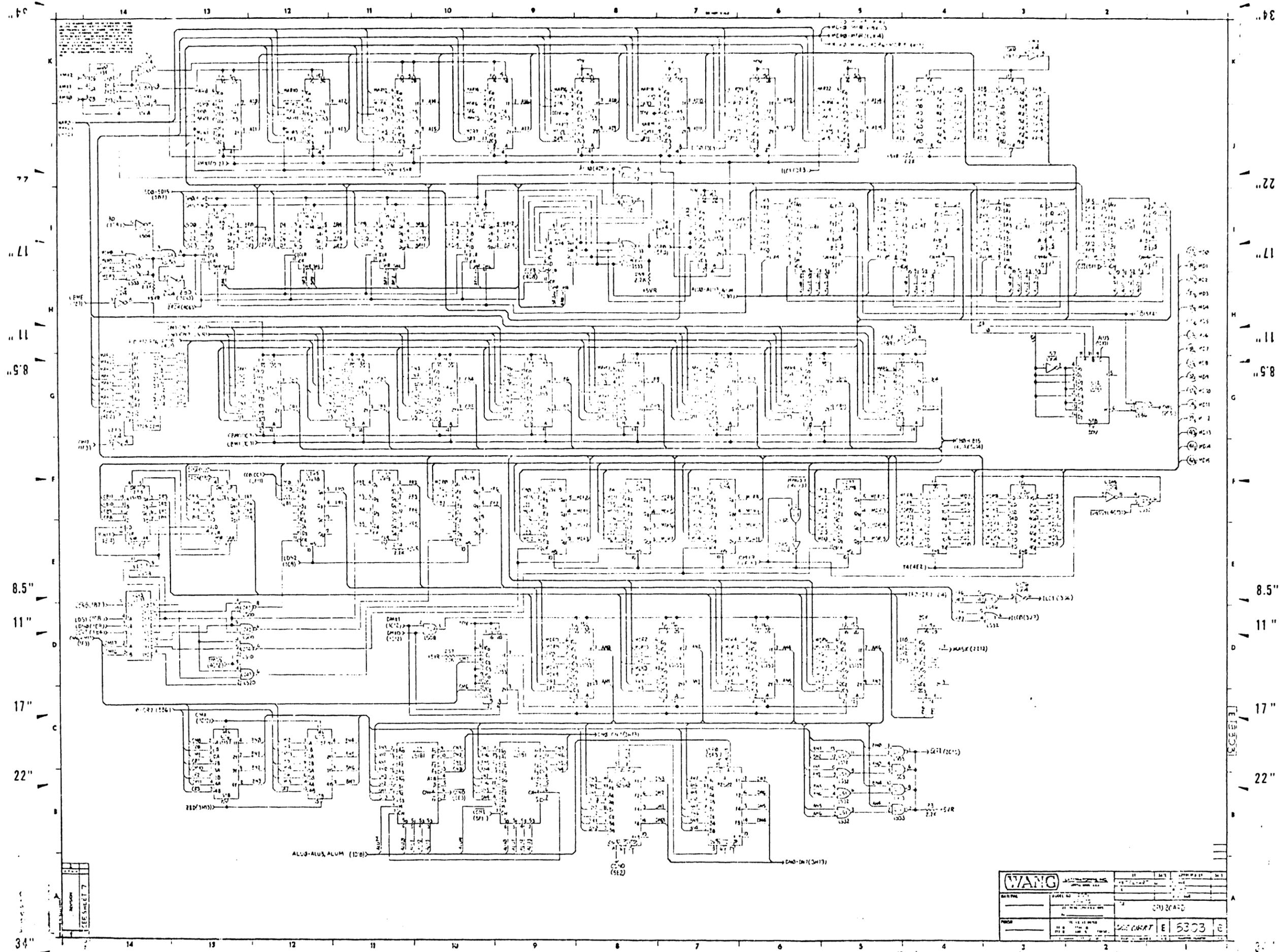


(TWARG)		REV E 8703	
DATE	DESIGNED BY	DATE	DESIGNED BY
CPU BOARD		REV E 8703	
ELECTRICAL		E 8703	

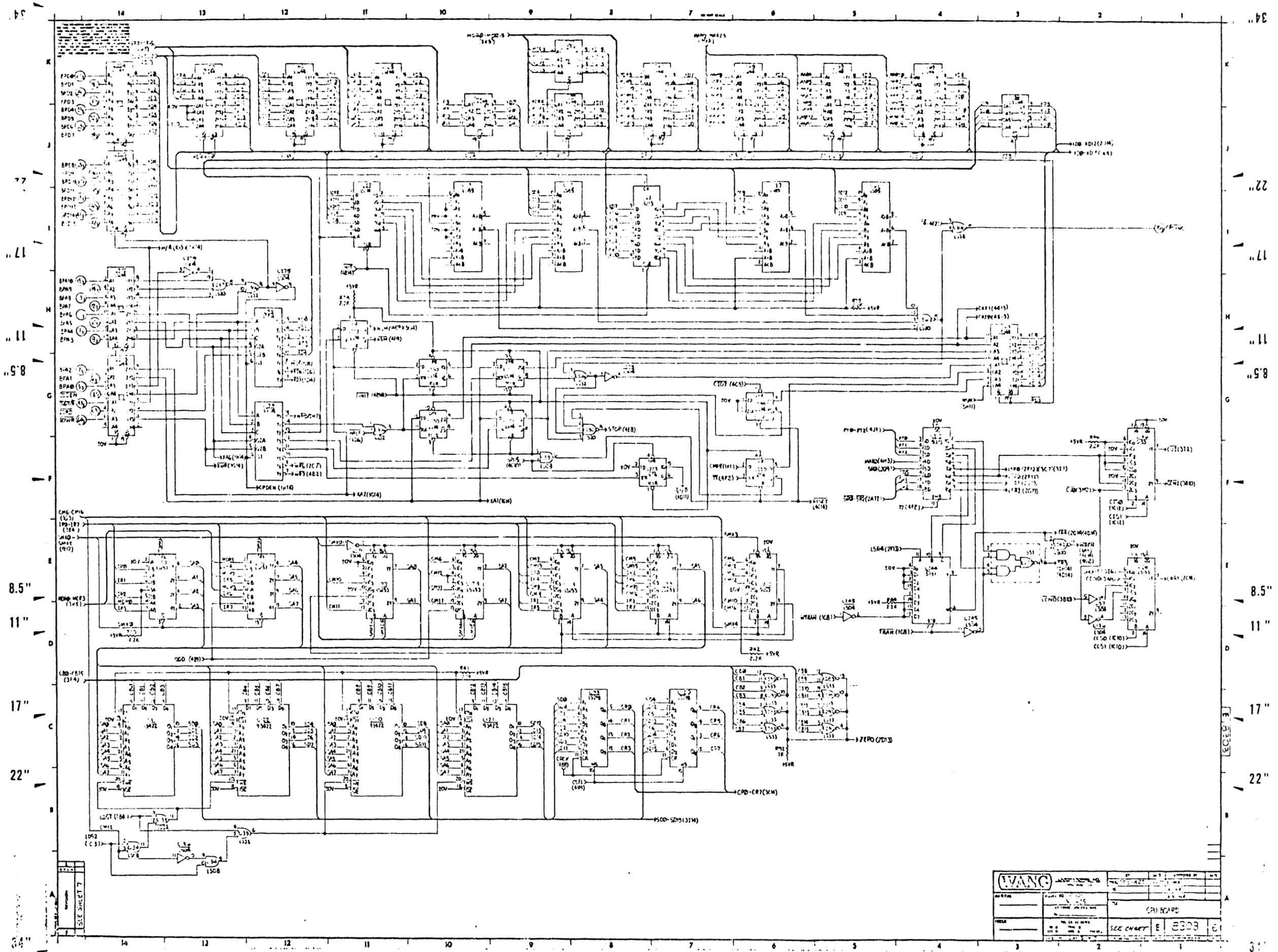


SEE SHEET 7

WANG		DATE	BY
REV	DATE	BY	APP
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			

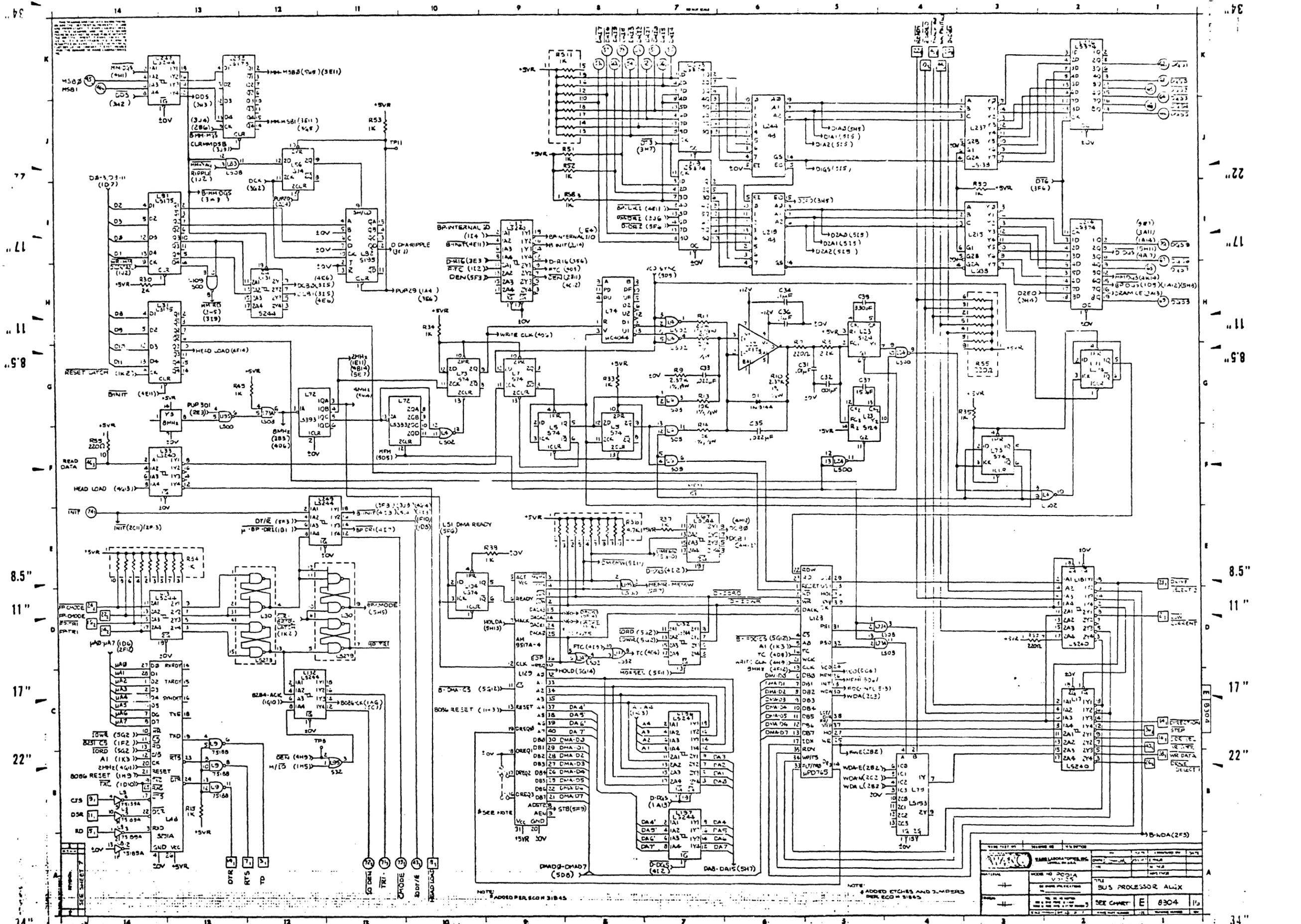


WANG		REV	DATE	DESIGNED BY	DRAWN BY
DATE	APPROVED BY	CPU BOARD			
NO.	REV.	DATE	BY	CHKD.	APP'D.
WANG		5303		E 5303	

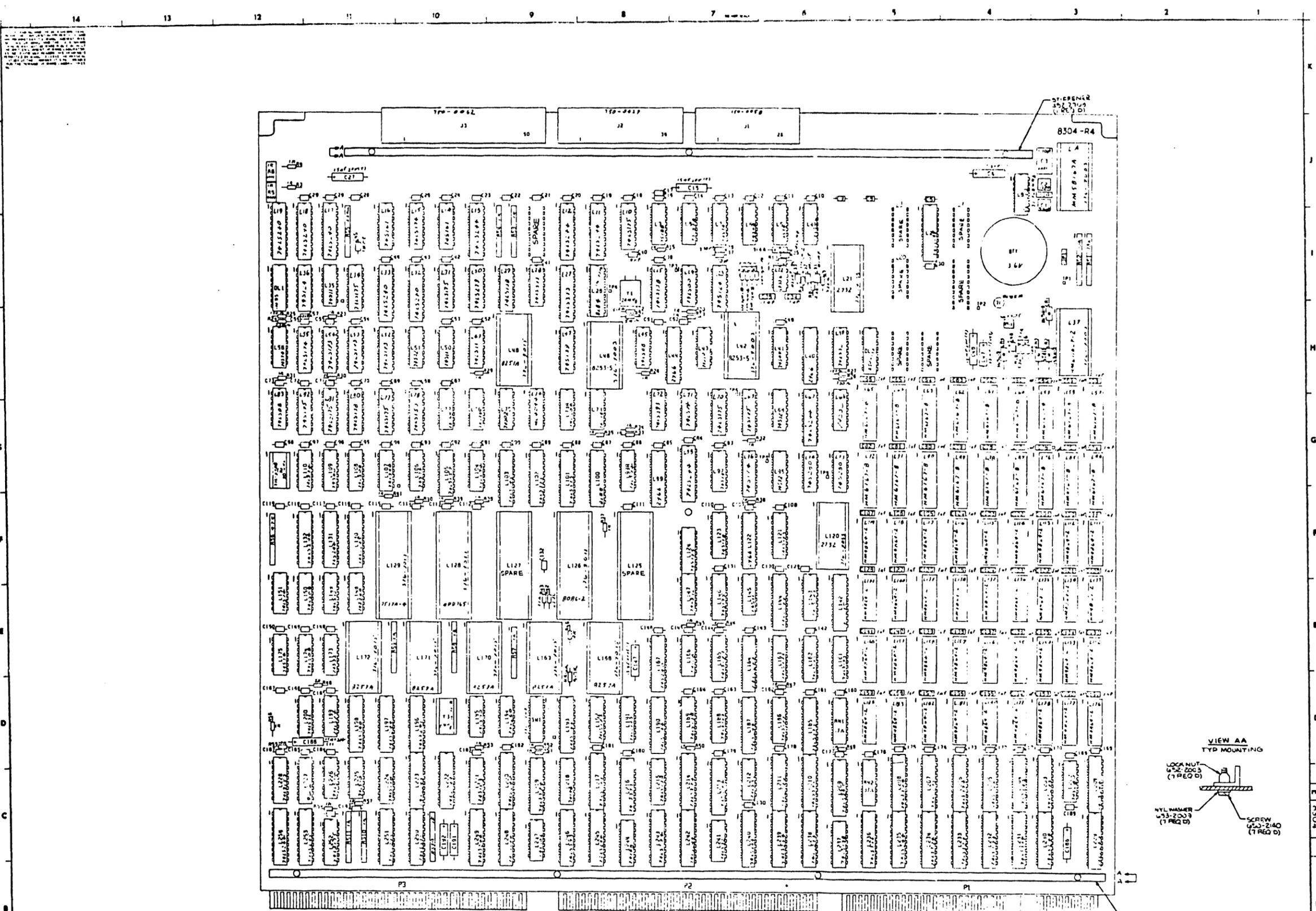


SHEET 7
 14 13 12 11 10 9 8 7 6 5 4 3 2 1

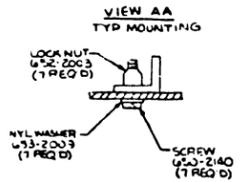
WANG <small>WANG LABORATORIES</small>		<small>REV. 10/68</small> <small>10/68</small>
<small>DATE</small> <small>BY</small>	<small>PROJECT NO.</small> <small>REV. NO.</small>	<small>REV. DATE</small> <small>BY</small>
<small>DESIGNER</small> <small>CHECKED</small>	<small>SEC CHART</small> E 8303	<small>REV. NO.</small> <small>DATE</small>



WACO		ELECTRONIC OPERATIONS	
MODEL NO 8304A	V. 1.1	TITLE	BUS PROCESSOR ALIX
SEE CHART	E	8304	1/2



20	209	L21	L37	L42,46	L49	210-209-377 or 378						
8304-A	8304	378-804	377-0423	377-0409	377-0352	L122	L125	L129	L168-172	BT1	L4	L120
8304-1A	8304-1	378-804-R3	377-0428	377-0446	377-0352	377-0437	377-0426	377-0411	377-0404	626-1025	377-0456	378-804-R4



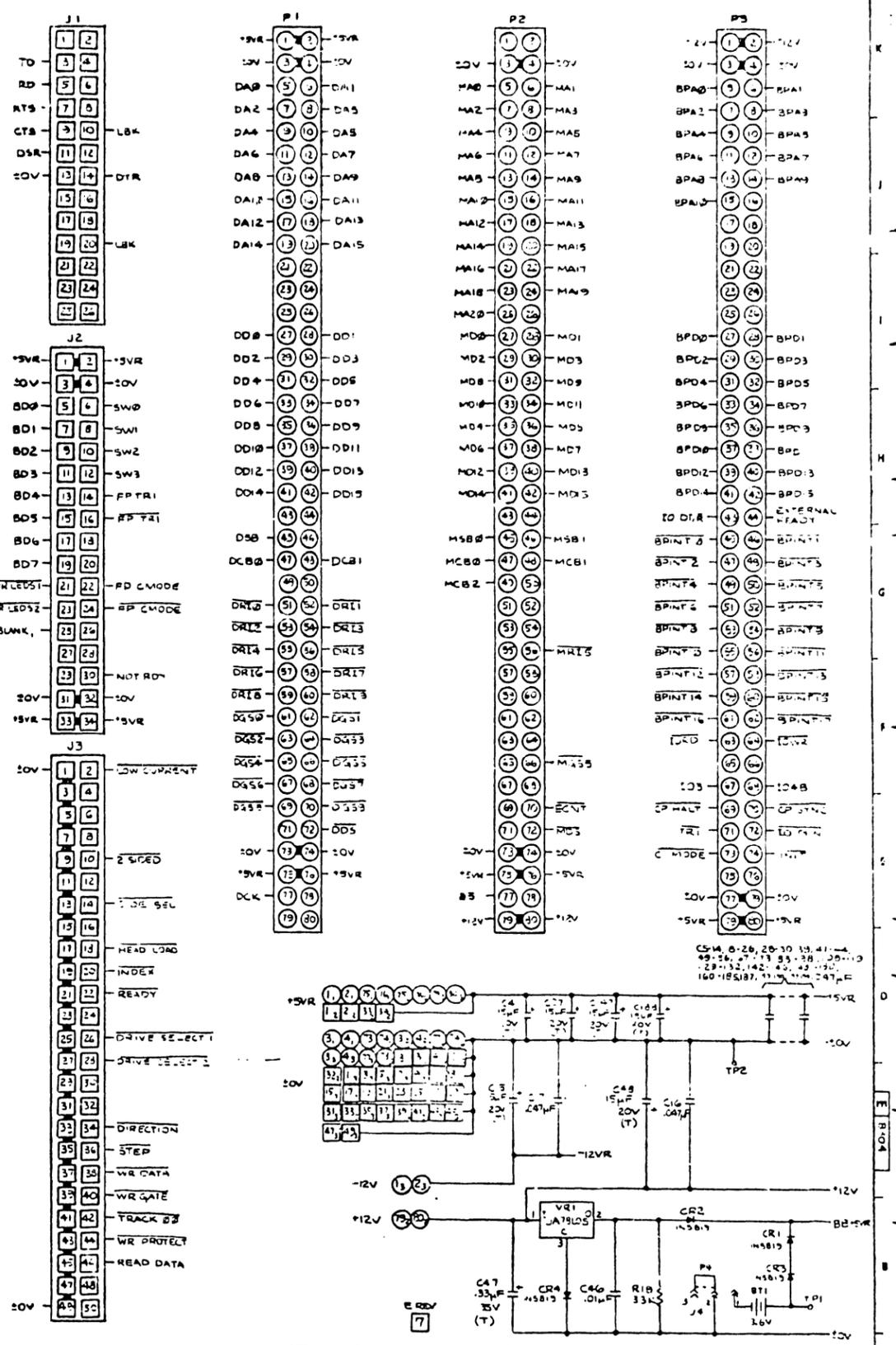
WANG		BY	CHK	APPROVED BY	DATE
PROJECT	8304	DATE	11/20/64	BY	
DESCRIPTION	BUS PROCESSOR ALGX.				
SEE CHART	E	8304	16		

SEE SHEET 7

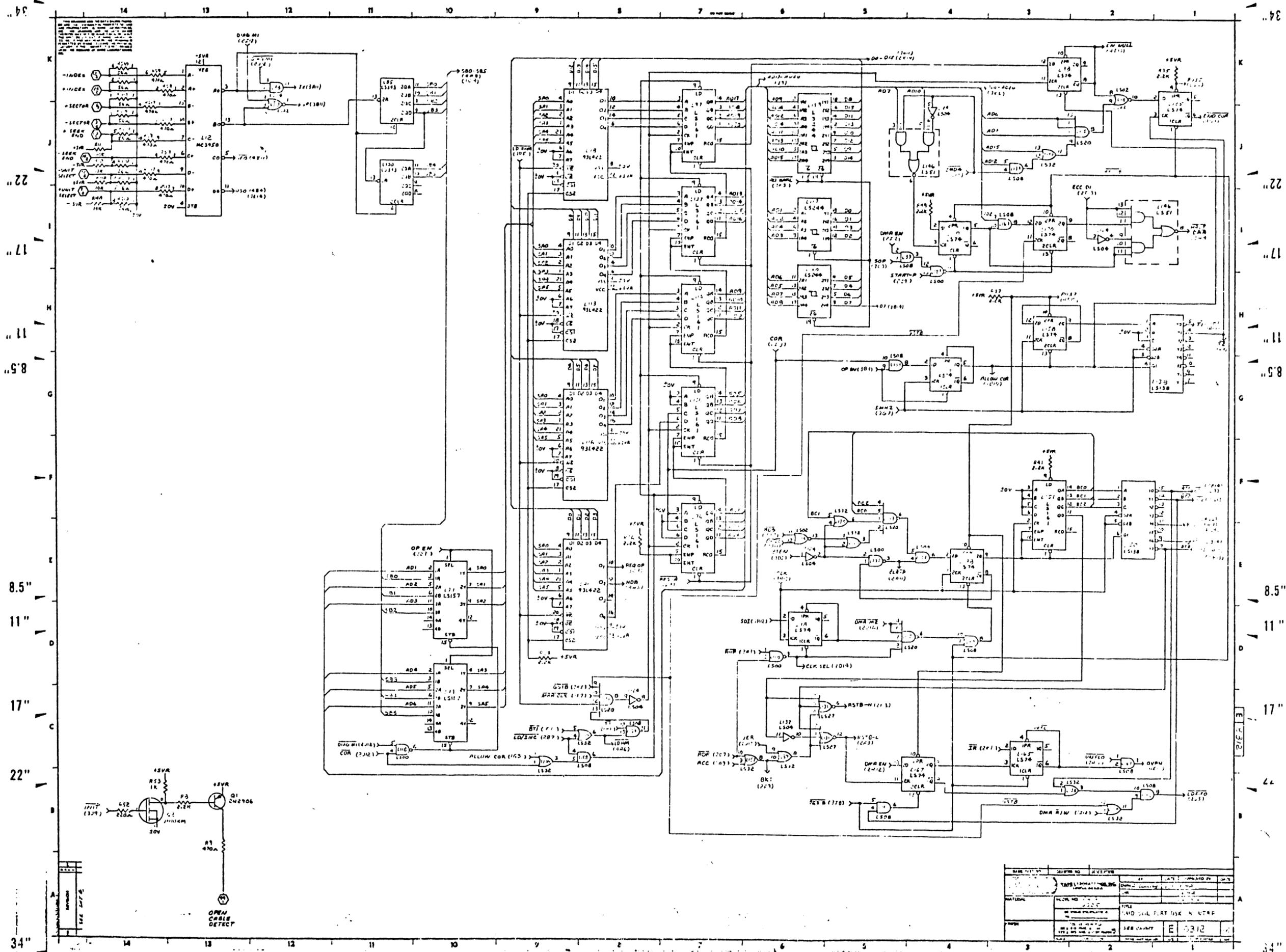
LOCATION	TYPE	W/L PART NO
L2, 105, 130, 142, 143, 104, 207, 209, 250, 251, 253	74LS04	376-0289
L4, 247	74LS02	376-0203
L5, 7, 12, 13, 76, 37, 106, 115	74LS74	376-0202
L6, 17, 186	74LS24	376-0200
L9	74LS14	376-0244
L3	74LS13	376-0345
L11, 12, 13, 93, 132, 144, 146, 187, 190, 191, 197, 201, 205, 211, 213, 217, 222, 223, 229, 230, 235, 239, 239, 240, 242, 245, 249, 249, 254, 267	74LS244	376-0219
L14, 16	74LS01	376-0279
L15, 35	74LS174	376-0193
L17, 18, 19, 32, 33, 193, 220	74LS240	376-0237
L21, 22	2732	476-0187
L22	LF396	476-0247
L27, 36	74LS124	376-0213
L7, 107, 149	74LS00	376-0236
L25, 29, 30, 137, 215, 224, 237	74LS119	376-0234
L26	8294	376-0433
L27, 101, 102, 185, 20, 216, 216	74LS173	376-0310
L29, 72	74LS393	376-0307
L30	74LS019	376-0316
L35, 50, 175	74LS11	376-0211
L37	MM5310A	SEE CHART
LA	MM5310A	SEE CHART
L39, 147, 147, 200, 212, 241	74LS32	376-0211
L40, 44, 39, 122	2966	376-0255
L41, 107	74LS00	376-0236
L42, 42	2732	476-0187
L43	74LS13	376-0345
L45, 81, 106, 50, 174, 147	74LS09	376-0103
L47	74LS13	376-0345
L48	3251A	SEE CHART
L49	74LS11	376-0211
L51, 69, 35, 173, 140	74LS32	376-0211
L52, 33, 34, 21, 143, 161, 162, 163, 165, 156, 139, 181, 132	74LS33	376-0210
L57, 65, 34, 92	MM5310A	376-0313
L131	74LS244	376-0219
L67, 92	74LS13	376-0345
L71, 104, 110, 51, 194, 224, 92A	74LS174	376-0193
L73	74LS13	376-0345
L75	74LS13	376-0345
L76, 227	74LS13	376-0345
L83, 94, 143, 222	74LS13	376-0345
L100	2294	376-0240
L93	74LS174	376-0193
L98	74LS13	376-0345
L108, 118, 33, 141, 152, 150, 176, 34	MM5310A	376-0313
L123	74LS13	376-0345
L124, 146	74LS13	376-0345
L126	3024	SEE CHART
L128	74LS13	376-0345
L129	3517A	SEE CHART
L167	74LS13	376-0345
L168, 172	9259A	SEE CHART
L194	74LS13	376-0345
L196	74LS13	376-0345
L226, 228, 24, 209, 231, 232, 233, 234, 234, 243	74LS374	376-0286
L233, 244	74LS13	376-0345
L221	74LS13	376-0345
L219	74LS13	376-0345
L217	9302	376-0244

LOCATION	TYPE	W/L PART NO
L2, 105, 130, 142, 143, 104, 207, 209, 250, 251, 253	74LS04	376-0289
L4, 247	74LS02	376-0203
L5, 7, 12, 13, 76, 37, 106, 115	74LS74	376-0202
L6, 17, 186	74LS24	376-0200
L9	74LS14	376-0244
L3	74LS13	376-0345
L11, 12, 13, 93, 132, 144, 146, 187, 190, 191, 197, 201, 205, 211, 213, 217, 222, 223, 229, 230, 235, 239, 239, 240, 242, 245, 249, 249, 254, 267	74LS244	376-0219
L14, 16	74LS01	376-0279
L15, 35	74LS174	376-0193
L17, 18, 19, 32, 33, 193, 220	74LS240	376-0237
L21, 22	2732	476-0187
L22	LF396	476-0247
L27, 36	74LS124	376-0213
L7, 107, 149	74LS00	376-0236
L25, 29, 30, 137, 215, 224, 237	74LS119	376-0234
L26	8294	376-0433
L27, 101, 102, 185, 20, 216, 216	74LS173	376-0310
L29, 72	74LS393	376-0307
L30	74LS019	376-0316
L35, 50, 175	74LS11	376-0211
L37	MM5310A	SEE CHART
LA	MM5310A	SEE CHART
L39, 147, 147, 200, 212, 241	74LS32	376-0211
L40, 44, 39, 122	2966	376-0255
L41, 107	74LS00	376-0236
L42, 42	2732	476-0187
L43	74LS13	376-0345
L45, 81, 106, 50, 174, 147	74LS09	376-0103
L47	74LS13	376-0345
L48	3251A	SEE CHART
L49	74LS11	376-0211
L51, 69, 35, 173, 140	74LS32	376-0211
L52, 33, 34, 21, 143, 161, 162, 163, 165, 156, 139, 181, 132	74LS33	376-0210
L57, 65, 34, 92	MM5310A	376-0313
L131	74LS244	376-0219
L67, 92	74LS13	376-0345
L71, 104, 110, 51, 194, 224, 92A	74LS174	376-0193
L73	74LS13	376-0345
L75	74LS13	376-0345
L76, 227	74LS13	376-0345
L83, 94, 143, 222	74LS13	376-0345
L100	2294	376-0240
L93	74LS174	376-0193
L98	74LS13	376-0345
L108, 118, 33, 141, 152, 150, 176, 34	MM5310A	376-0313
L123	74LS13	376-0345
L124, 146	74LS13	376-0345
L126	3024	SEE CHART
L128	74LS13	376-0345
L129	3517A	SEE CHART
L167	74LS13	376-0345
L168, 172	9259A	SEE CHART
L194	74LS13	376-0345
L196	74LS13	376-0345
L226, 228, 24, 209, 231, 232, 233, 234, 234, 243	74LS374	376-0286
L233, 244	74LS13	376-0345
L221	74LS13	376-0345
L219	74LS13	376-0345
L217	9302	376-0244

PHONIC	COORD
TO	4A12
RD	4K4
ATS	4A11
CTS	4A13
DSR	4A14
SOV	4A15
SWR	4A16
SWR	4A17
SWR	4A18
SWR	4A19
SWR	4A20
SWR	4A21
SWR	4A22
SWR	4A23
SWR	4A24
SWR	4A25
SWR	4A26
SWR	4A27
SWR	4A28
SWR	4A29
SWR	4A30
SWR	4A31
SWR	4A32
SWR	4A33
SWR	4A34
SWR	4A35
SWR	4A36
SWR	4A37
SWR	4A38
SWR	4A39
SWR	4A40
SWR	4A41
SWR	4A42
SWR	4A43
SWR	4A44
SWR	4A45
SWR	4A46
SWR	4A47
SWR	4A48
SWR	4A49
SWR	4A50
SWR	4A51
SWR	4A52
SWR	4A53
SWR	4A54
SWR	4A55
SWR	4A56
SWR	4A57
SWR	4A58
SWR	4A59
SWR	4A60
SWR	4A61
SWR	4A62
SWR	4A63
SWR	4A64
SWR	4A65
SWR	4A66
SWR	4A67
SWR	4A68
SWR	4A69
SWR	4A70
SWR	4A71
SWR	4A72
SWR	4A73
SWR	4A74
SWR	4A75
SWR	4A76
SWR	4A77
SWR	4A78
SWR	4A79
SWR	4A80
SWR	4A81
SWR	4A82
SWR	4A83
SWR	4A84
SWR	4A85
SWR	4A86
SWR	4A87
SWR	4A88
SWR	4A89
SWR	4A90
SWR	4A91
SWR	4A92
SWR	4A93
SWR	4A94
SWR	4A95
SWR	4A96
SWR	4A97
SWR	4A98
SWR	4A99
SWR	4A100



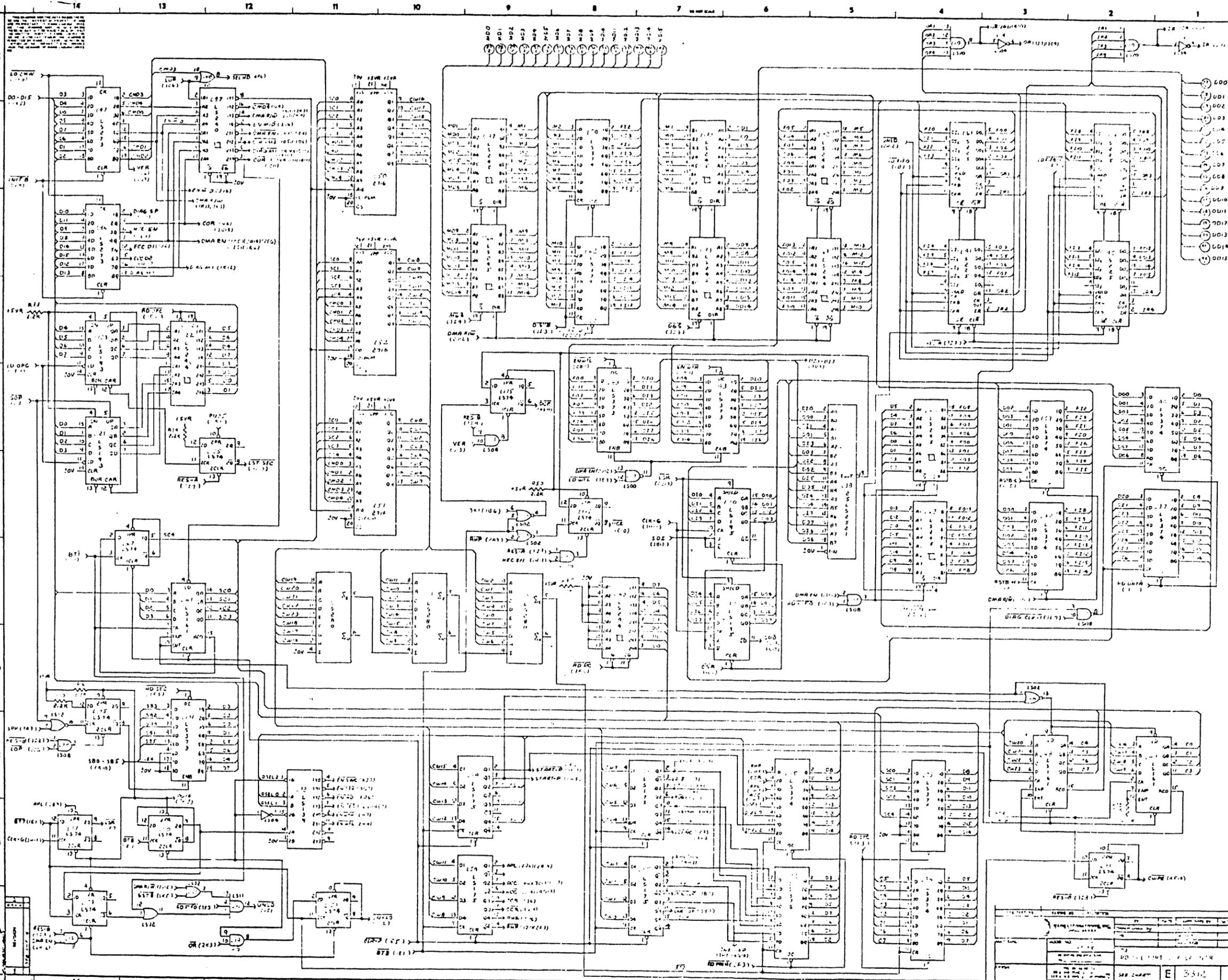
LOCATION	TYPE	W/L PART NO
L15, 105, 130, 142, 143, 104, 207, 209, 250, 251, 253	74LS04	376-0289
L4, 247	74LS02	376-0203
L5, 7, 12, 13, 76, 37, 106, 115	74LS74	376-0202
L6, 17, 186	74LS24	376-0200
L9	74LS14	376-0244
L3	74LS13	376-0345
L11, 12, 13, 93, 132, 144, 146, 187, 190, 191, 197, 201, 205, 211, 213, 217, 222, 223, 229, 230, 235, 239, 239, 240, 242, 245, 249, 249, 254, 267	74LS244	376-0219
L14, 16	74LS01	376-0279
L15, 35	74LS174	376-0193
L17, 18, 19, 32, 33, 193, 220	74LS240	376-0237
L21, 22	2732	476-0187
L22	LF396	476-0247
L27, 36	74LS124	376-0213
L7, 107, 149	74LS00	376-0236
L25, 29, 30, 137, 215, 224, 237	74LS119	376-0234
L26	8294	376-0433
L27, 101, 102, 185, 20, 216, 216	74LS173	376-0310
L29, 72	74LS393	376-0307
L30	74LS019	376-0316
L35, 50, 175	74LS11	376-0211
L37	MM5310A	SEE CHART
LA	MM5310A	SEE CHART
L39, 147, 147, 200, 212, 241	74LS32	376-0211
L40, 44, 39, 122	2966	376-0255
L41, 107	74LS00	376-0236
L42, 42	2732	476-0187
L43	74LS13	376-0345
L45, 81, 106, 50, 174, 147	74LS09	376-0103
L47	74LS13	376-0345
L48	3251A	SEE CHART
L49	74LS11	376-0211
L51, 69, 35, 173, 140	74LS32	376-0211
L52, 33, 34, 21, 143, 161, 162, 163, 165, 156, 139, 181, 132	74LS33	376-0210
L57, 65, 34, 92	MM5310A	376-0313
L131	74LS244	376-0219
L67, 92	74LS13	376-0345
L71, 104, 110, 51, 194, 224, 92A	74LS174	376-0193
L73	74LS13	376-0345
L75	74LS13	376-0345
L76, 227	74LS13	376-0345
L83, 94, 143, 222	74LS13	376-0345
L100	2294	376-0240
L93	74LS174	376-0193
L98	74LS13	376-0345
L108, 118, 33, 141, 152, 150, 176, 34	MM5310A	376-0313
L123	74LS13	376-0345
L124, 146	74LS13	376-0345
L126	3024	SEE CHART
L128	74LS13	376-0345
L129	3517A	SEE CHART
L167	74LS13	376-0345
L168, 172	9259A	SEE CHART
L194	74LS13	376-0345
L196	74LS13	376-0345
L226, 228, 24, 209, 231, 232, 233, 234, 234, 243	74LS374	376-0286
L233, 244	74LS13	376-0345
L221	74LS13	376-0345
L219	74LS13	376-0345
L217	9302	376-0244



REV	DATE	BY	CHKD	APP'D	DESCRIPTION
1					INITIAL DESIGN
2					REVISIONS
3					REVISIONS
4					REVISIONS
5					REVISIONS
6					REVISIONS
7					REVISIONS
8					REVISIONS
9					REVISIONS
10					REVISIONS
11					REVISIONS
12					REVISIONS
13					REVISIONS
14					REVISIONS

34" 22" 17" 11" 8.5" 11" 17" 22" 34"

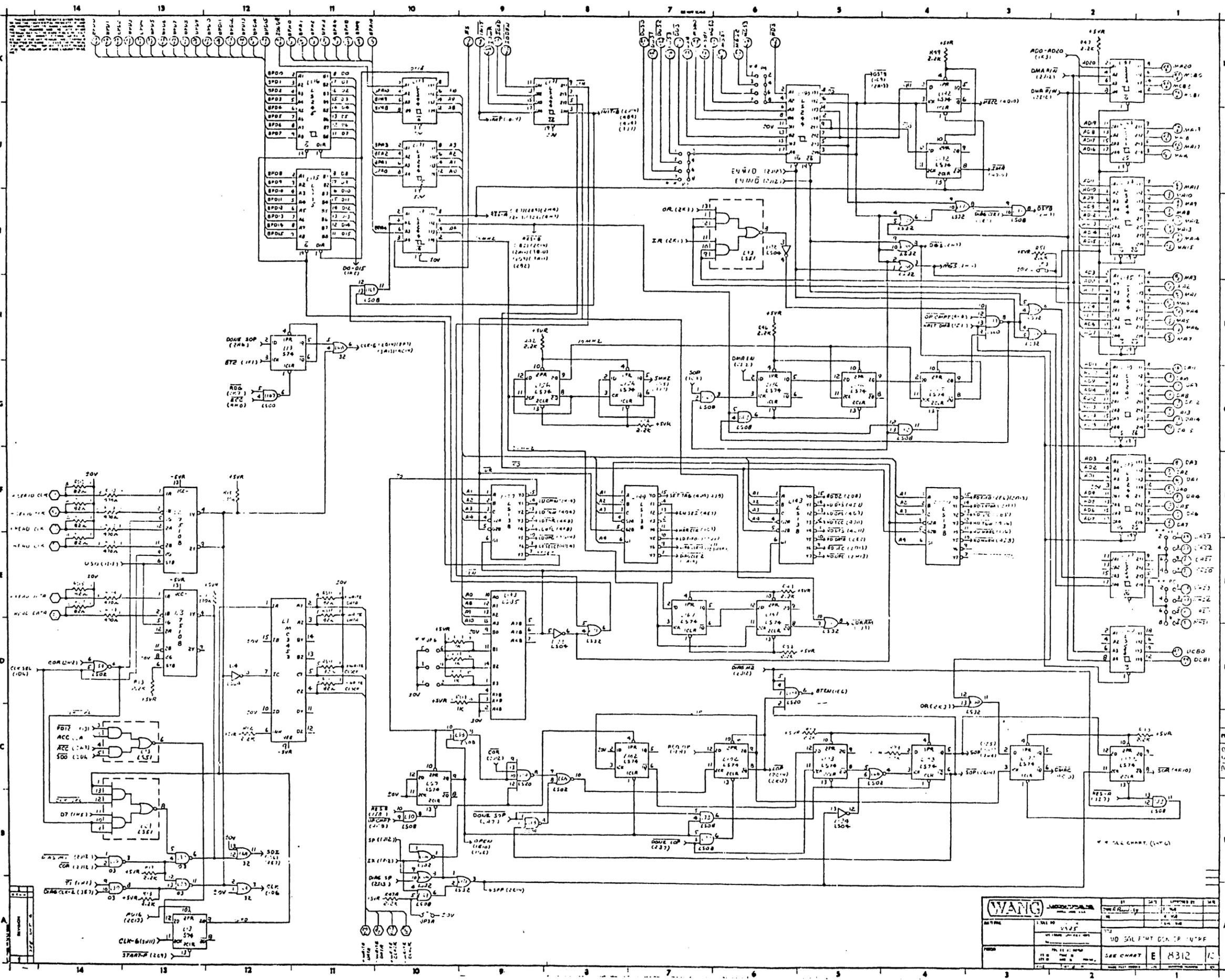
34" 22" 17" 11" 8.5" 11" 17" 22" 34"



10V 15V 20V 25V 30V 35V 40V 45V 50V 55V 60V 65V 70V 75V 80V 85V 90V 95V 100V
 10V 15V 20V 25V 30V 35V 40V 45V 50V 55V 60V 65V 70V 75V 80V 85V 90V 95V 100V

DATE	DESIGNED BY	CHECKED BY
1958	J. E. B.	J. E. B.
NO.	REV.	BY
100	1	J. E. B.

