

# Service Manual

Notebook Computer

CF-M34

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*Simplified*


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This is the Service Manual for  
the following areas.  
G ...for Germany

## Model Number Reference

The following models are numbered in accordance with the types of CPU, LCD and HDD etc. featured by product.

Model No. CF-M341 2 6YN 3

1: CPU type

W: for Intel® Mobile Celeron™ 400 MHz LV

2: HDD type

D: for 30 GB

3: Area

G: Refer to above area table

### WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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# Panasonic®

# WARNINGS

For U.K.

## **This apparatus must be earthed for your safety.**

To ensure safe operation the three-pin plug must be inserted only into a standard three-pin power point which is effectively earthed through the normal household wiring.

Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth. Wrongly wired extension cords are a major cause of fatalities.

The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe.

For your safety, if you have any doubt about the effective earthing of the power point, consult a qualified electrician.

### **FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY**

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 3 amp fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 3 amps and that it is approved by ASTA or BSI to BS 1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

**IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.**

**THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.**

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.


**Warning: THIS APPLIANCE MUST BE EARTHED.**

### **Important**

The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured GREEN-and-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol  coloured GREEN or GREEN-and-YELLOW.

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured BLACK.

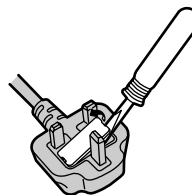
The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured RED.

The mains plug on this equipment must be used to disconnect the mains power.

Please ensure that a socket outlet is available near the equipment and shall be easily accessible.

## **How to replace the fuse**

Open the fuse compartment with a screw-driver and replace the fuse.



### **Warnings**

- This equipment is not designed for connection to an IT power system.  
(An IT system is a system having no direct connections between live parts and Earth; the exposed-conductive-parts of the electrical installation are earthed.  
An IT system is not permitted where the computer is directly connected to public supply systems in the U.K.)
- Disconnect the mains plug from the supply socket when the computer is not in use.

This equipment is produced to BS800/1983.

# LASER SAFETY INFORMATION

## For U.S.A.

### Class 1 LASER-Product

This product is certified to comply with DHHS Rules 21 CFR Subchapter J.

This product complies with European Standard EN60825 (or IEC Publication 825)

### For all areas

This equipment is classified as a class 1 level LASER product and there is no hazardous LASER radiation.

#### Caution:

- (1) Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- (2) The drive is designed to be incorporated into a computer-based system or unit which has an enclosing cover. It should never be used as a stand alone drive.

#### Danger:

The serviceman should not remove the cover of drive unit and should not service because the drive unit is a non-serviceable part.

Please check DANGER label on PD-drive unit.

- Unplug the AC power cord to the equipment before opening the top cover of the drive.
- When the power switch it on, do not place your eyes close to the front panel door to look into the interior of the unit.

#### LASER Specification

Class 1 level LASER Product

Wave Length:	DVD	658 ± 8 nm
	CD	775~815 nm

Laser safety information is appropriate only when drive with laser is installed.

## LITHIUM BATTERY ⚠

### • CAUTION

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the equipment manufacture.

Discard used batteries according to the manufacturer's instructions.

## LITHIUMBATTERIES ⚠

### Vorsicht!

Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

## PILE AU LITHIUM ⚠

ATTENTION: IL Y A DANGER D'EXPLOSION S' IL Y A REMPLACEMENT INCORRECT DE LA PILE. REMPLACER UNIQUEMENT AVEC UNE PILE DU MÊME TYPE OU D'UN TYPE RECOMMANDÉ PAR LE CONSTRUCTEUR. METTRE AU RÉBUT LES PILES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT.

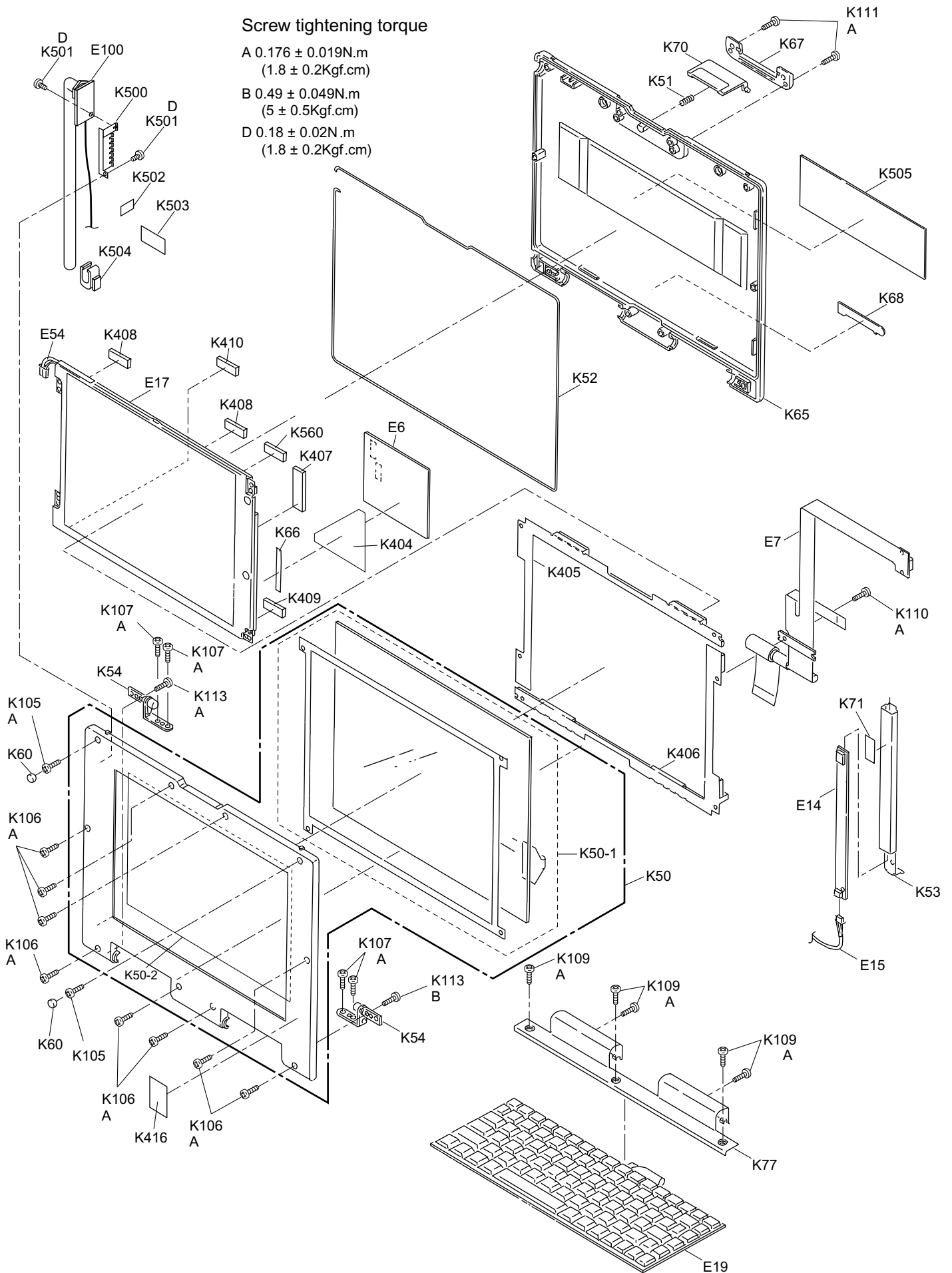


### Screw tightening torque

A  $0.176 \pm 0.019\text{N.m}$   
( $1.8 \pm 0.2\text{Kgf.cm}$ )


B  $0.49 \pm 0.049\text{N.m}$   
( $5 \pm 0.5\text{Kgf.cm}$ )

D  $0.18 \pm 0.02\text{N.m}$   
( $1.8 \pm 0.2\text{Kgf.cm}$ )








# Replacement Parts List

## Note: Important Safety Notice

Components identified by  mark have special characteristics important for safety.  
When replacing any of these components, use only manufacturer's specified parts.

## CF-M34WD6YNG

REF.NO. and AREA	PART NO.	DESCRIPTION	Q'TY
<b>Main Block Unit</b>			
E 1	DL3U17077DAA	PCB, MAIN	RTL 1
E 5	DL3U47057GAA	PCB, LED	RTL 1
E 6	DL3UP7046ABA	PCB, TOUCH SCREEN PANEL	RTL 1
E 7	DFWV48C0604	FPC, LCD	1
E 8	DL3UP7048BAA	FPC, HDD	1
E 9	N2EABEC00001	TOUCH PAD	1
E 10	DFAS28P01ZAF	SPEAKER	1
E 11	DFJE9102ZA	FFC, TOUCH PAD	1
E 12	DFJE9103ZA	FFC, LED	1
E 13	CR2025/S5H	BATTERY, LITHIUM	1
E 14	 DFWP0123ZA	PCB, INVERTER	1
E 15	DFJS703ZA	CABLE, INVERTER	1
E 16	DFJS552ZA	CABLE, SPEAKER	1
E 17	DL3DW0163HAA	LCD	1
E 18	N3CABQD00001	HDD	1
E 19	DFSX1A93XBTR	KEYBOARD	1
E 22	DFUB0018ZA	EJECTOR, PCMCIA	1
E 24	DL3U17072AAA	PCB, MPC1 RELAY CARD	RTL 1
E 41	DL3UP7054HAA	PCB, DIMM	RTL 1
E48	DL3UP7115AAA	PCB, DOCKING	RTL 1
E 54	A2CA00000051	LCD BACK LIGHT	1
E100	N1BZBJA00001	ANTENNA	1
<b>Accessories</b>			
A 1	 *	OPERATING INSTRUCTION MANUAL	1
A 3	 CF-AA1527K6	AC ADAPTOR	1
A 4	 *	AC Cable	1
A 6	 DFWV95F0003	BATTERY PACK	1
A10	DDB1Z138-V	FERRITE CORE	2
A11	DFQX1388ZB	LEAFLET, FERRITE CORE	1
A 20	DFHS9010ZA	CLOTH	1
A 21	DFHR9039ZA-0	STYLUS PEN	1
Note: About the parts which written " * " above, please order to Computer Products Europe (CPE) written below. Matsushita Electric (U.K.) Ltd. Computer Products Europe (CPE) TEL: +44-1222-736060 FAX: +44-1222-735500			
<b>Packing Material</b>			
P 1	DFPK1061YA	CASE, PACKING	1
P 2	DFPE0598YA	CUSHION	1
<b>Mechanical Parts</b>			
K 1	DFMD7583YA	PLATE, DOCKING CONNECTOR PCB	1
K 2	DFMD7584ZA	PLATE, DOCKING COVER	1
K 4	DFWV84F0080	COVER, KEYBOARD FPC	1
K 5	DFWV84F0081	COVER, LCD FPC	1
K 6	DFMD7589ZB	PLATE, RF FRONT	1
K 7	DFMD7592ZA	PLATE, AUDIO JACK	1


K 8	DFMD7594ZA-0	HOLDER, PCMCIA COVER	1
K 9	DFMX0635ZB	TAPE	2
K 10	DFMX0719XA	INSULATION SHEET, LED CARD	1
K 11	DFMX0736YA	SPACER, AUDIO JACK	1
K 14	DFMY0218ZA	SHEET, CPU HEAT SINK	3
K 15	DFMY5009ZB	HEAT PIPE	1
K 16	DFMY5010ZA	PLATE, HEAT SINK	1
K 19	DFWV80C0447	CABINET, BOTTOM	1
K 19-1	DFHG1209ZA	RUBBER FOOT	2
K 20	DFWV80A0308	CABINET, TOP	1
K 21	DFHG1270ZB	SHIELD SHEET, AUDIO JACK BEZEL	1
K 22	DFHG1271ZA	SHIELD FOAM, AUDIO JACK	1
K 23	DFHG1276ZA	PLATE, SPEAKER	1
K 25	DFHG1293ZA-0	COVER, AUDIO JACK	1
K 26	DFHG1385ZA-0	COVER, DC JACK	1
K 27	DFHG1295ZB-0	COVER, USB JACK	1
K 28	DFHG1296ZA-0	COVER, SERIAL CONNECTOR	1
K 29	DFKE0649YA-0	COVER, PCMCIA, BOFROST	1
K 32	DFHR7632ZA-0	SHEET, HANDLE SCREW BLIND	2
K 34	DFHG1330ZA	PAD, TOUCH PAD	1
K 35	DFHE0326ZA	CONDUCTIVE CUSHION, USB	1
K 36	DFKE0488ZA-0	COVER, BATTERY	1
K 37	DFHG1209ZA	FOOT	2
K 38	DFKE0489ZB-0	AUDIO JACK BEZEL	1
K 40	DFKE0490XB	HOLDER, SPEAKER/RTC BATTERY	1
K 41	DFKE0491YA-0	COVER, DOCKING CONNECTOR	1
K 42	DFKE0492ZA	STOPPER, COVER	1
K 43	DFKE9040VB-0	PALM REST COVER	1
K 45	DFBC0239ZA	CLICK BUTTON	1
K 46	DFBD0121ZA-0	KNOB, POWER SW	1
K 47	DFBD9002XA-0	KNOB, BATTERY COVER	1
K 50	DFWV80A0315	CABINET, LCD FRONT/TS PANEL	1
K 50-1	DFWV84A0227	KIT, TOUCH SCREEN PANEL	1
K 50-2	DFHR9061ZA	PROTECTION FILM	1
K 51	DFUS0254ZA	SPRING, BUCKLE	1
K 52	DFMC0539ZA	WATER RESISTING SHEET	1
K 53	DFMX0762ZB	CASE, INVERTER PCB	1
K 54	DFBH1100ZA	HINGE	2
K 60	DFHG1299ZA-0	LCD RUBBER	2
K 65	DFWV80C0437	CABINET, LCD REAR	1
K 66	DFHP7069ZA	TAPE, TOUCH SCREEN PANEL PCB	1
K 67	DFKE0496ZA-1	HOLDER, BUCKLE	1
K 68	DFGB0075ZA-0	LOGO BADGE	1
K 70	DFBS0055YA-1	BUCKLE	1
K 71	DFQT6077YA	LABEL, CAUTION, INVERTER	1
K 74	DFMD7581ZB	HDD CASE UPPER	1
K 75	DFMD7582ZA	HDD CASE LOWER	1
K 76	DFHG1260ZC	CUSHION, HDD	1
K 77	DFMD7591ZA-1	COVER, HINGE	1
K 80	△ DFGT0775YA	LABEL, RATING	1
K 82	DFQC9005ZA-0	STRAP	1
K 86	DFMD7593YA	PLATE, REFLECT PCMCIA	1
K 87	DFMX0735ZB	SHEET, KBD FPC	1

K 88	DFHG1272ZB	SHIELD SHEET, SERIAL CONNECTOR	1
K 89	DFHG1280YA	COVER SHEET, PCMCIA	1
K351	DFHE0490ZA	SHIELD SHEET, PCMCIA, BOFROST	1
K353	DFMX0954ZA	SHEET, DOC PCB, BOFROST	1
K 403	DFHE0534ZA	PCMCIA ASSIST	1
K 404	DFMX0965ZA	PCB, INSULATION SHEET T-P	1
K 405	DFHG826ZA	ASS'Y, UPPER LCD-TP SHEET	1
K 406	DFHG827ZA	ASS'Y, LOWER LCD-TP SHEET	1
K 407	DFHG828ZA	RUBBER, INVERTER HOLD	1
K 408	DFHE0507ZA	UPPER, LCD CUSHION	2
K 409	DFHE0508ZA	LOWER, LCD CUSHION	1
K 410	DFHE0514ZA	LOWER L, LCD CUSHION	1
K 418	DFMD7653ZA	PLATE, MINI PCI TYPE313 CARD	1
K 419	DFMX0797ZA	INSULATION SHEET MINI PCI TYPE3 RELAY	1
K 421	DFHE0381ZA	GASKET	1
K 422	DFHG1282YA	SHEET, UPPER, INVERTER CABLE	1
K 423	DFGX0236ZA-0	SHEET	1
K500	DFUS0255ZA	PLATE, ANTENNA SHIELD	1
K501	XYN2+J5FN	SCREW	2
K502	DFHE0529ZA	SHEET, ANTENNA CABLE	1
K504	DFKE0493YA-0	ANTENNA HOLDER	1
K505	DFQT9781ZA	LABEL, BOFROST	1
K 552	DFHE0638ZA	SHIELD SHEET, DSUB	1
K 559	DFMD3096ZA	HOLDER, USB CONNECTOR	1
K 560	DFHG1556ZA	LCD CUSHION UPPER-2	1
K 561	DFMC0567ZA	SHIELD SHEET B	1
K 565	XSB2+4	SCREW	1
K 569	DFHR3301ZA	SHEET, MINI PCI CARD	2
K600	DFHG856ZA	SHEET, MODEM JACK	1
K601	DFHG1331ZA	SHEET, LAN JACK	1
K603	DFHE0422ZA	GASKET	2
K604	DFHE0515ZA	HOLDER, DIMM	1
K605	DFHR5544ZA-0	LABEL, RESET SW	1
K606	DFHR5545XA-0	BLIND SHEET, LAN JACK	1
K607	DFHR6092ZA	BLIND SHEET, MODEM JACK	1
K 101	XSB2+4FNL	SCREW	22
K 103	XYN2+J10FN	SCREW	2
K 104	XYN2+J4FN	SCREW	3
K 105	XYN2+J6FN	SCREW	2
K 106	XYN2+J8FZ	SCREW	8
K 107	XYN26+J8FN	SCREW	4
K 108	IKT0104AA	SCREW	2
K 109	DFHE5117ZA	SCREW	9
K 110	XYN2+J6	SCREW	1
K 111	XYN2+J8FN	SCREW	2
K 112	XYN2+J8FZ	SCREW	10
K 113	XYN3+J7FNL	SCREW	2
K 114	XYN4+J9FZ	SCREW	2
K 115	XYN2+J5FZ	SCREW	2
K 120	XYN2+J7FN	SCREW	16



## Replacement Parts List Comparison Table

Note: Important Safety Notice

Components identified  mark have special characteristics important for safety.  
When replacing any of these components, use only manufacturer's specified parts.

### CF-M34WD6YNG (03-07-07)

REF. NO. and AREA	PART NO.		DESCRIPTION	Q'TY
	CF-M34JA2BEG	CF-M34WD6YNG		
<b>Main PCB</b>				
C387	ICUV1H220JCS	-----	CAPACITOR, 50V, 22pF	1->0
R418	-----	ERJ2GEJ102X	RESISTOR, 1/16W, 1KΩ	0->1
C162, 164	DCUM1C104ZFL	-----	CAPACITOR, 16V, 0.1μF	2->0
C166, 167	DCUM1C104ZFL	-----	CAPACITOR, 16V, 0.1μF	2->0
C161, 163	DCSG0JP100RR	-----	CAPACITOR, 6.3V, 10μF	2->0
C165, 174	DCSG0JP100RR	-----	CAPACITOR, 6.3V, 10μF	2->0
C168	DCUJ1C104KBL	-----	CAPACITOR, 16V, 0.1μF	1->0
C709	-----	DCUJ1C104KBL	CAPACITOR, 16V, 0.1μF	0->1
C169, 170	ICUV1H070DCS	-----	CAPACITOR, 50V, 7pF	2->0
C171, 172, 173	DCUJ1C104KBL	-----	CAPACITOR, 16V, 0.1μF	3->0
CN31	DFJS207ZA015	-----	CONNECTOR	1->0
IC60	RN5VD27CA-TR	-----	IC, DETECTOR	1->0
IC80	DA72012B003D	-----	IC, USB I/O	1->0
IC81	C0DBZHG00003	-----	IC, USB I/O	1->0
IC82	C0DBZHG00004	-----	IC, USB I/O	1->0
IC83, 84	DA7W66UT12L0	-----	IC, USB I/O	2->0
IC85	DA7W04UT12L0	-----	IC, INVERTER	1->0
IC92	DA710GX04X3U	C1DB00000749	IC, VGA	1
L47, 48	DDB5Z024E-L	-----	FERRITE BEAD	2->0
R152	ERJ3GEYJ152V	-----	RESISTOR, 1/16W, 1.5KΩ	1->0
R234, 235, 236	ERJ2GEJ104X	-----	RESISTOR, 1/16W, 100KΩ	3->0
R385, 386, 387	ERJ2GEJ473X	-----	RESISTOR, 1/16W, 47KΩ	3->0
R626	-----	ERJ2GEJ473X	RESISTOR, 1/16W, 47KΩ	0->1
R155, 157	ERJ3GEY0R00V	-----	RESISTOR, 1/16W, 0Ω	2->0
R154, 160	ERJ3GEY0R00V	-----	RESISTOR, 1/16W, 0Ω	2->0
R118, 119, 120, 121	-----	ERJ3GEY0R00V	RESISTOR, 1/16W, 0Ω	0->4
R624, 625	RL1220SR12F	-----	RESISTOR, 1/4W, 0.12Ω	2->0
R624, 625	-----	RL1220SR15F	RESISTOR, 1/4W, 0.15Ω	0->2
RA69	EXBV8V153JV	-----	RESISTOR ARRAY	1->0
R70	D1HG1508A001	-----	RESISTOR ARRAY	1->0
RA72	D1HA1538A003	-----	RESISTOR ARRAY	1->0
X6	DECU04000L1U	-----	OSCILLATOR (4.0MHz)	1->0
<b>Docking PCB</b>				
CN801	-----	DFJS226ZA100	CONNECTOR	1
<b>Docking Connector PCB</b>				
CN551	DFJS553ZA100	-----	CONNECTOR, PORT REPLICATOR	1->0
CN552	DFJS226ZA100	-----	CONNECTOR, MAIN PCB	1->0
<b>Modem Jack PCB</b>				
CN 541	DFJS555ZA004	-----	JK, MODEM	1->0
CN 544	DFJP02C75YAJ	-----	CONNECTOR, FOR INTERNAL MODEM PC	1->0

# Service Manual

Notebook Computer

CF-M34

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*Simplified*


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This is the Service Manual for the following areas.

G ...for Germany

F ...for France

T ...for Italy



## Model Number Reference

The following models are numbered in accordance with the types of CPU, LCD and HDD etc. featured by product.

Model No. CF-M341 2 4YN 3

1: CPU type

W: for Intel® Mobile Celeron™ 400 MHz LV

2: HDD type

A: for 10 GB

3: Area

G/F/T: Refer to above area table

### WARNING


This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

# Panasonic®

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## Replacement Parts List Comparison Table

Note: Important Safety Notice

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### CF-M34WA4YNG/F/T

REF. NO. and AREA	PART NO.		DESCRIPTION	Q'TY
	CF-M34JA2BEG	CF-M34WA4YNx		
<b>Main Block Unit</b>				
E1	DL3U17077AAA	DL3U17077CAA	PCB, MAIN	RTL 1
E3	DL3U27057BAA	DL3U27057EAA	PCB, MODEM JACK	RTL 1
E4	DL3U37057BAA	-----	PCB, DOCKING CONNECTOR	RTL 0
E5	DL3U47057BAA	DL3U47057EAA	PCB, LED	RTL 1
E19 (G)	DFSX1A93ZBTR	DFSX1A93XBTR	KEYBOARD	1
E19 (F)	-----	DFSX1A94XBTR	KEYBOARD	1
E19 (T)	-----	DFSX1A98XBTR	KEYBOARD	1
E21	DFWP0125WA	DFWP0132ZA	INTERNAL MODEM	1
E41	-----	DL3UP7054EAA	PCB, DIMM	RTL 1
E48	-----	DL3UP7115AAA	PCB, DOCKING	RTL 1
E100	-----	N1BZBJA00001	ANTENNA	1
<b>Accessories</b>				
A8	DFQC9006ZA-0	-----	SHOULDER BELT	0
A10	-----	DDB1Z138-V	FERRITE CORE	2
A11	-----	DFQX1388ZB	LEAFLET, FERRITE CORE	1
<b>Mechanical Parts</b>				
K1	DFMD7583ZB	DFMD7583YA	PLATE, DOCKING CONNECTOR	1
K29	DFHG1297ZA-0	-----	COVER, PCMCIA	0
K29	-----	DFKE0649YA-0	COVER, PCMCIA, BOFROST	1
K31	DFHG1304ZA	-----	RUBBER, ANTENNA CABLE	0
K61	DFHG1300ZA-0	-----	CAP, ANTENNA	0
K62	DFHG1301ZA-0	-----	CAP, ANTENNA HOLDER	0
K69	DFGB0077ZA-1	-----	TOUGHBOOK LABEL	0
K81	DFQT9718ZA	DFQT9761ZA	LABEL, MODEM CAUTION	1
K92	DFME0112ZA	-----	CARD HOLDER RUBBER	0
K92	-----	DFHG1522ZA	HOLDER, MINI PCI	1
K351	-----	DFHE0490ZA	SHIELD SHEET, PCMCIA, BOFROST	1
K353	-----	DFMX0954ZA	SHEET, DOC PCB, BOFROST	1
K500	-----	DFUS0255ZA	PLATE, ANTENNA SHIELD	1
K501	-----	XYN2+J5FN	SCREW	2
K502	-----	DFHE0529ZA	SHEET, ANTENNA CABLE	1
K503	-----	DFHP7118ZA	TAPE	1
K504	-----	DFKE0493YA-0	ANTENNA HOLDER	1
K505	-----	DFQT9781ZA	LABEL, BOFROST	1
<b>Main PCB</b>				
C162, 164		DCUM1C104ZFL	CAPACITOR, (DELETION)	84->82
C166, 167		DCUM1C104ZFL	CAPACITOR, (DELETION)	59->57
C161, 163		DMSG0JP100RR	CAPACITOR, (DELETION)	13->11
C165, 174		DMSG0JP100RR	CAPACITOR, (DELETION)	11->9
C168, 709		DCUJ1C104KBL	CAPACITOR, (DELETION C168, ADDITION C709)	8->8
C169, 170	ICUV1H070DCS	-----	CAPACITOR, (DELETION)	2->0
C171, 172, 173		DCUJ1C104KBL	CAPACITOR, (DELETION)	22->19
CN31		DFJS207ZA015	CONNECTOR, (DELETION)	2->1

IC60	RN5VD27CA-TR		IC, DETECTOR, (DELETION)	2->1
IC80	DA72012B003D	-----	IC, USB I/O, (DELETION)	1->0
IC81	C0DBZHG00003	-----	IC, USB I/O, (DELETION)	1->0
IC82	C0DBZHG00004	-----	IC, USB I/O, (DELETION)	1->0
IC83, 84	DA7W66UT12L0	-----	IC, USB I/O, (DELETION)	2->0
IC85	DA7W04UT12L0	-----	IC, INVERTER, (DELETION)	1->0
IC92	DA710GX04X3U	C1DB00000749	IC, VGA	1->1
L47, 48	DDB5Z024E-L		FERRITE BEAD (DELETION)	3->1
R152	ERJ3GEYJ152V		RESISTOR, (DELETION)	5->4
R234, 235, 236	ERJ2GEJ104X		RESISTOR, (DELETION)	16->13
R385, 386, 387, 626	ERJ2GEJ473X		RESISTOR, (DELETION R385, 386, 387, ADDITION R626)	16->14
R155, 157	ERJ3GEY0R00V		RESISTOR, (DELETION)	9->7
R154, 160, 118, 119, 120, 121	ERJ3GEY0R00V		RESISTOR, (DELETION R154, 160, ADDITION R118, 119, 120, 121)	18->20
R624, 625	RL1220SR12F		RESISTOR, (DELETION)	3->1
R624, 625	-----	RL1220SR15F	RESISTOR, 1/4W, 0.15Ω	0->2
RA69	EXBV8V153JV	-----	RESISTOR ARRAY, 15KΩ	1->0
R70	D1HG1508A001	-----	RESISTOR ARRAY, 15Ω	1->0
RA72	D1HA1538A003	-----	RESISTOR ARRAY, 15KΩ	1->0
X6	DECU04000L1U	-----	OSCILLATOR (4.0MHz)	1->0
<b>Docking PCB</b>				
CN801	-----	DFJS226ZA100	CONNECTOR	1
<b>Docking Connector PCB</b>				
CN551	DFJS553ZA100	-----	CONNECTOR, PORT REPLICATOR	1->0
CN552	DFJS226ZA100	-----	CONNECTOR, MAIN PCB	1->0





# Service Manual

Notebook Computer

CF-M34

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**Simplified**


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This is the Service Manual for  
the following areas.

G...for Germany



## Model Number Reference

The following models are numbered in accordance with the types of CPU, LCD and HDD etc. featured by product.

Model No. CF-M341 2 4Y 3 4

1: CPU type

W: for Intel® Mobile Celeron™ 400 MHz LV

2: HDD type

A: for 10 GB

3: Operation System

E: Microsoft® Windows® 98

4: Area

G: Refer to above area table

### WARNING


This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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## Replacement Parts List Comparison Table

Note: Important Safety Notice

Components identified with  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

### CF-M34WA4YEG

REF. NO. and AREA	PART NO.		DESCRIPTION	Q'TY
	CF-M34JA2BEG	CF-M34WA4YEG		
<b>Main Block Unit</b>				
E1 	DL3U17077AAA	DL3U17077CAA	PCB, MAIN	RTL 1
E3	DL3U27057BAA	DL3U27057EAA	PCB, MODEM JACK	RTL 1
E4	DL3U37057BAA	-----	PCB, DOCKING CONNECTOR	RTL 0
E5	DL3U47057BAA	DL3U47057EAA	PCB, LED	RTL 1
E21	DFWP0125WA	DFWP0132ZA	INTERNAL MODEM	1
E41	-----	DL3UP7054EAA	PCB, DIMM	RTL 1
E48	-----	DL3UP7115AAA	PCB, DOCKING	RTL 1
<b>Accessories</b>				
A10	-----	DDB1Z138-V	FERRITE CORE	2
A11	-----	DFQX1388ZA	LEAFLET, FERRITE CORE	1
<b>Mechanical Parts</b>				
K1	DFMD7583ZB	DFMD7583YA	PLATE, DOCKING CONNECTOR	1
K29	DFHG1297ZA-0	-----	COVER, PCMCIA	0
K29	-----	DFKE0649ZA-0	COVER, PCMCIA, BOFROST	1
K81	DFQT9718ZA	DFQT9761ZA	LABEL, MODEM CAUTION	1
K92	DFME0112ZA	-----	CARD HOLDER RUBBER	0
K92	-----	DFHG1522ZA	HOLDER, MINI PCI	1
K351	-----	DFHE0490ZA	SHIELD SHEET, PCMCIA, BOFROST	1
K353	-----	DFMX0954ZA	SHEET, DOC PCB, BOFROST	1
<b>Main PCB</b>				
C162, 164	DCUM1C104ZFL		CAPACITOR, (DELETION)	84->82
C166, 167	DCUM1C104ZFL		CAPACITOR, (DELETION)	59->57
C161, 163	DCSG0JP100RR		CAPACITOR, (DELETION)	13->11
C165, 174	DCSG0JP100RR		CAPACITOR, (DELETION)	11->9
C168, 709	DCUJ1C104KBL		CAPACITOR, (DELETION C168, ADDITION C709)	8->8
C169, 170	ICUV1H070DCS		CAPACITOR, (DELETION)	2->0
C171, 172, 173	DCUJ1C104KBL		CAPACITOR, (DELETION)	22->19
CN31	DFJS207ZA015		CONNECTOR, (DELETION)	2->1
D5, 7, 8	DEDDA204UT		DIODE, (DELETION)	6->3
IC60	RN5VD27CA-TR		IC, DETECTOR, (DELETION)	2->1
IC80	DA72012B003D		IC, USB I/O, (DELETION)	1->0
IC81	C0DBZHG00003		IC, USB I/O, (DELETION)	1->0
IC82	C0DBZHG00004		IC, USB I/O, (DELETION)	1->0
IC83, 84	DA7W66UT12L0		IC, USB I/O, (DELETION)	2->0
IC85	DA7W04UT12L0		IC, INVERTER, (DELETION)	1->0
IC92	DA710GX04X3U	C1DB00000749	IC, VGA	1->1
L47, 48	DDB5Z024E-L		FERRITE BEAD	3->1



R152	ERJ3GEYJ152V		RESISTOR, (DELETION)	5->4
R234, 235, 236	ERJ2GEJ104X		RESISTOR, (DELETION)	16->13
R385, 386, 387, 626	ERJ2GEJ473X		RESISTOR, (DELETION R385, 386, 387, ADDITION R626)	16->14
R155, 157	ERJ3GEY0R00V		RESISTOR, (DELETION)	9->7
R154, 160, 118, 119, 120, 121	ERJ3GEY0R00V		RESISTOR, (DELETION R154, 160, ADDITION R118, 119, 120, 121)	18->20
R624, 625	RL1220SR12F		RESISTOR, (DELETION)	3->1
R624, 625	-----	RL1220SR15F	RESISTOR, 1/4W, 0.15Ω	0->2
RA69	EXBV8V153JV	-----	RESISTOR ARRAY, 15KΩ	1->0
R70	D1HG1508A001	-----	RESISTOR ARRAY, 15Ω	1->0
RA72	D1HA1538A003	-----	RESISTOR ARRAY, 15KΩ	1->0
X6	DECU04000L1U	-----	OSCILLATOR (4.0MHz)	1->0
<b>Docking PCB</b>				
CN801	-----	DFJS226ZA100	CONNECTOR	1





# Service Manual

Notebook Computer

CF-M34

*Simplified*

**TOUGHBOOK**

This is the Service Manual for  
the following areas.  
M...for U.S.A. and Canada

Model No. CF-M34VTFZKM

**⚠ WARNING**


This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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## Replacement Parts List Comparison Table

Note: Important Safety Notice

Components identified by  mark have special characteristics important for safety.

When replacing any of these components, use only manufacturer's specified parts.

### CF-M34VTFZKM

REF. NO. and AREA	PART NO.		DESCRIPTION	Q'T Y
	CF-M34UTFZKM	CF-M34VTFZKM		
<b>Main Block Unit</b>				
E 1	DL3U11205CAA	DL3U11205EAA	PCB, MAIN RTL	1
<b>Mechanical Parts</b>				
K 50	DFWV80A0290	DFWV80A0321	CABINET, LCD FRONT/TS PANEL	1
K 50-1	DFWV84A0198	DFWV84A0233	KIT, TOUCH SCREEN PANEL	1
K 50-2	-----	DFHR9064ZA	PROTECTION FILM	0->1
<b>Accessories</b>				
A 21	DFHR9039ZA-0	DFHR9084ZA	STYLUS PEN	1
<b>Main PCB</b>				
IC 1	C2GBC0000164	C2GBC0000171	IC, CPU	1

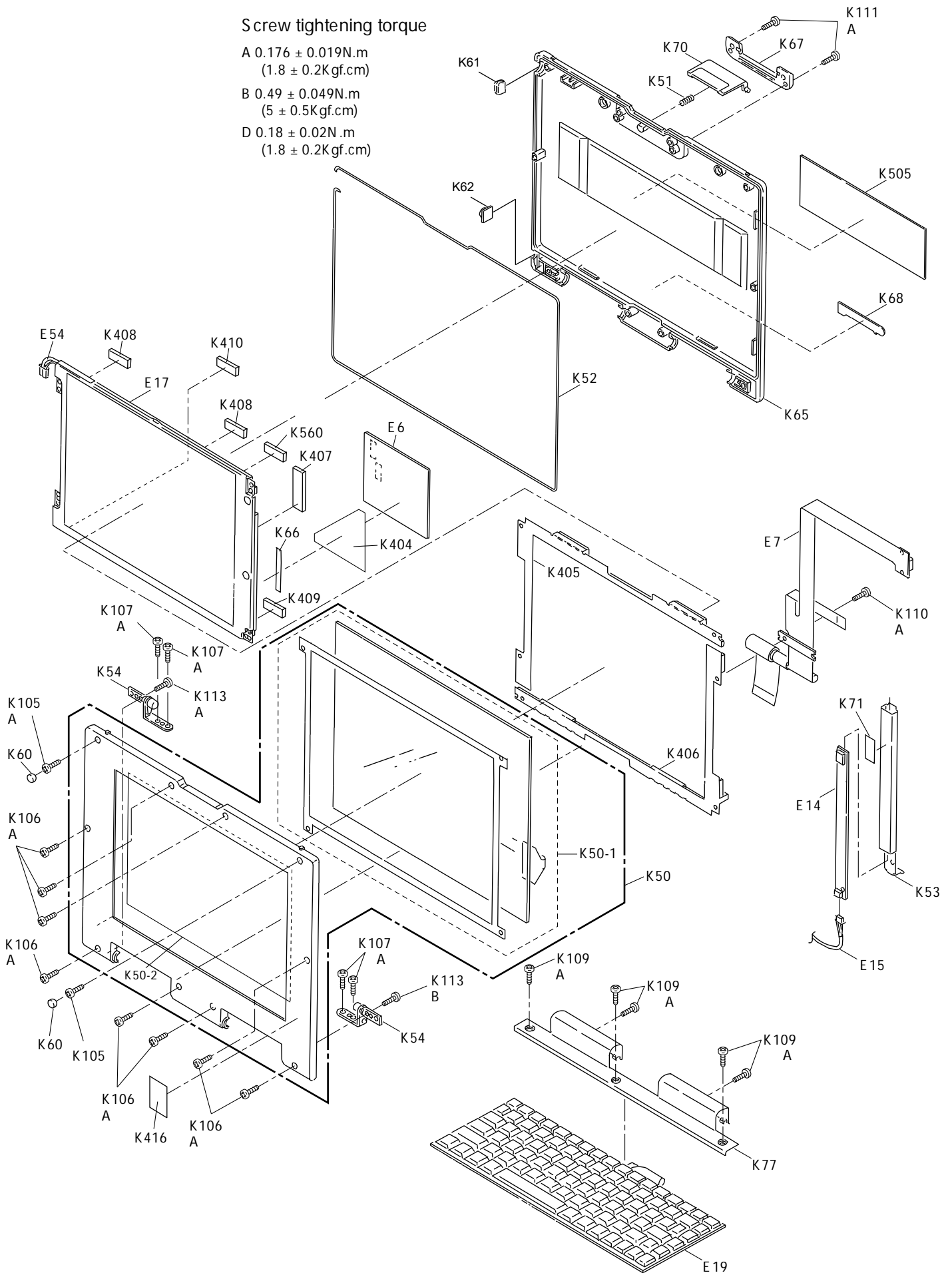


### Screw tightening torque

A  $0.176 \pm 0.019\text{N.m}$   
( $1.8 \pm 0.2\text{Kgf.cm}$ )

B  $0.49 \pm 0.049\text{N.m}$   
( $5 \pm 0.5\text{Kgf.cm}$ )

D  $0.18 \pm 0.02\text{N.m}$   
( $1.8 \pm 0.2\text{Kgf.cm}$ )



# Service Manual

Notebook Computer

CF-M34

*Simplified*

**TOUGHBOOK**

This is the Service Manual for  
the following areas.  
M ...for U.S.A. and Canada

Model No. CF-M34VHFZ1 2

1: Operation System

D: Microsoft® Windows® 2000

K: Microsoft® Windows® XP Professional

2: Area

M: Refer to above area table

## **WARNING**

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## Replacement Parts List Comparison Table

Note: Important Safety Notice

Components identified by  mark have special characteristics important for safety.

When replacing any of these components, use only manufacturer's specified parts.

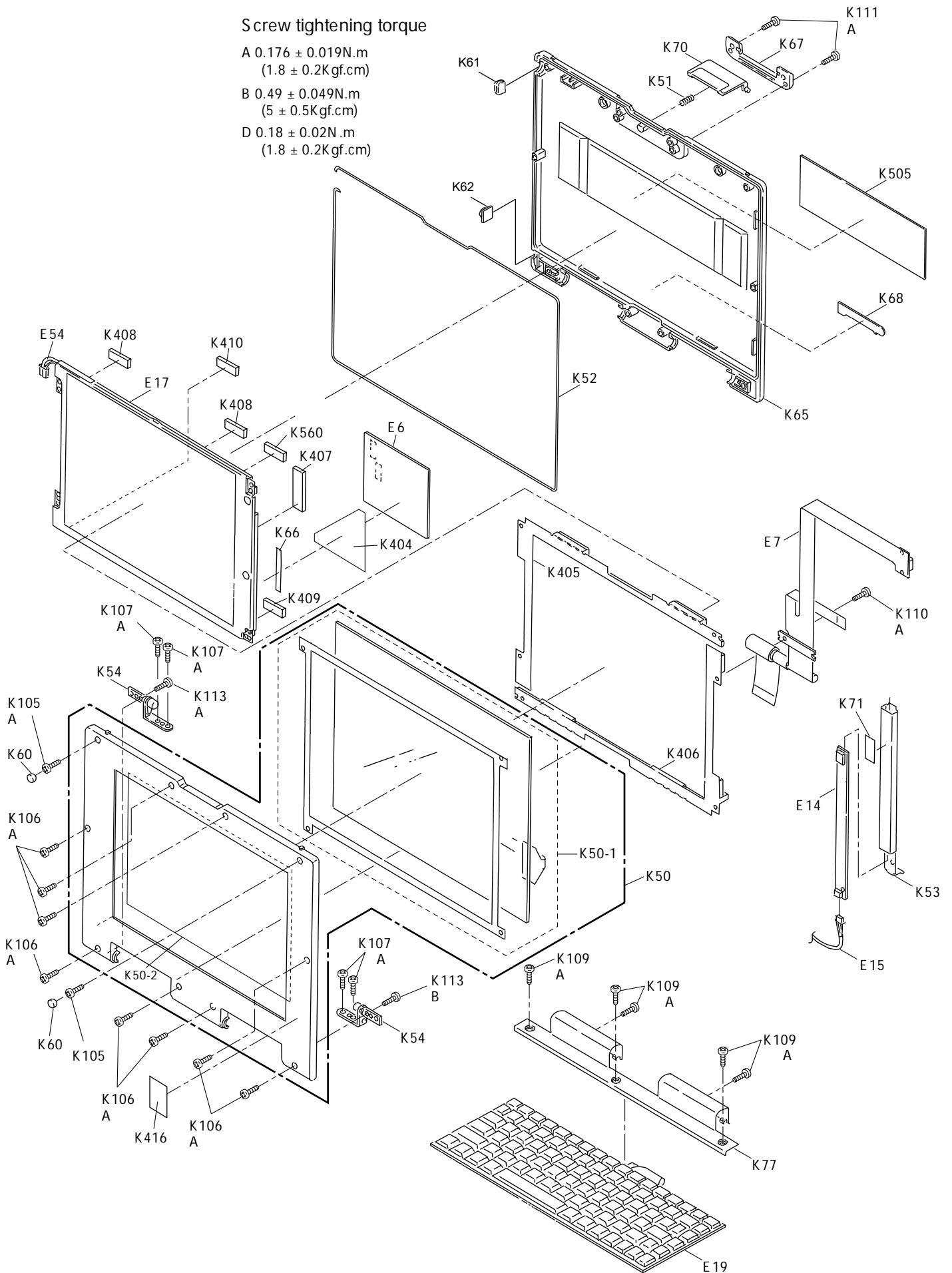
### CF-M34VHFZxM

REF. NO. and AREA	PART NO.		DESCRIPTION	Q'T Y
	CF-M34UHFZxM	CF-M34VHFZxM		
<b>Main Block Unit</b>				
E 1	DL3U11205CAA	DL3U11205EAA	PCB, MAIN RTL	1
<b>Mechanical Parts</b>				
K 50	DFWV80A0299	DFWV80A0324	CABINET, LCD FRONT/TS PANEL	1
K 50-1	DFWV84A0210	DFWV84A0236	KIT, TOUCH SCREEN PANEL	1
K 50-2	-----	DFHR9064ZA	PROTECTION FILM	0->1
<b>Accessories</b>				
A 21	DFHR9039ZA-0	DFHR9084YA	STYLUS PEN	1
<b>Main PCB</b>				
IC 1	C2GBC0000164	C2GBC0000171	IC, CPU	1

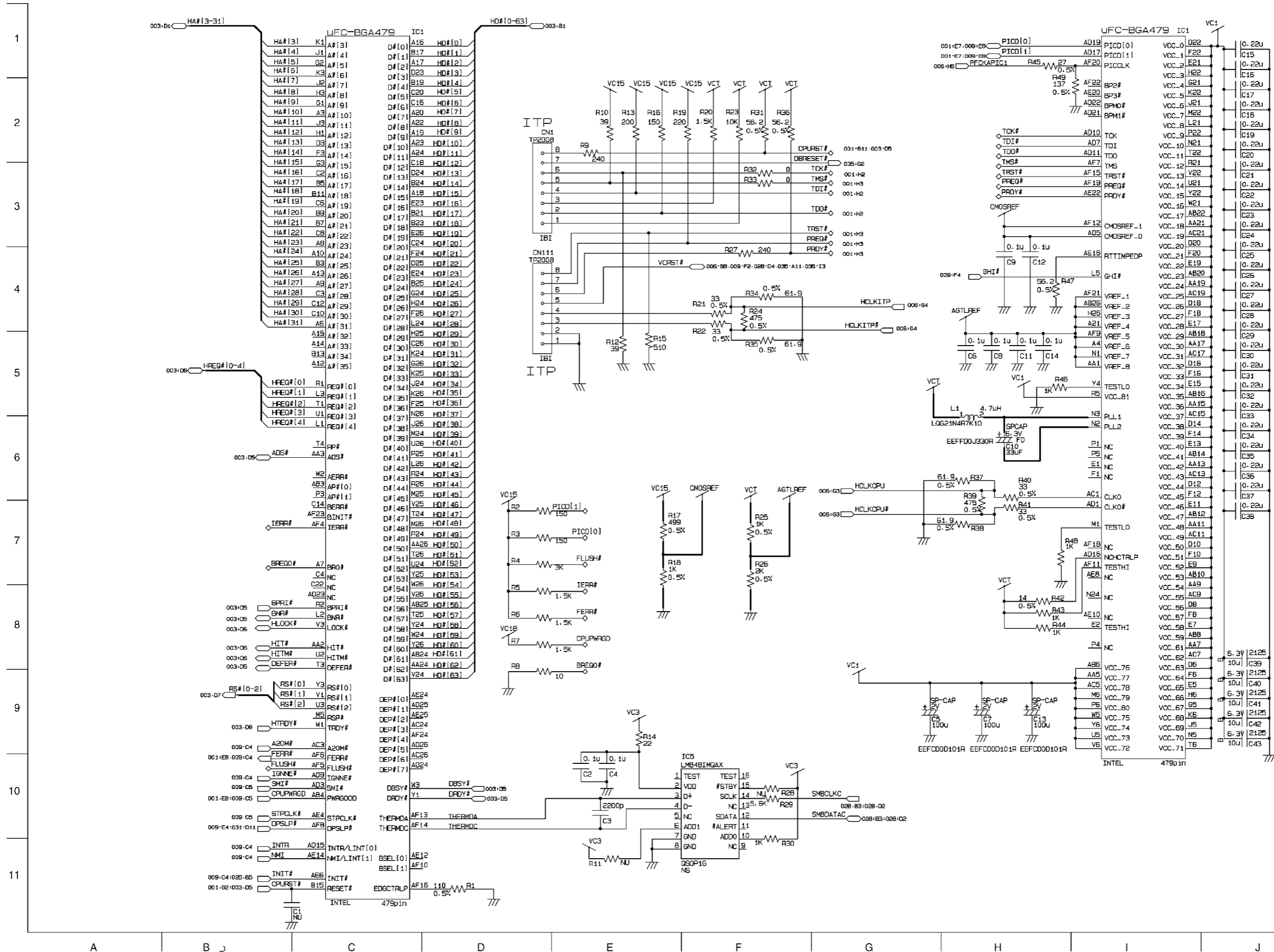


### Screw tightening torque

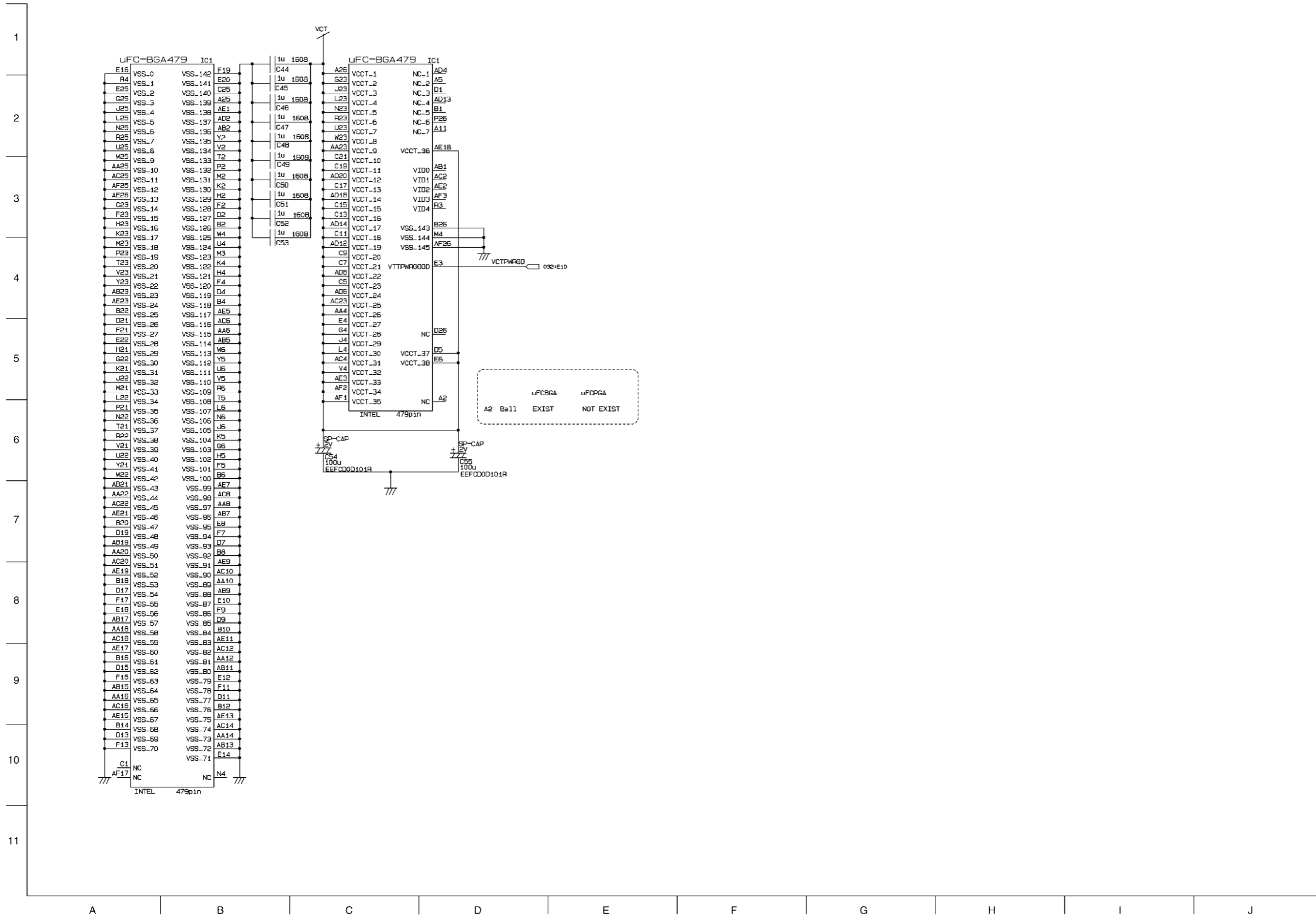
- A  $0.176 \pm 0.019\text{N.m}$   
( $1.8 \pm 0.2\text{Kgf.cm}$ )
- B  $0.49 \pm 0.049\text{N.m}$   
( $5 \pm 0.5\text{Kgf.cm}$ )
- D  $0.18 \pm 0.02\text{N.m}$   
( $1.8 \pm 0.2\text{Kgf.cm}$ )



# CF-M34UxFZxx Schematic Diagrams Main 1 CPU (TUALATIN ULV800) (1/2)



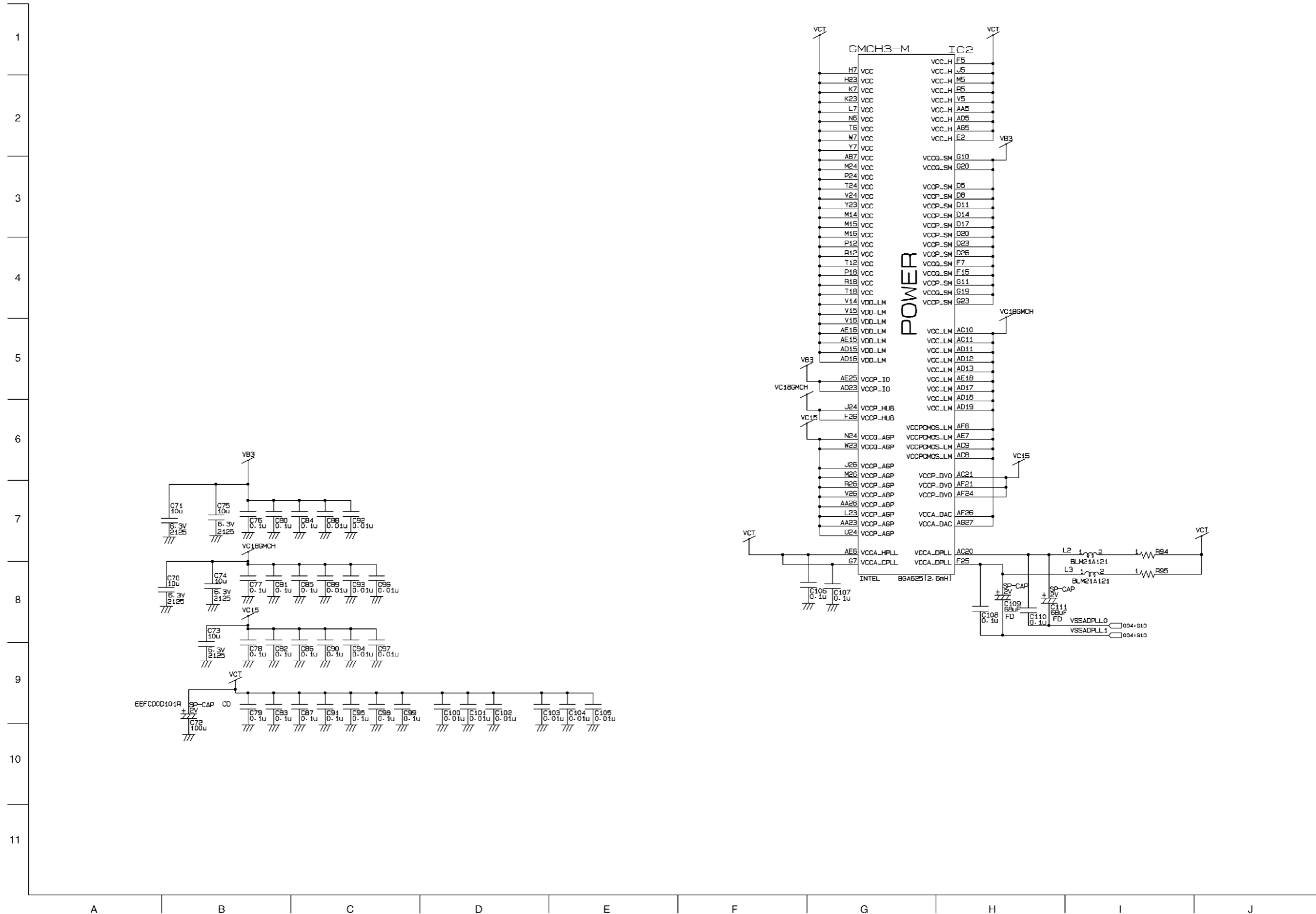
# Main 2 CPU (TUALATIN ULV800) (2/2)





