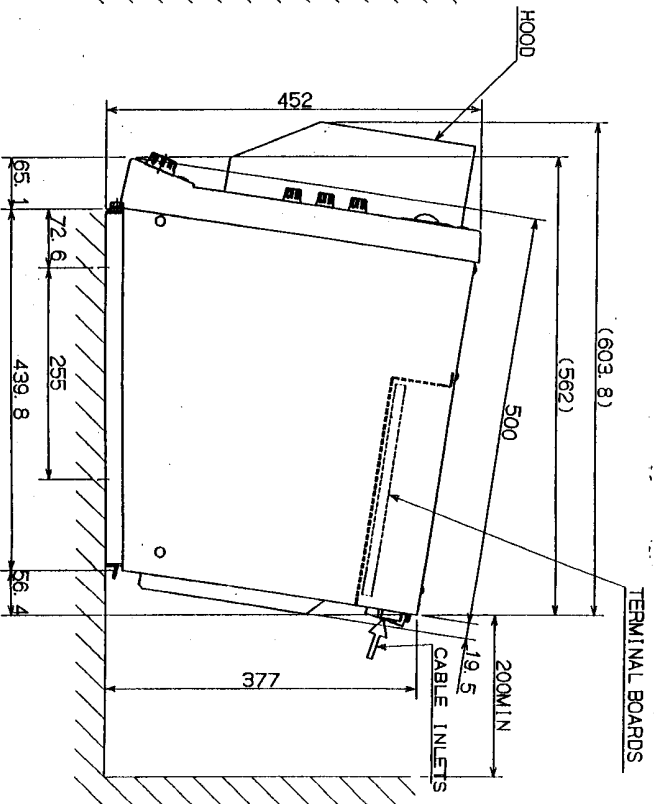


4-4-12 MOUNTING HOLES
HOLDING BOLT M10

MOUNTING DIMENSIONS

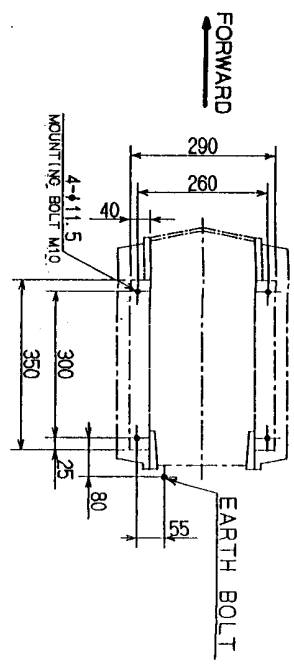
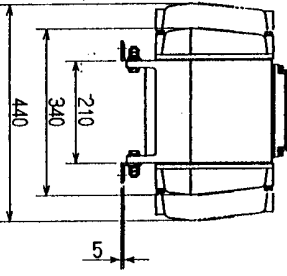
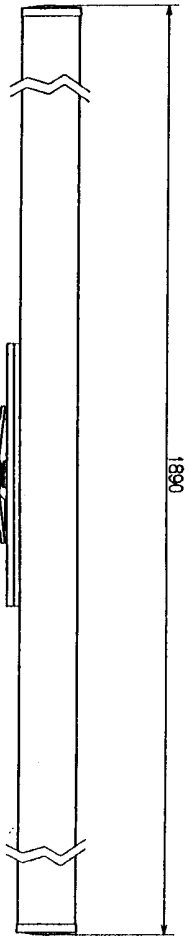
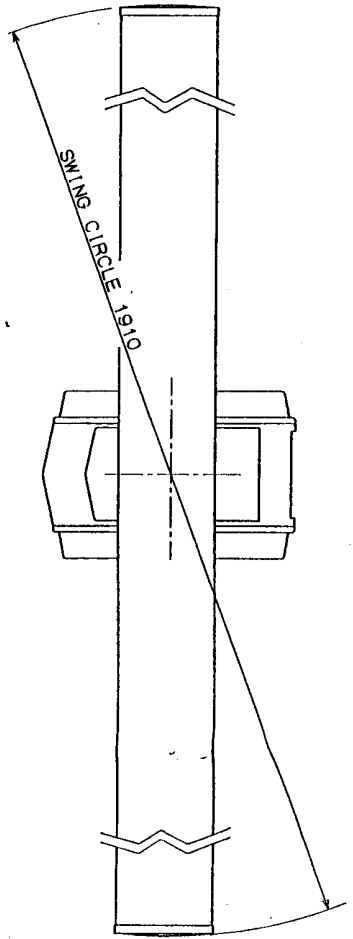
UNLESS OTHERWISE SPECIFIED		TOLERANCE	TOLERANCE
DIMENSION	SPECIFIED		
0 TO 30	± 1	± 0.5	
OVER 30 TO 120	± 1.5	± 1	
OVER 120 TO 400	± 2.5	± 1	
OVER 400 TO 1000	± 4	± 2	
OVER 1000 TO 2000	± 6	± 3	
OVER 2000 TO 3000	± 8	± 4	



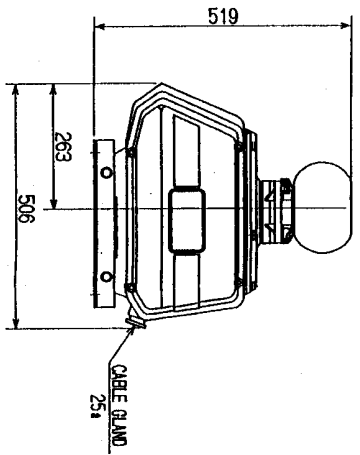
TERMINAL BOARDS

WEIGHT APPROX. 34 K.G.

3rd Angle Projection		Dimension in mm		3		6		7		8	
CHECKED M. Morikubo	APPROVED M. Morikubo	DESIGNED R. Funakoshi	DATE 19 MAY '98	SCALE A3	TITLE NCD-3780 DISPLAY UNIT OUTLINE DRAWING	SHEET NO. 1/1	DRAWING NO.	JRC Japan Radio Co., Ltd. SCNCD5106			



MOUNTING DIMENSIONS



WEIGHT APPROX. 38kg

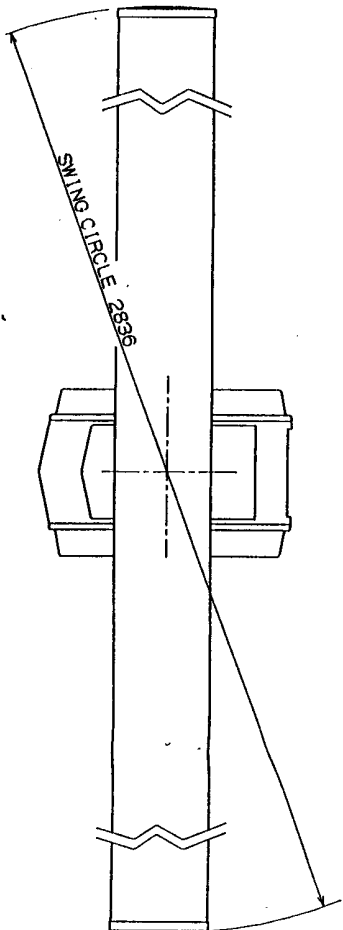
UNLESS OTHERWISE SPECIFIED		DIMENSION SPECIFIED TOLERANCE	
0 TO 30	± 1	40.5	
OVER 30 TO 120	± 1.5		
OVER 120 TO 400	± 2.5	± 1	
OVER 400 TO 1000	± 4	± 2	
OVER 1000 TO 2000	± 6		
OVER 2000 TO 3000	± 8	± 3	

Dimension mm

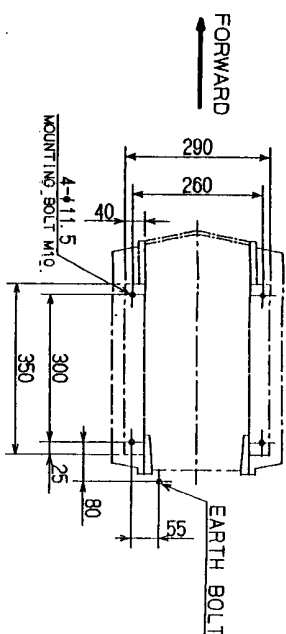
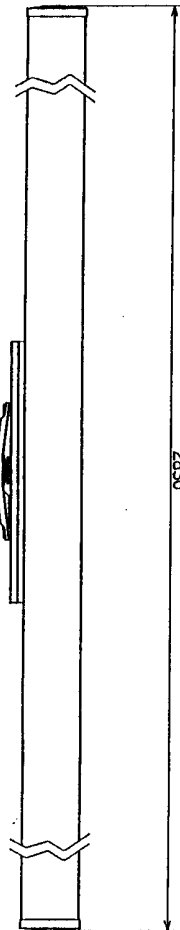
CHECKED	H. Kobayashi	APPROVED	H. Kobayashi	DATE	08 JUN '98
	E. Koga	DESIGNED		SCALE	1:10
H. Kobayashi			A3		

JRC Japan Radio Co. Ltd.		SCNKE5136	
OUTLINE DRAWING		DRAWING NO.	
		1/1	

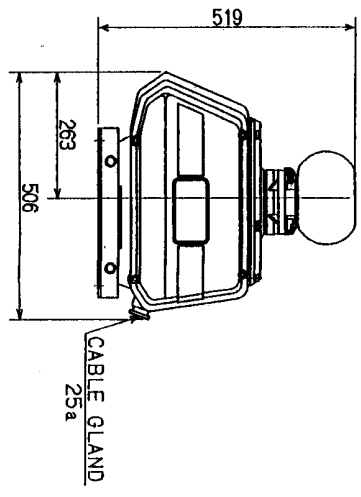
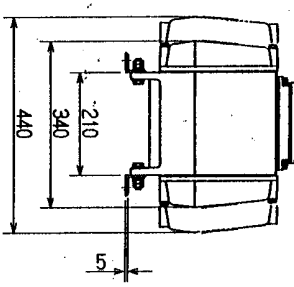
3rd Angle System Dimension mm 3 6 7 8



2830



MOUNTING DIMENSIONS



WEIGHT APPROX. 43k g

UNLESS OTHERWISE SPECIFIED

DIMENSION SPECIFIED	TOLERANCE	TOLERANCE
0 TO 30	± 1	± 0.5
OVER 30 TO 120	± 1.5	± 1
OVER 120 TO 400	± 2.5	± 2
OVER 400 TO 1000	± 4	± 3
OVER 1000 TO 2000	± 6	± 5
OVER 2000 TO 3000	± 8	± 7

Dimension mm.

CHECKED H. Kobayashi		APPROVED H. Kobayashi		DATE 08 JUN '98	TITLE NKE-1056-9 SCANNER UNIT	SHEET NO. 1/1
DESIGNED E. Kose		SCALE A3		DRAWING NO. SCNKE5137		

JRC Japan Radio Co., Ltd.

3rd Angle System Dimension mm

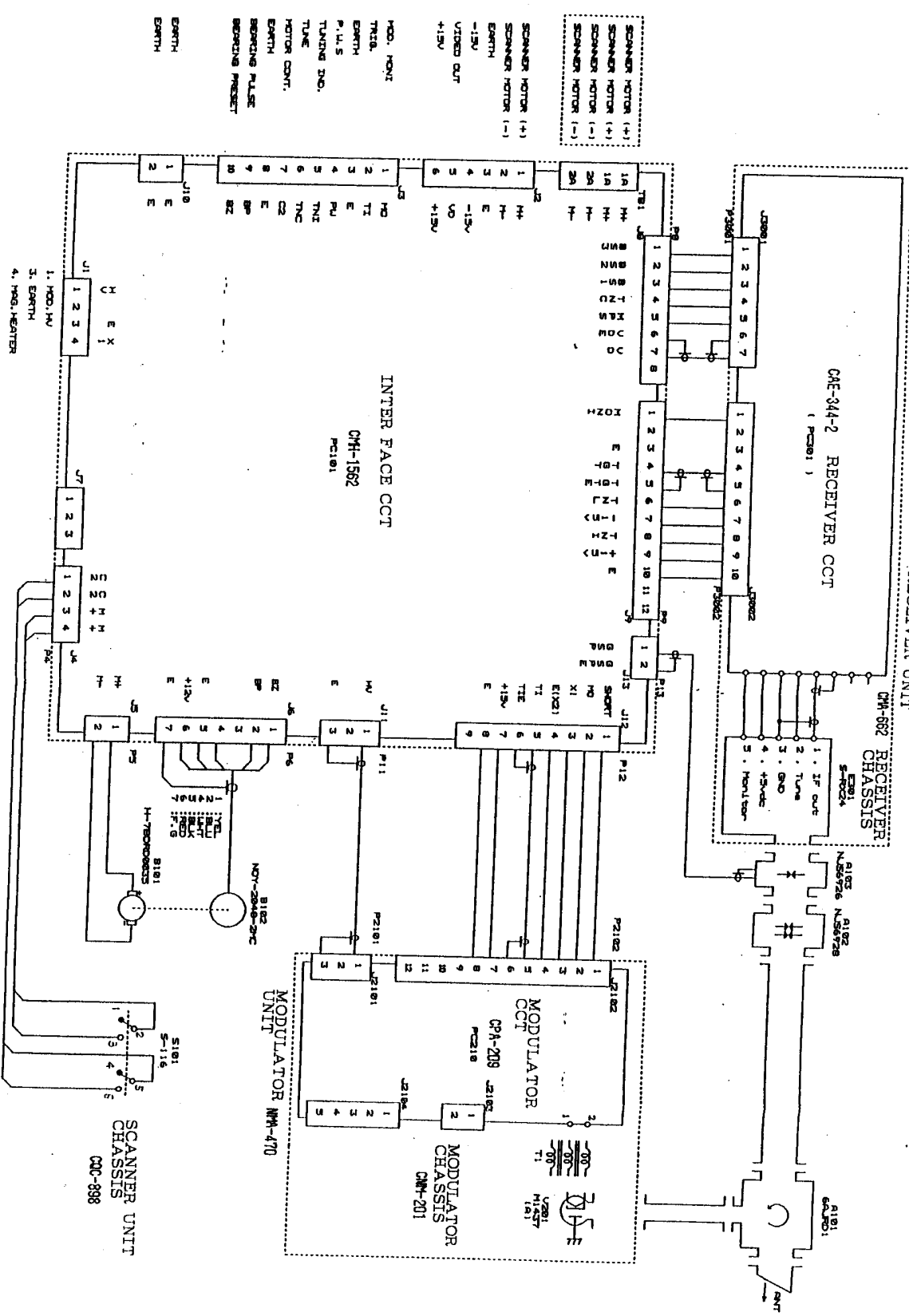
3

6

7

8

3月 2 3 6 7



CHECKED	APPROVED	DATE	TITLE
<i>H. Suda</i>	<i>H. Suda</i>		SHEET NO.
DESIGNED		SCALE	
<i>W. Kitagawa</i>		A3	
INTERNAL CONNECTIONS OF ANTENNA : NKE-1056		DRAWING NO.	
ED000-		NKE-11056-1001	