34"
22"
17"
11"
8.5"
8.5"
11"
17"
22"
34"



34"
22"
17"
11"
8.5"
8.5"
11"
17"
22"
34"

WANG		NO. 11	REV. 1	DATE	11/11/60
PROJECT	100-1000	NO. 11	REV. 1	DATE	11/11/60
DESCRIPTION	100-1000	NO. 11	REV. 1	DATE	11/11/60
DESIGNED BY	W. J. B.	NO. 11	REV. 1	DATE	11/11/60
CHECKED BY	W. J. B.	NO. 11	REV. 1	DATE	11/11/60
APPROVED BY	W. J. B.	NO. 11	REV. 1	DATE	11/11/60
REVISIONS					
NO.	DESCRIPTION	DATE	BY	APP.	
1	INITIAL DESIGN	11/11/60	W. J. B.		
2	REVISION	11/11/60	W. J. B.		
3	REVISION	11/11/60	W. J. B.		
4	REVISION	11/11/60	W. J. B.		
5	REVISION	11/11/60	W. J. B.		
6	REVISION	11/11/60	W. J. B.		
7	REVISION	11/11/60	W. J. B.		
8	REVISION	11/11/60	W. J. B.		
9	REVISION	11/11/60	W. J. B.		
10	REVISION	11/11/60	W. J. B.		
11	REVISION	11/11/60	W. J. B.		
12	REVISION	11/11/60	W. J. B.		
13	REVISION	11/11/60	W. J. B.		
14	REVISION	11/11/60	W. J. B.		
15	REVISION	11/11/60	W. J. B.		
16	REVISION	11/11/60	W. J. B.		
17	REVISION	11/11/60	W. J. B.		
18	REVISION	11/11/60	W. J. B.		
19	REVISION	11/11/60	W. J. B.		
20	REVISION	11/11/60	W. J. B.		
21	REVISION	11/11/60	W. J. B.		
22	REVISION	11/11/60	W. J. B.		
23	REVISION	11/11/60	W. J. B.		
24	REVISION	11/11/60	W. J. B.		
25	REVISION	11/11/60	W. J. B.		
26	REVISION	11/11/60	W. J. B.		
27	REVISION	11/11/60	W. J. B.		
28	REVISION	11/11/60	W. J. B.		
29	REVISION	11/11/60	W. J. B.		
30	REVISION	11/11/60	W. J. B.		
31	REVISION	11/11/60	W. J. B.		
32	REVISION	11/11/60	W. J. B.		
33	REVISION	11/11/60	W. J. B.		
34	REVISION	11/11/60	W. J. B.		
35	REVISION	11/11/60	W. J. B.		
36	REVISION	11/11/60	W. J. B.		
37	REVISION	11/11/60	W. J. B.		
38	REVISION	11/11/60	W. J. B.		
39	REVISION	11/11/60	W. J. B.		
40	REVISION	11/11/60	W. J. B.		
41	REVISION	11/11/60	W. J. B.		
42	REVISION	11/11/60	W. J. B.		
43	REVISION	11/11/60	W. J. B.		
44	REVISION	11/11/60	W. J. B.		
45	REVISION	11/11/60	W. J. B.		
46	REVISION	11/11/60	W. J. B.		
47	REVISION	11/11/60	W. J. B.		
48	REVISION	11/11/60	W. J. B.		
49	REVISION	11/11/60	W. J. B.		
50	REVISION	11/11/60	W. J. B.		
51	REVISION	11/11/60	W. J. B.		
52	REVISION	11/11/60	W. J. B.		
53	REVISION	11/11/60	W. J. B.		
54	REVISION	11/11/60	W. J. B.		
55	REVISION	11/11/60	W. J. B.		
56	REVISION	11/11/60	W. J. B.		
57	REVISION	11/11/60	W. J. B.		
58	REVISION	11/11/60	W. J. B.		
59	REVISION	11/11/60	W. J. B.		
60	REVISION	11/11/60	W. J. B.		
61	REVISION	11/11/60	W. J. B.		
62	REVISION	11/11/60	W. J. B.		
63	REVISION	11/11/60	W. J. B.		
64	REVISION	11/11/60	W. J. B.		
65	REVISION	11/11/60	W. J. B.		
66	REVISION	11/11/60	W. J. B.		
67	REVISION	11/11/60	W. J. B.		
68	REVISION	11/11/60	W. J. B.		
69	REVISION	11/11/60	W. J. B.		
70	REVISION	11/11/60	W. J. B.		
71	REVISION	11/11/60	W. J. B.		
72	REVISION	11/11/60	W. J. B.		
73	REVISION	11/11/60	W. J. B.		
74	REVISION	11/11/60	W. J. B.		
75	REVISION	11/11/60	W. J. B.		
76	REVISION	11/11/60	W. J. B.		
77	REVISION	11/11/60	W. J. B.		
78	REVISION	11/11/60	W. J. B.		
79	REVISION	11/11/60	W. J. B.		
80	REVISION	11/11/60	W. J. B.		
81	REVISION	11/11/60	W. J. B.		
82	REVISION	11/11/60	W. J. B.		
83	REVISION	11/11/60	W. J. B.		
84	REVISION	11/11/60	W. J. B.		
85	REVISION	11/11/60	W. J. B.		
86	REVISION	11/11/60	W. J. B.		
87	REVISION	11/11/60	W. J. B.		
88	REVISION	11/11/60	W. J. B.		
89	REVISION	11/11/60	W. J. B.		
90	REVISION	11/11/60	W. J. B.		
91	REVISION	11/11/60	W. J. B.		
92	REVISION	11/11/60	W. J. B.		
93	REVISION	11/11/60	W. J. B.		
94	REVISION	11/11/60	W. J. B.		
95	REVISION	11/11/60	W. J. B.		
96	REVISION	11/11/60	W. J. B.		
97	REVISION	11/11/60	W. J. B.		
98	REVISION	11/11/60	W. J. B.		
99	REVISION	11/11/60	W. J. B.		
100	REVISION	11/11/60	W. J. B.		

WANG LABORATORIES, INC. ELECTRICAL PARTS LIST SHEET 7 OF 8 PAGE 1

L.D.C.

BOARD NO. & TITLE: C8312 SMD SGL PORT DR INTR
 SCHEMATIC REVISION (S): 12 SHEET OF PAGE 2

REF. DES. WANG PART NO. VALUE/TYPE DESCRIPTION DRAWING NO. QTY.

C1 - C186	302-1966-	.047U	CAP CERAMIC MCMO AXIAL .40 -20% 50V 25U	186
C187 - C191	308-4022-	15U	CAP TANT AXIAL 12% 20V	5
L170	328-1503-	SWITCH	SLIDE SPST 0 PCS	1
R52	330-2023-	220.000	RES FIXED 1/4W 5%	1
R18	330-2034-	330.000	RES FIXED 1/4W 5%	2
R17				
R9	330-2048-	470.620	RES FIXED 1/4W 5%	1
R53	330-3011-	1K	RES FIXED 1/4W 5%	1
R7 - R8	330-3023-	2.2K	RES FIXED 1/4W 5%	10
R12 - R14				
R16				
R18 - R22				
R24 - R30				
R32 - R51				
R1 - R4	330-4011-	10K	RES FIXED 1/4W 5%	10
R10 - R11				
RA14				
RB14				
RS1	333-0802-	96.000N	RESISTOR NETWORK TYPE: 10/09/C/SS	7
RS3 - RS4				
RS5 - RS8				
RS10				
RS2	333-0803-	470.000N	RESISTOR NETWORK TYPE: 10/05/F/SS	7
RS5				
RS9				
RS13 - RS14				
RS16 - RS17				
RS11 - RS12	333-0804-	82.000N	RESISTOR NETWORK TYPE: 10/09/C/SS	3
RS15				
RS18 - RS20	333-0837-	1.000N	RESISTOR NETWORK TYPE: 10/09/C/SS	3
J1	350-0057-	40 CCNT	CGNH PC HEADER DUAL ROW .100 8/A W/LOCK/EJECT	1
J2	350-0054-	26 CCNT	CGNH PC HEADER DUAL ROW .100 8/A W/LOCK/EJECT	1
JP1 - JP2	350-0212-	0 CCNT	CGNH PC HEADER DUAL ROW .100	4
JP4 - JP5				
Q2 - Q39	350-4506-	2 CCNT	CGNH SHUNT .100 CTR	8
Q1	2N7006A		TSYR NPN TO-18 400MA 60V 150MA	1
Q2	375-1115-	VR100M	FET N-CH TO-237 1W 60V .5A	1

BOARD NO. & TITLE: C8312 SMD SGL PORT DR INTR
 SCHEMATIC REVISION (S): 12 SHEET OF PAGE 2

REF. DES. WANG PART NO. VALUE/TYPE DESCRIPTION DRAWING NO. QTY.

L60	375-0004-	128-000	TRANSIPAD TO-18 (SMALL)	1
L30	376-0028-	7403	IC QUAD 2-INPUT NAND GATE O/C OUTPUTS	1
L94	376-0081-	7408	IC QUAD 2-INPUT AND GATE	1
L1 - L3	376-0009-	75108	IC QUAD LINE RECEIVER 16 PIN DIP	2
L70	376-0092-	7425	IC QUAD 4-INPUT NOR GATE	1
L126				
L68	376-0093-	7432	IC QUAD 2-INPUT POSITIVE OR GATE	2
L33	376-0153-	74LS08	IC QUAD 2-INPUT AND GATE	8
L80				
L30				
L139				
L139				
L147				
L162				
L169				
L67	376-0155-	74LS74	IC QUAD D-TYPE POSITIVE EDGE TRIG FLIP-FLOP	20
L77				
L91				
L90				
L102 - L103				
L105				
L110				
L125				
L154				
L154				
L154				
L158				
L167				
L165				
L167				
L176				
L172				
L175				
L186				
L192				
L15	376-0160-	74LS175	IC QUAD D-TYPE FLIP-FLOP	8
L54				
L71				
L74				
L111				
L134 - L135				
L145				
L16	376-0180-	74LS04	IC HEX INVERTER	3
L124				
L132				
L13	376-0202-	74574	IC DUAL D-TYPE POS EDGE TRIGRD F/F W/PRESET/C	2
L108				
L107	376-0207-	74LS00	IC QUAD 2-INPUT NAND GATE	2
L110				
L58	376-0208-	74LS02	IC QUAD 2-INPUT NOR GATE	3
L66				

BOARD NO. & TITLE: C8312 SMD SGL PORT DR INTR
 SCHEMATIC REVISION (S): 12 SHEET OF PAGE 3

REF. DES. WANG PART NO. VALUE/TYPE DESCRIPTION DRAWING NO. QTY.

L108				
L10	376-0210-	74LS20	IC DUAL 4-INPUT NAND GATE	5
L104				
L115				
L141				
L149				
L89	376-0211-	74LS32	IC QUAD 2-INPUT OR GATE	8
L106				
L130				
L140				
L157				
L168				
L171				
L180				
L29	376-0213-	74LS51	IC DUAL 2-WIDE 2-INPUT AND-OR-INVERT GATE	3
L93				
L146				
L114	376-0214-	74LS151	IC 1-OF-8 DATA SEL/MUX	1
L79	376-0216-	74LS157	IC QUAD 2-INPUT MULTIPLEXER	2
L99				
L193	376-0218-	74LS85	IC 4-BIT MAGNITUDE COMPARATOR	1
L22	376-0220-	74LS193	IC UP/DOWN BINARY COUNTER	4
L25				
L171				
L123				
L101	376-0225-	74LS11	IC TRIPLE 3-INPUT AND GATE	1
L82	376-0226-	74LS139	IC 2-TO-4-LINE DECODER/MULTIPLEXER	1
L86	376-0231-	74LS86	IC QUAD 2-INPUT EXCLUSIVE-OR GATE	4
L95				
L112				
L155				
L48 - L49	376-0233-	74LS161	IC SYNCHRONOUS 4-BIT BINARY COUNTER W/DIRECT CLEAR	8
L69				
L96 - L97				
L136 - L137				
L151				
LA128	376-0234-	74LS164	IC SERIAL-IN PARALLEL-OUT SHIFT REGISTER	1
L31 - L32	376-0242-	74LS280	IC 9-BIT CDD/EVEN PARITY GENERATOR/CHECKER	3
L53				
L128	376-0245-	74LS27	IC TRIPLE 3-INPUT NOR GATE	2
L131				
L20	376-0248-	74LS198	IC 4-BIT UNIVERSAL SHIFT REGISTER	2
L39				
L1	376-0274-	3483	IC QUAD LINE DRIVER 16 PIN DIP	6
L6 - L9				
L11				
L4 - L5	376-0275-	3480	IC QUAD LINE RECEIVER 16 PIN DIP	3
L12				
L133	376-0276-	74LS133	IC 13-INPUT NAND GATE	2
L173				

BOARD NO. & TITLE: C8312 SMD SGL PORT DR INTR
 SCHEMATIC REVISION (S): 12 SHEET OF PAGE 4

REF. DES. WANG PART NO. VALUE/TYPE DESCRIPTION DRAWING NO. QTY.

L60	376-0285-	74LS245	IC OCTAL BUS TRANSCEIVER TRI-STATE OUTPUTS	8
L63				
L166				
L176				
L182 - L183				
L187				
L195				
L24	376-0286-	74LS374	IC OCTAL D-TYPE FLIP-FLOP TRI-STATE	13
L27				
L37				
L40				
L42				
L46				
L57				
L59				
L62				
L72 - L73				
L75				
L80				
L19	376-0288-	74LS244	IC OCTAL BUFFER/LINE DRIVER W/TRI STATE	23
L23				
L26				
L28				
L64 - L65				
L82				
L84				
L117				
L122				
L159 - L160				
L163 - L164				
L179 - L180				
L184 - L185				
L189 - L191				
L194				
L139	376-0294-	74LS138	IC 3-LINE TO 8-LINE DECODER/MULTIPLEXER	6
L127				
L130				
L143 - L144				
L150				
L87	376-0297-	74LS240	IC OCTAL BUFFER/LINE DRIVER/LINE RECEIVER	8
L110				
L129				
L133				
L132				
L174				
L177				
L196				
L18	376-0302-	74LS273	IC OCTAL D-TYPE FLIP-FLOP W/CLEAR	6
L14				

MATERIAL	WANG LABORATORIES, INC.	BY	DATE	APPROVED BY	LATE
	OWN				
FINISH	WANG LABORATORIES, INC.	CHECK			
	OWN				
TITLE		SMD SGL PORT DR INTRF			
SERIAL NO.		8312			
REV. DATE		12			
REV. DATE		12			

17"
11"
8.5"
11"
8.5"
17"

17"
11"
8.5"
11"
8.5"
17"

17"

11"

8.5"

8.5"

11"

17"

BOARD NO. & TITLE: C8312 SHD SGL PORT DR INTR SCHEMATIC REVISION (S): 12 SHEET 8 OF 8 PAGE 5

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L36					
L47					
L55					
L86					
L85	376-0307-	74LS393	IC DUAL 4-BIT BINARY COUNTER		2
L100					
L43	376-0310-	74LS373	IC OCTAL D-TYPE LATCH TRI-STATE OUTPUTS		3
L83					
L101					
L16 - L17	376-0317-	25LS2521	IC 8-BIT COMPARATOR		4
L38					
L142	376-0318-	74276	IC QUAD J-K FLIP-FLOP		1
L41	376-0323-	745225	IC 16 X 8 BI POLAR ASYNCH FIFO		4
L44 - L45					
L61					
01 - 02	375-9093-	SMT 24	IC SOCKET 24 PIN DIL PC MOUNT		3
04 - 07	375-9013-	SMT 22	IC SOCKET 22 PIN DIL PC MOUNT		4
ST72	452-2707-	STIFFNER	STIFFNER LOWER		1
ST1	452-2708-	STIFFNER	STIFFNER UPPER		1
09	463-1238-	EXTRACTOR	EXTRACTORS		2
017					
00	510-8312-	PCB	PCB		1
010	403-5007-	24AWG	WIRE SOLID UNINSULATED TINNED COPPER ***QTY A/R***		1
018 - 024	650-2100-	SCREW	SCREW 4-40 X 5/16		7
025 - 031	652-2000-	NUT	NUT 4-40		7
3P6 - 3P6	654-10104-	1 CONT	CONN PC HEADER SINGLE ROW .100		3

BOARD NO. & TITLE: C8312 SHD SGL PORT DR INTR SCHEMATIC REVISION (S): 12 SHEET OF PAGE 6

WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
(CAUTION - THE FOLLOWING PARTS/COMMENTS CONTAINED IN THIS B.O.M. ARE NOT RECOMMENDED FOR NEW DESIGNS)				
376-0201-	74574	IC DUAL D-TYPE BUS EGGLE TUTOR P/P W/PRESET/IC		2
376-0274-	3451	IC QUAD LINE DRIVER 16 PIN DIP		6
376-0318-	74276	IC QUAD J-K FLIP FLOP		1
376-0323-	745225	IC 16 X 8 BI POLAR ASYNCH FIFO		4

*** END OF REPORT ***

WANG LABORATORIES, INC.
 ***** ELECTRICAL PARTS LIST ***** SHEET OF PAGE 1

(FINAL BILL OF MATERIALS)

BOARD NO. & TITLE: C8312 SHD SGL PORT DR INTR
 ASSEMBLY LEVEL & TITLE: 210 8312-A
 ARTWORK REVISION (R): 04
 ASSEMBLY REVISION (A): 02
 SCHEMATIC REVISION (S): 12
 OUR DR MOST RECENT ECD: 32302

CREATED: 04/12/81 13:02
 LAST MODIFIED: 08/14/84 08:50 BY: LAB
 EDITING REVISION: 7

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
01	209-8312		PCA		1
L78	377-0384-	93L422	IC 256 X 4 BIPOLAR RAM 60NS 1 PAR 22 PIN		4
L81					
L113					
L116					
L50 - L52	377-0398-	2716	IC 2K8 UV EPROM 45NS (5V)		3

*** END OF REPORT ***

WANG LABORATORIES, INC. 10000 WILSON BLVD DALLAS, TEXAS 75243	BY: [Signature]	DATE: [Date]	APPROVED BY: [Signature]	DATE: [Date]
MATERIAL	WELL NO.	REV	SHD SGL PORT DR INTR	
FINISH	SEE CHART C	8312	12	

17"

11"

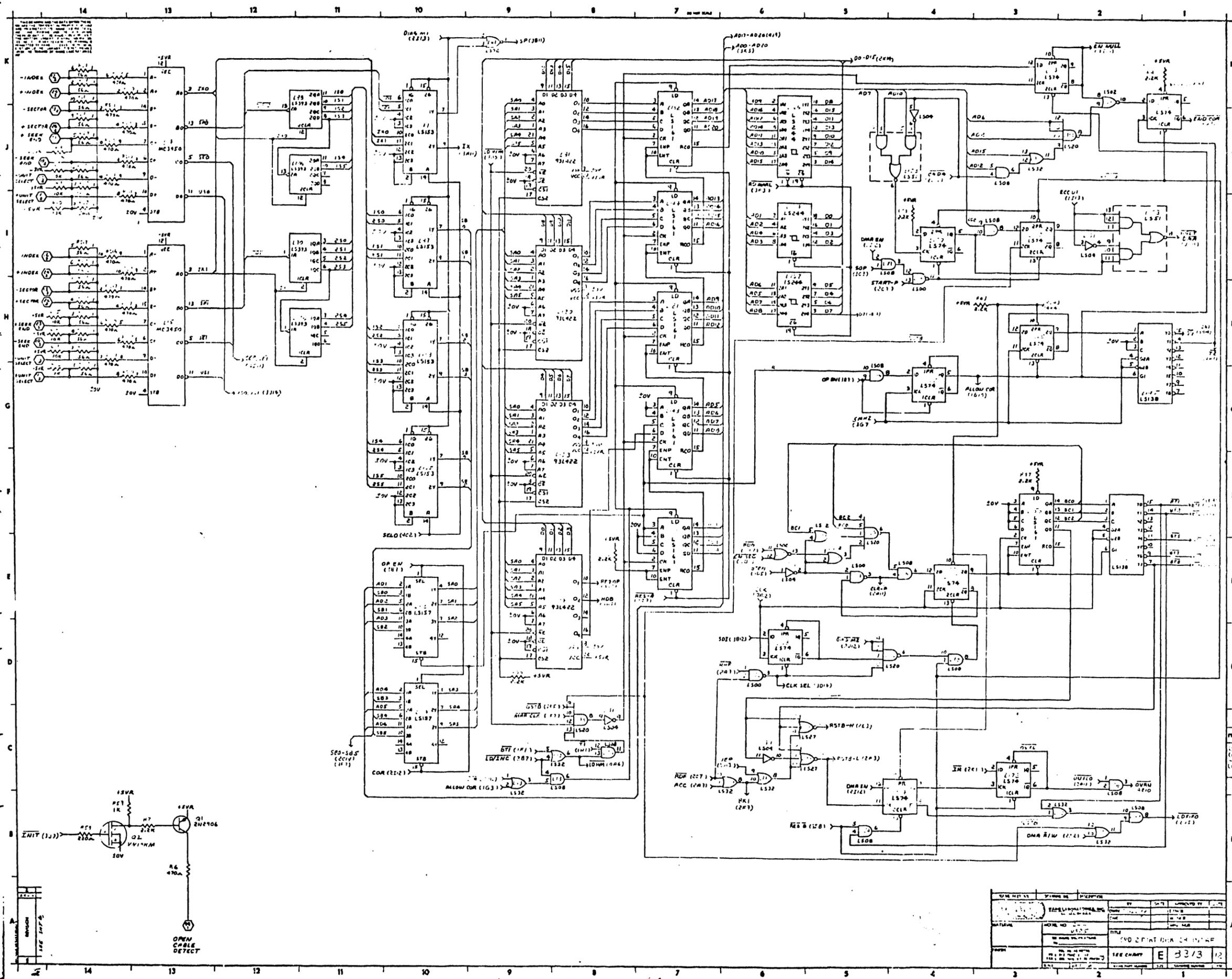
8.5"

8.5"

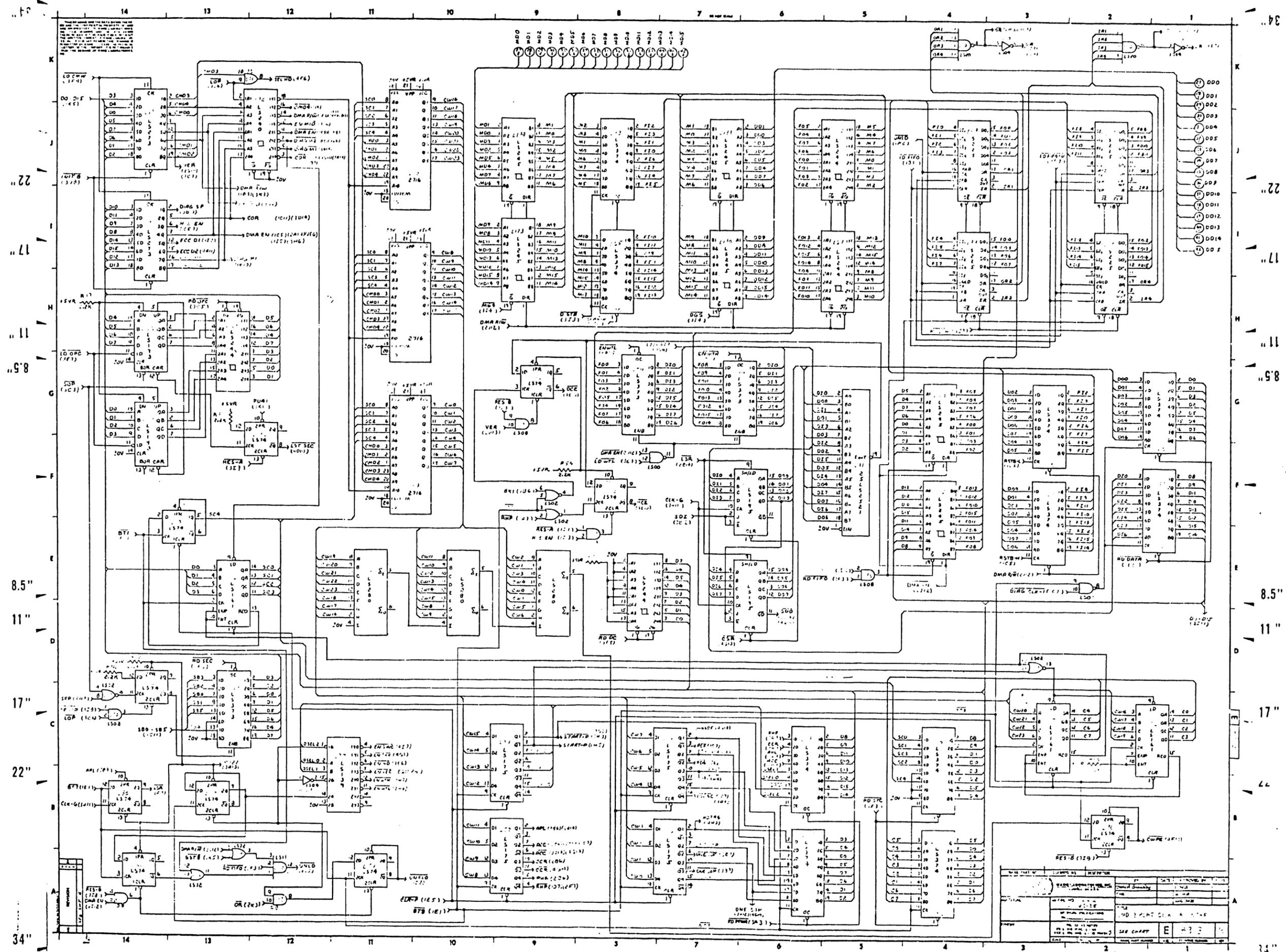
11"

17"

34" 22" 17" 11" 8.5" 8.5" 11" 17" 22" 34"

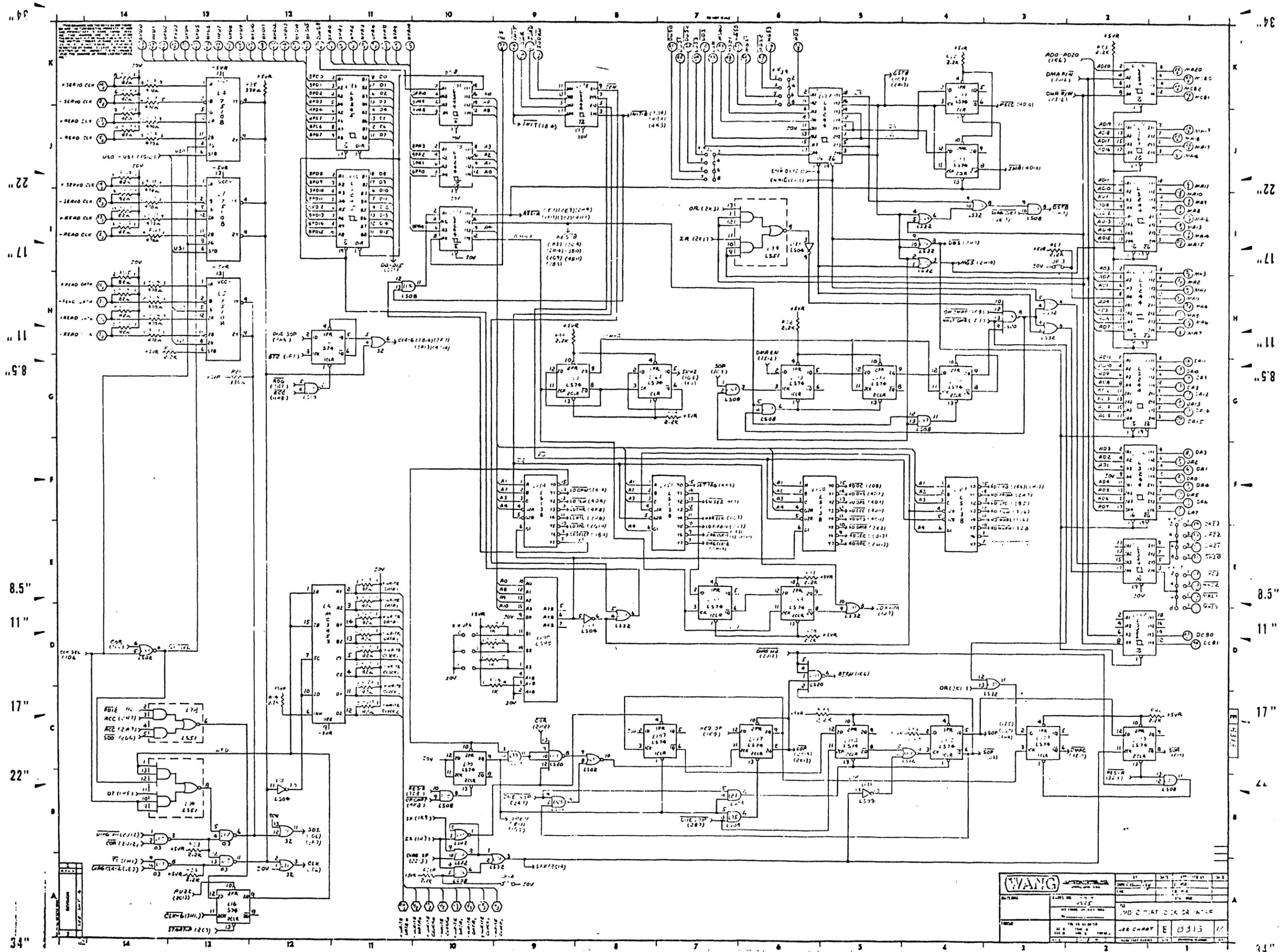


REV	DATE	BY	CHKD	APP'D
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				
61				
62				
63				
64				
65				
66				
67				
68				
69				
70				
71				
72				
73				
74				
75				
76				
77				
78				
79				
80				
81				
82				
83				
84				
85				
86				
87				
88				
89				
90				
91				
92				
93				
94				
95				
96				
97				
98				
99				
100				



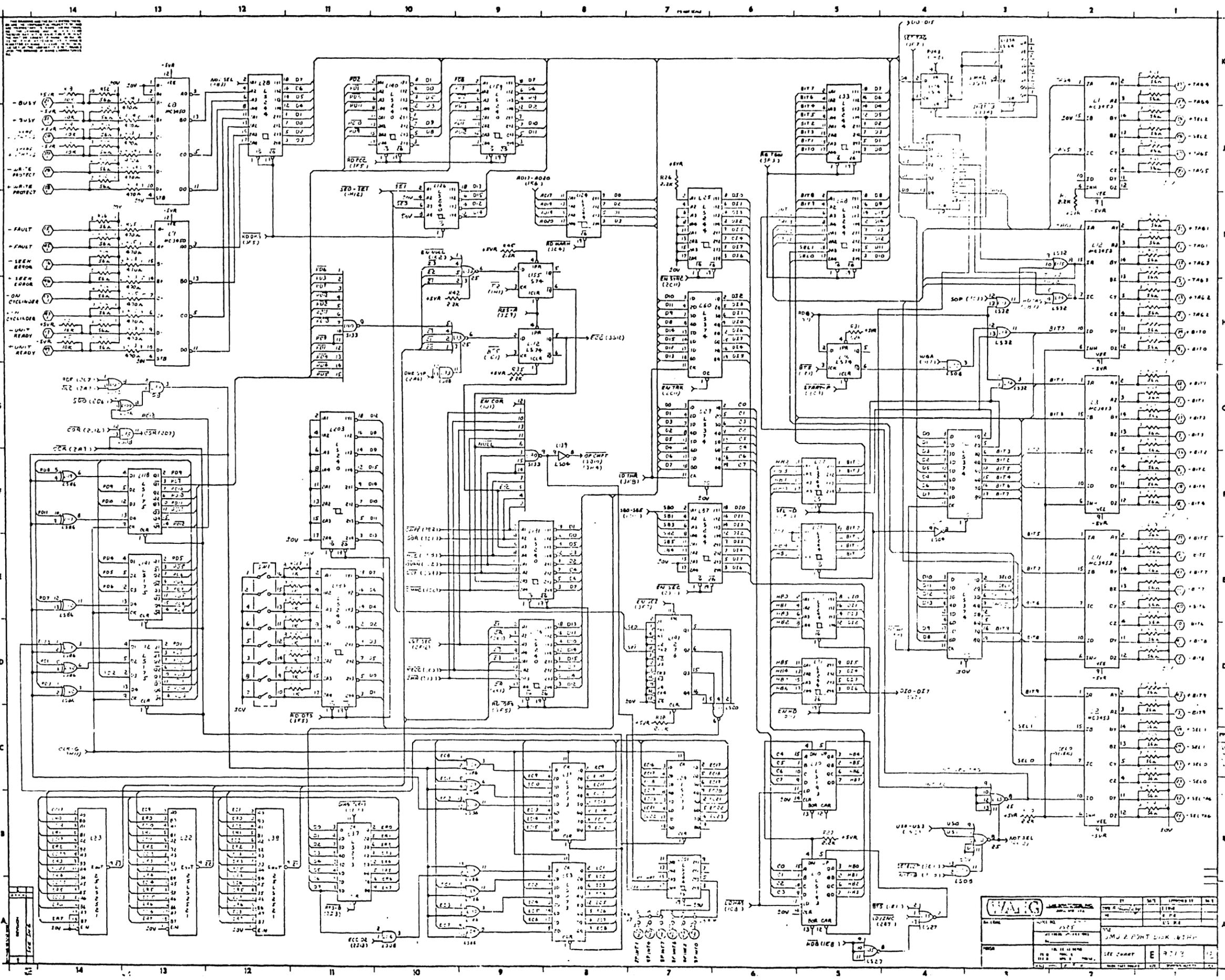
- ① D00
- ② D01
- ③ D02
- ④ D03
- ⑤ D04
- ⑥ D05
- ⑦ D06
- ⑧ D07
- ⑨ D08
- ⑩ D09
- ⑪ D10
- ⑫ D11
- ⑬ D12
- ⑭ D13
- ⑮ D14
- ⑯ D15

NO.	DESCRIPTION	REV.	DATE	BY
1	ISSUED FOR CONSTRUCTION	1	10/1/68	J. H. B.
2	REVISION	1	10/1/68	J. H. B.
3	REVISION	1	10/1/68	J. H. B.
4	REVISION	1	10/1/68	J. H. B.
5	REVISION	1	10/1/68	J. H. B.
6	REVISION	1	10/1/68	J. H. B.
7	REVISION	1	10/1/68	J. H. B.
8	REVISION	1	10/1/68	J. H. B.
9	REVISION	1	10/1/68	J. H. B.
10	REVISION	1	10/1/68	J. H. B.