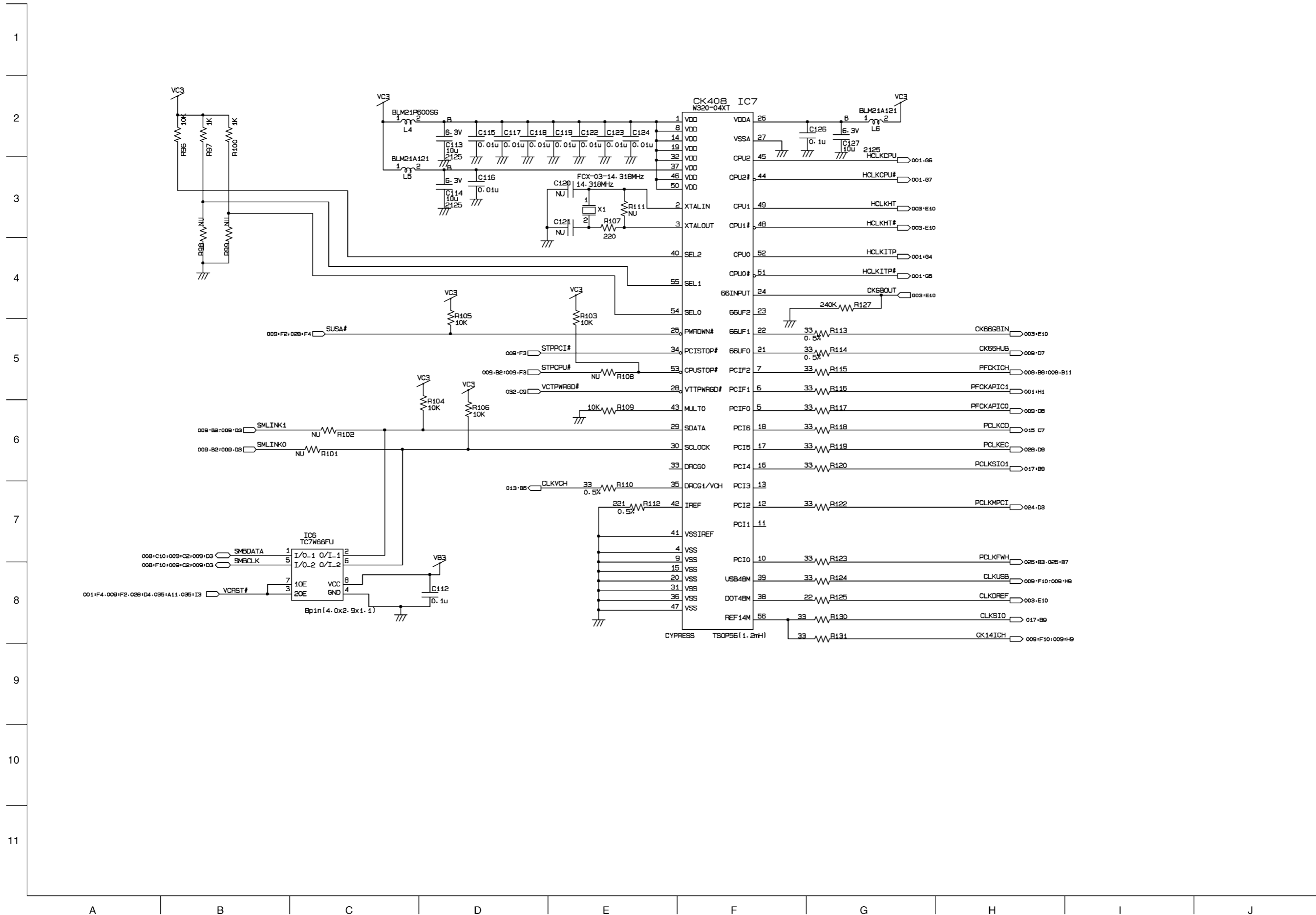


# Main 5 GMCH (830MG) (3/3)

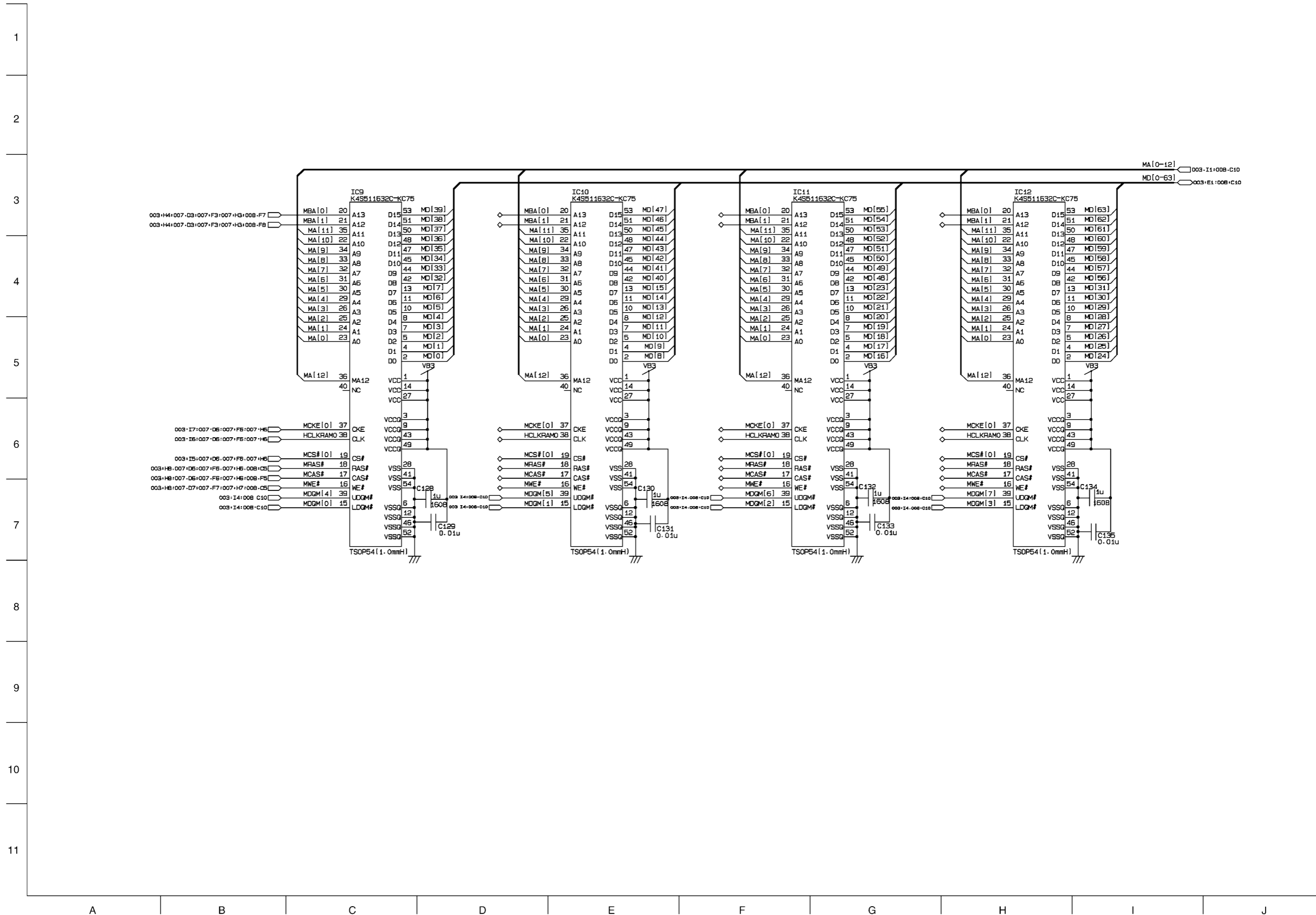




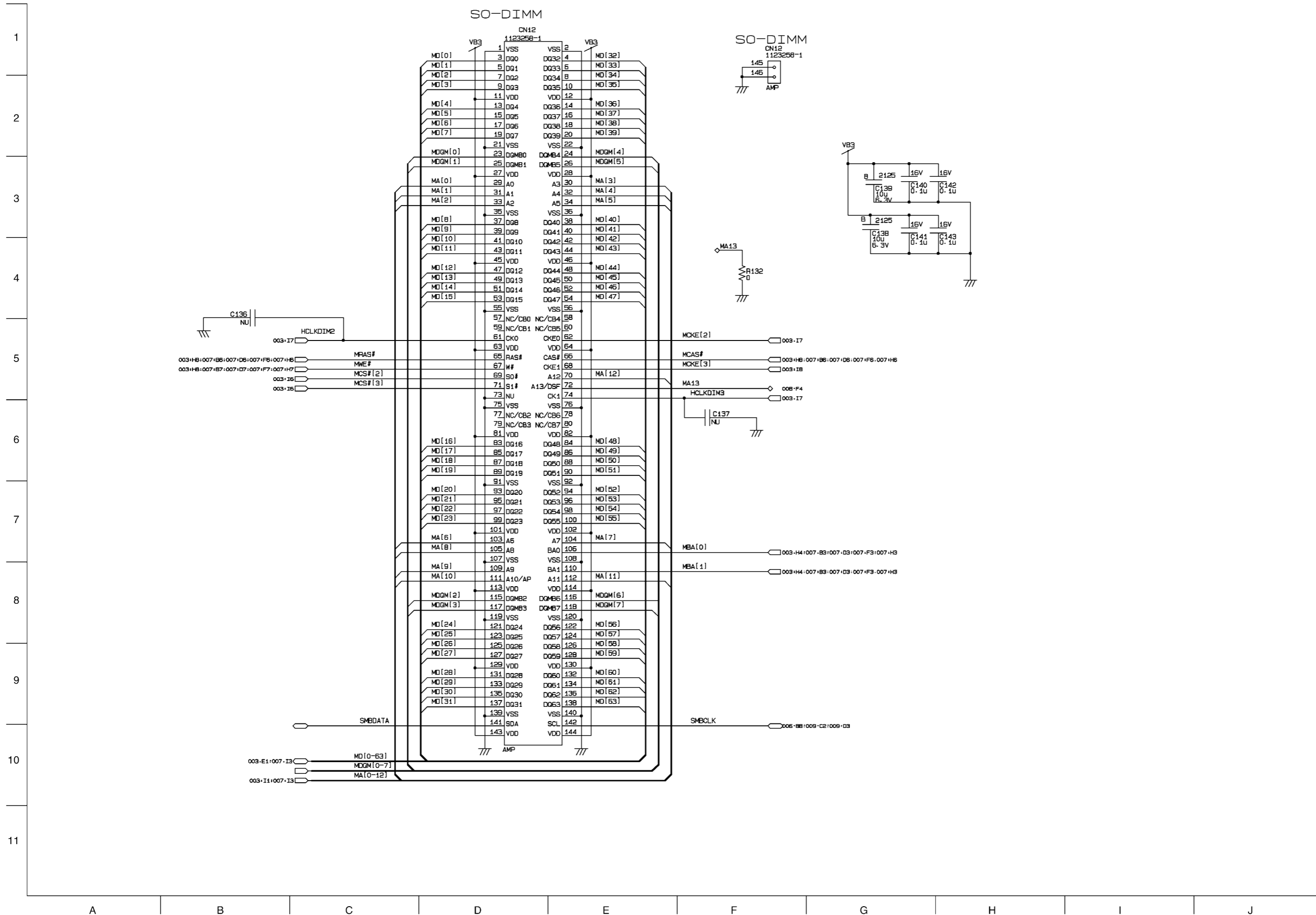
# Main 6 Clock



# Main 7 On Board Memory

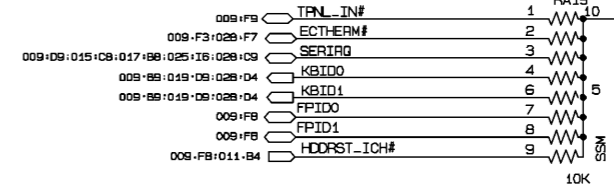
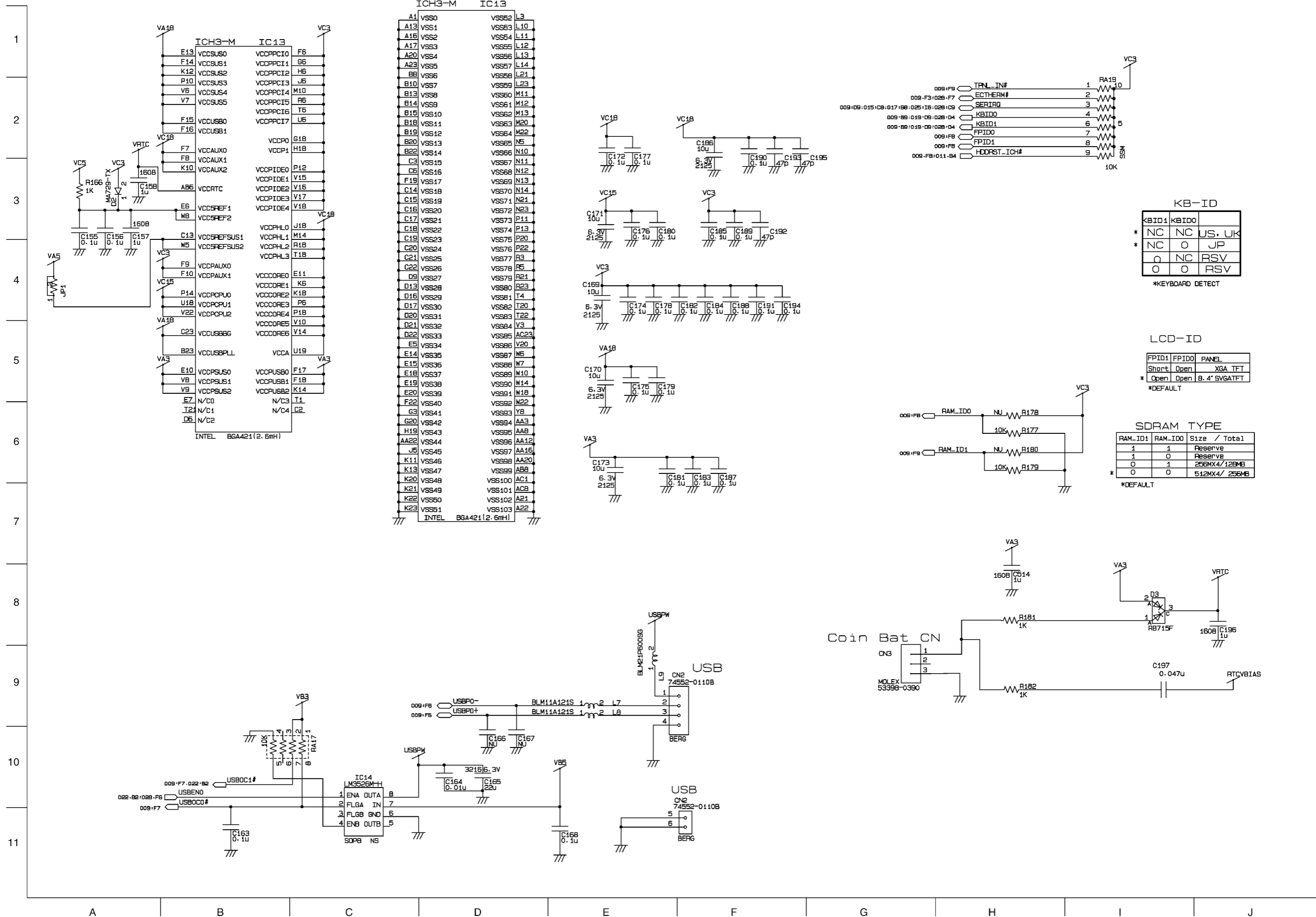


# Main 8 SO DIMM





# Main 10 ICH3, USB



**KB-ID**

KBID1	KBID0	
NC	NC	US, UK
NC	0	JP
0	NC	RSV
0	0	RSV

\*KEYBOARD DETECT

**LCD-ID**

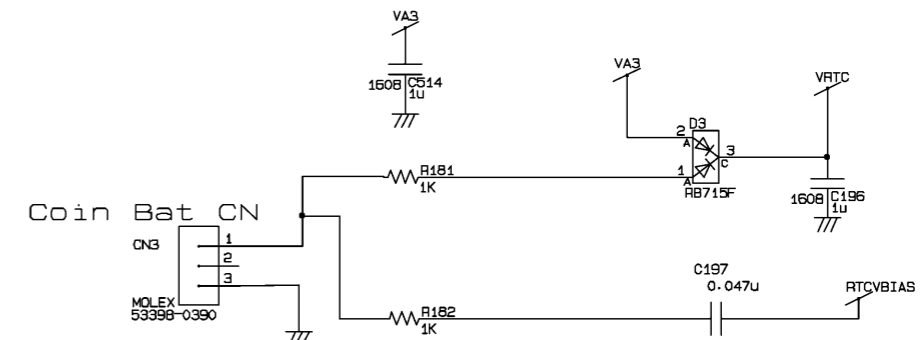
FPID1	FPID0	PANEL
Short	Open	XGA TFT
Open	Open	B. 4" SVGATFT

\*DEFAULT

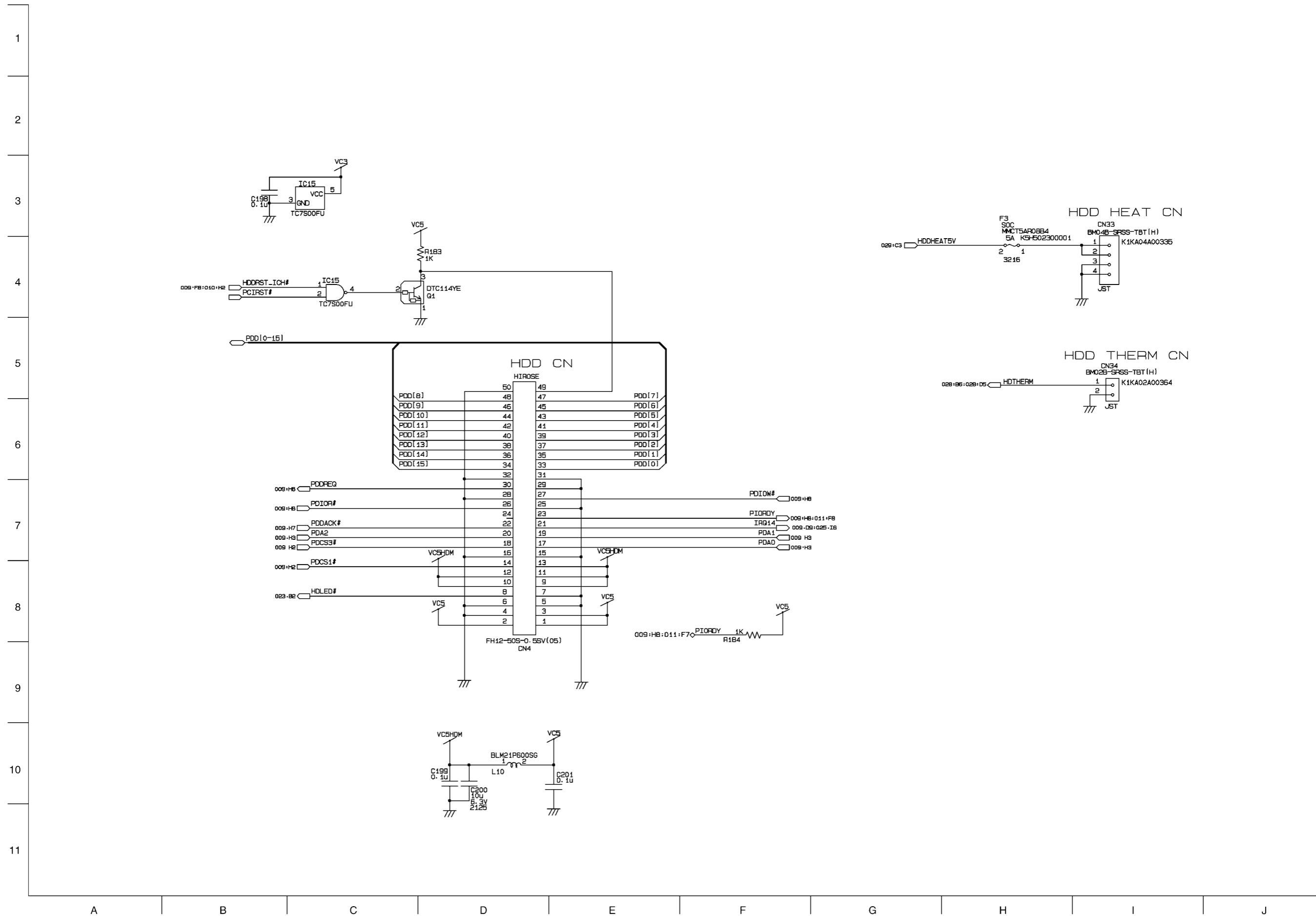
**SDRAM TYPE**

RAM-ID1	RAM-ID0	Size	Total
1	1	Reserve	
1	0	Reserve	
0	1	256MX4/128MB	
0	0	512MX4/ 256MB	

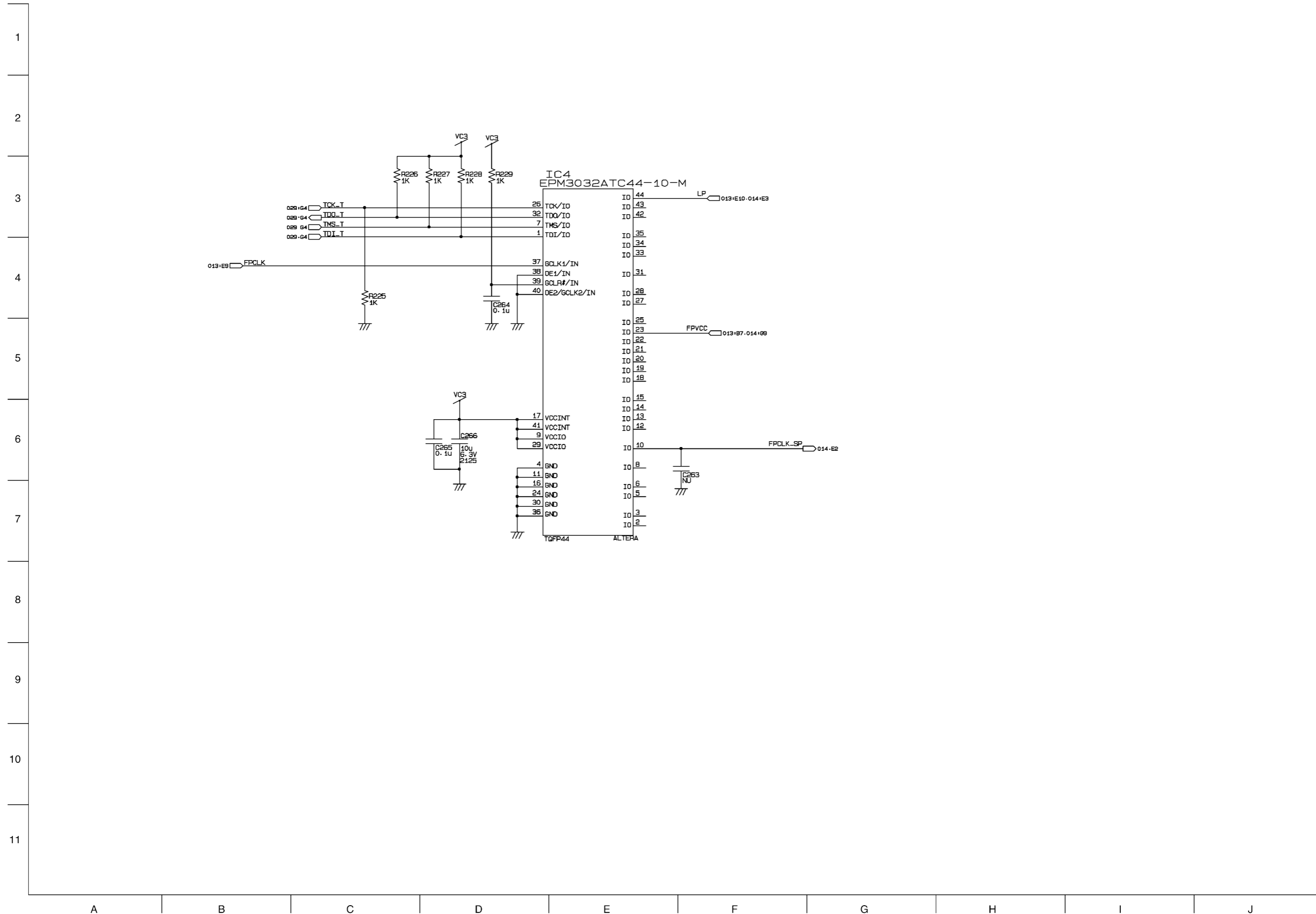
\*DEFAULT



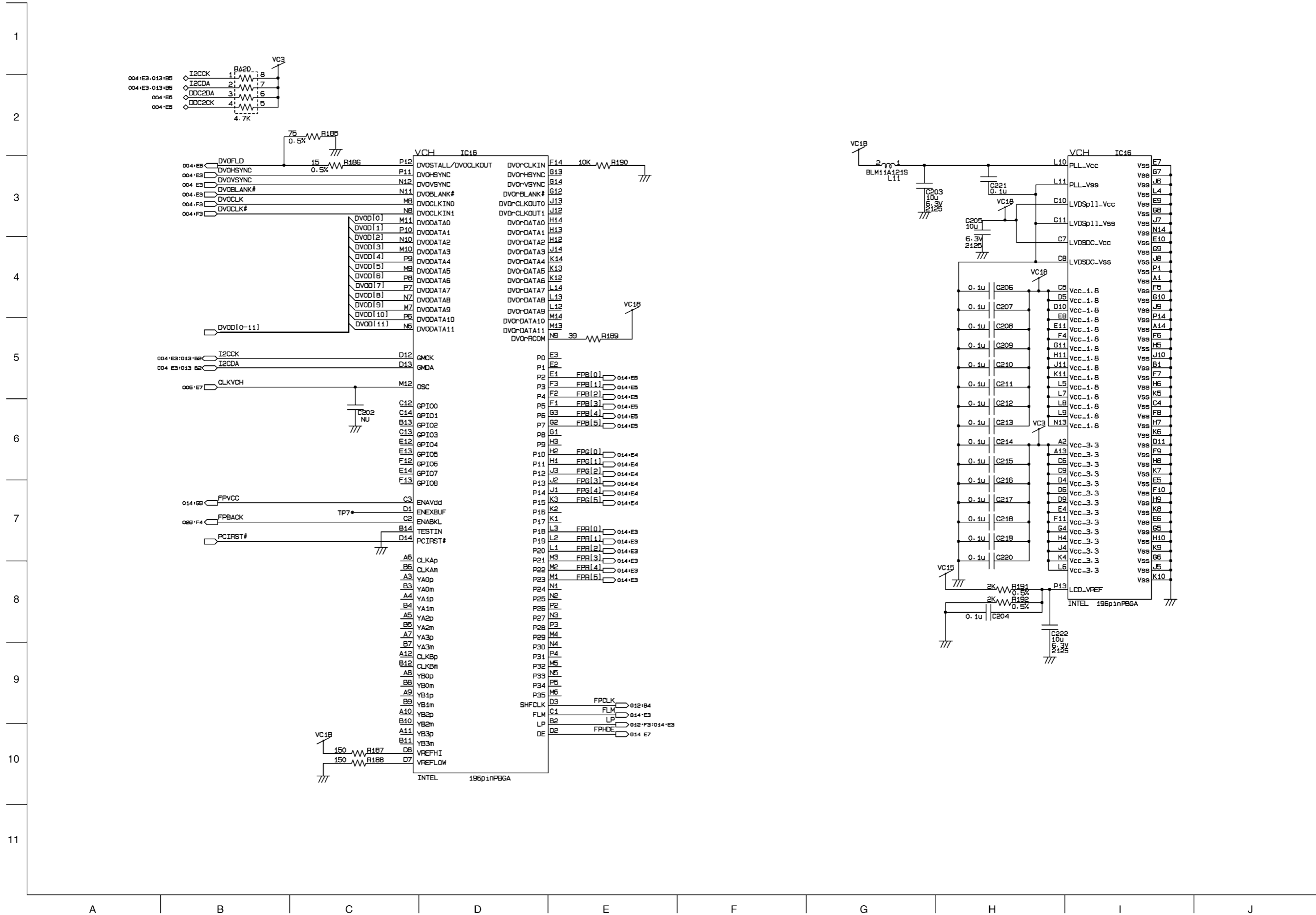
# Main 11 HDD I/F



# Main 12 ALTERA

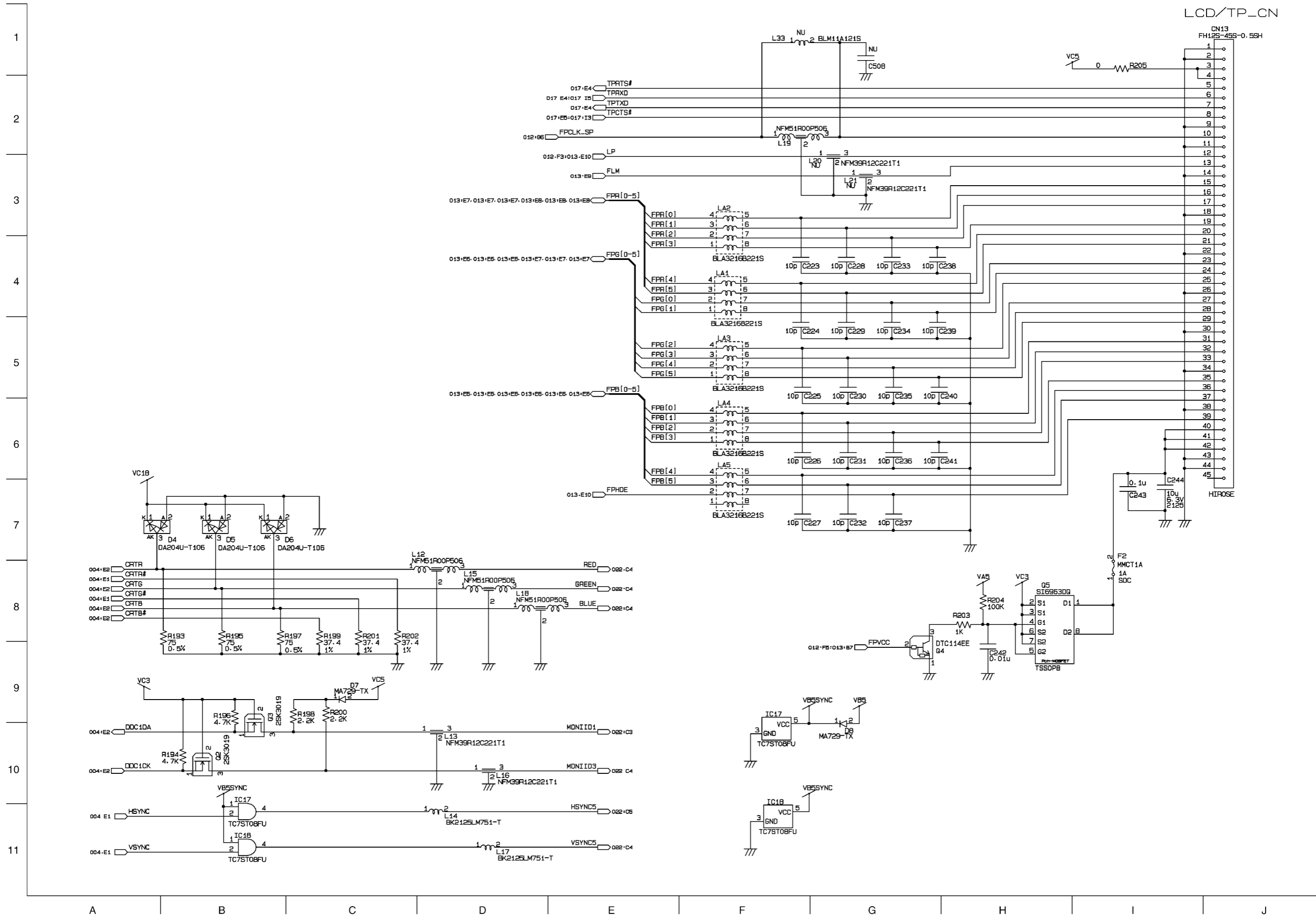


# Main 13 VCH



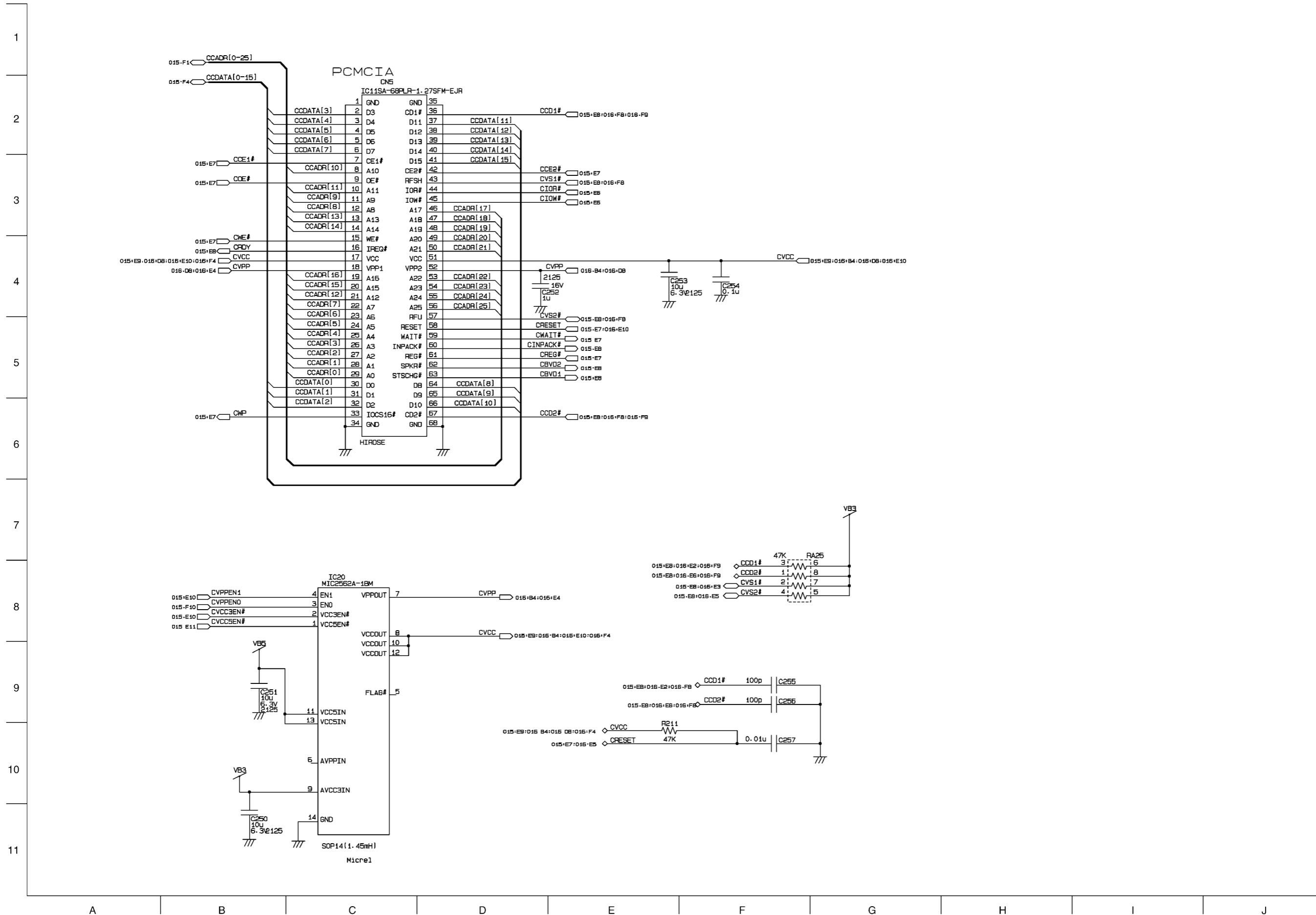


# Main 14 LCD I/F, CRT



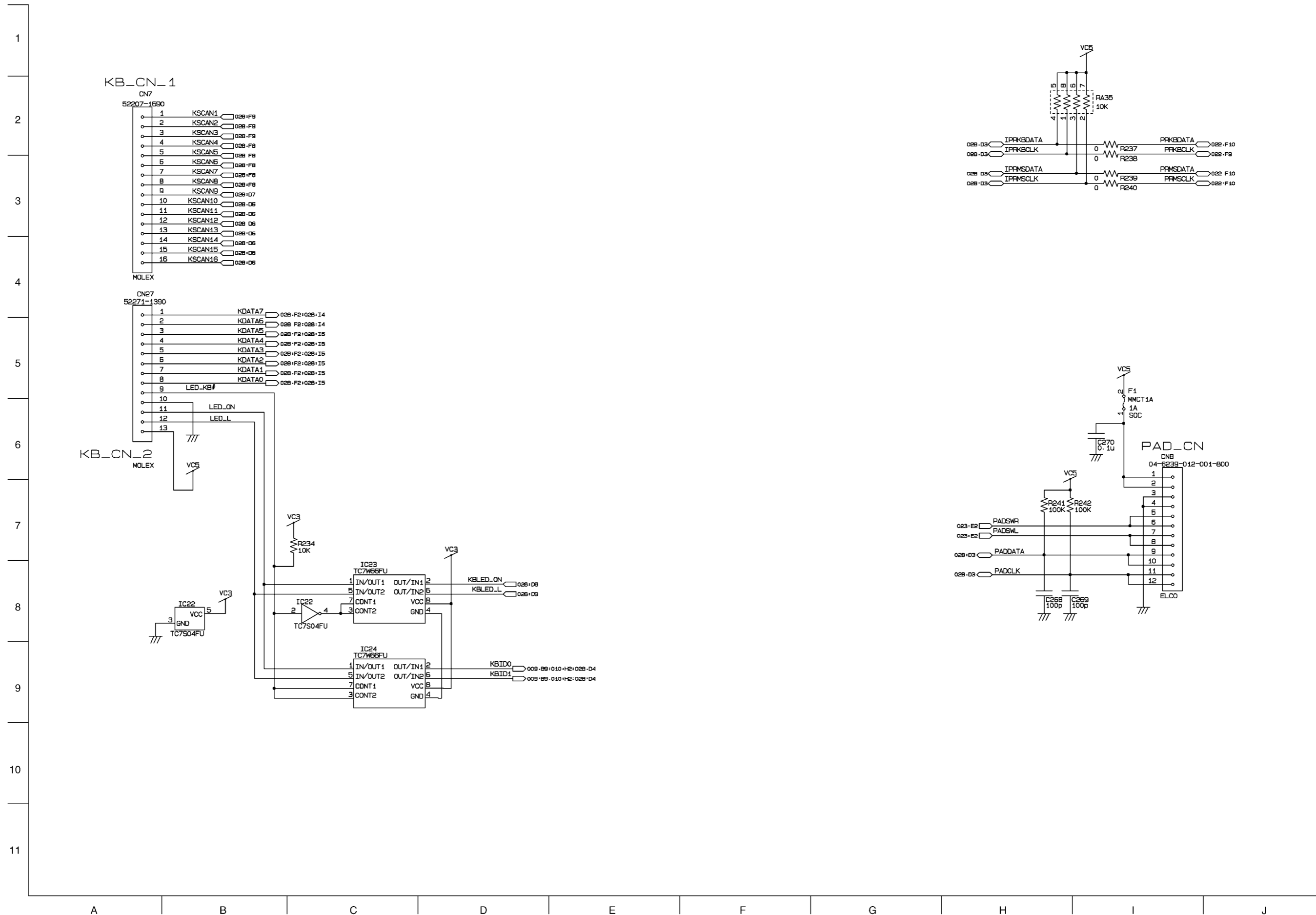


# Main 16 PCMCIA CN. 1Slot

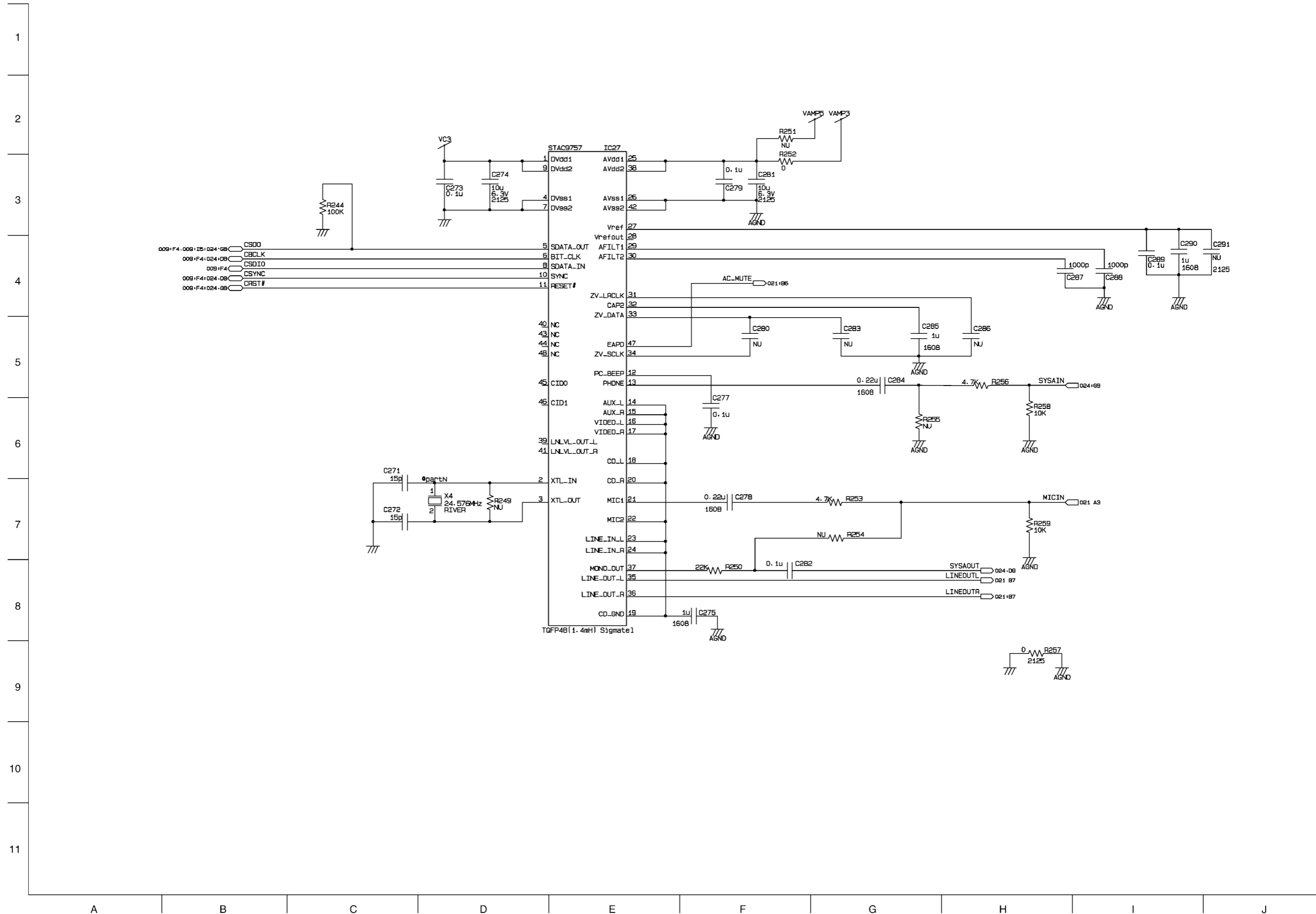




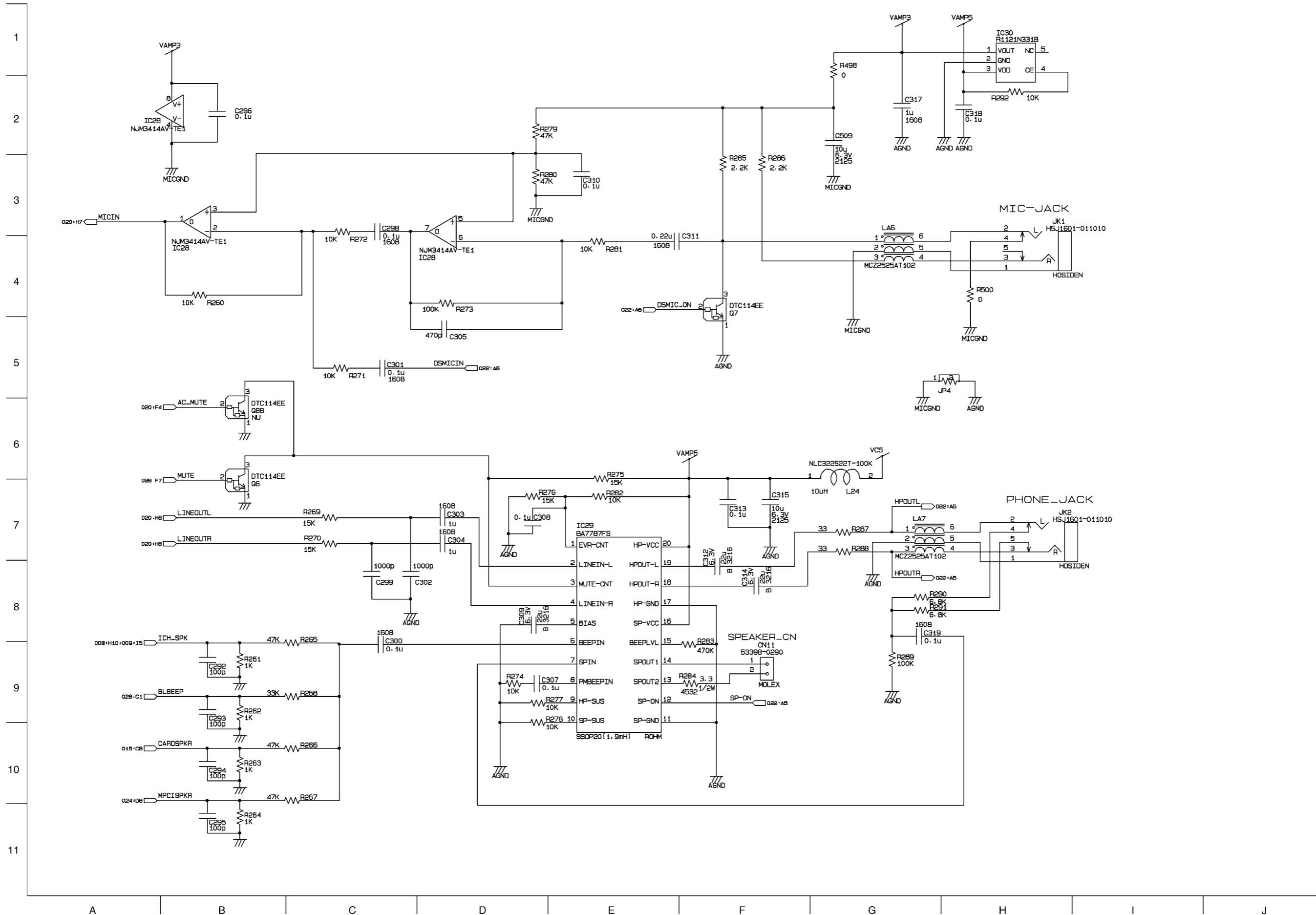
# Main 19 KB PAD CN.