OH-344-2 RECEIVER CCT
(P2001)

OH-682 RECEIVER CHASSIS
S-1024
S-1024
N181726 N181728

INTER FACE CCT
OH-1582
P2101

MODULATOR UNIT
OH-208
MODULATOR CCT
P2102
MODULATOR CHASSIS
OH-201

SCANNER UNIT
CHC-888

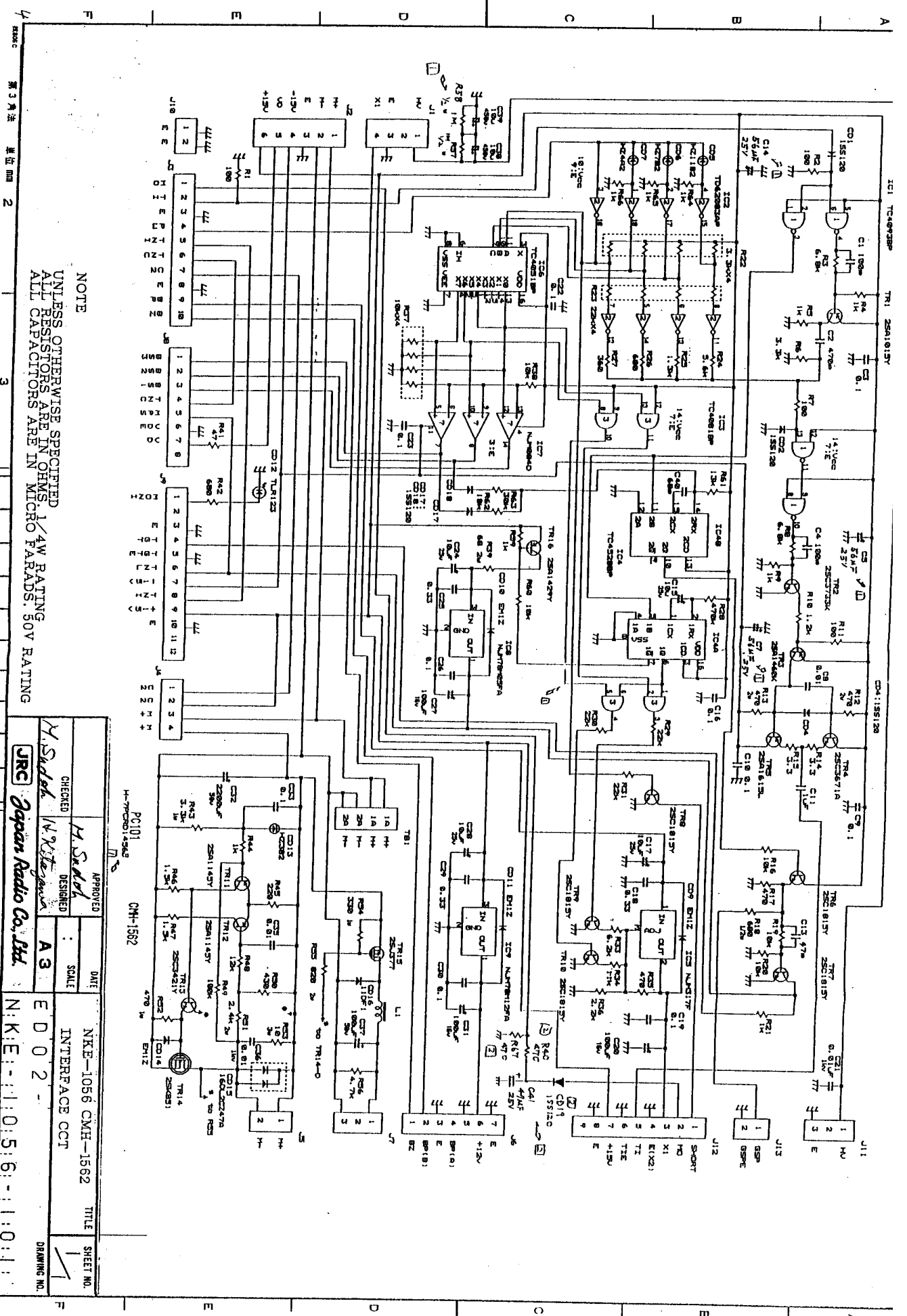
MOD. HUNT
TUNE
TUNE DIAL
TUNE
MOTOR CONT.
EARTH
REPAIRING PLATE
REPAIRING PRESET

OH-344-2 RECEIVER CCT
1. IF out
2. Tune
3. BFO
4. Mixer
5. Monitor

MODULATOR UNIT
H-THERMOSTATS
NOT-284B-2-C
S101
S-116

SCANNER UNIT
CHC-888

3月 2 3 6 7

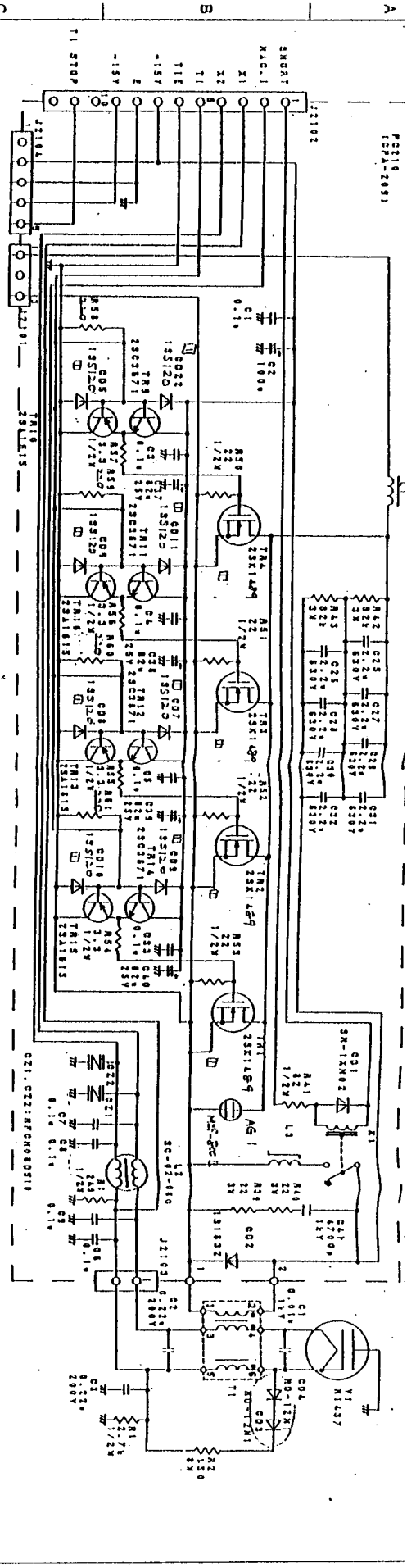


第3号法 单位mm 2 3 6 7

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS ARE IN OHMS
ALL CAPACITORS ARE IN MICRO FARADS. 50V RATING

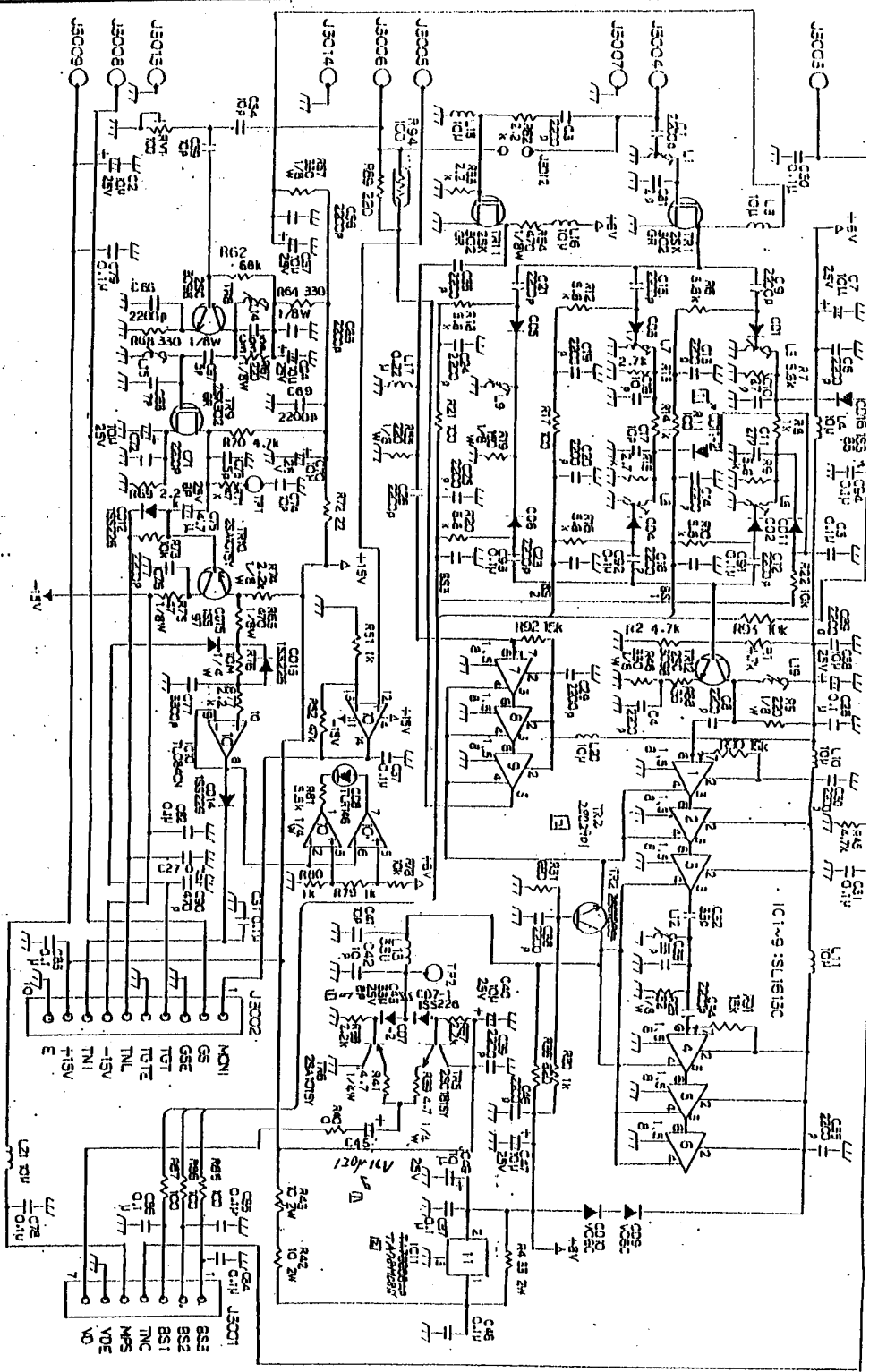
CHECKED <i>M. Sada</i> DESIGNED <i>W. K. Higashimura</i>	DATE	TITLE	SHEET NO.
	SCALE	INTERFACE CCT	
	A3		
APPROVED <i>M. Sada</i>	DATE		
JRC Japan Radio Co. Ltd.			
E D 0 2 N K E 1 1 0 5 6 1 1 0 1			
DRAWING NO.			

PC101
H-700014562
CMH-1562



CHECKED		APPROVED		DATE		TITLE		SHEET NO.	
M. S. Sedok		M. S. Sedok		A 3		NMA-470		1	
DESIGNED		SCALE		MODULATOR CCT		DRAWING NO.			
M. S. Sedok		A 3		E D O I T		N: M: A: - 4: 7: 0:			
JRC		Japan Radio Co., Ltd.		7		8			