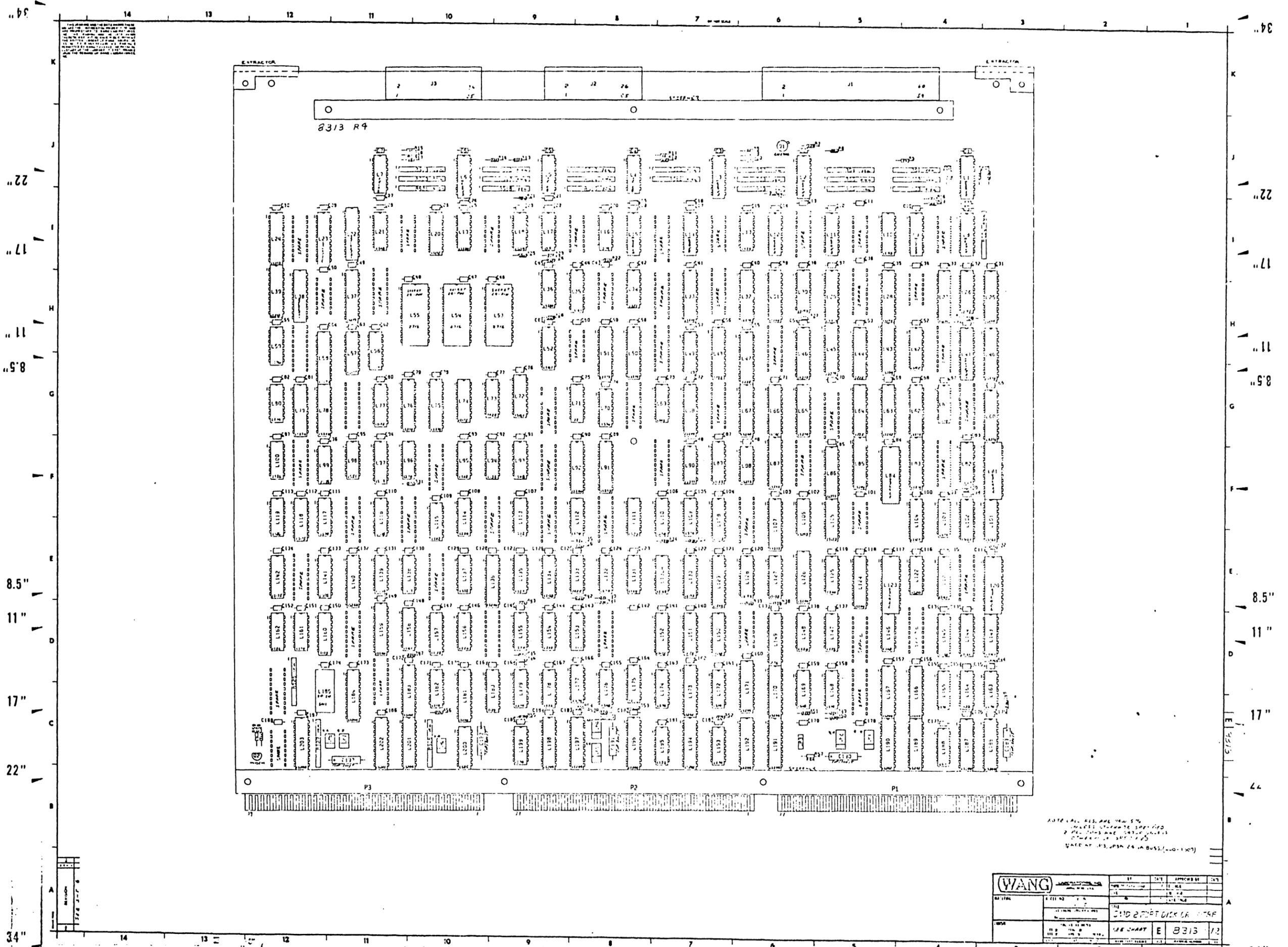
WANG		DATE	REV	BY	CHK
PROJECT	NO. 2200	DATE	REV	BY	CHK
TITLE	NO. 2200	DATE	REV	BY	CHK
DESIGNER	J. E. CHART	DATE	REV	BY	CHK
CHECKER	E. C. B. 12	DATE	REV	BY	CHK

34" 22" 17" 11" 8.5" 8.5" 11" 17" 22" 34"



34" 22" 17" 11" 8.5" 8.5" 11" 17" 22" 34"

WAG		REV	DATE	BY
1	INITIAL	1	11/11/68	WAG
2	REVISION	1	11/11/68	WAG
3	REVISION	1	11/11/68	WAG
4	REVISION	1	11/11/68	WAG
5	REVISION	1	11/11/68	WAG
6	REVISION	1	11/11/68	WAG
7	REVISION	1	11/11/68	WAG
8	REVISION	1	11/11/68	WAG
9	REVISION	1	11/11/68	WAG
10	REVISION	1	11/11/68	WAG
11	REVISION	1	11/11/68	WAG
12	REVISION	1	11/11/68	WAG
13	REVISION	1	11/11/68	WAG
14	REVISION	1	11/11/68	WAG
15	REVISION	1	11/11/68	WAG
16	REVISION	1	11/11/68	WAG
17	REVISION	1	11/11/68	WAG
18	REVISION	1	11/11/68	WAG
19	REVISION	1	11/11/68	WAG
20	REVISION	1	11/11/68	WAG
21	REVISION	1	11/11/68	WAG
22	REVISION	1	11/11/68	WAG
23	REVISION	1	11/11/68	WAG
24	REVISION	1	11/11/68	WAG
25	REVISION	1	11/11/68	WAG
26	REVISION	1	11/11/68	WAG
27	REVISION	1	11/11/68	WAG
28	REVISION	1	11/11/68	WAG
29	REVISION	1	11/11/68	WAG
30	REVISION	1	11/11/68	WAG
31	REVISION	1	11/11/68	WAG
32	REVISION	1	11/11/68	WAG
33	REVISION	1	11/11/68	WAG
34	REVISION	1	11/11/68	WAG
35	REVISION	1	11/11/68	WAG
36	REVISION	1	11/11/68	WAG
37	REVISION	1	11/11/68	WAG
38	REVISION	1	11/11/68	WAG
39	REVISION	1	11/11/68	WAG
40	REVISION	1	11/11/68	WAG
41	REVISION	1	11/11/68	WAG
42	REVISION	1	11/11/68	WAG
43	REVISION	1	11/11/68	WAG
44	REVISION	1	11/11/68	WAG
45	REVISION	1	11/11/68	WAG
46	REVISION	1	11/11/68	WAG
47	REVISION	1	11/11/68	WAG
48	REVISION	1	11/11/68	WAG
49	REVISION	1	11/11/68	WAG
50	REVISION	1	11/11/68	WAG



NOTE: ALL RES. ARE 100% 5%
 2. ALL RES. ARE 100% 5%
 3. ALL RES. ARE 100% 5%
 4. ALL RES. ARE 100% 5%
 5. ALL RES. ARE 100% 5%

WANG		BY	DATE	APPROVED BY	DATE
PROJECT	2200	DATE	11/11/68	DATE	11/11/68
DESCRIPTION	2200 2-PORT DICKER CHART				
REV.	1	DATE	11/11/68	BY	E 8313
REV.	2	DATE	11/11/68	BY	1/2

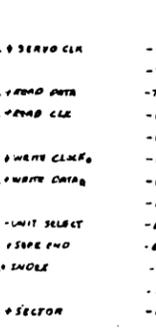
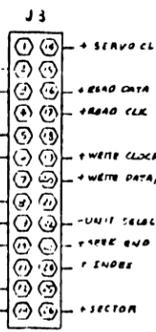
DATE	11/11/68
BY	E 8313

UNIT	TYPE	NO.	DESCRIPTION
1	1	1	1
1	1	2	2
1	1	3	3
1	1	4	4
1	1	5	5
1	1	6	6
1	1	7	7
1	1	8	8
1	1	9	9
1	1	10	10
1	1	11	11
1	1	12	12
1	1	13	13
1	1	14	14
1	1	15	15
1	1	16	16
1	1	17	17
1	1	18	18
1	1	19	19
1	1	20	20
1	1	21	21
1	1	22	22
1	1	23	23
1	1	24	24
1	1	25	25
1	1	26	26
1	1	27	27
1	1	28	28
1	1	29	29
1	1	30	30
1	1	31	31
1	1	32	32
1	1	33	33
1	1	34	34
1	1	35	35
1	1	36	36
1	1	37	37
1	1	38	38
1	1	39	39
1	1	40	40
1	1	41	41
1	1	42	42
1	1	43	43
1	1	44	44
1	1	45	45
1	1	46	46
1	1	47	47
1	1	48	48
1	1	49	49
1	1	50	50
1	1	51	51
1	1	52	52
1	1	53	53
1	1	54	54
1	1	55	55
1	1	56	56
1	1	57	57
1	1	58	58
1	1	59	59
1	1	60	60
1	1	61	61
1	1	62	62
1	1	63	63
1	1	64	64
1	1	65	65
1	1	66	66
1	1	67	67
1	1	68	68
1	1	69	69
1	1	70	70
1	1	71	71
1	1	72	72
1	1	73	73
1	1	74	74
1	1	75	75
1	1	76	76
1	1	77	77
1	1	78	78
1	1	79	79
1	1	80	80
1	1	81	81
1	1	82	82
1	1	83	83
1	1	84	84
1	1	85	85
1	1	86	86
1	1	87	87
1	1	88	88
1	1	89	89
1	1	90	90
1	1	91	91
1	1	92	92
1	1	93	93
1	1	94	94
1	1	95	95
1	1	96	96
1	1	97	97
1	1	98	98
1	1	99	99
1	1	100	100

UNIT	TYPE	NO.	DESCRIPTION
1	1	1	1
1	1	2	2
1	1	3	3
1	1	4	4
1	1	5	5
1	1	6	6
1	1	7	7
1	1	8	8
1	1	9	9
1	1	10	10
1	1	11	11
1	1	12	12
1	1	13	13
1	1	14	14
1	1	15	15
1	1	16	16
1	1	17	17
1	1	18	18
1	1	19	19
1	1	20	20
1	1	21	21
1	1	22	22
1	1	23	23
1	1	24	24
1	1	25	25
1	1	26	26
1	1	27	27
1	1	28	28
1	1	29	29
1	1	30	30
1	1	31	31
1	1	32	32
1	1	33	33
1	1	34	34
1	1	35	35
1	1	36	36
1	1	37	37
1	1	38	38
1	1	39	39
1	1	40	40
1	1	41	41
1	1	42	42
1	1	43	43
1	1	44	44
1	1	45	45
1	1	46	46
1	1	47	47
1	1	48	48
1	1	49	49
1	1	50	50
1	1	51	51
1	1	52	52
1	1	53	53
1	1	54	54
1	1	55	55
1	1	56	56
1	1	57	57
1	1	58	58
1	1	59	59
1	1	60	60
1	1	61	61
1	1	62	62
1	1	63	63
1	1	64	64
1	1	65	65
1	1	66	66
1	1	67	67
1	1	68	68
1	1	69	69
1	1	70	70
1	1	71	71
1	1	72	72
1	1	73	73
1	1	74	74
1	1	75	75
1	1	76	76
1	1	77	77
1	1	78	78
1	1	79	79
1	1	80	80
1	1	81	81
1	1	82	82
1	1	83	83
1	1	84	84
1	1	85	85
1	1	86	86
1	1	87	87
1	1	88	88
1	1	89	89
1	1	90	90
1	1	91	91
1	1	92	92
1	1	93	93
1	1	94	94
1	1	95	95
1	1	96	96
1	1	97	97
1	1	98	98
1	1	99	99
1	1	100	100

NOTE: EACH HEADER MADE UP OF (2) PIN HEADERS

MEMORIES	ADDR	DATA
1	1	1
1	2	2
1	3	3
1	4	4
1	5	5
1	6	6
1	7	7
1	8	8
1	9	9
1	10	10
1	11	11
1	12	12
1	13	13
1	14	14
1	15	15
1	16	16
1	17	17
1	18	18
1	19	19
1	20	20
1	21	21
1	22	22
1	23	23
1	24	24
1	25	25
1	26	26
1	27	27
1	28	28
1	29	29
1	30	30
1	31	31
1	32	32
1	33	33
1	34	34
1	35	35
1	36	36
1	37	37
1	38	38
1	39	39
1	40	40
1	41	41
1	42	42
1	43	43
1	44	44
1	45	45
1	46	46
1	47	47
1	48	48
1	49	49
1	50	50
1	51	51
1	52	52
1	53	53
1	54	54
1	55	55
1	56	56
1	57	57
1	58	58
1	59	59
1	60	60
1	61	61
1	62	62
1	63	63
1	64	64
1	65	65
1	66	66
1	67	67
1	68	68
1	69	69
1	70	70
1	71	71
1	72	72
1	73	73
1	74	74
1	75	75
1	76	76
1	77	77
1	78	78
1	79	79
1	80	80
1	81	81
1	82	82
1	83	83
1	84	84
1	85	85
1	86	86
1	87	87
1	88	88
1	89	89
1	90	90
1	91	91
1	92	92
1	93	93
1	94	94
1	95	95
1	96	96
1	97	97
1	98	98
1	99	99
1	100	100



BOARD NO. & TITLE: C8313 SMD 2 PORT DISK DR INTFR
 ASSEMBLY LEVEL & TITLE: 209 8313
 SCHEMATIC REVISION (S): 12
 QWR OR MOST RECENT ECO: 32722

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
C1 - C188	300-1966-	.047U	CAP CERAMIC MIMO AXIAL .40 -20% 50V Z5U		100
C189 - C193	300-4022-	15U	CAP TANT ALCL 10% 20V		5
L188	325-1503-	SWITCH	SLIDE SPST 8 POS		1
R58	330-2023-	220.000	RES FIXED 1/4W 5%		1
R21	330-2034-	330.000	RES FIXED 1/4W 5%		2
R25					
R6	330-2040-	470.000	RES FIXED 1/4W 5%		1
R59	330-3011-	1K	RES FIXED 1/4W 5%		1
R1	330-3023-	2.2K	RES FIXED 1/4W 5%		30
R7					
R13 - R14					
R25					
R22 - R24					
R26 - R28					
R30 - R36					
R38 - R57					
RAS3					
R2 - R5	330-4011-	10K	RES FIXED 1/4W 5%		14
R8 - R12					
R15 - R19					
R51 - R52	333-0802-	56.000H	RESISTOR NETWORK TYPE: 10/09/C/SS		8
R54					
R56 - R59					
RS19					
RS3	333-0803-	470.000H	RESISTOR NETWORK TYPE: 10/05/F/SS		11
RS5					
RS10 - RS11					
RS14					
RS16 - RS17					
RS21 - RS24					
RS13	333-0804-	82.000H	RESISTOR NETWORK TYPE: 10/09/C/SS		4
RS18					
RS20					
RS25 - RS27	333-0837-	1.000KH	RESISTOR NETWORK TYPE: 10/09/C/SS		3
J1	350-0057-	60 CONT	CONN PC HEADER DUAL ROW .100 R/A W/LOCK/EJECT		1
J2 - J3	350-0058-	26 CONT	CONN PC HEADER DUAL ROW .100 R/A W/LOCK/EJECT		2
JP1 - JP2	350-0212-	8 CONT	CONN PC HEADER DUAL ROW .100		4

BOARD NO. & TITLE: C8313 SMD 2 PORT DISK DR INTFR SCHEMATIC REVISION (S): 12 SHEET OF PAGE 3

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L131					
L139					
L16	376-0202-	74S74	IC DUAL D-TYPE POS EDGE TRIGRD F/F W/PRESET/C		2
L155					
L114	376-0207-	74LS00	IC QUAD 2-INPUT NAND GATE		2
L125					
L61	376-0208-	74LS07	IC QUAD 2-INPUT NOR GATE		3
L69					
L115					
L110	376-0210-	74LS20	IC DUAL 4-INPUT NAND GATE		5
L111					
L122					
L148					
L156					
L94	376-0211-	74LS32	IC QUAD 2-INPUT OR GATE		8
L113					
L137					
L147					
L104					
L175					
L178					
L195					
L34	376-0213-	74LS81	IC DUAL 2-WIDE 2-INPUT AND-OR-INVERT GATE		3
L98					
L153					
L82	376-0216-	74LS157	IC QUAD 2-INPUT MULTIPLEXER		2
L104					
L200	376-0218-	74LS85	IC 4-BIT MAGNITUDE COMPARATOR		1
L10	376-0220-	74LS193	IC UP/DOWN BINARY COUNTER		4
L30					
L128					
L130					
L188	376-0225-	74LS11	IC TRIPLE 3-INPUT AND GATE		1
L97	376-0226-	74LS139	IC 2-TO-4-LINE DECODER/MULTIPLEXER		1
L59	376-0231-	74LS86	IC QUAD 2-INPUT EXCLUSIVE-OR GATE		4
L700					
L119					
L162					
L35	376-0233-	74LS161	IC SYNCHRONOUS 4-BIT BINARY COUNTER W/DIRECT CLEAR		9
L52					
L72					
L101 - L102					
L121					
L143 - L144					
L158					
L4130	376-0236-	74LS164	IC SERIAL-IN PARALLEL-OUT SHIFT REGISTER		1
L19	376-0242-	74LS289	IC 9-BIT ODD/EVEN PARITY GENERATOR/CHECKER		3
L36					
L56					
L135	376-0248-	74LS27	IC TRIPLE 3-INPUT NOR GATE		2

BOARD NO. & TITLE: C8313 SMD 2 PORT DISK DR INTFR SCHEMATIC REVISION (S): 12 SHEET OF PAGE 2

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
JP4 - JP5					
Q12 - Q19	350-4506-	2 CONT	CONN SHUNT .100 CTR		8
Q1	375-1017-	2N2906A	FET NPN TO-18 400M 60V 150MA		1
Q2	375-1116-	WR100M	FET N-CH TO-237 1W 50V .5A		1
Q40	375-9004-	128-080	TRANSIMPED TO-18 (SMALL)		1
L17	376-0228-	7403	IC QUAD 2-INPUT NAND GATE OVC OUTPUTS		1
L99	376-0081-	7408	IC QUAD 2-INPUT AND GATE		1
L4 - L5	376-0089-	75108	IC DUAL LINE RECEIVER 16 PIN DIP		3
L7					
L73	376-0092-	7425	IC DUAL 4-INPUT NOR GATE		2
L133					
L71	376-0093-	7432	IC QUAD 2-INPUT POSITIVE OR GATE		1
L23	376-0153-	74LS08	IC QUAD 2-INPUT AND GATE		1
L93					
L95					
L116					
L146					
L154					
L169					
L176					
L70	376-0155-	74LS74	IC DUAL D-TYPE POSITIVE EDGE TRIG FLIP-FLOP		19
L80					
L103					
L109 - L110					
L112					
L117					
L132					
L161					
L163					
L165					
L168					
L172					
L174					
L177					
L179					
L182					
L193					
L199					
L49	376-0156-	74LS153	IC DUAL 4-INPUT MULTIPLEXER		4
L89					
L105					
L108					
L20	376-0160-	74LS175	IC QUAD D-TYPE FLIP-FLOP		8
L57					
L74					
L77					
L118					
L141 - L142					
L152					
L18	376-0180-	74LS04	IC HEX INVERTER		3

BOARD NO. & TITLE: C8313 SMD 2 PORT DISK DR INTFR SCHEMATIC REVISION (S): 12 SHEET OF PAGE 4

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L138					
L26	376-0248-	74LS195	IC 4-BIT UNIVERSAL SHIFT REGISTER		2
L42					
L1 - L3	376-0274-	3453	IC QUAD LINE DRIVER 16 PIN DIP		6
L6					
L11 - L12					
L8 - L9	376-0278-	3450	IC QUAD LINE RECEIVER 16 PIN DIP		4
L16 - L15					
L160	376-0276-	74LS133	IC 13-INPUT NAND GATE		2
L180					
L63	376-0285-	74LS245	IC OCTAL BUS TRANSCEIVER TRI-STATE OUTPUTS		8
L66					
L123					
L183					
L189 - L190					
L194					
L202					
L29	376-0286-	74LS374	IC OCTAL D-TYPE FLIP-FLOP TRI-STATE		14
L32					
L40					
L43					
L45					
L50					
L60					
L62					
L65					
L75 - L76					
L78 - L79					
L81					
L25	376-0288-	74LS244	IC OCTAL BUFFER/LINE DRIVER W/TRI STATE		23
L27 - L28					
L31					
L33					
L166 - L167					
L170 - L171					
L186 - L187					
L191 - L192					
L196 - L198					
L201					
L127	376-0294-	74LS138	IC 3-LINE TO 8-LINE DECODER/MULTIPLEXER		6
L134					
L145					
L150 - L151					
L157					
L92	376-0297-	74LS240	IC OCTAL BUFFER/LINE DRIVER/LINE RECEIVER		8

WANG LABORATORIES, INC. 100 WILSON AVENUE		BY	DATE	APPROVED BY	DATE
MATERIAL		DWN		E ENGR	
MODEL NO.		CHK		M ENGR	
SEE ENG'G SPECIFICATIONS		TITLE			
		SMD 2 PORT DD INTERFACE			
FINISH		SEE CHART	C	8313	12

17"
11"
8.5"
11"
8.5"
17"

17"
11"
8.5"
11"
17"

17"

11"

8.5"

8.5"

11"

17"

BOARD NO. & TITLE: CB313 SMD 2 PORT DISK DR INTRF SCHEMATIC REVISION (S): 12 SHEET 7 OF 8 PAGE 5

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L126					
L136					
L140					
L159					
L181					
L184					
L203					
L24	376-0302-	74LS273	IC OCTAL D-TYPE FLIP-FLOP W/CLEAR		6
L37					
L39					
L81					
L88	376-0307-	74LS393	IC DUAL 4-BIT BINARY COUNTER		3
L90					
L106	376-0310-	74LS373	IC OCTAL D-TYPE LATCH TRI-STATE OUTPUTS		3
L86					
L107					
L22 - L23	376-0317-	28LS2521	IC 8-BIT COMPARATOR		4
L38					
L41	376-0318-	74276	IC QUAD J-K FLIP-FLOP		1
L149	376-0323-	74S225	IC 16 X 5 BI POLAR ASYNCH FIFO		4
L44					
L47 - L48					
L64					
01 - 03	376-0003-	SKT 24	IC SOCKET 24 PIN DIL PC MOUNT		3
04 - 07	376-0010-	SKT 22	IC SOCKET 22 PIN DIL PC MOUNT		6
STF2	452-2707-	STIFFNER	STIFFNER LOWER		1
STF1	452-2708-	STIFFNER	STIFFNER UPPER		1
09 - 010	465-1238-	EXTRACTOR	EXTRACTOR		2
08	310-8313-	PCB	PCB		1
011	600-9007-	24AWG	WIRE SOLID UNINSULATED TINNED COPPER *** (QTY A/R) ***		1
018 - 024	650-2100-	SCREW	SCREW 4-40 X 5/16		7
025 - 031	652-2000-	NUT	NUT 4-40		7
JP6 - JP8	654-0104-	3 CONT	CONN PC HEADER SINGLE ROW .100		3

BOARD NO. & TITLE: CB313 SMD 2 PORT DISK DR INTRF SCHEMATIC REVISION (S): 12 SHEET OF PAGE 6

(CAUTION - THE FOLLOWING PARTS/COMPONENTS CONTAINED IN THIS B.O.M. ARE NOT RECOMMENDED FOR NEW DESIGNS)

WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
376-0702-	74S74	IC DUAL D-TYPE PPS EDGE TRIGRO P/P W/PRESET/C		2
376-0274-	3453	IC QUAD LINE DRIVER 16 PIN DIP		6
376-0318-	74276	IC QUAD J-K FLIP-FLOP		1
376-0323-	74S225	IC 16 X 5 BI POLAR ASYNCH FIFO		4

*** END-OF-REPORT ***

17"

11"

8.5"

8.5"

11"

17"

WANG LABORATORIES, INC.
 ELECTRICAL PARTS LIST SHEET OF PAGE 1

(FINAL BILL-OF-MATERIALS)

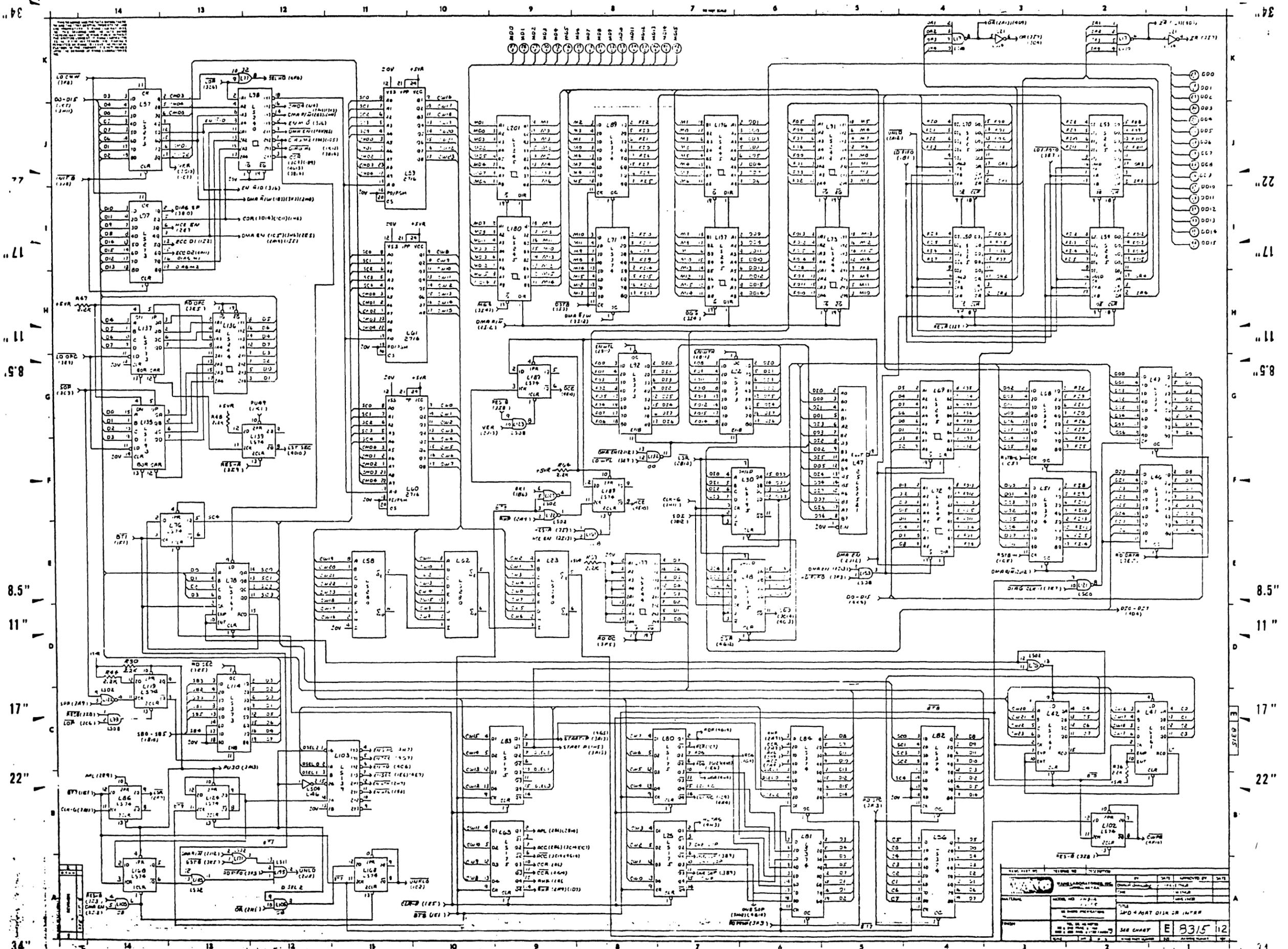
BOARD NO. & TITLE: CB313 SMD 2 PORT DISK DR INTRF
 ASSEMBLY LEVEL & TITLE: 210 8313-A
 ART-DRAW REVISION (R): 04
 ASSEMBLY REVISION (A): 77
 SCHEMATIC REVISION (S): 12
 DWR OR MOST RECENT ECO: 32702

CREATED: 09/12/83 16:56
 LAST MODIFIED: 08/14/84 08:49 BY: LAB
 EDITING REVISION: 6

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
01	209-8313-	PCA	PCA		1
L81	377-0384-	93L422	IC 256 X 4 BIPOLAR RAM 60NS L PWR 22 PIN		4
L88					
L120					
L123					
L53 - L55	377-0398-	2716	IC 2KX8 UV EPROM 450NS (5V)		3

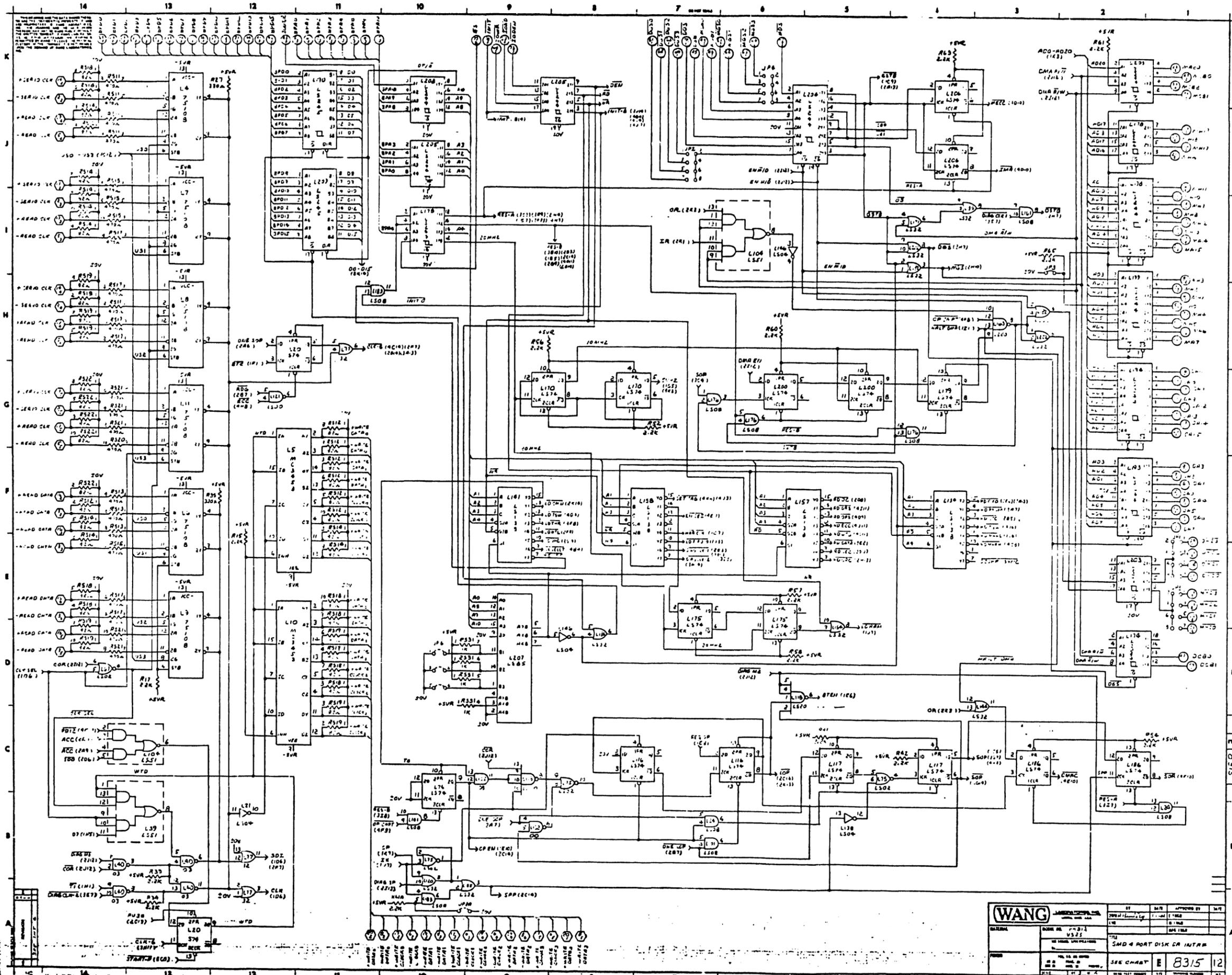
*** END-OF-REPORT ***

WANG LABORATORIES, INC. 100 WASHINGTON ST. MELDEN, MA 01946		BY	DATE	APPROVED BY	DATE
MATERIAL		DATE	DATE	DATE	DATE
TITLE		SMD 2 PORT DD INTERFACE			
PART NO.		SEE CHART C	8313	12	
FINISH		SCALE			



NO.	DESCRIPTION	DATE	APPROVED BY	DATE
1	DESIGNED BY			
2	CHECKED BY			
3	DATE			
4	SCALE			
5	BY			
6	DATE			
7	SCALE			
8	BY			
9	DATE			
10	SCALE			
11	BY			
12	DATE			
13	SCALE			
14	BY			
15	DATE			
16	SCALE			
17	BY			
18	DATE			
19	SCALE			
20	BY			
21	DATE			
22	SCALE			
23	BY			
24	DATE			
25	SCALE			
26	BY			
27	DATE			
28	SCALE			
29	BY			
30	DATE			
31	SCALE			
32	BY			
33	DATE			
34	SCALE			
35	BY			
36	DATE			
37	SCALE			
38	BY			
39	DATE			
40	SCALE			
41	BY			
42	DATE			
43	SCALE			
44	BY			
45	DATE			
46	SCALE			
47	BY			
48	DATE			
49	SCALE			
50	BY			
51	DATE			
52	SCALE			
53	BY			
54	DATE			
55	SCALE			
56	BY			
57	DATE			
58	SCALE			
59	BY			
60	DATE			
61	SCALE			
62	BY			
63	DATE			
64	SCALE			
65	BY			
66	DATE			
67	SCALE			
68	BY			
69	DATE			
70	SCALE			
71	BY			
72	DATE			
73	SCALE			
74	BY			
75	DATE			
76	SCALE			
77	BY			
78	DATE			
79	SCALE			
80	BY			
81	DATE			
82	SCALE			
83	BY			
84	DATE			
85	SCALE			
86	BY			
87	DATE			
88	SCALE			
89	BY			
90	DATE			
91	SCALE			
92	BY			
93	DATE			
94	SCALE			
95	BY			
96	DATE			
97	SCALE			
98	BY			
99	DATE			
100	SCALE			

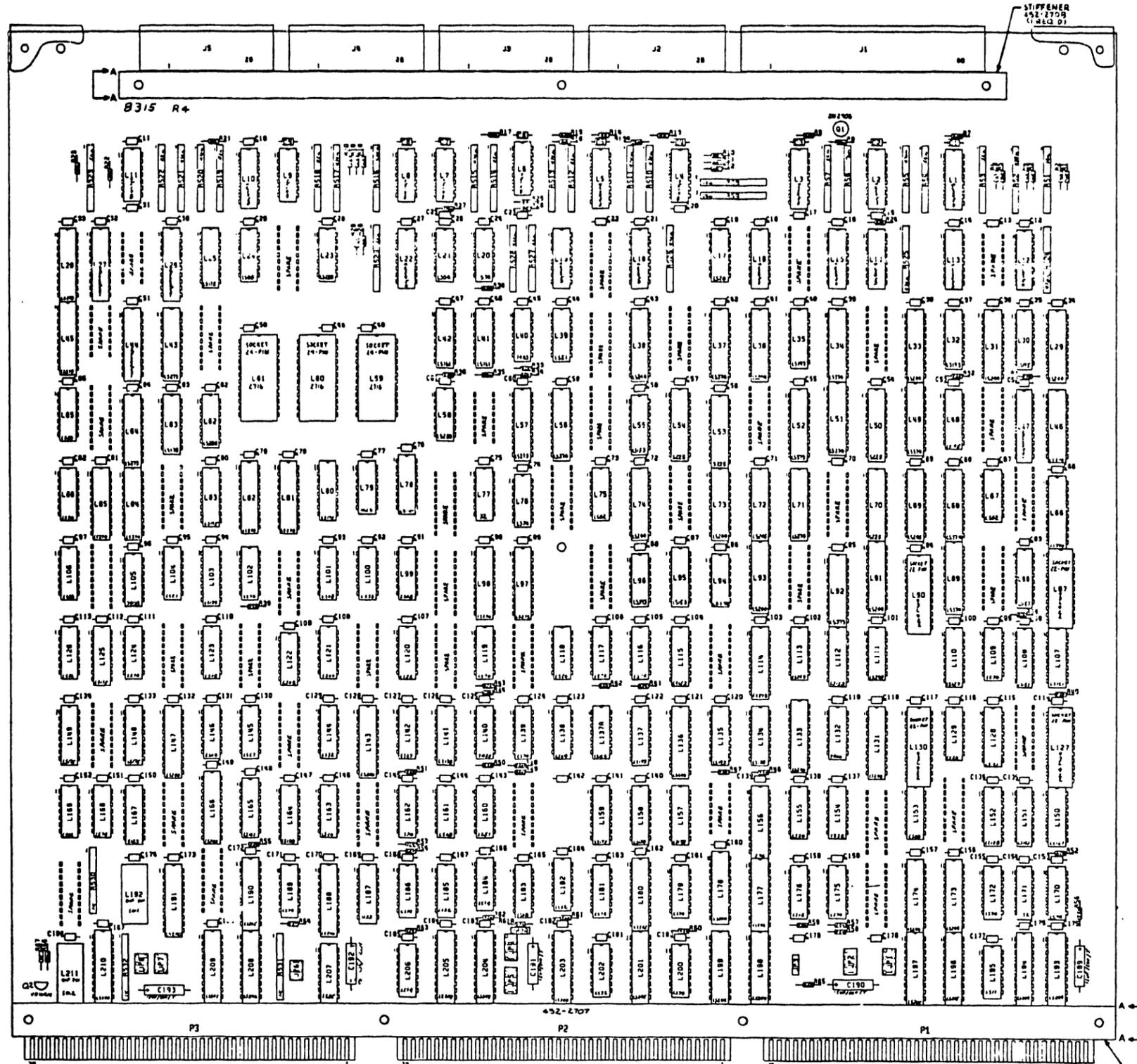
34
77
17
11
8.5
8.5
11
17
22
34



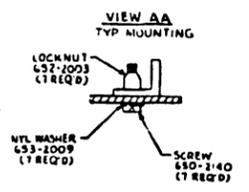
34
22
17
11
8.5
8.5
11
17
22
34

WANG		BY	DATE	APPROVED BY	DATE
MODEL NO. 74100		CHK	1-1-68	1-1-68	
SERIAL NO. 10000		REV	1	REV	
TITLE		TRN	8 PORT DISK CA INTFR	CHK	
PART NO.		SEC	CHART	E	8315 12
REV		REV	REV	REV	

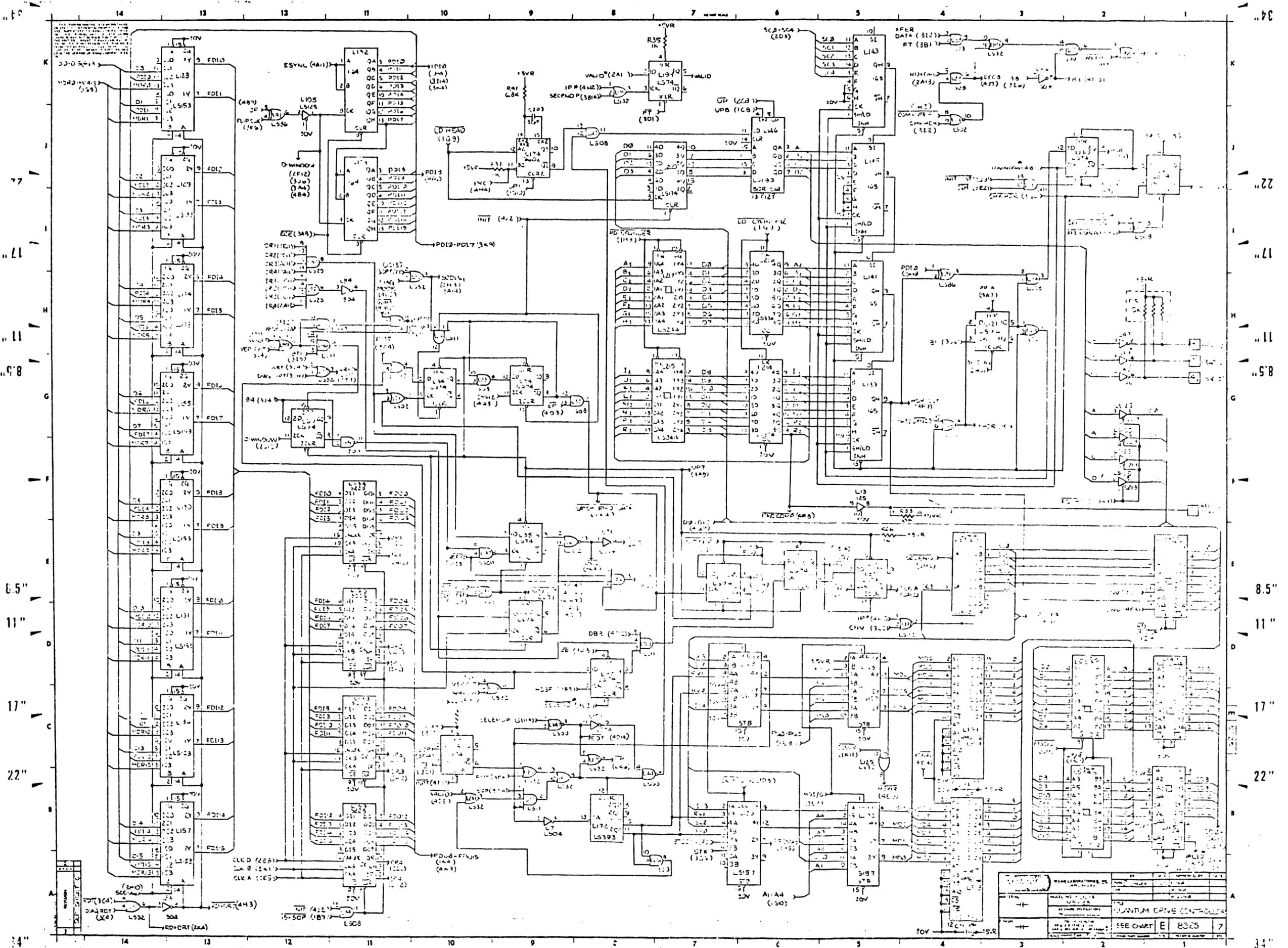
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS TO CENTER UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS TO SURFACE UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS TO EDGE UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS TO FACE UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS TO HOLE UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS TO CENTERLINE UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS TO CENTER OF GRAVITY UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS TO CENTER OF MASS UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS TO CENTER OF BUOYANCY UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS TO CENTER OF PRESSURE UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS TO CENTER OF GRAVITY AND BUOYANCY UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS TO CENTER OF GRAVITY AND PRESSURE UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS TO CENTER OF BUOYANCY AND PRESSURE UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS TO CENTER OF GRAVITY, BUOYANCY AND PRESSURE UNLESS OTHERWISE SPECIFIED.