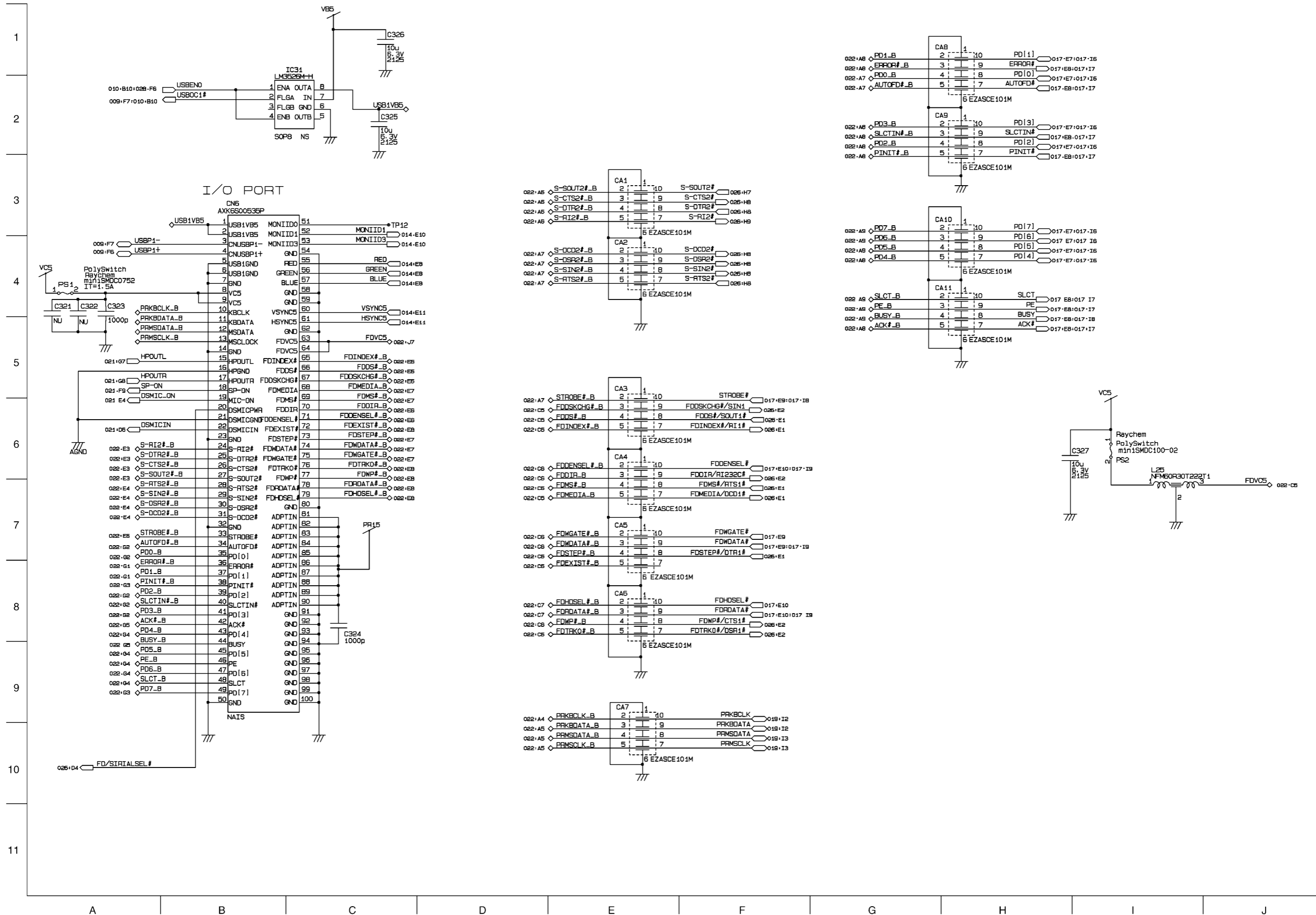
# Main 20 Sound IC



# Main 21 Sound AMP, MIC SPK

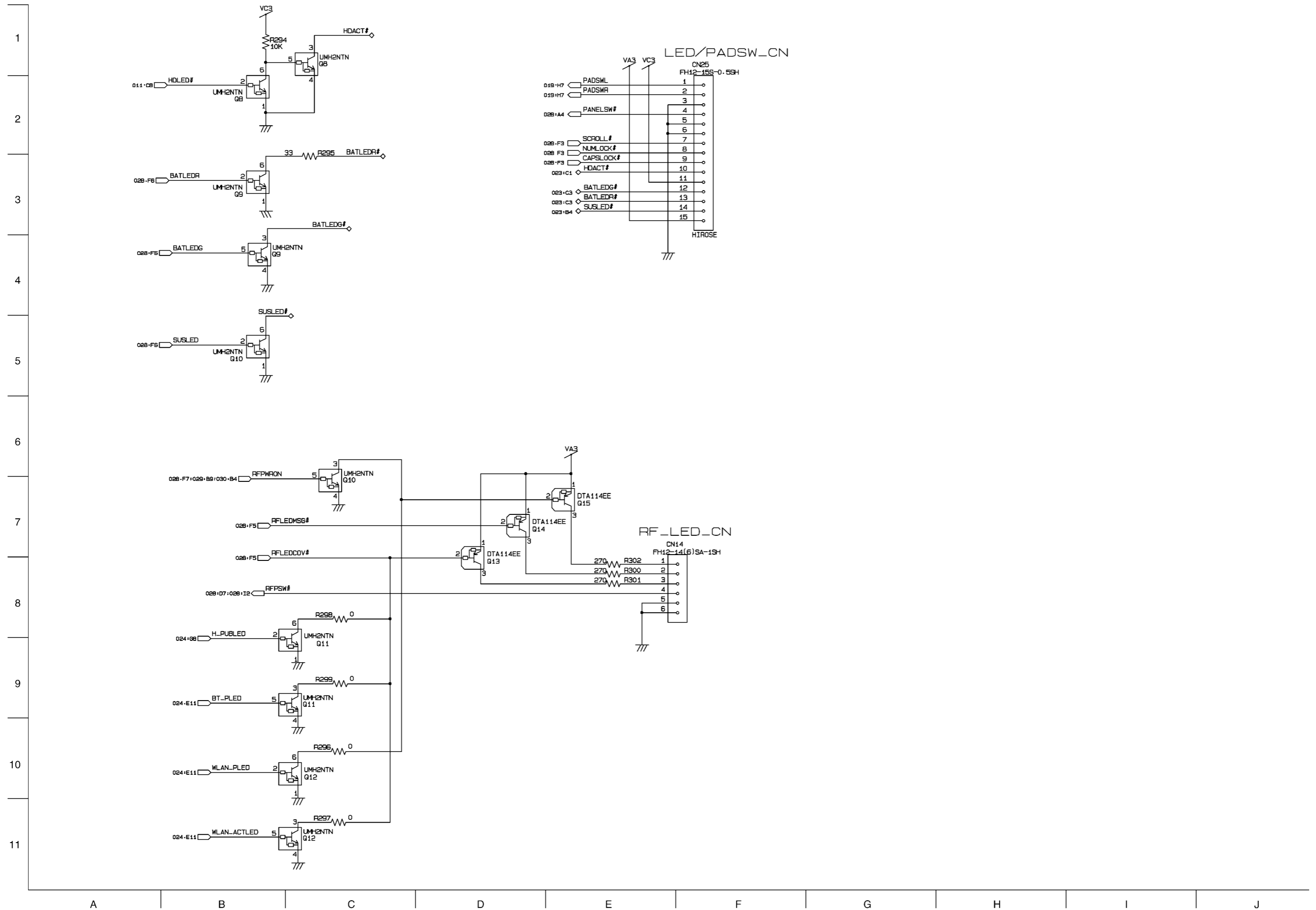


# Main 22 POTORI. EXT CN

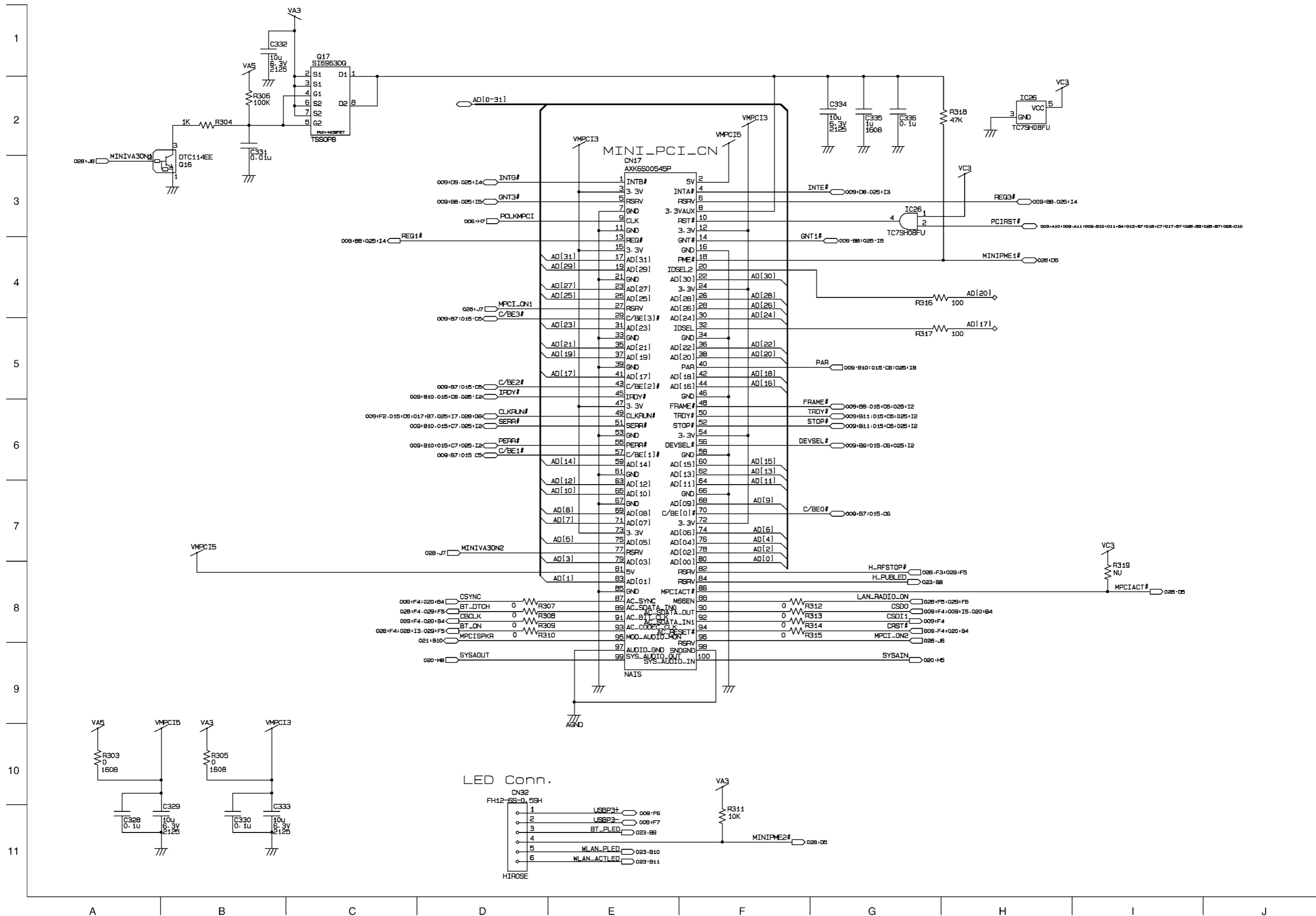




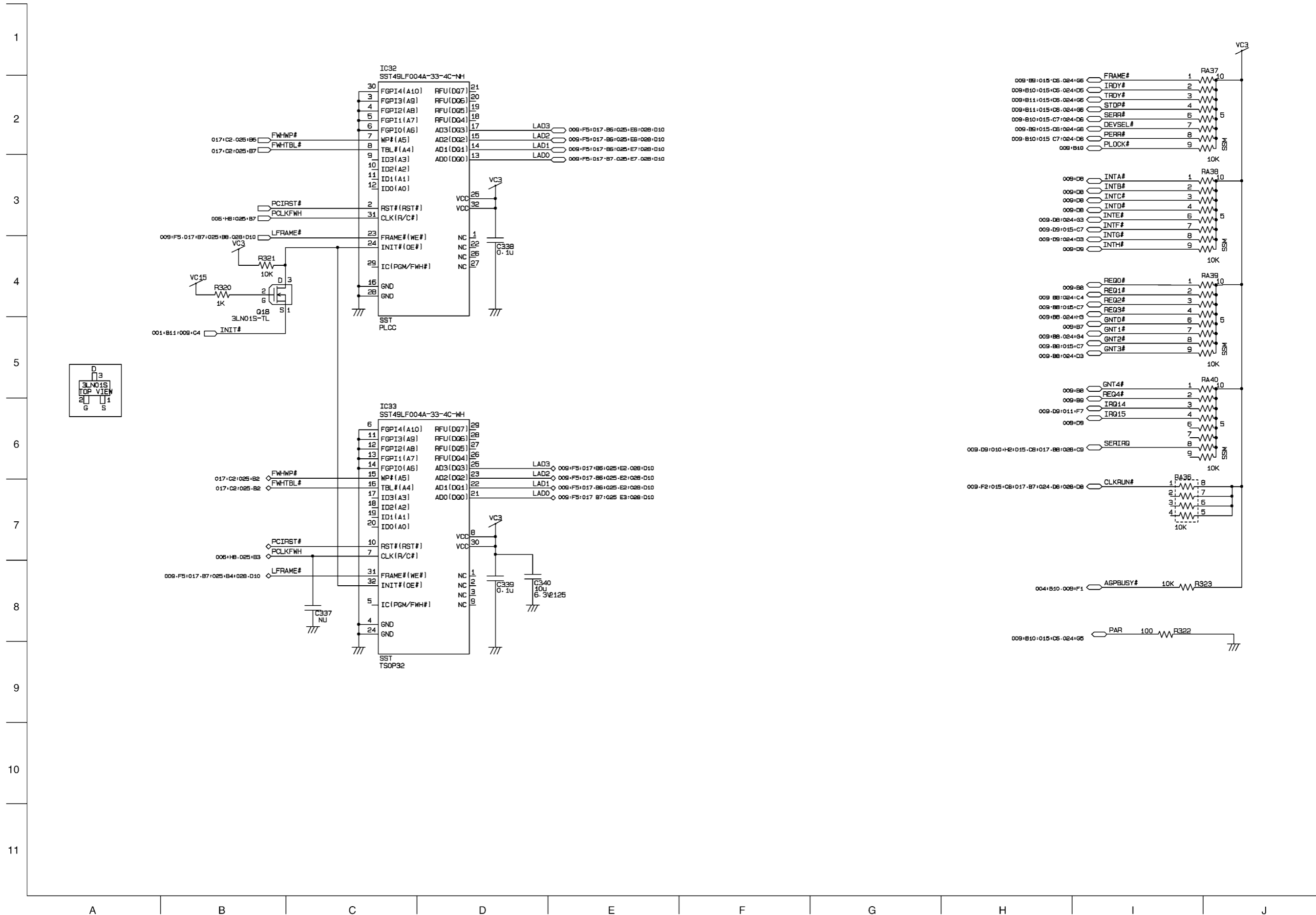
# Main 23 LED, PAD SW CN



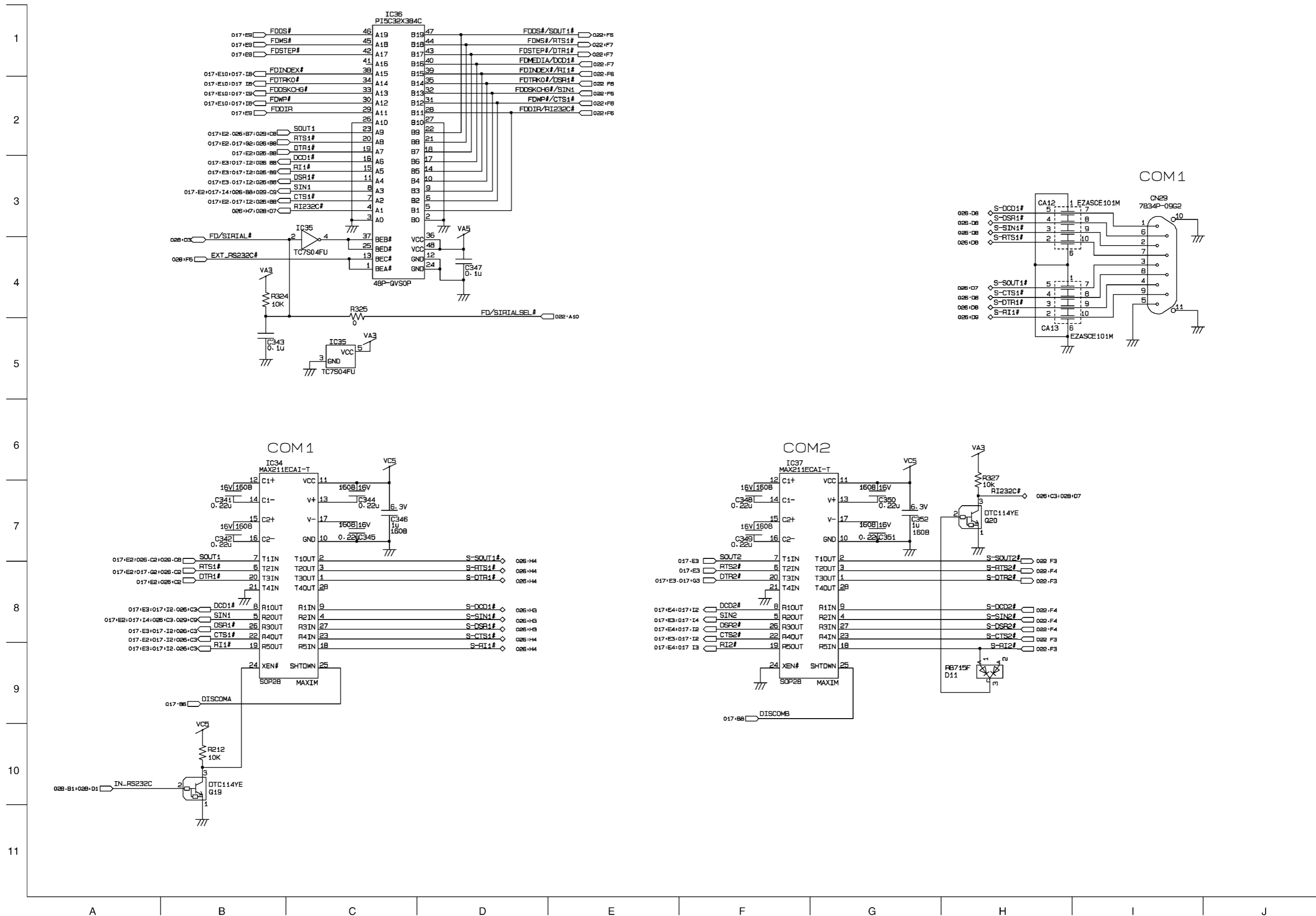
# Main 24 Mini PCI CN.



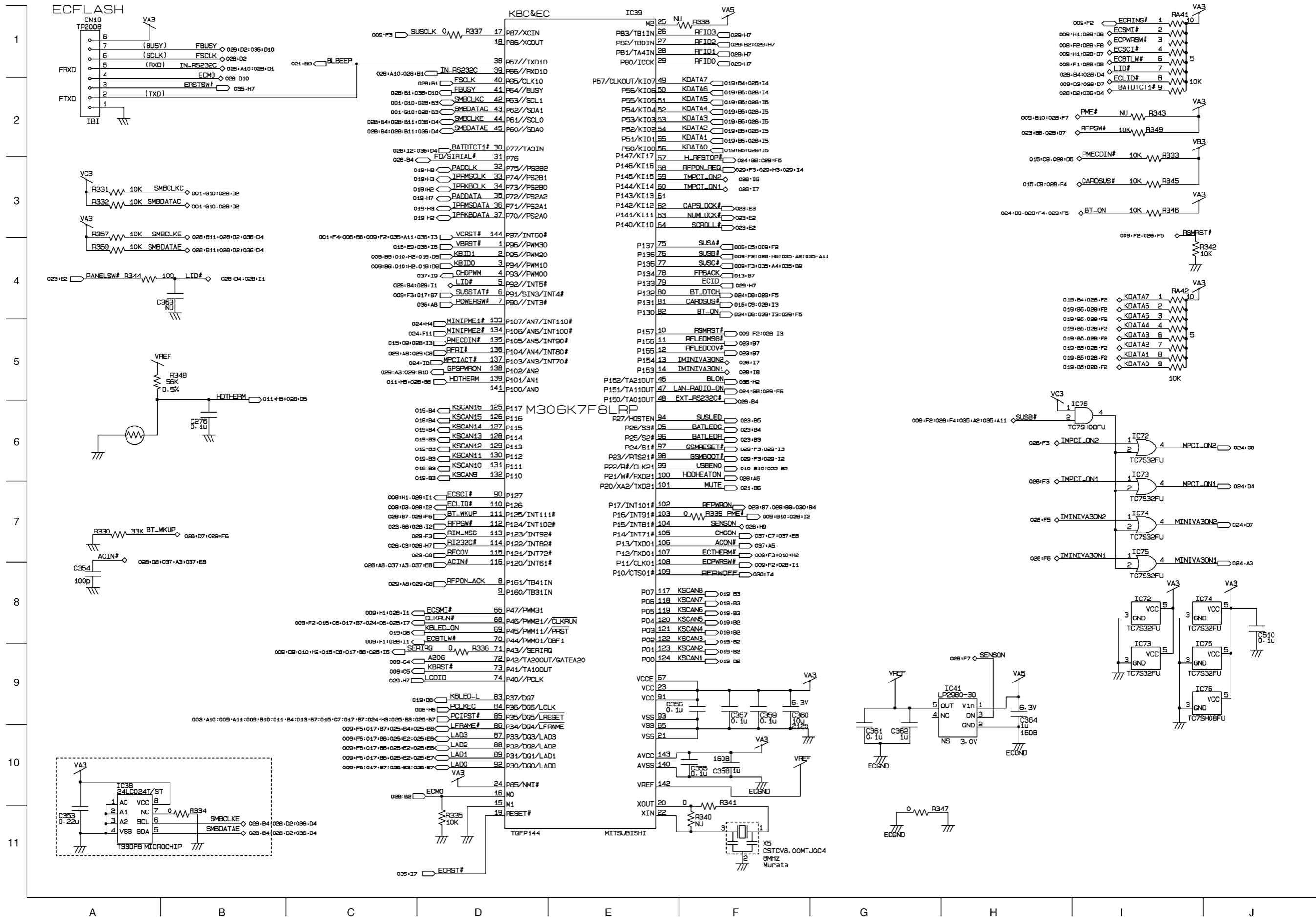
# Main 25 BIOS, Registers



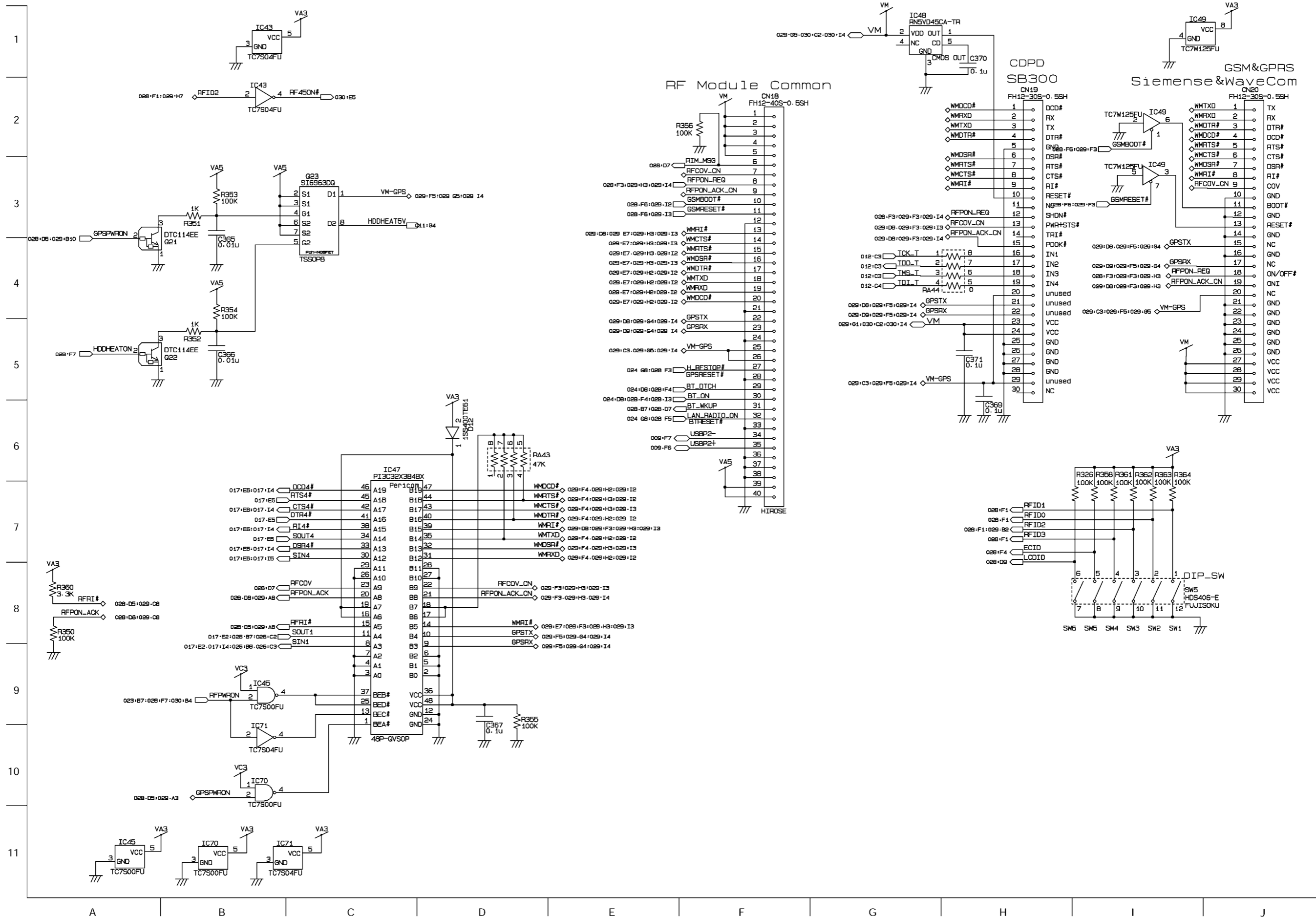
# Main 26 RS232C



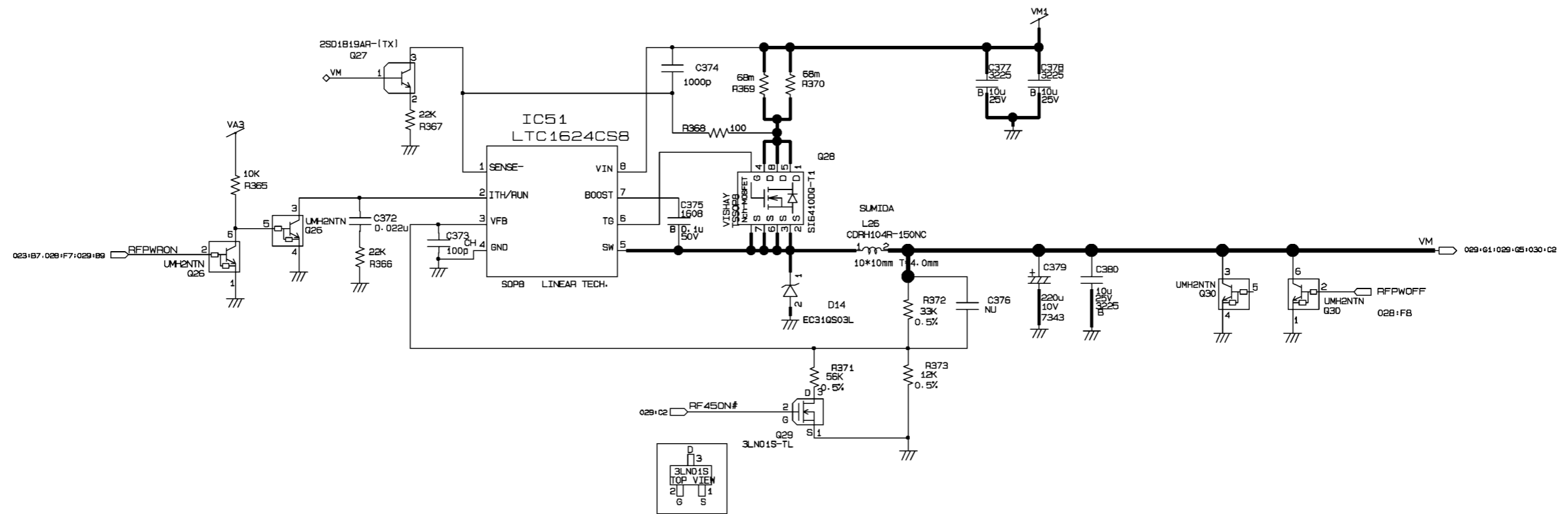
# Main 28 EC, KB



# Main 29 Wireless CN.

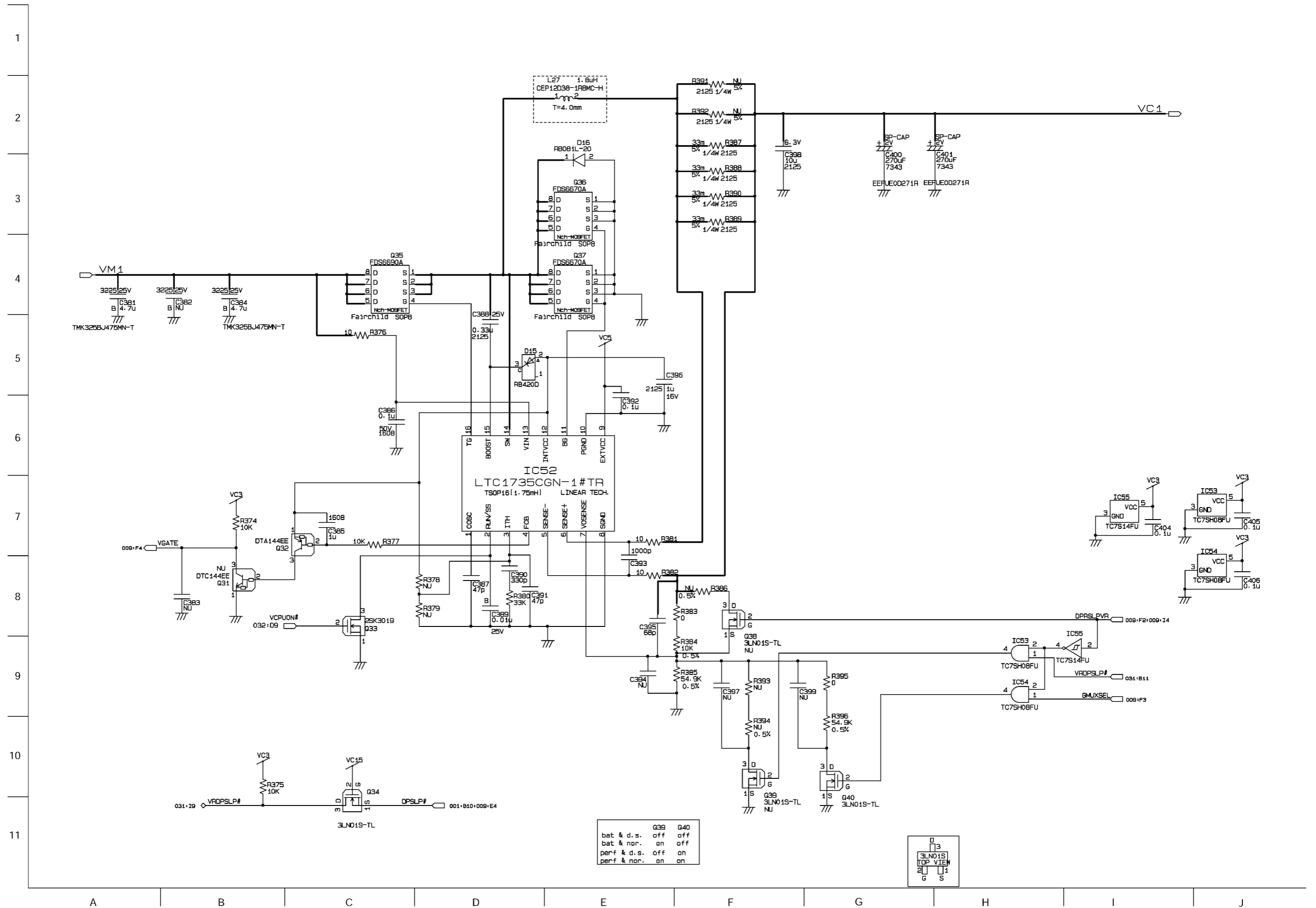


# Main 30 Wireless Power (VM)

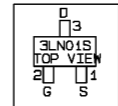


	RFPWON	RF450N#
VM4.5V	H	L
VMSV	H	H

# Main 31 VC1

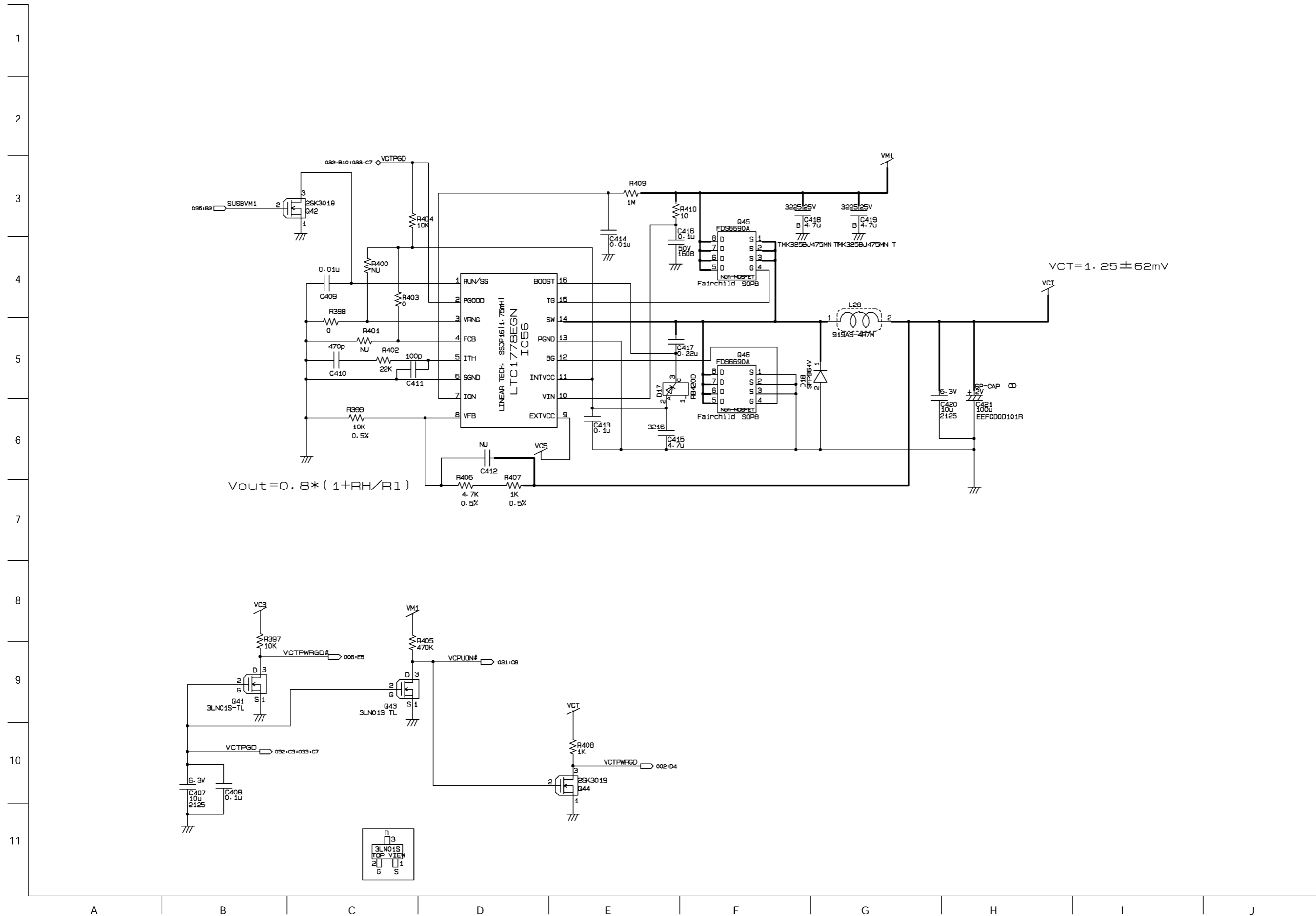


	Q39	Q40
bat & d.s.	off	off
bat & nor.	an	off
perf & d.s.	off	on
perf & nor.	an	on

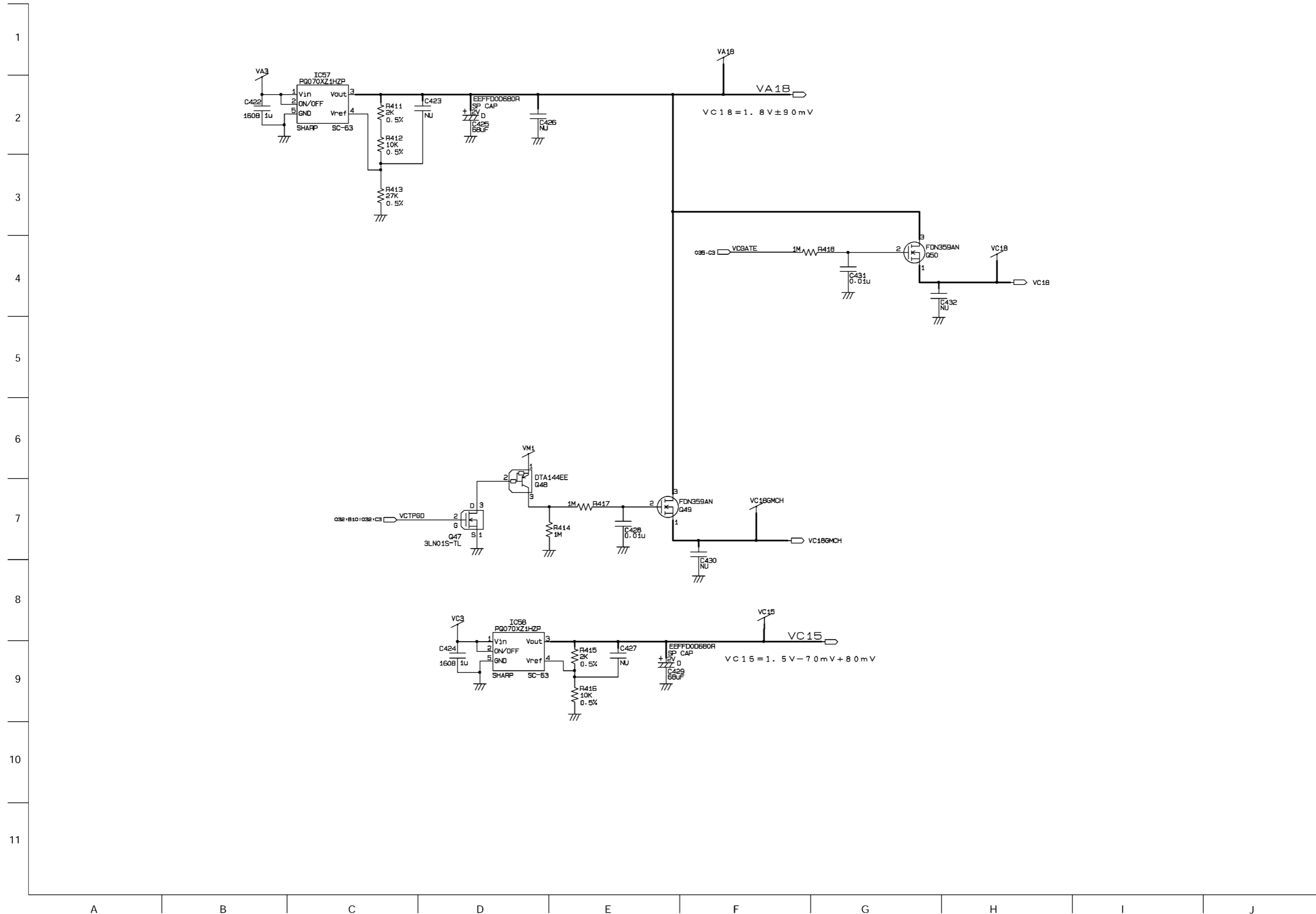




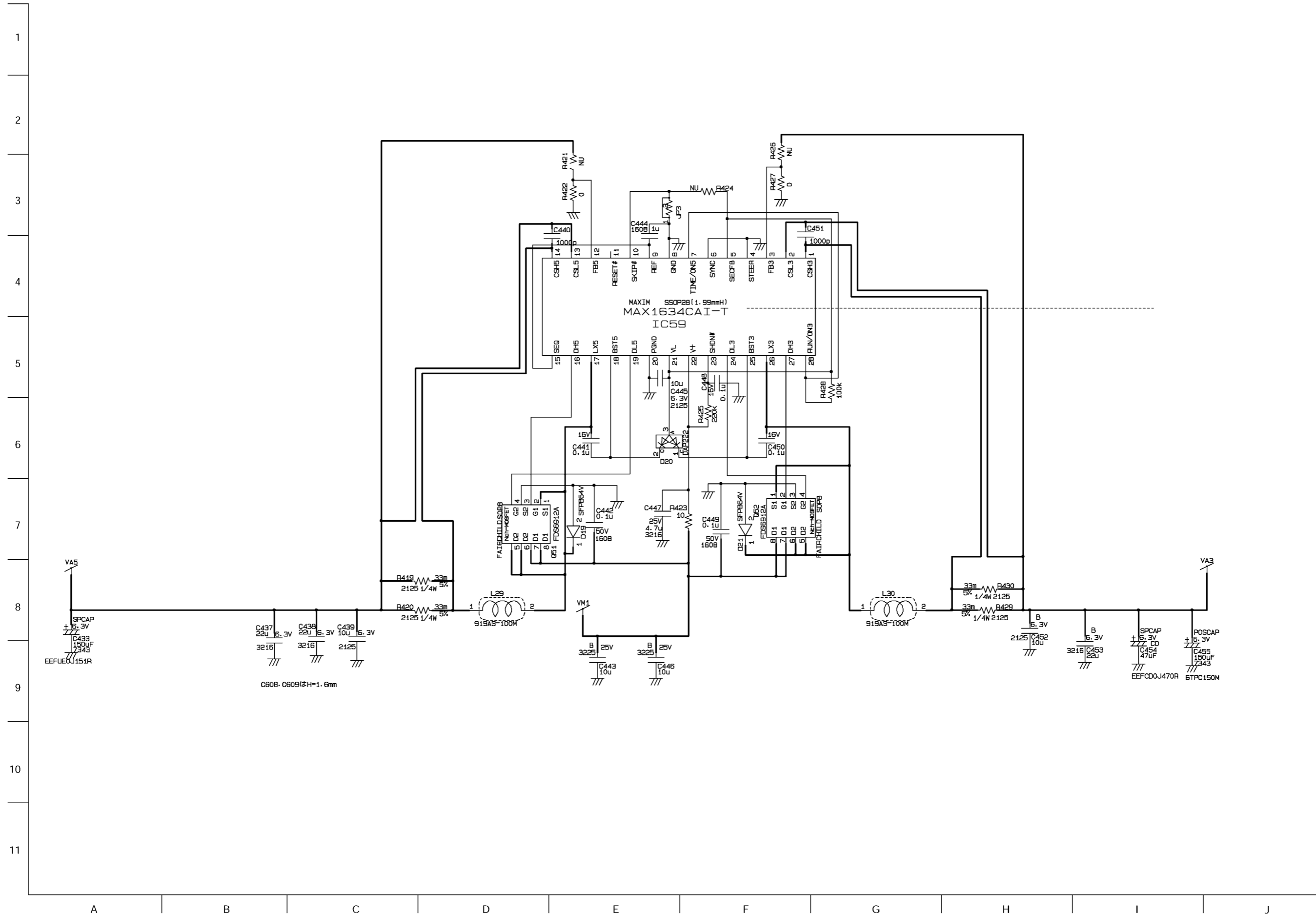
# Main 32 VCT



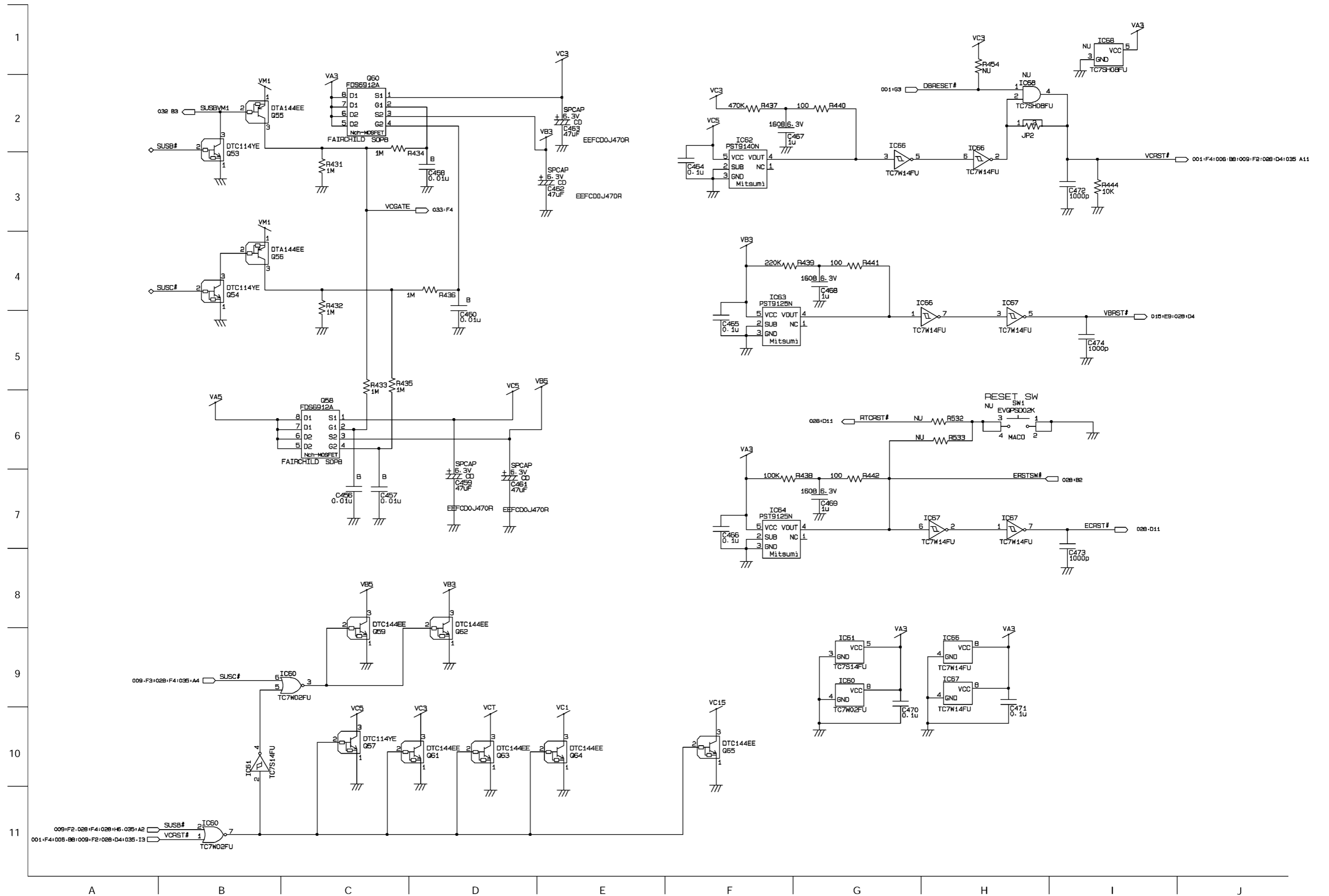
# Main 33 VA1.8, VC1.5



# Main 34 VA3, VA5

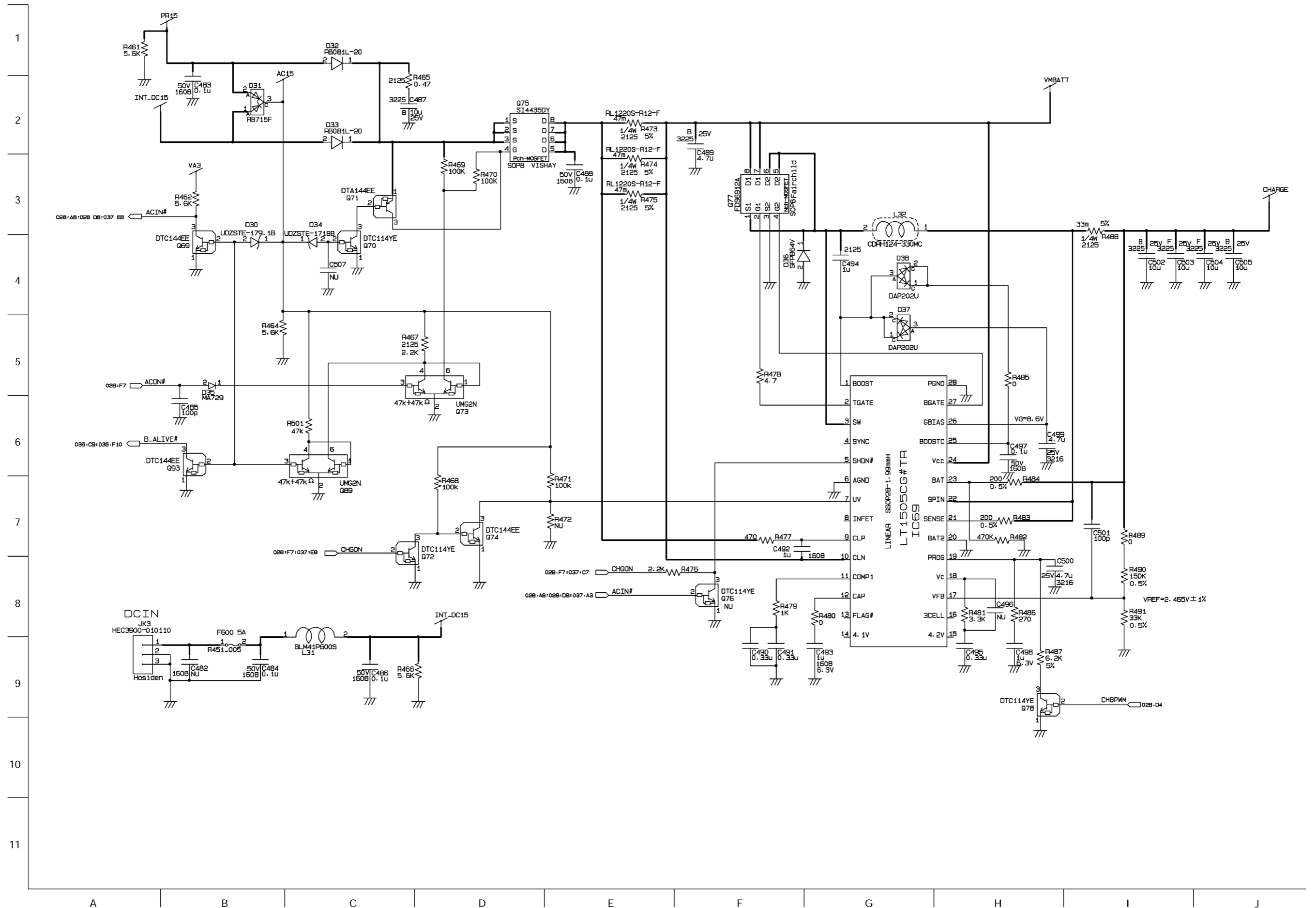


# Main 35 VC3, VB3, VC5, VB5, Reset





# Main 37 DCIN, Battery Charger





## 2. Main PCB<Bottom View>





# Service Manual

Notebook Computer

CF-M34

TOUGHBOOK

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**Simplified**


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This is the Service Manual for the following areas.

M ...for U.S.A. and Canada

E ...for U.K.

G ...for Germany

F ...for France

S ...for Sweden

T ...for Italy

P ...for Spain

## Model Number Reference

The following models are numbered in accordance with the types of CPU, LCD and HDD etc. featured by product.

## Model No. CF-M34 1 2 3 Z 4 5

### 1: CPU type

U: Mobile Intel® Pentium® III Processor M866ULV

### 2: LCD /HDD type

H: 8.4" TFT Color / 30 GB

T: 8.4" TFT Color / 30 GB

### 3: RAM size / Modem - LAN

F: 256 MB / Combo

### 4: Operation System

D: Microsoft® Windows® 2000

F: Multi-Language (Microsoft® Windows® 2000)

G: Multi-Language (Microsoft® Windows® XP Professional)

K: Microsoft® Windows® XP Professional

Q: Dual OS (Microsoft® Windows® 2000 Professional / Microsoft® Windows® XP Professional)

### 4: Area

M/ E /G /F /S /T /P: Refer to above area table

## WARNING

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# WARNINGS

For U.K.

## **This apparatus must be earthed for your safety.**

To ensure safe operation the three-pin plug must be inserted only into a standard three-pin power point which is effectively earthed through the normal household wiring.

Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth. Wrongly wired extension cords are a major cause of fatalities.

The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe.

For your safety, if you have any doubt about the effective earthing of the power point, consult a qualified electrician.

### **FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY**

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 3 amp fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 3 amps and that it is approved by ASTA or BSI to BS 1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

**IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.**

**THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.**

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.


**Warning: THIS APPLIANCE MUST BE EARTHED.**

### **Important**

The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured GREEN-and-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol  coloured GREEN or GREEN-and-YELLOW.

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured BLACK.

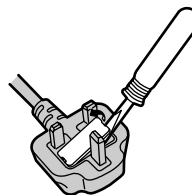
The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured RED.

The mains plug on this equipment must be used to disconnect the mains power.

Please ensure that a socket outlet is available near the equipment and shall be easily accessible.

## **How to replace the fuse**

Open the fuse compartment with a screw-driver and replace the fuse.



### **Warnings**

- This equipment is not designed for connection to an IT power system.  
(An IT system is a system having no direct connections between live parts and Earth; the exposed-conductive-parts of the electrical installation are earthed.  
An IT system is not permitted where the computer is directly connected to public supply systems in the U.K.)
- Disconnect the mains plug from the supply socket when the computer is not in use.

This equipment is produced to BS800/1983.

## LITHIUM BATTERY ⚠

- **CAUTION**

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the equipment manufacture.

Discard used batteries according to the manufacturer's instructions.

## LITHIUMBATTERIES ⚠

**Vorsicht!**


Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

## PILE AU LITHIUM ⚠









ATTENTION: IL Y A DANGER D'EXPLOSION S' IL Y A REMPLACEMENT INCORRECT DE LA PILE. REMPLACER UNIQUEMENT AVEC UNE PILE DU MÊME TYPE OU D'UN TYPE RECOMMANDÉ PAR LE CONSTRUCTEUR. METTRE AU RÉBUT LES PILES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT.

# Replacement Parts List

**Note: Important Safety Notice**

Components identified by  mark have special characteristics important for safety.  
When replacing any of these components, use only manufacturer's specified parts.

**CF-M34UxFZxx**

REF.NO. and AREA	PART NO.	DESCRIPTION	Q'TY
<b>Main Block Unit</b>			
E 1	DL3U11205CAA	PCB, MAIN	RTL 1
E 3	DL3U27057FAA	PCB, MODEM JACK	RTL 1
E 4	DL3U37057FAA	PCB, DOCKING CONNECTOR	RTL 1
E 5	DL3U47057FAA	PCB, LED	RTL 1
E 6	DL3UP7046ABA	PCB, TOUCH SCREEN PANEL	RTL 1
E 7	DFWV48C0604	FPC, LCD	1
E 8	DL3UP7048CAA	FPC, HDD	1
E 9	N2EABEC00001	TOUCH PAD	1
E 10	DFAS28P01ZAF	SPEAKER	1
E 11	DFJE9102ZA	FFC, TOUCH PAD	1
E 12	DFJE9103ZA	FFC, LED	1
E 13	CR2025/S5H	BATTERY, LITHIUM	1
E 14	 DFWP0123ZA	PCB, INVERTER	1
E 15	DFJS703ZA	CABLE, INVERTER	1
E 16	DFJS552ZA	CABLE, SPEAKER	1
E 17	DL3DW9037WAA	LCD (CF-M34UTFZxM)	1
E 17	DL3DW9037XAA	LCD (CF-M34UHFZxx)	1
E 18	N3CABQD00008	HDD	1
E 19(M)	DFSX1A91VBTR	KEYBOARD	1
E 19(E)	DFSX1A92XBTR	KEYBOARD	1
E 19(G)	DFSX1A93XBTR	KEYBOARD	1
E 19(F)	DFSX1A94XBTR	KEYBOARD	1
E 19(T)	DFSX1A98XBTR	KEYBOARD	1
E 19(S)	DFSX1F01XBTR	KEYBOARD	1
E 19(P)	N2ABZJ000008	KEYBOARD	1
E 20	DFJS550YA	CABLE, MODEM	1
E 21	N5HCC0000001	COMBO CARD	1
E 22	DFUB0018ZA	EJECTOR, PCMCIA	1
E 24	DL3U17124AAA	PCB, MPCIA RELAY CARD3	RTL 1
E 52	DFJS641YA	CABLE, LAN	1
E 54	A2CA00000042	LCD BACK LIGHT (CF-M34UTFZxM)	1
E 54	A2CA00000043	LCD BACK LIGHT (CF-M34UHFZxx)	1
<b>Accessories</b>			
A 1(M)	 DFQX5335ZA	OPERATING INSTRUCTION MANUAL	1
A 1(E,G,F,T,S,P)	 *	OPERATING INSTRUCTION MANUAL	1
A 3	 CF-AA1653M1	AC ADAPTOR	1
A 4(M)	 K2CG3DR00003	AC CABLE	1
A 4(E,G,F,T,S,P)	 *	AC Cable	1
A 5	 DFJS535ZA	MODEM CABLE	1
A 6	 DFWV95F0008	BATTERY PACK	1
A 8	DFQC9006ZA-0	SHOULDER BELT	1
A 20	DFHS9010ZA	CLOTH	1


A 21	DFHR9039ZA-0	STYLUS PEN	1
Note: About the parts which written " * " above, please order to Computer Products Europe (CPE) written below. Matsushita Electric (U.K.) Ltd. Computer Products Europe (CPE) TEL: +44-1222-736060 FAX: +44-1222-735500			
<b>Packing Material</b>			
P 1	DFPK1061YA	CASE, PACKING	1
P 2	DFPE0598ZA	CUSHION	1
<b>Mechanical Parts</b>			
K 1	DFMD7583ZB	PLATE, DOCKING CONNECTOR PCB	1
K 2	DFMD7584ZA	PLATE, DOCKING COVER	1
K 4	DFWV84F0080	COVER, KEYBOARD FPC	1
K 5	DFWV84F0081	COVER, LCD FPC	1
K 6	DFMD7589ZB	PLATE, RF FRONT	1
K 7	DFMD7592ZA	PLATE, AUDIO JACK	1
K 8	DFMD7594ZA-0	HOLDER, PCMCIA COVER	1
K 9	DFMX0635ZB	TAPE	2
K 10	DFMX0719XA	INSULATION SHEET, LED CARD	1
K 11	DFMX0736YA	SPACER, AUDIO JACK	1
K 14	DFMY0218ZA	SHEET, CPU HEAT SINK	3
K 15	DFMY5009ZB	HEAT PIPE	1
K 16	DFMY5010ZA	PLATE, HEAT SINK	1
K 19 (M)	DFWV80C0447	CABINET, BOTTOM	1
K 19-1 (M)	DFHG1209ZA	RUBBER FOOT	2
K 19 (E,G,F,T,S,P)	DFWV80C0448	CABINET, BOTTOM	1
K 19-1 (E,G,F,T,S,P)	DFHG1209ZA	RUBBER FOOT	2
K 20	DFWV80A0308	CABINET, TOP	1
K 21	DFHG1270ZB	SHIELD SHEET, AUDIO JACK BEZEL	1
K 22	DFHG1271ZA	SHIELD FOAM, AUDIO JACK	1
K 23	DFHG1276ZA	PLATE, SPEAKER	1
K 25	DFHG1293ZA-0	COVER, AUDIO JACK	1
K 26	DFHG1385ZA-0	COVER, DC JACK	1
K 27	DFHG1295ZB-0	COVER, USB JACK	1
K 28	DFHG1296ZA-0	COVER, SERIAL CONNECTOR	1
K 29	DFHG1297ZA-0	COVER, PCMCIA	1
K 30	DFHG1302ZA-0	COVER, MODEM JACK	1
K 31	DFHG1304ZA	RUBBER, ANTENNA CABLE	1
K 32	DFHR7632ZA-0	SHEET, HANDLE SCREW BLIND	2
K 34	DFHG1330ZA	PAD, TOUCH PAD	1
K 35	DFHE0326ZA	CONDUCTIVE CUSHION, USB	1
K 36	DFKE0488ZA-0	COVER, BATTERY	1
K 37	DFHG1209ZA	FOOT	2
K 38	DFKE0489ZB-0	AUDIO JACK BEZEL	1
K 40	DFKE0490XB	HOLDER, SPEAKER/RTC BATTERY	1
K 41	DFKE0491YA-0	COVER, DOCKING CONNECTOR	1
K 42	DFKE0492ZA	STOPPER, COVER	1
K 43	DFKE9040VB-0	PALM REST COVER	1
K 45	DFBC0239ZA	CLICK BUTTON	1
K 46	DFBD0121ZA-0	KNOB, POWER SW	1
K 47	DFBD9002XA-0	KNOB, BATTERY COVER	1
K 50	DFWV80A0290	CABINET, LCD FRONT/TSPANEL (CF-M34UTFZxM)	1
K 50-1	DFWV84A0198	KIT, TOUCH SCREEN PANEL (CF-M34UTFZxM)	1
K 50	DFWV80A0299	CABINET, LCD FRONT/TSPANEL (CF-M34UHFZxx)	1
K 50-1	DFWV84A0210	KIT, TOUCH SCREEN PANEL (CF-M34UHFZxx)	1
K 51	DFUS0254ZA	SPRING, BUCKLE	1

K 52		DFMC0539ZA	WATER RESISTING SHEET	1
K 53		DFMX0762ZB	CASE, INVERTER PCB	1
K 54		DFBH1100ZA	HINGE	2
K 60		DFHG1299ZA-0	LCD RUBBER	2
K 61		DFHG1300ZA-0	CAP, ANTENNA	1
K 62		DFHG1301ZA-0	CAP, ANTENNA HOLDER	1
K 65		DFWV80C0437	CABINET, LCD REAR	1
K 66		DFHP7069ZA	TAPE, TOUCH SCREEN PANEL PCB	1
K 67		DFKE0496ZA-1	HOLDER, BUCKLE	1
K 68		DFGB0075ZA-0	LOGO BADGE	1
K 69		DFGB0077ZA-1	TOUGHBOOK LABEL	1
K 70		DFBS0055ZA-1	BUCKLE	1
K 71		DFQT6077YA	LABEL, CAUTION, INVERTER	1
K 74		DFMD7581ZA	HDD CASE UPPER	1
K 75		DFMD7582ZA	HDD CASE LOWER	1
K 76		DFHG1613ZA	CUSHION, HDD	1
K 77		DFMD7591ZA-1	COVER, HINGE	1
K 80 (M)	△	DFGT0753YA-0	LABEL, RATING	1
K 80 (E,G,F,T,S,P)	△	DFGT0907ZA	LABEL, RATING	1
K 82		DFQC9005ZA-0	STRAP	1
K 86		DFMD7593YA	PLATE, REFLECT PCMCIA	1
K 87		DFMX0735ZB	SHEET, KBD FPC	1
K 88		DFHG1272ZB	SHIELD SHEET, SERIAL CONNECTOR	1
K 89		DFHG1280YA	COVER SHEET, PCMCIA	1
K 401		DFMX0574ZA	INSULATION SHEET	1
K 402		DFHE0533ZA	GASKET	1
K 403		DFHE0534ZA	PCMCIA ASSIST	1
K 404		DFMX0965ZA	PCB, INSULATION SHEET T-P	1
K 405		DFHG826ZA	ASS'Y, UPPER LCD-TP SHEET	1
K 406		DFHG827ZA	ASS'Y, LOWER LCD-TP SHEET	1
K 407		DFHG828ZA	RUBBER, INVERTER HOLD	1
K 408		DFHE0507ZA	UPPER, LCD CUSHION	2
K 409		DFHE0508ZA	LOWER, LCD CUSHION	1
K 410		DFHE0514ZA	LOWER L, LCD CUSHION	1
K 411		DFHG1434ZA	COVER, JACK, LAN	1
K 413		DFQT9669ZA	LABEL, MS	1
K 414 (M)		DFQT9675ZA	LABEL, ENERGY STAR	1
K 415		DFQT6243ZA	LABEL, AMBIT COMBO	1
K 418		DFMD7653ZA	PLATE, MINI PCI TYPE313 CARD	1
K 419		DFMX0797ZA	INSULATION SHEET MINI PCI TYPE3 RELAY	1
K 420		DFHG807ZB	HOLDER, MINI PCI 3A	1
K 421		DFHE0381ZA	GASKET	1
K 422		DFHG1282YA	SHEET, UPPER, INVERTER CABLE	1
K 423		DFGX0236ZA-0	SHEET	1
K 550		DFMC0654ZA	PLATE, DOCKING EMI L	1
K 551		DFMC0655ZA	PLATE, DOCKING EMI R	1
K 552		DFHE0638ZA	SHIELD SHEET, DSUB	1
K 553		DFHR7649ZA	SHEET B	1
K 554		L9DZAA000002	HEATER	1
K 555		D4CZ71030001	THERMISTOR, NTC	1
K 556 (E,G,F,T,S,P)		DFMD4040ZA-0	SIM COVER, GSM/GPRS	1
K 557 (E,G,F,T,S,P)		DFHE0637ZA	SHIELD SHEET, SIM COVER	1

K 558	DFMX1031ZA	SHEET, PCMCIA	1
K 559	DFMD3096ZA	HOLDER, USB CONNECTOR	1
K 560	DFHG1556ZA	LCD CUSHION UPPER-2	1
K 561	DFMC0567ZA	SHIELD SHEET B	1
K 562 (E,G,F,T,S,P)	DXQN17+A3FZL	SCREW	2
K 565	XSB2+4	SCREW	1
K 566 (E,G,F,T,S,P)	DFMC0514ZA	CONDUCTIVE SHEET	1
K 567 (E,G,F,T,S,P)	DFHE0354ZA	CONDUCTIVE SHEET	1
K 568 (E,G,F,T,S,P)	DFHE0513ZA	CONDUCTIVE SHEET	1
K 569	DFHR3301ZA	SHEET, MINI PCI CARD	2
K 570	DFHE0664ZA	GASKET	2
K 101	XSB2+4FNL	SCREW	20
K 103	XYN2+J10FN	SCREW	2
K 104	XYN2+J4FN	SCREW	3
K 105	XYN2+J6FN	SCREW	22
K 106	XYN2+J8FZ	SCREW	8
K 107	XYN26+J8FN	SCREW	4
K 108	IKT0104AA	SCREW	2
K 109	DFHE5117ZA	SCREW	9
K 110	XYN2+J6	SCREW	1
K 111	XYN2+J8FN	SCREW	2
K 112	XYN2+J8FZ	SCREW	10
K 113	XYN3+J7FNL	SCREW	2
K 114	XYN4+J9FZ	SCREW	2
K 115	XYN2+J5FZ	SCREW	2

# Replacement Parts List

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When replacing any of these components use only manufacturer's specified parts.