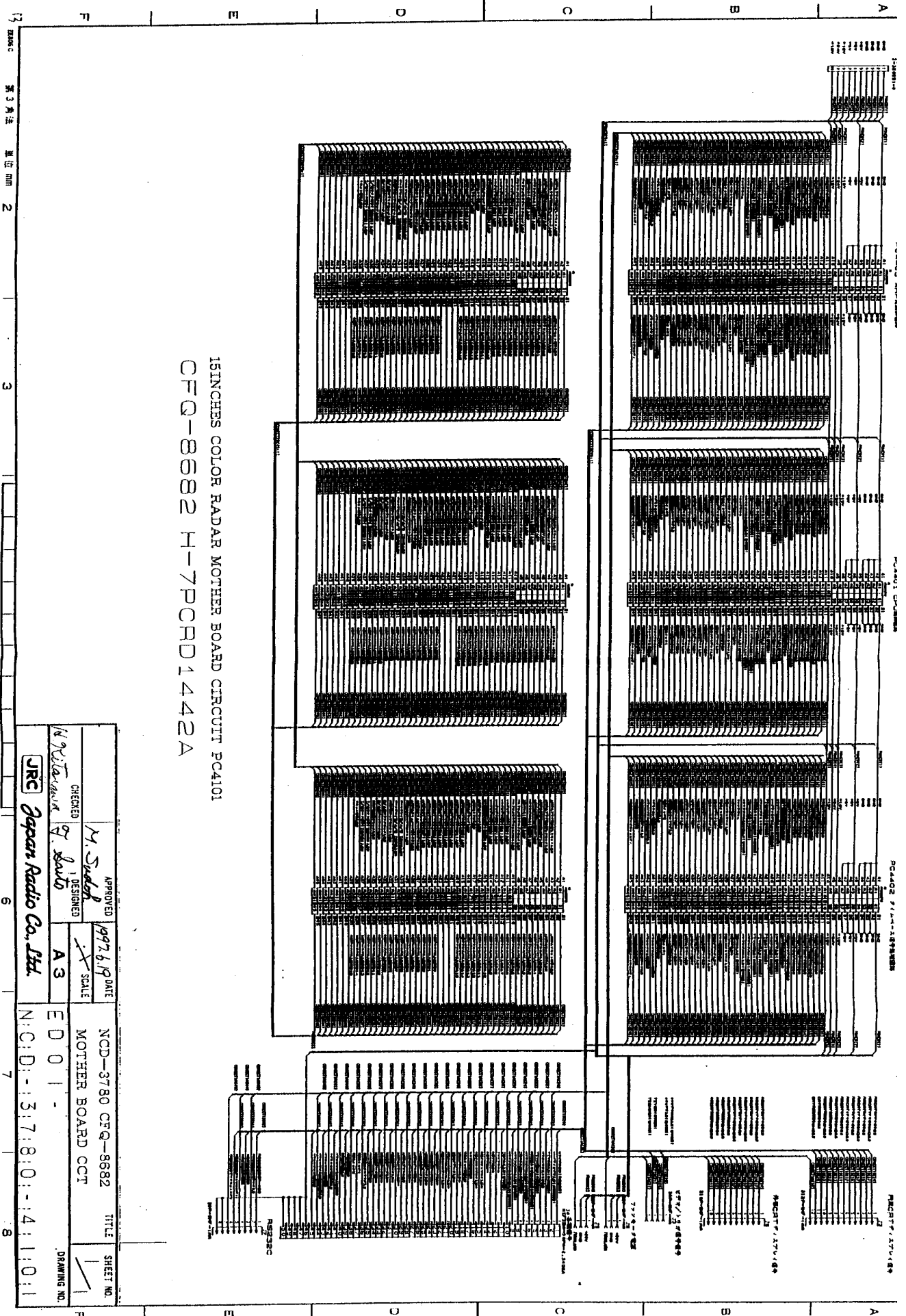
第 3 角 2 3



NOTE UNLESS OTHERWISE SPECIFIED
 ALL RESISTORS ARE IN OHMS. 1/10W RATING
 ALL CAPACITORS ARE IN FARADS. 50V RATING

7PCRD1343B CAE-344-2 PC3D1

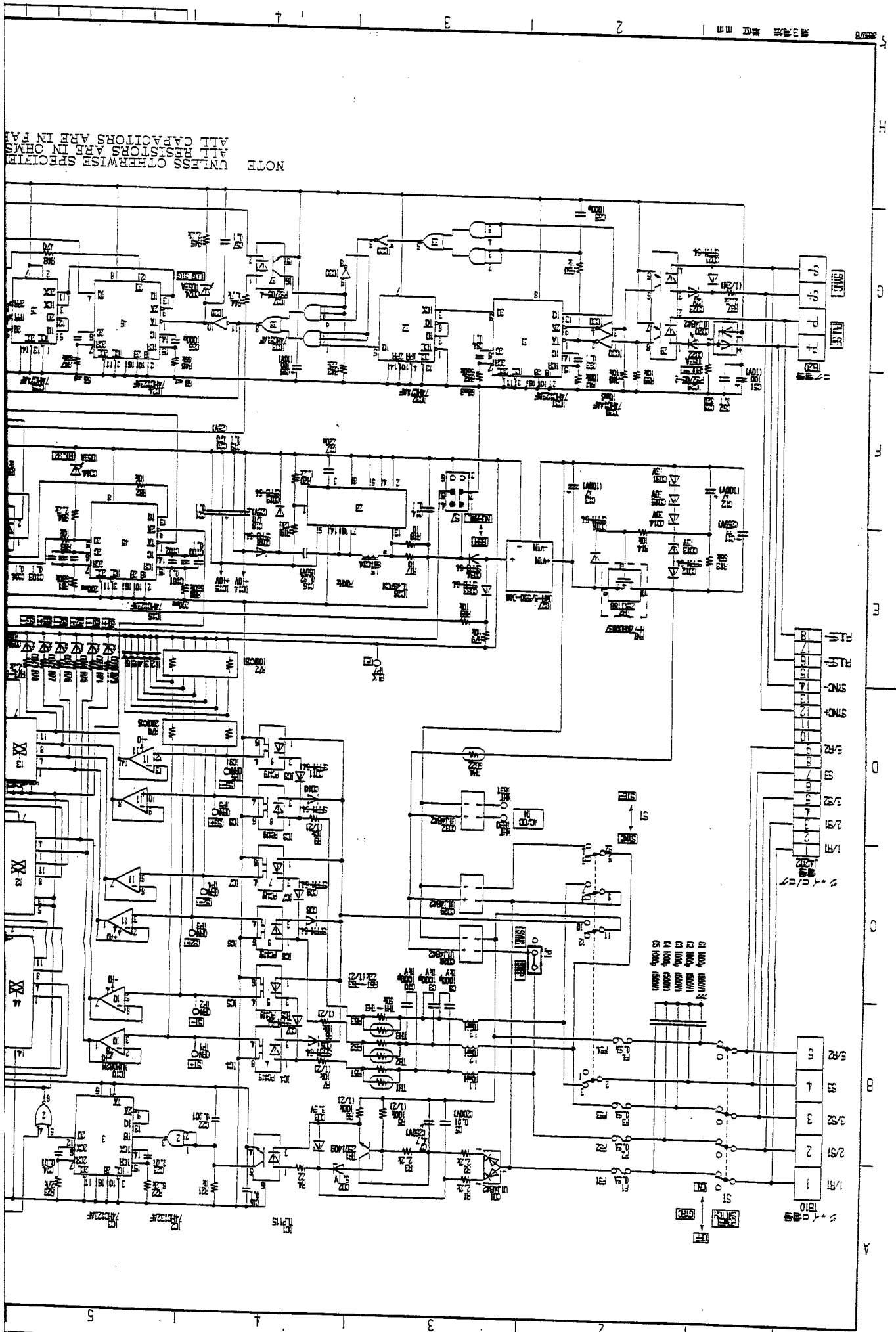
DESIGNED	W. Saitoh	APPROVED	W. Saitoh	DATE	CAE-344-2	TITLE	SHEET NO.
CHECKED	W. Saitoh	DESIGNED	W. Saitoh	SCALE	IF AMP CCT		
JRC Japan Radio Co. Ltd.				A3	ED02		
					N:K: E-1105:6-13:011		



18 INCHES COLOR RADAR MOTHER BOARD CIRCUIT PC4101
 CFQ-8682 H-7PCRD1442A

APPROVED	DATE	TITLE	SHEET NO.
<i>M. Suda</i>	1997.6.19	NCD-3780 CFQ-8682 MOTHER BOARD CCT	1
CHECKED	DESIGNED	SCALE	DRAWING NO.
<i>A. Sudo</i>		A3	NCD-3780-141101
JRC Japan Radio Co., Ltd.			

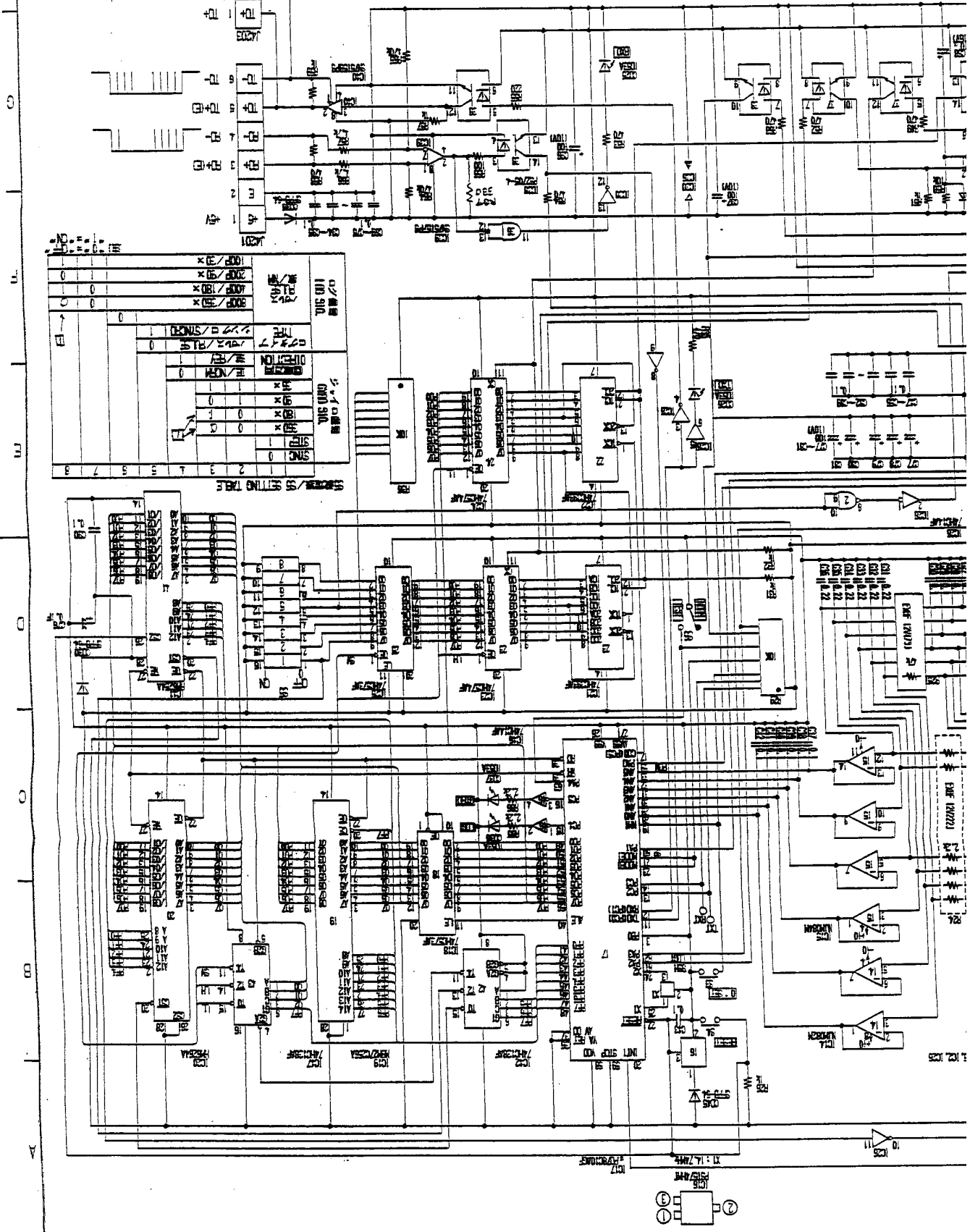
18 INCHES COLOR RADAR MOTHER BOARD CIRCUIT PC4101
 CFQ-8682 H-7PCRD1442A
 2 3 6 7 8



NOTE
 UNLESS OTHERWISE SPECIFIED
 ALL RESISTORS ARE IN OHMS
 ALL CAPACITORS ARE IN P.F.M.S

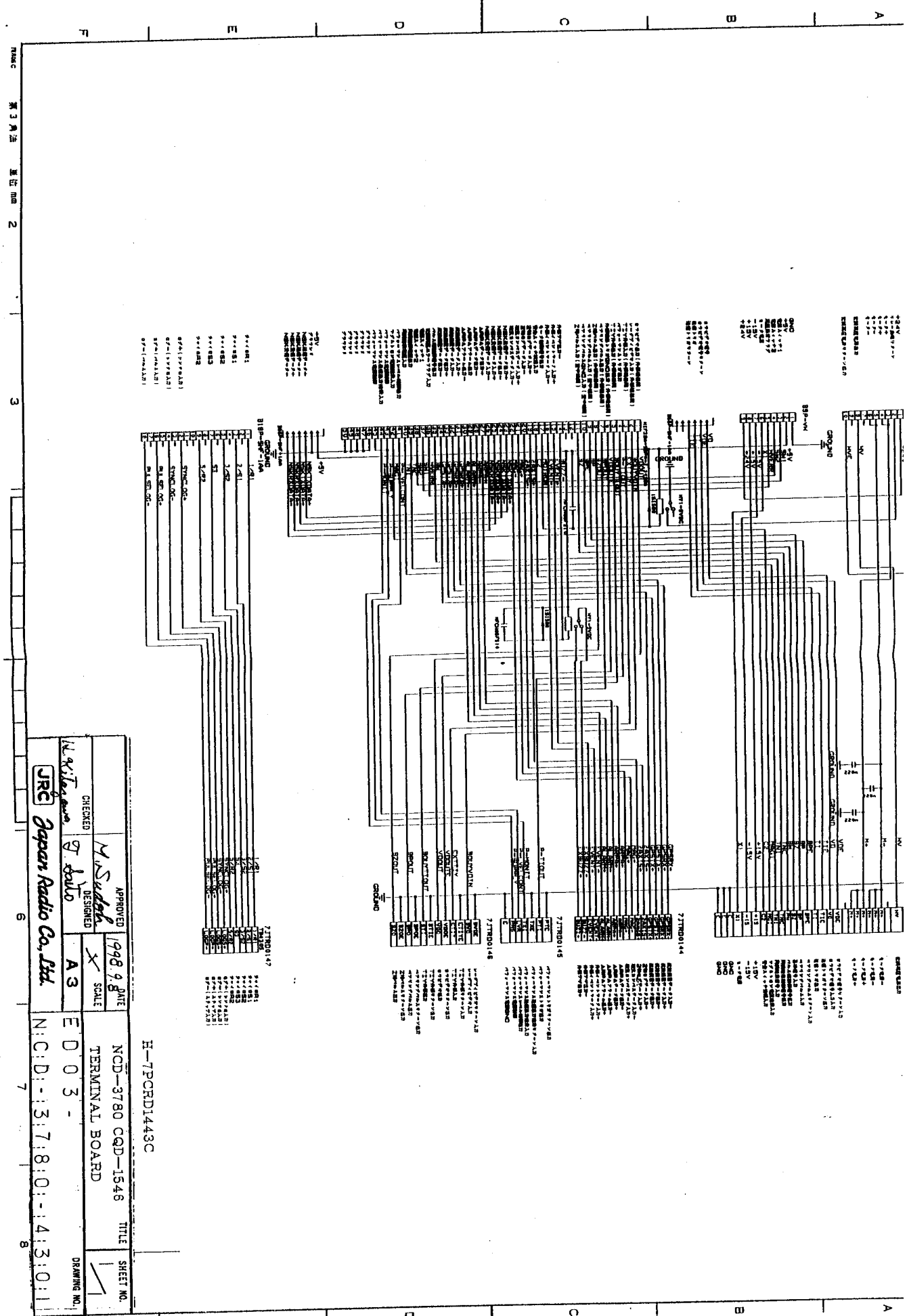
APPROVED 1997.11.11 M. Saito		CHECKED H. Kato G. Kato	
DATE 1997.11.11		DESIGNED G. Kato	
SCALE A2		DRAWING NO. E D 0 1 -	
TITLE NCD-3590 NSR/LOG CCT		SHEET NO. 5	