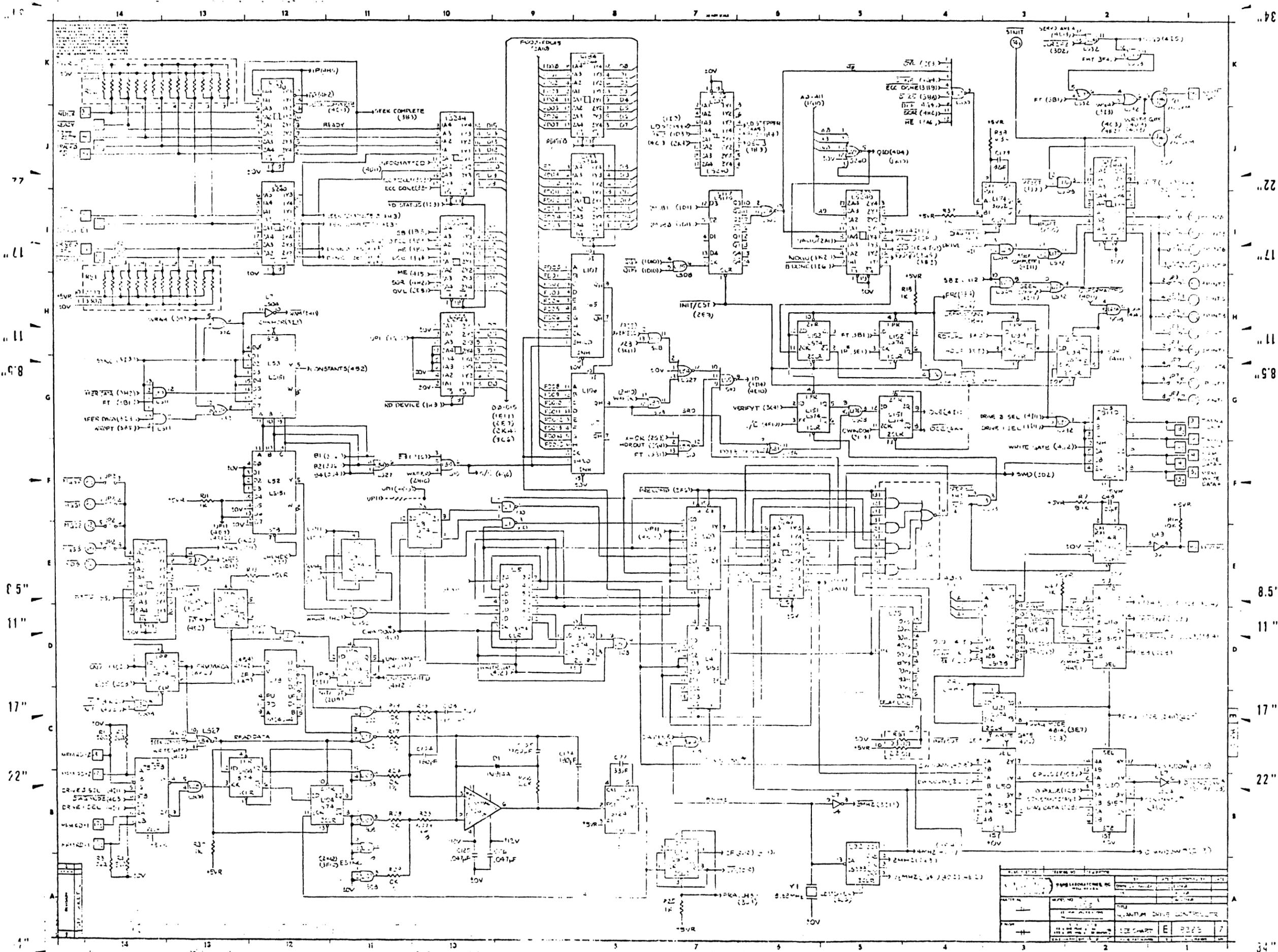
1. ADD MOUNTS (550-1500) 5 TO 301-8 AS SHOWN.
 2. ADD TERMINALS 301-52 WITH 24 GAUGE WIRE (500-7007)
 3. ALL RESISTORS ARE 1/4W 5% UNLESS OTHERWISE SPECIFIED
 4. ALL CAPS ARE .047UF UNLESS OTHERWISE SPECIFIED

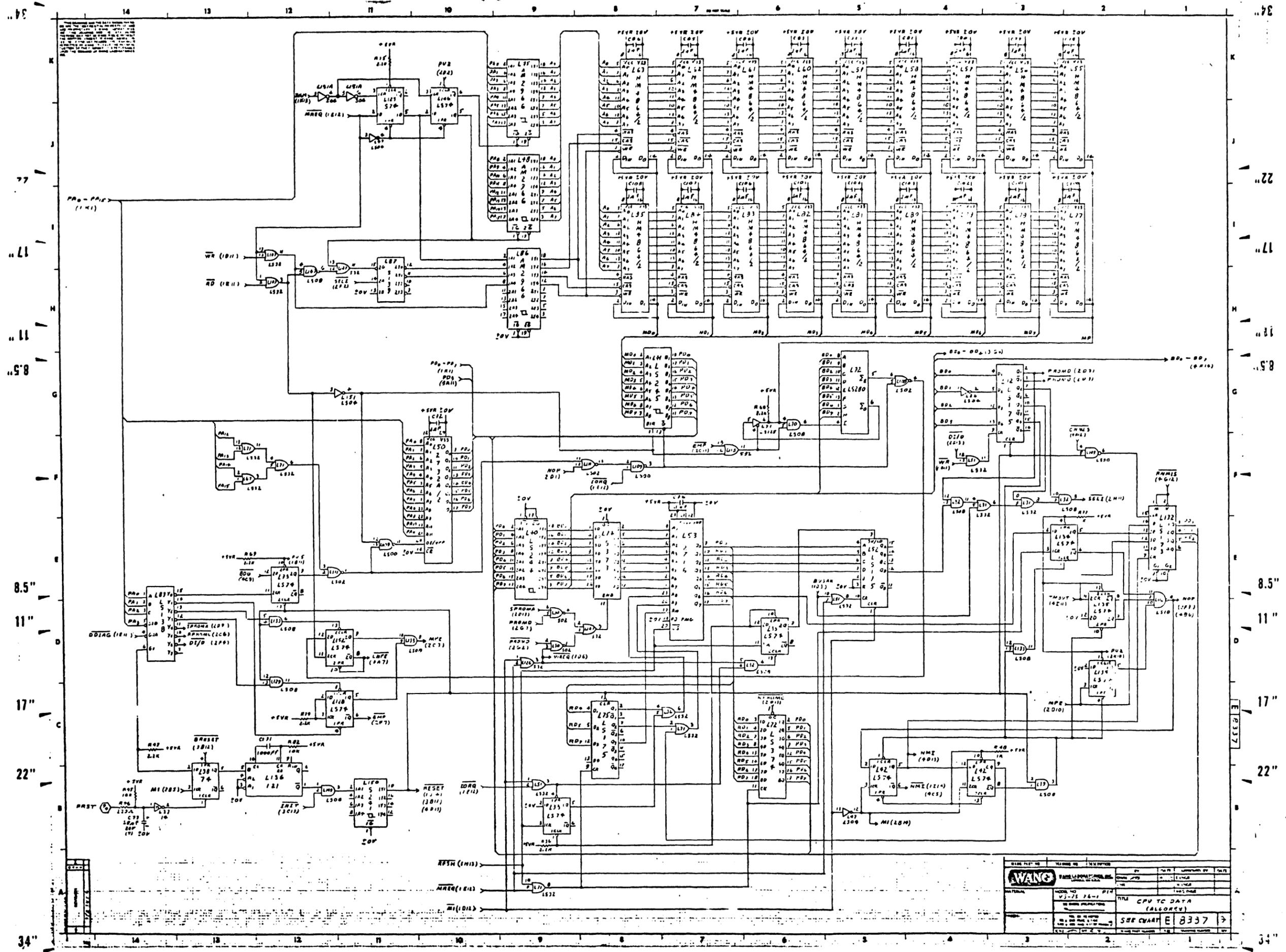


WANG		BY	DATE	APPROVED BY	DATE
NO. 1000	MODEL NO. 1000	REV. 1	1/1/68	J. J. KING	1/1/68
SMD 4 P. HI DISCR. INTRE		SEE CHART	E	B315	12



NO.	DESCRIPTION	QTY	REF.
1	74100 (SRAM)	1	101
2	74101 (SRAM)	1	102
3	74102 (SRAM)	1	103
4	74103 (SRAM)	1	104
5	74104 (SRAM)	1	105
6	74105 (SRAM)	1	106
7	74106 (SRAM)	1	107
8	74107 (SRAM)	1	108
9	74108 (SRAM)	1	109
10	74109 (SRAM)	1	110
11	74110 (SRAM)	1	111
12	74111 (SRAM)	1	112
13	74112 (SRAM)	1	113
14	74113 (SRAM)	1	114
15	74114 (SRAM)	1	115
16	74115 (SRAM)	1	116
17	74116 (SRAM)	1	117
18	74117 (SRAM)	1	118
19	74118 (SRAM)	1	119
20	74119 (SRAM)	1	120
21	74120 (SRAM)	1	121
22	74121 (SRAM)	1	122
23	74122 (SRAM)	1	123
24	74123 (SRAM)	1	124
25	74124 (SRAM)	1	125
26	74125 (SRAM)	1	126
27	74126 (SRAM)	1	127
28	74127 (SRAM)	1	128
29	74128 (SRAM)	1	129
30	74129 (SRAM)	1	130
31	74130 (SRAM)	1	131
32	74131 (SRAM)	1	132
33	74132 (SRAM)	1	133
34	74133 (SRAM)	1	134
35	74134 (SRAM)	1	135
36	74135 (SRAM)	1	136
37	74136 (SRAM)	1	137
38	74137 (SRAM)	1	138
39	74138 (SRAM)	1	139
40	74139 (SRAM)	1	140
41	74140 (SRAM)	1	141
42	74141 (SRAM)	1	142
43	74142 (SRAM)	1	143
44	74143 (SRAM)	1	144
45	74144 (SRAM)	1	145
46	74145 (SRAM)	1	146
47	74146 (SRAM)	1	147
48	74147 (SRAM)	1	148
49	74148 (SRAM)	1	149
50	74149 (SRAM)	1	150
51	74150 (SRAM)	1	151
52	74151 (SRAM)	1	152
53	74152 (SRAM)	1	153
54	74153 (SRAM)	1	154
55	74154 (SRAM)	1	155
56	74155 (SRAM)	1	156
57	74156 (SRAM)	1	157
58	74157 (SRAM)	1	158
59	74158 (SRAM)	1	159
60	74159 (SRAM)	1	160
61	74160 (SRAM)	1	161
62	74161 (SRAM)	1	162
63	74162 (SRAM)	1	163
64	74163 (SRAM)	1	164
65	74164 (SRAM)	1	165
66	74165 (SRAM)	1	166
67	74166 (SRAM)	1	167
68	74167 (SRAM)	1	168
69	74168 (SRAM)	1	169
70	74169 (SRAM)	1	170
71	74170 (SRAM)	1	171
72	74171 (SRAM)	1	172
73	74172 (SRAM)	1	173
74	74173 (SRAM)	1	174
75	74174 (SRAM)	1	175
76	74175 (SRAM)	1	176
77	74176 (SRAM)	1	177
78	74177 (SRAM)	1	178
79	74178 (SRAM)	1	179
80	74179 (SRAM)	1	180
81	74180 (SRAM)	1	181
82	74181 (SRAM)	1	182
83	74182 (SRAM)	1	183
84	74183 (SRAM)	1	184
85	74184 (SRAM)	1	185
86	74185 (SRAM)	1	186
87	74186 (SRAM)	1	187
88	74187 (SRAM)	1	188
89	74188 (SRAM)	1	189
90	74189 (SRAM)	1	190
91	74190 (SRAM)	1	191
92	74191 (SRAM)	1	192
93	74192 (SRAM)	1	193
94	74193 (SRAM)	1	194
95	74194 (SRAM)	1	195
96	74195 (SRAM)	1	196
97	74196 (SRAM)	1	197
98	74197 (SRAM)	1	198
99	74198 (SRAM)	1	199
100	74199 (SRAM)	1	200
101	74200 (SRAM)	1	201
102	74201 (SRAM)	1	202
103	74202 (SRAM)	1	203
104	74203 (SRAM)	1	204
105	74204 (SRAM)	1	205
106	74205 (SRAM)	1	206
107	74206 (SRAM)	1	207
108	74207 (SRAM)	1	208
109	74208 (SRAM)	1	209
110	74209 (SRAM)	1	210
111	74210 (SRAM)	1	211
112	74211 (SRAM)	1	212
113	74212 (SRAM)	1	213
114	74213 (SRAM)	1	214
115	74214 (SRAM)	1	215
116	74215 (SRAM)	1	216
117	74216 (SRAM)	1	217
118	74217 (SRAM)	1	218
119	74218 (SRAM)	1	219
120	74219 (SRAM)	1	220
121	74220 (SRAM)	1	221
122	74221 (SRAM)	1	222
123	74222 (SRAM)	1	223
124	74223 (SRAM)	1	224
125	74224 (SRAM)	1	225
126	74225 (SRAM)	1	226
127	74226 (SRAM)	1	227
128	74227 (SRAM)	1	228
129	74228 (SRAM)	1	229
130	74229 (SRAM)	1	230
131	74230 (SRAM)	1	231
132	74231 (SRAM)	1	232
133	74232 (SRAM)	1	233
134	74233 (SRAM)	1	234
135	74234 (SRAM)	1	235
136	74235 (SRAM)	1	236
137	74236 (SRAM)	1	237
138	74237 (SRAM)	1	238
139	74238 (SRAM)	1	239
140	74239 (SRAM)	1	240
141	74240 (SRAM)	1	241
142	74241 (SRAM)	1	242
143	74242 (SRAM)	1	243
144	74243 (SRAM)	1	244
145	74244 (SRAM)	1	245
146	74245 (SRAM)	1	246
147	74246 (SRAM)	1	247
148	74247 (SRAM)	1	248
149	74248 (SRAM)	1	249
150	74249 (SRAM)	1	250
151	74250 (SRAM)	1	251
152	74251 (SRAM)	1	252
153	74252 (SRAM)	1	253
154	74253 (SRAM)	1	254
155	74254 (SRAM)	1	255
156	74255 (SRAM)	1	256
157	74256 (SRAM)	1	257
158	74257 (SRAM)	1	258
159	74258 (SRAM)	1	259
160	74259 (SRAM)	1	260
161	74260 (SRAM)	1	261
162	74261 (SRAM)	1	262
163	74262 (SRAM)	1	263
164	74263 (SRAM)	1	264
165	74264 (SRAM)	1	265
166	74265 (SRAM)	1	266
167	74266 (SRAM)	1	267
168	74267 (SRAM)	1	268
169	74268 (SRAM)	1	269
170	74269 (SRAM)	1	270
171	74270 (SRAM)	1	271
172	74271 (SRAM)	1	272
173	74272 (SRAM)	1	273
174	74273 (SRAM)	1	274
175	74274 (SRAM)	1	275
176	74275 (SRAM)	1	276
177	74276 (SRAM)	1	277
178	74277 (SRAM)	1	278
179	74278 (SRAM)	1	279
180	74279 (SRAM)	1	280
181	74280 (SRAM)	1	281
182	74281 (SRAM)	1	282
183	74282 (SRAM)	1	283
184	74283 (SRAM)	1	284
185	74284 (SRAM)	1	285
186	74285 (SRAM)	1	286
187	74286 (SRAM)	1	287
188	74287 (SRAM)	1	288
189	74288 (SRAM)	1	289
190	74289 (SRAM)	1	290
191	74290 (SRAM)	1	291
192	74291 (SRAM)	1	292
193	74292 (SRAM)	1	293
194	74293 (SRAM)	1	294
195	74294 (SRAM)	1	295
196	74295 (SRAM)	1	296
197	74296 (SRAM)	1	297
198	74297 (SRAM)	1	298
199	74298 (SRAM)	1	299
200	74299 (SRAM)	1	300
201	7430		



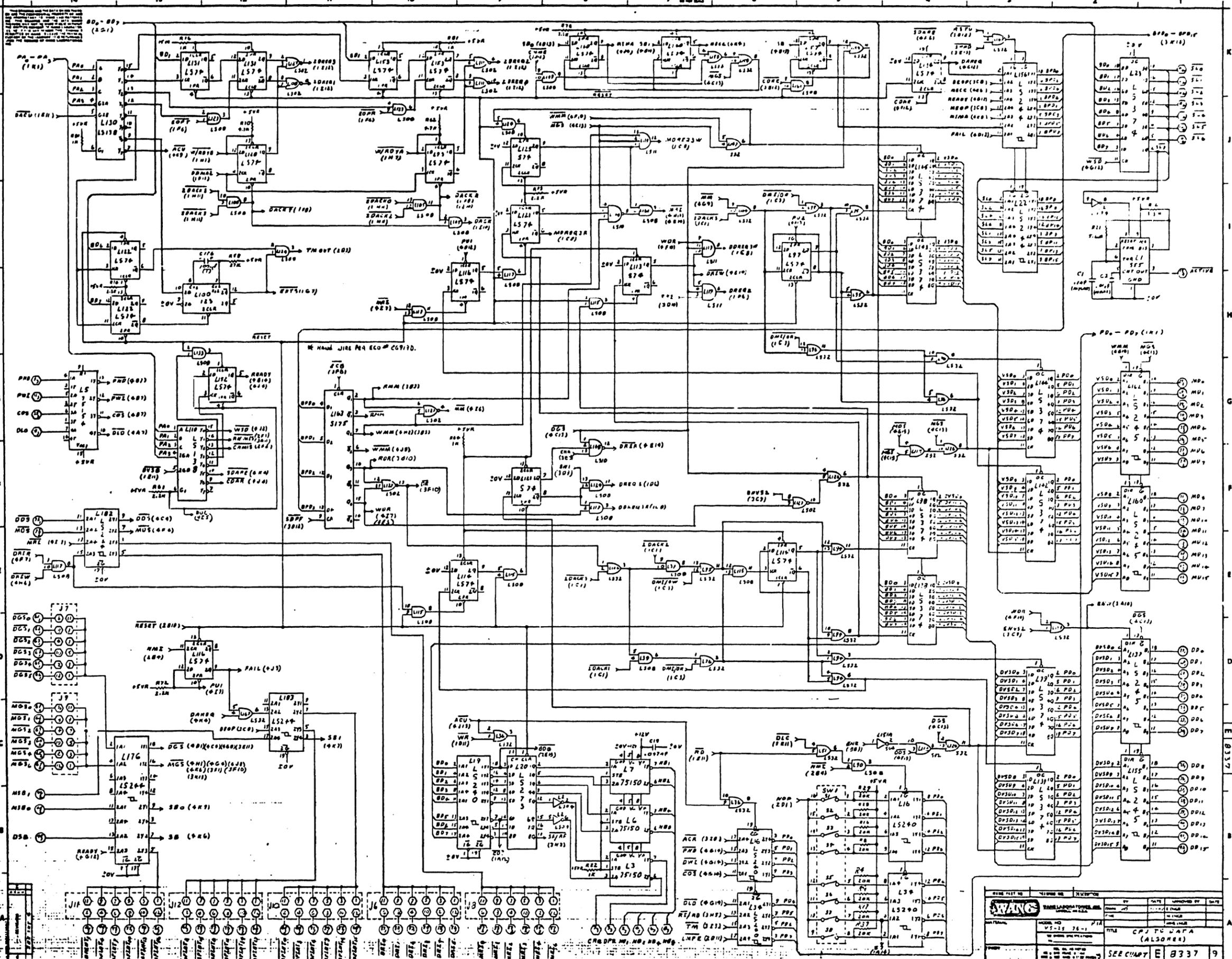


DATE	BY	REVISION	DESCRIPTION
1964-11-10	WAVCO	1	INITIAL DESIGN
1964-11-15	WAVCO	2	REVISED FOR MANUFACTURE
1964-11-20	WAVCO	3	REVISED FOR TESTING
1964-11-25	WAVCO	4	REVISED FOR PRODUCTION

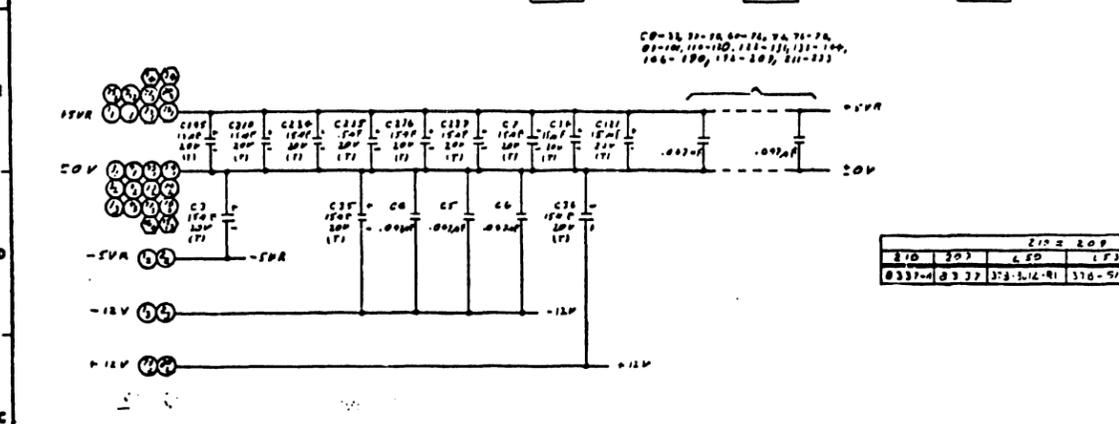
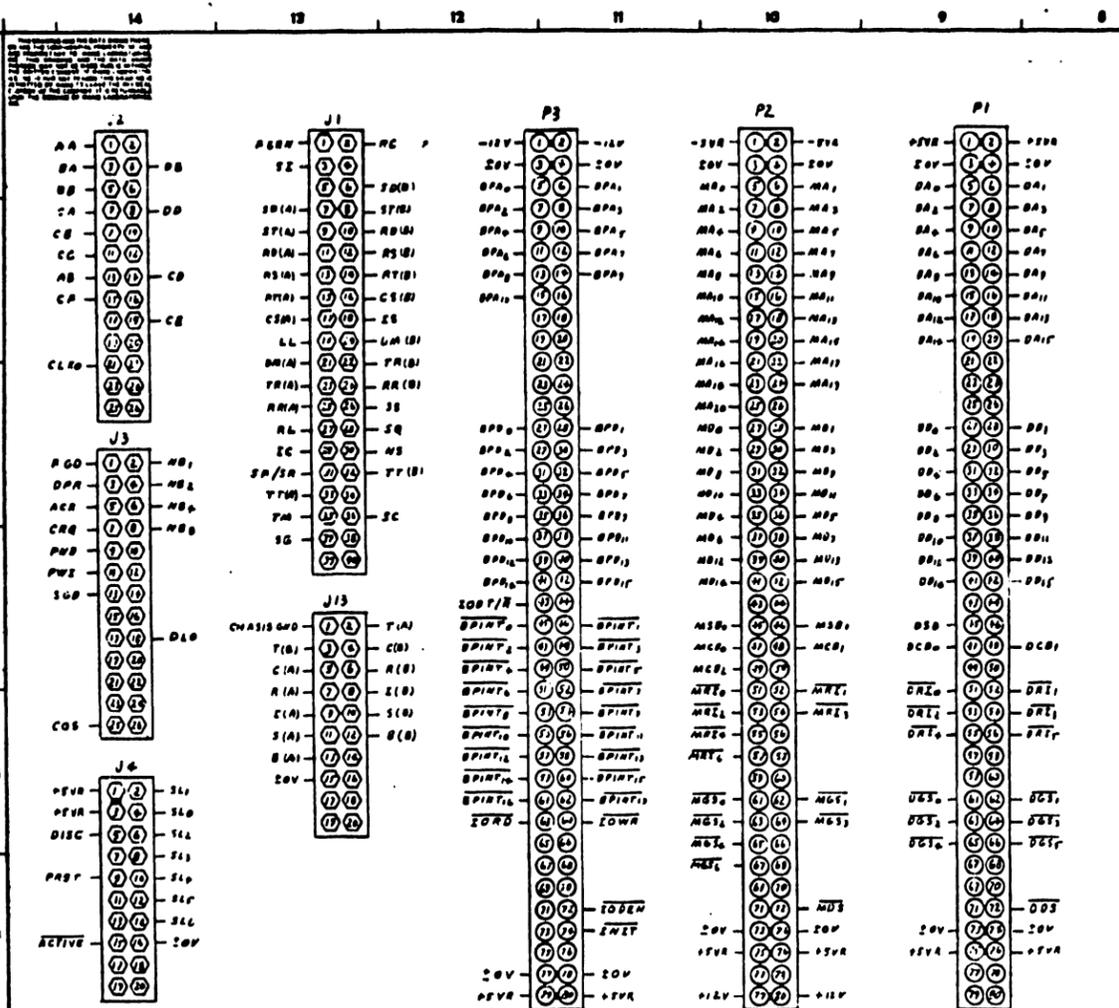
AVANG	MODEL NO. 72-25 76-1 P11	TITLE CPU TC DATA (ALGOREV)
SEE CHART E 8337		

34" 22" 17" 11" 8.5" 11" 17" 22" 34"

14 13 12 11 10 9 8 7 6 5 4 3 2 1



DATE	REV	BY	CHKD
1964-08-11	1	W. J. ...	...
1964-08-11	2	W. J. ...	...
1964-08-11	3	W. J. ...	...
1964-08-11	4	W. J. ...	...
1964-08-11	5	W. J. ...	...
1964-08-11	6	W. J. ...	...
1964-08-11	7	W. J. ...	...
1964-08-11	8	W. J. ...	...
1964-08-11	9	W. J. ...	...
1964-08-11	10	W. J. ...	...
1964-08-11	11	W. J. ...	...
1964-08-11	12	W. J. ...	...
1964-08-11	13	W. J. ...	...
1964-08-11	14	W. J. ...	...
1964-08-11	15	W. J. ...	...
1964-08-11	16	W. J. ...	...
1964-08-11	17	W. J. ...	...
1964-08-11	18	W. J. ...	...
1964-08-11	19	W. J. ...	...
1964-08-11	20	W. J. ...	...

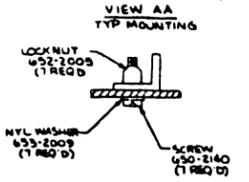
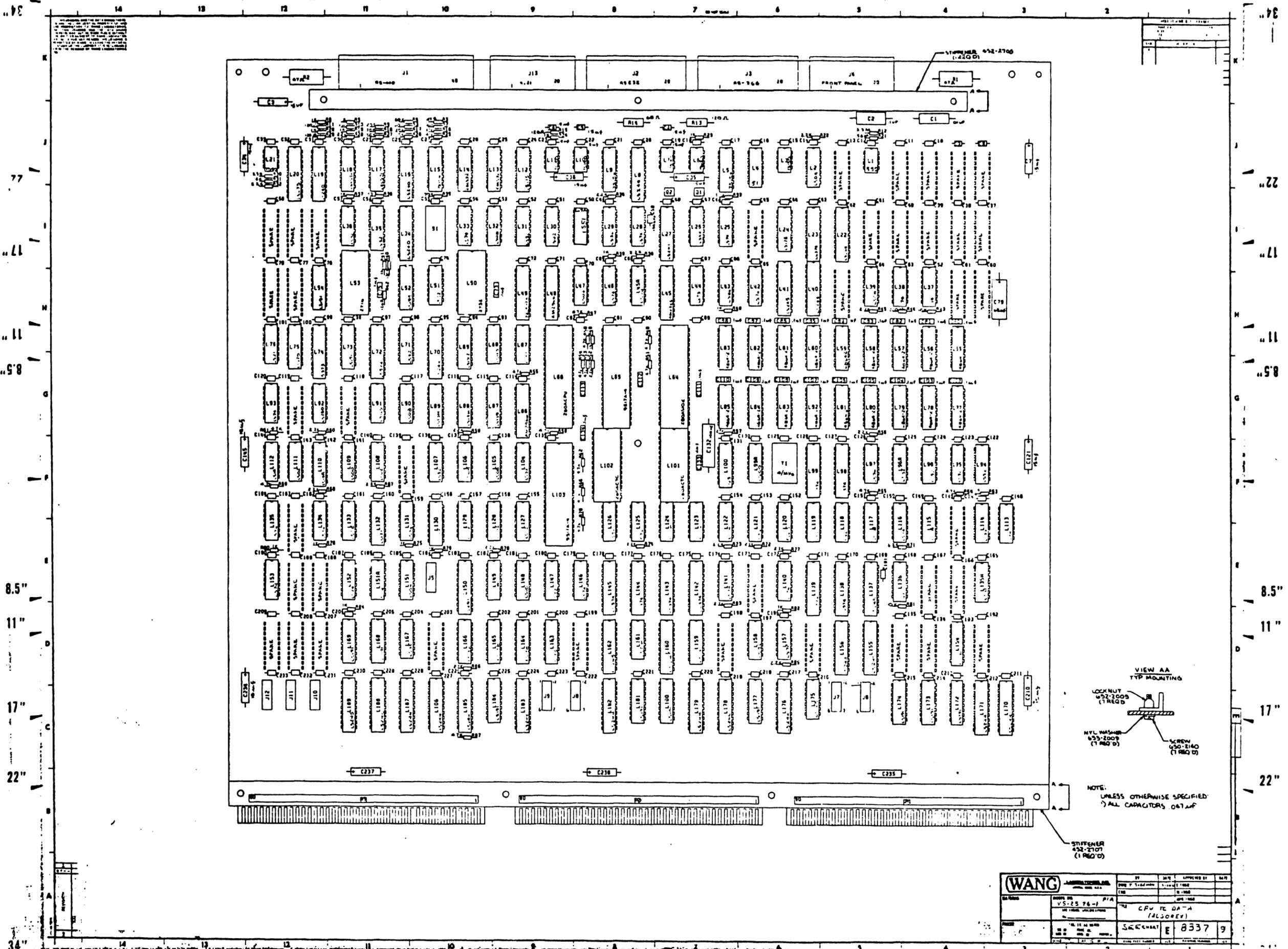


P.C. LOCATION	TYPE	MT. PART NO.
L1	515	174-0126
L2, L3, L4, L5	74120	174-0110
L6, L7, L8, L9	74120	174-0110
L10, L11, L12, L13, L14, L15, L16, L17, L18, L19, L20, L21, L22, L23, L24, L25, L26, L27, L28, L29, L30, L31, L32, L33, L34, L35, L36, L37, L38, L39, L40, L41, L42, L43, L44, L45, L46, L47, L48, L49, L50, L51, L52, L53, L54, L55, L56, L57, L58, L59, L60, L61, L62, L63, L64, L65, L66, L67, L68, L69, L70, L71, L72, L73, L74, L75, L76, L77, L78, L79, L80, L81, L82, L83, L84, L85, L86, L87, L88, L89, L90, L91, L92, L93, L94, L95, L96, L97, L98, L99, L100	74120	174-0110
L101, L102, L103, L104, L105, L106, L107, L108, L109, L110, L111, L112, L113, L114, L115, L116, L117, L118, L119, L120, L121, L122, L123, L124, L125, L126, L127, L128, L129, L130, L131, L132, L133, L134, L135, L136, L137, L138, L139, L140, L141, L142, L143, L144, L145, L146, L147, L148, L149, L150, L151, L152, L153, L154, L155, L156, L157, L158, L159, L160, L161, L162, L163, L164, L165, L166, L167, L168, L169, L170, L171, L172, L173, L174, L175, L176, L177, L178, L179, L180, L181, L182, L183, L184, L185, L186, L187, L188, L189, L190, L191, L192, L193, L194, L195, L196, L197, L198, L199, L200	74120	174-0110
L201, L202, L203, L204, L205, L206, L207, L208, L209, L210, L211, L212, L213, L214, L215, L216, L217, L218, L219, L220, L221, L222, L223, L224, L225, L226, L227, L228, L229, L230, L231, L232, L233, L234, L235, L236, L237, L238, L239, L240, L241, L242, L243, L244, L245, L246, L247, L248, L249, L250, L251, L252, L253, L254, L255, L256, L257, L258, L259, L260, L261, L262, L263, L264, L265, L266, L267, L268, L269, L270, L271, L272, L273, L274, L275, L276, L277, L278, L279, L280, L281, L282, L283, L284, L285, L286, L287, L288, L289, L290, L291, L292, L293, L294, L295, L296, L297, L298, L299, L300	74120	174-0110
L301, L302, L303, L304, L305, L306, L307, L308, L309, L310, L311, L312, L313, L314, L315, L316, L317, L318, L319, L320, L321, L322, L323, L324, L325, L326, L327, L328, L329, L330, L331, L332, L333, L334, L335, L336, L337, L338, L339, L340, L341, L342, L343, L344, L345, L346, L347, L348, L349, L350, L351, L352, L353, L354, L355, L356, L357, L358, L359, L360, L361, L362, L363, L364, L365, L366, L367, L368, L369, L370, L371, L372, L373, L374, L375, L376, L377, L378, L379, L380, L381, L382, L383, L384, L385, L386, L387, L388, L389, L390, L391, L392, L393, L394, L395, L396, L397, L398, L399, L400	74120	174-0110
L401, L402, L403, L404, L405, L406, L407, L408, L409, L410, L411, L412, L413, L414, L415, L416, L417, L418, L419, L420, L421, L422, L423, L424, L425, L426, L427, L428, L429, L430, L431, L432, L433, L434, L435, L436, L437, L438, L439, L440, L441, L442, L443, L444, L445, L446, L447, L448, L449, L450, L451, L452, L453, L454, L455, L456, L457, L458, L459, L460, L461, L462, L463, L464, L465, L466, L467, L468, L469, L470, L471, L472, L473, L474, L475, L476, L477, L478, L479, L480, L481, L482, L483, L484, L485, L486, L487, L488, L489, L490, L491, L492, L493, L494, L495, L496, L497, L498, L499, L500	74120	174-0110
L501, L502, L503, L504, L505, L506, L507, L508, L509, L510, L511, L512, L513, L514, L515, L516, L517, L518, L519, L520, L521, L522, L523, L524, L525, L526, L527, L528, L529, L530, L531, L532, L533, L534, L535, L536, L537, L538, L539, L540, L541, L542, L543, L544, L545, L546, L547, L548, L549, L550, L551, L552, L553, L554, L555, L556, L557, L558, L559, L560, L561, L562, L563, L564, L565, L566, L567, L568, L569, L570, L571, L572, L573, L574, L575, L576, L577, L578, L579, L580, L581, L582, L583, L584, L585, L586, L587, L588, L589, L590, L591, L592, L593, L594, L595, L596, L597, L598, L599, L600	74120	174-0110
L601, L602, L603, L604, L605, L606, L607, L608, L609, L610, L611, L612, L613, L614, L615, L616, L617, L618, L619, L620, L621, L622, L623, L624, L625, L626, L627, L628, L629, L630, L631, L632, L633, L634, L635, L636, L637, L638, L639, L640, L641, L642, L643, L644, L645, L646, L647, L648, L649, L650, L651, L652, L653, L654, L655, L656, L657, L658, L659, L660, L661, L662, L663, L664, L665, L666, L667, L668, L669, L670, L671, L672, L673, L674, L675, L676, L677, L678, L679, L680, L681, L682, L683, L684, L685, L686, L687, L688, L689, L690, L691, L692, L693, L694, L695, L696, L697, L698, L699, L700	74120	174-0110
L701, L702, L703, L704, L705, L706, L707, L708, L709, L710, L711, L712, L713, L714, L715, L716, L717, L718, L719, L720, L721, L722, L723, L724, L725, L726, L727, L728, L729, L730, L731, L732, L733, L734, L735, L736, L737, L738, L739, L740, L741, L742, L743, L744, L745, L746, L747, L748, L749, L750, L751, L752, L753, L754, L755, L756, L757, L758, L759, L760, L761, L762, L763, L764, L765, L766, L767, L768, L769, L770, L771, L772, L773, L774, L775, L776, L777, L778, L779, L780, L781, L782, L783, L784, L785, L786, L787, L788, L789, L790, L791, L792, L793, L794, L795, L796, L797, L798, L799, L800	74120	174-0110
L801, L802, L803, L804, L805, L806, L807, L808, L809, L810, L811, L812, L813, L814, L815, L816, L817, L818, L819, L820, L821, L822, L823, L824, L825, L826, L827, L828, L829, L830, L831, L832, L833, L834, L835, L836, L837, L838, L839, L840, L841, L842, L843, L844, L845, L846, L847, L848, L849, L850, L851, L852, L853, L854, L855, L856, L857, L858, L859, L860, L861, L862, L863, L864, L865, L866, L867, L868, L869, L870, L871, L872, L873, L874, L875, L876, L877, L878, L879, L880, L881, L882, L883, L884, L885, L886, L887, L888, L889, L890, L891, L892, L893, L894, L895, L896, L897, L898, L899, L900	74120	174-0110
L901, L902, L903, L904, L905, L906, L907, L908, L909, L910, L911, L912, L913, L914, L915, L916, L917, L918, L919, L920, L921, L922, L923, L924, L925, L926, L927, L928, L929, L930, L931, L932, L933, L934, L935, L936, L937, L938, L939, L940, L941, L942, L943, L944, L945, L946, L947, L948, L949, L950, L951, L952, L953, L954, L955, L956, L957, L958, L959, L960, L961, L962, L963, L964, L965, L966, L967, L968, L969, L970, L971, L972, L973, L974, L975, L976, L977, L978, L979, L980, L981, L982, L983, L984, L985, L986, L987, L988, L989, L990, L991, L992, L993, L994, L995, L996, L997, L998, L999, L1000	74120	174-0110