## CF-M34UxFZxx

REF. NO and AREA	PART NO.	DESCRIPTION	Q'TY
<b>Main PCB</b>			
C 2 4 6 8 9 11 12 14 58 59 60 61 64 65 66 67 68 76 77 78 79 80 81 82 83 84 85 86 87 90 91 95 98 99 106 107 108 110 112 126 140 141 142 143 148 155 156 163 168 172 174 175 176 177 178 179 180 181 182 183 184 185 187 188 189 190 191 194 198 199 201 204 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 243 245 246 247 248 249 254 261 264 265 270 273 276 277 279 282 289 296 307 308 310 313 318 328 330 336 338 339 343 347 355 356 357 359 361 367 369 370 371 392 404 405 406 408 413 441 448 450 464 465 466 470 471 480 510 511 512 513	DCUN1C104ZFD	CAPACITOR, 16V, 0.1 $\mu$ F	146
C 3	F1G1H222A450	CAPACITOR, 50V, 2200 pF	1
C 5 7 13 54 55 72 421	EEFCD0D101R	CAPACITOR, 2V, 100 $\mu$ F	7
C 10	EEFFD0J330R	CAPACITOR, 6.3V, 33 $\mu$ F	1
C 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 353	F1G0J224A004	CAPACITOR, 6.3V, 0.22 $\mu$ F	25
C39 40 41 42 43 70 71 73 74 75 113 114 127 138 139 169 170 171 173 186 200 203 205 222 244 250 251 253 262 266 274 281 315 325 326 327 329 332 333 334 340 360 398 407 420 439 445 452 509	F1J0J106A004	CAPACITOR, 6.3V, 10 $\mu$ F	49



C44 45 46 47 48 49 50 51 52 53 128 130 132 134 154 157 158 196 275 285 290 303 304 317 335 346 352 358 362 364 385 422 424 444 467 468 469 492 493 498	F1H0J1050013	CAPACITOR, 6.3V, 1 µF	40
C56 57 305 410	F1G1H471A450	CAPACITOR, 50V, 470 pF	4
C 62 88 89 92 93 94 96 97 100 101 102 103 104 105 115 116 117 118 119 122 123 124 129 131 133 135 147 149 164 242 257 331 365 366 389 409 414 428 431 456 457 458 460	F1G1E103A062	CAPACITOR, 25V, 0.01 µF	43
C 109 111 425 429	EEFFD0D680R	CAPACITOR, 2V, 68 µF	4
C 152 153	F1G1H6R0A452	CAPACITOR, 50V, 6 pF	2
C 165 309 312 314 437 438 453	F1K0J226A004	CAPACITOR, 6.3V, 22 µF	7
C 197	F1G1C473A004	CAPACITOR, 16V, 0.047 µF	1
C 144 287 288 299 302 323 324 374 393 440 451 472 473 474 477 607	F1G1H102A450	CAPACITOR, 50V, 1000 pF	16
C 192 193 195 387 391	F1G1H470A451	CAPACITOR, 50V, 47 pF	5
C 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241	F1G1H100A452	CAPACITOR, 50V, 10 pF	19
C 252 396 494	F1J1C1050011	CAPACITOR, 16V, 1 µF	3
C 255 256 268 269 292 293 294 295 354 373 411 485 501	F1G1H101A451	CAPACITOR, 50V, 100 pF	13
C 271 272	F1G1H150A451	CAPACITOR, 50V, 15 pF	2
C 278 284 311	F1H1A224A028	CAPACITOR, 10V, 0.22 µF	3
C 298 300 301 319 375 386 416 442 449 481 483 484 486 488 497	F1H1H104A783	CAPACITOR, 50V, 0.1 µF	15
C 341 342 344 345 348 349 350 351	ECUV1C224ZFV	CAPACITOR, 16V, 0.22 µF	8
C 372	F1G1C223A033	CAPACITOR, 16V, 0.022 µF	1
C 377 378 446 503 504	F1L1C1060014	CAPACITOR, 35V, 10 µF	5
C 379	DCS1ATB221M	CAPACITOR, 10V, 220 µF	1
C 380	DCUI1C106HDB	CAPACITOR, 16V, 10 µF	1
C 381 384 418 419 489	F1L1E4750006	CAPACITOR, 25V, 4.7 µF	5
C 388 490 491 495	F1J1H334A679	CAPACITOR, 50V, 0.33 µF	4
C 390	F1G1H331A450	CAPACITOR, 50V, 330 pF	1
C 395	F1G1H680A451	CAPACITOR, 50V, 68 pF	1
C 400 401	EEFUE0D271R	CAPACITOR, 2V, 270 µF	2
C 415 447 499 500	ICUV1E475ZFT	CAPACITOR, 25V, 4.7 µF	4
C 417	F1J1H224A679	CAPACITOR, 50V, 0.22 µF	1
C 433	EEFUE0J151R	CAPACITOR, 6.3V, 150 µF	1
C 443 487 502 505 506	F1L1E106A017	CAPACITOR, 25V, 10 µF	5
C 454 459 461 462 463	EEFCD0J470R	CAPACITOR, 6.3V, 47 µF	5
C 455	F4Z0J1570003	CAPACITOR, 6.3V, 150 µF	1

CA 1 2 3 4 5 6 7 8 9 10 11 12 13		EZASCE101M	CAPACITOR ARRAY	13
CN 2		DFJS356ZA004	CONNECTOR	1
CN 3		DFJP050ZA003	CONNECTOR, RTC BATTERY	1
CN 4		K1MN50A00006	CONNECTOR	1
CN 5		DFJP224ZA068	CONNECTOR, PC CARD SLOT	1
CN 6		DFJP214ZA100	CONNECTOR, DOCKING CONNECTOR PCB	1
CN 7		DFJS16N23ZAJ	CONNECTOR, KEYBOARD	1
CN 8		DFJS547ZA012	CONNECTOR, TOUCH PAD	1
CN 12		1123258-1	CONNECTOR	1
CN 11		DFJP050ZA002	CONNECTOR, FOR SPEAKER	1
CN 13		DFJS207YA045	CONNECTOR, LCD/TOUCH SCREEN PANEL PCB	1
CN 14		DFJS549ZA006	CONNECTOR	1
CN 17		K1KAA0A00079	CONNECTOR, MODEM CONNECTOR PCB	1
CN 18		K1MN40B00003	CONNECTOR	1
CN 19 20		DFJS207ZA030	CONNECTOR	2
CN 25		DFJS207ZA015	CONNECTOR, LED PCB	1
CN 27		DFJS13N24ZAJ	CONNECTOR, KEYBOARD	1
CN 29		DFJP236ZA009	CONNECTOR, SERIAL PORT	1
CN 32		DFJS207ZA006	CONNECTOR	1
CN 33		K1KA04A00335	CONNECTOR	1
CN 34		K1KA02A00364	CONNECTOR	1
CN 600		3900170-08	CONNECTOR, MAIN BATTERY	1
CN 602		DFJP217ZA005	CONNECTOR, INVERTER PCB	1
D 2 7 8 35		MA729-TX	DIODE	4
D 3 11 31 50		B0JDBE000002	DIODE	4
D 4 5 6 22 23		DEDDA204UT	DIODE	5
D 9 12		DED1SS400T61	DIODE	2
D 14		DEDEC31QS03L	DIODE	1
D 15 17		DEDRB420DT97	DIODE	2
D 16 32 33 39 41		DEDRB081L20	DIODE	5
D 18 19 21 36		DEDSFPB64V	DIODE	4
D 20		DAP222TL	DIODE	1
D 25 26 27 28		DEDUDZ6R2BT	DIODE	4
D 29		DED03P2JT1-D	DIODE	1
D 30		B0BC9R000008	DIODE	1
D 34		B0BC01700015	DIODE	1
D 37 38		B0ADCJ000025	DIODE	2
D 40 51		DAN222TL	DIODE	2
F 1 2 602	△	XBADMMCT010U	FUSE (1A)	3
F 3	△	K5H502300001	FUSE (5A)	1
F 600 601	△	XBAD4515R00	FUSE (5A)	2
L 1		DDAZR4R7KT2L	INDUCTOR	1
L 14 17		G1CYYYZ00036	INDUCTOR	2
L 24		G1C100KA0002	INDUCTOR	1
L 26		G1A150ZA0004	COIL	1
L 28		G1C4R7MA0022	INDUCTOR	1
L 32		G0A330H00006	INDUCTOR	1
SW 3		SSST01-3A	SW, POWER	1
SW 5		K0D166A00003	SW	1
JK 1, 2		IHC0721AA	JK, HEADPHONE	2
JK 3		IHC0626AA	JK, DC-IN	1
IC 1		C2GBC0000164	IC, CPU	1
IC 2		C1DB00000919	IC, GMCH	1
IC 3		C1DB00000941	IC, SUPER I/O	1
IC 4		C1ZBZ0002165	IC, PLD	1
IC 5		C1DB00000578	IC, TEMP SENSOR	1
IC 6 23 24		DA7W66UT12L0	IC, SWITCH	3
IC 7		C9ZB00000407	IC, PLL	1
IC 9 10 11 12		C3ABRG000021	IC, SDRAM	4

IC 13	C1DB00000908	IC, ICH3	1
IC 14 31	C0DBZH00004	IC, USB POWER CONTROLLER	2
IC 15 45 70	DA7S00UT85L0	IC, AND GATE	3
IC 16	C1DB00000881	IC, VGA CONTROLLER	1
IC 17 18	DA7ST08U85L0	IC, AND GATE	2
IC 19	DAR5C4752T-R	IC, PCMCIA CONTROLLER	1
IC 20	DA2562A1BX2V	IC, BIPOLAR LOGIC	1
IC 22 35 43 71	DA7S04UT85L0	IC, INVERTER	4
IC 26 53 54 76	DA7SH08U85L0	IC, AND GATE	4
IC 27	C1BB00000670	IC, AC97 CODEC	1
IC 28	DAM3414AVTEP	IC, OP AMP	1
IC 29	DA7787FSE2E	IC, SOUND AMP	1
IC 30	DA121N331BRR	IC, REGULATOR	1
IC 33	C3FBKC000076	IC, BIOS	1
IC 34 37	C0ZBZ0000526	IC, SERIAL BUFFER	2
IC 36	DA32X384CBT	IC, QUICK SW	1
IC 38	C3EBDC000036	IC, EEPROM	1
IC 39	C2CBHF000243	IC, EC	1
IC 41 77	DALP298030N	IC, BIPOLAR LINEAR	2
IC 47	C0JBAZ001945	IC, BUS SWITCH	1
IC 48	DAN5VD45CARR	IC, RESET	1
IC 49	C0JBAZ000279	IC, INVERTER	1
IC 51	DAC1624CS8XU	IC, DC/DC CONVERTER	1
IC 52	C0DBAFH00006	IC, DC/DC CONTROLLER	1
IC 55 61	DA7S14UT85L0	IC, INVERTER	2
IC 56	C0DBAFH00011	IC, DC/DC CONVERTER	1
IC 57 58	C0DBEZG00010	IC, REGULATOR	2
IC 59	DA1634CAITXX	IC, STEP REGULATOR	1
IC 60	DA7W02UT12L0	IC, NOR GATE	1
IC 62	DAPST9140NXT	IC, RESET	1
IC 63 64	DAPST9125NXT	IC, RESET	2
IC 66 67	DA7W14UT12L0	IC, INVERTER	2
IC 69	C1DB00000534	IC, CHARGER	1
IC 72 73 74 75	DA7S32UT85L0	IC, OR GATE	4
IC 78	TC7W74FUTE	IC, FLIP FLOP	1
L 2 3 5 6	DDB5Z005-L	INDUCTOR	4
L 4 9 10	DDB5Z031J-L	INDUCTOR	3
L 7 8 11	DDB5Z024E-L	INDUCTOR	3
L 12 15 18 19	DEAM51R0P506	FILTER	4
L 13 16	NFM39R12C221	FILTER	2
L 25	DEAM60R3T222	FILTER	1
L 27	DDAZS1R8MTZE	INDUCTOR	1
L 29 30	DDAZS100MT3T	INDUCTOR	2
L 31	DDB5Z028C-L	INDUCTOR	1
LA 1 2 3 4 5	ILH0070AA	TRANSFORMER	5
LA 6 7	MCZ2525AT102	FERRITE BEAD ARRAY	2
PS 1	MINISMDC0752	POLY SWITCH	1
PS 2	MINISMDC1002	POLY SWITCH	1
Q 1 19 20 53 54 57 70 72 74 78 81	DETC114YETL	TRANSISTOR	11
Q 2 3 33 42 44 91	2SK3019TL	TRANSISTOR	6
Q 4 6 7 16 21 22	DETC114EETL	TRANSISTOR	6
Q 5 17 23	DASI6963DQ	TRANSISTOR	3
Q 8 9 10 11 12 26 30 92	UMH2NTN	TRANSISTOR	8
Q 13 14 15	DETA114EETL	TRANSISTOR	3

Q 18 29 34 40 41 43 47	DA3LN01STL	TRANSISTOR	7
Q 27	2SD1819ARTX	TRANSISTOR	1
Q 28	DASI6410DQT1	TRANSISTOR	1
Q 32 48 55 56 71	DETA144EETL	TRANSISTOR	5
Q 35 45 46	DAFDS6690A	TRANSISTOR	3
Q 36 37	DAFDS6670A	TRANSISTOR	2
Q 49 50	DAFDN359AN	TRANSISTOR	2
Q 51 52 58 60 77	DAFDS6912A	TRANSISTOR	5
Q 59 61 62 63 64 65 69 93	DETC144EETL	TRANSISTOR	8
Q 67	2SK1582T2	TRANSISTOR	1
Q 68 75	DASI4435DYTA	TRANSISTOR	2
Q 73 89	DETUMG2NTR	TRANSISTOR	2
Q 82 90	DASI6415DQT1	TRANSISTOR	2
R 1	D0HA111ZA001	RESISTOR, 1/16W, 110Ω	1
R 2 3 16 187 188	ERJ2GEJ151X	RESISTOR, 1/16W, 150Ω	5
R 4	ERJ2GEJ302X	RESISTOR, 1/16W, 3kΩ	1
R 5 6 7 20	ERJ2GEJ152X	RESISTOR, 1/16W, 1.5kΩ	4
R 8 70 71 72 73 74 75 76 77 78 79 376 381 382 410 423	ERJ2GEJ100X	RESISTOR, 1/16W, 150Ω	16
R 9 27	ERJ2GEJ241X	RESISTOR, 1/16W, 240Ω	2
R 10 12 189	ERJ2GEJ390X	RESISTOR, 1/16W, 39Ω	3
R 13	ERJ2GEJ201X	RESISTOR, 1/16W, 200Ω	1
R 14 125	ERJ2GEJ220X	RESISTOR, 1/16W, 22Ω	2
R 15	ERJ2GEJ511X	RESISTOR, 1/16W, 510Ω	1
R 17	D1BA4990A004	RESISTOR, 1/16W, 499Ω	1
R 18 25 52 53 65 66 68 146 147 407	D0HA102ZA001	RESISTOR, 1/16W, 1kΩ	10
R 19 107	ERJ2GEJ221X	RESISTOR, 1/16W, 220Ω	2
R 21 22 40 41 60 61 110 113 114	D0HA330ZA002	RESISTOR, 1/16W, 33Ω	9
R 23 88 96 103 104 105 106 109 135 138 148 150 152 167 177 179 190 210 212 215 216 217 218 220 221 234 258 259 260 271 272 274 277 278 281 282 292 294 311 321 323 324 327 331 332 333 335 342 345 346 349 357 359 365 374 375 377 397 404 443 444 460	ERJ2GEJ103X	RESISTOR, 1/16W, 10kΩ	62
R 24 39 62	D1BA4750A004	RESISTOR, 1/16W, 475Ω	3
R 26 191 192 411 415	D0HA202ZA001	RESISTOR, 1/16W, 2kΩ	5
R 29 461 462 464 466	ERJ2GEJ562X	RESISTOR, 1/16W, 5.6kΩ	5
R 30 43 44 46 48 97 100 166 181 182 183 184 203 222 225 226 227 228 229 261 262 263 264 304 320 351 352 408 479 504 513	ERJ2GEJ102X	RESISTOR, 1/16W, 1kΩ	31
R 31 36 47	D1BA56R2A003	RESISTOR, 1/16W, 56.2Ω	3

R 32 33 132 139 140 143 156 158 205 208 237 238 239 240 252 296 297 298 299 303 307 308 309 310 312 313 314 315 325 334 336 337 339 341 347 383 395 398 403 422 427 480 485 498 500	ERJ2GE0R00X	RESISTOR, 1/16W, 0Ω	45
R 34 35 37 38 63 64	ERJ2RKF61R9X	RESISTOR, 1/16W, 61.9Ω	6
R 42	D1BA14R0A003	RESISTOR, 1/16W, 14Ω	1
R 45	D0HA270ZA002	RESISTOR, 1/16W, 27Ω	1
R 49	ERJ2RKF1370X	RESISTOR, 1/16W, 137Ω	1
R 50 51 207 316 317 322 344 368 440 441 442 445 446 447 451 452 453 455	ERJ2GEJ101X	RESISTOR, 1/16W, 100Ω	18
R 54 56 57	ERJ2RKF54R9X	RESISTOR, 1/16W, 54.9Ω	3
R 55	ERJ2RKF27R4X	RESISTOR, 1/16W, 27.4Ω	1
R 58	ERJ2RKF80R6X	RESISTOR, 1/16W, 80.6Ω	1
R 59	D0HA470ZA002	RESISTOR, 1/16W, 47Ω	1
R 69 483 484	D0HA201ZA001	RESISTOR, 1/16W, 200Ω	3
R 82	ERJ2RKF2550X	RESISTOR, 1/16W, 255Ω	1
R 84	ERJ2GEJ561X	RESISTOR, 1/16W, 560Ω	1
R 85 90 136 137 198 200 285 286 476	ERJ2GEJ222X	RESISTOR, 1/16W, 2.2kΩ	9
R 94 95	ERJ2GEJ1R0X	RESISTOR, 1/16W, 1Ω	2
R 112	D1BA2210A004	RESISTOR, 1/16W, 221Ω	1
R 115 116 117 118 119 120 122 123 124 130 131 155 287 288 295	ERJ2GEJ330X	RESISTOR, 1/16W, 33Ω	15
R 127	ERJ2GEJ244X	RESISTOR, 1/16W, 240kΩ	1
R 133 134 194 196 253 256 449	ERJ2GEJ472X	RESISTOR, 1/16W, 4.7kΩ	7
R 141 250 366 367 402 456	ERJ2GEJ223X	RESISTOR, 1/16W, 22kΩ	6
R 142	D1BA36R5A003	RESISTOR, 1/16W, 36.5kΩ	1
R 154	D1BA18R2A003	RESISTOR, 1/16W, 18.2Ω	1
R 157 159	ERJ3GEYJ106V	RESISTOR, 1/16W, 10MΩ	2
R 165 269 270 275 276	ERJ2GEJ153X	RESISTOR, 1/16W, 15kΩ	5
R 185 193 195 197	D1BA75R0A003	RESISTOR, 1/16W, 75Ω	4
R 186	D0HA150ZA002	RESISTOR, 1/16W, 15Ω	1
R 199 201 202	ERJ2RKF37R4X	RESISTOR, 1/16W, 37.4Ω	3
R 204 241 242 244 273 289 306 326 350 353 354 355 356 358 361 362 363 364 428 438 468 469 470 471 505 506	ERJ2GEJ104X	RESISTOR, 1/16W, 100kΩ	26
R 211 265 266 267 279 280 318 494 497 501	ERJ2GEJ473X	RESISTOR, 1/16W, 47kΩ	10
R 257	ERJ6GEY0R00V	RESISTOR, 1/10W, 0Ω	1
R 268 330 380	ERJ2GEJ333X	RESISTOR, 1/16W, 33kΩ	3
R 283 405 437 459 482 496 502 503	ERJ2GEJ474X	RESISTOR, 1/16W, 470kΩ	8
R 284	ERJ12YJ3R3H	RESISTOR, 1/2W, 3.3Ω	1
R 290 291	ERJ2GEJ682X	RESISTOR, 1/16W, 6.8kΩ	2
R 300 301 302 486	ERJ2GEJ271X	RESISTOR, 1/16W, 270Ω	4
R 305 489	ERJ3GEY0R00V	RESISTOR, 1/16W, 0Ω	2
R 348 371	D0HA563ZA001	RESISTOR, 1/16W, 56kΩ	2
R 360 481	ERJ2GEJ332X	RESISTOR, 1/16W, 3.3kΩ	2

R 369 370		DBJ14RR068VM	RESISTOR, 1/4W, 0.068Ω	2
R 372 491		D0HA333ZA001	RESISTOR, 1/16W, 33kΩ	2
R 373		D0HA123ZA001	RESISTOR, 1/16W, 12kΩ	1
R 384 399 412 416		D0HA103ZA001	RESISTOR, 1/16W, 10kΩ	4
R 385 396		ERJ2RKD5492X	RESISTOR, 1/16W, 54.9kΩ	2
R 387 388 389 390 419 420 429 430 488		D1BDR0330001	RESISTOR, 1/8W, 0.033Ω	9
R 406		D0HA472ZA001	RESISTOR, 1/16W, 4.7kΩ	1
R 409 414 417 418 431 432 433 434 435 436		ERJ2GEJ105X	RESISTOR, 1/16W, 1MΩ	10
R 413		D0HA273ZA001	RESISTOR, 1/16W, 27kΩ	1
R 425 439		ERJ2GEJ224X	RESISTOR, 1/16W, 220kΩ	2
R 457 458 467		ERJ6GEYJ222V	RESISTOR, 1/10W, 2.2kΩ	3
R 465		RL1220SR47F	RESISTOR, 1/4W, 0.47Ω	1
R 473 474 475		D1BDR1200001	RESISTOR, 1/8W, 0.12Ω	3
R 477		ERJ2GEJ471X	RESISTOR, 1/16W, 470Ω	1
R 478		ERJ2GEJ4R7X	RESISTOR, 1/4W, 4.7Ω	1
R 487		ERJ2GEJ622X	RESISTOR, 1/16W, 6.2kΩ	1
R 490		ERJ2RKD154X	RESISTOR, 1/16W, 150kΩ	1
R 524 525 526 527 528 529 530 531		ERJ2GEJ180X	RESISTOR, 1/16W, 18Ω	8
RA 11 12 44		EXBV8VR000V	RESISTOR ARRAY, 0Ω	3
RA 13 51 52		EXBV8V100JV	RESISTOR ARRAY, 10Ω	3
RA 14 19 30 33 37 38 39 40 41 42		DEARA8AJ103M	RESISTOR ARRAY, 10kΩ	10
RA 15 16 17 24 26 35		EXBV8V103JV	RESISTOR ARRAY, 10kΩ	7
RA 20		EXBV8V472JV	RESISTOR ARRAY, 4.7kΩ	1
RA 25 43		EXBV8V473JV	RESISTOR ARRAY, 47kΩ	2
RA 27 28 29		DEARA8AJ102M	RESISTOR ARRAY, 1kΩ	3
X 1		DECU14318L5U	OSCILLATOR (14.318MHz)	1
X 2		H0J327200051	OSCILLATOR (32.768kHz)	1
X 4		DECU24576L3U	OSCILLATOR (24.576MHz)	1
X 5		H2D800400011	OSCILLATOR (8MHz)	1
<b>Touch Screen Panel PCB</b>				
C 401 402 403 404		ICUV1H103KBS	CAPACITOR, 50V, 0.01 μF	4
C 405 408 413		ICUV1E104ZFS	CAPACITOR, 25V, 0.1 μF	3
C 409 410		ECST1AY106R	CAPACITOR, 10V, 10 μF	2
CN 401		DFJS440ZA008	CONNECTOR, FOR MAIN PCB	1
CN 402		DFJS440ZA008	CONNECTOR, FOR TOUCH SCREEN PANEL	1
D 401		DED1SS355T17	DIODE	1
D 402 403 404 405 406		DEDDA204UT	DIODE	8
IC 403		C1DB00000509	IC, TOUCH SCREEN PANEL CONTROLLER	1
Q 401 402 404		2SA1576RT107	TRANSISTOR	3
Q 403 405 406		2SC4081RT107	TRANSISTOR	3
R 401 402 403 404 405		ERJ3GEYJ472V	RESISTOR, 1/16W, 4.7kΩ	7
R 407		ERJ3GEYJ103V	RESISTOR, 1/16W, 10kΩ	1
R 408		ERJ3GEYJ104V	RESISTOR, 1/16W, 100kΩ	1
R 415 416 417		ERJ3GEY0R00V	RESISTOR, 1/16W, 0Ω	3
RA 401		EXBV8V102JV	RESISTOR ARRAY, 1kΩ	1
RA 404 405		EXBV8VR000V	RESISTOR ARRAY, 0Ω	2
X 401		DEBB4R91N1GX	OSCILLATOR (4.9152MHz)	1
<b>LED PCB</b>				
CN 511		DFJS207ZA015	CONNECTOR, FOR MAIN PCB	1
D 510 512 513 514 515		SEC1703C	L.E.D.	5
D 511		SEC2764C	L.E.D.	1
R 511 513 514 515 516		ERJ3GEYJ331V	RESISTOR, 1/16W, 330Ω	6
R 512		ERJ3GEYJ471V	RESISTOR, 1/16W, 470Ω	1
SW 511		DFSE057ZA	SW, MAGNETIC LEAD	1
SW 512		EVQPLDA15	SW, LEFT CLICK	1

SW 513		EVQPLDA15	SW, RIGHT CLICK	1
<b>MODEM JACK PCB</b>				
C 541		F1L3D102A003	CAPACITOR, 2000V, 1000pF	1
CN 541		DFJS555ZA004	JK, MODEM	1
CN 542		DFJS554ZA008	JK	1
CN 543		K1KA10B00151	CONNECTOR	1
CN 544		DFJP02C75YAJ	CONNECTOR, FOR INTERNAL MODEM PCB	1
R 541 542		ERJ3GEYJ750V	RESISTOR, 1/16W, 75Ω	2
<b>DOCKING CONNECTOR PCB</b>				
CN 551		DFJS553ZA100	CONNECTOR, FOR PORT REPLICATOR	1
CN 552		DFJS226ZA100	CONNECTOR, FOR MAIN PCB	1
<b>HDD FPC</b>				
CN 1		DFJS502ZA044	CONNECTOR, FOR HDD	1
<b>LCD FPC</b>				
CN 1		K1KB30A00066	CONNECTOR, FOR LCD	1
<b>MPCI RELAY CARD3 PCB</b>				
C 1 2 3 4 9 10 19 20		F1G1C104A031	CAPACITOR, 16V, 0.1 μF	8
C 13		F1G1C103A046	CAPACITOR, 16V, 0.01 μF	1
C 14 15		F3E1A106A004	CAPACITOR, 10V, 10 μF	2
CN 1		DFJS511ZA124	CONNECTOR, FOR MINI PCI	1
CN 4		DFJS226ZA100	CONNECTOR	1
L 1		DDB5Z005-L	INDUCTOR	1
Q 1		DETC114EETL	TRANSISTOR	1
Q 6		DASI6963DQ	TRANSISTOR	1
R 1 4 20 23		ERJ2GE0R00X	RESISTOR, 1/16W, 0Ω	4
R 8		ERJ2GEJ103X	RESISTOR, 1/16W, 10kΩ	1
R 14		ERJ2GEJ102X	RESISTOR, 1/16W, 1kΩ	1
R 15		ERJ2GEJ104X	RESISTOR, 1/16W, 100kΩ	1

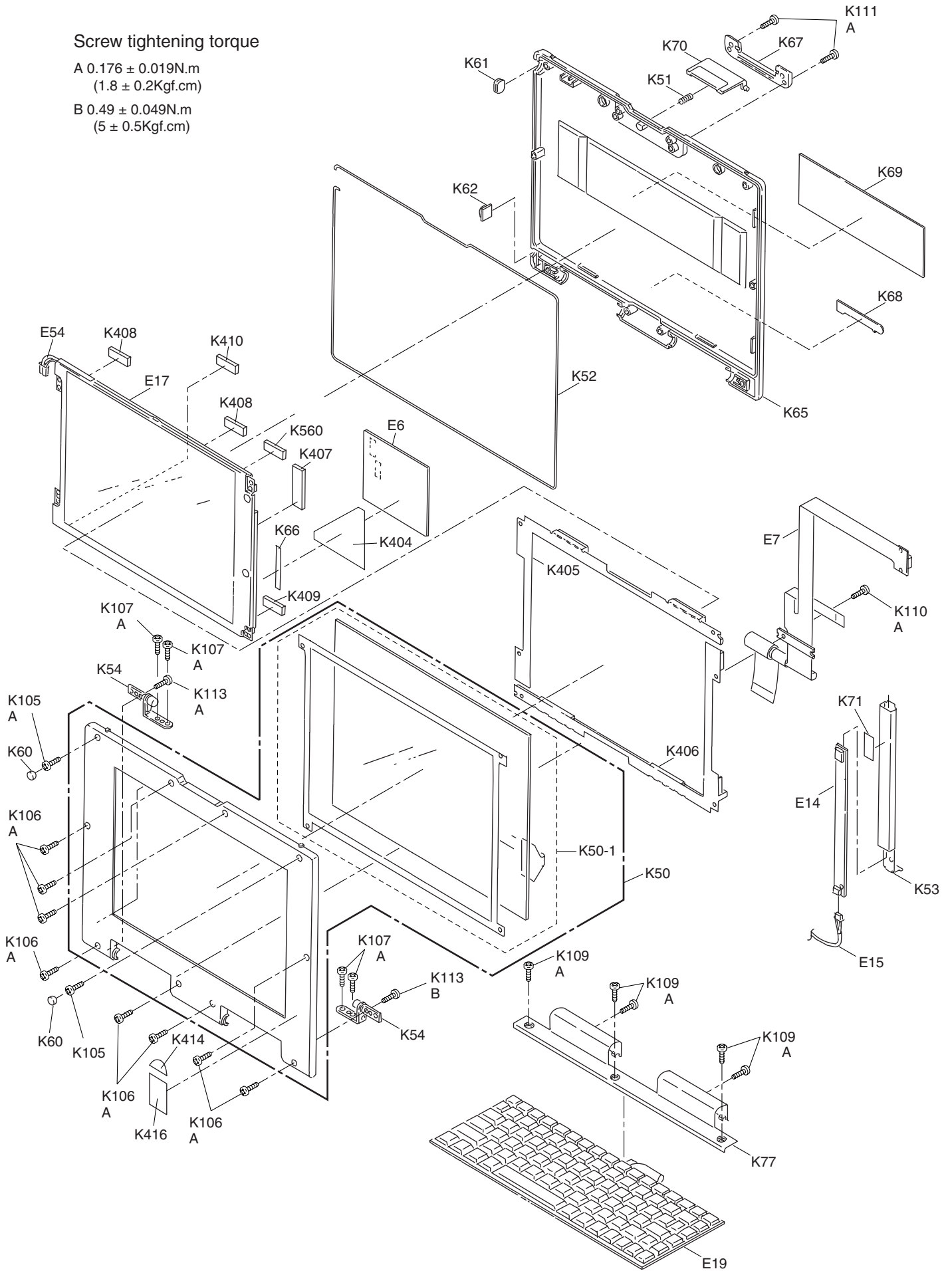




### Screw tightening torque

A  $0.176 \pm 0.019\text{N.m}$   
 $(1.8 \pm 0.2\text{Kgf.cm})$

B  $0.49 \pm 0.049\text{N.m}$   
 $(5 \pm 0.5\text{Kgf.cm})$



# Service Manual

Notebook Computer

CF-M34

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*Simplified*


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This is the Service Manual for the following areas.

E ...for U.K.

## Model Number Reference

The following models are numbered in accordance with the types of CPU, LCD and HDD etc. featured by product.

Model No. CF-M341 2 3Q4 5

1: CPU type

T: for Intel® Mobile Celeron™ 300 MHz

2: HDD type

A: for 10 GB

3: RAM size

4: 128 MB (on board 64 MB plus DIMM card 64 MB)

4: Operation System

D: Microsoft® Windows® 2000

5: Area

E: Refer to above area table

## WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

# Panasonic®

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# WARNINGS

For U.K.

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 3 amp fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 3 amps and that it is approved by ASTA or BSI to BS 1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

Important

The wires in this mains lead are coloured in accordance with the following code:


Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured RED.

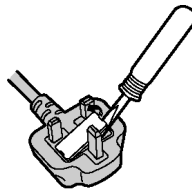
Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol  .

The mains plug on this equipment must be used to disconnect the mains power.

Please ensure that a socket outlet is available near the equipment and shall be easily accessible.

## ■ How to replace the fuse

Open the fuse compartment with a screw-driver and replace the fuse.



Warnings

● This equipment is not designed for connection to an IT power system.

(An IT system is a system having no direct connections between live parts and Earth; the exposed-conductive-parts of the electrical installation are earthed.

An IT system is not permitted where the computer is directly connected to public supply systems in the U.K.)

● Disconnect the mains plug from the supply socket when the computer is not in use.

This equipment is produced to BS800/1983.

## LITHIUM BATTERY ⚠

- **CAUTION**

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the equipment manufacture.

Discard used batteries according to the manufacturer's instructions.

## LITHIUMBATTERIES ⚠

**Vorsicht!**

Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

## PILE AU LITHIUM ⚠

ATTENTION: IL Y A DANGER D'EXPLOSION S' IL Y A REMPLACEMENT INCORRECT DE LA PILE. REMPLACER UNIQUEMENT AVEC UNE PILE DU MÊME TYPE OU D'UN TYPE RECOMMANDÉ PAR LE CONSTRUCTEUR. METTRE AU RÉBUT LES PILES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT.

## Replacement Parts List Comparison Table

Note: Important Safety Notice

Components identified by  $\Delta$  mark have special characteristics important for safety.

When replacing any of these components, use only manufacturer's specified parts.

### CF-M34TA4QDE

REF. NO. and AREA	PART NO.		DESCRIPTION	Q'TY
	CF-M34T42AAE	CF-M34TA4QDE		
<b>Main Block Unit</b>				
E9	DFJL0033ZA	N2EABEC00001	TOUCH PAD	1
E18	DFJH098ZA-T	-----	HDD, 4.3 GB	0
E18	-----	N3CABND00002	HDD, 10 GB	1
E40	-----	DL3UP7063BAA	PCB, GSM	1
E41	-----	DL3UP7054EAA	PCB, DIMM	1
E42	-----	N1BZBJB00001	ANTENNA, GSM	1
E43	-----	DFWP0130ZC	GSM MODULE	1
E44	-----	DFWP0117ZA	RF SWITCH	1
E45	-----	DFJE0024ZA	CABLE	1
E46	-----	DFJE9109ZA	FFC	1
K20	DFWV80A0263	DFWV80A0277	CABINET, TOP	1
K26	DFHG1294ZA-0	DFHG1385ZA-0	COVER, DC JACK	1
K31	DFHG1304ZA	-----	RUBBER, ANTENNA CABLE	0
K61	DFHG1300ZA-0	-----	CAP, ANTENNA	0
K62	DFHG1301ZA-0	-----	CAP, ANTENNA HOLDER	0
K69	DFGB0077ZA-1	-----	TOUGHBOOK LABEL	0
K69	-----	DFQT6217ZA	EIRCOM LABEL	1
K300	-----	DFMD7621YA	PLATE, RF, GSM	1
K301	-----	DFMC0605ZA	SHIELD SHEET, GSM UNIT	1
K302	-----	DFMX0741ZA	PROTECTION SHEET	1
K303	-----	XYN2+J4FN	SCREW	4
K304	-----	DFHG1285ZB	PROTECTION SHEET, RF FPC	1
K305	-----	DFHG1326ZA	SHEET, CABLE PROTECTION	1
K306	-----	DFHE0370ZA	SPACER, ANTENNA CONNECTOR	1
K307	-----	DFHE0384ZA	GASKET	1
K308	-----	DFQT6214ZA	LABEL, GSM MODEM	1
K309	-----	DFQT9703ZA	LABEL, WIRELESS READY	1
K310	-----	DFUS0255ZA	PLATE, ANTENNA SHIELD	1
K311	-----	XYN2+J5FN	SCREW	2
K313	-----	DFKE0493YA-0	HOLDER, ANTENNA	1
K314	-----	DFQT9753ZA	MODEL LABEL, EIRCOM	1
K315	-----	DFMC0617ZA	CONDUCTIVE CUSHION	2

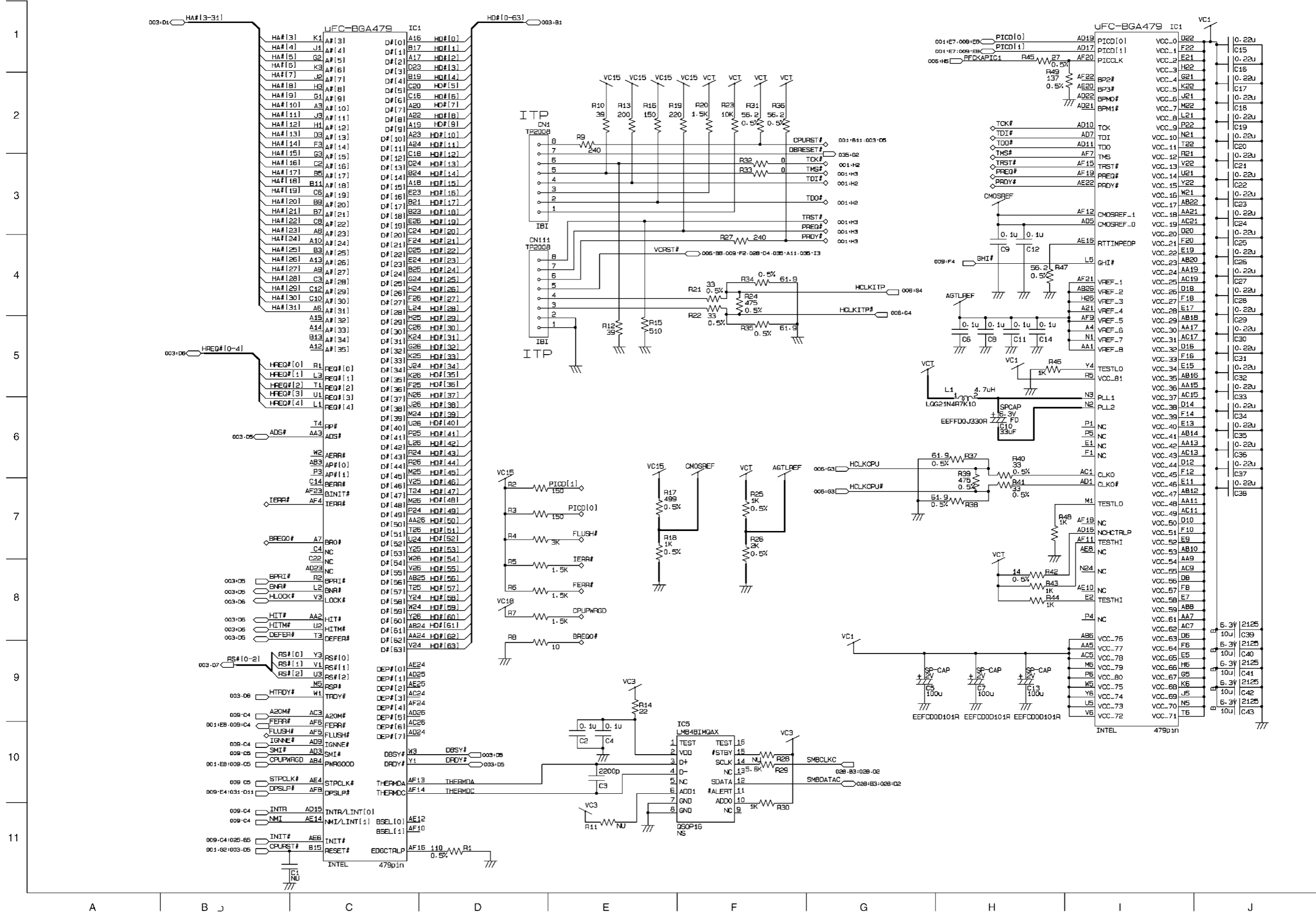




# CF-M34RxFZxx

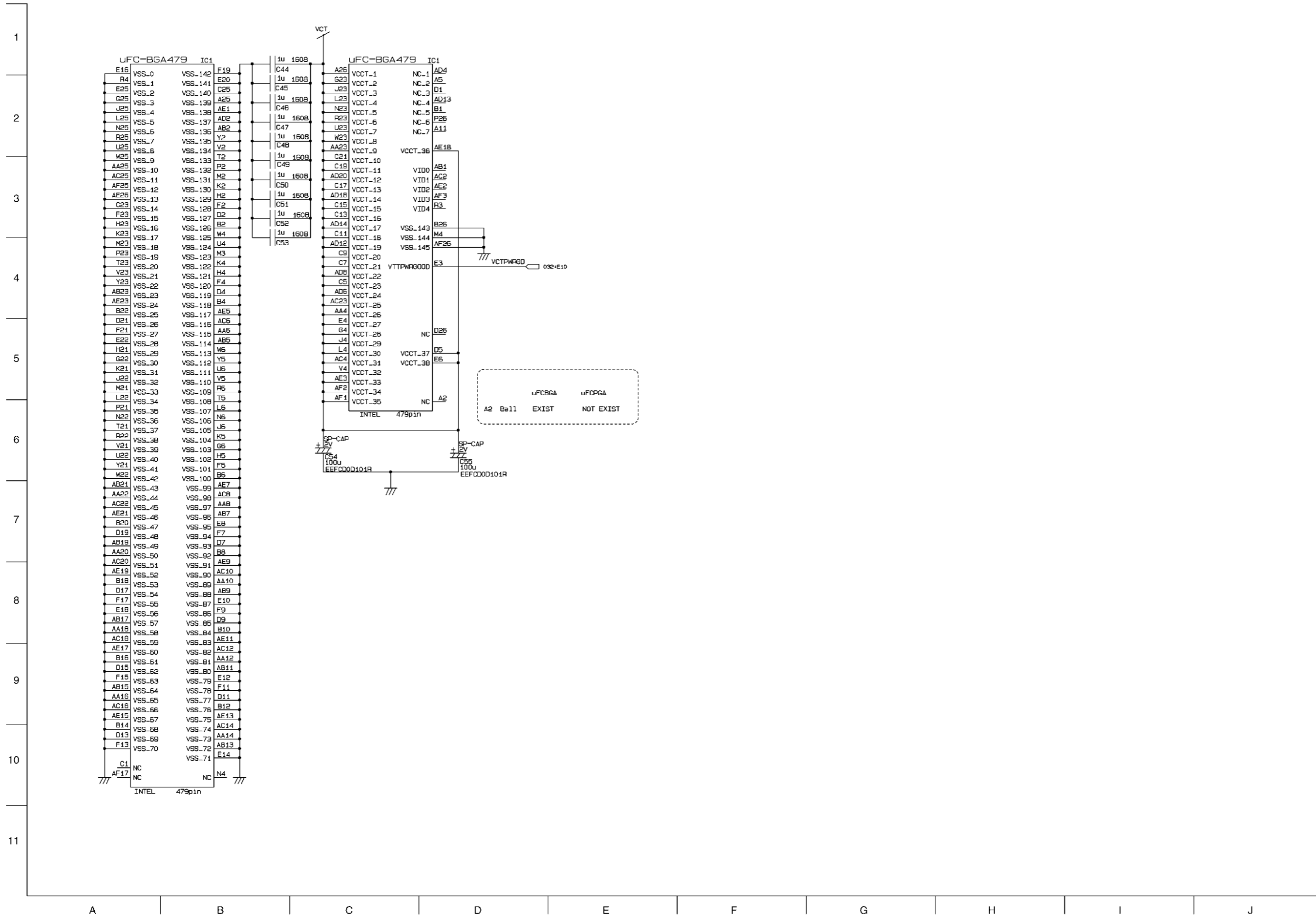
## Schematic Diagrams

### Main 1 CPU (TUALATIN ULV800) (1/2)



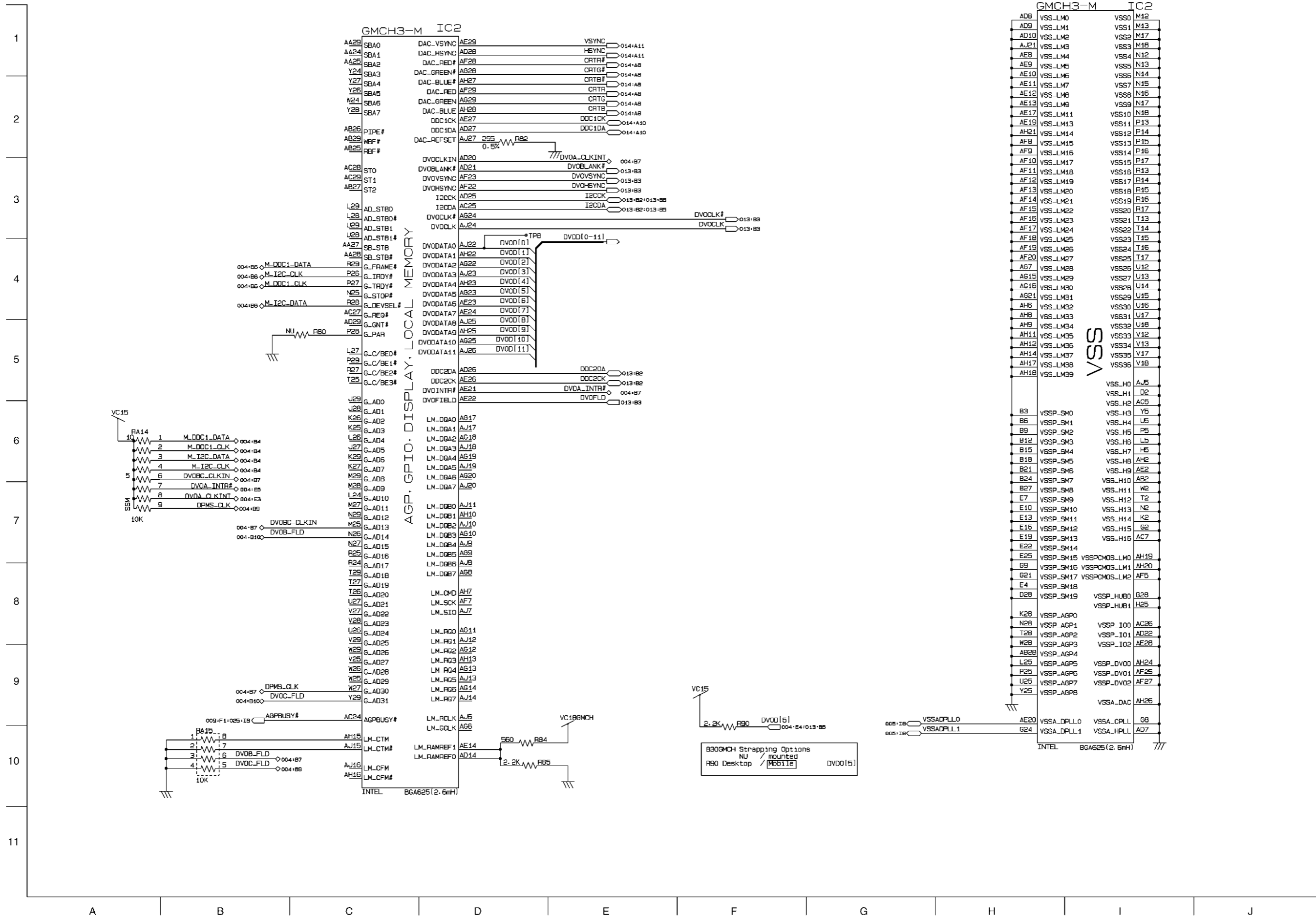


# Main 2 CPU (TUALATIN ULV800) (2/2)

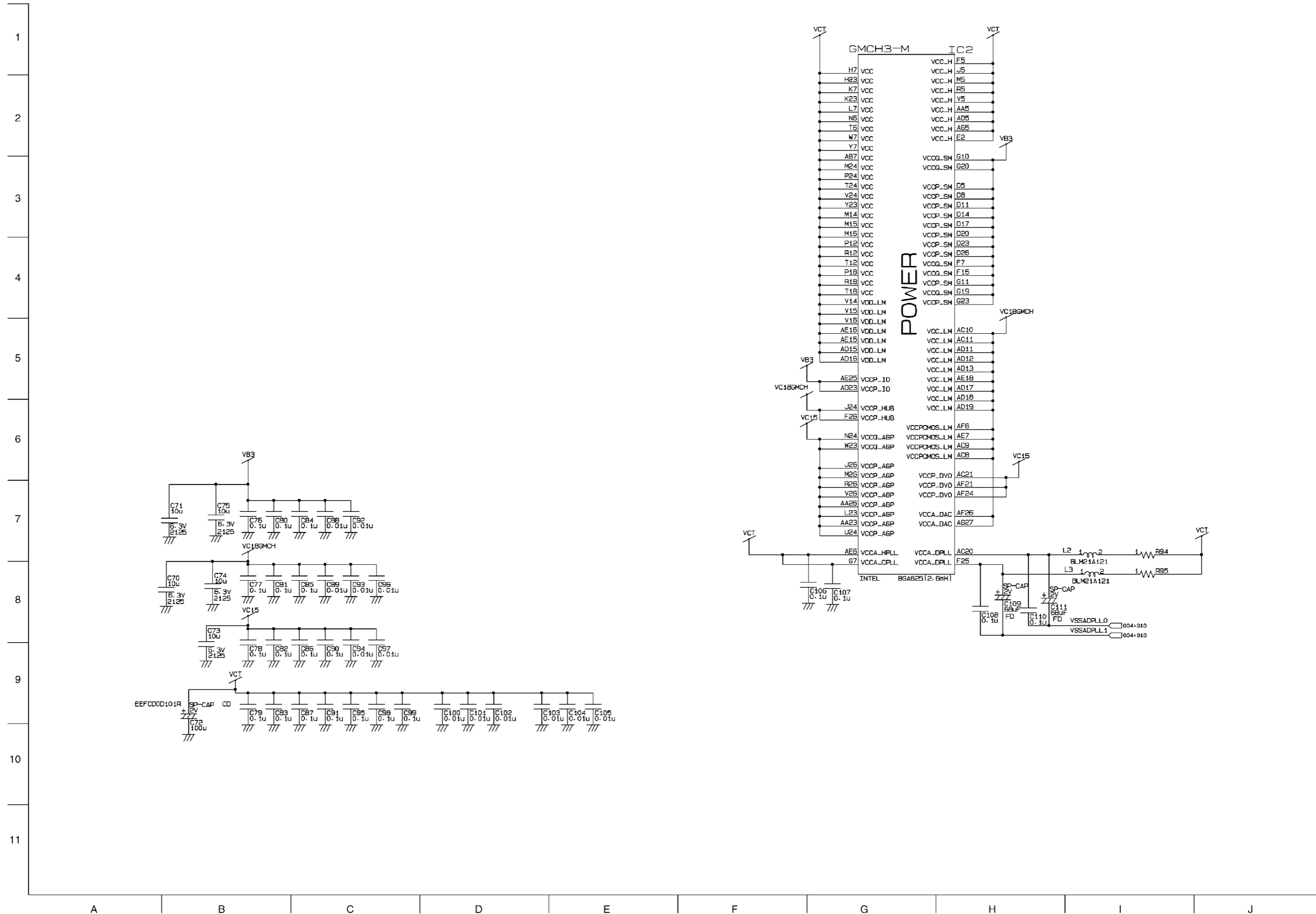




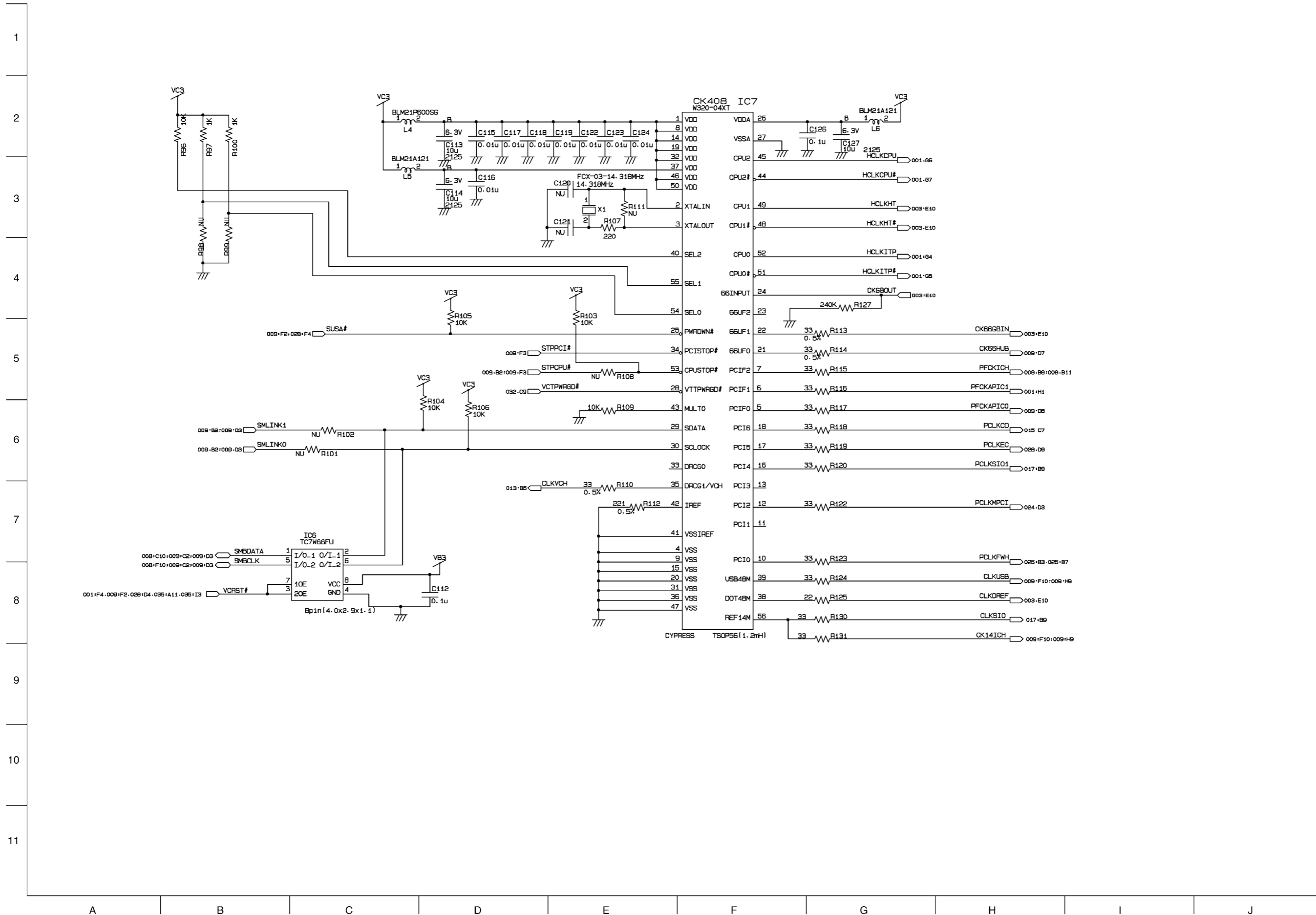
# Main 4 GMCH (830MG) (2/3)