PC4201 CMJ-304C H-7PCRD1440A



部品表 / PART LIST

部品番号	部品名	数量	単位	備考
100-310	部品名	1	個	
100-311	部品名	1	個	
100-312	部品名	1	個	
100-313	部品名	1	個	
100-314	部品名	1	個	
100-315	部品名	1	個	
100-316	部品名	1	個	
100-317	部品名	1	個	
100-318	部品名	1	個	
100-319	部品名	1	個	
100-320	部品名	1	個	
100-321	部品名	1	個	
100-322	部品名	1	個	
100-323	部品名	1	個	
100-324	部品名	1	個	
100-325	部品名	1	個	
100-326	部品名	1	個	
100-327	部品名	1	個	
100-328	部品名	1	個	
100-329	部品名	1	個	
100-330	部品名	1	個	



第3巻線 単位mm 2

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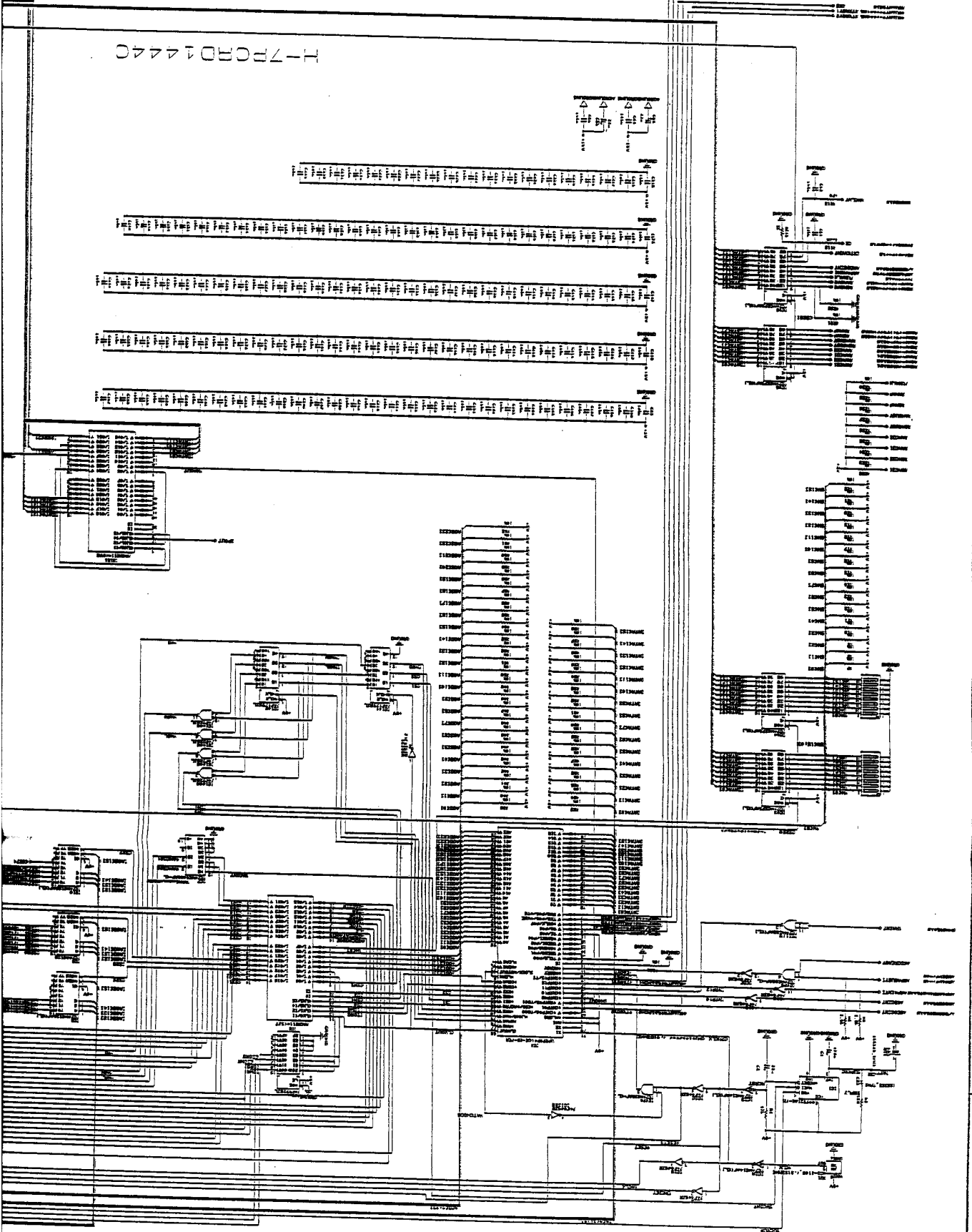
8

CHECKED <i>N. Kikawa</i>	DESIGNED <i>T. Ito</i>	APPROVED <i>M. Sudo</i>	DATE 1998.9.8	SCALE X	TITLE NCD-3780 CQD-1546 TERMINAL BOARD	SHEET NO. 1
JRC Japan Radio Co., Ltd.			A3	ED 03 -	DRAWING NO. N.C.D.-378101-4301	

H-7PORD1443C

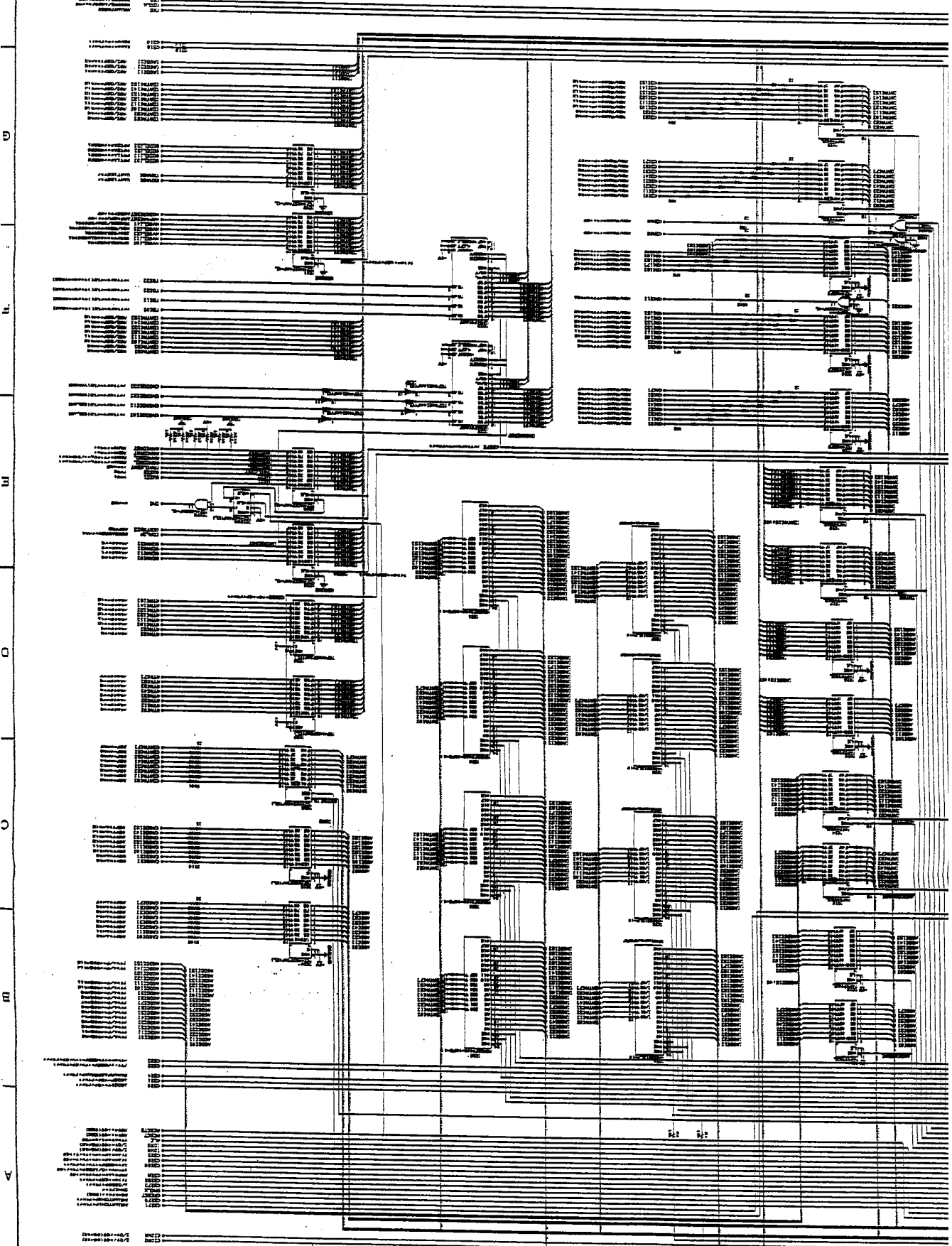
15 INCHES COLOR RADAR

H-7PCRD14440



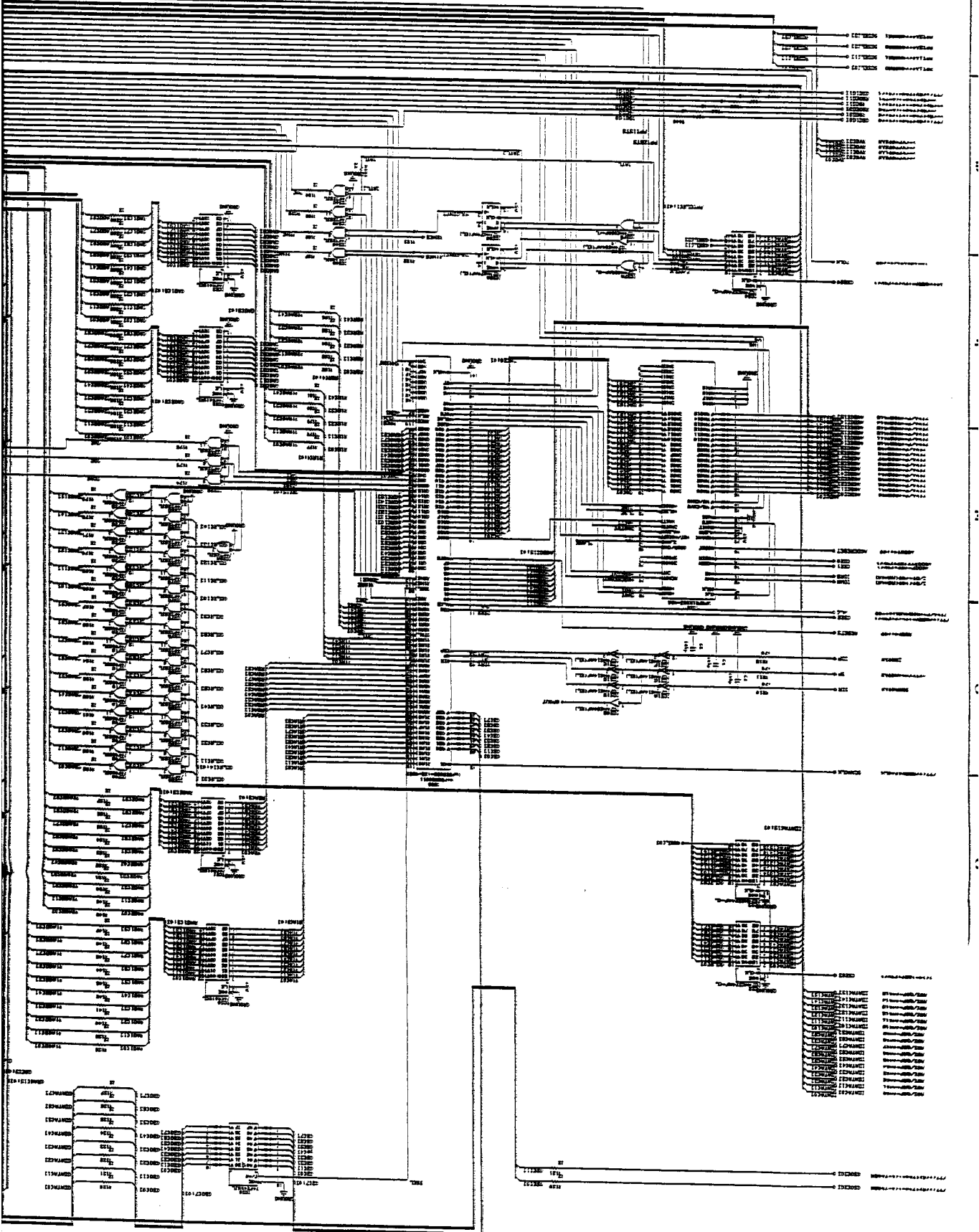
DRAWING NO. E D 0 3 -		A 2		CHECKED H. Kikuchi		DESIGNED G. Yamaguchi	
SHEET NO. 4		SCALE		APPROVED M. Suda		DATE 1998.9.8	
TITLE NCD-3780 CMC-1012 CPU CONTROL COT		JRC Japan Radio Co. Ltd.					