COMPONENT	TYPE	MT. PART NO.
R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100

P.C. TYPE	LOC.	QUANTITY
74120	L10	1
74120	L11	1
74120	L12	1
74120	L13	1
74120	L14	1
74120	L15	1
74120	L16	1
74120	L17	1
74120	L18	1
74120	L19	1
74120	L20	1
74120	L21	1
74120	L22	1
74120	L23	1
74120	L24	1
74120	L25	1
74120	L26	1
74120	L27	1
74120	L28	1
74120	L29	1
74120	L30	1
74120	L31	1
74120	L32	1
74120	L33	1
74120	L34	1
74120	L35	1
74120	L36	1
74120	L37	1
74120	L38	1
74120	L39	1
74120	L40	1
74120	L41	1
74120	L42	1
74120	L43	1
74120	L44	1
74120	L45	1
74120	L46	1
74120	L47	1
74120	L48	1
74120	L49	1
74120	L50	1
74120	L51	1
74120	L52	1
74120	L53	1
74120	L54	1
74120	L55	1
74120	L56	1
74120	L57	1
74120	L58	1
74120	L59	1
74120	L60	1
74120	L61	1
74120	L62	1
74120	L63	1
74120	L64	1
74120	L65	1
74120	L66	1
74120	L67	1
74120	L68	1
74120	L69	1
74120	L70	1
74120	L71	1
74120	L72	1
74120	L73	1
74120	L74	1
74120	L75	1
74120	L76	1
74120	L77	1
74120	L78	1
74120	L79	1
74120	L80	1
74120	L81	1
74120	L82	1
74120	L83	1
74120	L84	1
74120	L85	1
74120	L86	1
74120	L87	1
74120	L88	1
74120	L89	1
74120	L90	1
74120	L91	1
74120	L92	1
74120	L93	1
74120	L94	1
74120	L95	1
74120	L96	1
74120	L97	1
74120	L98	1
74120	L99	1
74120	L100	1

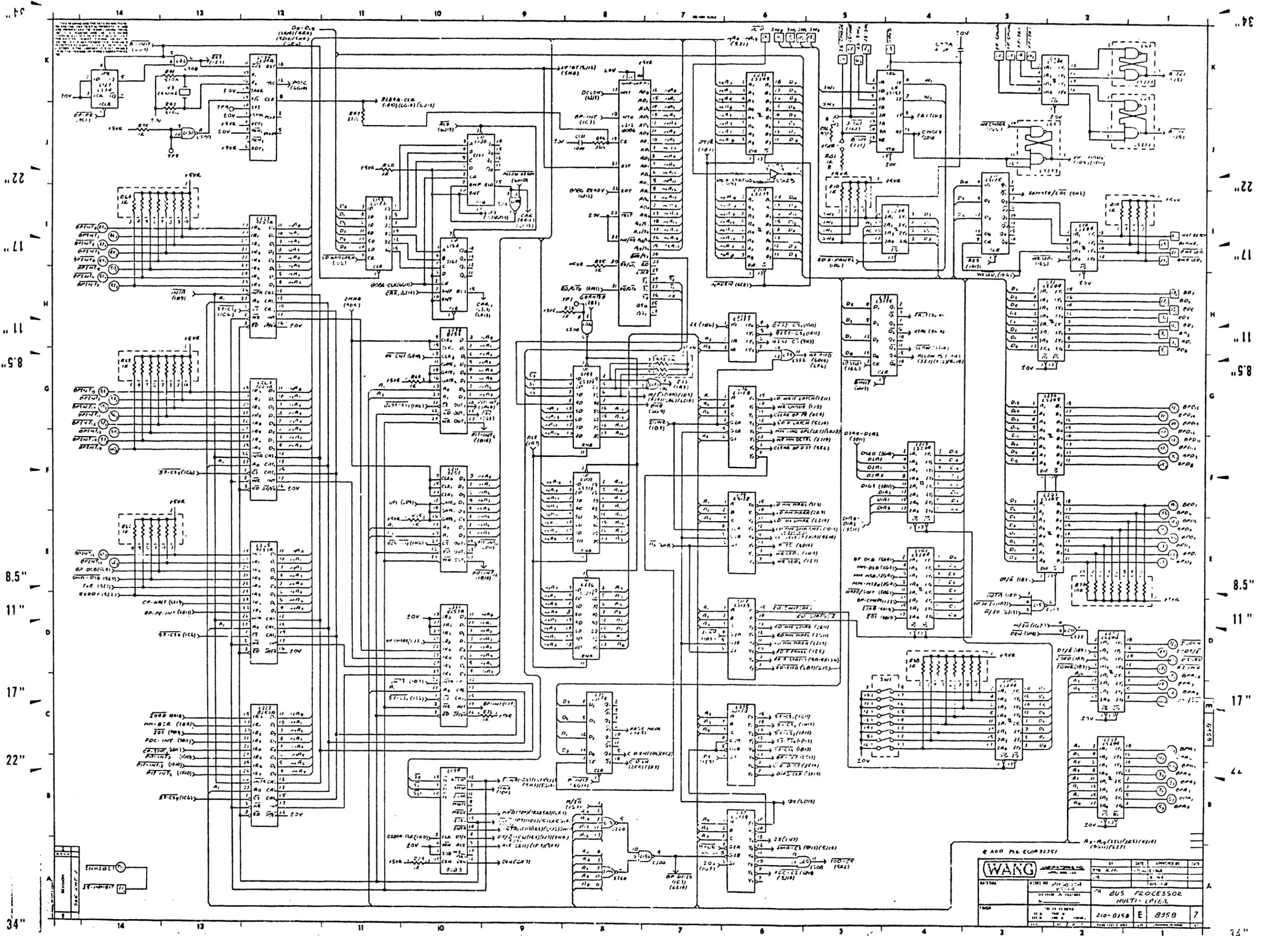
REF. SYMBOL	VALUE	REF. SYMBOL	VALUE
R1	10K	R101	10K
R2	10K	R102	10K
R3	10K	R103	10K
R4	10K	R104	10K
R5	10K	R105	10K
R6	10K	R106	10K
R7	10K	R107	10K
R8	10K	R108	10K
R9	10K	R109	10K
R10	10K	R110	10K
R11	10K	R111	10K
R12	10K	R112	10K
R13	10K	R113	10K
R14	10K	R114	10K
R15	10K	R115	10K
R16	10K	R116	10K
R17	10K	R117	10K
R18	10K	R118	10K
R19	10K	R119	10K
R20	10K	R120	10K
R21	10K	R121	10K
R22	10K	R122	10K
R23	10K	R123	10K
R24	10K	R124	10K
R25	10K	R125	10K
R26	10K	R126	10K
R27	10K	R127	10K
R28	10K	R128	10K
R29	10K	R129	10K
R30	10K	R130	10K
R31	10K	R131	10K
R32	10K	R132	10K
R33	10K	R133	10K
R34	10K	R134	10K
R35	10K	R135	10K
R36	10K	R136	10K
R37	10K	R137	10K
R38	10K	R138	10K
R39	10K	R139	10K
R40	10K	R140	10K
R41	10K	R141	10K
R42	10K	R142	10K
R43	10K	R143	10K
R44	10K	R144	10K
R45	10K	R145	10K
R46	10K	R146	10K
R47	10K	R147	10K
R48	10K	R148	10K
R49	10K	R149	10K
R50	10K	R150	10K
R51	10K	R151	10K
R52	10K	R152	10K
R53	10K	R153	10K
R54	10K	R154	10K
R55	10K	R155	10K
R56	10K	R156	10K
R57	10K	R157	10K
R58	10K	R158	10K
R59	10K	R159	10K
R60	10K	R160	10K
R61	10K	R161	10K
R62	10K	R162	10K
R63	10K	R163	10K
R64	10K	R164	10K
R65	10K	R165	10K
R66	10K	R166	10K
R67	10K	R167	10K
R68	10K	R168	10K
R69	10K	R169	10K
R70	10K	R170	10K
R71	10K	R171	10K
R72	10K	R172	10K
R73	10K	R173	10K
R74	10K	R174	10K
R75	10K	R175	10K
R76	10K	R176	10K
R77	10K	R177	10K
R78	10K	R178	10K
R79	10K	R179	10K
R80	10K	R180	10K
R81	10K	R181	10K
R82	10K	R182	10K
R83	10K	R183	10K
R84	10K	R184	10K
R85	10K	R185	10K
R86	10K	R186	10K
R87	10K	R187	10K
R88	10K	R188	10K
R89	10K	R189	10K
R90	10K	R190	10K
R91	10K	R191	10K
R92	10K	R192	10K
R93	10K	R193	10K
R94	10K	R194	10K
R95	10K	R195	10K
R96	10K	R196	10K
R97	10K	R197	10K
R98	10K	R198	10K
R99	10K	R199	10K
R100	10K	R200	10K



NOTE:
UNLESS OTHERWISE SPECIFIED
ALL CAPACITORS OUTLINE

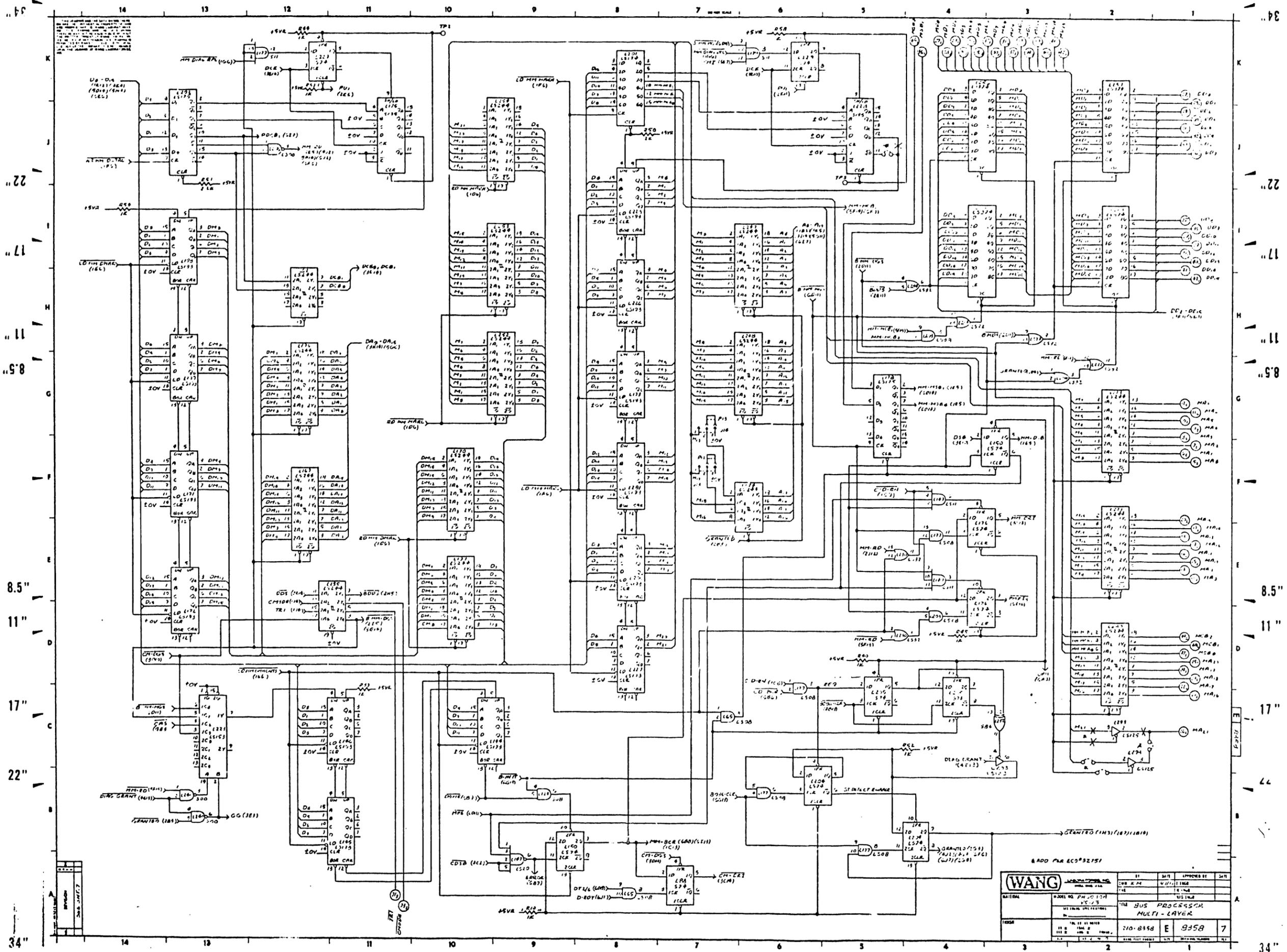
STIFFENER
432-2107
(1 REQ'D)

(WANG)		BY	CHKD	APPROVED BY	DATE
DESIGN NO.	VS-25 76-1 P/A	DATE	DATE	DATE	DATE
BY		BY		BY	
CPU PC DA-A (ALSOES)		SHEET NO. 8337 9			

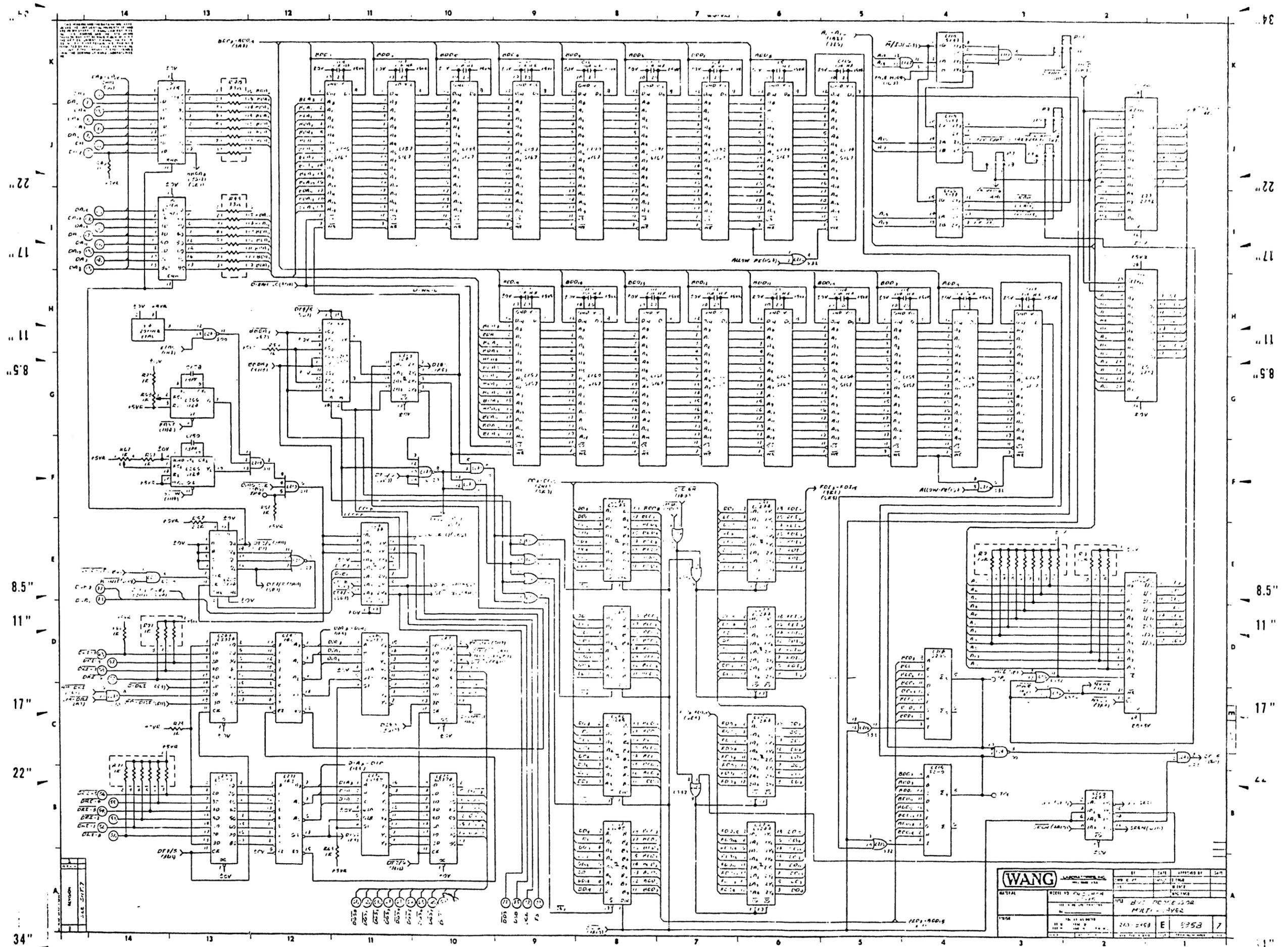


WANG MODEL NO. 210-0358 PART NO. 210-0358		DATE	APPROVED BY
		REV.	DATE
BUS PROCESSOR MULTI-LAYER		210-0358	E 0358
210-0358 E 0358		7	

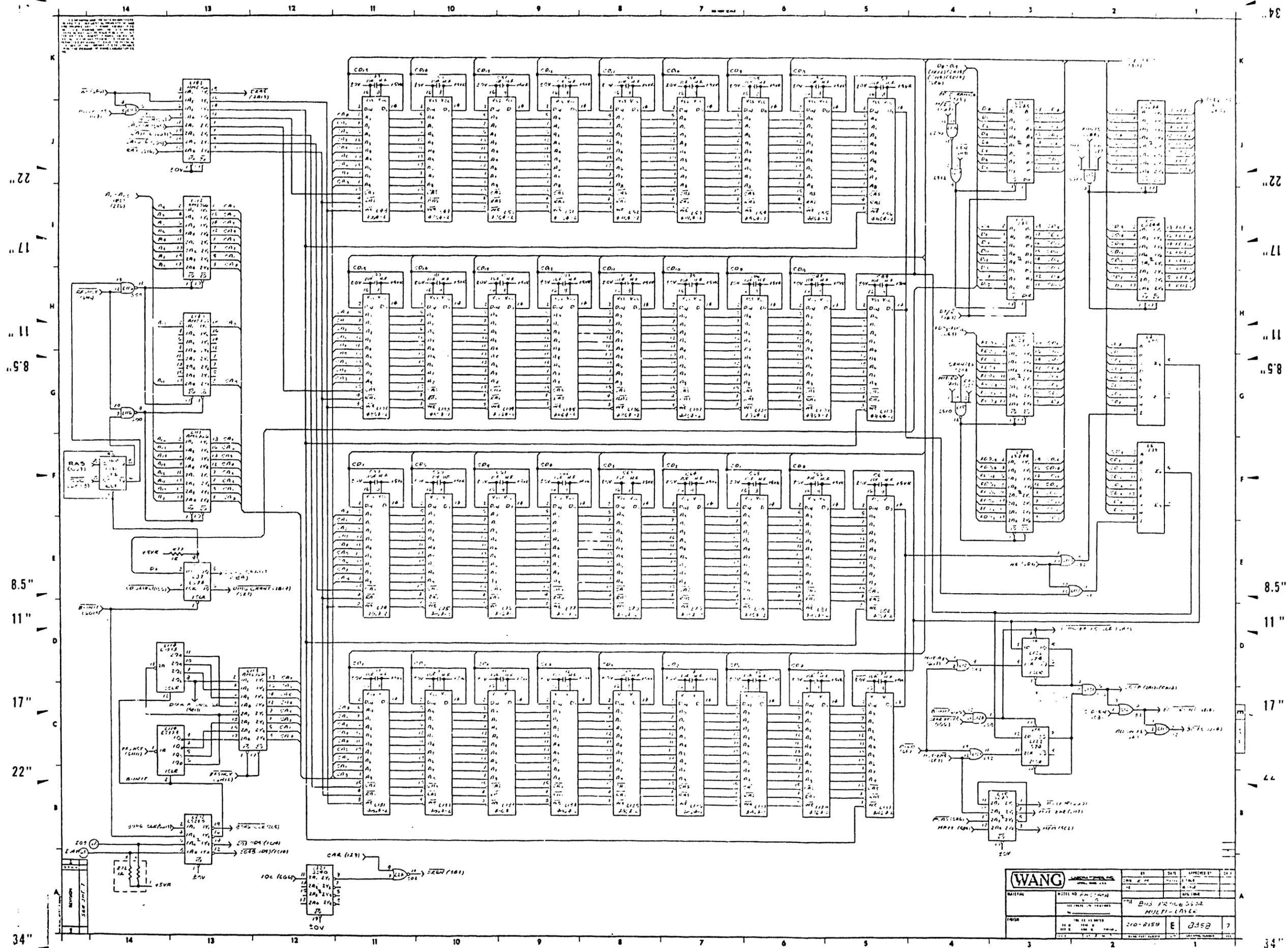
34" 22" 17" 11" 8.5" 8.5" 11" 17" 22" 34"



WANG		DATE	REV	APPROVED BY	DATE
MODEL NO. 720-107		DATE	REV	APPROVED BY	DATE
MULTI-LAYER		DATE	REV	APPROVED BY	DATE
720-8358		DATE	REV	APPROVED BY	DATE
E 9358		DATE	REV	APPROVED BY	DATE
7		DATE	REV	APPROVED BY	DATE

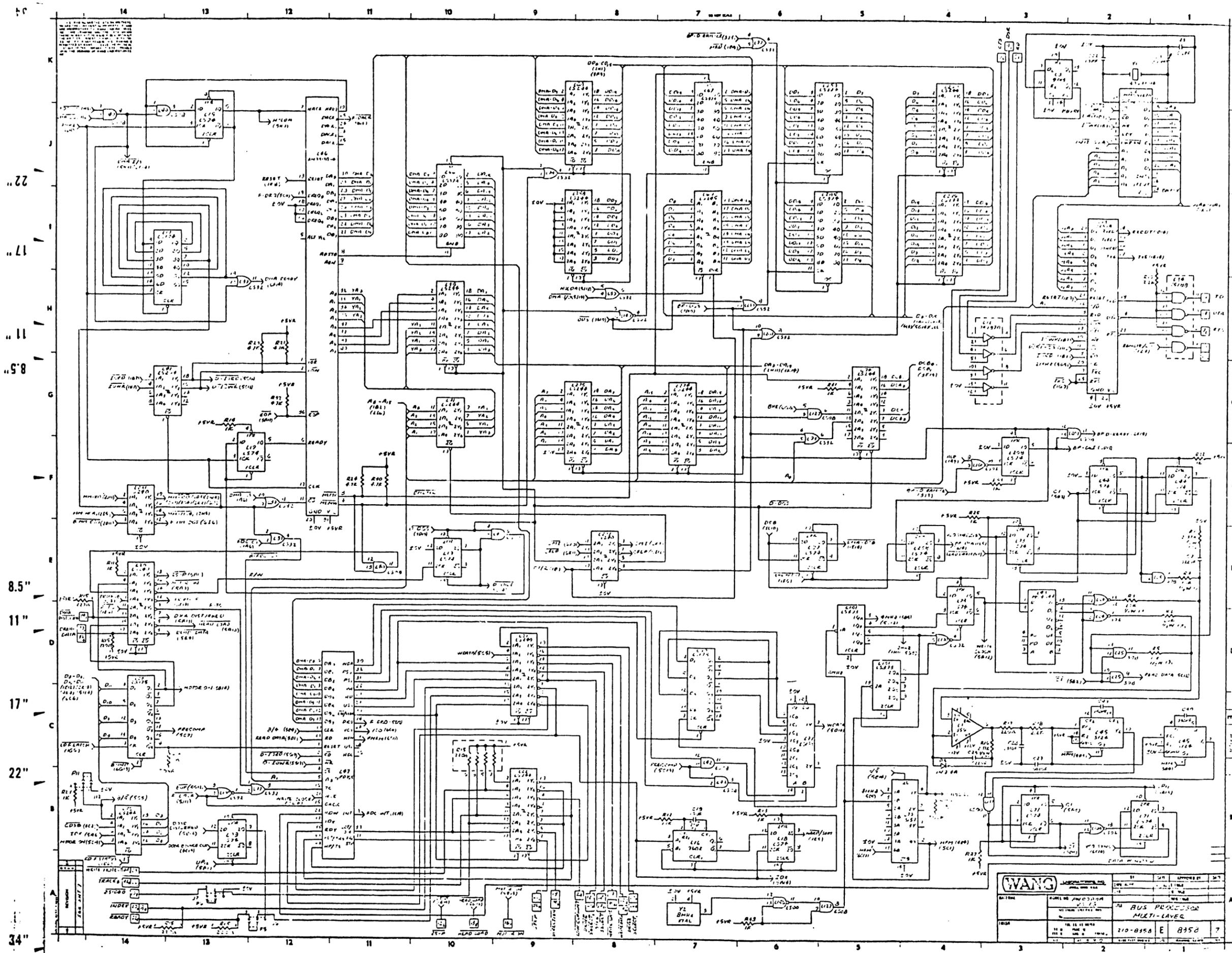


WANG		DATE	APPROVED BY	DATE
		REVISED	BY	DATE
PARTIAL		REVISIONS		
TITLE		MULTIPLIER		
DRAWN		E 3953 7		



1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
 2. BOARD SIZE IS 34" X 14".
 3. BOARD THICKNESS IS .0625".
 4. BOARD WEIGHT IS 1.5 LBS.
 5. BOARD AREA IS 476 SQ. IN.
 6. BOARD PERIMETER IS 96 IN.
 7. BOARD VOLUME IS 30.6 CU. IN.
 8. BOARD SURFACE AREA IS 1411 SQ. IN.
 9. BOARD WEIGHT PER SQ. IN. IS 0.0031 LBS.
 10. BOARD WEIGHT PER CU. IN. IS 0.051 LBS.
 11. BOARD WEIGHT PER SQ. FT. IS 0.00077 LBS.
 12. BOARD WEIGHT PER CU. FT. IS 0.0125 LBS.
 13. BOARD WEIGHT PER SQ. YD. IS 0.00277 LBS.
 14. BOARD WEIGHT PER CU. YD. IS 0.044 LBS.

(WANG)		DATE	APPROVED BY	NO.
MATERIAL	WANG	NOV 19 1964		
DESIGN	WANG	NOV 19 1964		
THE BUS PRINCIPLE		MULTI-LAYER		
NO.	NO. OF LAYERS	NO. OF LAYERS	NO. OF LAYERS	NO. OF LAYERS
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31	32	33	34	35
36	37	38	39	40
41	42	43	44	45
46	47	48	49	50
51	52	53	54	55
56	57	58	59	60
61	62	63	64	65
66	67	68	69	70
71	72	73	74	75
76	77	78	79	80
81	82	83	84	85
86	87	88	89	90
91	92	93	94	95
96	97	98	99	100



WANG		DATE: 11/15/68	REV: 1
PART NO: 210-8558		QTY: 1	APPROVED BY: [Signature]
MFG: [Manufacturer]		THE BUS PROCESSOR MULTI-LAYER	
110-8558	E	8558	7

BOARD NO. & TITLE: C8358 BUS PROCESSOR M/L
 SCHEMATIC REVISION (S): 07 SHEET OF PAGE 1

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
C23	300-1016-	5.6P	CAP CERAMIC MONO RADIAL 50V +/-0.5PF NPO		1
C158	300-1018-	18P	CAP CERAMIC DISC 10% 500V VPO		2
C22	300-1021-	10P	CAP CERAMIC DISC 5% 100V N750 TEMP CDMP		2
C131					
C40	300-1150-	150P	CAP CERAMIC DISC 10% 500V XSP		1
C30	300-1330-	330P	CAP CERAMIC DISC 1% 500V XSF		1
C49 - C57	300-1833-	.1U	CAP CERAMIC MONO AXIAL LEADED +80%-20% 50V Z5U		56
C58 - C67					
C80 - C97					
C109 - C126	300-1903-	.01U	CAP CERAMIC DISC +80% -20% 25V Z5F		2
C20					
C37					
C29	300-1906-	.001U	CAP CERAMIC DISC 10% 500V XSF		1
C7	300-1914-	.022U	CAP CERAMIC DISC 20% 25V Z5F		2
C28					
C1 - C6	300-1966-	.047U	CAP CERAMIC MONO AXIAL +80 -20% 50V Z5U		63
C9 - C18					
C19 - C21					
C31 - C35					
C38					
C43 - C47					
C68 - C79					
C94					
C98 - C108					
C127 - C130					
C132 - C149					
C151 - C156					
C162 - C164					
C94	300-4001-	.47U	CAP TANT AXIAL 10% 35V		1
C26	300-4009-	.39U	CAP TANT AXIAL 10% 35V		1
C10	300-4022-	18U	CAP TANT AXIAL 10% 20V		9
C27					
C36					
C56					
C157					
C159 - C161					
C165					

BOARD NO. & TITLE: C8358 BUS PROCESSOR M/L
 SCHEMATIC REVISION (S): 07 SHEET OF PAGE 3

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
R71 - R72					
R67 - R68	336-1014-	1K	RES TRIMMER .375" SQUARE SIDE ADJ 10% 1 TURN		2
J2	350-0058-	26 CONT	CONN PC HEADER DUAL ROW .100 R/A W/LOCK/EJECT		1
J4	350-0218-	50 CONT	CONN PC HEADER W/LOCK/EJECT R/A		1
J1	350-0429-	34 CONT	CONN HEADER R/A W/LOCK EJECT		2
J3					
VH1	374-0032-	78L05A	IC REG 78L05A +/- 5% TO-92		1
Q1	375-1115-	VN100M	FET N-CH TO-237 1W 60V .5A		1
L16	376-0104-	9602	IC DUAL REYRIG/RESET MONOSTABLE MULTIVIBRATOR		1
L40	376-0153-	74LS08	IC QUAD 2-INPUT AND GATE		5
L42					
L65					
L177					
L203					
L10 - L19	376-0155-	74LS74	IC DUAL D-TYPE POSITIVE EDGE TRIG FLIP-FLOP		9
L71					
L87					
L129					
L150					
L176					
L204					
L208					
L64	376-0156-	74LS153	IC DUAL 4-INPUT MULTIPLEXER		3
L99					
L233					
L17	376-0159-	74LS174	IC HEX D-TYPE FLIP-FLOP		3
L163					
L201					
L11	376-0160-	74LS175	IC QUAD D-TYPE FLIP-FLOP		7
L23					
L33					
L92					
L98					
L178					
L202					
L245					
L271					
L90	376-0184-	74S51	IC DUAL 2 WIDE 2-INPUT AND-OR-INVERT GATES		1
L24	376-0199-	74S02	IC QUAD 2-INPUT POSITIVE-NOR GATES		2
L148					
L25	376-0200-	74S08	IC QUAD 2 INPUT POSITIVE AND GATES		5
L121					
L124					
L127					
L243					
L44	376-0202-	74S74	IC DUAL D-TYPE POS EDGE TRIGRD F/F W/PRESET/C		11
L73					
L88					
L120					
L122					

BOARD NO. & TITLE: C8358 BUS PROCESSOR M/L
 SCHEMATIC REVISION (S): 07 SHEET OF PAGE 2

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
C6	300-8007-	0.8-10P	CAP VARIABLE AIR. 250V MCR-TURNING		1
Y1	321-0060-	32.76K	CRYSTAL MINIATURE 32.76K KHZ		1
Y3	321-0065-	24.000	CRYSTAL QUARTZ 24.000KHZ +/-C-10/10		1
Y2	321-1000-	8 MHZ	CLOCK OSCILLATOR 8.00 MHZ +/- .01% TTL		1
Y4	321-1001-	20 MHZ	CLOCK OSCILLATOR 20.00 MHZ +/- .01% TTL		1
SW1	325-1503-		SLIDE SPST 8 POS		1
R47	330-1023-	22 300	RES FIXED METAL FILM 1/4W 5% 200PPM		1
R46	330-1234-	33.300	RES FIXED METAL FILM 1/4W 5% 200PPM		1
R13	330-2023-	220.000	RES FIXED METAL FILM 1/4W 5% 200PPM		1
R41 - R42	330-2352-	510.000	RES FIXED METAL FILM 1/4W 5% 200PPM		2
R6 - R7	330-3011-	1K	RES FIXED METAL FILM 1/4W 5% 200PPM		2
R11					
R13 - R14					
R22					
R26 - R29					
R31					
R33 - R35					
R37					
R39 - R40					
R44 - R45					
R49					
R52 - R56					
R58 - R63					
R65 - R70					
R75					
R78 - R81					
R50	330-3021-	2.000K	RES FIXED METAL FILM 1/4W 5% 200PPM		1
R18 - R19	330-3023-	2.200K	RES FIXED METAL FILM 1/4W 5% 200PPM		1
R26					
R31					
R37					
R23	330-3034-	3.300K	RES FIXED METAL FILM 1/4W 5% 200PPM		1
R20 - R21	330-3048-	4.700K	RES FIXED METAL FILM 1/4W 5% 200PPM		1
R24					
R28					
R12	330-4011-	10.000K	RES FIXED METAL FILM 1/4W 5% 200PPM		1
R82	330-4048-	47K	RES FIXED METAL FILM 1/4W 5% 200PPM		1
R6 - R5	333-0090-	10.000K	RES FIXED METAL FILM 1/8W 1% 100PPM RMSS		2
R1	333-0093-	2.370K	RES FIXED METAL FILM 1/8W 100PPM RMSS		2
R16					
R2 - R3	333-0110-	20.000K	RES FIXED METAL FILM 1/8W 1% TC: D RMSS		2
R8 - R9	333-0809-	10.000K	RESISTOR NETWORK TYPE: 13/09/C/SS		3
R74					
R15	333-0811-	220.000H	RESISTOR NETWORK TYPE: 10/09/C/SS		1
R63	333-0835-	33.000 H	RESISTOR NETWORK TYPE: 16/08/F/D		2
R48					
R10	333-8837-	10K	RESISTOR NETWORK TYPE: 10/09/C/SS		7
R38					
R64 - R66					

BOARD NO. & TITLE: C8358 BUS PROCESSOR M/L
 SCHEMATIC REVISION (S): 07 SHEET OF PAGE 4

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L128					
L141					
L182					
L205					
L229					
L234					
L115	376-0205-	74S32	IC QUAD 2-INPUT OR GATE		3
L123					
L216					
L185	376-0206-	74S260	IC DUAL 5-INPUT EXPANDER		1
L130	376-0207-	74LS00	IC QUAD 2-INPUT NAND GATE		3
L156					
L206					
L100	376-0208-	74LS02	IC QUAD 2-INPUT NOR GATE		1
L15	376-0209-	74LS10	IC TRIPLE 3-INPUT POS NAND GATES		1
L61	376-0210-	74LS20	IC DUAL 4-INPUT NAND GATE		2
L147					
L36	376-0211-	74LS32	IC QUAD 2-INPUT OR GATE		9
L39					
L93					
L97					
L207					
L222					
L230					
L269					
L284					
L14	376-0213-	74LS51	IC DUAL 2-WIDE 2-INPUT AND-OR-INVERT GATE		1
L217	376-0215-	74S153	IC DUAL 4-INPUT MULTIPLEXER		1
L4	376-0216-	74LS157	IC QUAD 2-INPUT MULTIPLEXER		1
L70	376-0217-	74S157	IC QUAD 2 TO 1 LINE DATA SEL/MUL		1
L125					
L144 - L146	376-0220-	74LS193	IC UP/DOWN BINARY COUNTER		13
L171 - L173					
L198 - L200					
L225 - L227					
L281					
L89	376-0221-	74S194	IC 4 BIT SHIFT REGISTER		3
L91					
L220					
L149	376-0225-	74LS11	IC TRIPLE 3-INPUT AND GATE		1
L116	376-0228-	74S00	IC QUAD 2-INPUT NAND GATE		2
L240					
L119	376-0237-	74S11	IC TRIPLE 3-INPUT AND GATE		3
L179					
L213					
L233	376-0245-	74LS27	IC TRIPLE 3-INPUT NOR GATE		1
L6	376-0246-	74S280	IC 9-BIT PARITY GENERATOR/CHECKER		1
L28					
L214					
L43	376-0264-	MC4804	IC PHASE FREQUENCY DETECTOR 14 PIN DIP		1

MATERIAL	WANG LABORATORIES, INC. LITTLE ROCK, AR, U.S.A.	BY	DATE	APPROVED BY	DATE
	MODEL NO.	DWH		E ENGR	
	SEE DRAWING SPECIFICATIONS	CNK		M ENGR	
				W/ENGR	
		TITLE BUS PROCESSOR M/L			

11

11

9.8

BOARD NO. & TITLE: C8188 BUS PROCESSOR M/L SCHEMATIC REVISION (S): 07 SHEET 9 OF 10 PAGE 8

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L157	376-0270-	74S175	IC QUAD D-TYPE FLIP-FLOP		1
L232	376-0271-	74S86	IC QUAD 2 IN EXCLUSIVE OR GATE		1
L45	376-0273-	74S124	IC DUAL VOLTAGE CONTROLLED OSC (VCO)		2
L266					
L154	376-0270-	74S161	IC SYN 4-BIT BINARY COUNTER W/DIRECT CLEAR		2
L180					
L9	376-0280-	74LS245	IC OCTAL BUS TRANSCEIVER TRI-STATE OUTPUTS		11
L31					
L69					
L210					
L237					
L241 - L242					
L267 - L268					
L289 - L290					
L240	376-0280-	74LS374	IC OCTAL D-TYPE FLIP-FLOP TRI-STATE		10
L247					
L256 - L257					
L250					
L270					
L273					
L282 - L283					
L285					
L7 - L8	376-0280-	74LS244	IC OCTAL BUFFER/LINE DRIVER W/TRI STATE		46
L10					
L29 - L30					
L32					
L38					
L41					
L69 - L60					
L62					
L62					
L72					
L65 - L66					
L94					
L181					
L158					
L169 - L170					
L176					
L182					
L196 - L197					
L219					
L224					
L248 - L255					
L258					
L260					
L274 - L280					
L286 - L288					
L39	376-0304-	74LS138	IC 3-LINE TO 8-LINE DECODER/MULTIPLEXER		7
L37					
L96					

BOARD NO. & TITLE: C8188 BUS PROCESSOR M/L SCHEMATIC REVISION (S): 07 SHEET OF PAGE 7

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L159 - L167	376-9020-	SKT 20	IC SOCKET 20 PIN DIL PC MOUNT		19
L184					
L186 - L194					
D5	380-1012-	1N914A	DIO SIG 75V 250MA 4NS 00-35		1
D1 - D4	380-4019-	1N5819	DIO SCKY BARRIER 40V 1A 500MV AXIAL		4
028	510-0358-		PCB		1
J6 - J15	654-0104-	3 CONT	CONN PC HEADER SINGLE ROW .100		11

8.5"

11"

17"

11

11

9.8

BOARD NO. & TITLE: C8188 BUS PROCESSOR M/L SCHEMATIC REVISION (S): 07 SHEET OF PAGE 6

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L117					
L235					
L246					
L272					
L28 - L22	376-0297-	74LS240	IC OCTAL BUFFER/LINE DRIVER/LINE RECEIVER		4
L292					
L143	376-0301-	74S158	IC QUAD 2 TO 1-LINE DATA SELECTOR/MUX INVERT		1
L101	376-0307-	74LS139	IC DUAL 4-BIT BINARY COUNTER		2
L114					
L66 - L67	376-0310-	74LS373	IC OCTAL D-TYPE LATCH TRI-STATE OUTPUTS		7
L168					
L183					
L195					
L209					
L236					
L63	376-0316-	74LS279	IC QUAD SET-RESET LATCH		1
L57 - L58	376-0323-	74S225	IC 16 X 8 BI POLAR ASYNCH FIFO		4
L83 - L84					
L118	376-0333-	74S139	IC 2 TO 4-LINE DECODER/MULTIPLEXER		2
L126					
L96	376-0334-	74S240	IC OCTAL BUFFER/LINE DRIVER		5
L101					
L210					
L223					
L231					
L12	376-0344-	75189A	IC QUAD LINE RECEIVER		1
L34	376-0345-	75188	IC QUAD LINE DRIVER 14 PIN DIP		1
L175	376-0427-	74S195	IC 4-BIT PARALLEL ACCESS SHIFT REGISTER		2
L220					
L3	376-0431-	4013	CMOS IC DUAL D-TYPE FLIP-FLOP		1
L293	376-0486-	74LS125	IC QUAD BUS BUFFER TRI-STATE OUTPUTS		1
L1	376-0547-	LF156	IC LF156 FET INPUT OP AMP 8 PIN DIP		1
L111 - L113	376-0553-	AM2966	IC OCTAL DTR MEM DRIVER W/3-ST OUT		5
L140					
L142					
L48 - L56	376-9002-	SKT 16	IC SOCKET 16 PIN DIL PC MOUNT		16
L74 - L82					
L102 - L110					
L131 - L139					
L7	376-9003-	SKT 24	IC SOCKET 24 PIN DIL PC MOUNT		6
L8					
L26 - L27					
L211					
L250					
028 - 029	376-9008-	SKT 16	IC SOCKET 16 PIN ANTI-LOCKING SPACER FOR (V2, V4)		2
L46 - L47	376-9011-	IC ACCES	SOCKET 40 PIN DIL PC MOUNT		3
L212					
L185	376-9014-	SKT 18	IC SOCKET 18 PIN DIL PC MOUNT		1
L13	376-9015-	SKT 28	IC SOCKET 28 PIN DIL PC MOUNT		6
L261 - L265					

BOARD NO. & TITLE: C8188 BUS PROCESSOR M/L SCHEMATIC REVISION (S): 07 SHEET OF PAGE 8

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
(CAUTION - THE FOLLOWING PARTS/COMPONENTS CONTAINED IN THIS B.O.M. ARE NOT RECOMMENDED FOR NEW DESIGNS)					
	300-4001-	.47U	CAP TANT AXIAL 10% 35V		1
	376-0199-	74S02	IC QUAD 2-INPUT POSITIVE-NOR GATES		2
	376-0200-	74S08	IC QUAD 2-INPUT POSITIVE AND GATES		5
	376-0202-	74S74	IC DUAL D-TYPE POS EDGE TRIGGD F/F W/PRESET/C		11
	376-0205-	74S32	IC QUAD 2-INPUT OR GATE		3
	376-0217-	74S157	IC QUAD 2 TO 1 LINE DATA SEL/MUL		2
	376-0221-	74S194	IC 4-BIT SHIFT REGISTER		2
	376-0228-	74S00	IC QUAD 2-INPUT NAND GATE		2
	376-0237-	74S11	IC TRIPLE 3-INPUT AND GATE		3
	376-0246-	74S280	IC 9-BIT PARITY GENERATOR/CHECKER		4
	376-0244-	MC4044	IC PHASE FREQUENCY DETECTOR 14 PIN DIP		1
	376-0270-	74S175	IC QUAD D-TYPE FLIP-FLOP		1
	376-0271-	74S85	IC QUAD 2 IN EXCLUSIVE OR GATE		1
	376-0301-	74S158	IC QUAD 2 TO 1-LINE DATA SELECTOR/MUX INVERT		1
	376-0323-	74S225	IC 16 X 8 BI POLAR ASYNCH FIFO		4
	376-0333-	74S139	IC 2 TO 4-LINE DECODER/MULTIPLEXER		2
	376-0334-	74S240	IC OCTAL BUFFER/LINE DRIVER		5

*** END-OF-REPORT ***

8.5"

11"

17"

WANG LABORATORIES, INC. LORRAINE, MA 01546		BY	DATE	APPROVED BY	DATE
MATERIAL		OWH		E ENGR	
MODEL NO		CHK		M ENGR	
SEE DIAG SPECIFICATIONS		TITLE			
		BUS PROCESSOR M/L			
FINISH		210-8358	C	8358	7
SCALE 1/8" = 1"		WANG PART NUMBER		U21	DRAWING NUMBER

17

11

8.5

WANG LABORATORIES, INC.