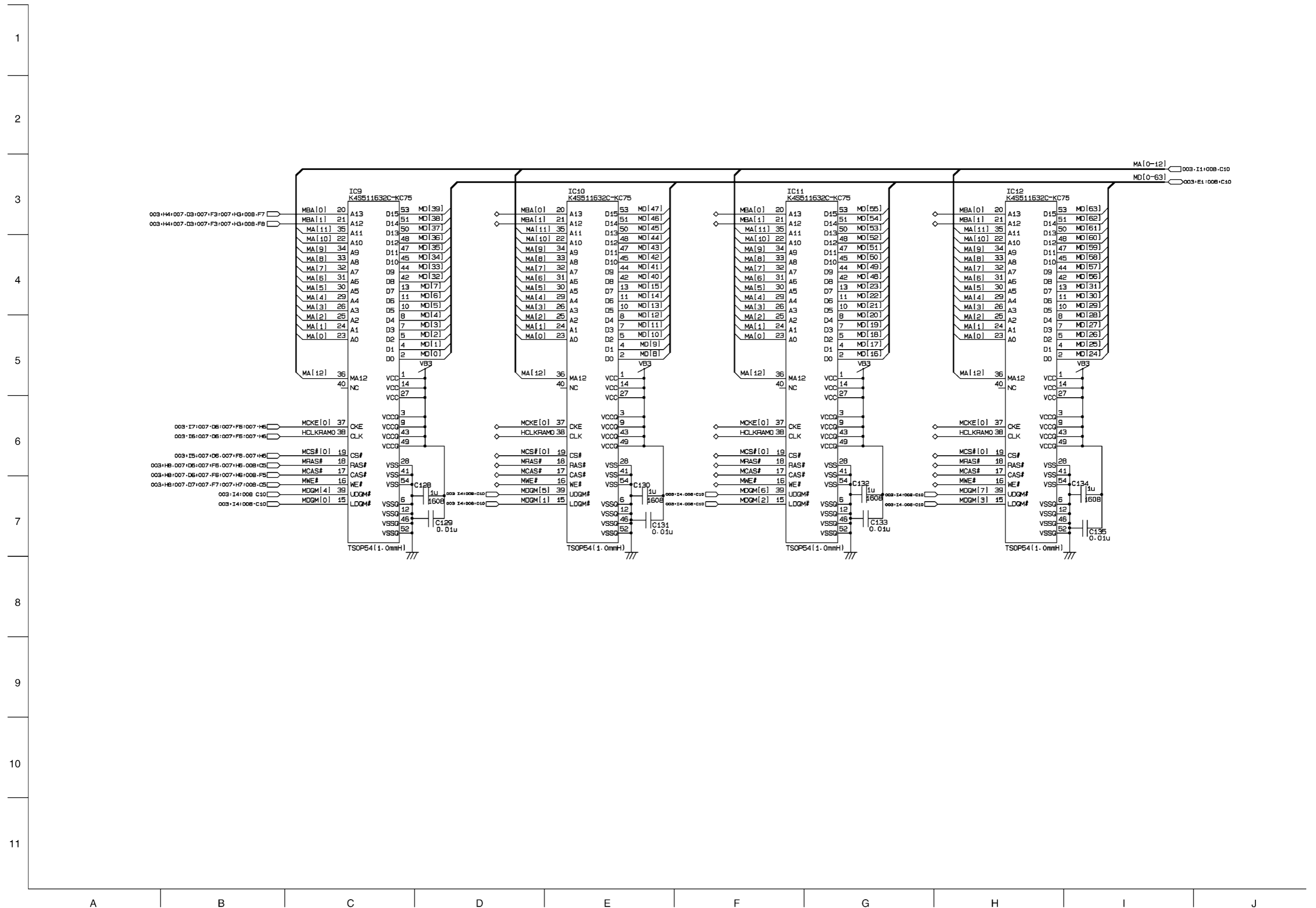
# Main 5 GMCH (830MG) (3/3)



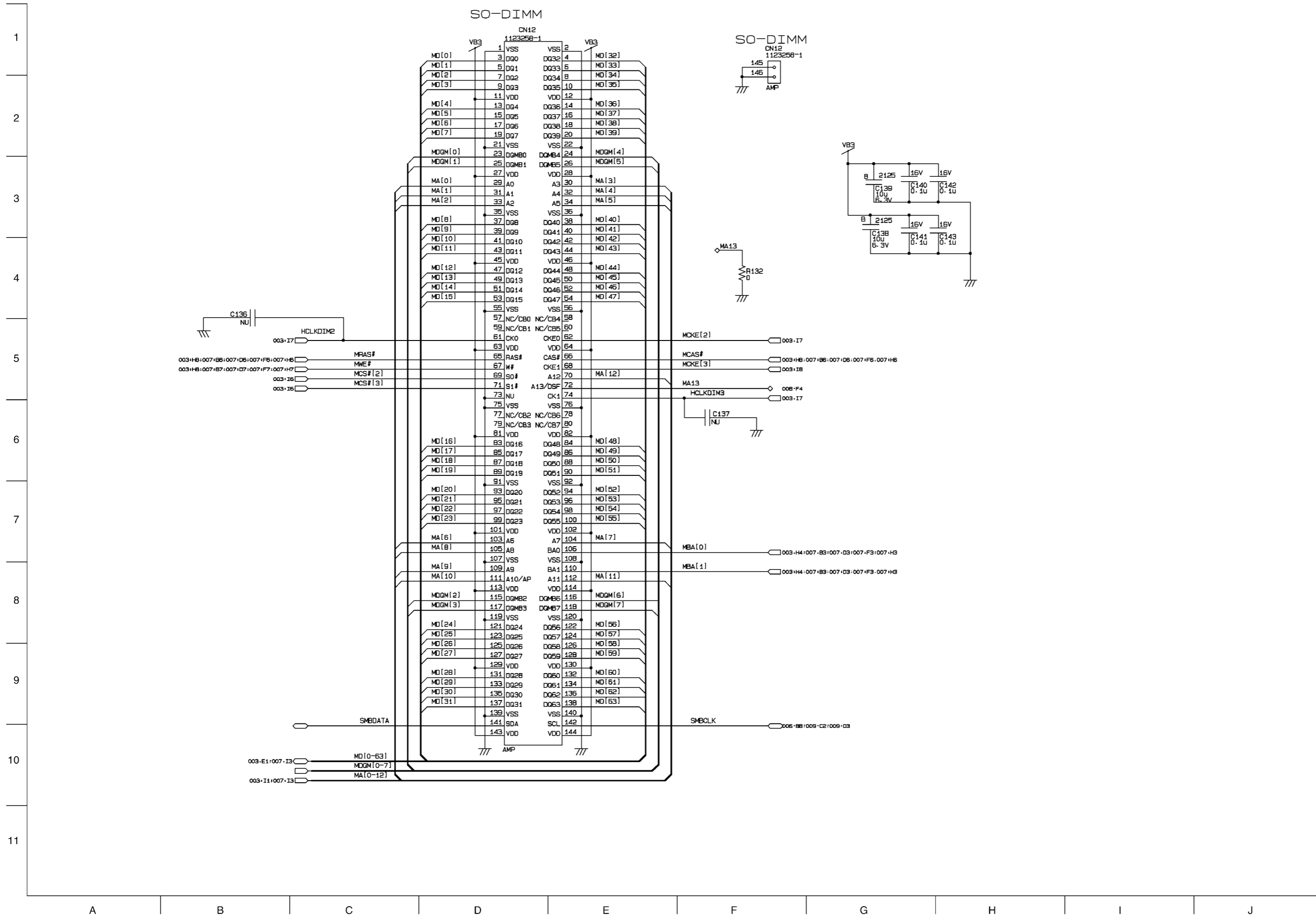
# Main 6 Clock



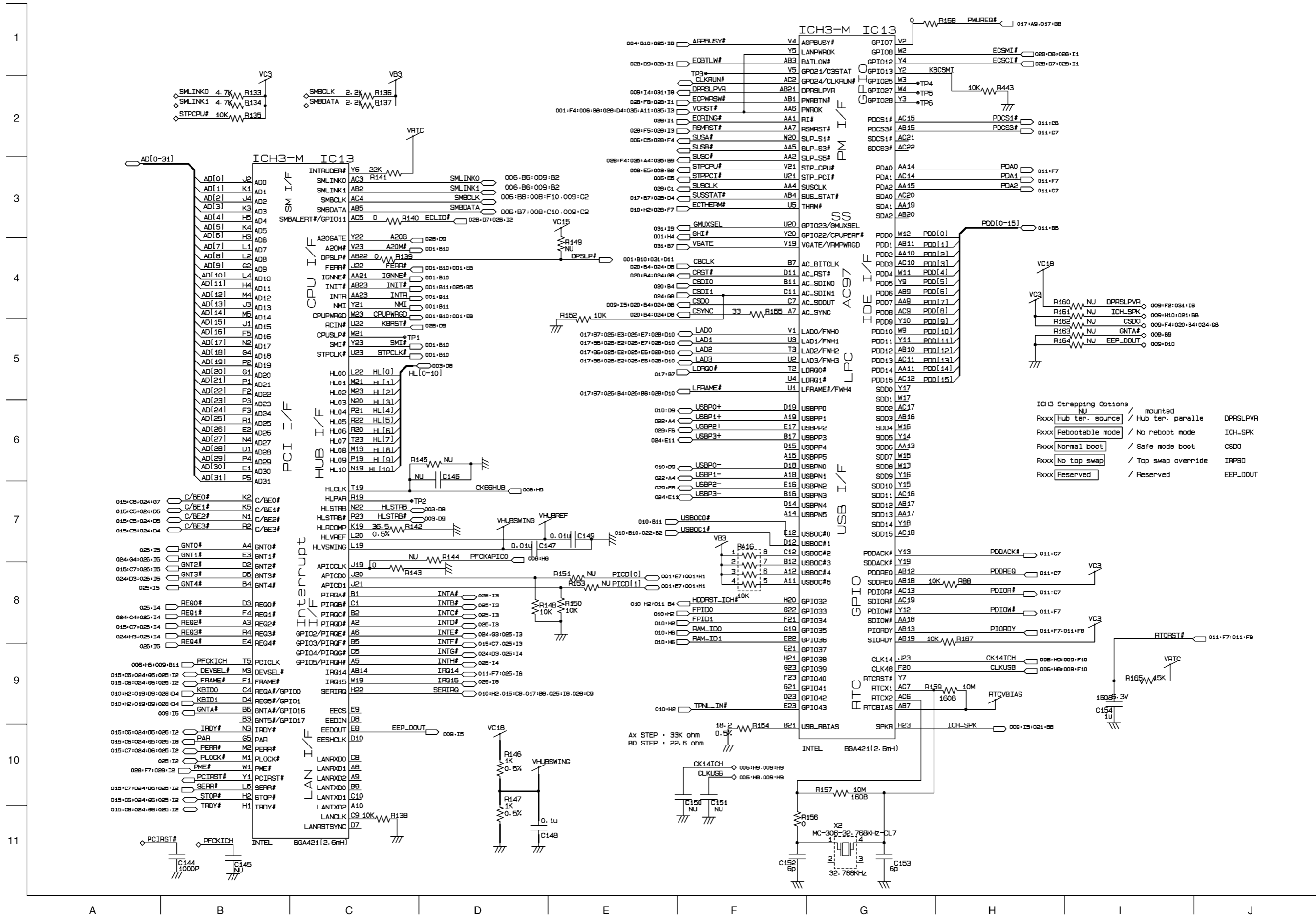
# Main 7 On Board Memory



# Main 8 SO DIMM



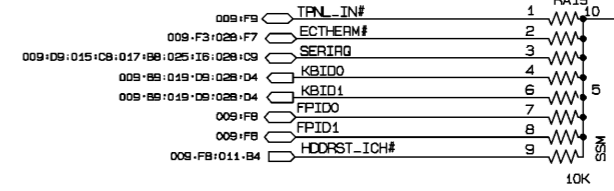
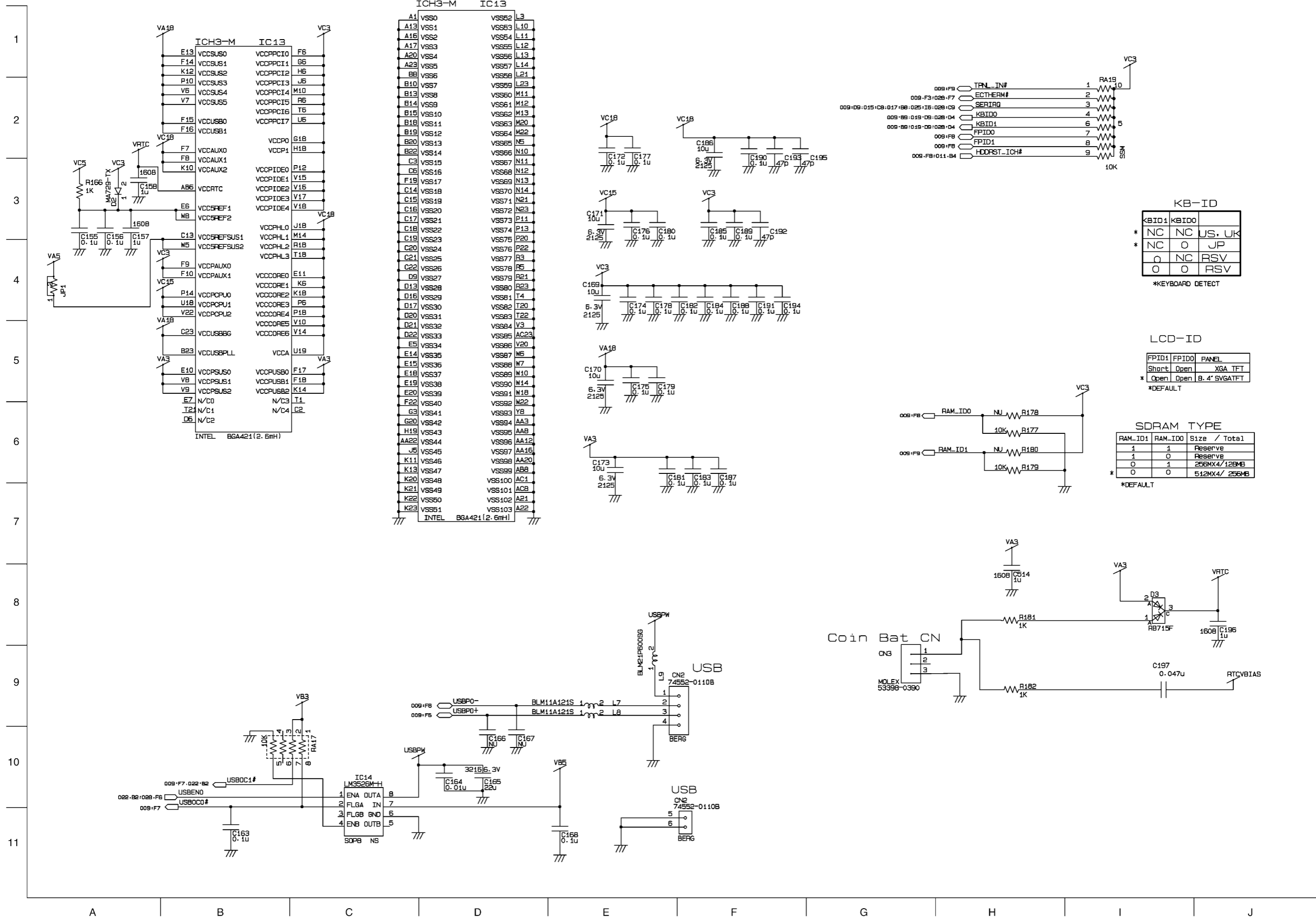
# Main 9 ICH3



- ICH3 Strapping Options
- Rxxx [Hub ter. source] / mounted
  - Rxxx [Hub ter. source] / Hub ter. paralle
  - Rxxx [Rebootable mode] / No reboot mode
  - Rxxx [Normal boot] / Safe mode boot
  - Rxxx [No top swap] / Top swap override
  - Rxxx [Reserved] / Reserved
- Options: ICH-SPK, CSDO, IRPSD, EEP\_DOUT



# Main 10 ICH3, USB



**KB-ID**

KBID1	KBID0	
NC	NC	US, UK
NC	0	JP
0	NC	RSV
0	0	RSV

\*KEYBOARD DETECT

**LCD-ID**

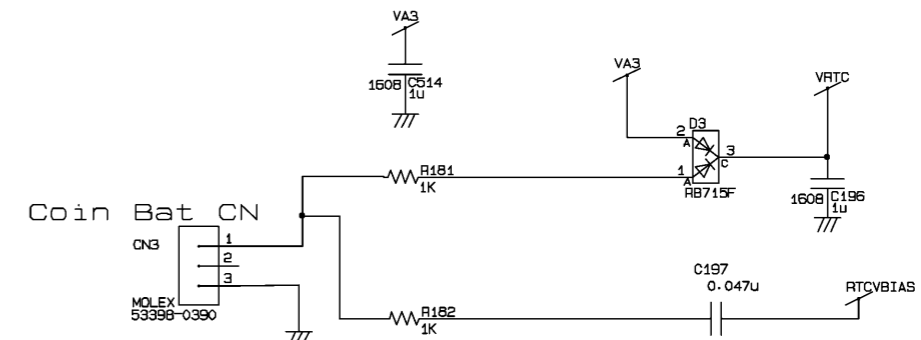
FPID1	FPID0	PANEL
Short	Open	XGA TFT
Open	Open	B. 4" SVGATFT

\*DEFAULT

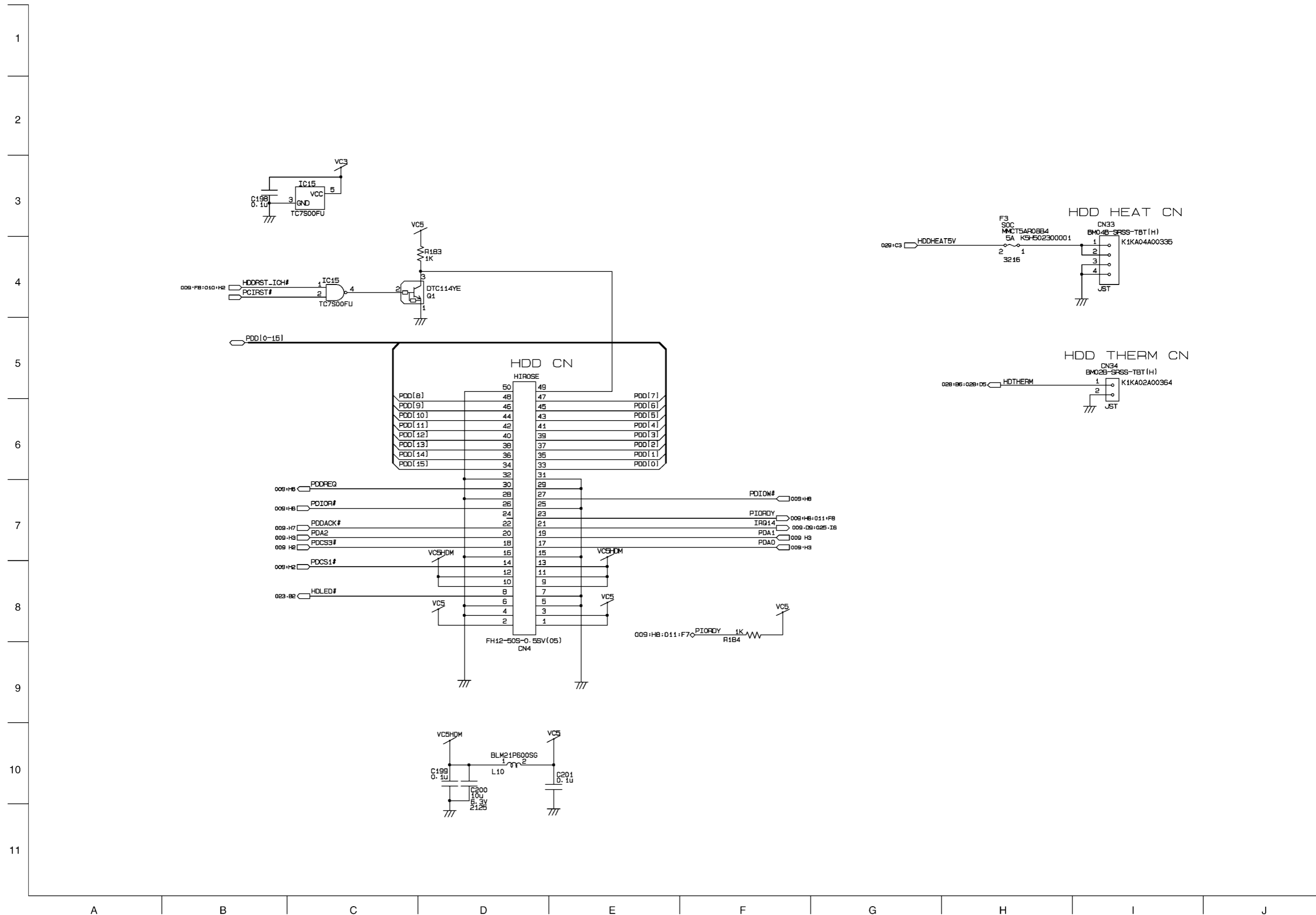
**SDRAM TYPE**

RAM-ID1	RAM-ID0	Size	Total
1	1	Reserve	
1	0	Reserve	
0	1	256MX4/128MB	
0	0	512MX4/ 256MB	

\*DEFAULT

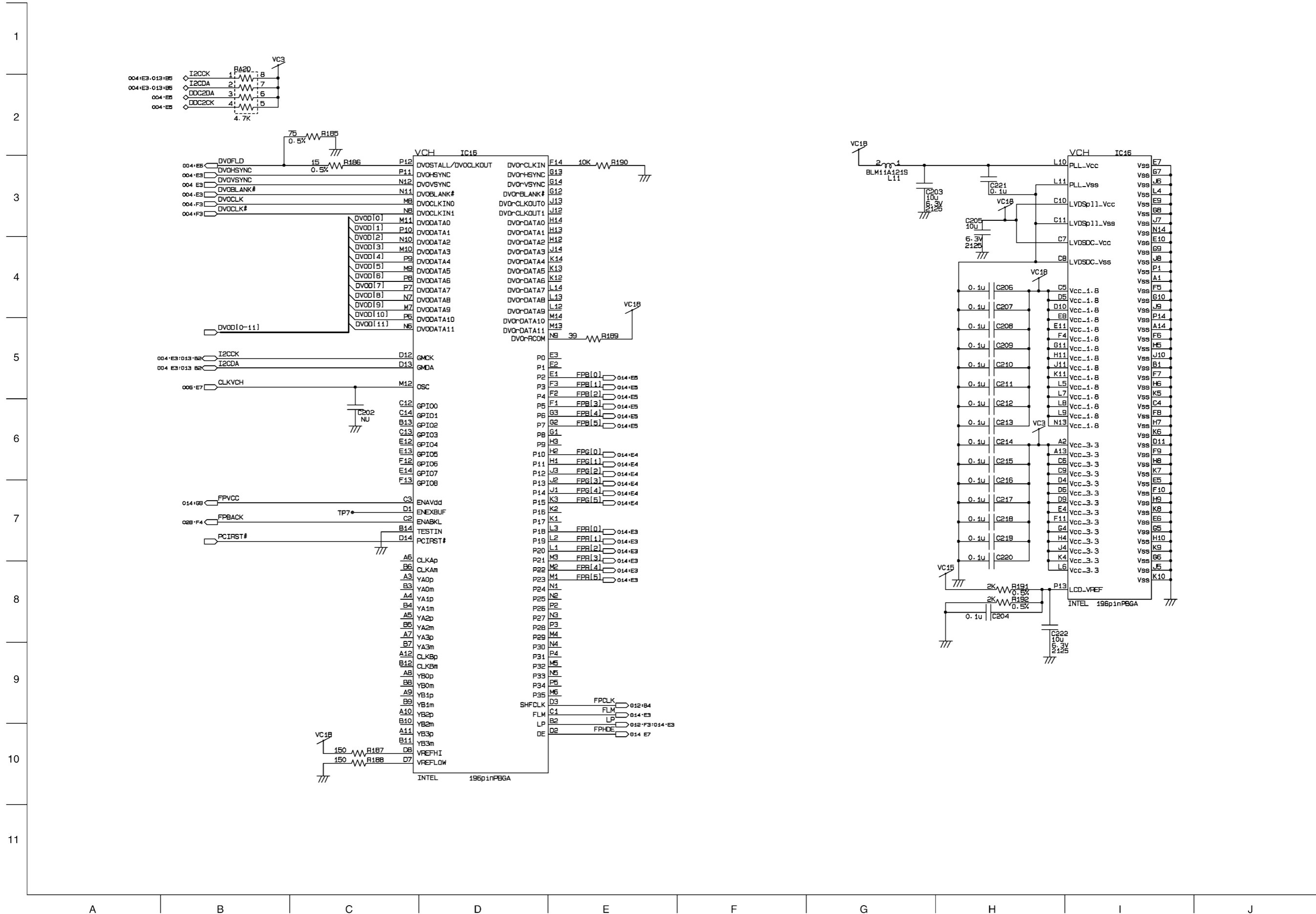


# Main 11 HDD I/F

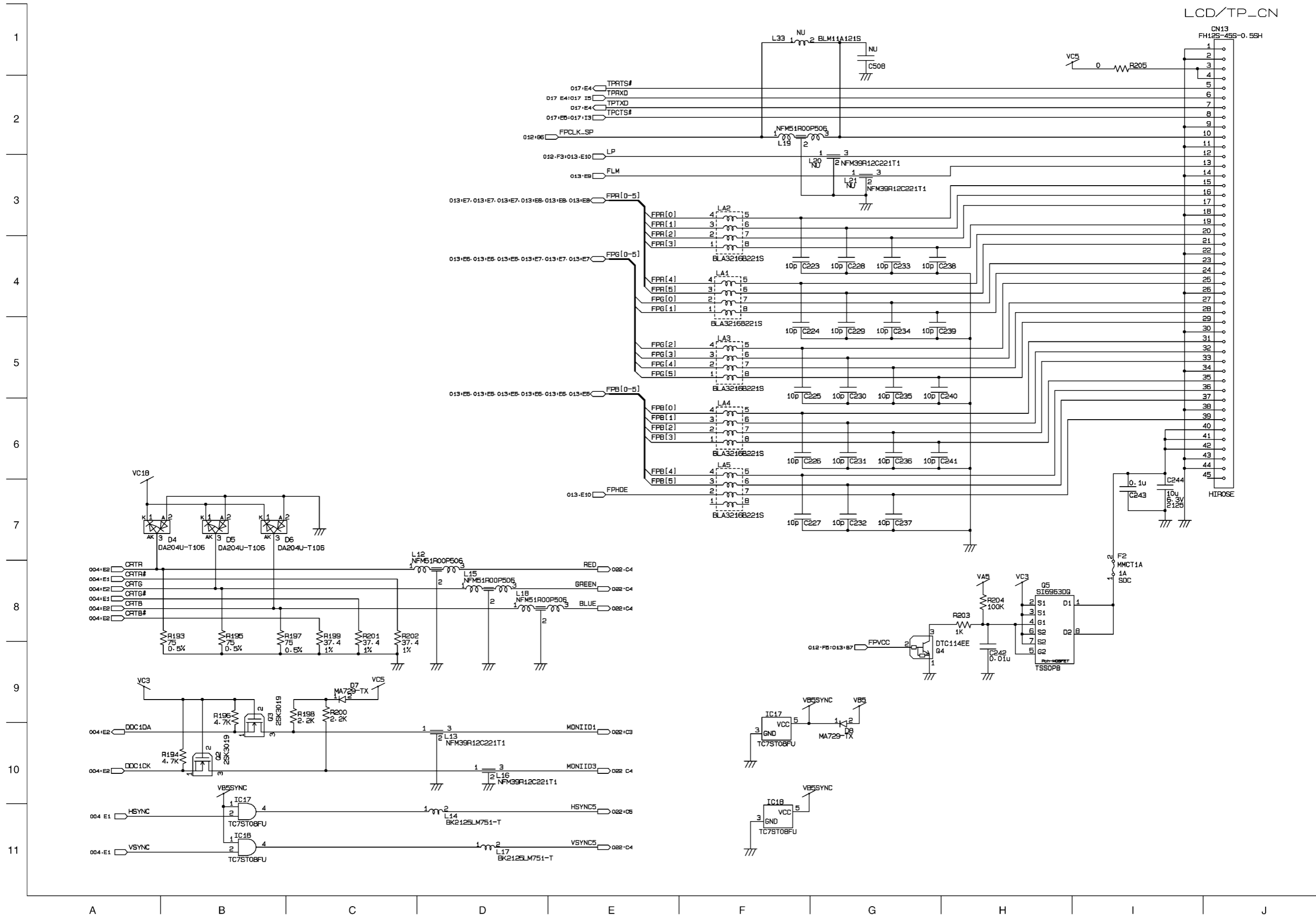




# Main 13 VCH

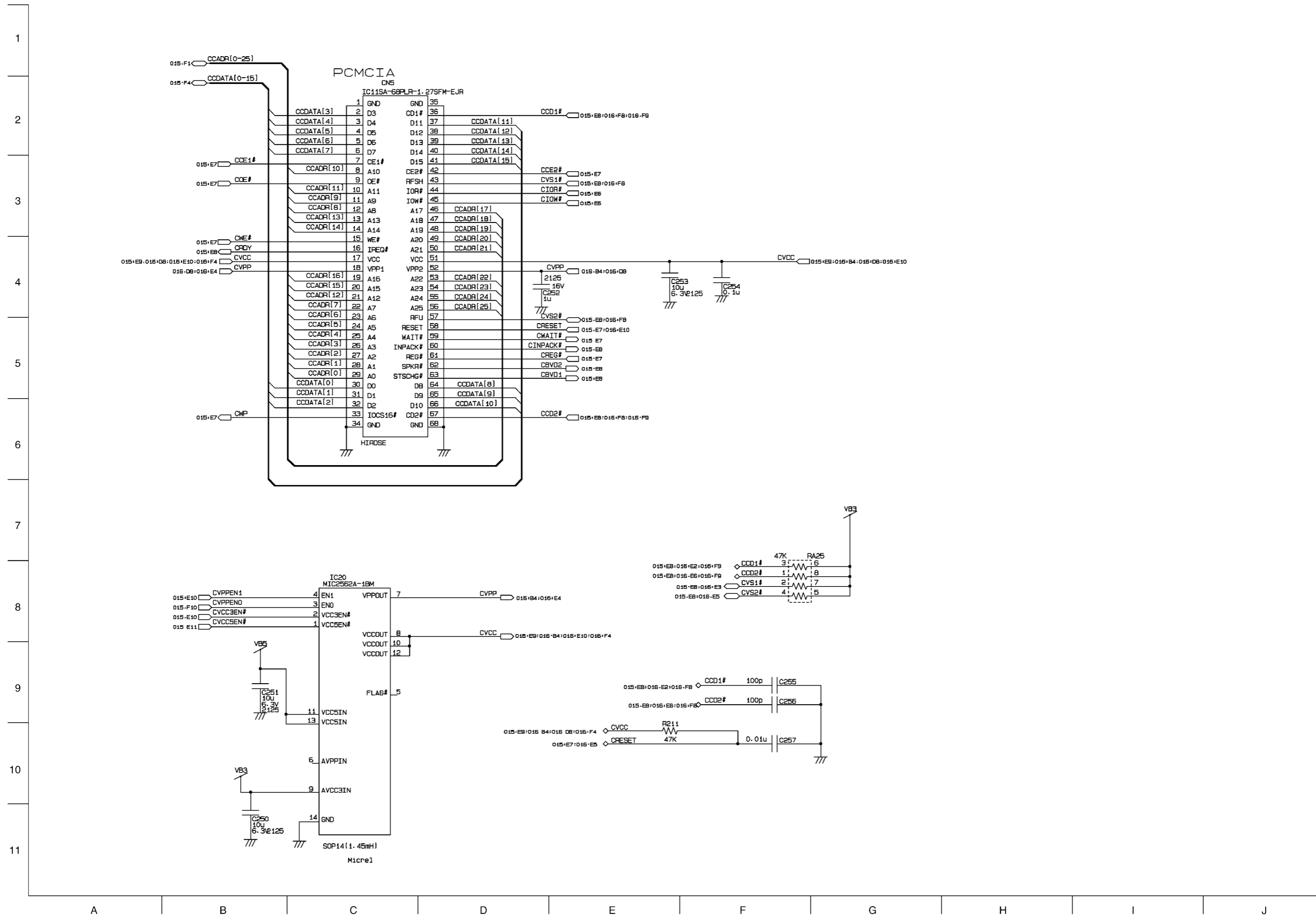


# Main 14 LCD I/F, CRT

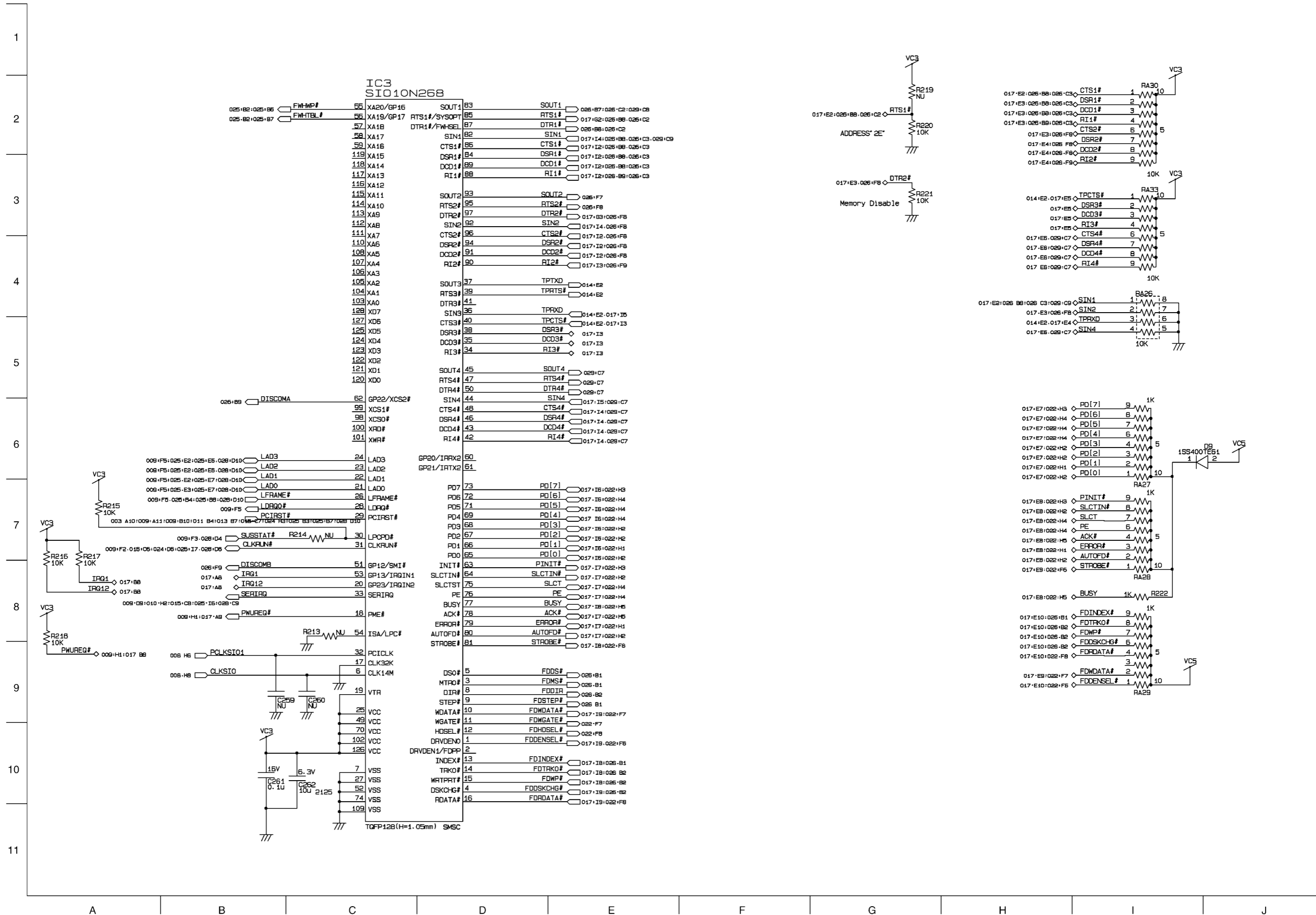




# Main 16 PCMCIA CN. 1Slot

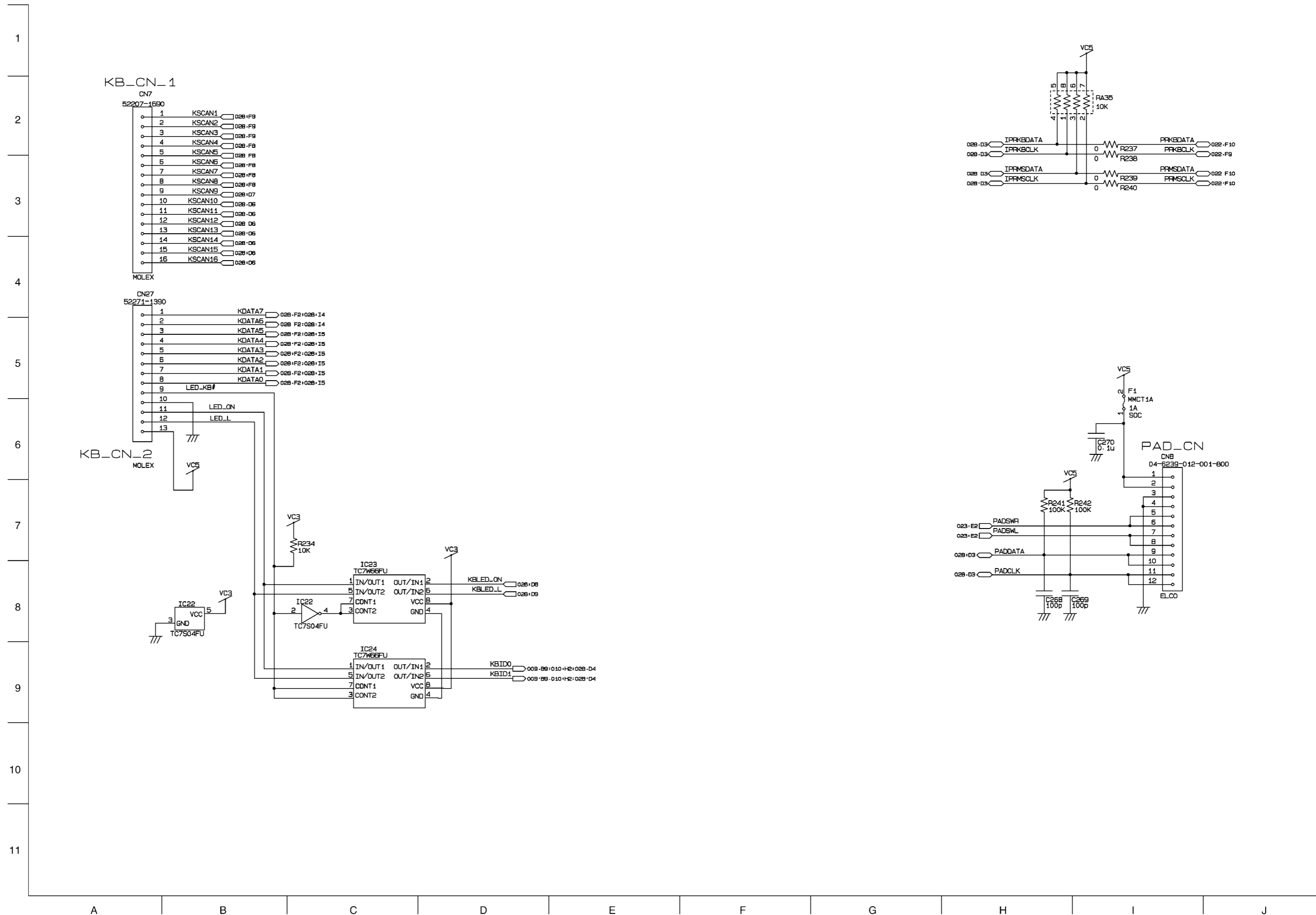


# Main 17 Super I/O (SMSC)

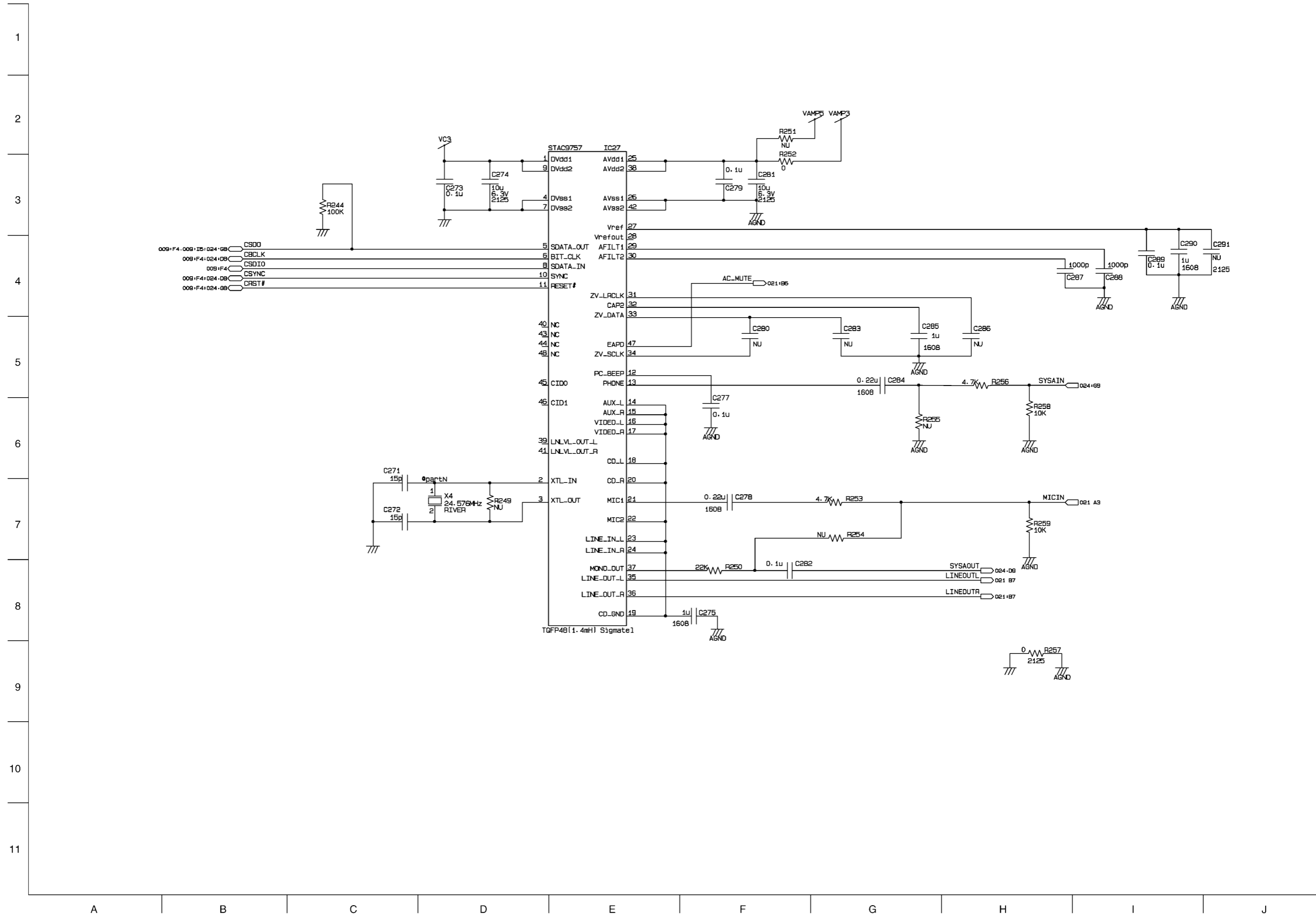




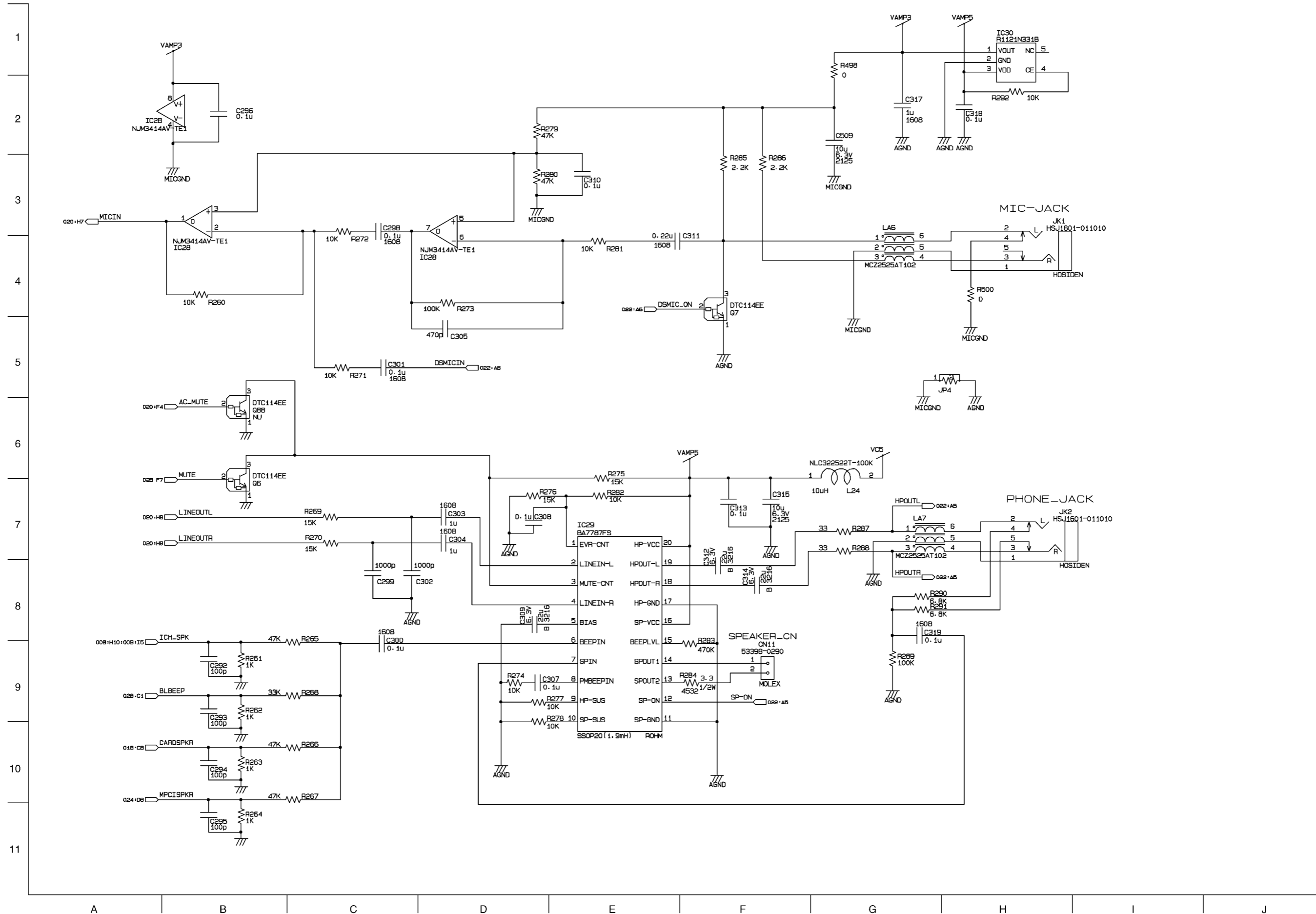
# Main 19 KB PAD CN.