CONTROL CIRCUIT PC4401.1/4



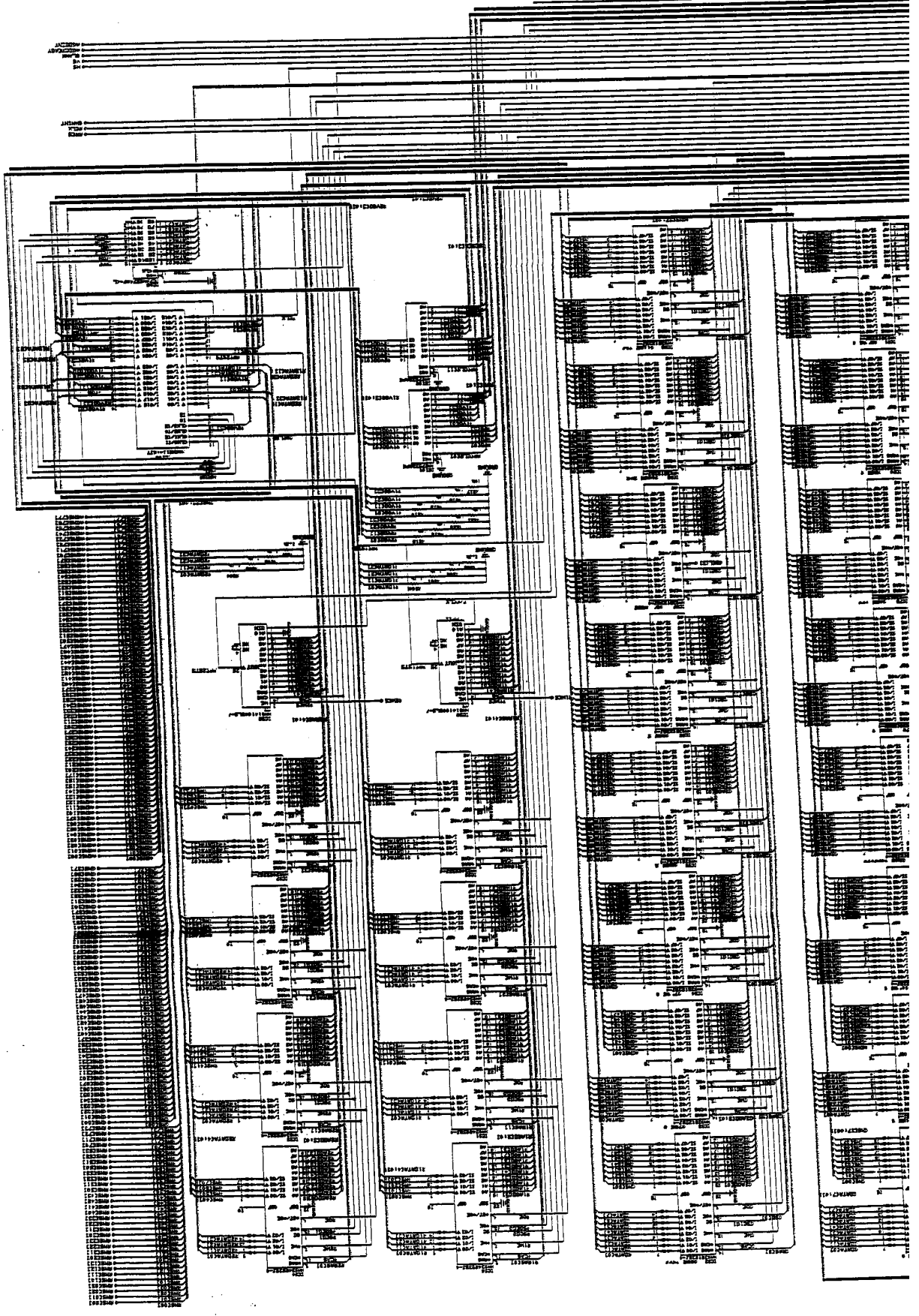
訂正 張 訂 履 原

15INCHES COLOR RADAR CPU CONTROL CIRCU



PC4401:2/4

JRC Japan Radio Co., Ltd. N.C.D. - 3780-1012 CPU CONTROL CPT E D O 3 - DRAWING NO.		N. Saito DESIGNED A 2 SCALE		M. Saito CHECKED	
1998.9.8 DATE		X SCALE		1998.9.8 DATE	
2 SHEET NO.		TITLE			



Grid lines and labels: G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ.

図号 改訂履歴

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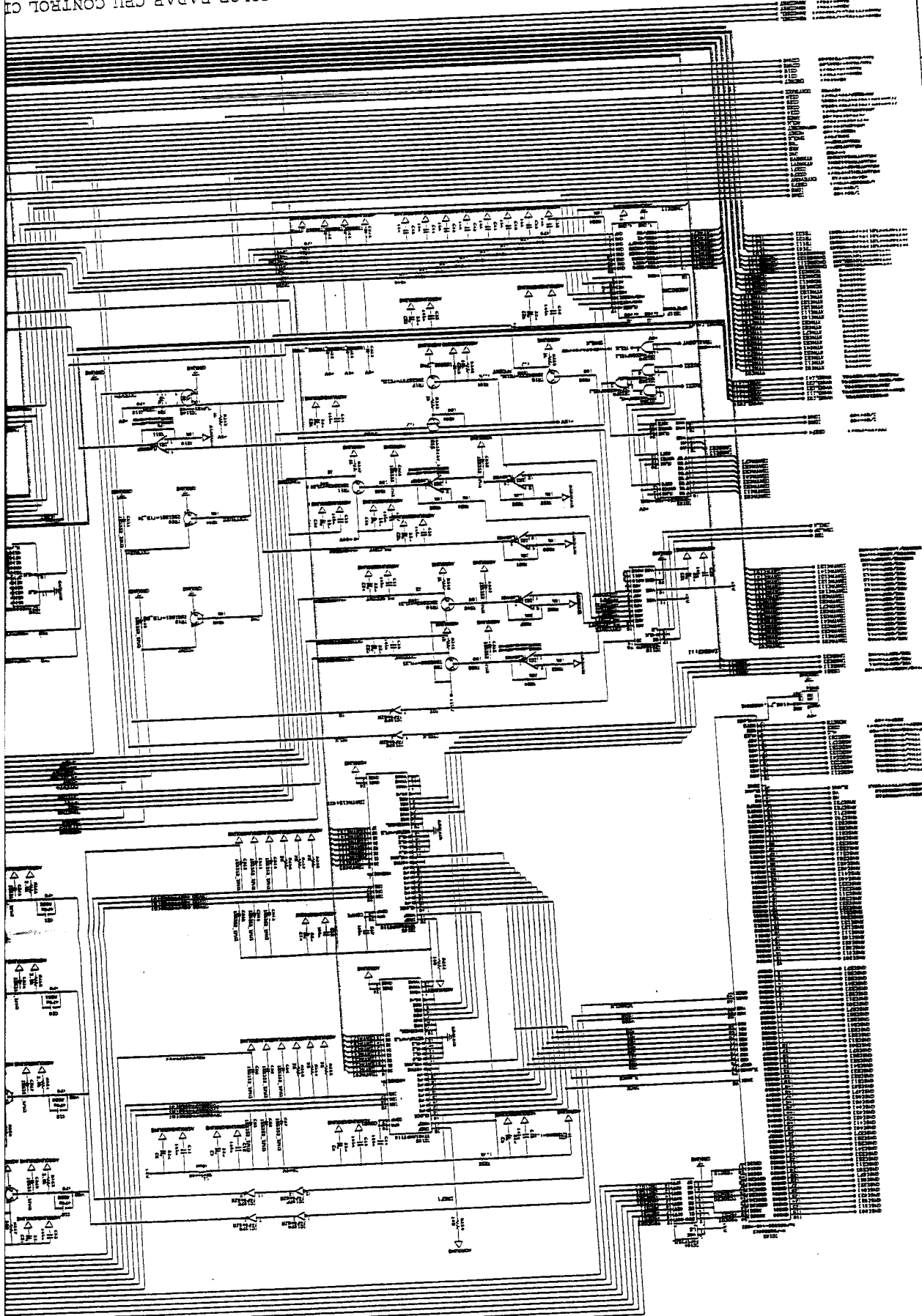
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15 INCHES COLOR RADAR CPU CONTROL CIRCUIT



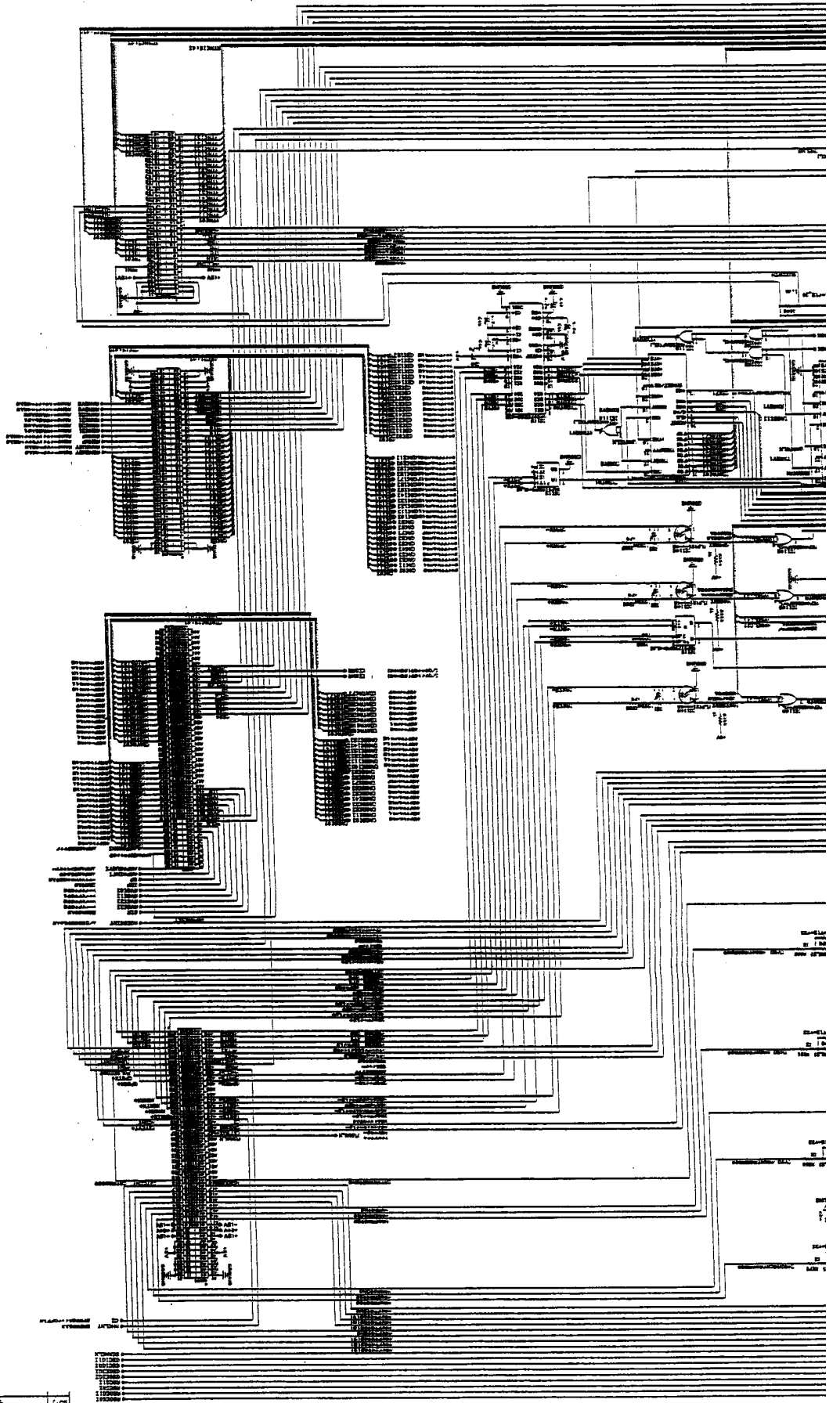
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A B C D E F G H I

1 2 3 4
A B C D E F G H I

1:3/4 H-7PCFD1444C

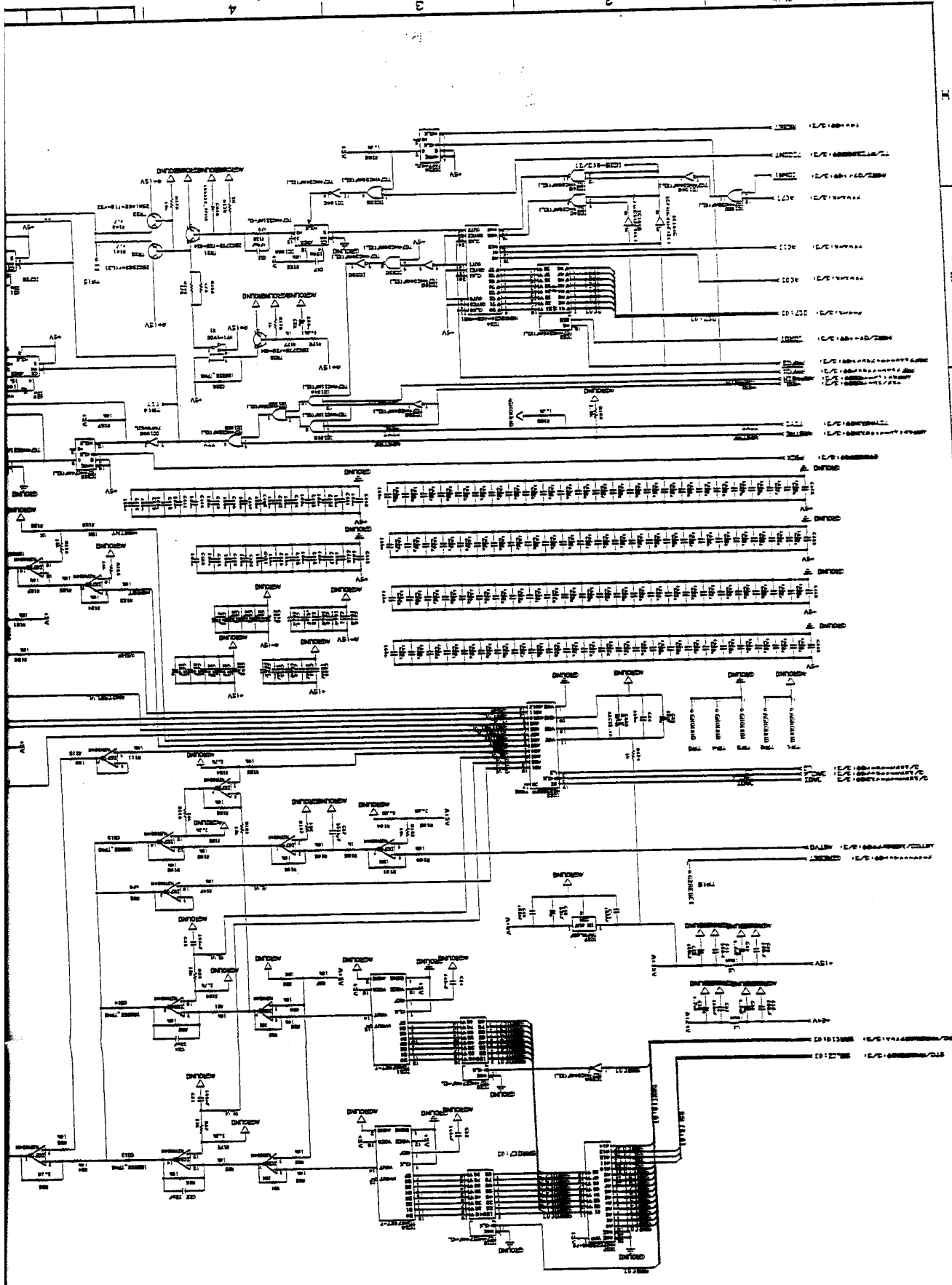
APPROVED M. Saitoh		DESIGNED S. Kato	
DATE 1998.9.8		SCALE A2	