ELECTRICAL PARTS LIST

SHEET 0 OF 10 PAGE 1

(FINAL BILL-OF-MATERIALS)

BOARD NO. & TITLE: C8358 BUS PROCESSOR M/L
ASSEMBLY LEVEL & TITLE: 210 8358-A
CREATED: 03/08/84 13:23
LAST MODIFIED: 08/16/84 13:09 BY: LAM
EDITING REVISION: 16

Table with columns: REF. DES., WANG PART NO., VALUE/TYP, DESCRIPTION, DRAWING NO., QTY.
Rows include: P4 - P16 (2 CONT), L105 (IC CLOCK GENERATOR & DRIVER), L13 (IC PROGRAMMABLE COMMUNICATION INTERFACE), L261 - L265 (IC PROGRAMMABLE INTERRUPT CONTROLLER), L46 (IC MULTIMODE DMA CONTROLLER 4 MHZ), L48 - L56 (IC 64KX1 DRAM 150NS REF REQUIRE 4MS/256 ROW), L74 - L82 (IC SINGLE/DOUBLE DENSITY FLOPPY DISK CONTROLLER), L102 - L110 (IC 2K X 8 SRAM CMOS 120NS 24 PIN), L131 - L139 (IC 16KX1 CMOS SRAM 100NS), L2 (IC CMOS REAL TIME CLOCK FOR MPU), L212 (IC 16 BIT MICROPROCESSOR 8 MHZ), L184 (IC 8258 BUS CONTROLLER FOR 8086/8088 BURNED-IN), L211 (IC PROGRAMMABLE INTERVAL TIMER), L5 (PROM IC 4KX8 UV EPROM 450 NS (5V)), L27 (PROM IC 4KX8 UV EPROM 450 NS (5V)), 02 (STIFFNER LOWER), 03 (STIFFNER UPPER), 04 - 05 (EXTRACTOR W/ROLL PIN), 06 - 012 (SCREW), 013 - 019 (NUT), 020 - 025 (WASHER), 071 (BATTERY).

17

11

8.5

BOARD NO. & TITLE: C8358 BUS PROCESSOR M/L
SCHEMATIC REVISION (S): 07
SHEET OF PAGE 2
WANG PART NO. VALUE/TYP DESCRIPTION DRAWING NO. QTY.

(CAUTION - THE FOLLOWING PARTS/COMPONENTS CONTAINED IN THIS B.O.M. ARE NOT RECOMMENDED FOR NEW DESIGNS)

377-8582- 0281A IC PROGRAMMABLE COMMUNICATION INTERFACE 1

*** END-OF-REPORT ***

8.5

11

17

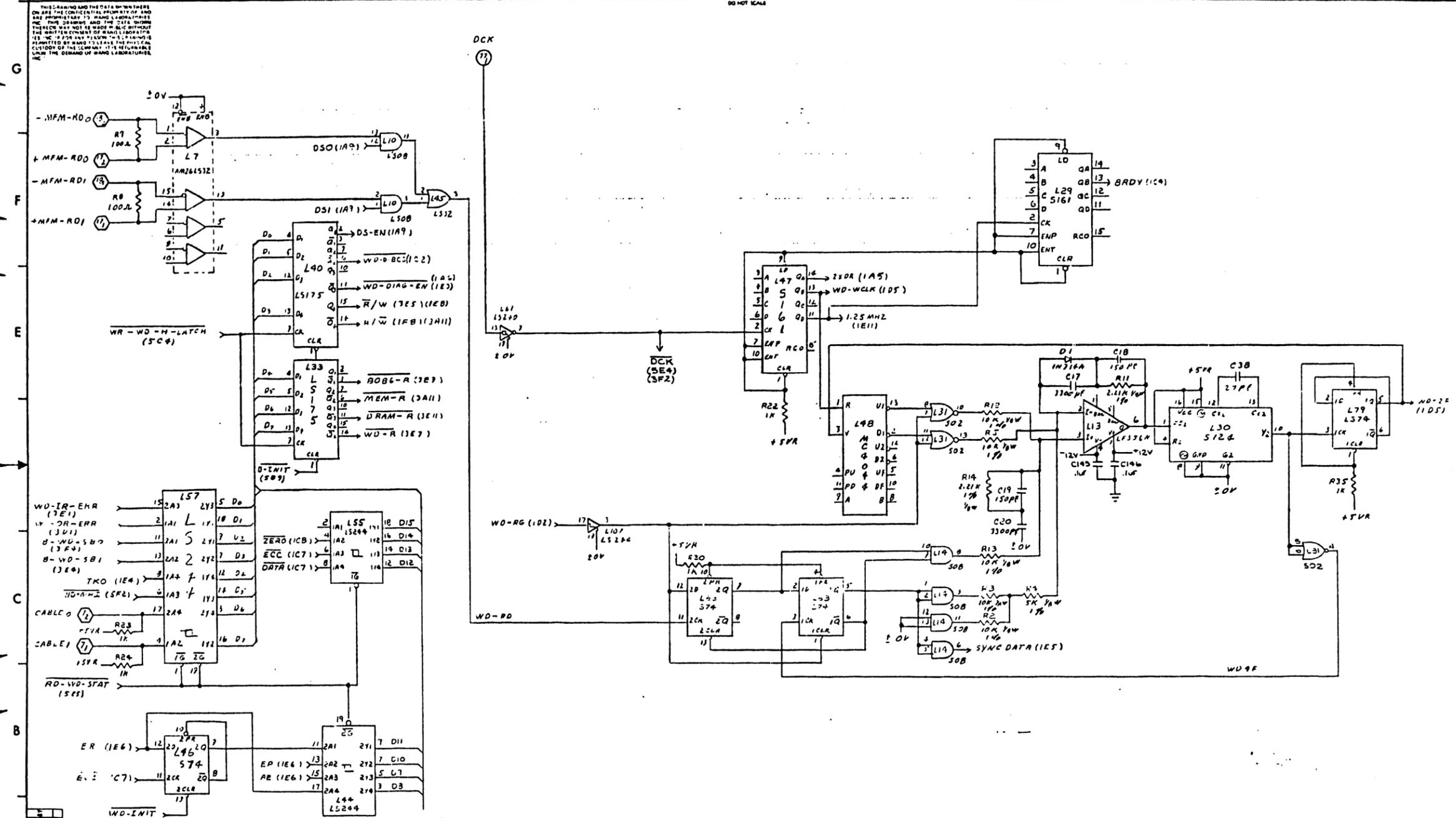
WANG LABORATORIES, INC. BY DATE APPROVED BY DATE
MATERIAL MODEL NO. TITLE
FINISH TOI EX AS NOTED
210-8358 C 8358 7

8.5

11

17

THIS DRAWING AND THE DATA CONTAINED THEREON ARE THE CONFIDENTIAL PROPERTY OF AND ARE PROPRIETARY TO WANG LABORATORIES, INC. THE DESIGN AND THE DATA THEREON ARE NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF WANG LABORATORIES, INC. THIS DRAWING IS THE PROPERTY OF WANG LABORATORIES, INC. IT IS TO BE RETURNED TO THE COMPANY AT THE TIME OF THE ORDER OR AS REQUESTED BY THE COMPANY.

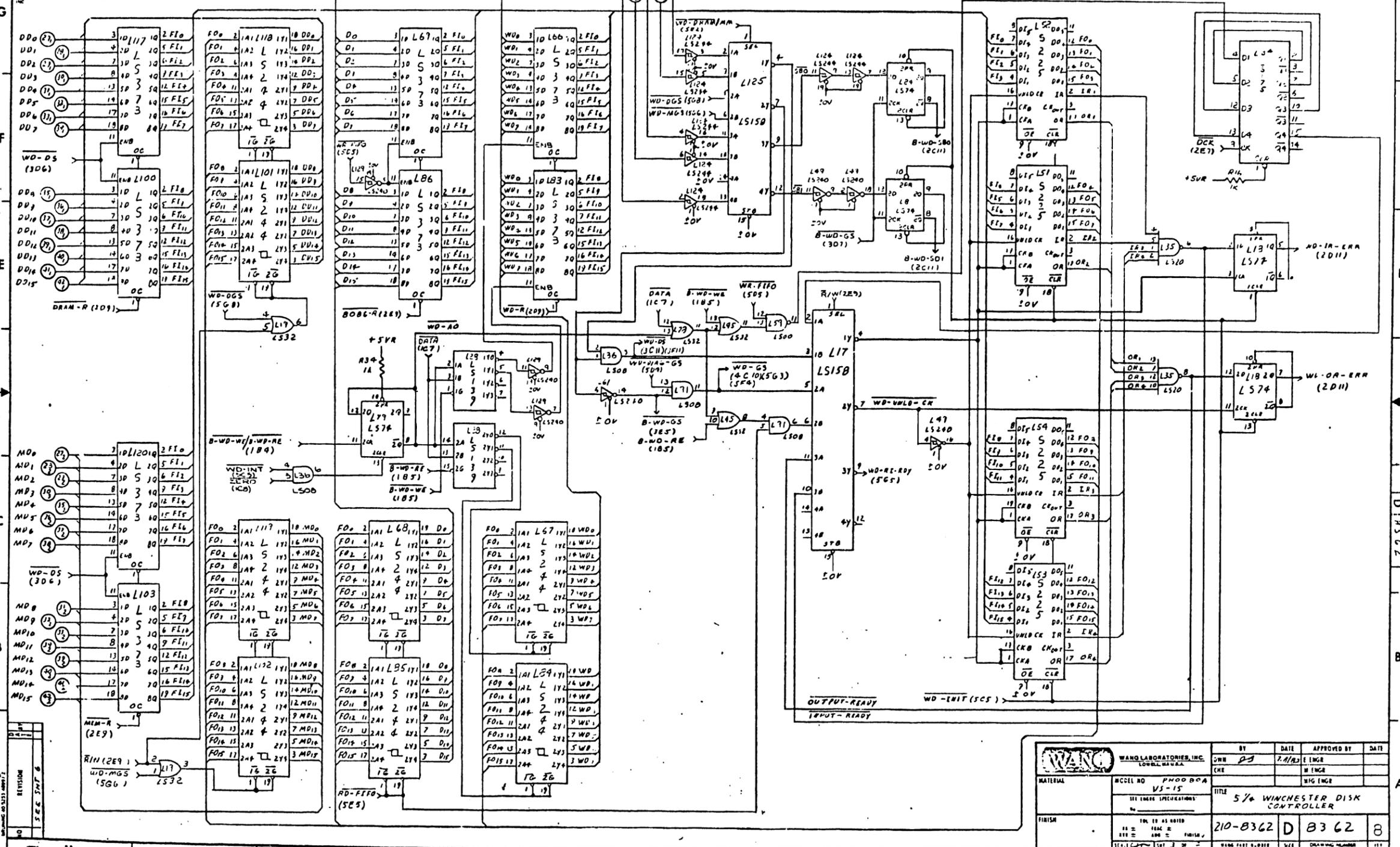


NO.	REVISION
1	SEE SWTG

DD-D15
(1511(367))
(4G2(564))

WANG WANG LABORATORIES, INC. LOWELL, MASS.		BY DWN	DATE 2.7.73	APPROVED BY E INGR	DATE
MATERIAL		(M)		(E)	
MODEL NO. 740000M VS-15		TITLE 5 1/8 WINCHESTER DISK CONTROLLER			
FINISH		101 SEE AS ORDER	210-8362	D	8

THIS DRAWING AND THE DATA SHOWN THERE ON ARE THE CONFIDENTIAL PROPERTY OF AND ARE PROPRIETARY TO WANG LABORATORIES, INC. THIS DRAWING AND THE DATA SHOWN THEREON MAY NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF WANG LABORATORIES, INC. FOR ANY REASON, THE REPRODUCTION OF THIS DRAWING OR THE DATA SHOWN THEREON IS STRICTLY PROHIBITED. THE REPRODUCTION OF THIS DRAWING OR THE DATA SHOWN THEREON FOR THE PURPOSES OF THE STUDY OF THE CURRENT STATE OF THE ART IS PERMITTED BY WANG LABORATORIES, INC. UNDER THE DEMAND OF WANG LABORATORIES, INC.



WANG LABORATORIES, INC. LOWELL, MASS. 01460		BY	DATE	APPROVED BY	DATE
MATERIAL		J. H. B. S. ENGE	2/1/73	W. ENGE	
FINISH					
MATERIAL		MCCEL NO. PH00 D0A V1-15			
FINISH		100% AS BUILT			
TITLE		5 1/4 WINCHESTER DISK CONTROLLER			
DATE		210-8362 D B3 62 8			
BY		WANG PART 6-0000 SEE DRAWING NUMBER 111			

BOARD NO. & TITLE: C8362 5 1/4 WINCHESTER DISK CNTRL SCHEMATIC REVISION (S): 08 SHEET OF PAGE 2

ASSEMBLY LEVEL & TITLE: 209 5 1/4 WINCHESTER DISK CNTRL
 PARTS LIST REVISION (R): 1
 ART-DWG REVISION (A): 02
 ASSEMBLY REVISION (A): 06
 SCHEMATIC REVISION (S): 08
 DWG OR MOST RECENT ECO: 33703

CREATED: 03/08/84 11:24
 LAST MODIFIED: 09/24/84 14:26 BY: NS
 EDITING REVISION: 13

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
C18	300-1027-	27P	CAP CERAMIC DISC 10% 500V N750		1
C18 - C19	300-1150-	150P	CAP CERAMIC DISC 1/4 500V N750		2
C17	300-1909-	3300P	CAP CERAMIC DISC 20% 500V Z5P		2
C145 - C146	300-1930-	.1U	CAP CERAMIC MONO RAD +80% -20% 50V Z5U		2
C1 - C16	300-1966-	.047U	CAP CERAMIC MONO AXIAL +80% -20% 50V Z5U		131
C21 - C37					
C40 - C54					
C56 - C138					
C39	300-4022-	15U	CAP TANT AXIAL 10% 20V		8
C55					
C139 - C144					
SW1 - SW2	325-1503-	SWITCH	SLIDE SPST 8 POS		2
R8 - R9	330-2011-	100.00K	RES FIXED METAL FILM 1/4W 5% 200PPM		2
R26	330-2016-	150.00K	RES FIXED METAL FILM 1/4W 5% 200PPM		3
R28 - R29					
R43	330-2023-	220.00K	RES FIXED METAL FILM 1/4W 5% 200PPM		1
R42	330-2034-	330.00K	RES FIXED METAL FILM 1/4W 5% 200PPM		1
R27	330-2057-	560.00K	RES FIXED METAL FILM 1/4W 5% 200PPM		1
R1	330-2069-	680.00K	RES FIXED METAL FILM 1/4W 5% 200PPM		1
R18 - R17	330-3011-	1.000K	RES FIXED METAL FILM 1/4W 5% 200PPM		17
R20					
R22 - R25					
R30 - R37					
R39					
R10 - R19	330-3040-	4.7K	RES FIXED METAL FILM 1/4W 5% 200PPM		2
R40 - R41	330-4011-	10.000K	RES FIXED METAL FILM 1/4W 5% 200PPM		2
R2 - R3	330-1090-	10.000K	RES FIXED METAL FILM 1/8W 1% 100PPM RN55		5
R5					
R12 - R13					
R11	330-0101-	2.21K	RES FIXED METAL FILM 1/8W 100PPM RN55		2
R14					
R4	330-0202-	4.99K	RES FIXED METAL FILM 1/8W 1% 100PPM		1
R10	330-0807-	220/330W	RESISTOR NETWORK TYPE: 10/16/T/SS		1
R6 - R7	330-0837-	1.000K	RESISTOR NETWORK TYPE: 10/09/C/SS		2
J1 - J2	350-0340-	20 CONT	CONN HDR 10-10 PC 8/A W/LC-EJT		2
J3	350-0429-	34 CONT	CONN HEADER 8/A W/LOCK EJECT		1

BOARD NO. & TITLE: C8362 5 1/4 WINCHESTER DISK CNTRL SCHEMATIC REVISION (S): 08 SHEET OF PAGE 3

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L70 - L71					
L94					
L111					
L1	376-0208-	74LS244	IC OCTAL BUFFER/LINE DRIVER W/TRE STATE		20
L41					
L44					
L50					
L55 - L57					
L64					
L67 - L68					
L72					
L84 - L85					
L98					
L101 - L102					
L107					
L115 - L116					
L118 - L119					
L121 - L124					
L127 - L128					
L131					
L17	376-0293-	74LS158	IC QUAD 2-INPUT MULTIPLEXER		2
L125					
L58	376-0294-	74LS138	IC 3-LINE TO 8-LINE DECODER/MULTIPLEXER		5
L92					
L109 - L110					
L126					
L4 - L5	376-0297-	74LS240	IC OCTAL BUFFER/LINE DRIVER/LINE RECEIVER		7
L9					
L25					
L19					
L61					
L129					
L90	376-0307-	74LS193	IC DUAL 4-BIT BINARY COUNTER		1
L66	376-0310-	74LS173	IC OCTAL D-TYPE LATCH TRI-STATE OUTPUTS		8
L69					
L83					
L86					
L100					
L103					
L117					
L120					
L51 - L54	376-0321-	74S225	IC 16 X 5 BI POLAR ASYNCH FIFO		4
L6	376-0470-	26LS31	IC QUAD LINE DRIVER 16 PIN DIP		1
L7	376-0471-	26LS32	IC QUAD LINE RECEIVER 16 PIN DIP		1
L13	376-3567-	LF356	IC LF356 PBT INPUT CM JMP 5 PIN DIP		1
L62	376-0548-	26S11	IC 26S11 QUAD BUS TRANSCIEVER 16 PIN DIP		1
L56	376-9023-	SEL LINE	IC SEL LINE 12-NS 12-NS 13 TAP		1
L75 - L76	376-9003-	SKT 24	IC SOCKET 24 PIN DIL PC MOUNT		5
L87 - L89					
L42 - L43	376-9011-	IC ACCES	SOCKET 40 PIN DIL PC MOUNT		2

BOARD NO. & TITLE: C8362 5 1/4 WINCHESTER DISK CNTRL SCHEMATIC REVISION (S): 08 SHEET OF PAGE 4

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
LED1	370-0035-	LED	LED RED DIFFUSED 500 MCD TYP		1
O2 - O3	375-1115-	VALTRON	PET R/CN 10-133 1W 50V TA		2
L11 - L12	376-0128-	7438	IC QUAD 2-INPUT NAND BUFFER D/C OUTPUTS		3
L22					
L10	376-0153-	74LS08	IC QUAD 2-INPUT AND GATE		4
L36					
L77					
L91					
L8	376-0155-	74LS74	IC DUAL D-TYPE POSITIVE EDGE TRIG FLIP FLOP		4
L18					
L24					
L70					
L30	376-0156-	74LS153	IC DUAL 4-INPUT MULTIPLEXER		1
L37	376-0159-	74LS174	IC HEX D-TYPE FLIP-FLOP		1
L73	376-0160-	74LS175	IC QUAD D-TYPE FLIP-FLOP		8
L33 - L34					
L40					
L60					
L73					
L108					
L114					
L31	376-0199-	74S02	IC QUAD 2-INPUT POSITIVE NDR GATES		1
L14	376-0200-	74S08	IC QUAD 2-INPUT POSITIVE AND GATES		1
L46	376-0202-	74S24	IC DUAL D-TYPE POS EDGE TRIGD P/F W/PRESET/C		3
L63					
L97					
L130	376-0206-	74S260	IC DUAL 5-INPUT EXPANDER		1
L59	376-0207-	74LS00	IC QUAD 2-INPUT NAND GATE		2
L112					
L30	376-0209-	74LS10	IC TRIPLE 3-INPUT POS NAND GATES		1
L35	376-0210-	74LS20	IC DUAL 4-INPUT NAND GATE		3
L81					
L93					
L19	376-0211-	74LS32	IC QUAD 2-INPUT OR GATE		4
L27					
L45					
L78					
L30					
L28	376-0225-	74LS11	IC TRIPLE 3-INPUT AND GATE		1
L26	376-0226-	74LS139	IC 2-TO-4-LINE DECODER/MULTIPLEXER		1
L82	376-0228-	74S00	IC QUAD 2-INPUT NAND GATE		1
L90	376-0231-	74LS161	IC SYNCHRONOUS 4-BIT BINARY COUNTER W/DIRECT CLEAR		5
L104 - L106					
L95	376-0248-	74LS195A	IC 4-BIT UNIVERSAL SHIFT REGISTER		1
L48	376-0264-	4044	IC PHASE FREQUENCY DETECTOR 14 PIN DIP		1
L30	376-0273-	74S124	IC DUAL VOLTAGE CONTROLLED OSC (VCO)		1
L29	376-0278-	74S161	IC SYN 4-BIT BINARY COUNTER W/DIRECT CLEAR		2
L47					
L2	376-0285-	74LS245	IC OCTAL BUS TRANSCIEVER TRI-STATE OUTPUTS		6
L65					

BOARD NO. & TITLE: C8362 5 1/4 WINCHESTER DISK CNTRL SCHEMATIC REVISION (S): 08 SHEET OF PAGE 4

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
O1	380-1012-	IN914A	DIO SIG 75W 250MA 4MS DO-35		1
O2	452-2707-	STIFFNER	STIFFENER LOWER		1
O3	452-2708-	STIFFNER	STIFFENER UPPER		1
O4 - O5	465-1238-	EJECTOR	CARD EJECTOR		2
O6	510-8362-	PCB	PCB		1
O6 - O12	630-2140-	SCREW	SCREW 4-40 X 7/16		7
O13 - O19	652-2003-	NUT	LOCK NUT 4-40		7
O20 - O26	653-2009-	WASHER	WASHER 4 FLAT NYL		7
J4 - J9	654-0113-	12 CONT	CONN PC HEADER DUAL ROW .100		6

WANG LABORATORIES, INC.		BY	DATE	APPROVED BY	DATE
LEVEL 2003A		EDWN		ELMOR	
MATERIAL		CHK		W. H. H.	
MATERIAL		TITLE			
MATERIAL SPECIFICATIONS		5 1/4 WINCHESTER DISK CNTRL			
FINISH		FOR USE AS NOTED	ZIC-8362	C	8362
FINISH		FOR 2-24 HOUR 2-1/4			
FINISH		FOR 2-24 HOUR 2-1/4			
FINISH		SCALE	UNIT	OF	

(CAUTION - THE FOLLOWING PARTS/COMPONENTS CONTAINED IN THIS B.O.M. ARE NOT RECOMMENDED FOR NEW DESIGNS)

376-0199-	74502	IC QUAD 2-INPUT POSITIVE-NOR GATES	1
376-0200-	74508	IC QUAD 2 INPUT POSITIVE AND GATES	1
376-0203-	74524	IC DUAL D-TYPE POS EDGE TRIG'D F/F W/PRESET/C	3
376-0228-	74500	IC QUAD 2-INPUT NAND GATE	1
376-0264-	4044	IC PHASE FREQUENCY DETECTOR 14 PIN DIP	1
376-0323-	745225	IC 16 X 8 BI POLAR ASYNCH FIFO	4

*** END-OF-REPORT ***

(FINAL PARTS LIST)

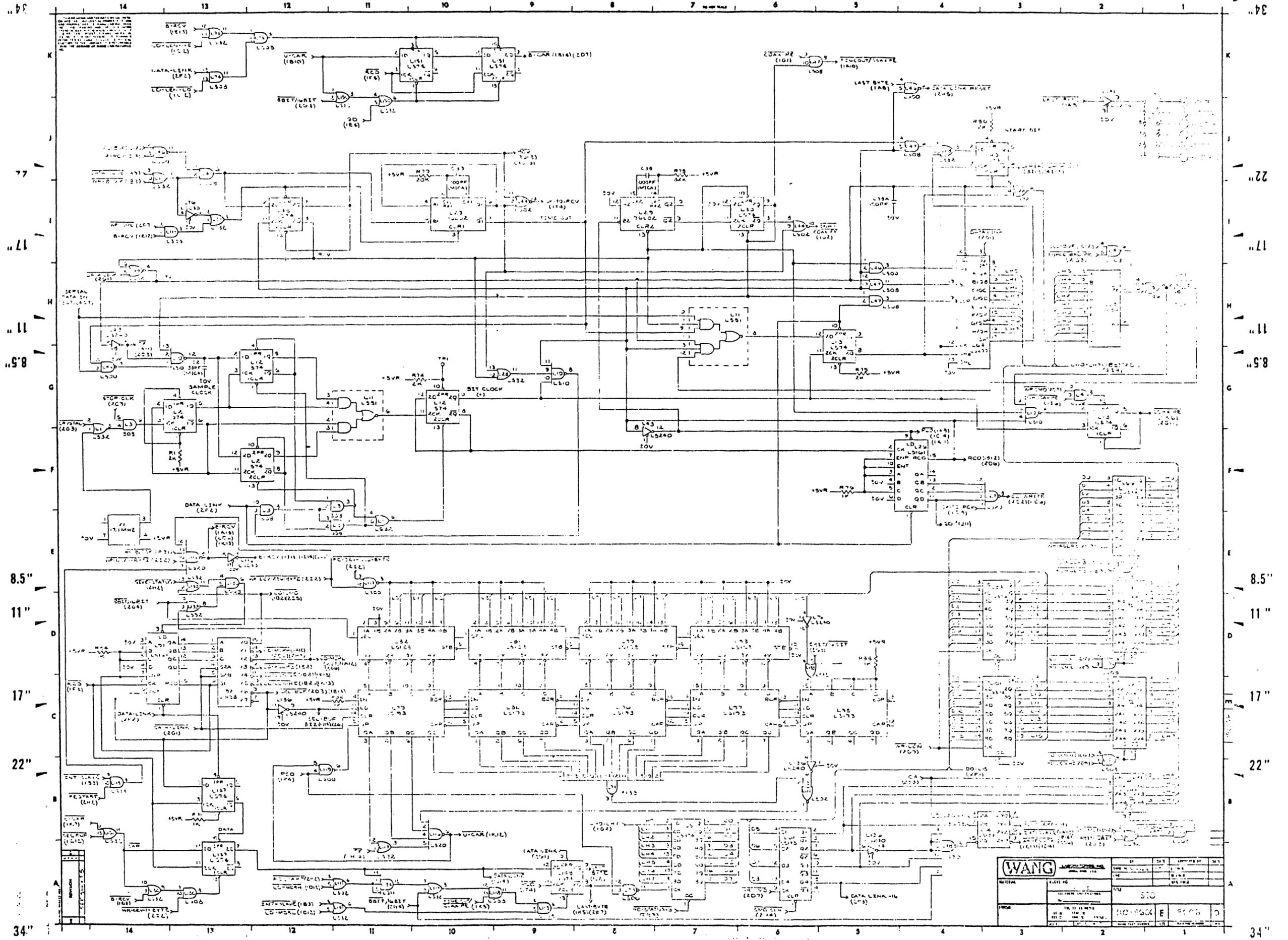
BOARD NO. & TITLE: C8362 5 1/4 WINCHESTER DISK CNTRL
 ASSEMBLY LEVEL & TITLE: 210-A 8362
 PARTS LIST REVISION (P): 1
 ART.WORK REVISION (R): 02
 ASSEMBLY REVISION (A): 06
 SCHEMATIC REVISION (S): 08
 DNR OR MOST RECENT ECO: 33703

CREATED: 03/08/84 11:26
 LAST MODIFIED: 09/24/84 14:26 BY: NS
 EDITING REVISION: 13

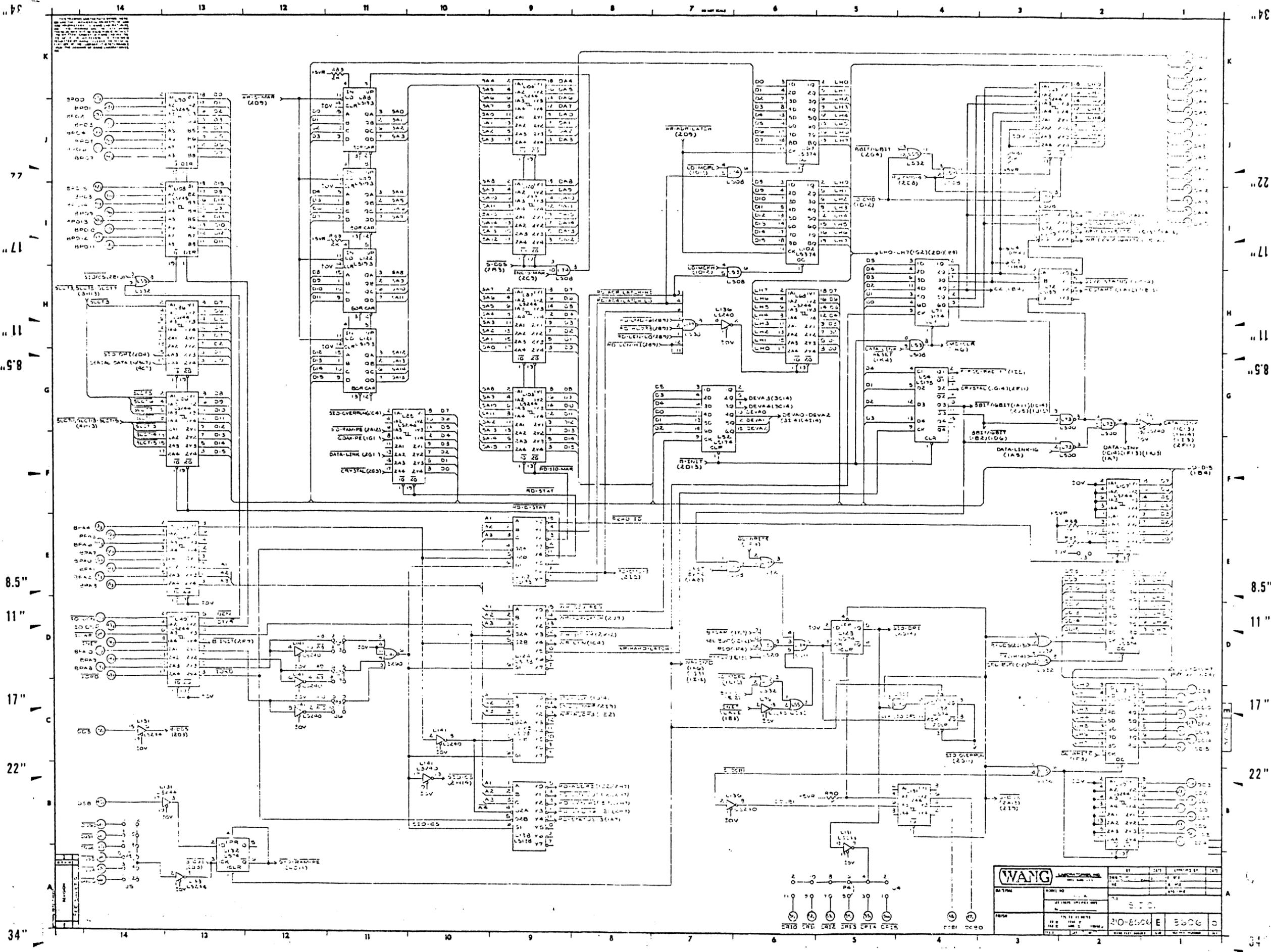
REF. DES.	WANG PART NO.	VALUE/TYPE	DESCRIPTION	DRAWING NO.	QTY.
01	209-8362-		PCA		1
025 - 032	350-4506-	2 CONT	CONN SHUNT .100 CTR		2
L87 - L89	377-0428-	6116-2	IC 2K X 8 SRAM CMOS 102NS 24 PIN		3
L75 - L76	377-0446-	8253-5	IC PROGRAMMABLE INTERNAL TIMER		2
L43	377-0460-	9521	IC BURST ERROR PROCESSOR		1
L42	377-0510-	WD1010-5	IC WINCHESTER DISK CONTROLLER		1

*** END-OF-REPORT ***

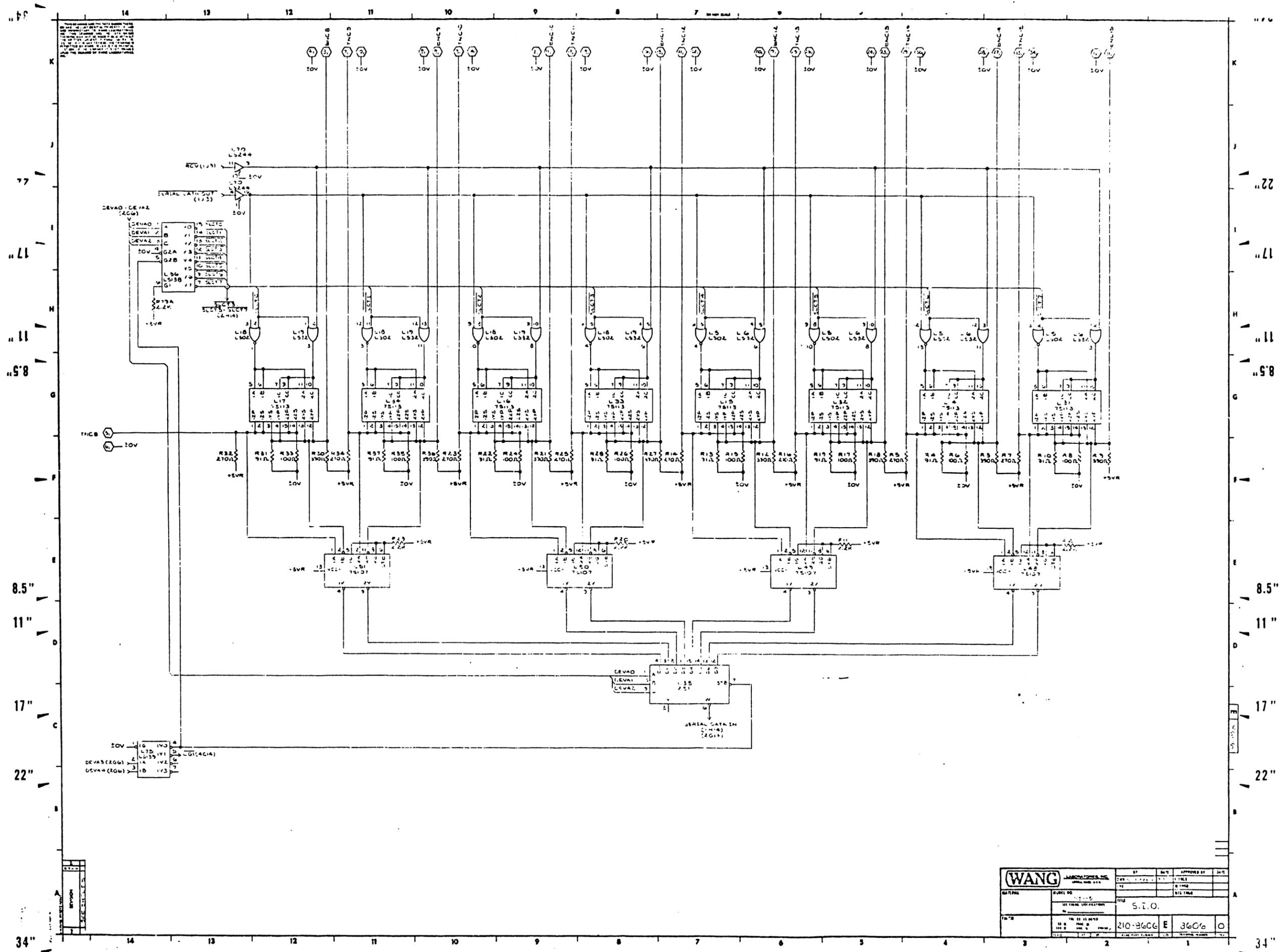
WANG LABORATORIES, INC. WELL 24/84		BY	DATE	APPROVED BY	DATE
MATERIAL		WCELL NO			
FINISH		TITLE			
		5 1/4 WINCHESTER DISK CNTRL			
		210-8362	C	8362	8