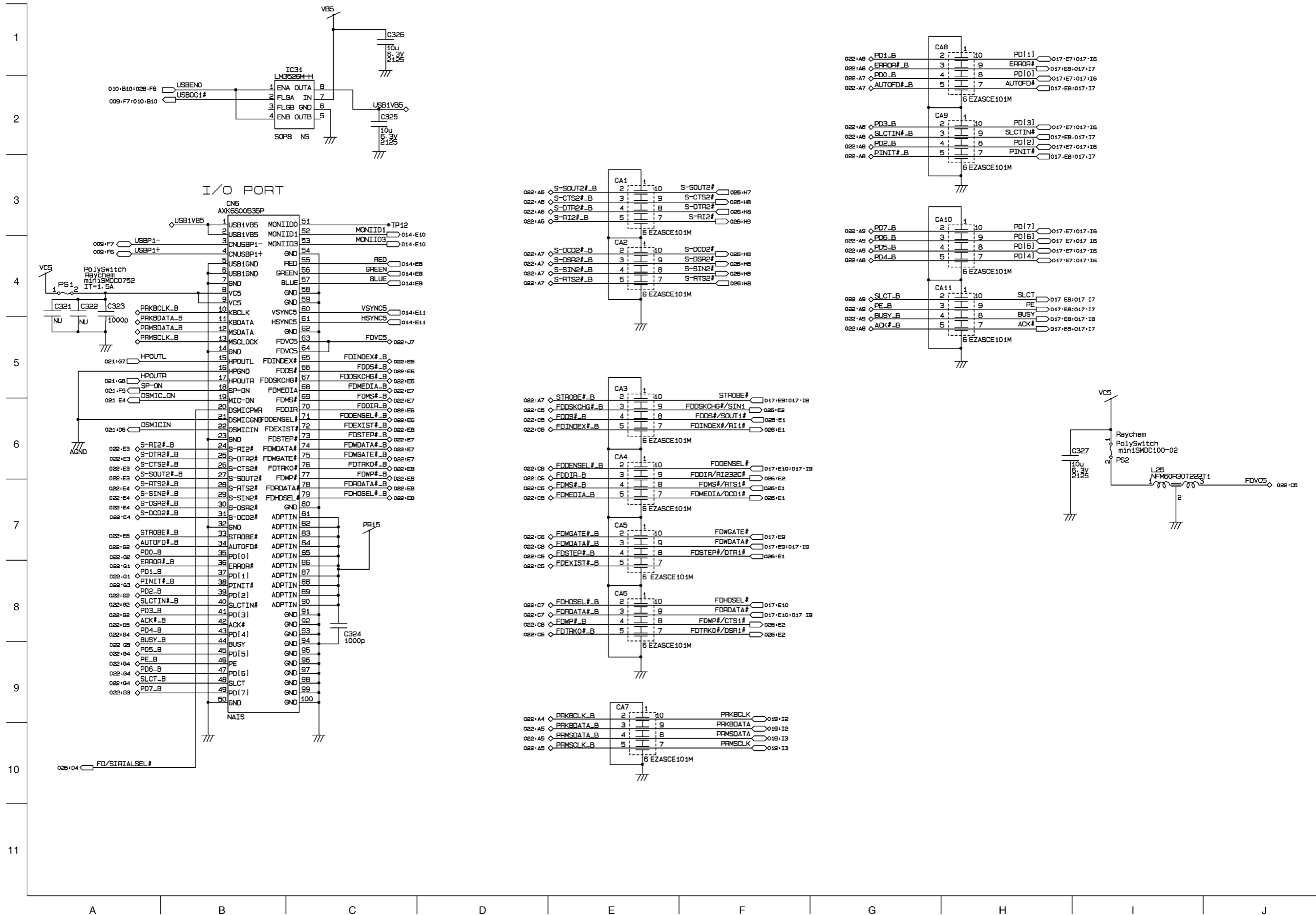
# Main 20 Sound IC



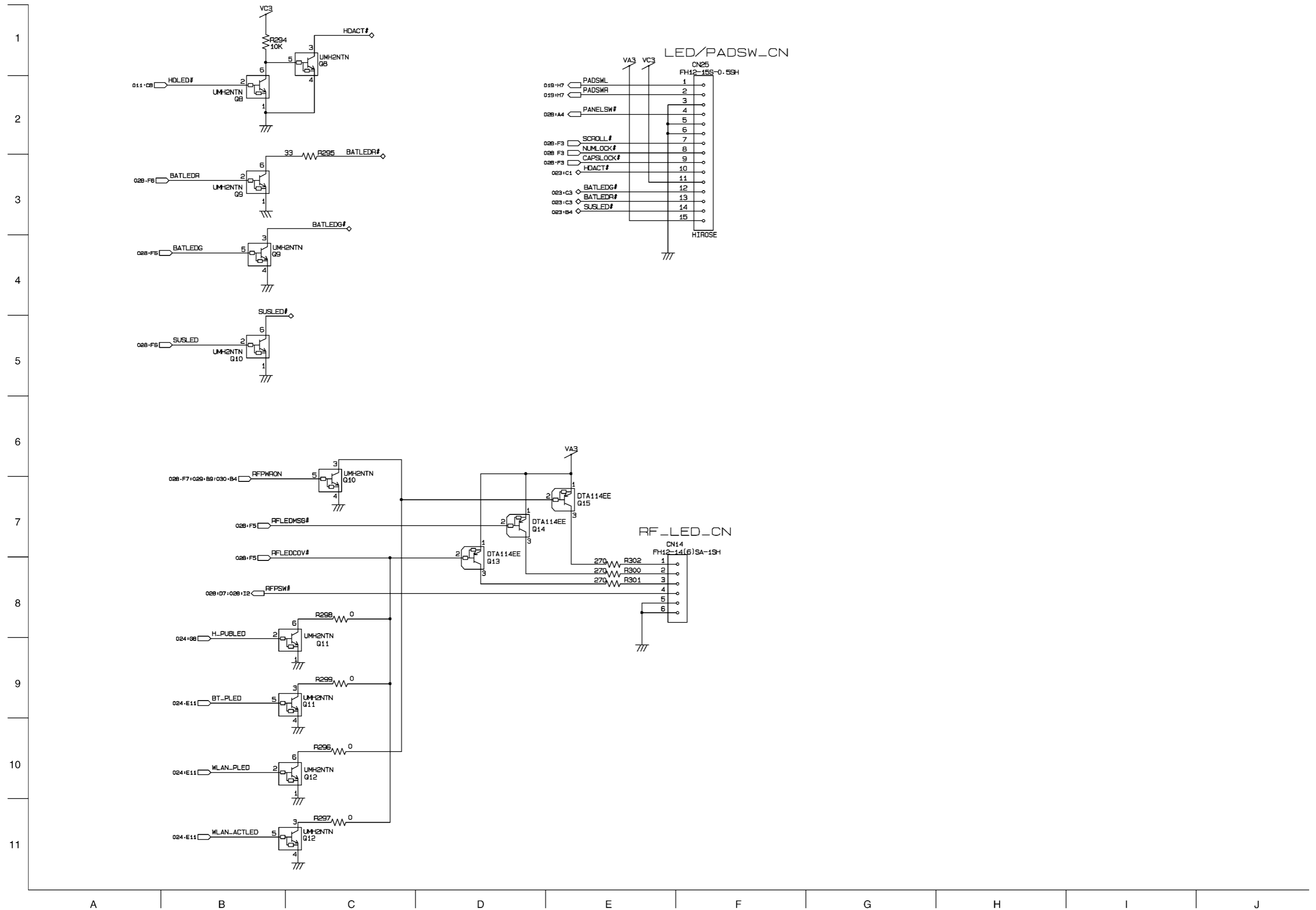
# Main 21 Sound AMP, MIC SPK



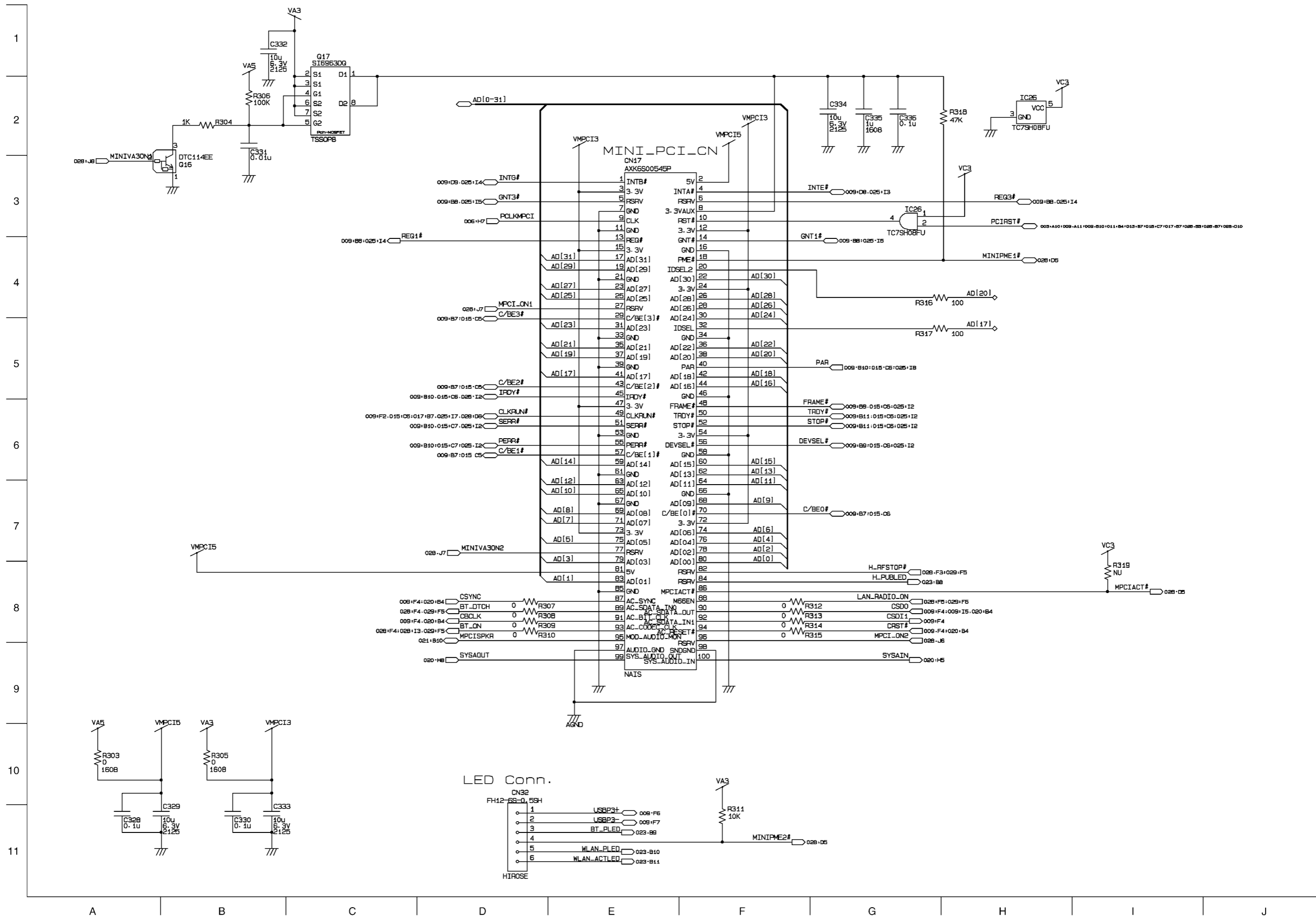
# Main 22 POTORI. EXT CN



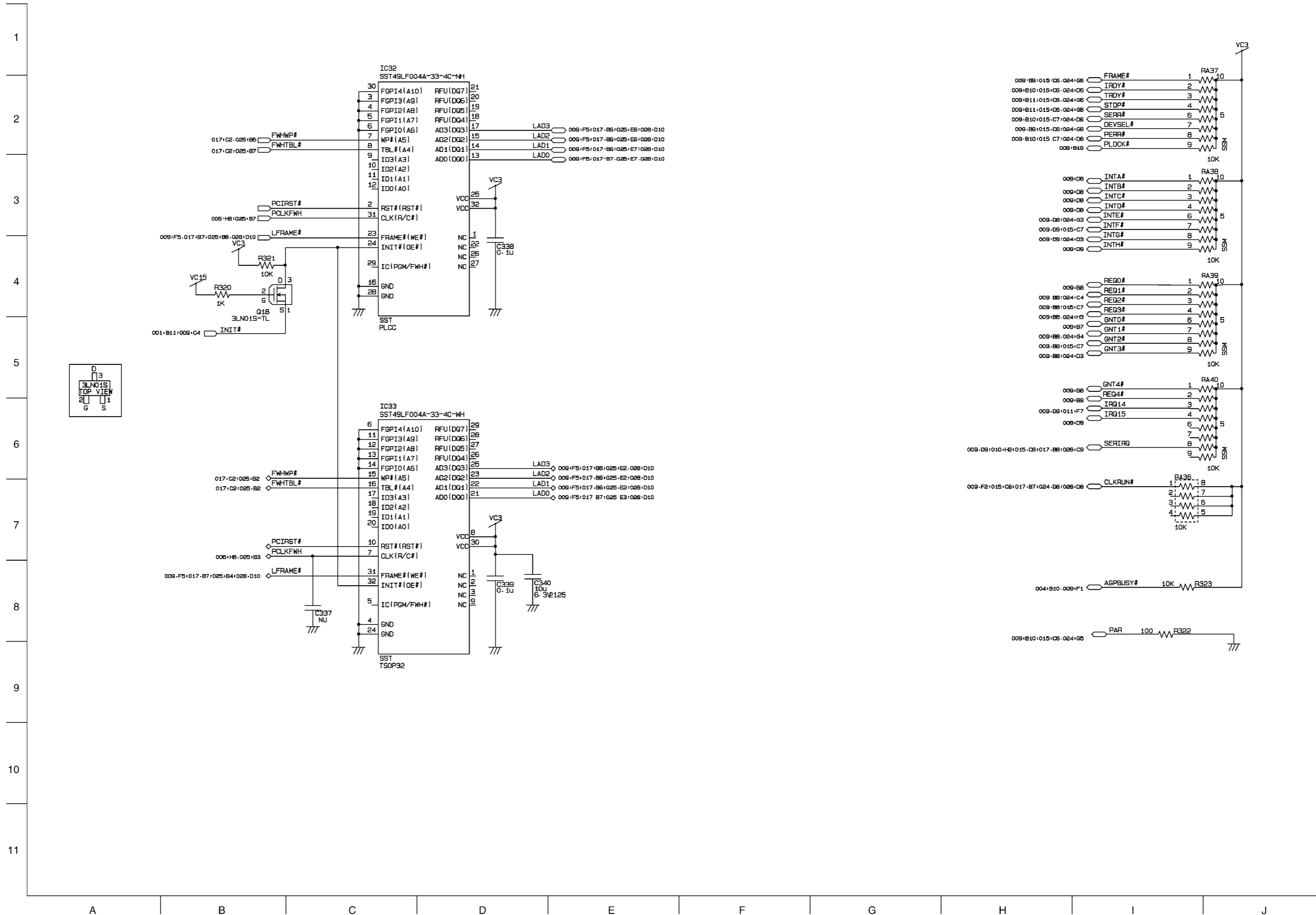
# Main 23 LED, PAD SW CN



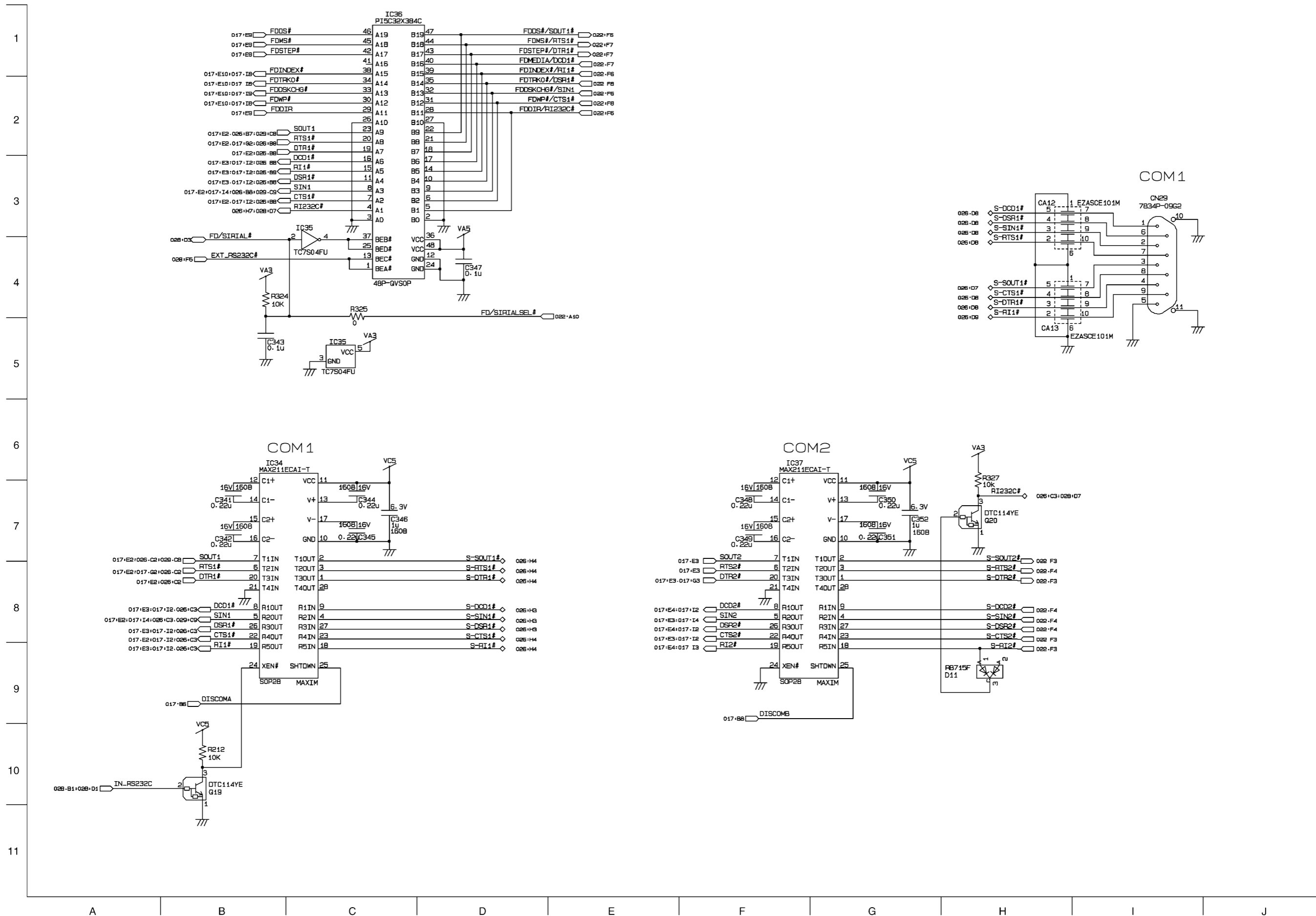
# Main 24 Mini PCI CN.



# Main 25 BIOS, Registers

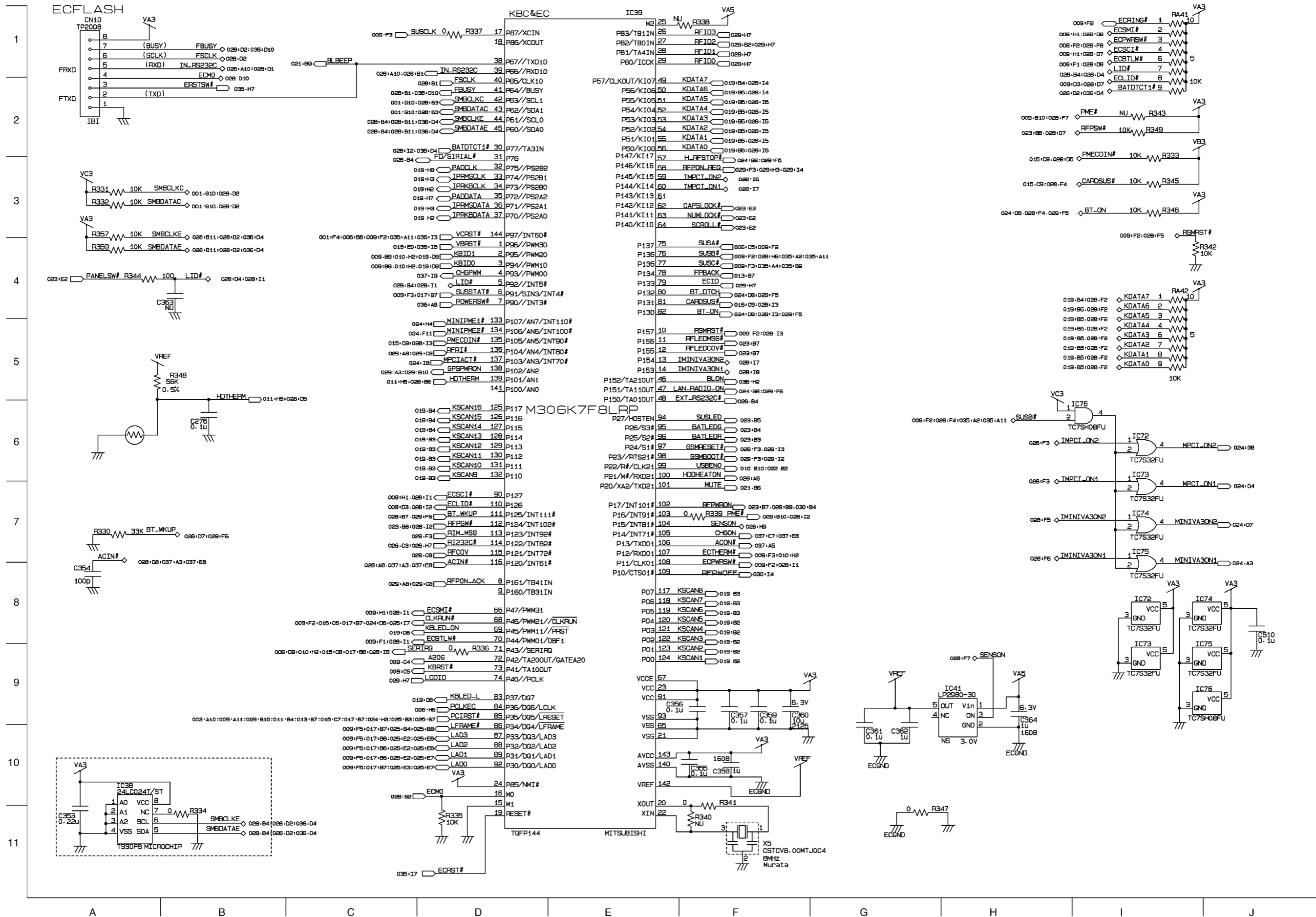


# Main 26 RS232C



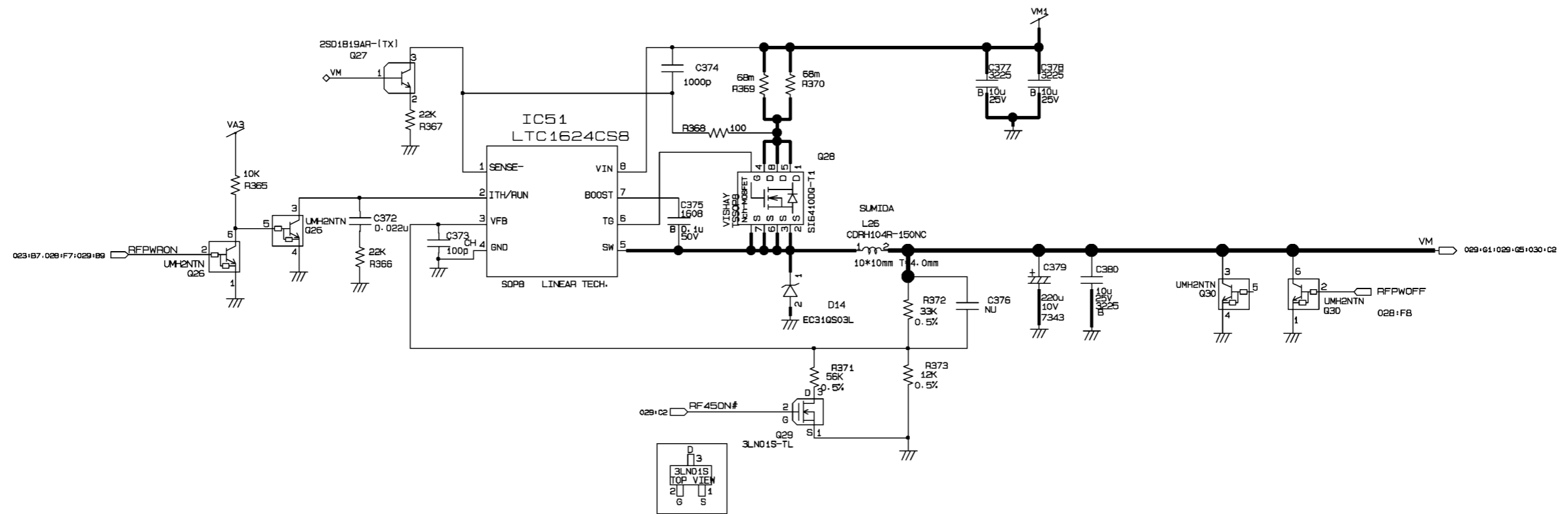


# Main 28 EC, KB



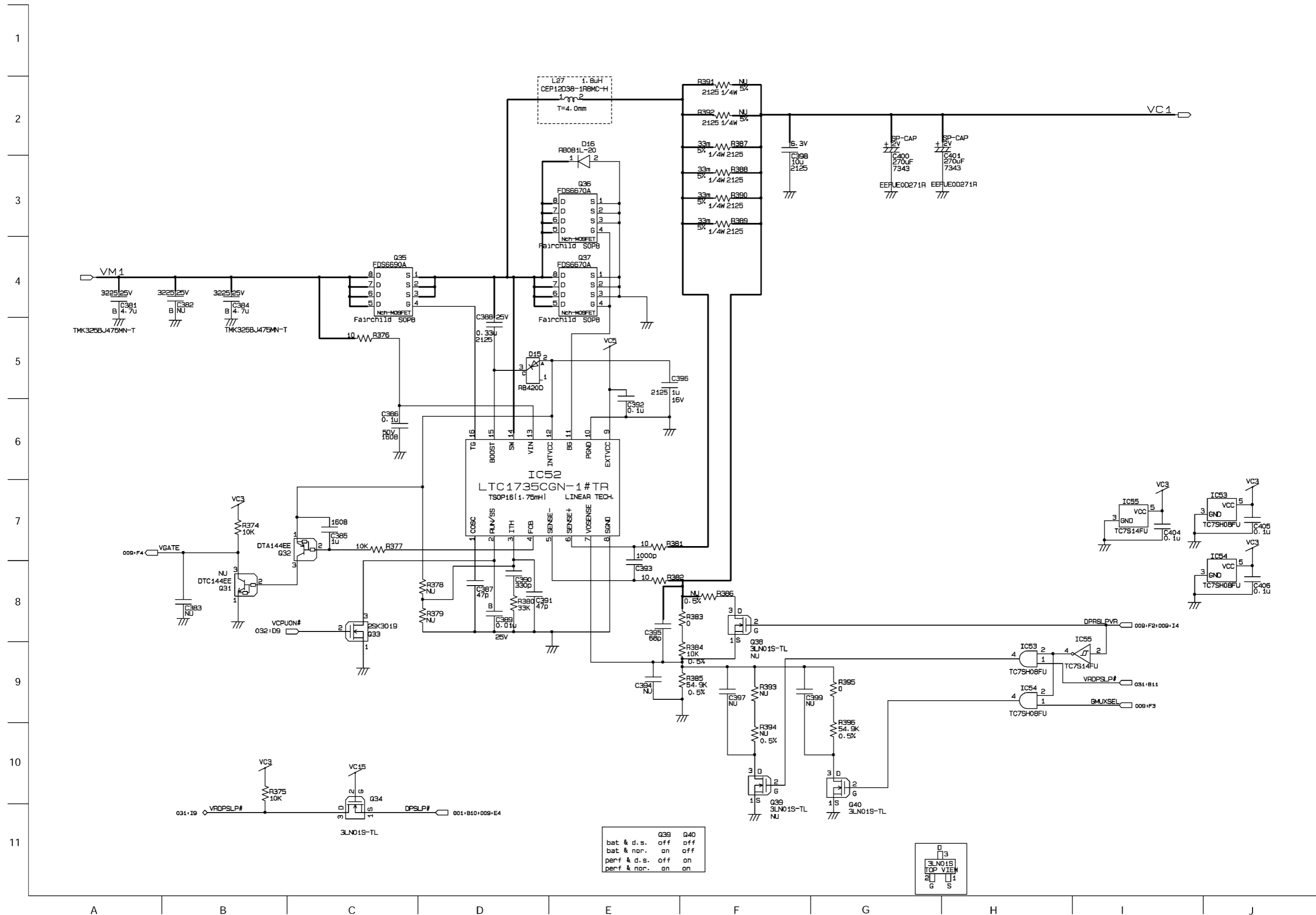


# Main 30 Wireless Power (VM)

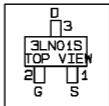


	RFPWON	RF450N#
VM4.5V	H	L
VMSV	H	H

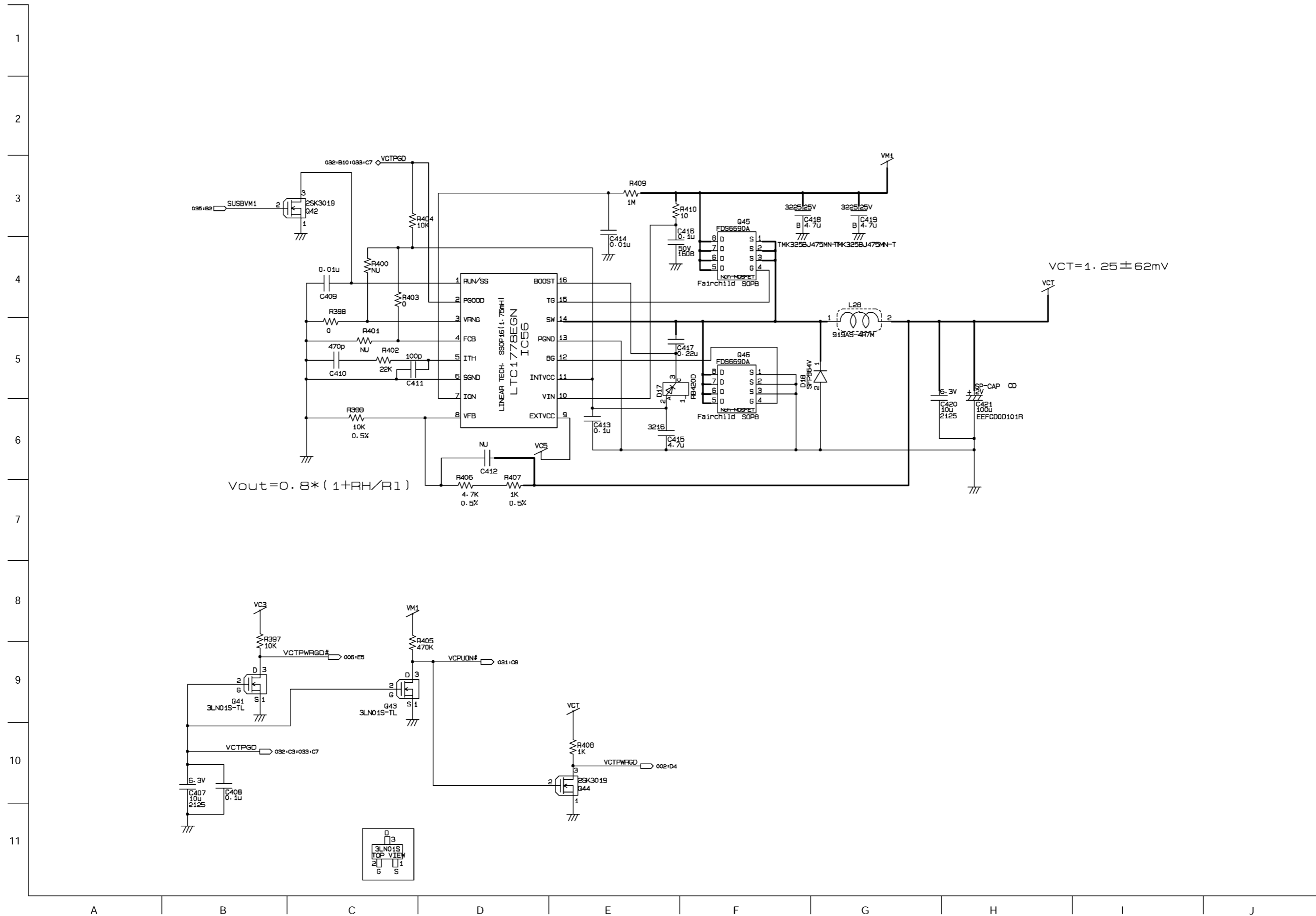
# Main 31 VC1



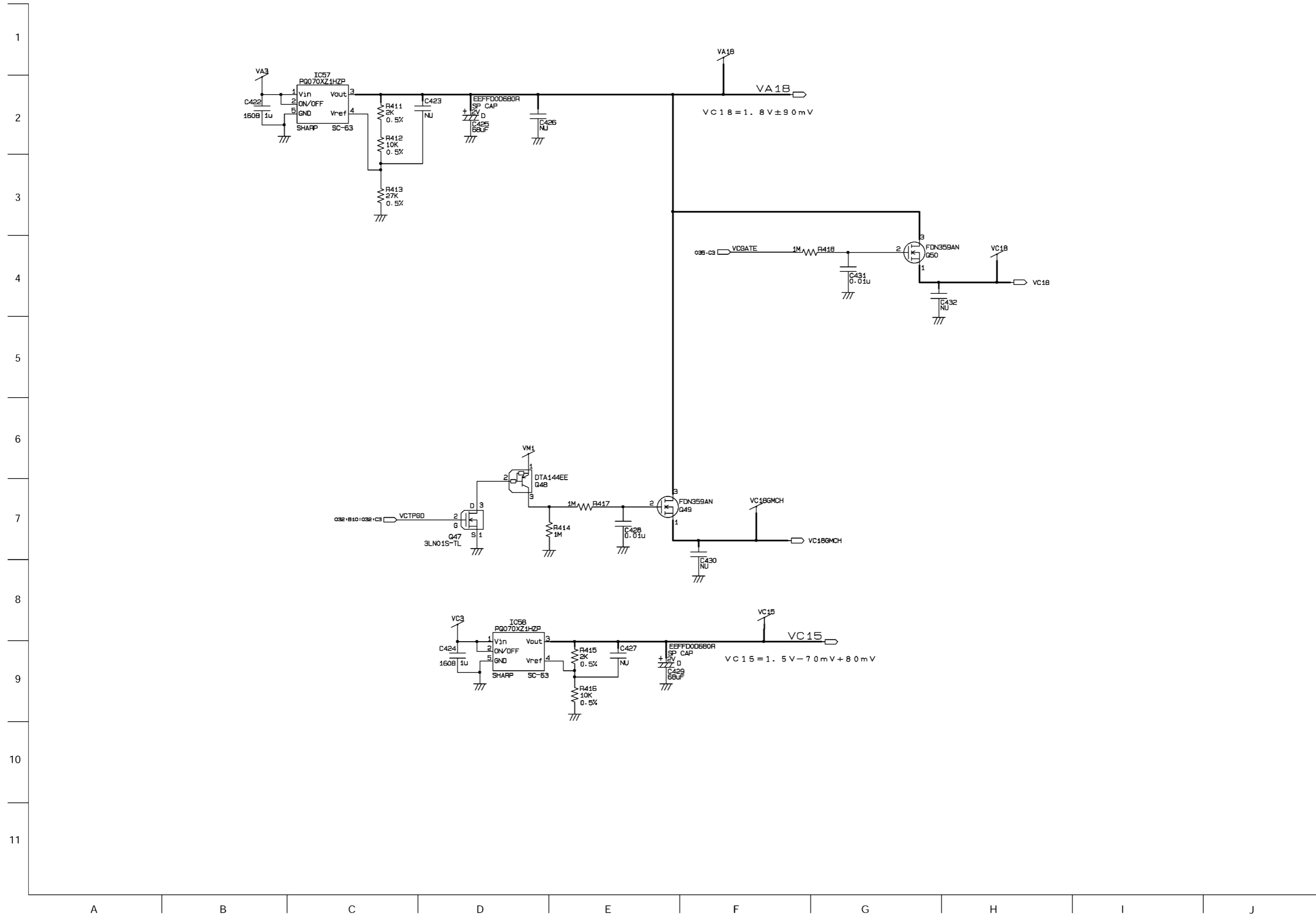
	Q39	Q40
bat & d.s.	off	off
bat & nor.	an	off
perf & d.s.	off	on
perf & nor.	an	on



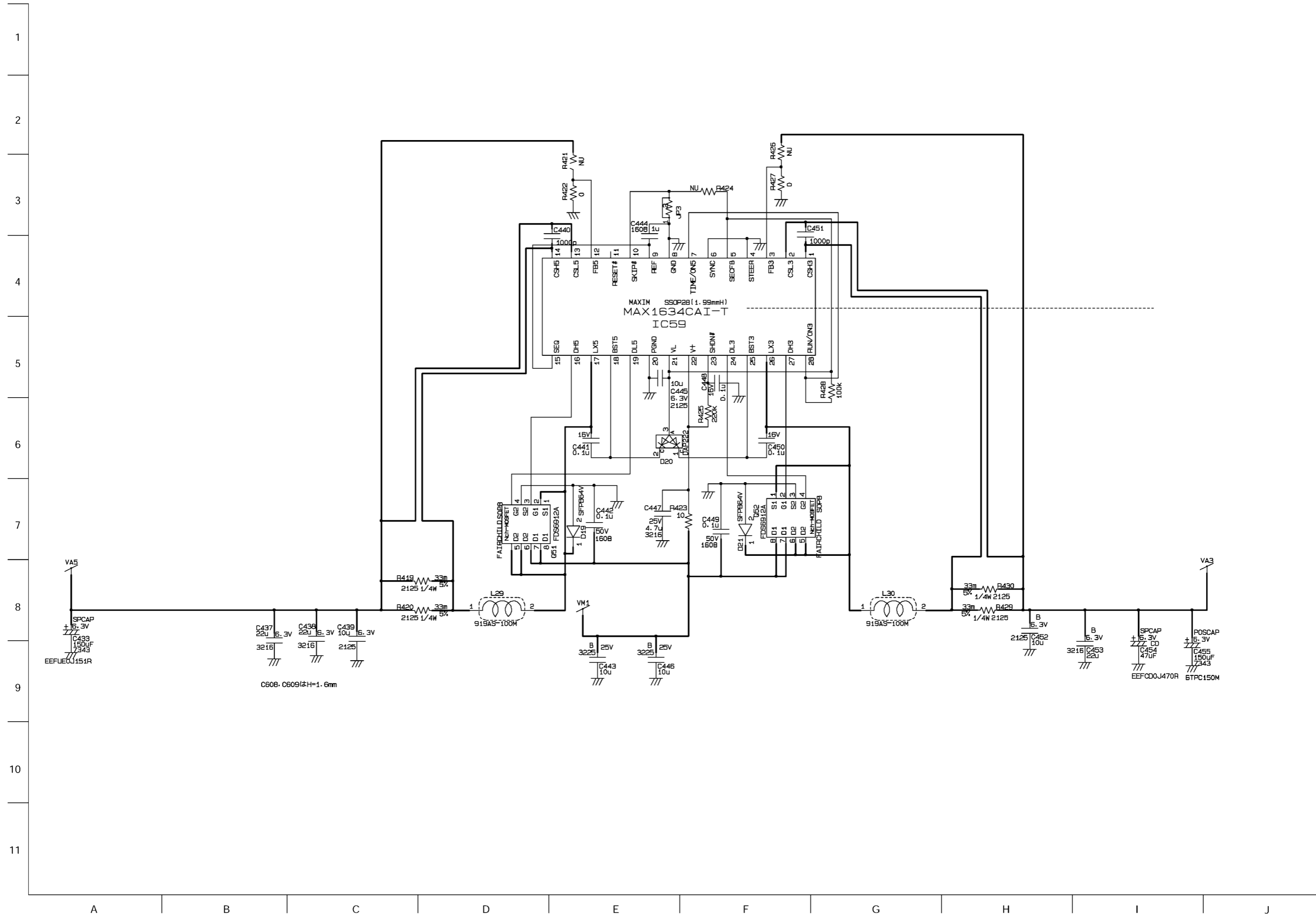
# Main 32 VCT



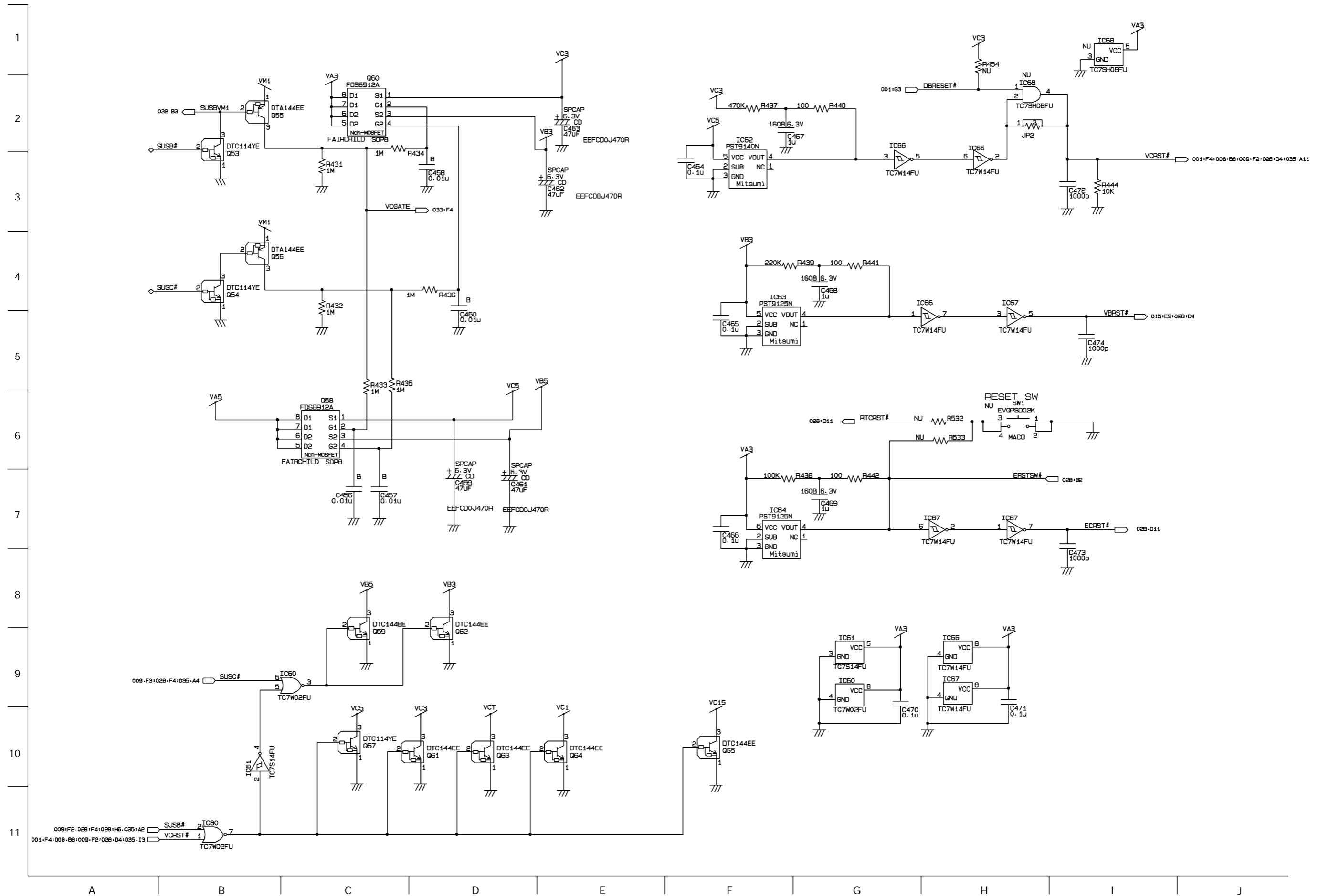
# Main 33 VA1.8, VC1.5



# Main 34 VA3, VA5



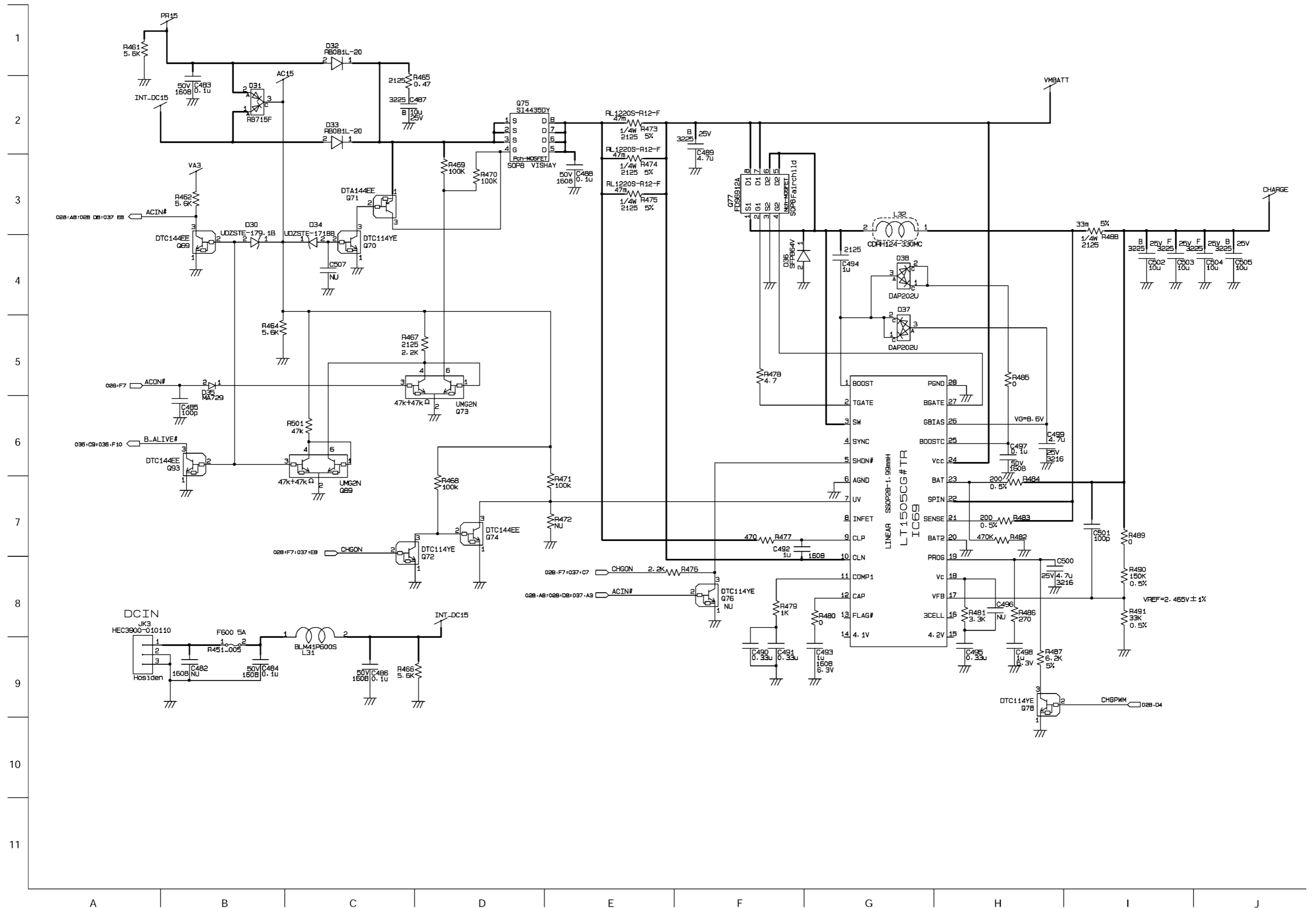
# Main 35 VC3, VB3, VC5, VB5, Reset







# Main 37 DCIN, Battery Charger





## 2. Main PCB<Bottom View>



# Service Manual

Notebook Computer

CF-M34

TOUGHBOOK

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***Simplified***


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This is the Service Manual for the following areas.

M ...for U.S.A. and Canada

E ...for U.K.

G ...for Germany

F ...for France

S ...for Sweden

T ...for Italy

P ...for Spain

## Model Number Reference

The following models are numbered in accordance with the types of CPU, LCD and HDD etc. featured by product.

## Model No. CF-M341 2 3 Z 4 5

### 1: CPU type

R: Mobile Intel® Pentium® III Processor-M 800MHz

### 2: LCD /HDD type

H: 8.4" TFT Color / 30 GB

T: 8.4" TFT Color / 30 GB

### 3: RAM size / Modem - LAN

F: 256 MB / Combo

### 4: Operation System

F: Multi-Language (Microsoft® Windows® 2000)

G: Multi-Language (Microsoft® Windows® XP Professional)

Q: Dual OS (Microsoft® Windows® 2000 Professional / Microsoft® Windows® XP Professional)

### 4: Area

M/ E /G /F /S /T /P: Refer to above area table

## WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

# Panasonic®

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# WARNINGS

For U.K.

## **This apparatus must be earthed for your safety.**

To ensure safe operation the three-pin plug must be inserted only into a standard three-pin power point which is effectively earthed through the normal household wiring.

Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth. Wrongly wired extension cords are a major cause of fatalities.

The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe.

For your safety, if you have any doubt about the effective earthing of the power point, consult a qualified electrician.

### **FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY**

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 3 amp fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 3 amps and that it is approved by ASTA or BSI to BS 1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

**IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.**

**THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.**

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

**Warning: THIS APPLIANCE MUST BE EARTHED.**

### **Important**


The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow: Earth

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured GREEN-and-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol  coloured GREEN or GREEN-and-YELLOW.

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured BLACK.

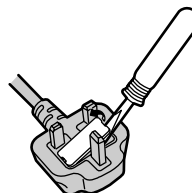
The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured RED.

The mains plug on this equipment must be used to disconnect the mains power.

Please ensure that a socket outlet is available near the equipment and shall be easily accessible.

## **How to replace the fuse**

Open the fuse compartment with a screw-driver and replace the fuse.



### **Warnings**

- This equipment is not designed for connection to an IT power system.  
(An IT system is a system having no direct connections between live parts and Earth; the exposed-conductive-parts of the electrical installation are earthed.  
An IT system is not permitted where the computer is directly connected to public supply systems in the U.K.)
- Disconnect the mains plug from the supply socket when the computer is not in use.

This equipment is produced to BS800/1983.

## LITHIUM BATTERY ⚠

- **CAUTION**

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the equipment manufacture.

Discard used batteries according to the manufacturer's instructions.

## LITHIUMBATTERIES ⚠

**Vorsicht!**

Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

## PILE AU LITHIUM ⚠

ATTENTION: IL Y A DANGER D'EXPLOSION S' IL Y A REMPLACEMENT INCORRECT DE LA PILE. REMPLACER UNIQUEMENT AVEC UNE PILE DU MÊME TYPE OU D'UN TYPE RECOMMANDÉ PAR LE CONSTRUCTEUR. METTRE AU RÉBUT LES PILES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT.












# Replacement Parts List

**Note: Important Safety Notice**

Components identified by  mark have special characteristics important for safety.  
When replacing any of these components, use only manufacturer's specified parts.

**CF-M34RxZFzx**

REF.NO.and AREA	PART NO.	DESCRIPTION	Q'TY
<b>Main Block Unit</b>			
E 1	DL3U11205AAA	PCB, MAIN	1
E 3	DL3U27057FAA	PCB, MODEM JACK	1
E 4	DL3U37057FAA	PCB, DOCKING CONNECTOR	1
E 5	DL3U47057FAA	PCB, LED	1
E 6	DL3UP7046ABA	PCB, TOUCH SCREEN PANEL	1
E 7	DFWV48C0604	FPC, LCD	1
E 8	DL3UP7048CAA	FPC, HDD	1
E 9	N2EABEC00001	TOUCH PAD	1
E 10	DFAS28P01ZAF	SPEAKER	1
E 11	DFJE9102ZA	FFC, TOUCH PAD	1
E 12	DFJE9103ZA	FFC, LED	1
E 13	CR2025/S5H	BATTERY, LITHIUM	1
E 14	 DFWP0123ZA	PCB, INVERTER	1
E 15	DFJS703ZA	CABLE, INVERTER	1
E 16	DFJS552ZA	CABLE, SPEAKER	1
E 17	DL3DW9037WAA	LCD (CF-M34RTFzXM)	1
E 17	DL3DW9037XAA	LCD (CF-M34RHFZxx)	1
E 18	N3CABQD00004	HDD	1
E 19(M)	DFSX1A91VBTR	KEYBOARD	1
E 19(E)	DFSX1A92XBTR	KEYBOARD	1
E 19(G)	DFSX1A93XBTR	KEYBOARD	1
E 19(F)	DFSX1A94XBTR	KEYBOARD	1
E 19(T)	DFSX1A98XBTR	KEYBOARD	1
E 19(S)	DFSX1F01XBTR	KEYBOARD	1
E 19(P)	N2ABZJ000008	KEYBOARD	1
E 20	DFJS550YA	CABLE, MODEM	1
E 21	N5HCC0000001	COMBO CARD	1
E 22	DFUB0018ZA	EJECTOR, PCMCIA	1
E 24	DL3U17124AAA	PCB, MPCFI RELAY CARD3	1
E 52	DFJS641YA	CABLE, LAN	1
E 54	A2CA00000042	LCD BACK LIGHT (CF-M34RTFzXM)	1
E 54	A2CA00000043	LCD BACK LIGHT (CF-M34RHFZxx)	1
<b>Accessories</b>			
A 1(M)	 DFQX5335ZA	OPERATING INSTRUCTION MANUAL	1
A 1 (E, G, F, T, S, P)	 *	OPERATING INSTRUCTION MANUAL	1
A 3	 CF-AA1653M1	AC ADAPTOR	1
A 4(M)	 K2CG3DR00003	AC CABLE	1
A 4 (E, G, F, T, S, P)	 *	AC Cable	1
A 5	 DFJS535ZA	MODEM CABLE	1
A 6	 DFWV95F0008	BATTERY PACK	1
A 8	DFQC9006ZA-0	SHOULDER BELT	1
A 20	DFHS9010ZA	CLOTH	1
A 21	DFHR9039ZA-0	STYLUS PEN	1

Note: About the parts which written " \* " above, please order to Computer Products Europe (CPE) written below.  
Matsushita Electric (U.K.) Ltd. Computer Products Europe (CPE) TEL: +44-1222-736060 FAX: +44-1222-735500

**Packing Material**

P 1	DFPK1061YA	CASE, PACKING	1
P 2	DFPE0598ZA	CUSHON	1

**Mechanical Parts**

K 1	DFMD7583ZB	PLATE, DOCKING CONNECTOR PCB	1
K 2	DFMD7584ZA	PLATE, DOCKING COVER	1
K 4	DFWV84F0080	COVER, KEYBOARD FPC	1
K 5	DFWV84F0081	COVER, LCD FPC	1
K 6	DFMD7589ZB	PLATE, RF FRONT	1
K 7	DFMD7592ZA	PLATE, AUDIO JACK	1
K 8	DFMD7594ZA-0	HOLDER, PCMCIA COVER	1
K 9	DFMX0635ZB	TAPE	2
K 10	DFMX0719XA	INSULATION SHEET, LED CARD	1
K 11	DFMX0736YA	SPACER, AUDIO JACK	1
K 14	DFMY0218ZA	SHEET, CPU HEAT SINK	3
K 15	DFMY5009ZB	HEAT PIPE	1
K 16	DFMY5010ZA	PLATE, HEAT SINK	1
K 19 (M)	DFWV80C0447	CABINET, BOTTOM	1
K 19-1 (M)	DFHG1209ZA	RUBBER FOOT	2
K 19 (E, G, F, T, S, P)	DFWV80C0448	CABINET, BOTTOM	1
K 19-1 (E, G, F, T, S, P)	DFHG1209ZA	RUBBER FOOT	2
K 20	DFWV80A0308	CABINET, TOP	1
K 21	DFHG1270ZB	SHIELD SHEET, AUDIO JACK BEZEL	1
K 22	DFHG1271ZA	SHIELD FOAM, AUDIO JACK	1
K 23	DFHG1276ZA	PLATE, SPEAKER	1
K 25	DFHG1293ZA-0	COVER, AUDIO JACK	1
K 26	DFHG1385ZA-0	COVER, DC JACK	1
K 27	DFHG1295ZB-0	COVER, USB JACK	1
K 28	DFHG1296ZA-0	COVER, SERIAL CONNECTOR	1
K 29	DFHG1297ZA-0	COVER, PCMCIA	1
K 30	DFHG1302ZA-0	COVER, MODEM JACK	1
K 31	DFHG1304ZA	RUBBER, ANTENNA CABLE	1
K 32	DFHR7632ZA-0	SHEET, HANDLE SCREW BLIND	2
K 34	DFHG1330ZA	PAD, TOUCH PAD	1
K 35	DFHE0326ZA	CONDUCTIVE CUSHION, USB	1
K 36	DFKE0488ZA-0	COVER, BATTERY	1
K 37	DFHG1209ZA	FOOT	2
K 38	DFKE0489ZB-0	AUDIO JACK BEZEL	1
K 40	DFKE0490XB	HOLDER, SPEAKER/RTC BATTERY	1
K 41	DFKE0491YA-0	COVER, DOCKING CONNECTOR	1
K 42	DFKE0492ZA	STOPPER, COVER	1
K 43	DFKE9040VB-0	PALM REST COVER	1
K 45	DFBC0239ZA	CLICK BUTTON	1
K 46	DFBD0121ZA-0	KNOB, POWER SW	1
K 47	DFBD9002XA-0	KNOB, BATTERY COVER	1
K 50	DFWV80A0290	CABINET, LCD FRONT/TS PANEL (CF-M34RTFZxM)	1
K 50-1	DFWV84A0198	KIT, TOUCH SCREEN PANEL (CF-M34RTFZxM)	1
K 50	DFWV80A0299	CABINET, LCD FRONT/TS PANEL (CF-M34RHFZxx)	1
K 50-1	DFWV84A0210	KIT, TOUCH SCREEN PANEL (CF-M34RHFZxx)	1
K 51	DFUS0254ZA	SPRING, BUCKLE	1
K 52	DFMC0539ZA	WATER RESISTING SHEET	1

K 53		DFMX0762ZB	CASE, INVERTER PCB	1
K 54		DFBH1100ZA	HINGE	2
K 60		DFHG1299ZA-0	LCD RUBBER	2
K 61		DFHG1300ZA-0	CAP, ANTENNA	1
K 62		DFHG1301ZA-0	CAP, ANTENNA HOLDER	1
K 65		DFWV80C0437	CABINET, LCD REAR	1
K 66		DFHP7069ZA	TAPE, TOUCH SCREEN PANEL PCB	1
K 67		DFKE0496ZA-1	HOLDER, BUCKLE	1
K 68		DFGB0075ZA-0	LOGO BADGE	1
K 69		DFGB0077ZA-1	TOUGHBOOK LABEL	1
K 70		DFBS0055ZA-1	BUCKLE	1
K 71		DFQT6077YA	LABEL, CAUTION, INVERTER	1
K 74		DFMD7581ZA	HDD CASE UPPER	1
K 75		DFMD7582ZA	HDD CASE LOWER	1
K 76		DFHG1260ZC	CUSHION, HDD	1
K 77		DFMD7591ZA-1	COVER, HINGE	1
K 80 (M)	△	DFGT0753YA-0	LABEL, RATING	1
K 80 (E, G, F, T, S, P)	△	DFGT0907ZA	LABEL, RATING	1
K 82		DFQC9005ZA-0	STRAP	1
K 86		DFMD7593YA	PLATE, REFLECT PCMCIA	1
K 87		DFMX0735ZB	SHEET, KBD FPC	1
K 88		DFHG1272ZB	SHIELD SHEET, SERIAL CONNECTOR	1
K 89		DFHG1280YA	COVER SHEET, PCMCIA	1
K 401		DFMX0574ZA	INSULATION SHEET	1
K 402		DFHE0533ZA	GASKET	1
K 403		DFHE0534ZA	PCMCIA ASSIST	1
K 404		DFMX0965ZA	PCB, INSULATION SHEET T-P	1
K 405		DFHG826ZA	ASS'Y, UPPER LCD-TP SHEET	1
K 406		DFHG827ZA	ASS'Y, LOWER LCD-TP SHEET	1
K 407		DFHG828ZA	RUBBER, INVERTER HOLD	1
K 408		DFHE0507ZA	UPPER, LCD CUSHION	2
K 409		DFHE0508ZA	LOWER, LCD CUSHION	1
K 410		DFHE0514ZA	LOWER L, LCD CUSHION	1
K 411		DFHG1434ZA	COVER, JACK, LAN	1
K 413		DFQT9669ZA	LABEL, MS	1
K 414 (M)		DFQT9675ZA	LABEL, ENERGY STAR	1
K 415		DFQT6243ZA	LABEL, AMBIT COMBO	1
K 416		DFQT9778ZA	LABEL, PENTIUM3-M	1
K 418		DFMD7653ZA	PLATE, MINI PCI TYPE313 CARD	1
K 419		DFMX0797ZA	INSULATION SHEET MINI PCI TYPE3 RELAY	1
K 420		DFHG807ZB	HOLDER, MINI PCI 3A	1
K 421		DFHE0381ZA	GASKET	1
K 422		DFHG1282YA	SHEET, UPPER, INVERTER CABLE	1
K 423		DFGX0236ZA-0	SHEET	1
K 550		DFMC0654ZA	PLATE, DOCKING EMI L	1
K 551		DFMC0655ZA	PLATE, DOCKING EMI R	1
K 552		DFHE0638ZA	SHIELD SHEET, DSUB	1
K 553		DFHR7649ZA	SHEET B	1
K 554		L9DZAA000002	HEATER	1
K 555		D4CZ71030001	THERMISTOR, NTC	1
K 556 (E, G, F, T, S, P)		DFMD4040ZA-0	SIM COVER, GSM/GPRS	1
K 557 (E, G, F, T, S, P)		DFHE0637ZA	SHIELD SHEET, SIM COVER	1
K 558		DFMX1031ZA	PROTECT SHEET, PCMCIA	1

K 559	DFMD3096ZA	HOLDER, USB CONNECTOR	1
K 560	DFHG1556ZA	LCD CUSHION UPPER-2	1
K 561	DFMC0567ZA	SHIELD SHEET B	1
K 562 (E, G, F, T, S, P)	DXQN17+A3FZL	SCREW	2
K 101	XSB2+4FNL	SCREW	20
K 103	XYN2+J10FN	SCREW	2
K 104	XYN2+J4FN	SCREW	3
K 105	XYN2+J6FN	SCREW	22
K 106	XYN2+J8FZ	SCREW	8
K 107	XYN26+J8FN	SCREW	4
K 108	IKT0104AA	SCREW	2
K 109	DFHE5117ZA	SCREW	9
K 110	XYN2+J6	SCREW	1
K 111	XYN2+J8FN	SCREW	2
K 112	XYN2+J8FZ	SCREW	10
K 113	XYN3+J7FNL	SCREW	2
K 114	XYN4+J9FZ	SCREW	2
K 115	XYN2+J5FZ	SCREW	2

# Replacement Parts List

Note: Important Safety Notice

Components identified by  $\Delta$  mark have special characteristics important for safety.  
When replacing any of these components use only manufacturer's specified parts.