TITLE NCD-3780 CPU CONTROL CCT		DRAWING NO. ED03-	
SHEET NO. 3/4		N.C.D.-3780-4:4:01	



A B C D E F G H
 1 2 3 4 5 6 7 8 9 10

10
 9
 8
 7
 6

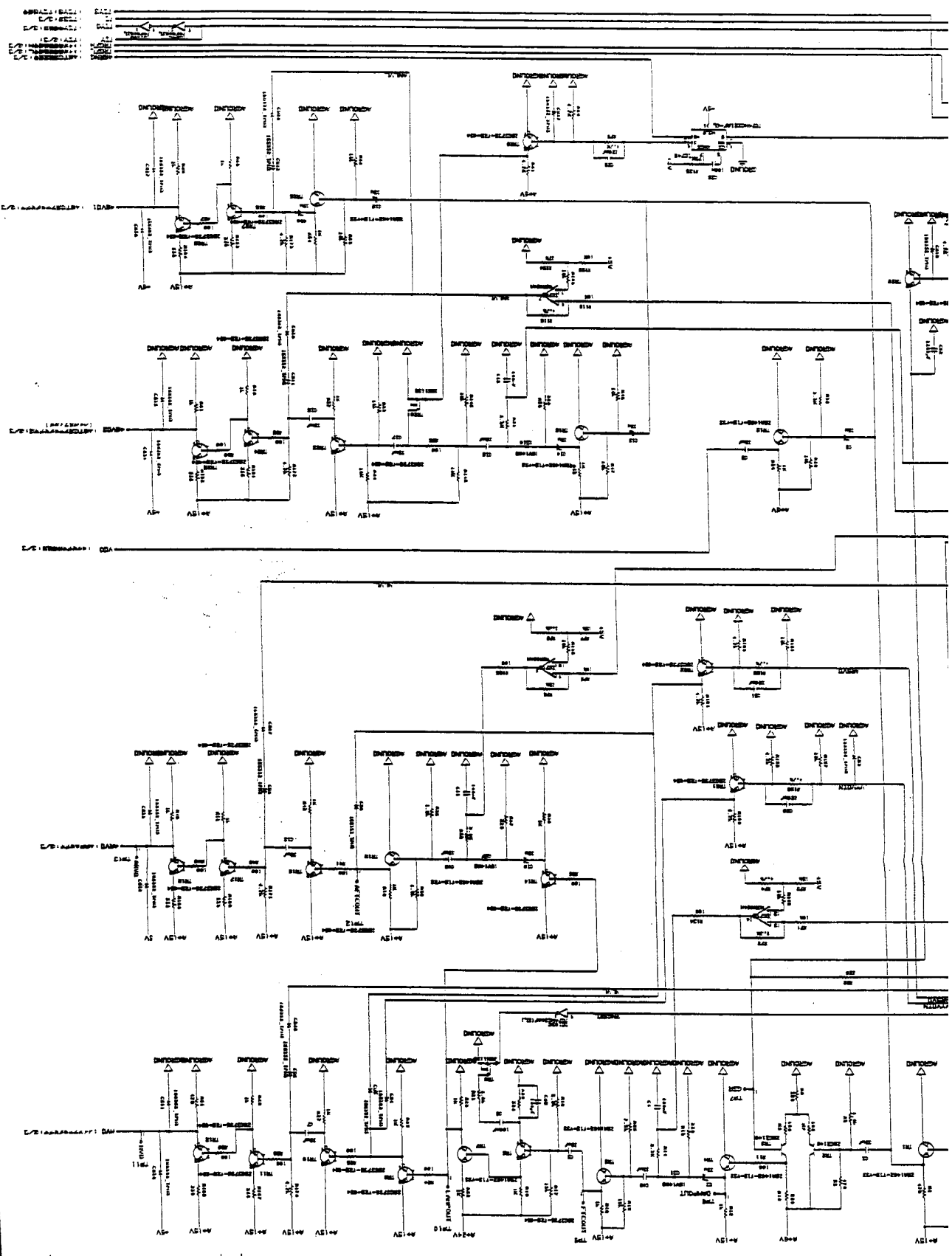


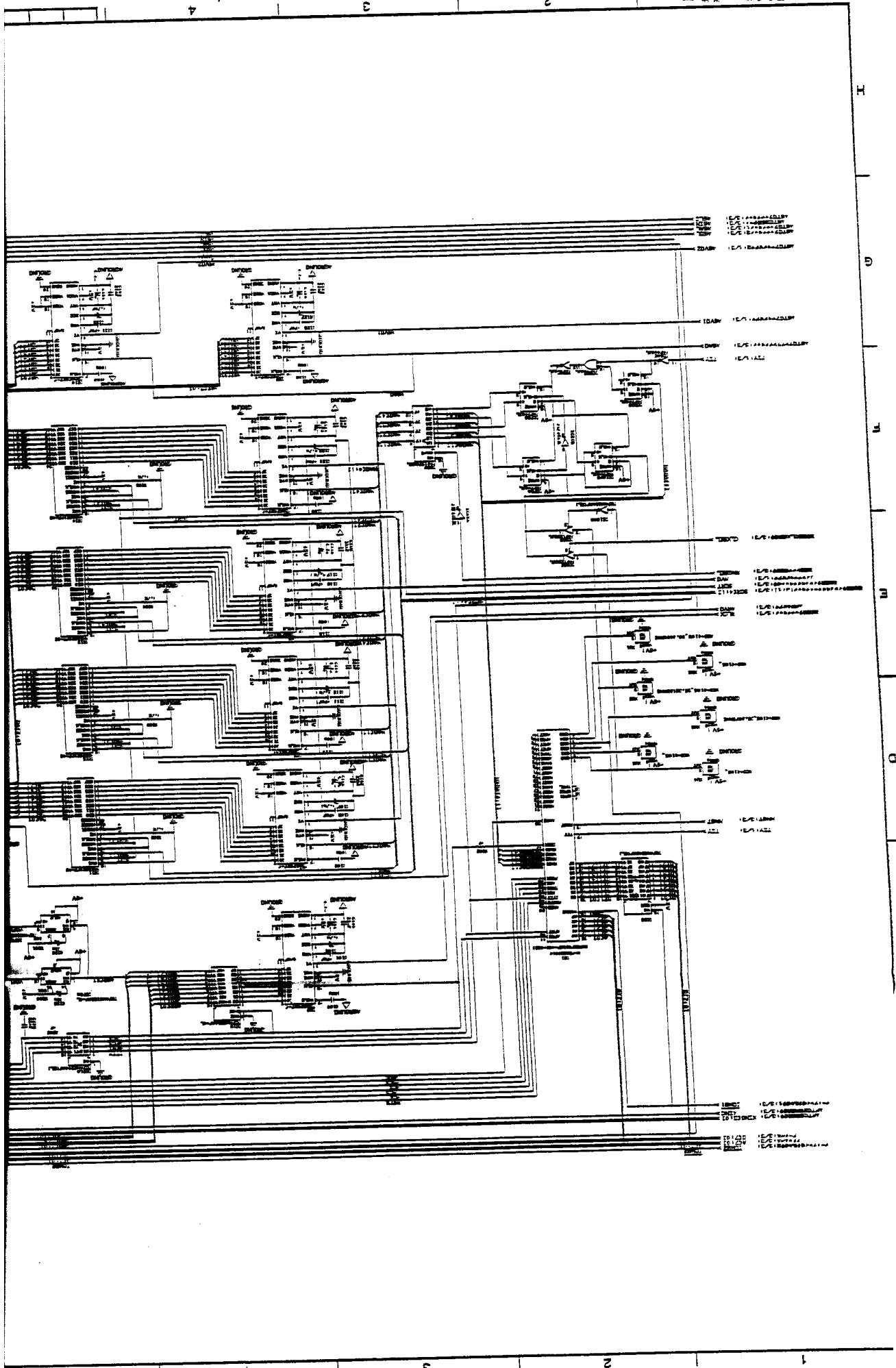
1. C/E 000000
 2. C/E 000001
 3. C/E 000002
 4. C/E 000003

DRAWING NO. E D O 3 -		DESIGNED <i>G. Kato</i>		CHECKED <i>M. Suda</i>	
TITLE NCD-3780 CED-42		SCALE <i>X</i>		DATE 1982.16	
SHEET NO. 3		APPROVED <i>M. Suda</i>			

JRC Japan Radio Co. Ltd.

H-7PFCFD14450 FC4402 CED-42





H

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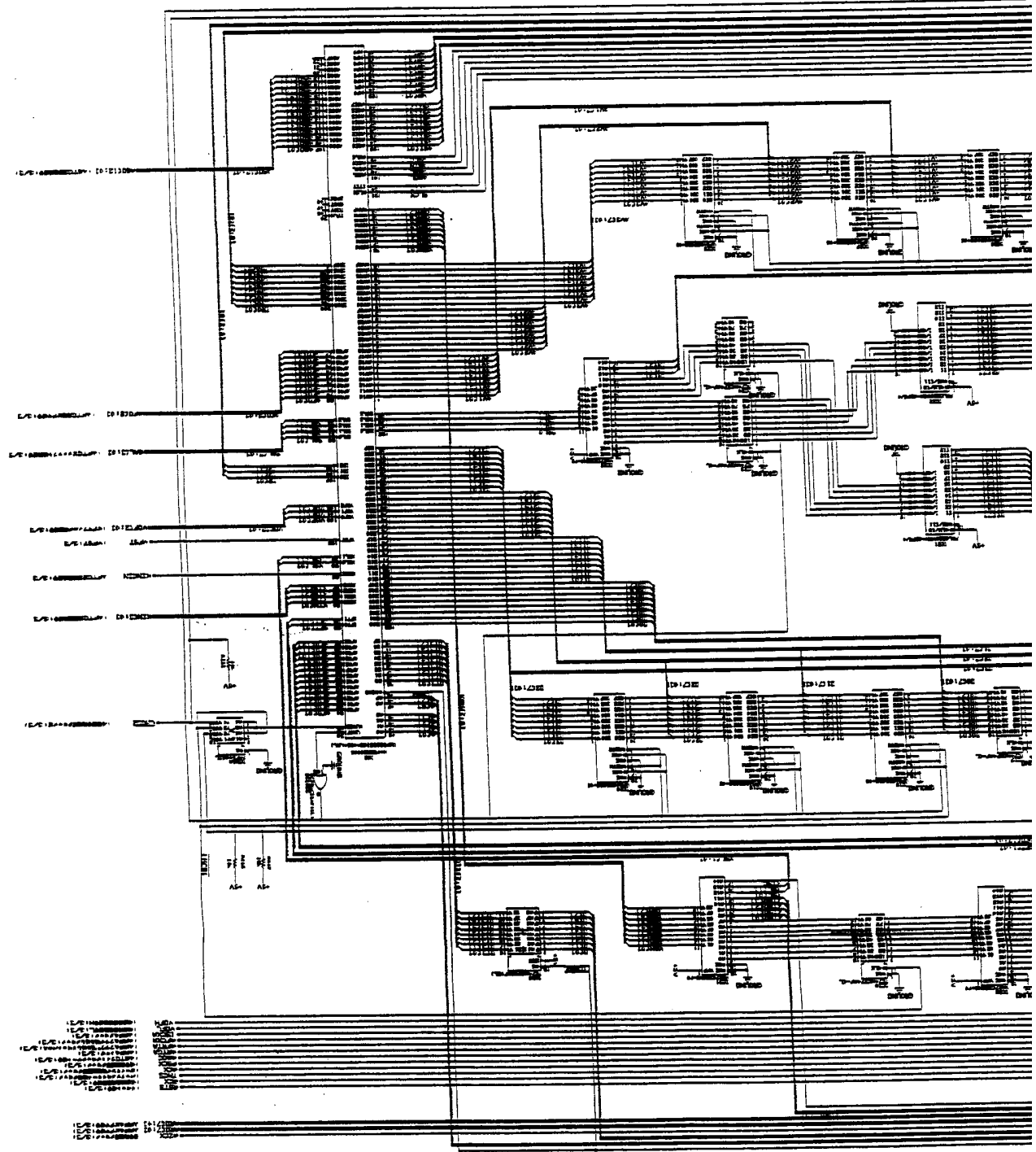
4