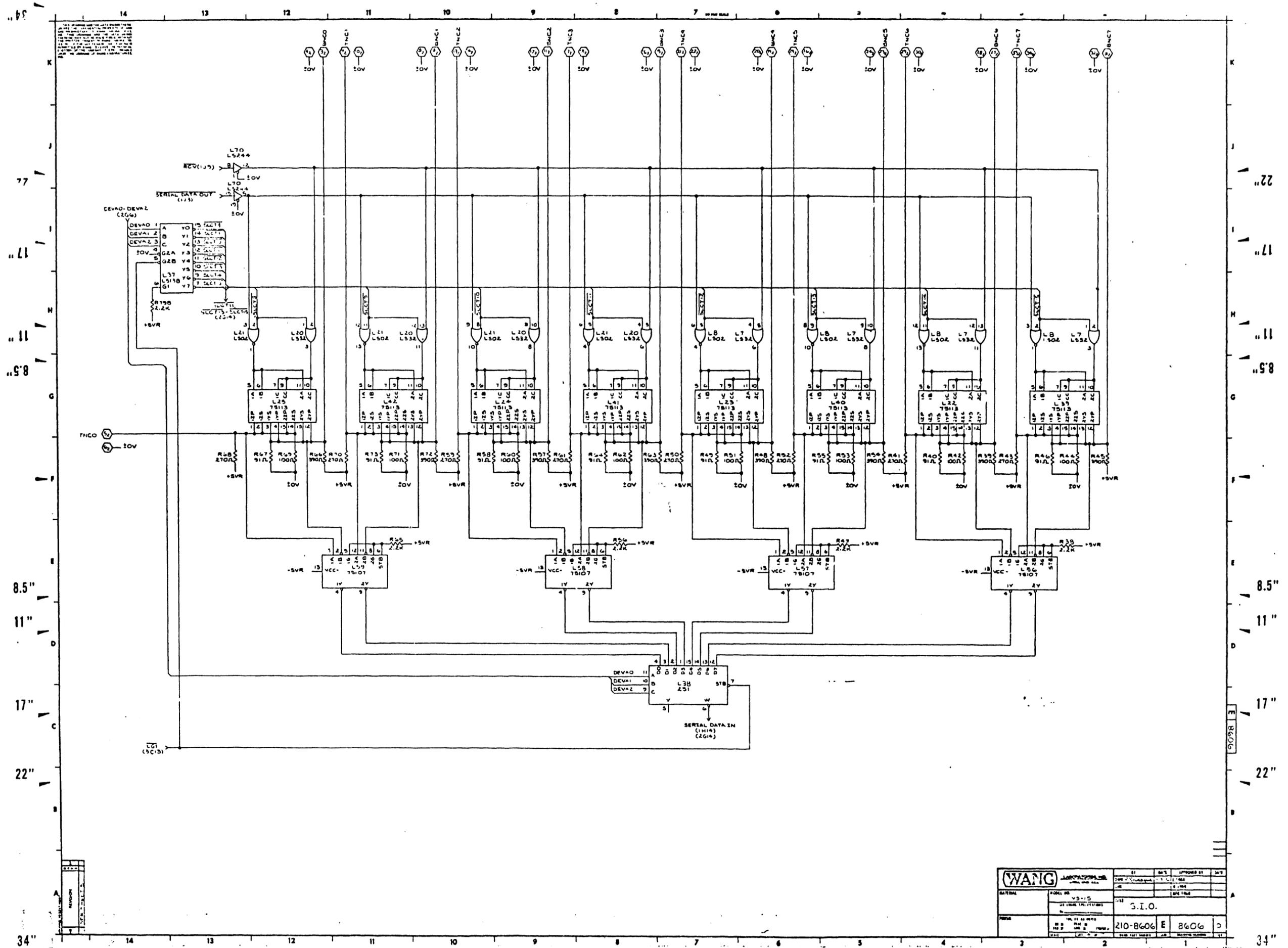
		REV	REV	REV	REV
		1	2	3	4
DATE	BY	CHKD	APP'D	REV	REV
11/11/66	W. J. W.				
11/12/66	W. J. W.				
WANG ELECTRONIC CORPORATION 1000 W. 17th St., Berkeley, CA 94704		TITLE: STC			
PROJECT: NO-BOOK E		DRAWING NO: 1000			



WANG		REV. 1	DATE	DESIGNED BY	DWG. NO.
DATE	SCALE	BY	CHKD.	APPR.	REV.
10/1/68	1:1	J. S. G.			
PARTS LIST		210-8406 E 8306			
QTY.	DESCRIPTION	QTY.	DESCRIPTION	QTY.	DESCRIPTION
1	74181	1	74182	1	74183
1	74184	1	74185	1	74186
1	74187	1	74188	1	74189
1	74190	1	74191	1	74192
1	74193	1	74194	1	74195
1	74196	1	74197	1	74198
1	74199	1	74200	1	74201
1	74202	1	74203	1	74204
1	74205	1	74206	1	74207
1	74208	1	74209	1	74210
1	74211	1	74212	1	74213
1	74214	1	74215	1	74216
1	74217	1	74218	1	74219
1	74220	1	74221	1	74222
1	74223	1	74224	1	74225
1	74226	1	74227	1	74228
1	74229	1	74230	1	74231
1	74232	1	74233	1	74234
1	74235	1	74236	1	74237
1	74238	1	74239	1	74240
1	74241	1	74242	1	74243
1	74244	1	74245	1	74246
1	74247	1	74248	1	74249
1	74250	1	74251	1	74252
1	74253	1	74254	1	74255
1	74256	1	74257	1	74258
1	74259	1	74260	1	74261
1	74262	1	74263	1	74264
1	74265	1	74266	1	74267
1	74268	1	74269	1	74270
1	74271	1	74272	1	74273
1	74274	1	74275	1	74276
1	74277	1	74278	1	74279
1	74280	1	74281	1	74282
1	74283	1	74284	1	74285
1	74286	1	74287	1	74288
1	74289	1	74290	1	74291
1	74292	1	74293	1	74294
1	74295	1	74296	1	74297
1	74298	1	74299	1	74300



WANG LABORATORIES, INC. SERIALS AND S.A.		BY	DATE	APPROVED BY	DATE
INTERNAL	FORM NO.	BY	DATE	BY	DATE
SERIALS DEPARTMENT		S.I.O.			
18-2	NO. OF SHEETS	210-3606	E	3606	0
TITLE		DATE			



BOARD NO. & TITLE: C8606 S10
 ASSEMBLY: S10
 ART-DRG REVISION (R): 00
 ASSEMBLY REVISION (A): 00
 SCHEMATIC REVISION (S): 00
 DWR DR MOST RECENT ECD: E1789
 CREATED: 11/14/83 16:42
 LAST MODIFIED: 07/17/84 15:02 BY: LAB
 EDITING REVISION: 12

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
C38A	300-1150-	150P	CAP CERAMIC DISC 10% 50V XSP		1
C4 - C37	300-1966-	.047U	CAP CERAMIC MONO AXIAL +80 -20% 50V 25U		152
C40 - C44					
C44A					
C45					
C45A					
C46					
C46A					
C47					
C47A					
C48 - C52					
C52A					
C53					
C53A					
C54					
C54A					
C55					
C55A					
C56 - C72					
C74 - C105					
C107 - C121					
C124 - C158					
C141 - C155					
C1	300-4022-	15U	CAP TANT AXIAL 10% 20V		2
C3					
C3A					
C158 - C161					
C38 - C39	300-5006-	1000P	CAP MICA DIPPED 5% 100V		2
C2	300-5016-	33P	CAP MICA DIPPED 5% 500V		1
Y1	321-1006-	17.1000	CLOCK OSCILLATOR 17.1MHZ +/- .01% TTL		1
R4	330-1092-	91.000	RES FIXED 1/4W 5%		16

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
R9					
R12					
R18					
R21					
R27					
R30					
R36					
R39					
R45					
R48					
R54					
R57					
R63					
R66					
R72					
R76 - R77	330-3011-	1K	RES FIXED 1/4W 5%		11
R81 - R82					
R84 - R88					
R90 - R91					
R1	330-3021-	2K	RES FIXED 1/4W 5%		6
R74 - R75					
R80					
R83					
R89					
R2	330-3023-	2.2K	RES FIXED 1/4W 5%		10
R11					
R20					
R29					
R28					
R47					
R56					
R65					
R79A					
R79B					
R79	330-4021-	20K	RES FIXED 1/4W 5%		1
R78	330-4083-	82K	RES FIXED 1/4W 5%		1
J3	350-0203-	2 CONT	CONN PC HEADER SINGLE ROW .100 R/A		1
J1 - J2	350-0429-	34 CONT	CONN HEADER R/A W/LOCK EJECT		2
P4 - P9	350-4506-	2 POS	CONN SHUNT .100 CTR		6
L29	376-0132-	96L02	IC DUAL RETRIGGERABLE MONOSTABLE MULTIVIBRATOR		1
L48 - L51	376-0146-	75107	IC DUAL LINE RECEIVER 14 PIN DIP		8

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
R10					
R13					
R19					
R22					
R28					
R31					
R37					
R40					
R46					
R49					
R55					
R58					
R64					
R67					
R73					
R6	330-2011-	100.000	RES FIXED 1/4W 5%		16
R8					
R15					
R17					
R24					
R26					
R33					
R35					
R42					
R44					
R51					
R53					
R60					
R62					
R69					
R71					
R5	330-2028-	270.000	RES FIXED 1/4W 5%		16
R7					
R14					
R16					
R23					
R25					
R32					
R34					
R41					
R43					
R50					
R52					
R59					
R61					
R68					
R70					
R3	330-2040-	390.000	RES FIXED 1/4W 5%		16

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L56 - L59					
L4	376-0153-	74LS08	IC QUAD 2-INPUT AND GATE		7
L47					
L53					
L74					
L105					
L118					
L130					
L13	376-0155-	74LS74	IC DUAL D-TYPE POSITIVE EDGE TRIG FLIP-FLOP		7
L10					
L128					
L132					
L148 - L149					
L151					
L52	376-0159-	74LS174	IC HEX D-TYPE FLIP-FLOP		2
L71					
L54	376-0160-	74LS175	IC QUAD D-TYPE FLIP-FLOP		2
L61					
L3	376-0200-	74S08	IC QUAD 2 INPUT POSITIVE AND GATES		1
L2	376-0202-	74S74	IC DUAL D-TYPE POS EDGE TRIGD F/F W/PRESET/C		2
L12					
L142	376-0206-	74S240	IC DUAL 3-INPUT EXPANDR		1
L46	376-0207-	74LS00	IC QUAD 2-INPUT NAND GATE		3
L73					
L119					
L5	376-0208-	74LS02	IC QUAD 2-INPUT NOR GATE		6
L8					
L18					
L21					
L44					
L111					
L10	376-0209-	74LS10	IC TRIPLE 3-INPUT POS NAND GATES		1
L27	376-0210-	74LS20	IC DUAL 4-INPUT NAND GATE		3
L116					
L135					
L1	376-0211-	74LS32	IC QUAD 2-INPUT OR GATE		12
L6 - L7					
L19 - L20					

		WANG LABORATORIES, INC.		BY	DATE	APPROVED BY	DATE
		LOWELL, MA U.S.A.		DWN		E ENGR	
MATERIAL MODEL NO. SEE ENGRG SPECIFICATIONS No. _____		TITLE		CHK		M ENGR	
		S10				MFG ENGR	
FINISH TOL EX AS NOTED XX ± 010 FRAC ± 1/64 XXX ± 005 ANG ± 1°30' FINISH ✓		210-8606		C		8606	0
		SCALE		SHT	OF	WANG PART NUMBER	SIZE	DRAWING NUMBER

17"

11"

8.5"

8.5"

11"

17"

BOARD NO. & TITLE: C8606 S10 SCHEMATIC REVISION (S): 00 SHEET 6 OF 7 PAGE 5

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L28					
L35					
L43					
L115					
L117					
L133					
L147					
L150	376-0213-	74LS51	IC DUAL 2-WIDE 2-INPUT AND-OR-INVERT GATE		1
L11	376-0228-	74LS193	IC UP/DOWN BINARY COUNTER		9
L79 - L80					
L88 - L89					
L95 - L97					
L121					
L122	376-0225-	74LS11	IC TRIPLE 3-INPUT AND GATE		1
L75	376-0226-	74LS139	IC 2-TO-4-LINE DECODER/MULTIPLEXER		3
L112					
L134					
L9	376-0231-	74LS86	IC QUAD 2-INPUT EXCLUSIVE-OR GATE		1
L26	376-0233-	74LS161	IC SYNCHRONOUS 4-BIT BINARY COUNTER W/DIRECT CLEAR		2
L91					
L63	376-0242-	74LS280	IC 9-BIT ODD/EVEN PARITY GENERATOR/CHECKER		1
L78	376-0249-	74LS30	IC 8-INPUT NAND GATE		2
L137					
L14 - L17	376-0256-	75113	IC DUAL LINE DRIVER 16 PIN DIP		16
L27 - L25					
L31 - L34					
L39 - L42					
L35	376-0272-	74251	IC DATA SELECTOR/MULTIPLEXER TRI-STATE		2
L38					
L94	376-0276-	74LS133	IC 13-INPUT NAND GATE		1
L90	376-0285-	74LS248	IC OCTAL BUS TRANSCEIVER TRI-STATE OUTPUTS		2
L108					
L65 - L67	376-0286-	74LS374	IC OCTAL D-TYPE FLIP-FLOP TRI-STATE		8
L84					
L101 - L102					
L113 - L114					
L62	376-0288-	74LS244	IC OCTAL BUFFER/LINE DRIVER W/TRI STATE		19

BOARD NO. & TITLE: C8606 S10 SCHEMATIC REVISION (S): 00 SHEET OF PAGE 6

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
L68 - L70					
L83					
L85 - L87					
L100					
L103 - L104					
L106 - L107					
L120					
L129					
L131					
L139 - L140					
L143					
L81 - L82	376-0293-	74LS158	IC QUAD 2-INPUT MULTIPLEXER		4
L98 - L99					
L36 - L37	376-0294-	74LS138	IC 3-LINE TO 8-LINE DECODER/MULTIPLEXER		7
L99					
L123 - L125					
L135					
L43	376-0297-	74LS240	IC OCTAL BUFFER/LINE DRIVER/LINE RECEIVER		4
L76					
L136					
L141					
L64	376-0303-	74LS299	IC 8-BIT UNIVERSAL SHIFT/STORAGE REGISTER		1
Q28	376-9077-	SKT-04	SKT, CRYST. OSC. 14 PINS, FOOTPRINT-TIN		1
Q2	452-2707-	STIFFNER	STIFFNER LOWER		1
Q1	452-2708-	STIFFNER	STIFFNER UPPER		1
Q25 - Q26	465-1250-	CARD EJ	CARD EJECTOR		2
Q3	510-8606-	PCB	PCB		1
Q4 - Q10	650-2100-	SCREW	SCR 4-40 X 5/16		7
Q11 - Q16	652-2000-	NUT	NUT 4-40 HEX		6
Q17 - Q23	653-2009-	WASH #4	WASHER #4		7
J4 - J7	654-0113-	12 CON	CONN PC HEADER DUAL ROW .100		4
TP1	654-1192-	TERM	TERMINAL SINGLE NECK		1

17"

11"

8.5"

8.5"

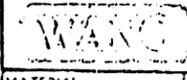
11"

17"

BOARD NO. & TITLE: C8606 S10 SCHEMATIC REVISION (S): 00 SHEET OF PAGE 7

REF. DES.	WANG PART NO.	VALUE/TYP	DESCRIPTION	DRAWING NO.	QTY.
376-0132-	96L02		IC DUAL RETRIGGERABLE MONOSTABLE MULTIVIBRATOR		1
376-0200-	74508		IC QUAD 2 INPUT POSITIVE AND GATES		1
376-0202-	74574		IC DUAL D-TYPE POS EDGE TRIGRD F/F W/PRESET/C		2

*** END-OF-REPORT ***

 WANG LABORATORIES, INC. LOWELL, MA U.S.A.		BY	DATE	APPROVED BY	DATE
		DWN		E ENGR	
		CH-K		M ENGR	
				MFG ENGR	
MATERIAL	MODEL NO.	TITLE			
	SEE ENG'G SPECIFICATIONS	S10			
FINISH	TOL EX AS NOTED XX ± 0.10 F/AC ± 1/64 XXX ± 0.05 ANG ± 1° 30' FINISH V	210-8606	C	8606	0
SCALE	SMT 7 OF 7	WANG PART NUMBER	SIZE	DRAWING NUMBER	REV

11 10 9 8 7 5 4 3 2 1 "22"

THIS DRAWING AND THE DATA THEREON ARE THE PROPERTY OF WANG LABORATORIES, INC. AND ARE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF WANG LABORATORIES, INC. THE INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE.

ITEM NO.	WANG PART NO.	DESCRIPTION	REFERENCE DESIGNATION(S)	QTY.	ITEM NO.	WANG PART NO.	DESCRIPTION	REFERENCE DESIGNATION(S)	QTY.	ITEM NO.	WANG PART NO.	DESCRIPTION	REFERENCE DESIGNATION(S)	QTY.
53					106									
52	333-0147	RES 33.2K 1/4W 1%	R19, 30, 42, 58	+	105									
51	333-0121	RES 23.2K 1/4W 1%	R31	1	104	175-2071	NEALS JNK		3					
50	333-0110	RES 20K 1/4W 1%	R1, 3, 6, 7	2	103	175-2070	NEALS JNK		2					
49					102									
48					101									
47					100	175-2069	5050R		2					
46	332-0056	RES 56K 1W 10%	R4, 45, 46	3	99	175-2068	LS3040		2					
45					98	175-2067	3273-37		5					
44					97									
43					96	175-2066	425420		2					
42	331-2056	RES 500Ω 1/2W 10%	R8-10	3	95	175-2065	RSTR 1W2221A	26	1	189	654-0104	CONN 3POS	J9	1
41	331-2010	RES 100Ω 1/2W 10%	R3, 7, 11	3	94	175-2064	RSTR 1W2221A	25	1	188				
40	330-5034	RES 100K 1/4W 5%	R59	1	93	175-2063	RSTR 2W425	27, 8	2	187				
39	330-5016	RES 150K 1/4W 5%	R54, 67	2	92	175-2062	RSTR 1W11111	21, 2, 40, 41	4	186				
38	330-0702	RES 22.5K 1/4W 5%	R11, 2	2	91	175-2061	RSTR 1W2222A	24	1	185				
37					90					184	652-2007	NUT 4-40		2
36	330-4014	RES 12K 1/4W 5%	R34	1	89					183				
35					88					182				
34	330-4011	RES 10K 1/4W 5%	R21, 22, 33, 44, 47, 61	6	87	324-1004	RES 1M450T	R21	1	180	650-3120	SCREW #6-32x1/4		4
33	330-3924	RES 3.3K 1/4W 5%	R32	1	86	324-1003	RES 7.5K 1/2	R22	1	179	650-3043	SCREW #6		1
32	330-3923	RES 2.2K 1/4W 5%	R1, 31, 50, 54, 60	5	85					178	650-2120	SCREW #4-40x3/8		2
31	330-2057	RES 400Ω 1/4W 5%	R53	1	84					177				
30	330-2011	RES 1K 1/4W 5%	R11, 21, 41, 42, 51	6	83					176				
29	330-2083	RES 820Ω 1/4W 5%	R2, 15, 20, 34, 35	5	82	320-1027	W/O (ORN)	.ED1-5	5	175				
28	330-2023	RES 220Ω 1/4W 5%	R11, 22, 40, 43, 43, 51	7	81					174	600-1018	WIRE		25'
27	330-1047	RES 56K 1/4W 5%	R25	1	80					173	600-0509	WIRE 20AWG		4
26					79					172				
25	330-2013	RES 120Ω 1/4W 5%	R10, 24, 22	3	78	340-1040	FUSE 1AMP	F1	1	171				
24	330-1043	RES 47K 1/4W 5%	R12, 13	2	77	340-0006	FUSE CLIP		2	170				
23					76					169				
22					75					168	410-0264	OUTPUT F-FORMER	T1	1
21	320-0916	CHOKER	23	1	74	350-0244	CONN 12POS	13	1	167	410-0200	DRIVER	T2	1
20	320-0716	CONN 100" H	21, 2	2	73	350-0234	CONN 5POS	J6	1	166				
19	320-0724	CONN	24	1	72	350-0219	CONN 12POS	J4, 10	2	165				
18					71					164	350-0122	DIO FE16C	D1-4	4
17					70	350-0212	CONN 6POS	15	1	163	350-0204	DIO 514GT	D6-16	1
16					69	350-0211	CONN 2POS	17, 11	2	162	350-0201	DIO 2H506A	Q3	1
15	300-3323	CAP 2200UF 35V(1)	C3, 4, 11, 15, 33	5	68	350-0207	CONN 12POS	11, 3	2	161	350-2142	DIO 1N5261A	D12	1
14	300-3321	CAP 100UF 50V(1)	C11, 36	2	67					160				
13					66					159				
12	300-3144	CAP 1KUF 20V(1)	C24, 37	2	65					158	350-2114	DIO 1N345A	D17	1
11	300-3132	CAP 47UF 50V(1)	C1, 2, 23	3	64	337-1010	RES 100Ω 1/4W 10%	R5, 6	2	157	350-2048	DIO 1N5130C	D24	1
10	300-2214	CAP .1UF 100V(1)	C17, 19, 30	3	63	337-1012	RES 12K 2W(1)	R26, 27	2	156	350-1012	DIO 1N314A	D5, 12, 22, 24	6
9					62					155				
8	300-2075	CAP 470UF 100V(1)	C28	1	61					154				
7	300-1966	CAP .001UF 50V	C10, 23, 24, 27, 28, 35, 37, 43	8	60					153				
6	300-1963	CAP .47UF 50V	C22	1	59	316-1022	POT 2K 500PPM	R24	1	152	316-0205	IC TL574	C4	1
5					58	334-1014	POT 1K 500PPM	R19, 37	2	151				
4	300-1931	CAP 1UF 50V	C11-13, 15, 16, 26, 32	7	57					150	376-0153	IC 14534	L2	1
3	300-1713	CAP .001UF 50V	C5-10, 20	7	56					149	376-0274	IC 4111	U1	1
2	300-1903	CAP .1UF 25V	C21	1	55	311-0187	RES 5.0K 1/4W 1%	R47, 64, 66	3	148	376-0240	IC LM333	C6-8	3
1	311-1471	CAP .001UF 1KV	C7A	1	54	333-0163	RES 215K 1/4W 1%	R55, 65	2	147				

G
"17"
"11"
"9.8"
E
C
8.5"
11"
B
17"
A

G
"17"
"11"
"9.8"
E
D
8.5"
11"
B
17"
A

REVISION	DATE	BY	DESCRIPTION
1			

		BY	DATE	APPROVED BY	DATE
WANG LABORATORIES, INC. 2000 W. WASHINGTON ST. RICHMOND, VA 23260		OWN	1/2/77	ENGR	1/2/77
MODEL NO. H0304 V1715		CHK		ENGR	
TITLE SPS156		DRG ENGR			
FINISH 100% AS BUILT		DATE	7/10-76/11	DATE	8/6/11
100% AS BUILT		DATE	7/10-76/11	DATE	8/6/11

77 11 10 9 8 7 5 4 3 2 1 22

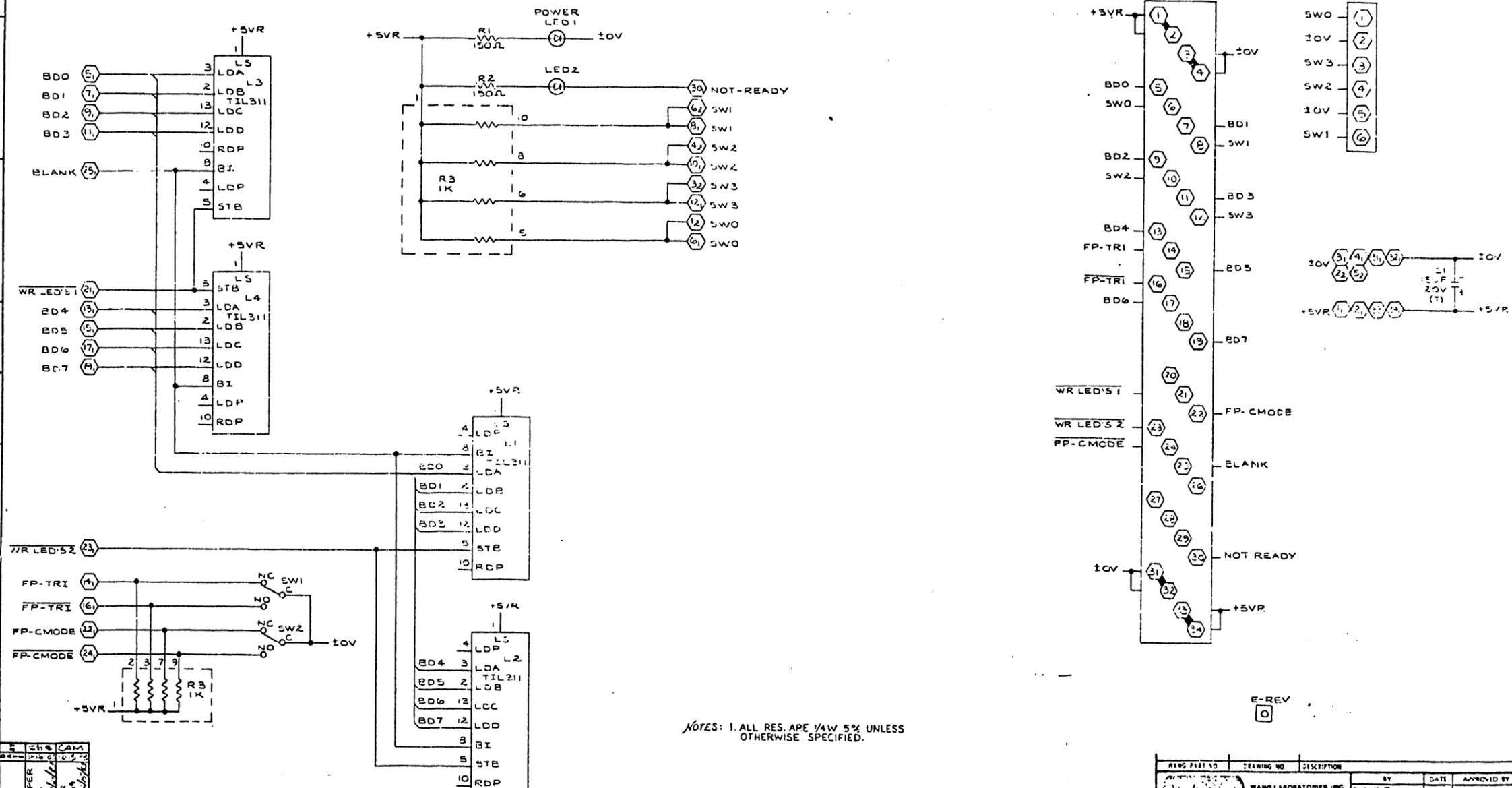
G
 LL
 11
 5.8
 E
 C
 8.5"
 11"
 B
 17"
 A
 22"

G
 LL
 11
 5.8
 E
 C
 8.5"
 11"
 B
 17"
 A
 22"

ITEM NO.	WANG PART NO.	DESCRIPTION	REFERENCE DESIGNATION(S)	QTY.	ITEM NO.	WANG PART NO.	DESCRIPTION	REFERENCE DESIGNATION(S)	QTY.	ITEM NO.	WANG PART NO.	DESCRIPTION	REFERENCE DESIGNATION(S)	QTY.
51	333-0056	RES. 220Ω 1/4W 1%	R45	1	106									
52					107	375-9071	CLIP		1					
53					108	375-9073	HEAT SINK		1					
54					109	375-9067	HEATING RESISTOR		1					
49	332-4054	RES. 56K 1/4W 10% 27, J		2	101									
48					100	375-1125	RES. 220Ω 1/4W 1%	R5, L	2					
47					99	375-1124	RES. 220Ω 1/4W 1%	R1, 2	2					
46					97	375-1097	RES. 220Ω 1/4W 1%	R1, 2	1					
45	331-2022	RES. 220Ω 1/4W 10% 27, J		2	97	375-1012	RES. 100Ω 1/4W 10%	R5, 13	2					
44	331-2010	RES. 100Ω 1/4W 10%	R5, 13	2	96				1					
43	331-1010	RES. 100Ω 1/4W 10%	R5, 13	2	95									
42					94									
41					93	374-0044	VR LM350T	V21	1					
40					92									
39	330-8002	THMS. CL50	R71, 2	2	91									
38	330-5013	RES. 120Ω 1/4W 5%	R24	1	90									
37	330-4061	RES. 120Ω 1/4W 5%	R25A	1	89	370-0027	LED ORN	LED1	1					
36	330-4034	RES. 33K 1/4W 5%	R19	1	88									
35	330-3023	RES. 2.2K 1/4W 5%	R13, 33, 34	3	87									
34	330-3011	RES. 1K 1/4W 5%	R14, 18-20, 26, 40, 43	9	86									
33	330-2034	RES. 330Ω 1/4W 5%	R6, 18, 35	3	85	340-1155	FUSE 2A PICO	F23	2					
32	330-1043	RES. 1/4W 5%	R7, 11	2	84	320-1100	FUSE 10A FB	F1	1					
31	330-3048	RES. 1/4W 5%	R17	1	83	360-0006	FUSE CLIP	FOR F1	2					
30	330-2069	RES. 1/4W 5%	R25	1	82									
29					81									
28	325-2113	SW. 220/115	SW1	1	80	350-0239	CONN. SPDS	J2	1					
27					79	350-0234	CONN. SPDS	J5	1					
26					78	350-0219	CONN. SPDS	J3	1					
25					77	350-0216	CONN. SPDS	J1	1					
24	320-0805	CHOK. 5V100A	Z1	1	76									
23	320-0761	CHOK. PI06	Z2	1	75									
22	320-0746	CHOK.	Z3, 4	2	74									
21					73									
20	320-0124	COIL 5C	Z6	1	72	337-0028	RES. 2.7K 1/4W 5%	R2, 10	2					
19					71									
18					70									
17					69									
16	300-3322	CAP. 470μF 35V(E)	C13, 17, 32, 34	4	68	336-1031	POT 10K 10P A01	R20	1					
15	300-3321	CAP. 10μF 50V(E)	C19	1	67	336-1012	POT 2K 50W A01	R23	1					
14	300-3147	CAP. 3300μF 25V(E)	C9, 10	2	66	336-1014	POT 1K 50W A01	R46	1					
13	300-3144	CAP. 10μF 250V(E)	C1, 2	2	65									
12					64									
11	300-3132	CAP. 0.1μF 50V(E)	C20, 28	2	63	334-0020	RES. 100Ω 5W 5%	R1	1					
10	300-2430	CAP. 1μF 250V(E)	C3, 14	2	62									
9	300-2234	CAP. 15μF 250V	C4, 5	2	61									
8	300-2075	CAP. 1000μF 10V(E)	C24	1	60									
7					59	333-0197	RES. 33K 1/4W 1%	R24A, 42	2					
6	300-1994	CAP. 0.033μF 35V	C15, 16	2	58	333-0136	RES. 220Ω 1/4W 1%	R17, 14	2					
5	300-1966	CAP. 0.01μF 50V	C1, 2, 17A, 17, 19, 23, 30, 31, 27	10	57	333-0107	RES. 15K 1/4W 1%	R16	1					
4	300-1731	CAP. 1μF 50V	C11, 25, 33, 35	4	56	333-0103	RES. 110Ω 1/4W 1%	R15, 38	2					
3					55	333-0093	RES. 2.7K 1/4W 1%	R23A, 32, 41	3					
2	300-1904	CAP. 0.2μF 25V	C16	1	54	333-0090	RES. 10K 1/4W 1%	R21, 22	2					
1	300-1915	CAP. 0.01μF 500V	C6, 12, 29	3										

WANG LABORATORIES, INC. 100 WALL STREET NEW YORK, N.Y. 10038		BY DJK	DATE 4/11/74	APPROVED BY EJNGR	DATE
PROJECT NO. P110 30A VS15/224		TITLE SPS 3201			
REV. NO. 1		REV. NO. 1			
DATE 11-2-73		DATE 11-2-73			
DRAWN BY DJK		DRAWN BY DJK			
CHECKED BY DJK		CHECKED BY DJK			
SCALE 1:1		SCALE 1:1			
SHEET NO. 1		SHEET NO. 1			
TOTAL SHEETS 1		TOTAL SHEETS 1			

THIS DRAWING AND THE DATA SHOWN THEREON ARE THE CONFIDENTIAL PROPERTY OF AND ARE PROPRIETARY TO WANG LABORATORIES, INC. THIS DRAWING AND THE DATA SHOWN THEREON ARE NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF WANG LABORATORIES, INC. IN THE EVENT OF ANY DISSEMINATION OF THIS DRAWING OR THE DATA SHOWN THEREON TO ANY OTHER PARTY, THE USER SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE CONFIDENTIALITY OF THE INFORMATION CONTAINED HEREIN AND FOR THE DEMAND OF WANG LABORATORIES, INC.



NOTES: 1. ALL RES. ARE 1/4W 5% UNLESS OTHERWISE SPECIFIED.