## CF-M34RxFZxx

REF. NO and AREA	PART NO.	DESCRIPTION	Q'TY
<b>Main PCB</b>			
C 2 4 6 8 9 11 12 14 58 59 60 61 64 65 66 67 68 76 77 78 79 80 81 82 83 84 85 86 87 90 91 95 98 99 106 107 108 110 112 126 140 141 142 143 148 155 156 163 168 172 174 175 176 177 178 179 180 181 182 183 184 185 187 188 189 190 191 194 198 199 201 204 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 243 245 246 247 248 249 254 261 264 265 270 273 276 277 279 282 289 296 307 308 310 313 318 328 330 336 338 339 343 347 355 356 357 359 361 367 369 370 371 392 404 405 406 408 413 441 448 450 464 465 466 470 471 480 510 511 512 513	DCUN1C104ZFD	CAPACITOR, 16V, 0.1 $\mu$ F	146
C 3	F1G1H222A450	CAPACITOR, 50V, 2200 pF	1
C 5 7 13 54 55 72 421	EEFCD0D101R	CAPACITOR, 2V, 100 $\mu$ F	7
C 10	EEFFD0J330R	CAPACITOR, 6.3V, 33 $\mu$ F	1
C 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 353	F1G0J224A004	CAPACITOR, 6.3V, 0.22 $\mu$ F	25
C 39 40 41 42 43 70 71 73 74 75 113 114 127 138 139 169 170 171 173 186 200 203 205 222 244 250 251 253 262 266 274 281 315 325 326 327 329 332 333 334 340 360 398 407 420 439 445 452 509	F1J0J106A004	CAPACITOR, 6.3V, 10 $\mu$ F	49

C 44 45 46 47 48 49 50 51 52 53 128 130 132 134 154 157 158 196 275 285 290 303 304 317 335 346 352 358 362 364 385 422 424 444 467 468 469 492 493 498	F1H0J1050013	CAPACITOR, 6.3V, 1 $\mu$ F	40
C56 57 305 410	F1G1H471A450	CAPACITOR, 50V, 470 pF	4
C 62 88 89 92 93 94 96 97 100 101 102 103 104 105 115 116 117 118 119 122 123 124 129 131 133 135 147 149 164 242 257 331 365 366 389 409 414 428 431 456 457 458 460	F1G1E103A062	CAPACITOR, 25V, 0.01 $\mu$ F	43
C 109 111 425 429	EEFFD0D680R	CAPACITOR, 2V, 68 $\mu$ F	4
C 152 153	F1G1H6R0A452	CAPACITOR, 50V, 6 pF	2
C 165 309 312 314 437 438 453	F1K0J226A004	CAPACITOR, 6.3V, 22 $\mu$ F	7
C 197	F1G1C473A004	CAPACITOR, 16V, 0.047 $\mu$ F	1
C 144 287 288 299 302 323 324 374 393 440 451 472 473 474 477 607	F1G1H102A450	CAPACITOR, 50V, 1000 pF	16
C 192 193 195 387 391	F1G1H470A451	CAPACITOR, 50V, 47 pF	5
C 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241	F1G1H100A452	CAPACITOR, 50V, 10 pF	19
C 252 396 494	F1J1C1050011	CAPACITOR, 16V, 1 $\mu$ F	3
C 255 256 268 269 292 293 294 295 354 373 411 485 501	F1G1H101A451	CAPACITOR, 50V, 100 pF	13
C 271 272	F1G1H150A451	CAPACITOR, 50V, 15 pF	2
C 278 284 311	F1H1A224A028	CAPACITOR, 10V, 0.22 $\mu$ F	3
C 298 300 301 319 375 386 416 442 449 481 483 484 486 488 497	F1H1H104A783	CAPACITOR, 50V, 0.1 $\mu$ F	15
C 341 342 344 345 348 349 350 351	ECUV1C224ZV	CAPACITOR, 16V, 0.22 $\mu$ F	8
C 372	F1G1C223A033	CAPACITOR, 16V, 0.022 $\mu$ F	1
C 377 378 446 503 504	F1L1C1060014	CAPACITOR, 35V, 10 $\mu$ F	5
C 379	DCS1ATB221M	CAPACITOR, 10V, 220 $\mu$ F	1
C 380	DCUI1C106HDB	CAPACITOR, 16V, 10 $\mu$ F	1
C 381 384 418 419 489	F1L1E4750006	CAPACITOR, 25V, 4.7 $\mu$ F	5
C 388 490 491 495	F1J1H334A679	CAPACITOR, 50V, 0.33 $\mu$ F	4
C 390	F1G1H331A450	CAPACITOR, 50V, 330 pF	1
C 395	F1G1H680A451	CAPACITOR, 50V, 68 pF	1
C 400 401	EEFUE0D271R	CAPACITOR, 2V, 270 $\mu$ F	2
C 415 447 499 500	ICUV1E475ZFT	CAPACITOR, 25V, 4.7 $\mu$ F	4
C 417	F1J1H224A679	CAPACITOR, 50V, 0.22 $\mu$ F	1
C 433	EEFUE0J151R	CAPACITOR, 6.3V, 150 $\mu$ F	1
C 443 487 502 505 506	F1L1E106A017	CAPACITOR, 25V, 10 $\mu$ F	5
C 454 459 461 462 463	EEFCD0J470R	CAPACITOR, 6.3V, 47 $\mu$ F	5
C 455	F4Z0J1570003	CAPACITOR, 6.3V, 150 $\mu$ F	1

CA 1 2 3 4 5 6 7 8 9 10 11 12 13		EZASCE101M	CAPACITOR ARRAY	13
CN 2		DFJS356ZA004	CONNECTOR	1
CN 3		DFJP050ZA003	CONNECTOR, FOR RTC BATTERY	1
CN 4		K1MN50A00006	CONNECTOR	1
CN 5		DFJP224ZA068	CONNECTOR, FOR PC CARD SLOT	1
CN 6		DFJP214ZA100	CONNECTOR, FOR DOCKING CONNECTOR PCB	1
CN 7		DFJS16N23ZAJ	CONNECTOR, FOR KEYBOARD	1
CN 8		DFJS547ZA012	CONNECTOR, FOR TOUCH PAD	1
CN 12		1123258-1	CONNECTOR	1
CN 11		DFJP050ZA002	CONNECTOR, FOR SPEAKER	1
CN 13		DFJS207YA045	CONNECTOR, FOR LCD/TOUCH SCREEN PANEL PCB	1
CN 14		DFJS549ZA006	CONNECTOR	1
CN 17		K1KAA0A00079	CONNECTOR, FOR MODEM CONNECTOR PCB	1
CN 18		K1MN40B00003	CONNECTOR	1
CN 19 20		DFJS207ZA030	CONNECTOR	2
CN 25		DFJS207ZA015	CONNECTOR, FOR LED PCB	1
CN 27		DFJS13N24ZAJ	CONNECTOR, FOR KEYBOARD	1
CN 29		DFJP236ZA009	CONNECTOR, SERIAL PORT	1
CN 32		DFJS207ZA006	CONNECTOR	1
CN 33		K1KA04A00335	CONNECTOR	1
CN 34		K1KA02A00364	CONNECTOR	1
CN 600		3900170-08	CONNECTOR, FOR MAIN BATTERY	1
CN 602		DFJP217ZA005	CONNECTOR, FOR INVERTER PCB	1
D 2 7 8 35		MA729-TX	DIODE	4
D 3 11 31 50		B0JDBE000002	DIODE	4
D 4 5 6 22 23		DEDDA204UT	DIODE	5
D 9 12		DED1SS400T61	DIODE	2
D 14		DEDEC31QS03L	DIODE	1
D 15 17		DEDRB420DT97	DIODE	2
D 16 32 33 39 41		DEDRB081L20	DIODE	5
D 18 19 21 36		DEDSFPB64V	DIODE	4
D 20		DAP222TL	DIODE	1
D 25 26 27 28		DEDUDZ6R2BT	DIODE	4
D 29		DED03P2JT1-D	DIODE	1
D 30		B0BC9R000008	DIODE	1
D 34		B0BC01700015	DIODE	1
D 37 38		B0ADCJ000025	DIODE	2
D 40 51		DAN222TL	DIODE	2
F 1 2 602	△	XBADMMCT010U	FUSE (1A)	3
F 3	△	K5H502300001	FUSE (5A)	1
F 600 601	△	XBAD4515R00	FUSE (5A)	2
L 1		DDAZR4R7KT2L	INDUCTOR	1
L 14 17		G1CYYYZ00036	INDUCTOR	2
L 24		G1C100KA0002	INDUCTOR	1
L 26		G1A150ZA0004	COIL	1
L 28		G1C4R7MA0022	INDUCTOR	1
L 32		G0A330H00006	INDUCTOR	1
SW 3		SSST01-3A	SW, POWER	1
SW 5		K0D166A00003	SW	1
JK 1, 2		IHC0721AA	JK, HEADPHONE	2
JK 3		IHC0626AA	JK, DC-IN	1
IC 1		C2GBC0000154	IC, CPU	1
IC 2		C1DB00000919	IC, GMCH	1
IC 3		C1DB00000941	IC, SUPER I/O	1
IC 4		C1ZBZ0002165	IC, PLD	1
IC 5		C1DB00000578	IC, TEMP SENSOR	1
IC 6 23 24		DA7W66UT12L0	IC, SWITCH	3
IC 7		C9ZB00000407	IC, PLL	1
IC 9 10 11 12		C3ABRG000021	IC, SDRAM	4



IC 13	C1DB00000908	IC, ICH3	1
IC 14 31	C0DBZH00004	IC, USB POWER CONTROLLER	2
IC 15 45 70	DA7S00UT85L0	IC, AND GATE	3
IC 16	C1DB00000881	IC, VGA CONTROLLER	1
IC 17 18	DA7ST08U85L0	IC, AND GATE	2
IC 19	DAR5C4752T-R	IC, PCMCIA CONTROLLER	1
IC 20	DA2562A1BX2V	IC, BIPOLAR LOGIC	1
IC 22 35 43 71	DA7S04UT85L0	IC, INVERTER	4
IC 26 53 54 76	DA7SH08U85L0	IC, AND GATE	4
IC 27	C1BB00000670	IC, AC97 CODEC	1
IC 28	DAM3414AVTEP	IC, OP AMP	1
IC 29	DA7787FSE2E	IC, SOUND AMP	1
IC 30	DA121N331BRR	IC, REGULATER	1
IC 33	C3FBKC000076	IC, BIOS	1
IC 34 37	C0ZBZ0000526	IC, SERIAL BUFFER	2
IC 36	DA32X384CBT	IC, QUICK SW	1
IC 38	C3EBDC000036	IC, EEPROM	1
IC 39	C2CBHF000243	IC, EC	1
IC 41 77	DALP298030N	IC, BIPOLAR LINEAR	2
IC 47	C0JBAZ001945	IC, BUS SWITCH	1
IC 48	DAN5VD45CARR	IC, RESET	1
IC 49	C0JBAZ000279	IC, INVERTER	1
IC 51	DAC1624CS8XU	IC, DC/DC CONVERTOR	1
IC 52	C0DBAFH00006	IC, DC/DC CONTROLLER	1
IC 55 61	DA7S14UT85L0	IC, INVERTER	2
IC 56	C0DBAFH00011	IC, DC/DC CONVERTOR	1
IC 57 58	C0DBEZG00010	IC, REGULATOR	2
IC 59	DA1634CAITXX	IC, STEP REGULATOR	1
IC 60	DA7W02UT12L0	IC, NOR GATE	1
IC 62	DAPST9140NXT	IC, RESET	1
IC 63 64	DAPST9125NXT	IC, RESET	2
IC 66 67	DA7W14UT12L0	IC, INVERTER	2
IC 69	C1DB00000534	IC, CHARGER	1
IC 72 73 74 75	DA7S32UT85L0	IC, OR GATE	4
IC 78	TC7W74FUTE	IC, FLIP FLOP	1
L 2 3 5 6	DDB5Z005-L	INDUCTOR	4
L 4 9 10	DDB5Z031J-L	INDUCTOR	3
L 7 8 11	DDB5Z024E-L	INDUCTOR	3
L 12 15 18 19	DEAM51R0P506	FILTER	4
L 13 16	NFM39R12C221	FILTER	2
L 25	DEAM60R3T222	FILTER	1
L 27	DDAZS1R8MTZE	INDUCTOR	1
L 29 30	DDAZS100MT3T	INDUCTOR	2
L 31	DDB5Z028C-L	INDUCTOR	1
LA 1 2 3 4 5	ILH0070AA	TRANSFORMER	5
LA 6 7	MCZ2525AT102	FERRITE BEAD ARRAY	2
PS 1	MINISMDC0752	POLY SWITCH	1
PS 2	MINISMDC1002	POLY SWITCH	1
Q 1 19 20 53 54 57 70 72 74 78 81	DETC114YETL	TRANSISTOR	11
Q 2 3 33 42 44 91	2SK3019TL	TRANSISTOR	6
Q 4 6 7 16 21 22	DETC114EETL	TRANSISTOR	6
Q 5 17 23	DASI6963DQ	TRANSISTOR	3
Q 8 9 10 11 12 26 30 92	UMH2NTN	TRANSISTOR	8
Q 13 14 15	DETA114EETL	TRANSISTOR	3

Q 18 29 34 40 41 43 47	DA3LN01STL	TRANSISTOR	7
Q 27	2SD1819ARTX	TRANSISTOR	1
Q 28	DASI6410DQT1	TRANSISTOR	1
Q 32 48 55 56 71	DETA144EETL	TRANSISTOR	5
Q 35 45 46	DAFDS6690A	TRANSISTOR	3
Q 36 37	DAFDS6670A	TRANSISTOR	2
Q 49 50	DAFDN359AN	TRANSISTOR	2
Q 51 52 58 60 77	DAFDS6912A	TRANSISTOR	5
Q 59 61 62 63 64 65 69 93	DETC144EETL	TRANSISTOR	8
Q 67	2SK1582T2	TRANSISTOR	1
Q 68 75	DASI4435DYTA	TRANSISTOR	2
Q 73 89	DETUMG2NTR	TRANSISTOR	2
Q 82 90	DASI6415DQT1	TRANSISTOR	2
R 1	D0HA111ZA001	RESISTOR, 1/16W, 110Ω	1
R 2 3 16 187 188	ERJ2GEJ151X	RESISTOR, 1/16W, 150Ω	5
R 4	ERJ2GEJ302X	RESISTOR, 1/16W, 3kΩ	1
R 5 6 7 20	ERJ2GEJ152X	RESISTOR, 1/16W, 1.5kΩ	4
R 8 70 71 72 73 74 75 76 77 78 79 376 381 382 410 423	ERJ2GEJ100X	RESISTOR, 1/16W, 10Ω	16
R 9 27	ERJ2GEJ241X	RESISTOR, 1/16W, 240Ω	2
R 10 12 189	ERJ2GEJ390X	RESISTOR, 1/16W, 39Ω	3
R 13	ERJ2GEJ201X	RESISTOR, 1/16W, 200Ω	1
R 14 125	ERJ2GEJ220X	RESISTOR, 1/16W, 22Ω	2
R 15	ERJ2GEJ511X	RESISTOR, 1/16W, 510Ω	1
R 17	D1BA4990A004	RESISTOR, 1/16W, 499Ω	1
R 18 25 52 53 65 66 68 146 147 407	D0HA102ZA001	RESISTOR, 1/16W, 1kΩ	10
R 19 107	ERJ2GEJ221X	RESISTOR, 1/16W, 220Ω	2
R 21 22 40 41 60 61 110 113 114	D0HA330ZA002	RESISTOR, 1/16W, 33Ω	9
R 23 88 96 103 104 105 106 109 135 138 148 150 152 167 177 179 190 210 212 215 216 217 218 220 221 234 258 259 260 271 272 274 277 278 281 282 292 294 311 321 323 324 327 331 332 333 335 342 345 346 349 357 359 365 374 375 377 397 404 443 444 460	ERJ2GEJ103X	RESISTOR, 1/16W, 10kΩ	62
R 24 39 62	D1BA4750A004	RESISTOR, 1/16W, 475Ω	3
R 26 191 192 411 415	D0HA202ZA001	RESISTOR, 1/16W, 2kΩ	5
R 29 461 462 464 466	ERJ2GEJ562X	RESISTOR, 1/16W, 5.6kΩ	5
R 30 43 44 46 48 97 100 166 181 182 183 184 203 222 225 226 227 228 229 261 262 263 264 304 320 351 352 408 479 504 513	ERJ2GEJ102X	RESISTOR, 1/16W, 1kΩ	31
R 31 36 47	D1BA56R2A003	RESISTOR, 1/16W, 56.2Ω	3

R 32 33 132 139 140 143 156 158 205 208 237 238 239 240 252 296 297 298 299 303 307 308 309 310 312 313 314 315 325 334 336 337 339 341 347 383 395 398 403 422 427 480 485 498 500	ERJ2GE0R00X	RESISTOR, 1/16W, 0Ω	45
R 34 35 37 38 63 64	ERJ2RKF61R9X	RESISTOR, 1/16W, 61.9Ω	6
R 42	D1BA14R0A003	RESISTOR, 1/16W, 14Ω	1
R 45	D0HA270ZA002	RESISTOR, 1/16W, 27Ω	1
R 49	ERJ2RKF1370X	RESISTOR, 1/16W, 137Ω	1
R 50 51 207 316 317 322 344 368 440 441 442 445 446 447 451 452 453 455	ERJ2GEJ101X	RESISTOR, 1/16W, 100Ω	18
R 54 56 57	ERJ2RKF54R9X	RESISTOR, 1/16W, 54.9Ω	3
R 55	ERJ2RKF27R4X	RESISTOR, 1/16W, 27.4Ω	1
R 58	ERJ2RKF80R6X	RESISTOR, 1/16W, 80.6Ω	1
R 59	D0HA470ZA002	RESISTOR, 1/16W, 47Ω	1
R 69 483 484	D0HA201ZA001	RESISTOR, 1/16W, 200Ω	3
R 82	ERJ2RKF2550X	RESISTOR, 1/16W, 255Ω	1
R 84	ERJ2GEJ561X	RESISTOR, 1/16W, 560Ω	1
R 85 90 136 137 198 200 285 286 476	ERJ2GEJ222X	RESISTOR, 1/16W, 2.2kΩ	9
R 94 95	ERJ2GEJ1R0X	RESISTOR, 1/16W, 1Ω	2
R 112	D1BA2210A004	RESISTOR, 1/16W, 221Ω	1
R 115 116 117 118 119 120 122 123 124 130 131 155 287 288 295	ERJ2GEJ330X	RESISTOR, 1/16W, 33Ω	15
R 127	ERJ2GEJ244X	RESISTOR, 1/16W, 240kΩ	1
R 133 134 194 196 253 256 449	ERJ2GEJ472X	RESISTOR, 1/16W, 4.7kΩ	7
R 141 250 366 367 402 456	ERJ2GEJ223X	RESISTOR, 1/16W, 22kΩ	6
R 142	D1BA36R5A003	RESISTOR, 1/16W, 36.5kΩ	1
R 154	D1BA18R2A003	RESISTOR, 1/16W, 18.2Ω	1
R 157 159	ERJ3GEYJ106V	RESISTOR, 1/16W, 10MΩ	2
R 165 269 270 275 276	ERJ2GEJ153X	RESISTOR, 1/16W, 15kΩ	5
R 185 193 195 197	D1BA75R0A003	RESISTOR, 1/16W, 75Ω	4
R 186	D0HA150ZA002	RESISTOR, 1/16W, 15Ω	1
R 199 201 202	ERJ2RKF37R4X	RESISTOR, 1/16W, 37.4Ω	3
R 204 241 242 244 273 289 306 326 350 353 354 355 356 358 361 362 363 364 428 438 468 469 470 471 505 506	ERJ2GEJ104X	RESISTOR, 1/16W, 100kΩ	26
R 211 265 266 267 279 280 318 494 497 501	ERJ2GEJ473X	RESISTOR, 1/16W, 47kΩ	10
R 257	ERJ6GEY0R00V	RESISTOR, 1/10W, 0Ω	1
R 268 330 380	ERJ2GEJ333X	RESISTOR, 1/16W, 33kΩ	3
R 283 405 437 459 482 496 502 503	ERJ2GEJ474X	RESISTOR, 1/16W, 470kΩ	8
R 284	ERJ12YJ3R3H	RESISTOR, 1/2W, 3.3Ω	1
R 290 291	ERJ2GEJ682X	RESISTOR, 1/16W, 6.8kΩ	2
R 300 301 302 486	ERJ2GEJ271X	RESISTOR, 1/16W, 270Ω	4
R 305 489	ERJ3GEY0R00V	RESISTOR, 1/16W, 0Ω	2
R 348 371	D0HA563ZA001	RESISTOR, 1/16W, 56kΩ	2
R 360 481	ERJ2GEJ332X	RESISTOR, 1/16W, 3.3kΩ	2

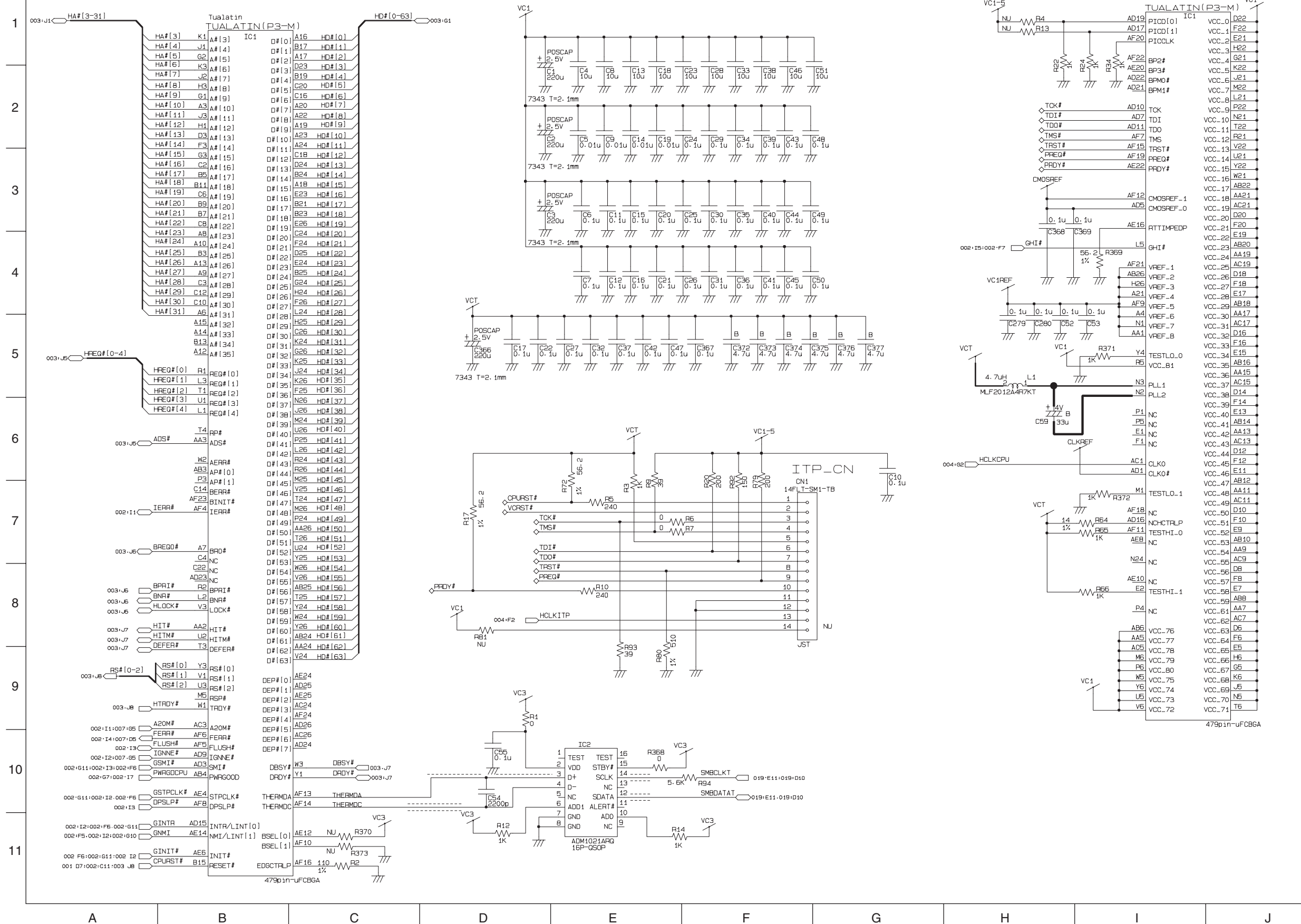
R 369 370		DBJ14RR068VM	RESISTOR, 1/4W, 0.068Ω	2
R 372 491		D0HA333ZA001	RESISTOR, 1/16W, 33kΩ	2
R 373		D0HA123ZA001	RESISTOR, 1/16W, 12kΩ	1
R 384 399 412 416		D0HA103ZA001	RESISTOR, 1/16W, 10kΩ	4
R 385 396		ERJ2RKD5492X	RESISTOR, 1/16W, 54.9kΩ	2
R 387 388 389 390 419 420 429 430 488		D1BDR0330001	RESISTOR, 1/8W, 0.033Ω	9
R 406		D0HA472ZA001	RESISTOR, 1/16W, 4.7kΩ	1
R 409 414 417 418 431 432 433 434 435 436		ERJ2GEJ105X	RESISTOR, 1/16W, 1MΩ	10
R 413		D0HA273ZA001	RESISTOR, 1/16W, 27kΩ	1
R 425 439		ERJ2GEJ224X	RESISTOR, 1/16W, 220kΩ	2
R 457 458 467		ERJ6GEYJ222V	RESISTOR, 1/10W, 2.2kΩ	3
R 465		RL1220SR47F	RESISTOR, 1/4W, 0.47Ω	1
R 473 474 475		D1BDR1200001	RESISTOR, 1/8W, 0.12Ω	3
R 477		ERJ2GEJ471X	RESISTOR, 1/16W, 470Ω	1
R 478		ERJ2GEJ4R7X	RESISTOR, 1/4W, 4.7Ω	1
R 487		ERJ2GEJ622X	RESISTOR, 1/16W, 6.2kΩ	1
R 490		ERJ2RKD154X	RESISTOR, 1/16W, 150kΩ	1
R 524 525 526 527 528 529 530 531		ERJ2GEJ180X	RESISTOR, 1/16W, 18Ω	8
RA 11 12 44		EXBV8VR000V	RESISTOR ARRAY, 0Ω	3
RA 13 51 52		EXBV8V100JV	RESISTOR ARRAY, 10Ω	3
RA 14 19 30 33 37 38 39 40 41 42		DEARA8AJ103M	RESISTOR ARRAY, 10kΩ	10
RA 15 16 17 24 26 35		EXBV8V103JV	RESISTOR ARRAY, 10kΩ	7
RA 20		EXBV8V472JV	RESISTOR ARRAY, 4.7kΩ	1
RA 25 43		EXBV8V473JV	RESISTOR ARRAY, 47kΩ	2
RA 27 28 29		DEARA8AJ102M	RESISTOR ARRAY, 1kΩ	3
X 1		DECU14318L5U	OSCILLATOR (14.318MHz)	1
X 2		H0J327200051	OSCILLATOR (32.768kHz)	1
X 4		DECU24576L3U	OSCILLATOR (24.576MHz)	1
X 5		H2D800400011	OSCILLATOR (8MHz)	1
<b>Touch Screen Panel PCB</b>				
C 401 402 403 404		ICUV1H103KBS	CAPACITOR, 50V, 0.01 μF	4
C 405 408 413		ICUV1E104ZFS	CAPACITOR, 25V, 0.1 μF	3
C 409 410		ECST1AY106R	CAPACITOR, 10V, 10 μF	2
CN 401		DFJS440ZA008	CONNECTOR, FOR MAIN PCB	1
CN 402		DFJS440ZA008	CONNECTOR, FOR TOUCH SCREEN PANEL	1
D 401		DED1SS355T17	DIODE	1
D 402 403 404 405 406		DEDDA204UT	DIODE	8
IC 403		C1DB00000509	IC, TOUCH SCREEN PANEL CONTROLLER	1
Q 401 402 404		2SA1576RT107	TRANSISTOR	3
Q 403 405 406		2SC4081RT107	TRANSISTOR	3
R 401 402 403 404 405		ERJ3GEYJ472V	RESISTOR, 1/16W, 4.7kΩ	7
R 407		ERJ3GEYJ103V	RESISTOR, 1/16W, 10kΩ	1
R 408		ERJ3GEYJ104V	RESISTOR, 1/16W, 100kΩ	1
R 415 416 417		ERJ3GEY0R00V	RESISTOR, 1/16W, 0Ω	3
RA 401		EXBV8V102JV	RESISTOR ARRAY, 1kΩ	1
RA 404 405		EXBV8VR000V	RESISTOR ARRAY, 0Ω	2
X 401		DEBB4R91N1GX	OSCILLATOR (4.9152MHz)	1
<b>LED PCB</b>				
CN 511		DFJS207ZA015	CONNECTOR, FOR MAIN PCB	1
D 510 512 513 514 515		SEC1703C	L.E.D.	5
D 511		SEC2764C	L.E.D.	1
R 511 513 514 515 516		ERJ3GEYJ331V	RESISTOR, 1/16W, 330Ω	6
R 512		ERJ3GEYJ471V	RESISTOR, 1/16W, 470Ω	1
SW 511		DFSE057ZA	SW, MAGNETIC LEAD	1
SW 512		EVQPLDA15	SW, LEFT CLICK	1

SW 513		EVQPLDA15	SW,RIGHT CLICK	1
<b>MODEM JACK PCB</b>				
C 541		F1L3D102A003	CAPACITOR, 2000V, 1000pF	1
CN 541		DFJS555ZA004	JK, MODEM	1
CN 542		DFJS554ZA008	JK	1
CN 543		K1KA10B00151	CONNECTOR	1
CN 544		DFJP02C75YAJ	CONNECTOR, FOR INTERNAL MODEM PCB	1
R 541 542		ERJ3GEYJ750V	RESISTOR, 1/16W, 75Ω	2
<b>DOCKING CONNECTOR PCB</b>				
CN 551		DFJS553ZA100	CONNECTOR, FOR PORT REPLICATOR	1
CN 552		DFJS226ZA100	CONNECTOR, FOR MAIN PCB	1
<b>HDD FPC</b>				
CN 1		DFJS502ZA044	CONNECTOR, FOR HDD	1
<b>LCD FPC</b>				
CN 1		K1KB30A00066	CONNECTOR, FOR LCD	1
<b>MPCI RELAY CARD3 PCB</b>				
C 1 2 3 4 9 10 19 20		F1G1C104A031	CAPACITOR, 16V, 0.1 μF	8
C 13		F1G1C103A046	CAPACITOR, 16V, 0.01 μF	1
C 14 15		F3E1A106A004	CAPACITOR, 10V, 10 μF	2
CN 1		DFJS511ZA124	CONNECTOR, FOR MINI PCI	1
CN 4		DFJS226ZA100	CONNECTOR	1
L 1		DDB5Z005-L	INDUCTOR	1
Q 1		DETC114EETL	TRANSISTOR	1
Q 6		DASI6963DQ	TRANSISTOR	1
R 1 4 20 23		ERJ2GE0R00X	RESISTOR, 1/16W, 0Ω	4
R 8		ERJ2GEJ103X	RESISTOR, 1/16W, 10kΩ	1
R 14		ERJ2GEJ102X	RESISTOR, 1/16W, 1kΩ	1
R 15		ERJ2GEJ104X	RESISTOR, 1/16W, 100kΩ	1

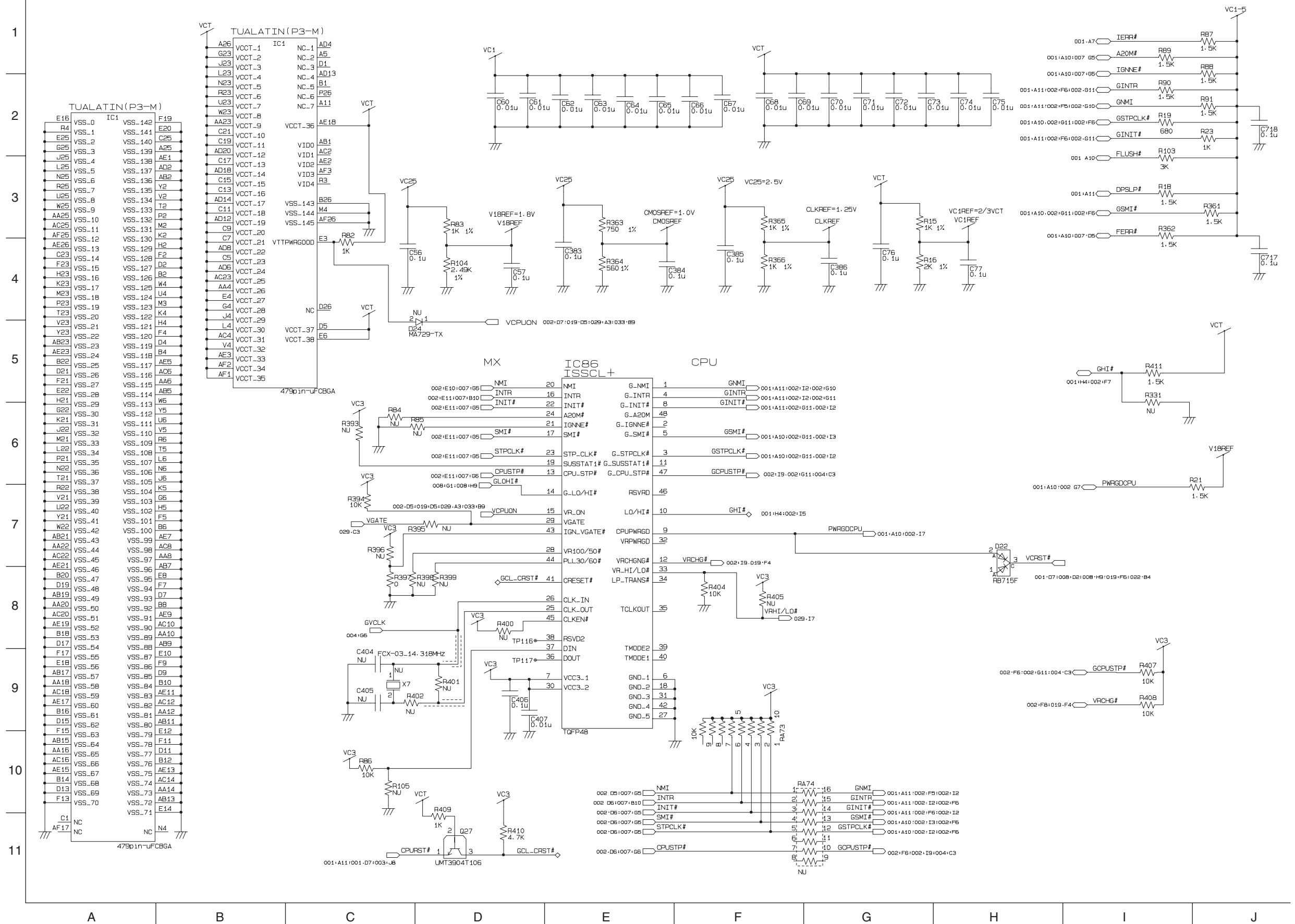
# Schematic Diagrams

## 1. Main PIII/GCL(1/2)

Ultra Low Voltage Mobile Intel Pentium3 Processor-M



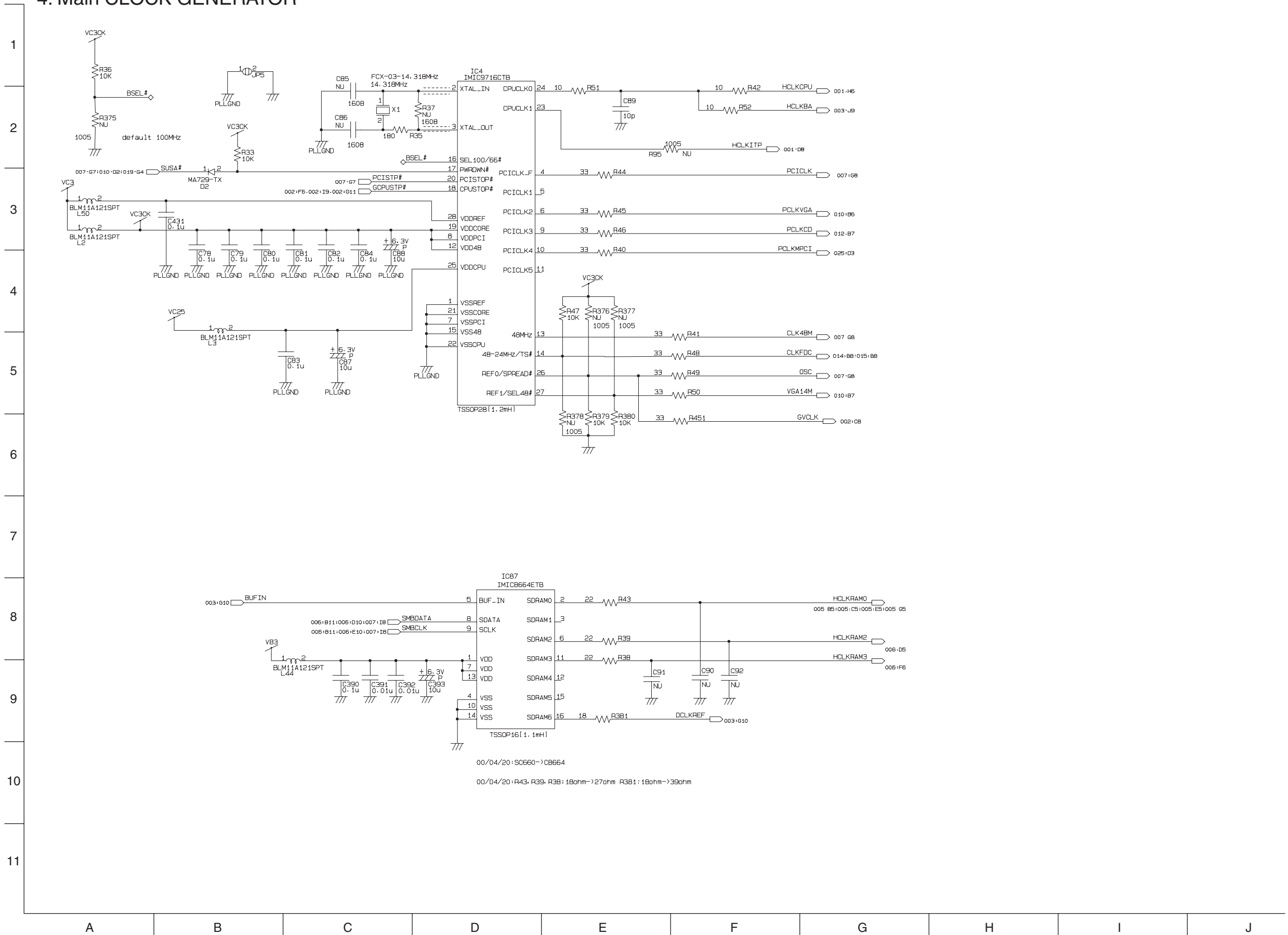
## 2. Main PIII/GCL(2/2)