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1

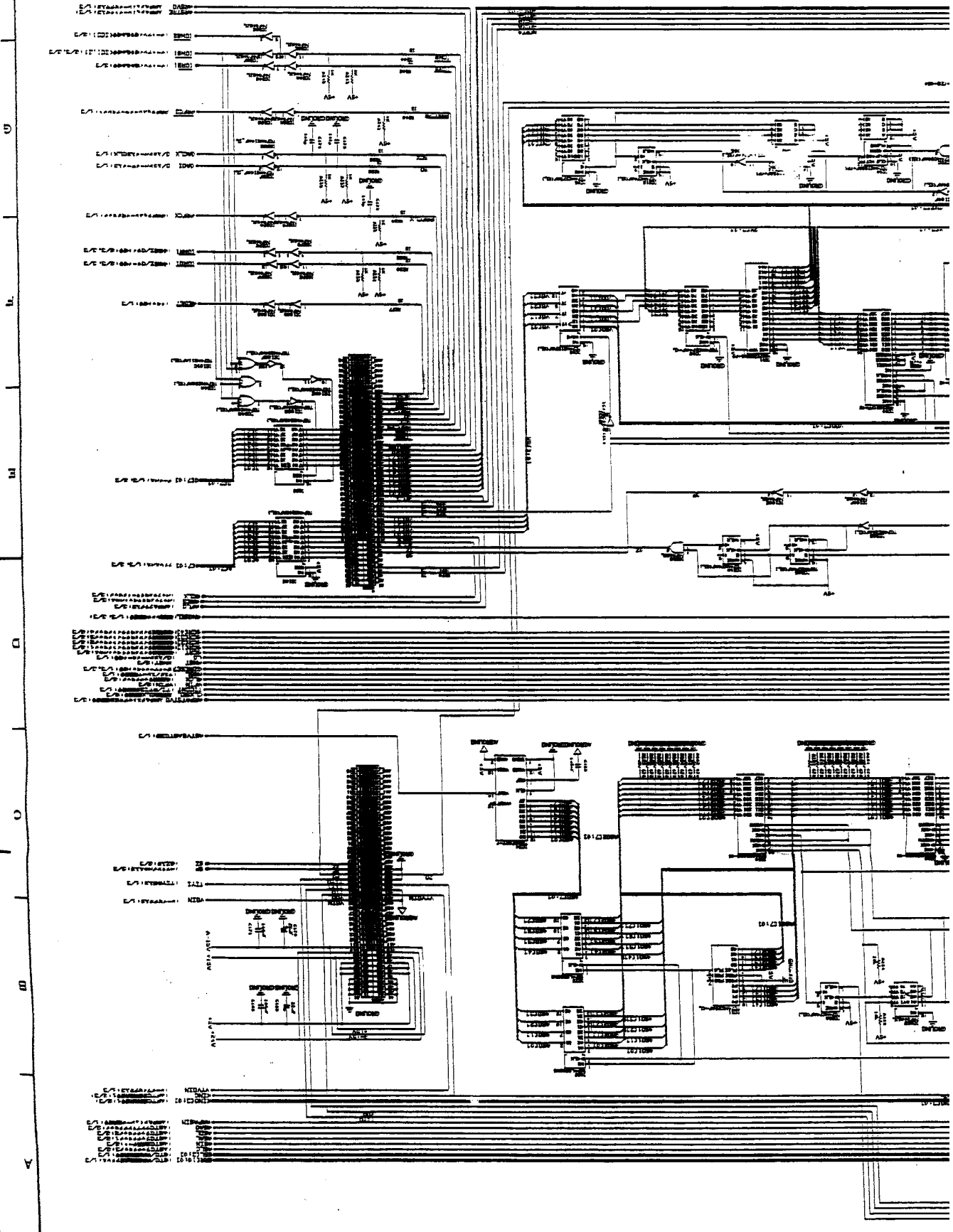
DRAWING NO. E D O 3 -		DATE 1998.2.16		SCALE X		DESIGNED M. Saitoh		CHECKED N. Kitagawa		APPROVED M. Saitoh	
SHEET NO. 2/3		TITLE NCD-3780 CED-42		TIME BASE CCT		JRC Japan Radio Co., Ltd.		NCD-3780 CED-42		7805014450 PC4402 CED-42	

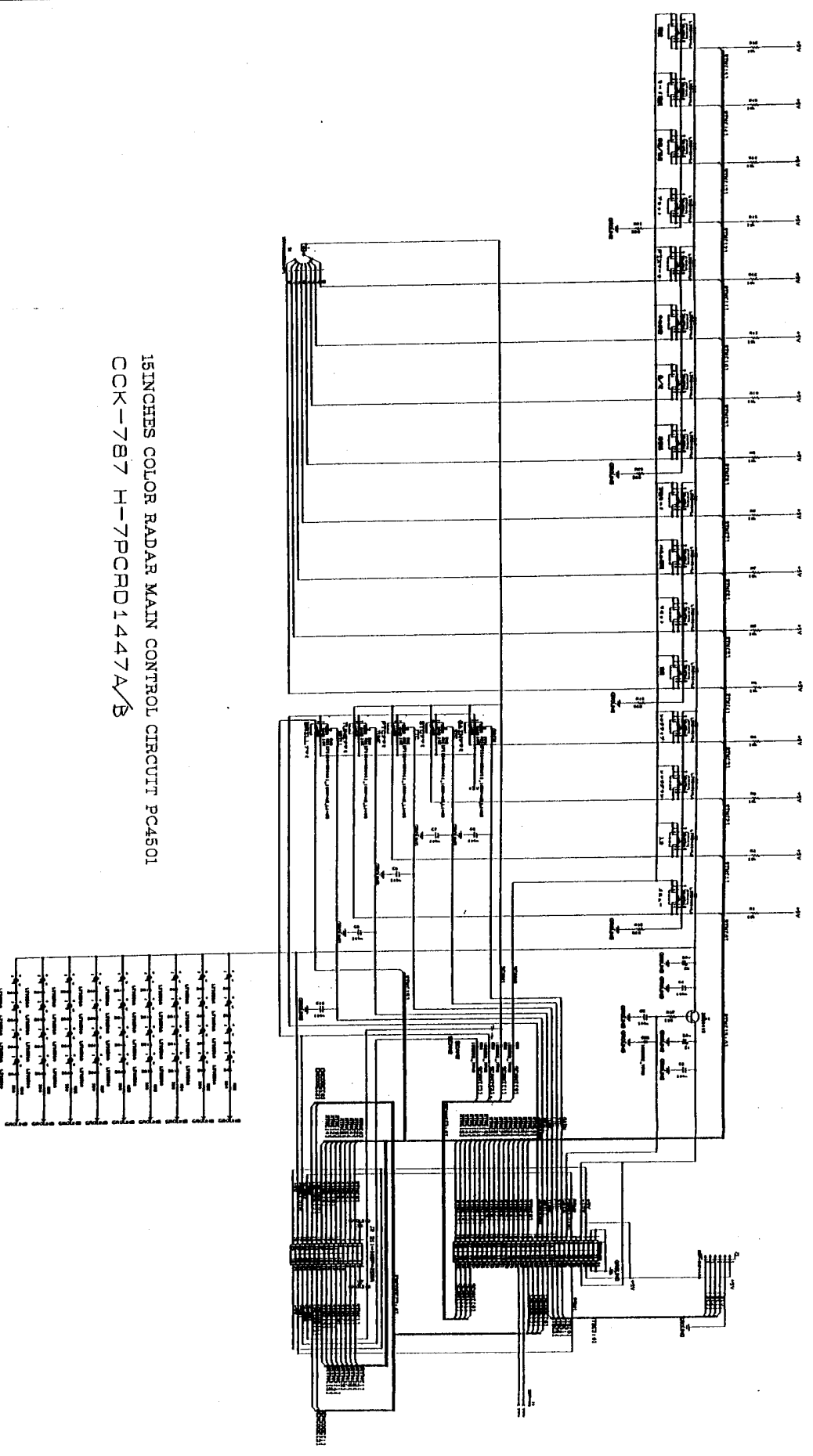


先打線圖		10		9		8		7		6	
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DRAWING NO. E D 0 3 -		A 2		CHECKED M. S. Sudo		DESIGNED S. Kato		APPROVED M. Sudo		DATE 1998.2.16		SCALE		TITLE NCD-3780 CED-42 TIME BASE CCT		SHEET NO. 3/3	
JRC Japan Radio Co. Ltd.												N.C.D.-3780-42-4102		10			

PCRD14450 PC4402 CED-42

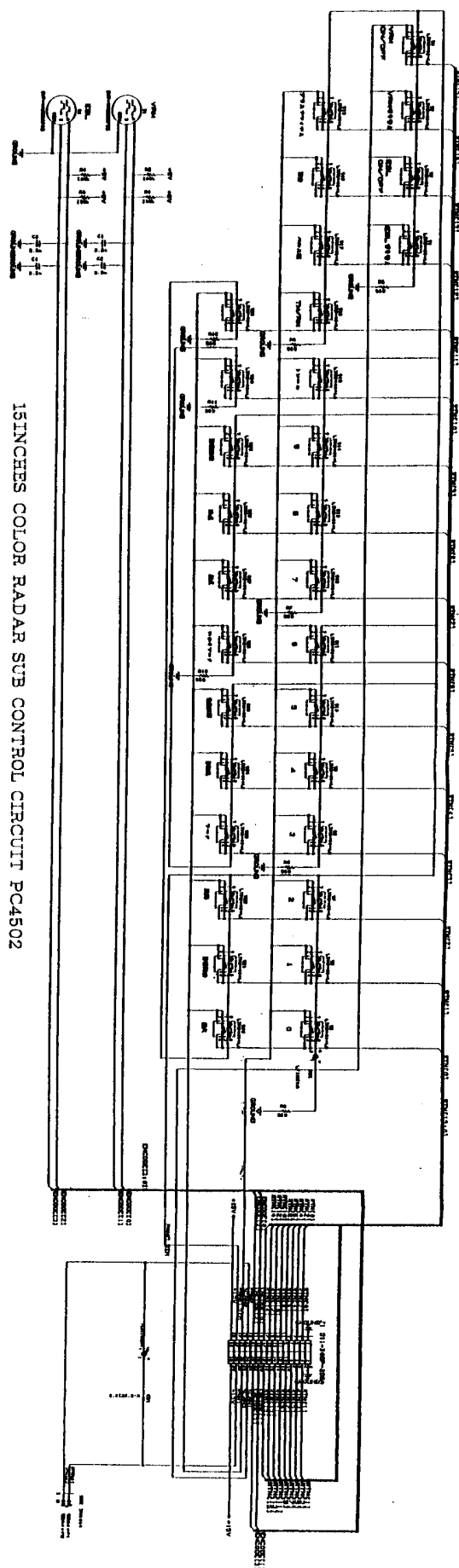




15 INCHES COLOR RADAR MAIN CONTROL CIRCUIT PC4501
 CCK-787 H-7PCRD1447A/B

APPROVED	DATE	TITLE	SHEET NO.
<i>M. Swadlow</i>	1978.1.6	NCD-3780 CCK-787	1
CHECKED	DESIGNED	PANEL CCT1	DRAWING NO.
<i>M. Swadlow</i>	<i>G. Davis</i>		
SCALE			
A3			
JRC Japan Radio Co. Ltd.		N.C.D.:-3780:-45:01	

Scale: 1:1
 Drawing No. N.C.D.:-3780:-45:01

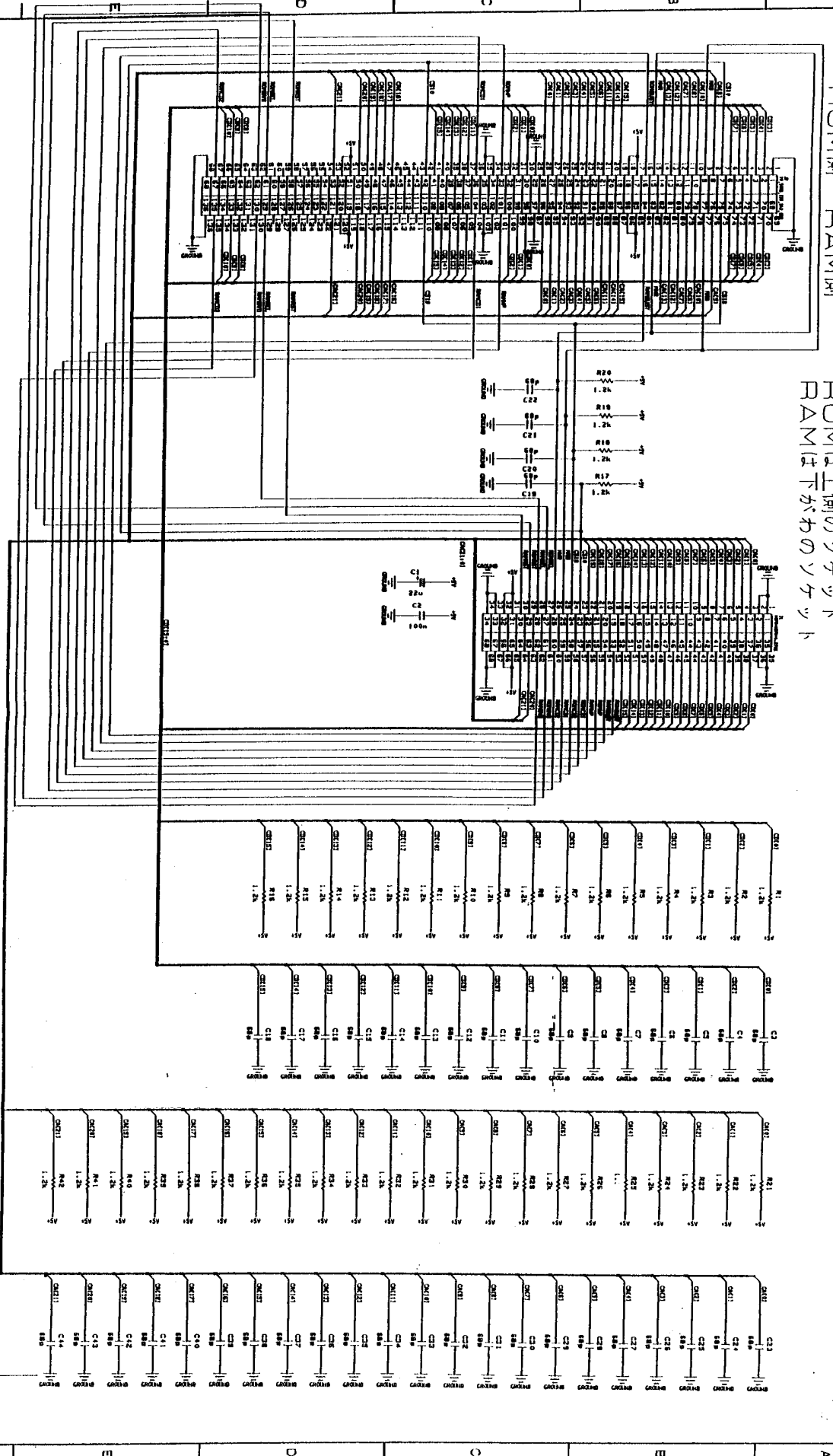


15 INCHES COLOR RADAR SUB CONTROL CIRCUIT PC4502
 CCK-789 H-7PCRD1448A/B

CHECKED <i>M. S. Sudo</i>	APPROVED <i>M. S. Sudo</i>	DATE 1978.1.6	TITLE NCD-3780 CCK-789 PANEL CCT2	SHEET NO. 1
	DESIGNED <i>S. Sudo</i>	SCALE A3		
JRC Japan Radio Co. Ltd.				