ORIGINATED FOR	DATE
DESIGNED BY	DATE
APPROVED BY	DATE
REVISIONS	
1	
2	

REV. PART NO.	SEWING NO.	DESCRIPTION	BY	DATE	APPROVED BY	DATE
		WANG LABORATORIES, INC. LOWELL, MASS.	CHW	12/15/64	W. J. M. J.	12/15/64
MATERIAL	MODEL NO. PHOTO 2-A VS-15	TITLE	VS-15 FRONT PANEL			
FINISH	FOR INFO: THIS DRAWING IS THE PROPERTY OF WANG LABORATORIES, INC. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF WANG LABORATORIES, INC.	210-8613 D	8613	1		

17"

11"

8.5"

17"

11"

8.5"

WANG LABORATORIES, INC.
 ***** ELECTRICAL PARTS LIST ***** SHEET OF PAGE 1

(PRELIMINARY BILL OF MATERIALS)

BOARD NO. & TITLE: C5613 VS-15 FRONT PANEL
 CREATED: 12/05/83 10:08
 LAST MODIFIED: 12/07/83 10:59 BY: LAB
 EDITING REVISION: 1

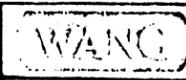
SUB-ASSEMBLY: 210 8613
 CREATED: 12/05/83 10:08
 LAST MODIFIED: 12/07/83 10:59 BY: LAB
 B.O.M. REVISION: 1

JOINTOR REVISION (R): 01
 MECHANICAL REVISION (M): 00
 ELECTRICAL REVISION (E): 00
 SCHEMATIC REVISION (S): 01
 POST RECENT ECO:
 DRAFTING WORK REQUEST: E2178
 MODEL NUMBER: VS-15
 ENGINEER: KIM CHEUNG

REF. DES.	WANG PART NO.	VALUE/TYPE	DESCRIPTION	DRAWING NO.	QTY.
J1	220-3118-	CABLE	CABLE 14 SOCKET TO TRANS		1
C1	300-4022-	15U	CAP TANT AXIAL 10% 20V		1
SW1	325-2249-	SWITCH	SPOT SWITCH (RED)		1
SW2	325-2250-	SWITCH	SPOT SWITCH (GREEN)		1
R1 - R2	330-2016-	150.000	RES FILMED METAL FILM 1/4W 1% 200PPM		2
R3	333-0837-	1.0000M	RESISTOR METAL FILM TYPE: 10/50/C/55		1
L1 - L4	340-0015-	DISPLAY	HEXADECIMAL DISPLAY WITH LOGIC		4
J2	350-0274-	CONN	CONN 6 PIN		1
LED1 - LED2	370-0011-	LED	LED RED RECTANGULAR 4MCD		2
01 - 04	376-9054-	SKT 14	SOCKET 14 PIN WIRE WRAP		4
05	510-8613-	PCB	PCB		1

*** END-OF-REPORT ***

M

 WANG LABORATORIES, INC. LOWELL, MA U.S.A.		BY	DATE	APPROVED BY	DATE		
		DWN		E ENGR			
MATERIAL MODEL NO SEE ENGR SPECIFICATIONS No		CHK		M ENGR			
				AIFG ENGR			
		TITLE VS-15 FRONT PANEL					
FINISH		TOL EX AS NOTED XX ± 010 FRAC ± 1/64 XXX ± 005 ANG ± 1'30" FINISH	210-8613	D	8613	1	
3	2	SCALE	SMT Z OF Z	WANG PART NUMBER	SIZE	DRAWING NUMBER	REV

8.5"

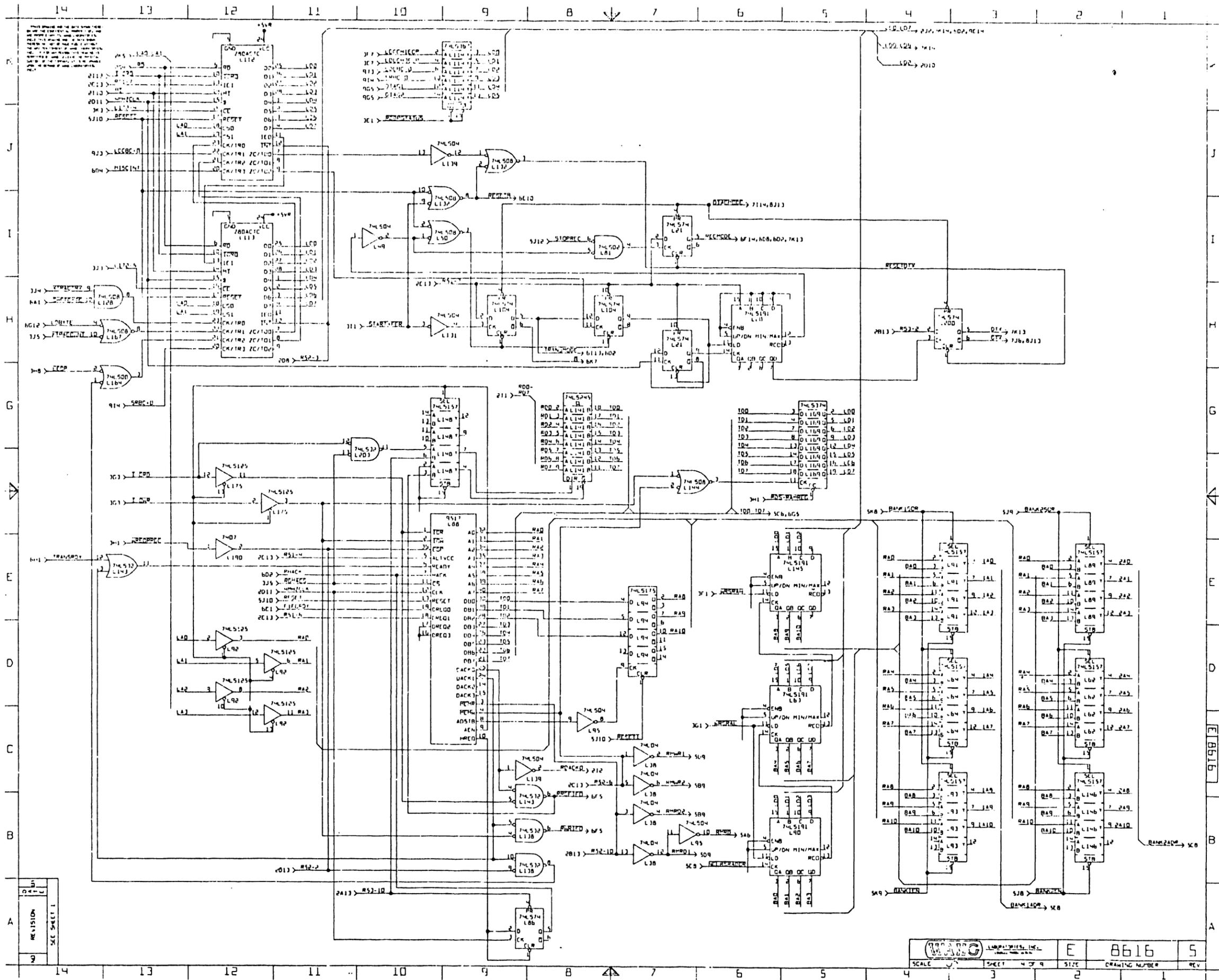
11"

17"

8.5"

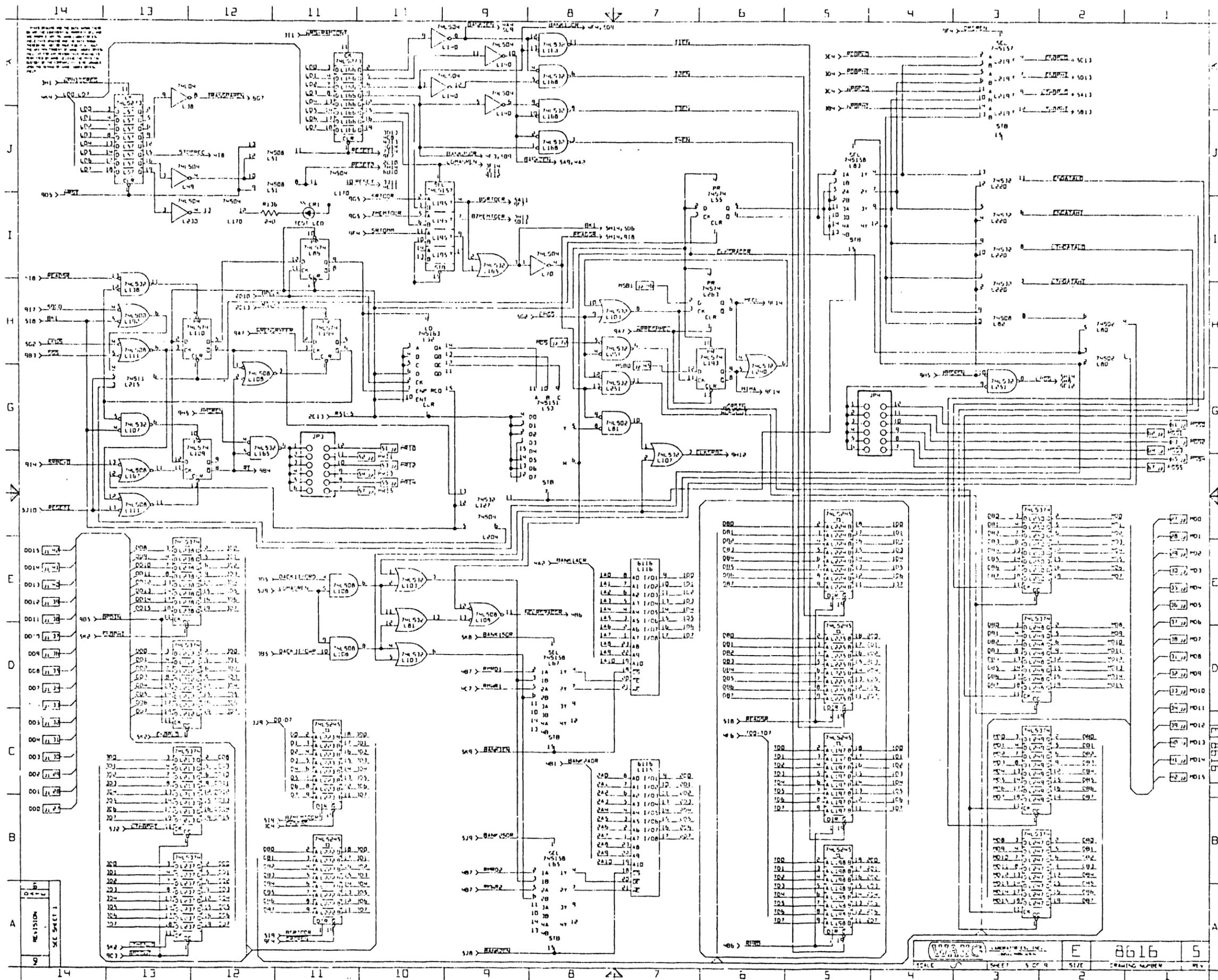
11"

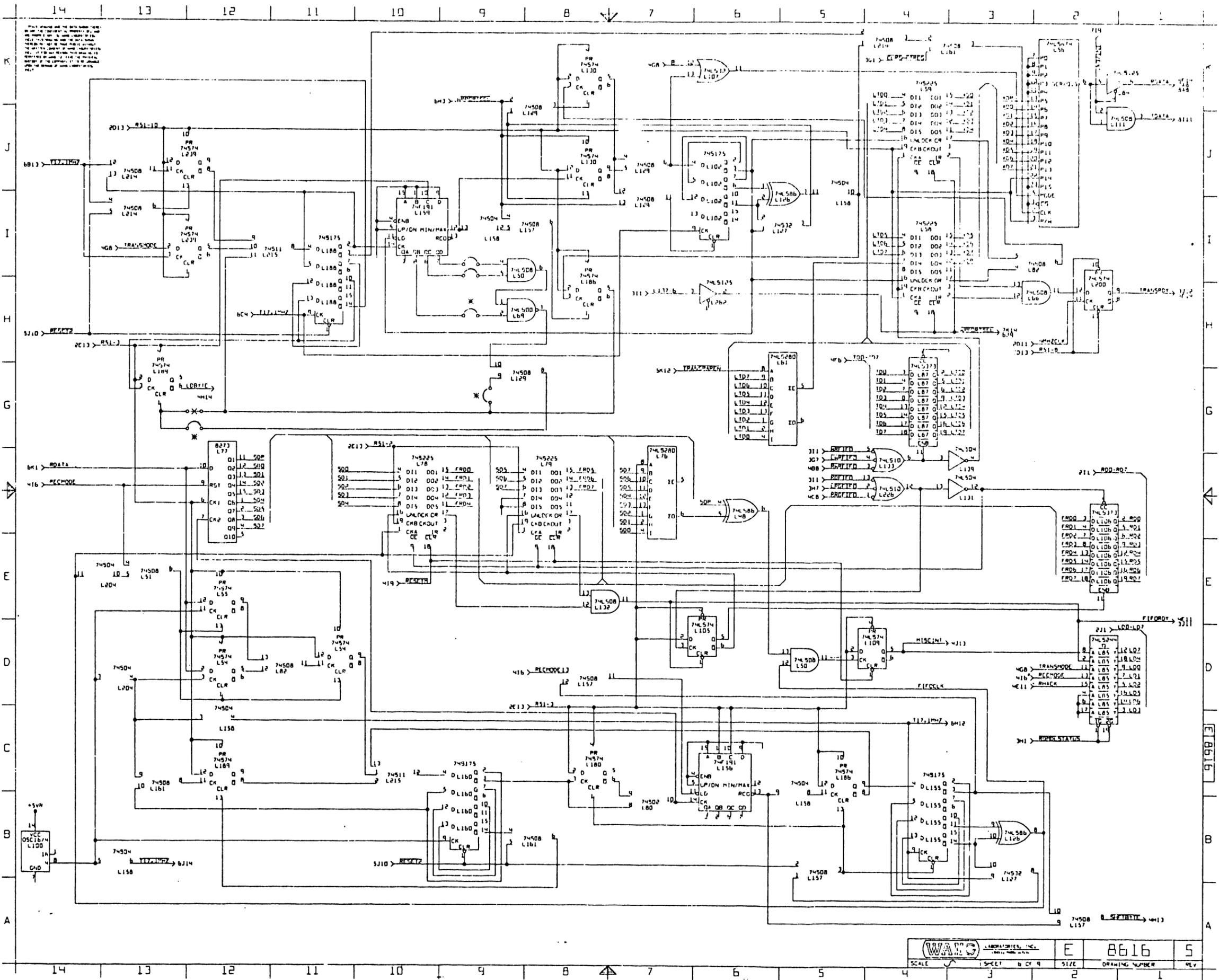
17"



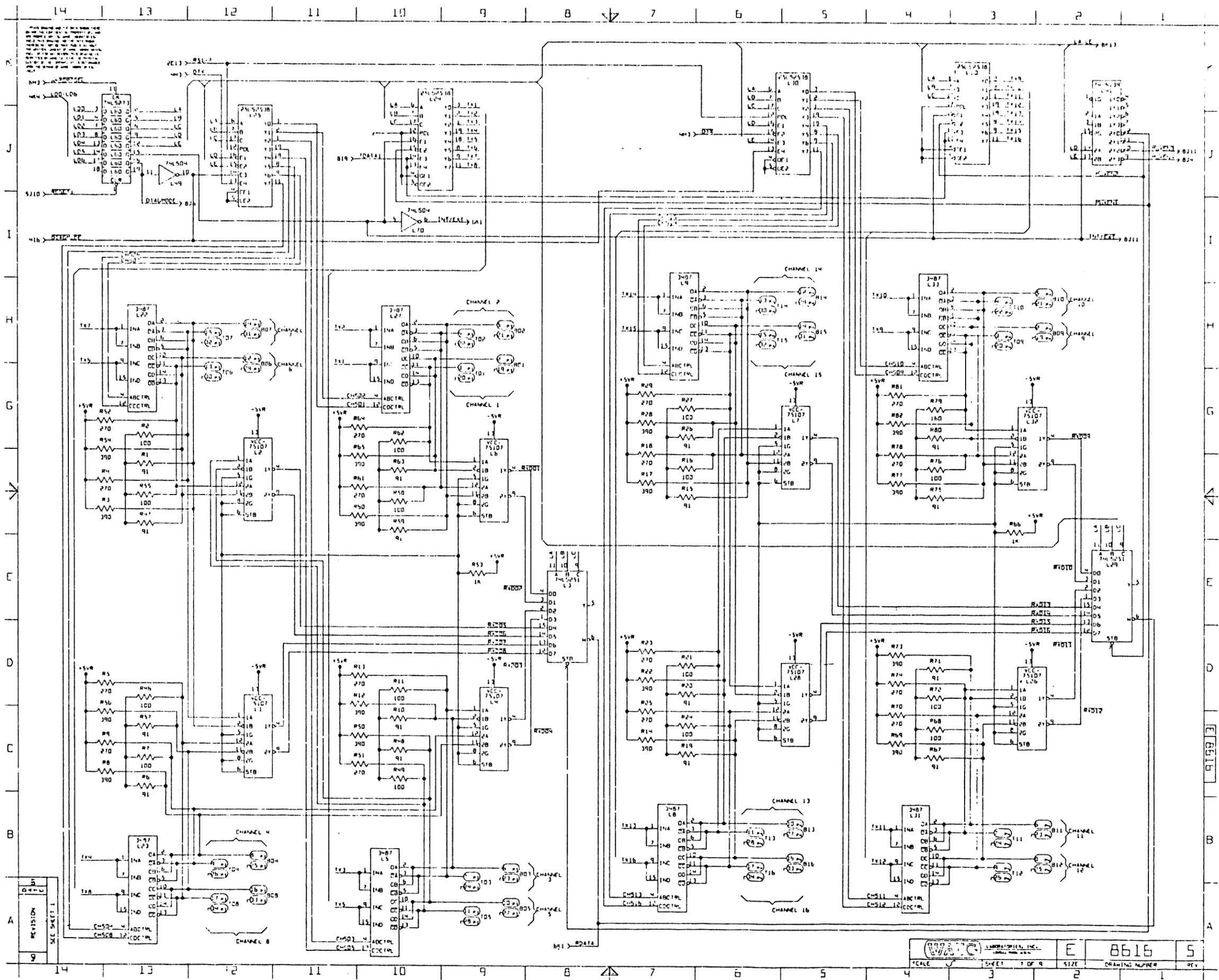
REV	DATE	BY
5		
4		
3		
2		
1		

SCALE	SHEET 4 OF 9	SIZE	8616	5
			DRAWING NUMBER	REV



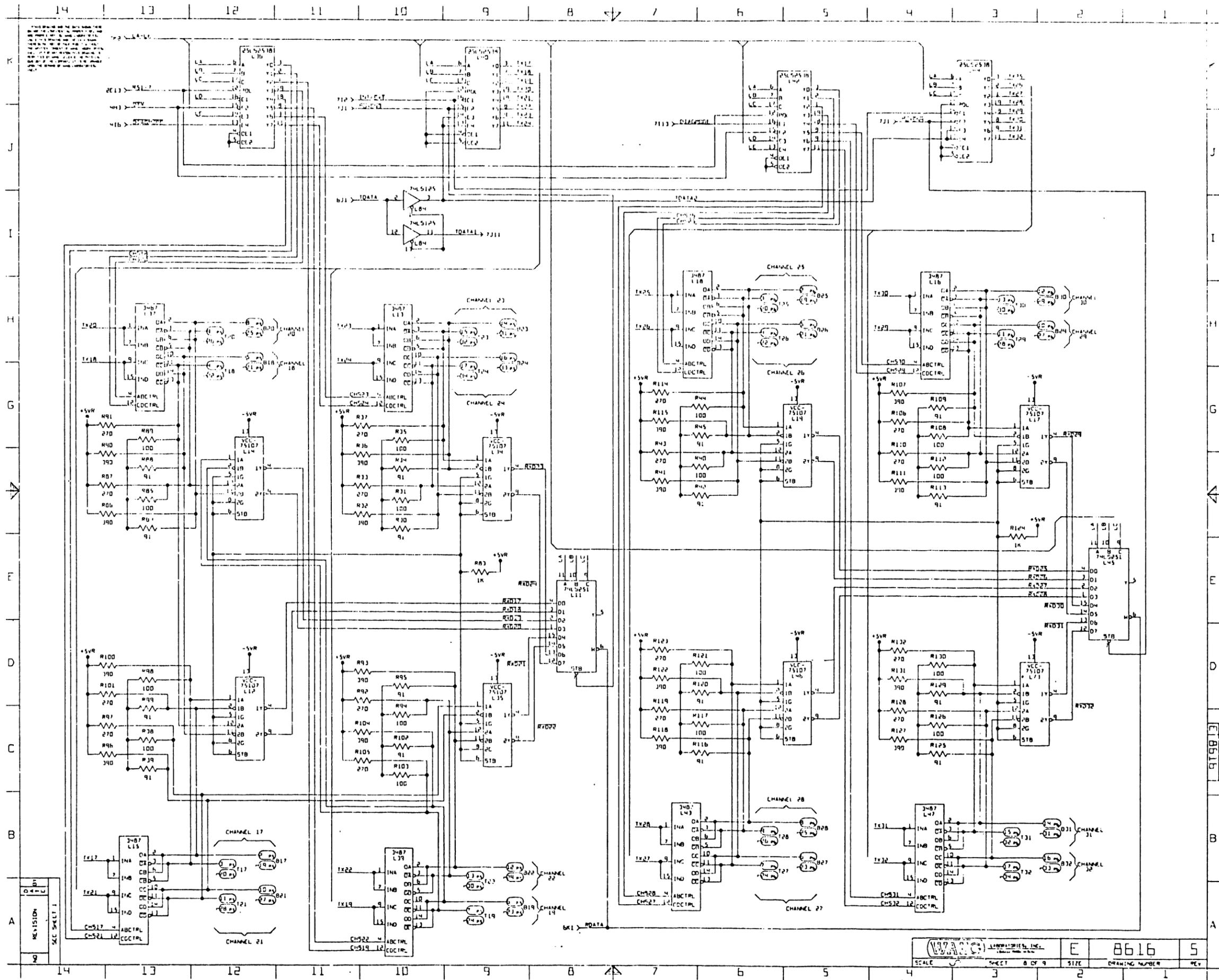


SCALE	SHEET	6 OF 9	SIZE	E	8616	5



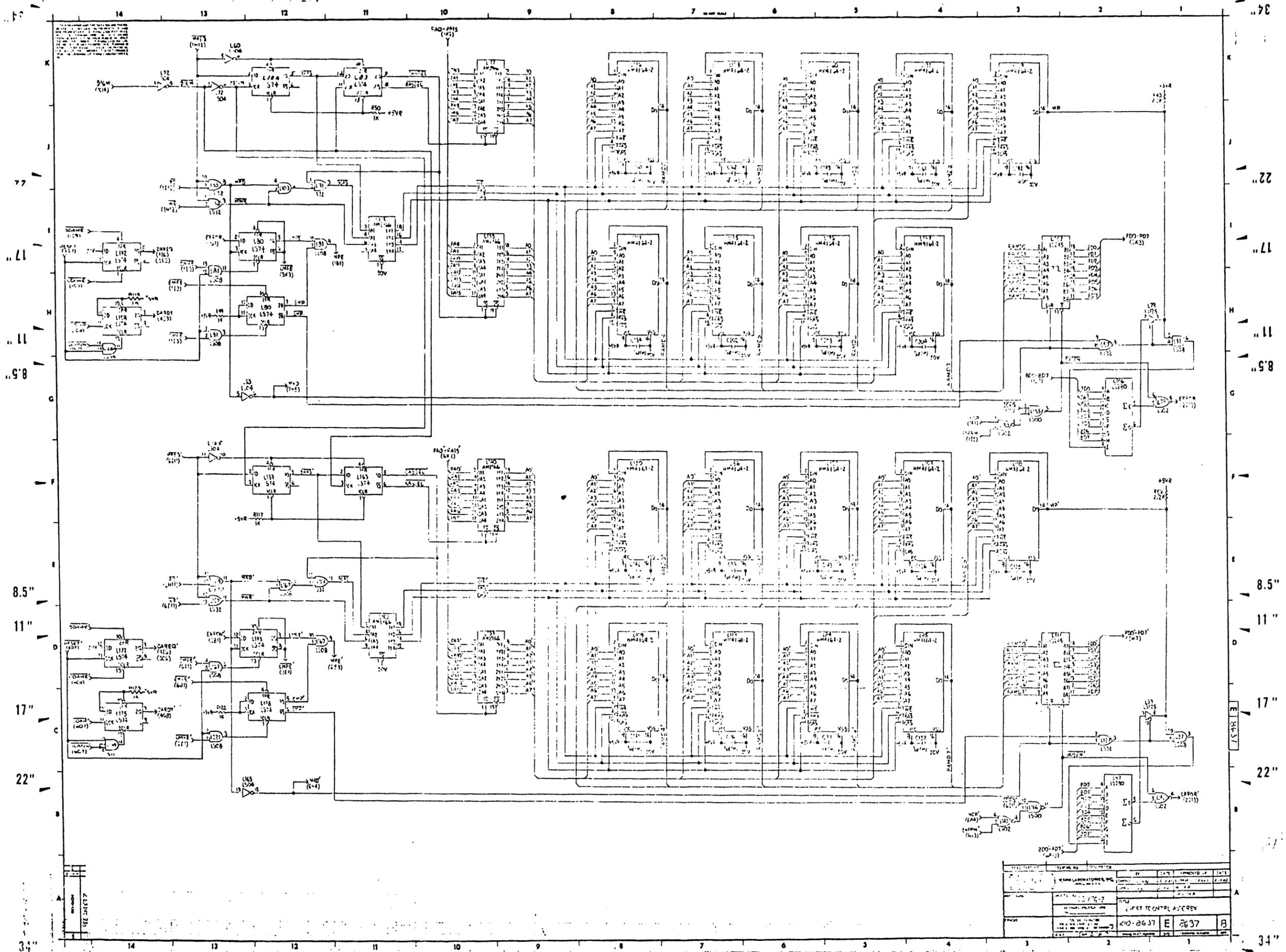
REVISION	SHEET 1
9	

SCALE	LABORATORIES, INC.	E	8616	5
	SHEET 7 OF 9	SIZE	DRAWING NUMBER	REV.



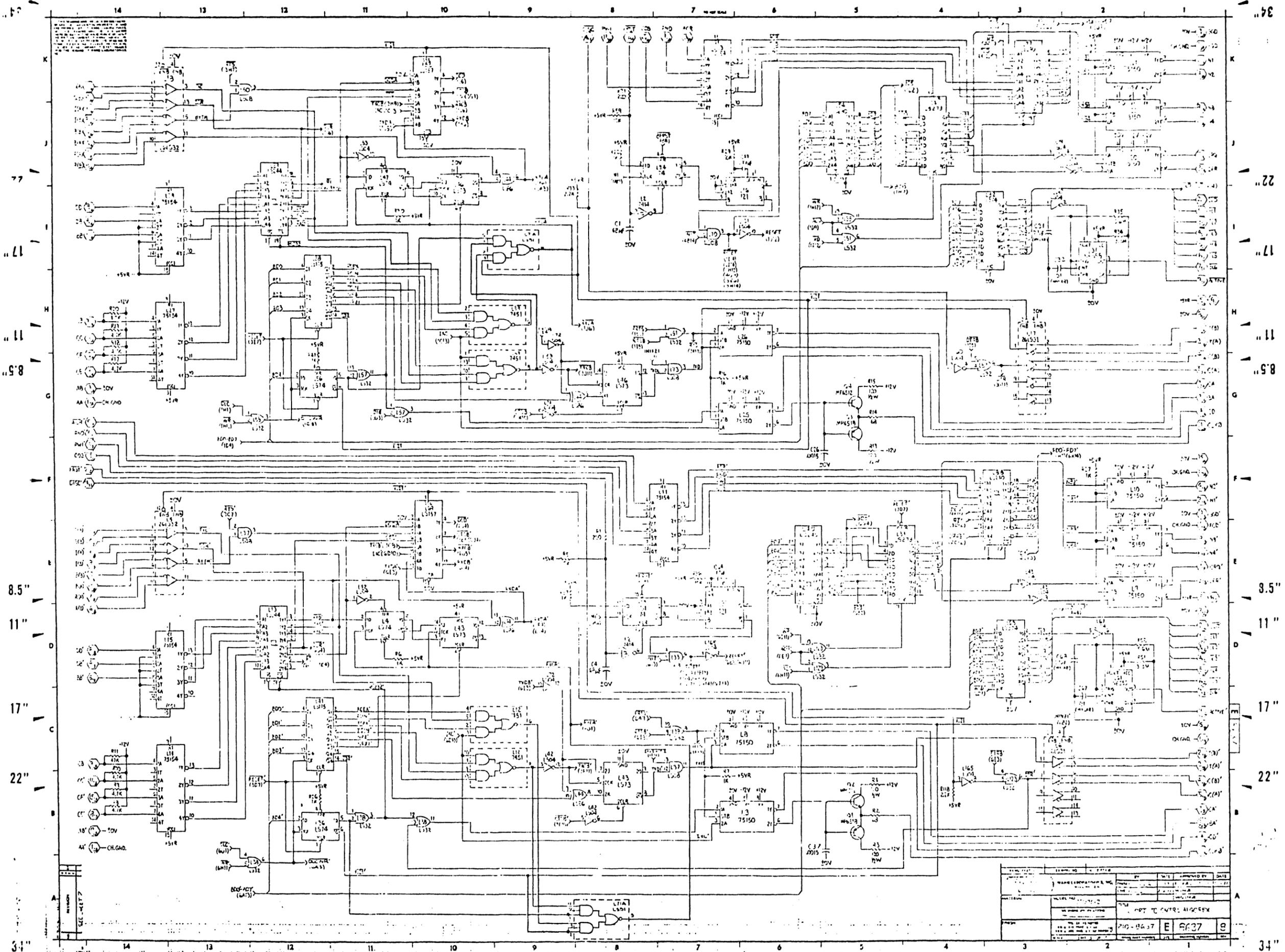
REVISION
 SEC SHEET 1

SCALE	SHEET 5 OF 9	SIZE	8616	5
		DRAWING NUMBER	REV	

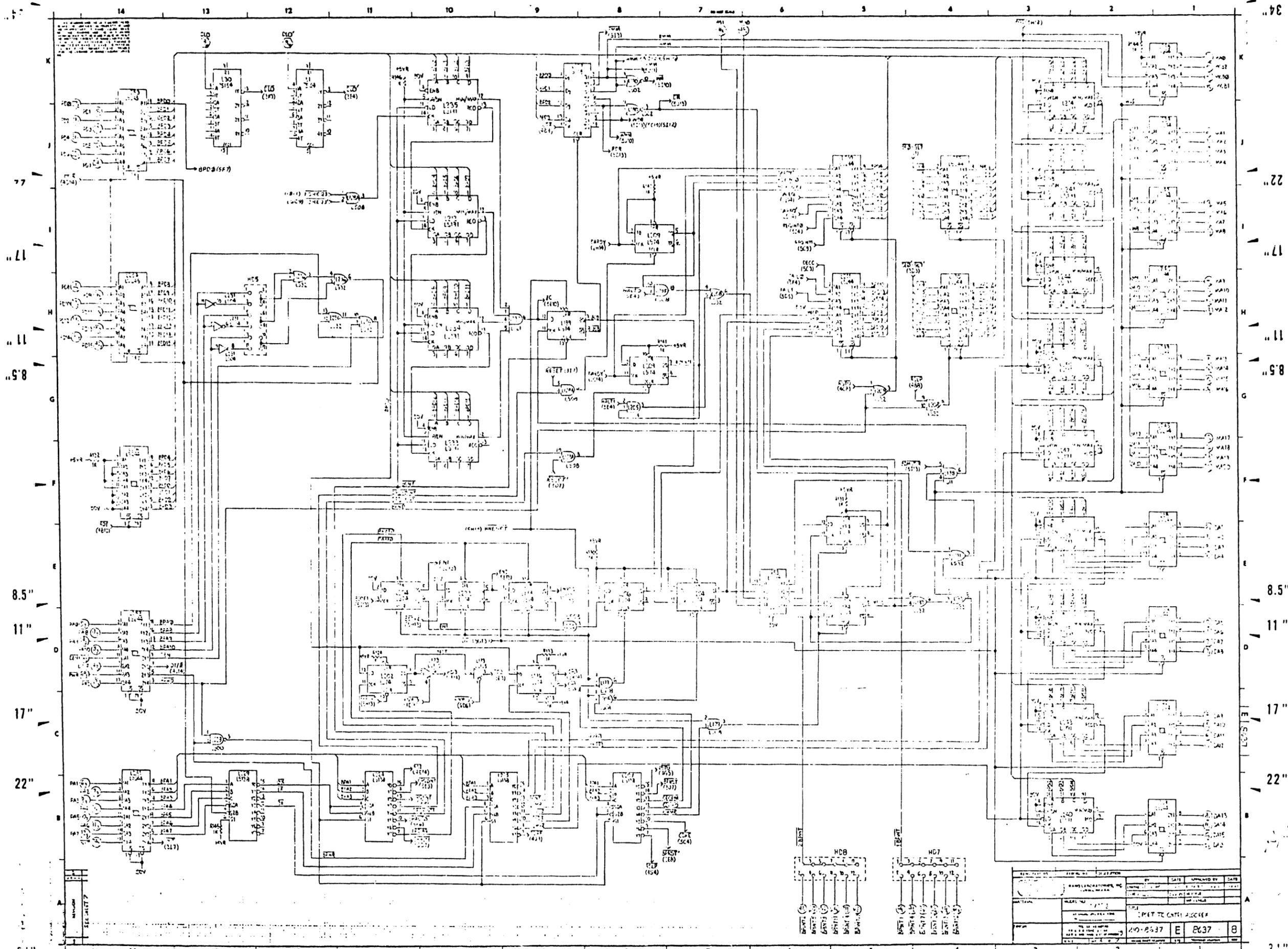


REV	DATE	BY	REVISION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			

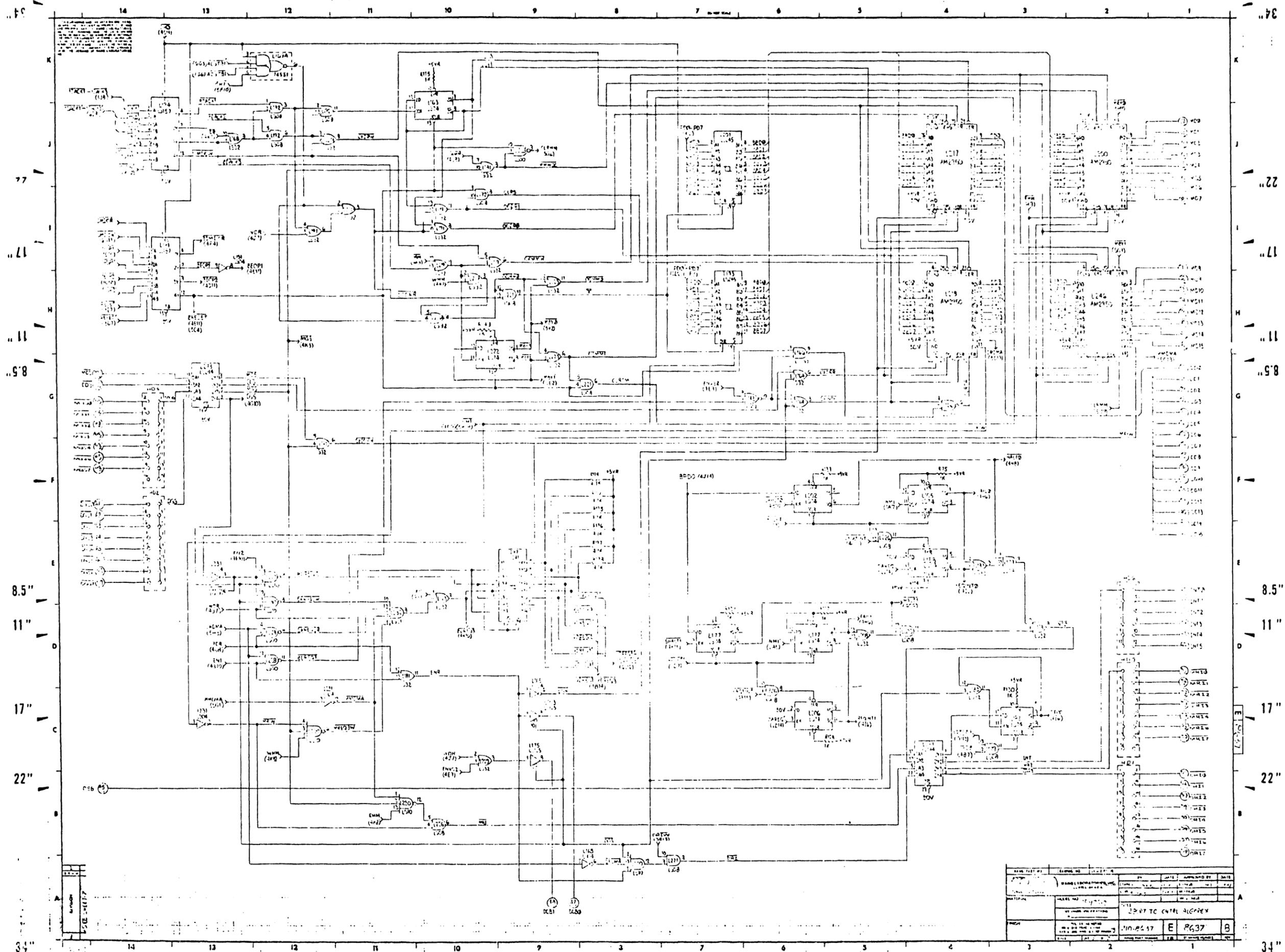
NAME	LABORATORY, INC.
ADDRESS	1000 N. 10TH ST., SUITE 100, DENVER, CO. 80202
PHONE	333-1111
FAX	333-1111
TELETYPE	333-1111
PROJECT NO.	410-8637
REV.	E 2637
DATE	
BY	
CHECKED	
APPROVED	



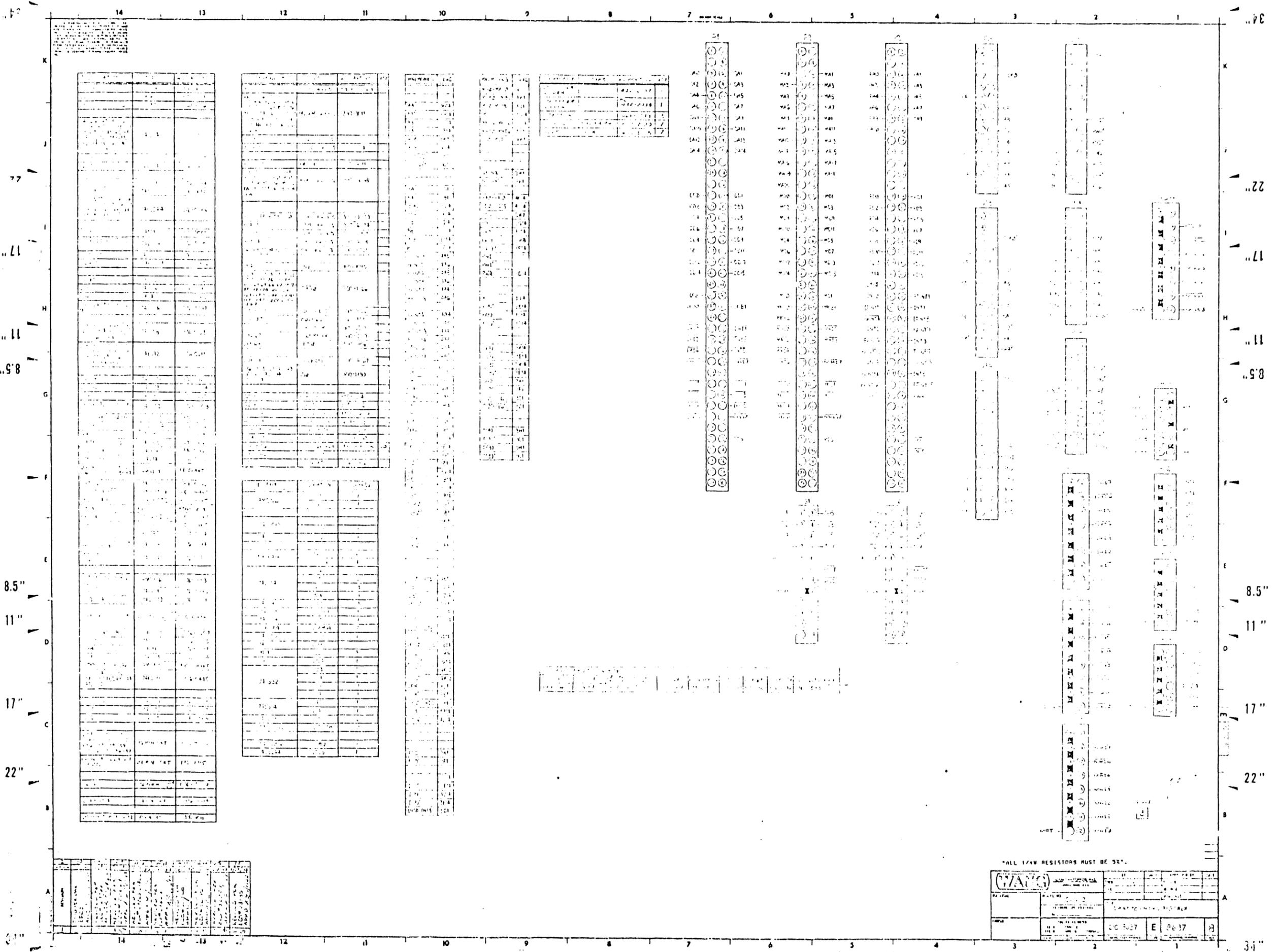
DATE	BY	APPROVED BY	DATE
PROJECT TITLE		PROJECT NO.	
DRAWN BY		CHECKED BY	
DESIGNED BY		APPROVED BY	
PARTS LIST		REVISIONS	
REV. NO.		DESCRIPTION	
REV. 1		INITIALS	
REV. 2		DATE	
REV. 3		BY	
REV. 4		DATE	
REV. 5		BY	
REV. 6		DATE	
REV. 7		BY	
REV. 8		DATE	
REV. 9		BY	
REV. 10		DATE	



NO.	DESCRIPTION	DATE	APPROVED BY	DATE
1	INITIAL DESIGN			
2	REVISED			
3	REVISED			
4	REVISED			
5	REVISED			
6	REVISED			
7	REVISED			
8	REVISED			
9	REVISED			
10	REVISED			
11	REVISED			
12	REVISED			
13	REVISED			
14	REVISED			
15	REVISED			
16	REVISED			
17	REVISED			
18	REVISED			
19	REVISED			
20	REVISED			
21	REVISED			
22	REVISED			
23	REVISED			
24	REVISED			
25	REVISED			
26	REVISED			
27	REVISED			
28	REVISED			
29	REVISED			
30	REVISED			
31	REVISED			
32	REVISED			
33	REVISED			
34	REVISED			
35	REVISED			
36	REVISED			
37	REVISED			
38	REVISED			
39	REVISED			
40	REVISED			
41	REVISED			
42	REVISED			
43	REVISED			
44	REVISED			
45	REVISED			
46	REVISED			
47	REVISED			
48	REVISED			
49	REVISED			
50	REVISED			
51	REVISED			
52	REVISED			
53	REVISED			
54	REVISED			
55	REVISED			
56	REVISED			
57	REVISED			
58	REVISED			
59	REVISED			
60	REVISED			
61	REVISED			
62	REVISED			
63	REVISED			
64	REVISED			
65	REVISED			
66	REVISED			
67	REVISED			
68	REVISED			
69	REVISED			
70	REVISED			
71	REVISED			
72	REVISED			
73	REVISED			
74	REVISED			
75	REVISED			
76	REVISED			
77	REVISED			
78	REVISED			
79	REVISED			
80	REVISED			
81	REVISED			
82	REVISED			
83	REVISED			
84	REVISED			
85	REVISED			
86	REVISED			
87	REVISED			
88	REVISED			
89	REVISED			
90	REVISED			
91	REVISED			
92	REVISED			
93	REVISED			
94	REVISED			
95	REVISED			
96	REVISED			
97	REVISED			
98	REVISED			
99	REVISED			
100	REVISED			



REV	DATE	APPROVED BY	DATE
1			
TITLE		2D BY TC CTRL ALGEBY	
PROJECT	JIN-8437	E	8637
DESIGNED BY			
CHECKED BY			
DATE			



ALL 1/4W RESISTORS MUST BE 5%.

WANG		DATE	BY
DESIGNED BY	CHECKED BY	DATE	BY
APPROVED BY	DATE	BY	
REV	DESCRIPTION	DATE	BY
01	INITIAL DESIGN	06-07	E
02	REVISED	06-17	B