第 3 圖表 單位 mm 2 3 9 7 8

ROM側 RAM側
ROMは上側のソケット
RAMは下側のソケット

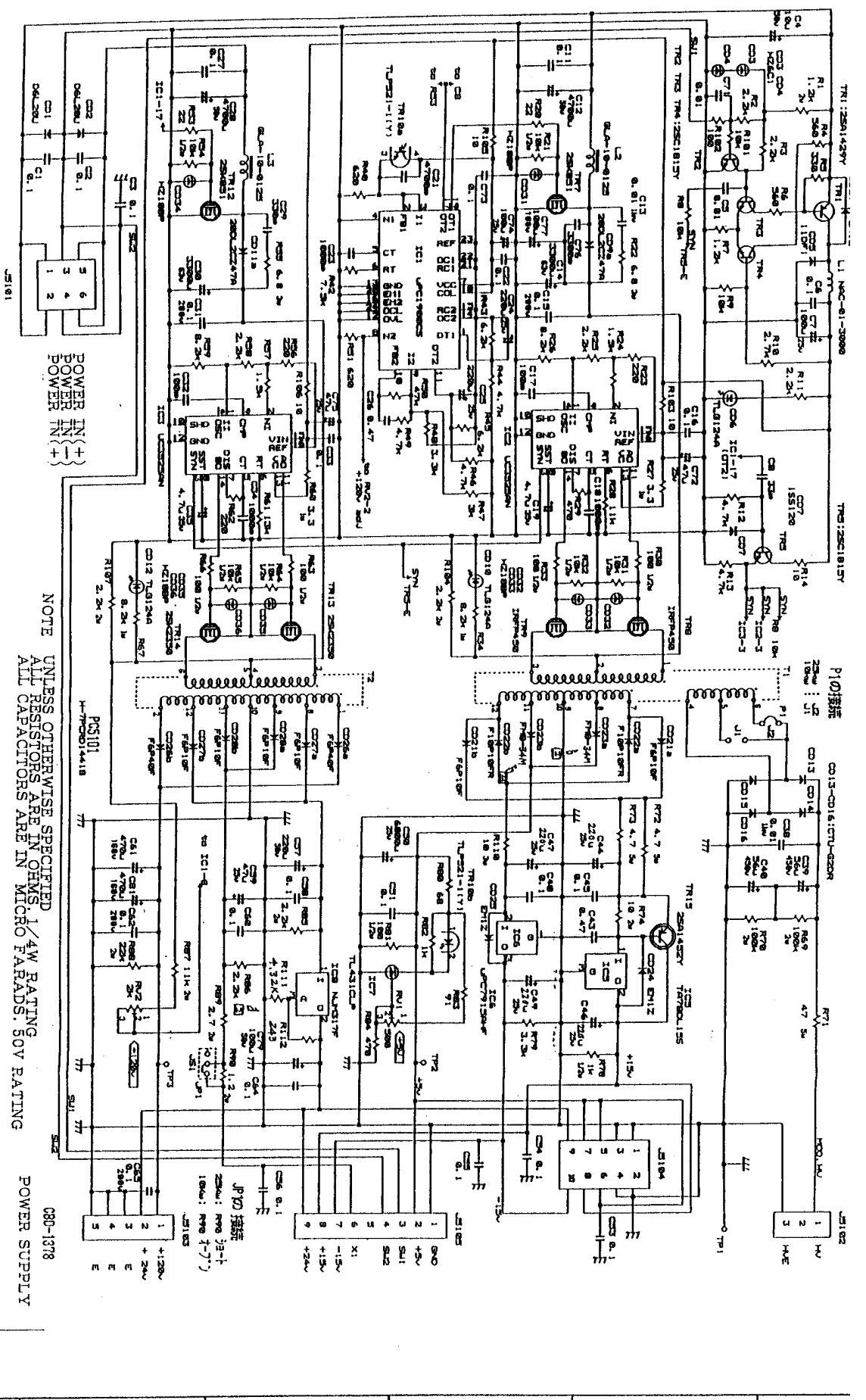


15 INCHES COLOR RADAR PANEL CIRCUITS PC4503
CCR-790 H-7PCRD1449C

CHECKED		APPROVED		DATE	
M. S. ...		M. S. ...		7/12/59	
DESIGNED		SCALE		TITLE	
A 3		A 3		NCD-3780 CCR-790 PANEL CCT3	
DRAWING NO.		SHEET NO.		1	
ED 0 3 -		N.C.D. - 13780-14503		DRAWING NO.	

第3号法 単位mm 2 3

5 7 8

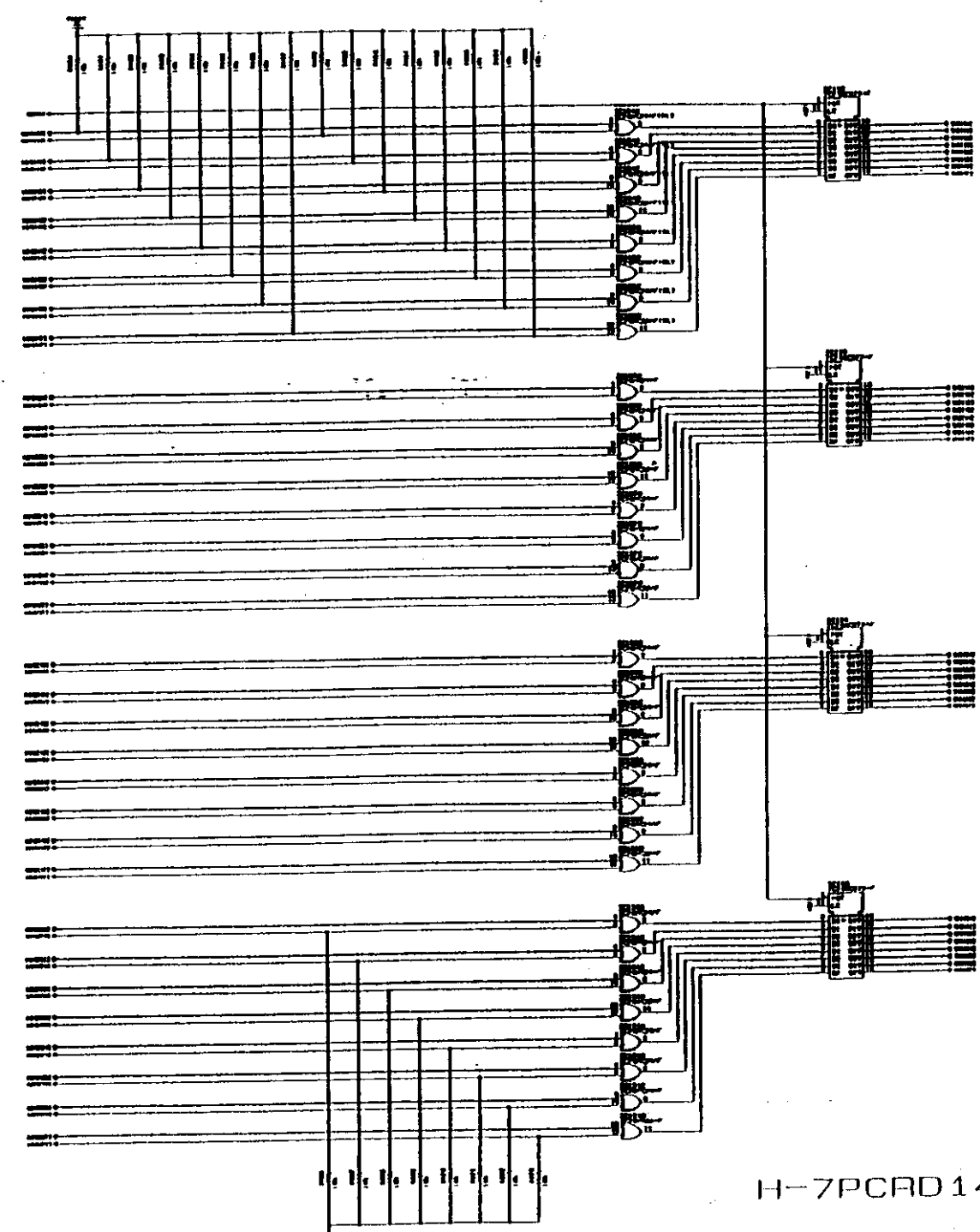


NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS ARE 1/4W RATING
ALL CAPACITORS ARE IN MICRO FARADS, 50V RATING

DESIGNED	APPROVED	DATE	TITLE
M. Suda	M. Suda		NCD-3780 CBD-1378
DESIGNED	SCALE	POWER SUPPLY CCT	SHEET NO.
M. Suda	A3		1
DRIVING NO.			

ED02-
N:C:D:13:7:8:0:-15:1:0:1

A
B
C
D
E

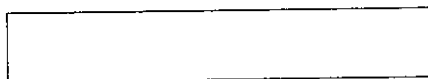


H-7PCRD1444C

15INCHES COLOR RADAR CPU CONTROL CIRCUIT PC4401;4/4

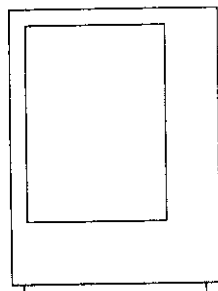
F	CHECKED <i>H. Kitayama</i>	APPROVED <i>M. Sudo</i>	1978.9.8 DATE	TITLE	SHEET NO.
		DESIGNED <i>J. Saito</i>	<input checked="" type="checkbox"/> SCALE	NCD-3780 CMC-1012 CPU CONTROL CCT	4/4
			A 4	E D 0 3 -	DRAWING NO.

SCANNER UNIT
NKE-1056-6



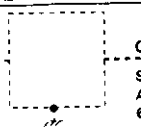
28-CORES COMPOSITE CABLE
H-CFG-8681
MAX. 18.5 ϕ (JRC SUPPLY)

DISPLAY UNIT
NCD-3780



- GYRO 250V-MPYCYS-5
- LOG 250V-DPYCS-1.25
- GPS 250V-TTYCYS-1
- RADAR BUOY H-2695110006 MAX. 12.5 ϕ (JRC SUPPLY)
- RADAR ADAPTER H-2695110006 MAX. 12.5 ϕ (JRC SUPPLY)
- USE EXCLUSION { 2 AXES LOG 250V-TTYCYS-1
- ELECTRIC COMPASS 250V-TTYCYS-1
- EXT. BUZZER 250V-TTYCYS-1
- ARPA ALARM 250V-TTYCYS-1

RECTIFIER UNIT (OPTION)
NBA-3308



CVVS2x5.5

CVVS2x5.5
SHIP'S MAIN
AC100V
60Hz, 1ϕ

CVVS2x5.5 SHIP'S MAIN
DC24V

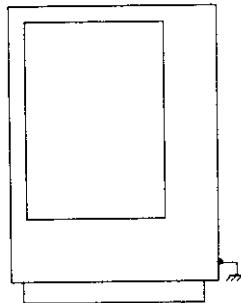
NOTES: ELIMINATING THE INTERFERENCE ON FREQUENCIES USED FOR MARINE COMMUNICATIONS AND NAVIGATION DUE TO OPERATION OF THE RADAR.
ALL CABLES OF THE RADAR ARE TO BE RUN AWAY FROM THE CABLES OF RADIO EQUIPMENT.
(EX. RADIOTELEPHONE, COMMUNICATIONS RECEIVER AND DIRECTION FINDER, ETC.).
ESPECIALLY INTER-WIRING CABLES BETWEEN SCANNER UNIT AND DISPLAY UNIT OF THE RADAR SHOULD NOT BE RUN PARALLEL WITH THE CABLES OF RADIO EQUIPMENT.

SCANNER UNIT
NKE-1056-9



28-CORES COMPOSITE CABLE
H-CFQ-8681
MAX. 18.5 φ (JRC SUPPLY)

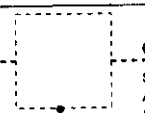
DISPLAY UNIT
NCD-3780



- GYRO 250V-MPYCYS-5
- LOG 250V-DPYCS-1.25
- GPS 250V-TTYCYS-1
- RADAR BUOY H-2695110006 MAX. 12.5 φ (JRC SUPPLY)
- RADAR ADAPTER H-2695110006 MAX. 12.5 φ (JRC SUPPLY)
- 2 AXES LOG 250V-TTYCYS-1
- ELECTRIC COMPASS 250V-TTYCYS-1
- EXT. BUZZER 250V-TTYCYS-1
- ARPA ALARM 250V-TTYCYS-1

USE EXCLUSION

RECTIFIER UNIT (OPTION)
NBA-3308



CVVS2x5.5

CVVS2x5.5

SHIP'S MAIN
AC100V
60Hz, 1φ

CVVS2x5.5

SHIP'S MAIN
DC24V

NOTES: ELIMINATING THE INTERFERENCE ON FREQUENCIES USED FOR MARINE COMMUNICATIONS AND NAVIGATION DUE TO OPERATION OF THE RADAR.
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