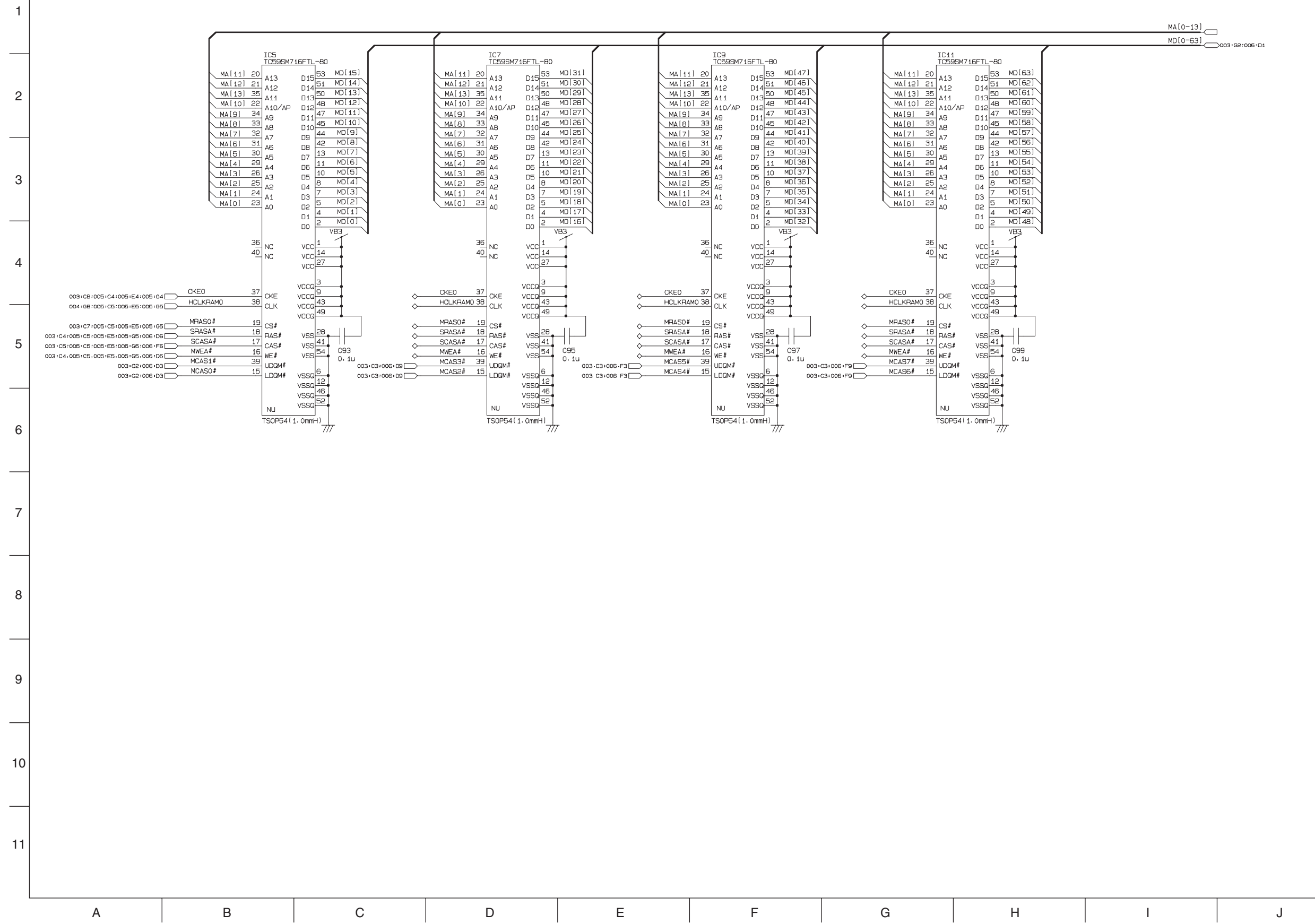




# 4. Main CLOCK GENERATOR



# 5. Main ONBOARD MEMORY

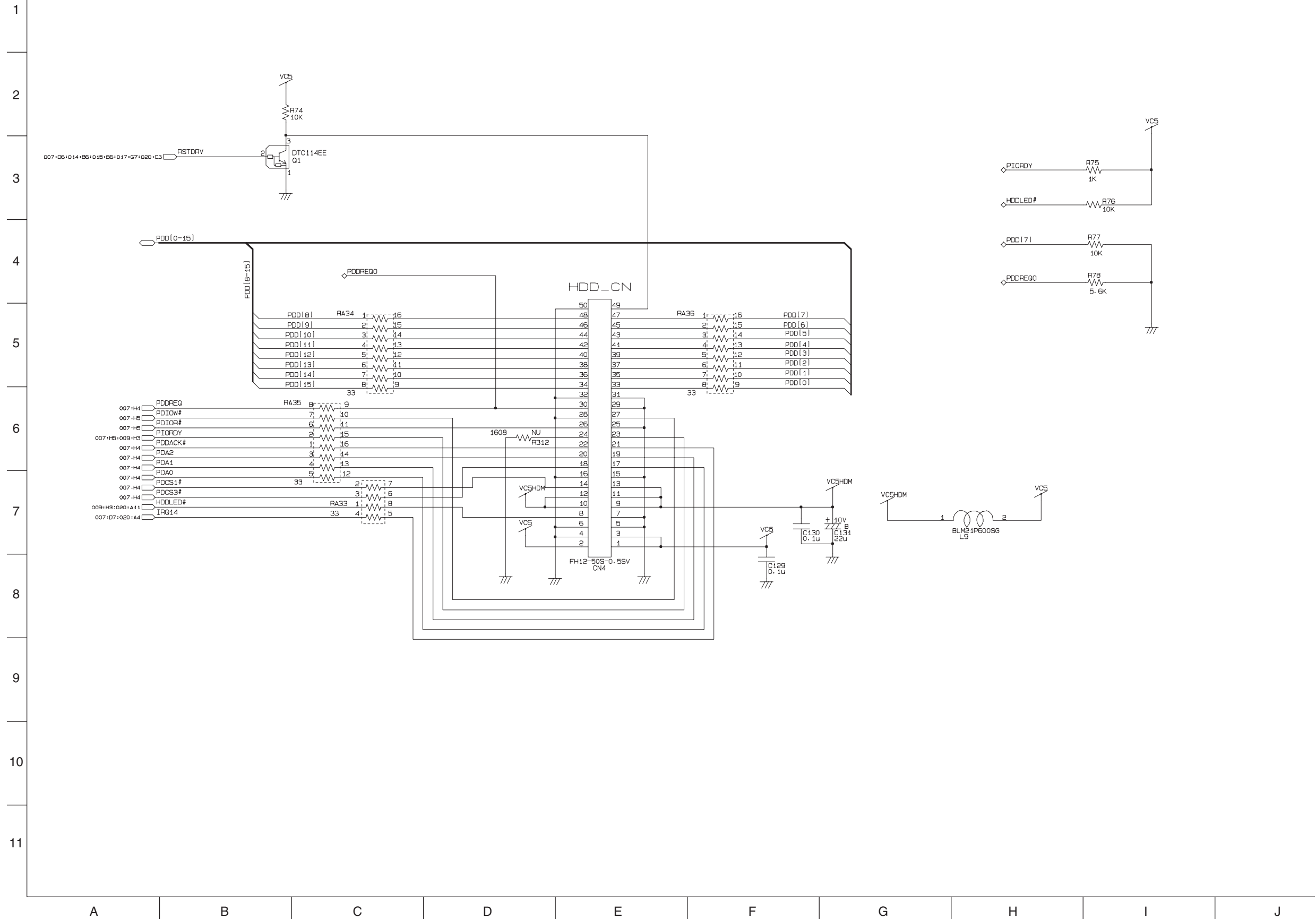








# 9. Main HDD CONNECTOR

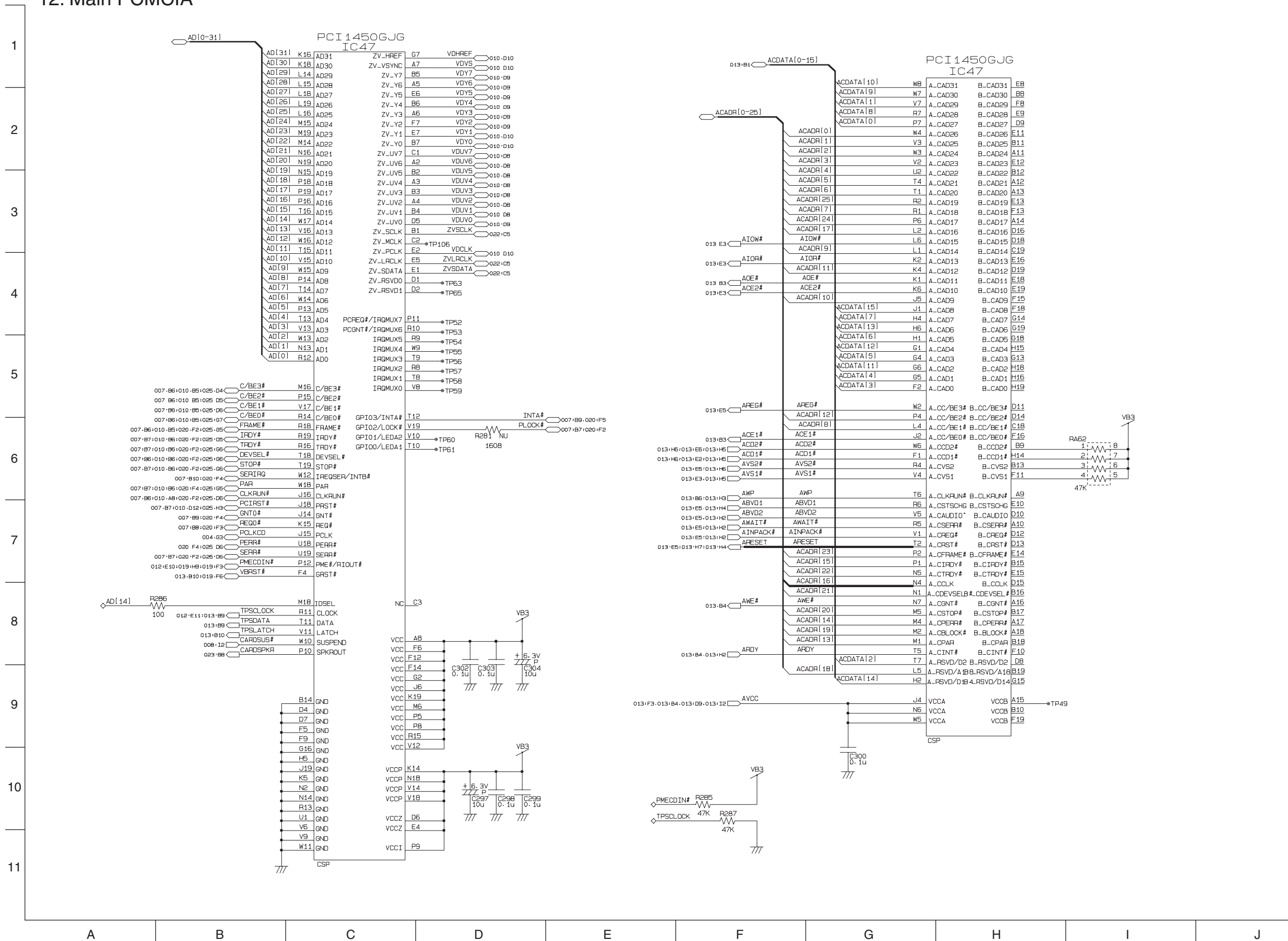




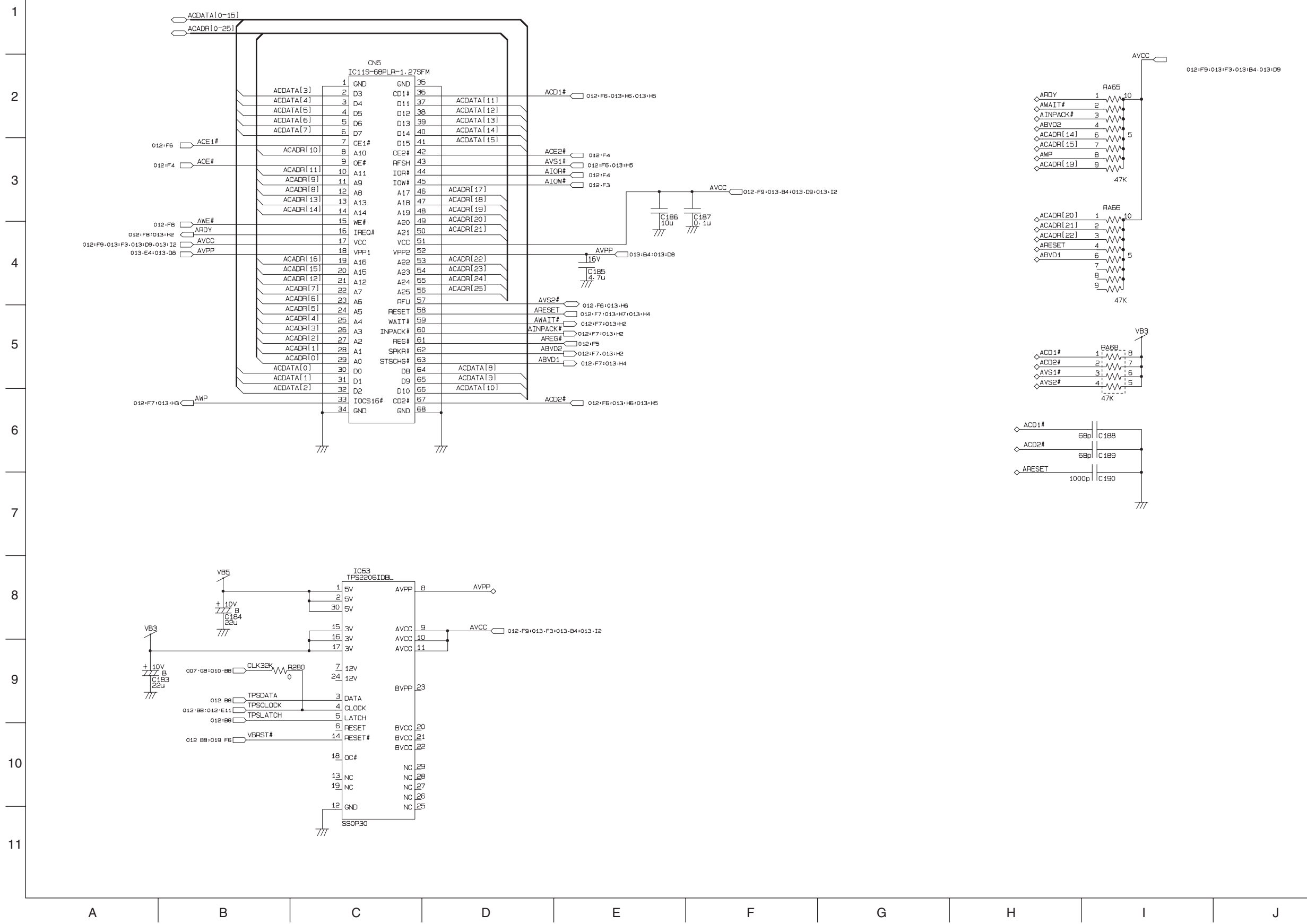




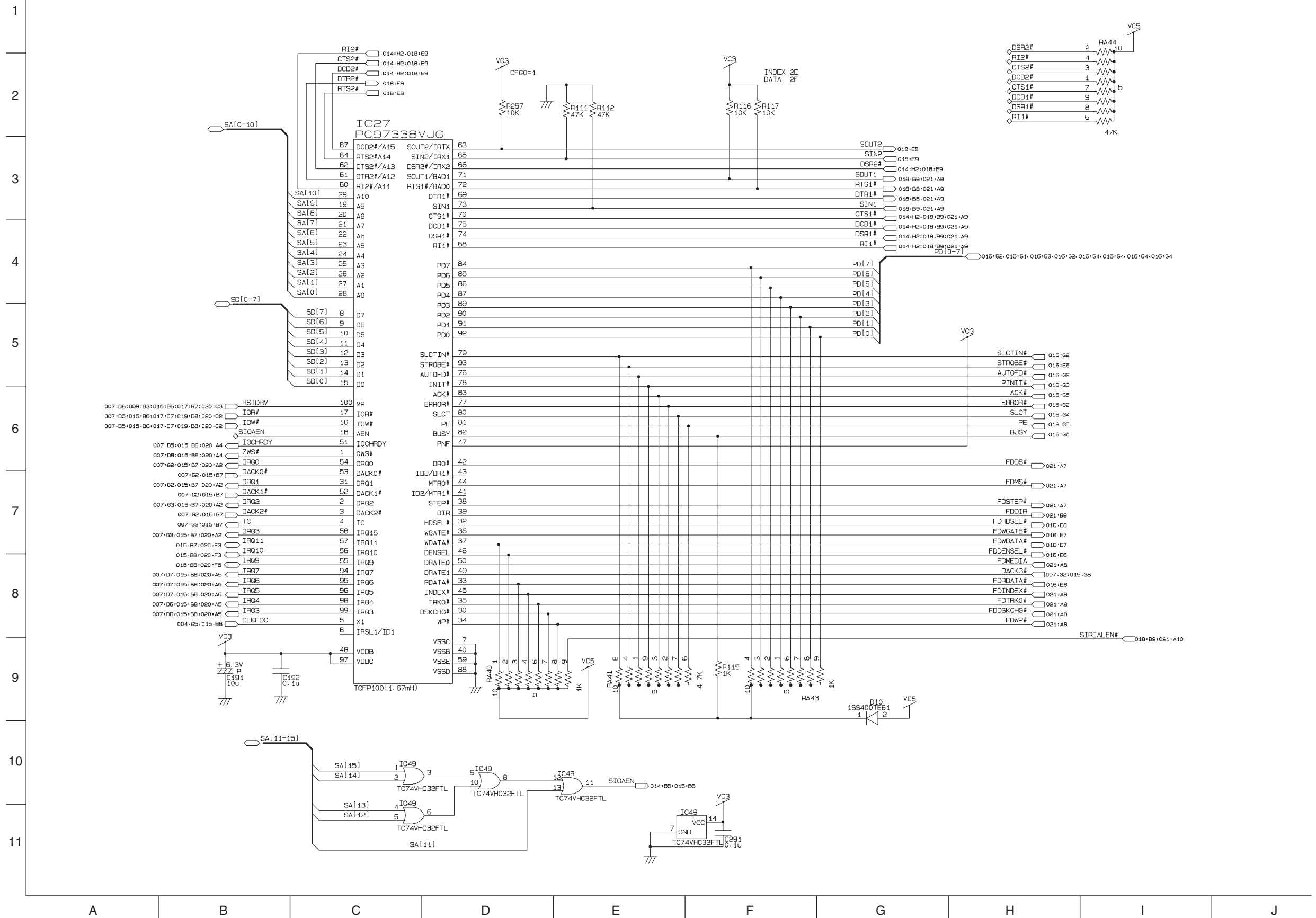
# 12. Main PCMCIA



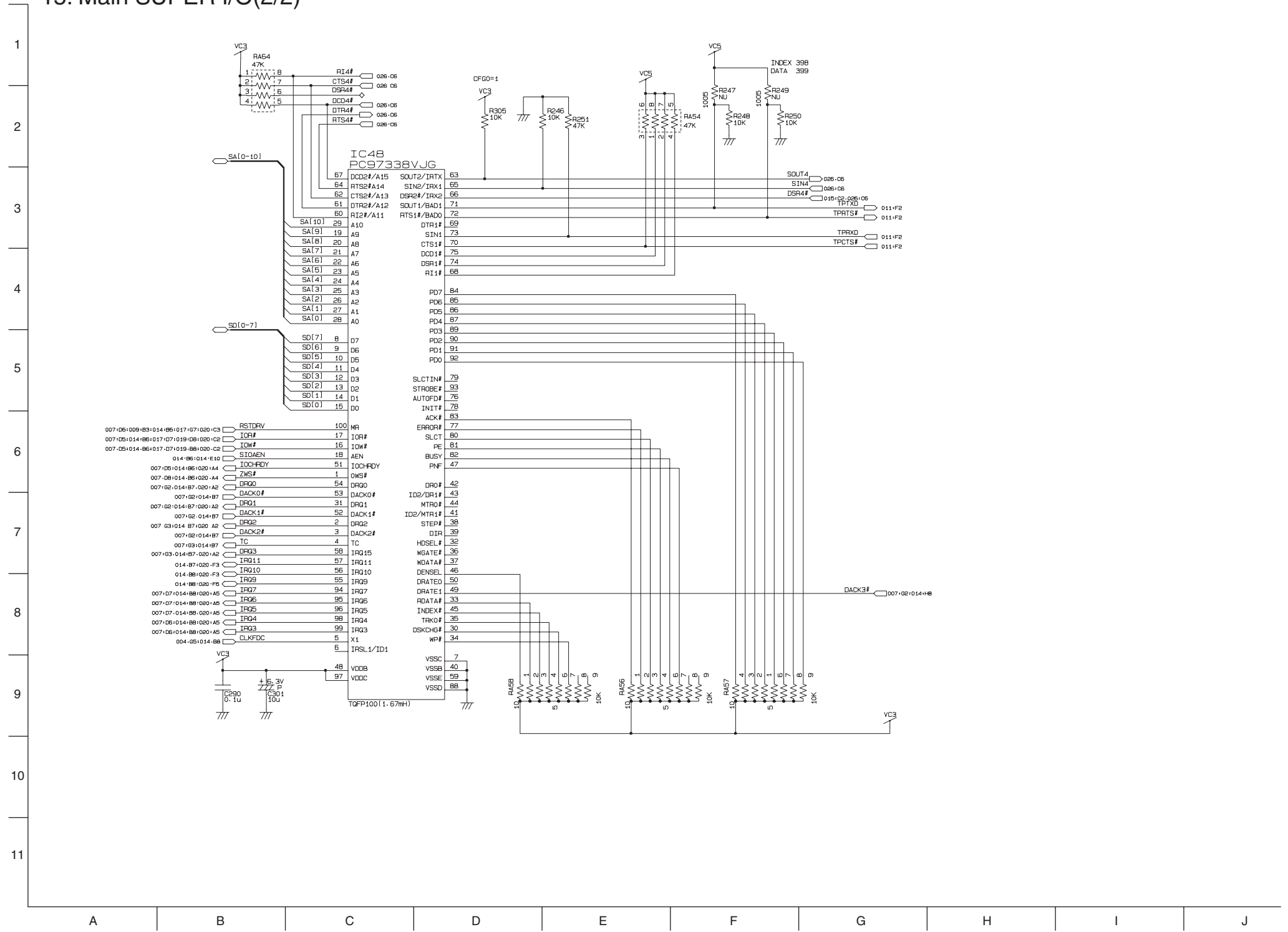
### 13. Main PCMCIA I/F



# 14. Main SUPER I/O(1/2)



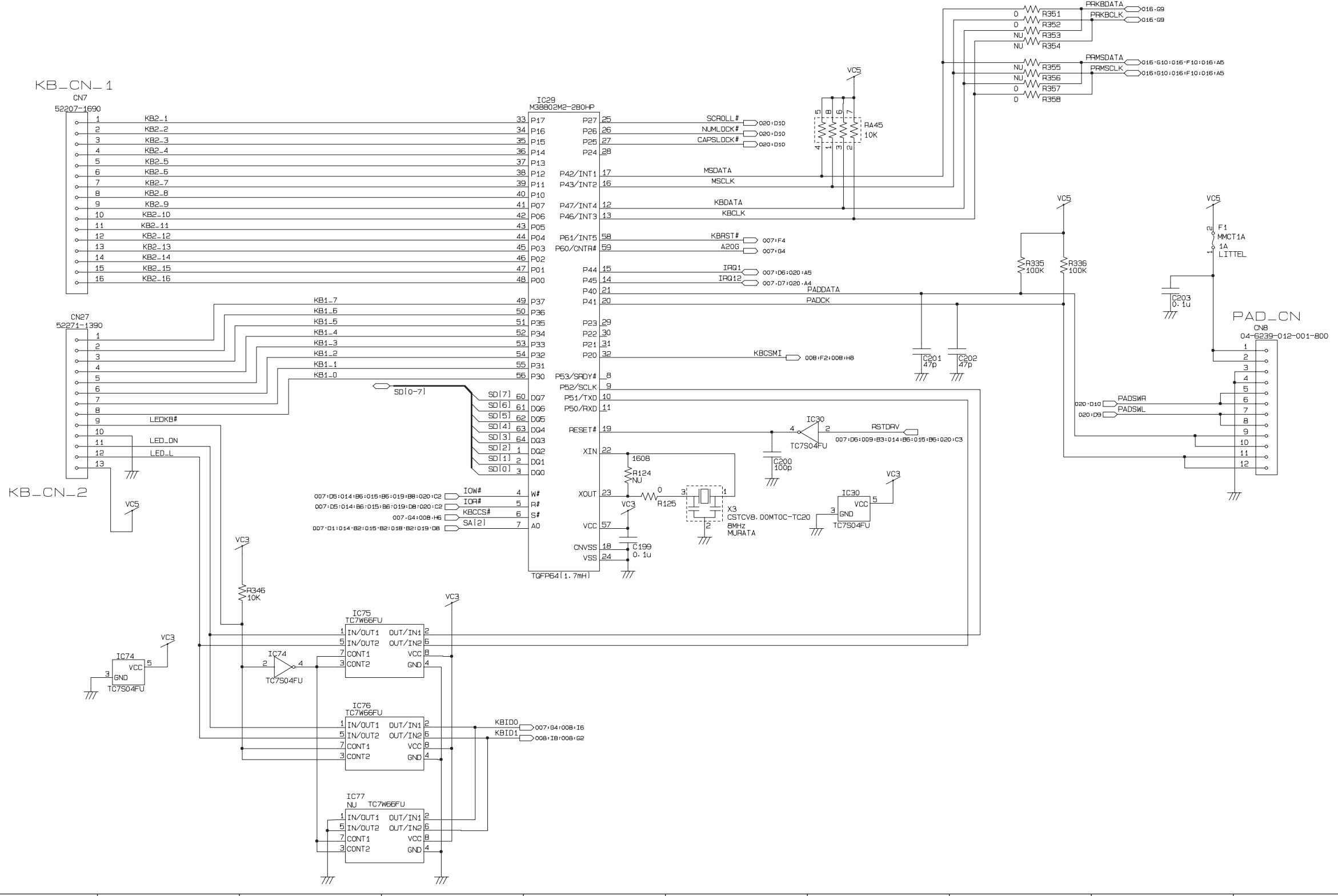
### 15. Main SUPER I/O(2/2)





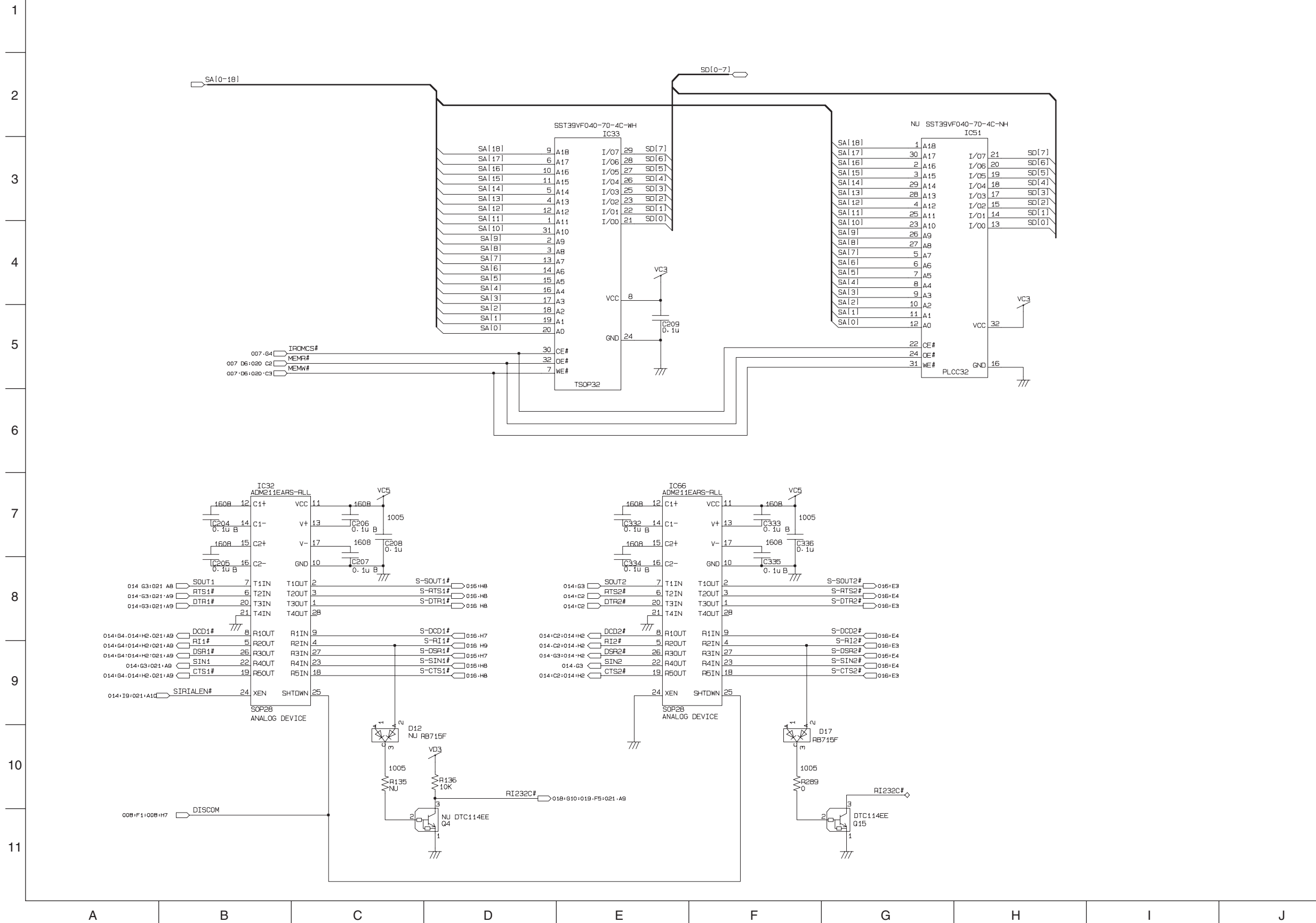
# 17. Main KBC

1  
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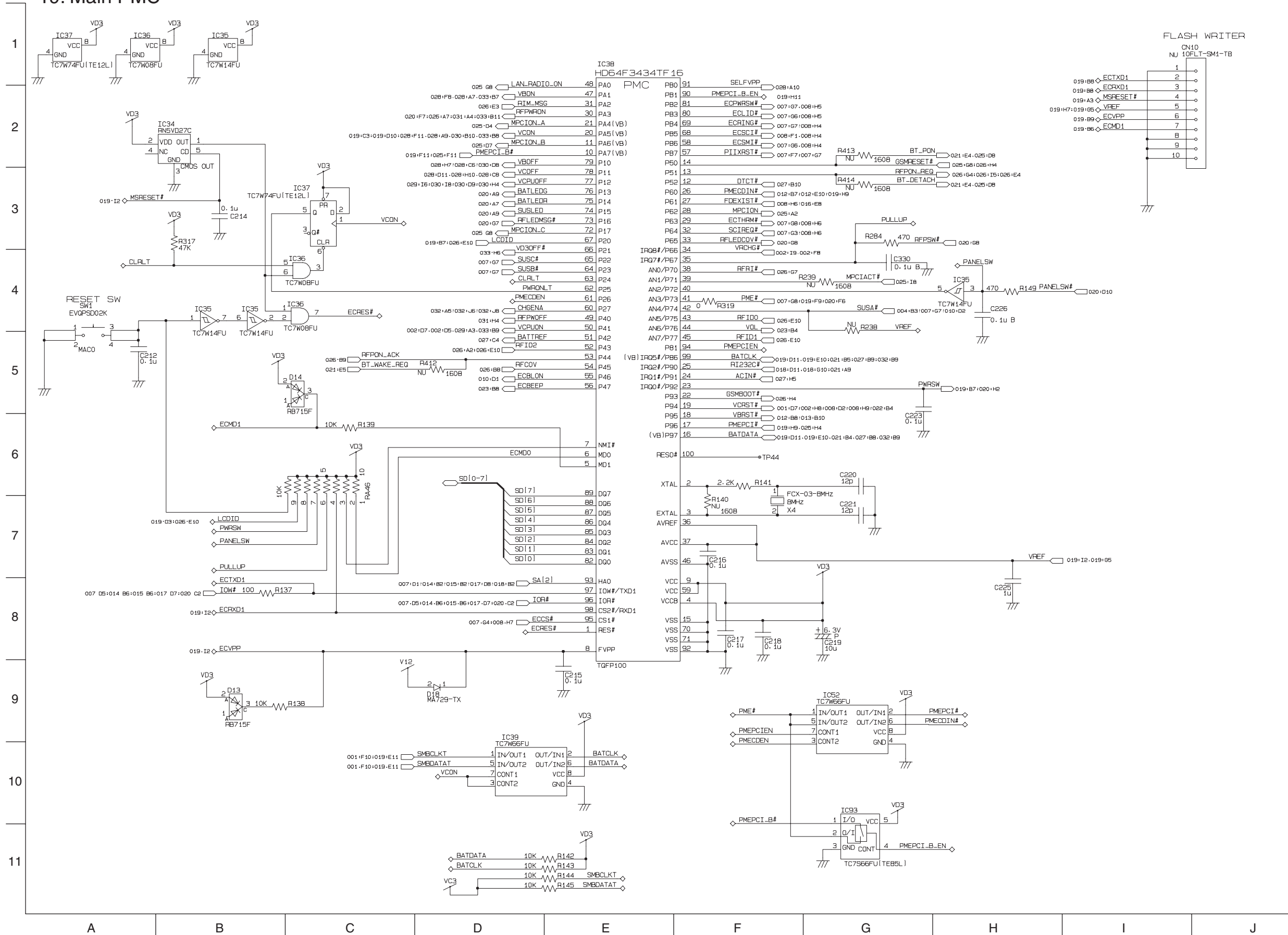


A B C D E F G H I J

# 18. Main BIOS ROM

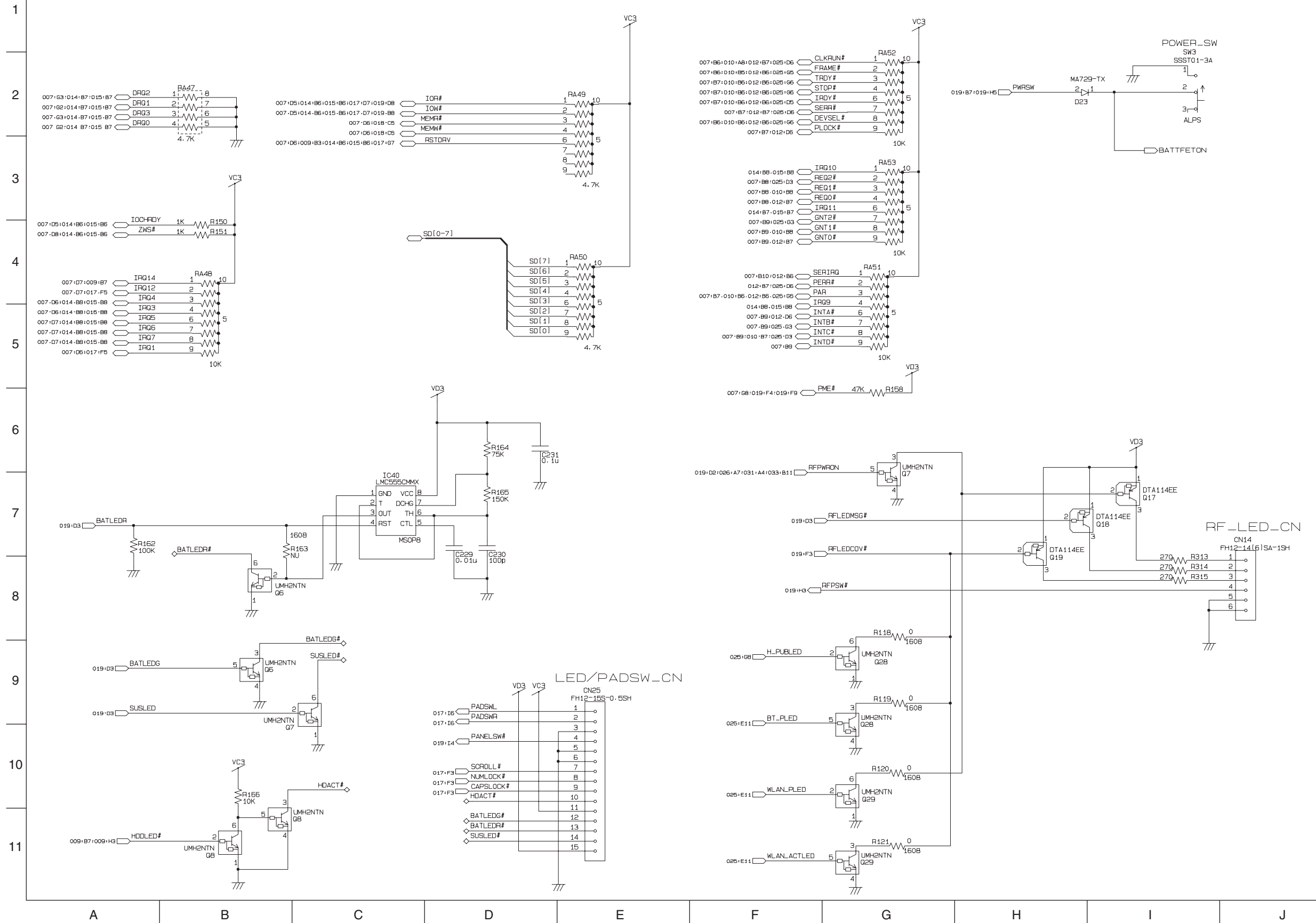


# 19. Main PMC





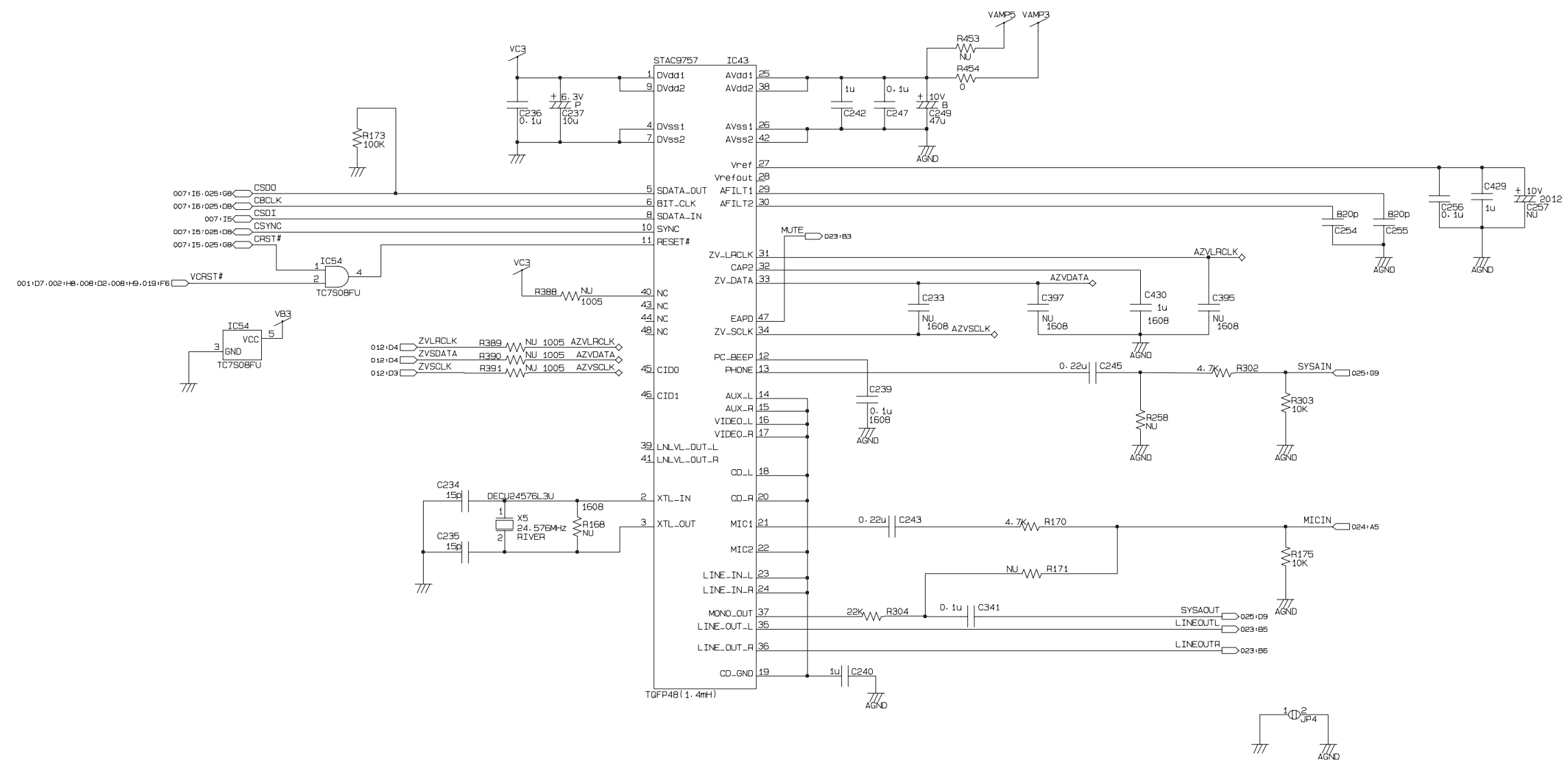
# 20. Main RES./SW/LED





# 22. Main AC97

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10  
11

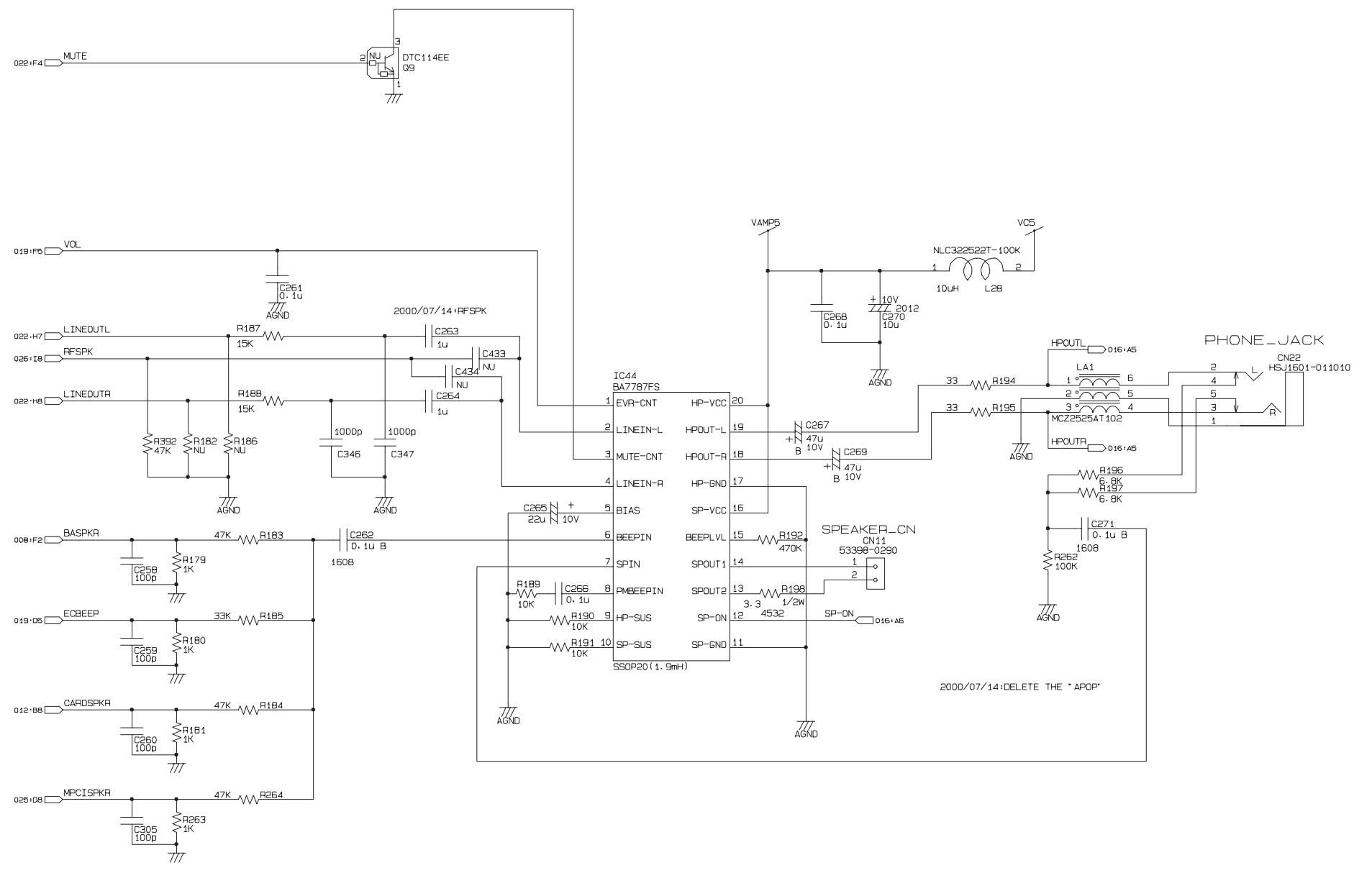


A B C D E F G H I J

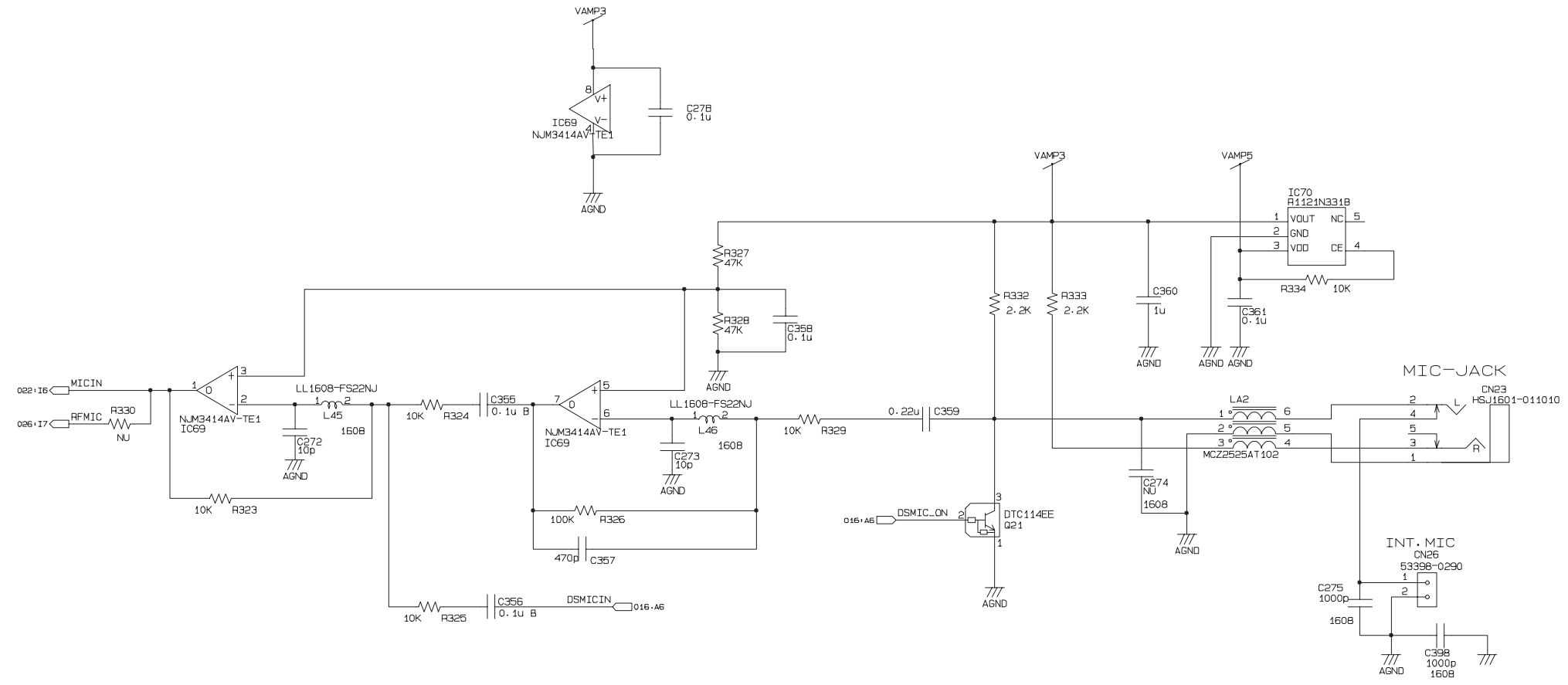
### 23. Main AMP/PHONES

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A B C D E F G H I J



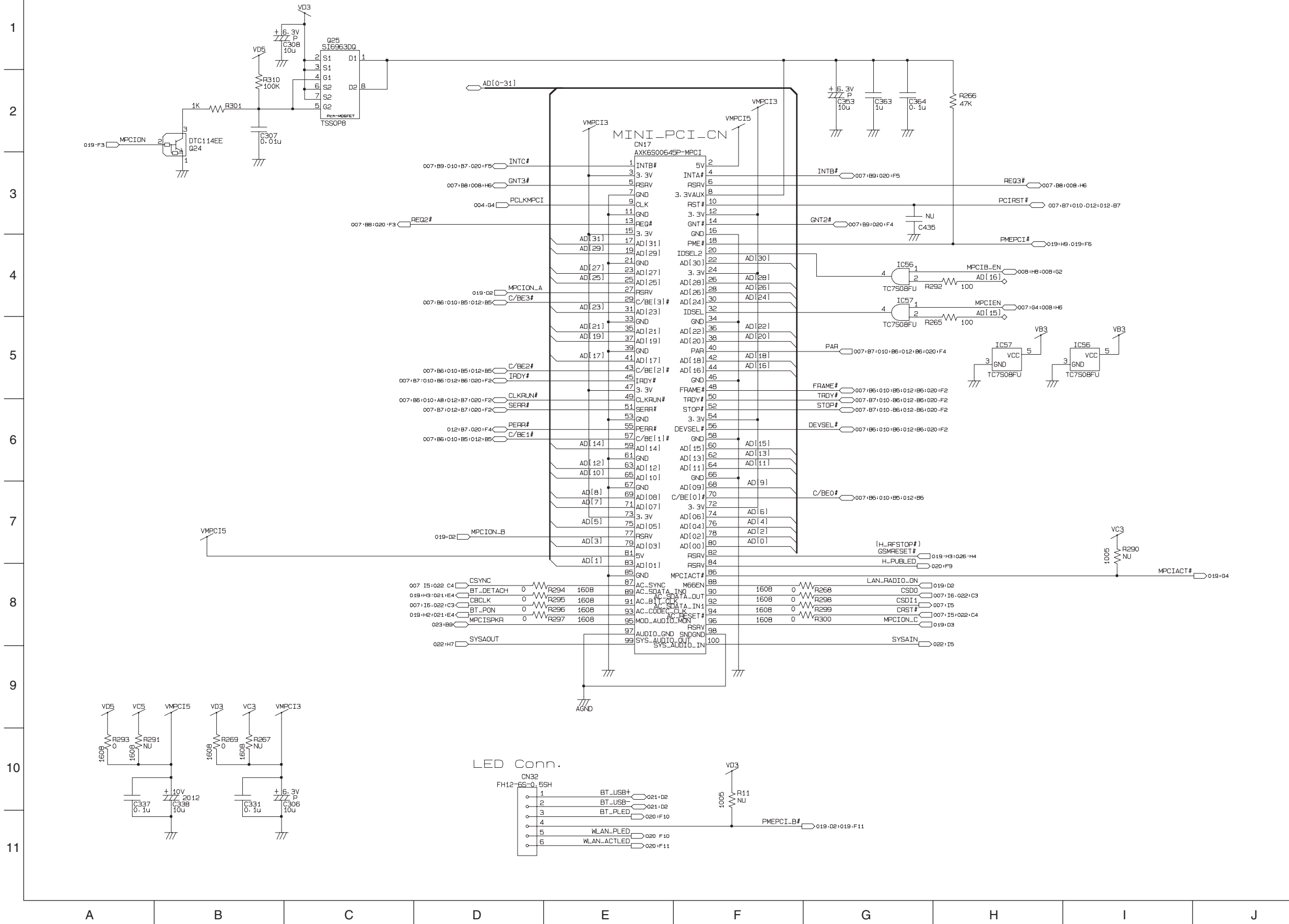
# 24. Main MICROPHONES



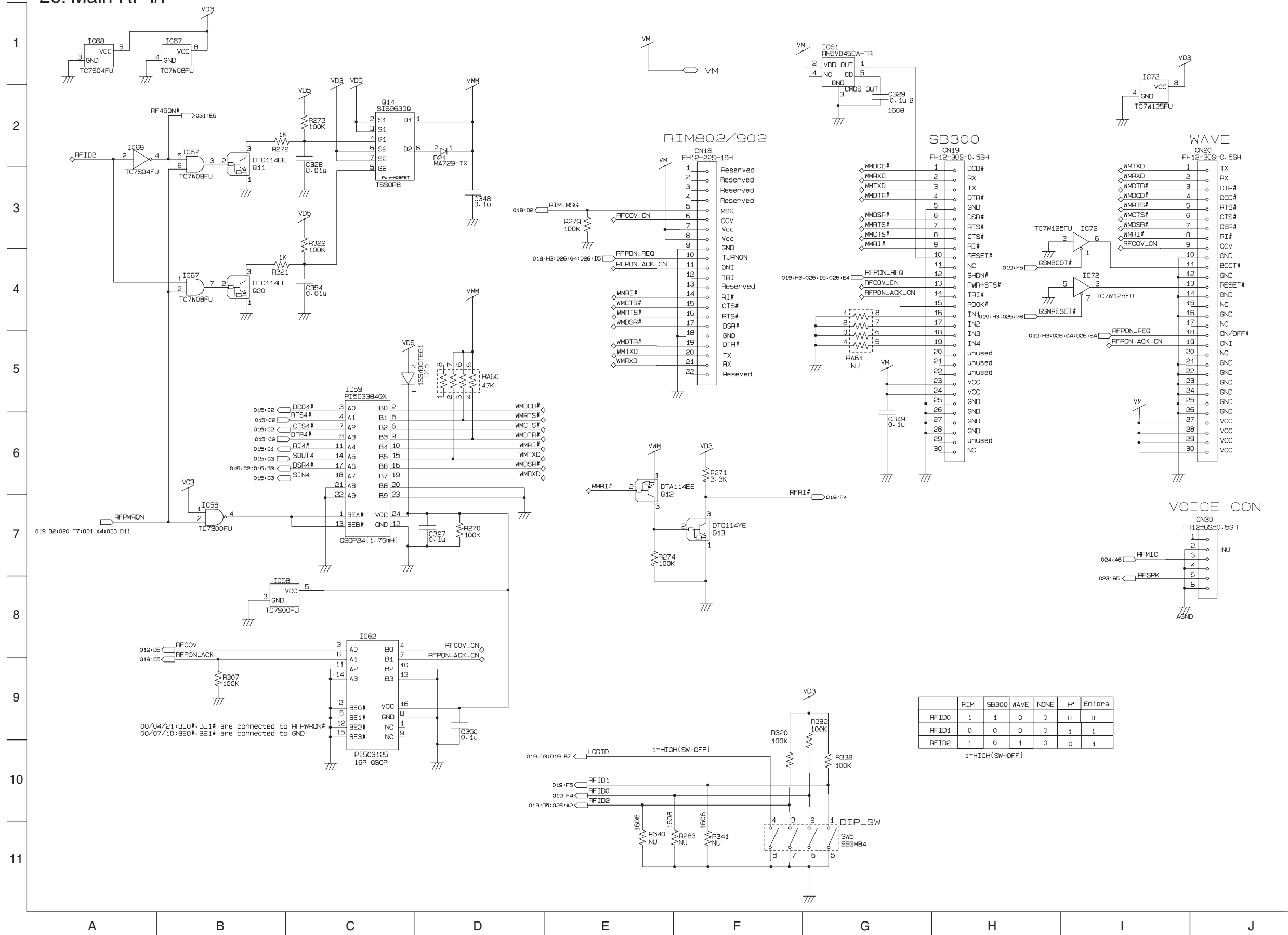
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A B C D E F G H I J

# 25. Main MINI PCI CONN



# 26. Main RF I/F

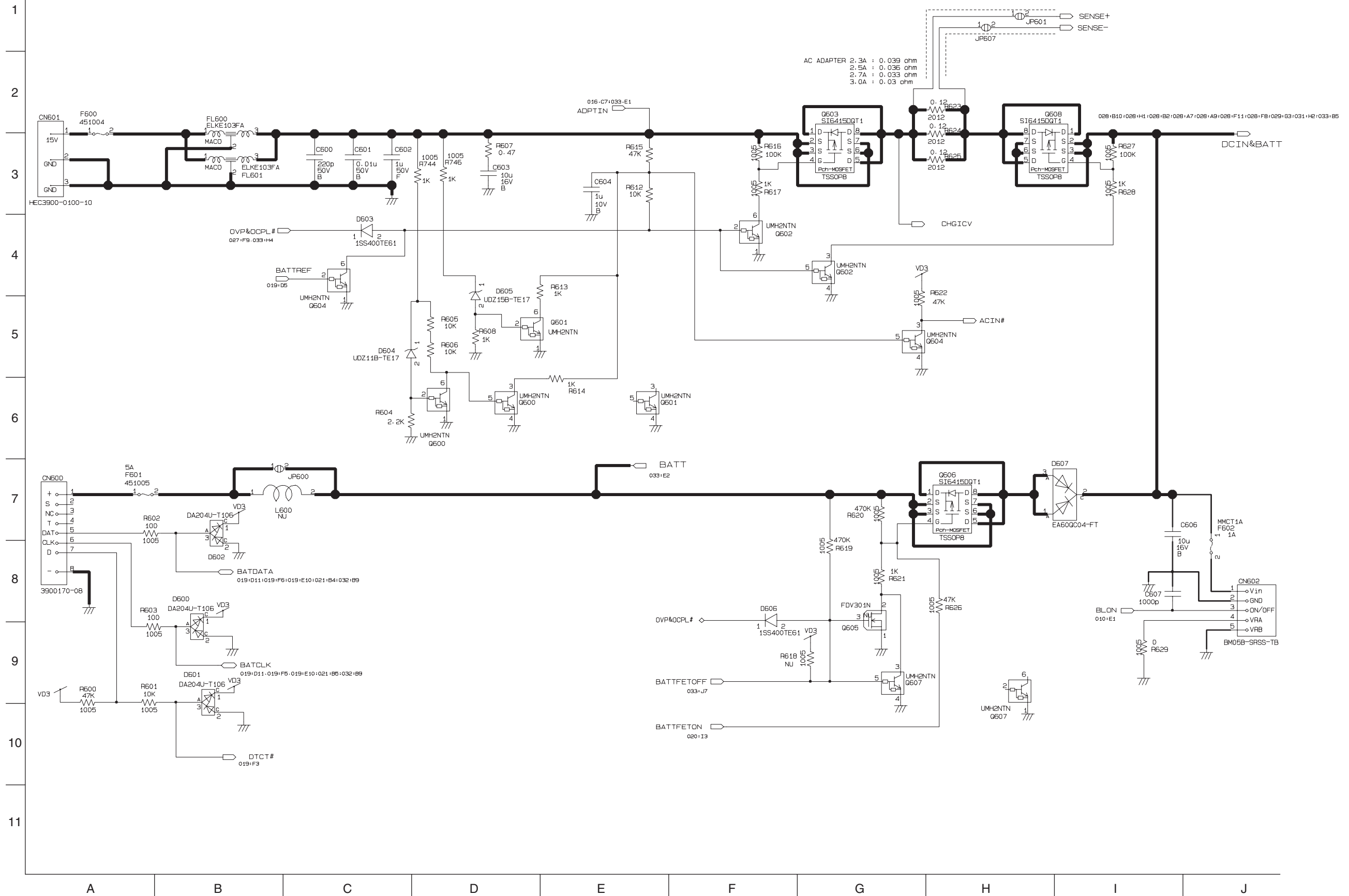


	RIM	SB300	WAVE	NONE	H+	Enfrdra
RFI00	1	1	0	0	0	0
RFI01	0	0	0	0	1	1
RFI02	1	0	1	0	0	1

1=HIGH(SW-OFF)

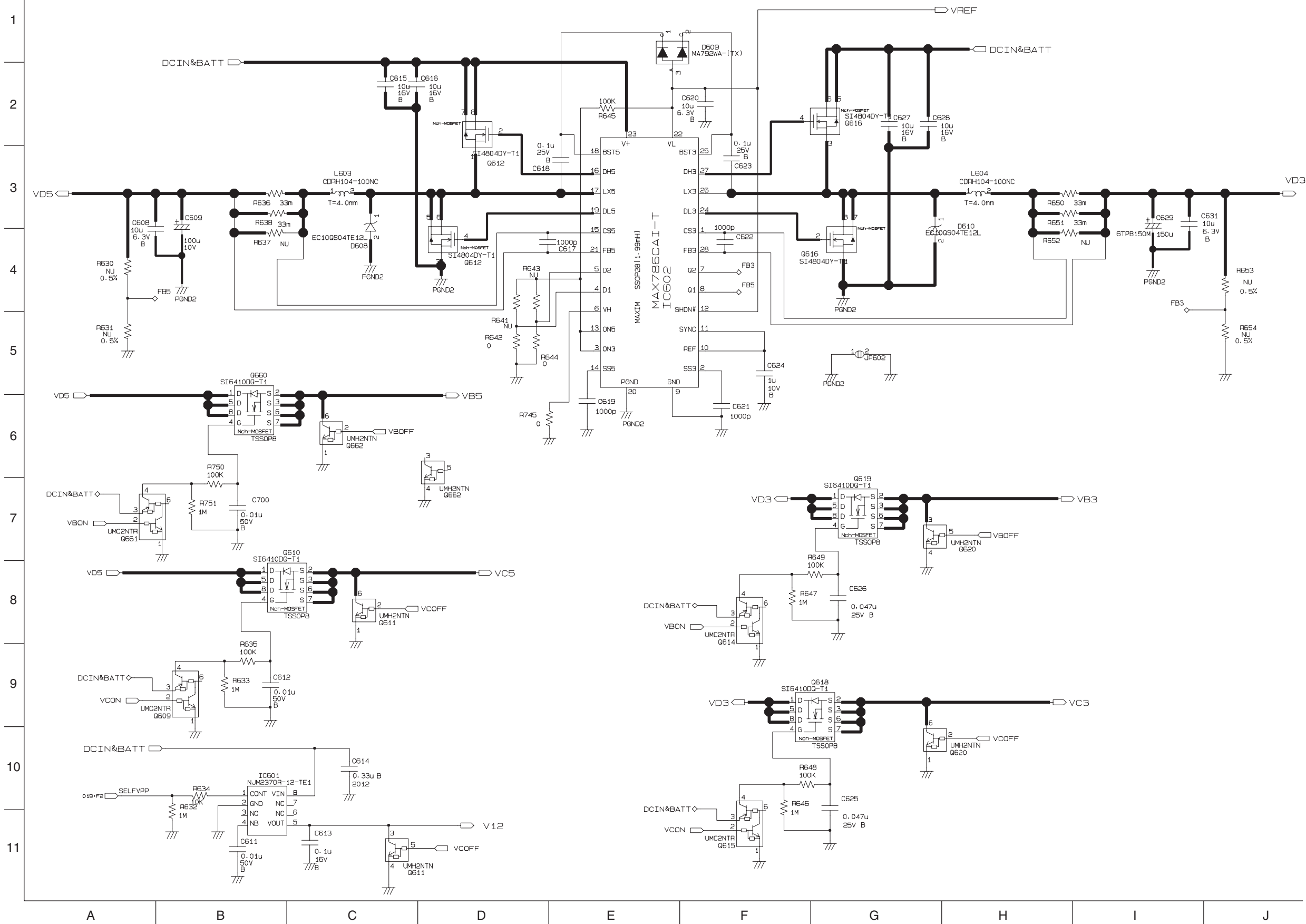
00/04/21:BE0#,BE1# are connected to RFPWRON#  
00/07/10:BE0#,BE1# are connected to GND

# 27. Main DCIN,BATT,INV

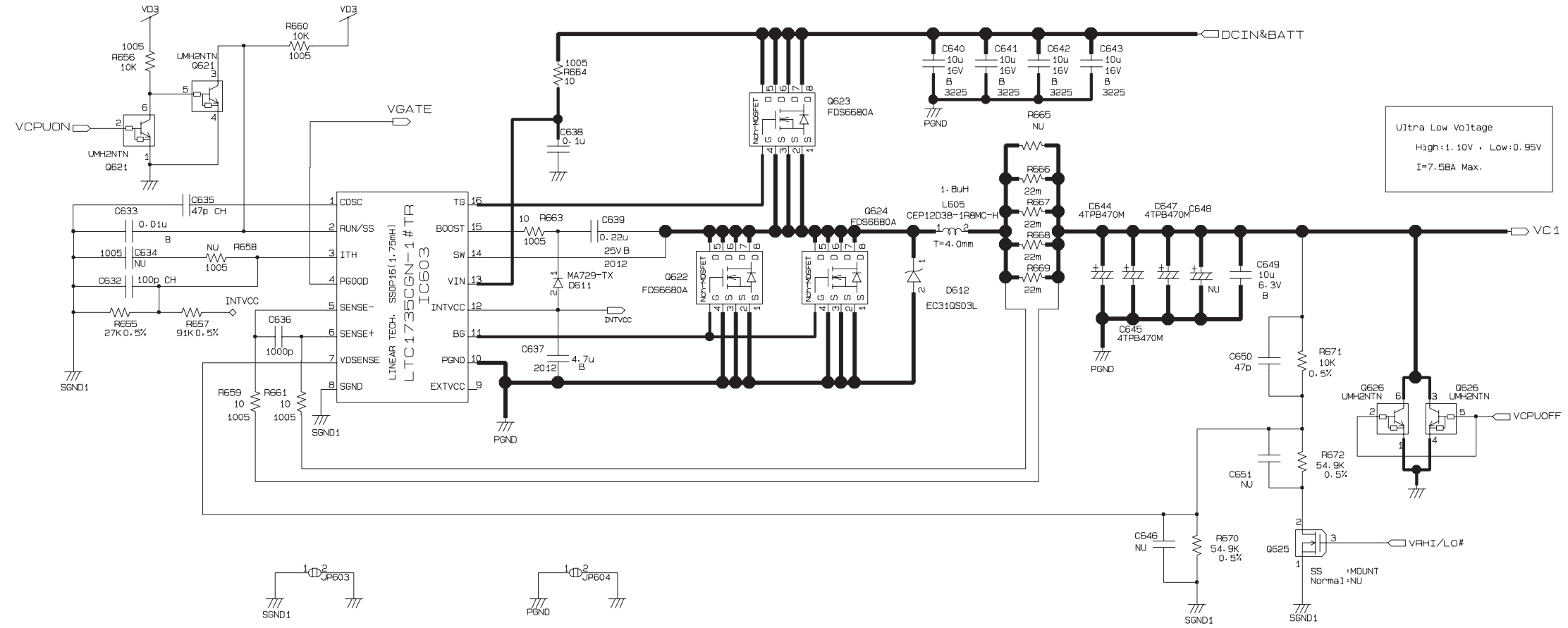




# 28. Main 5V/3.3V,12V



# 29. Main VCPU CORE (VC1)



Ultra Low Voltage  
 High: 1.10V · Low: 0.95V  
 I=7.58A Max.

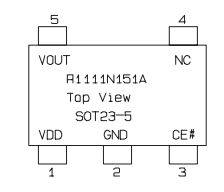
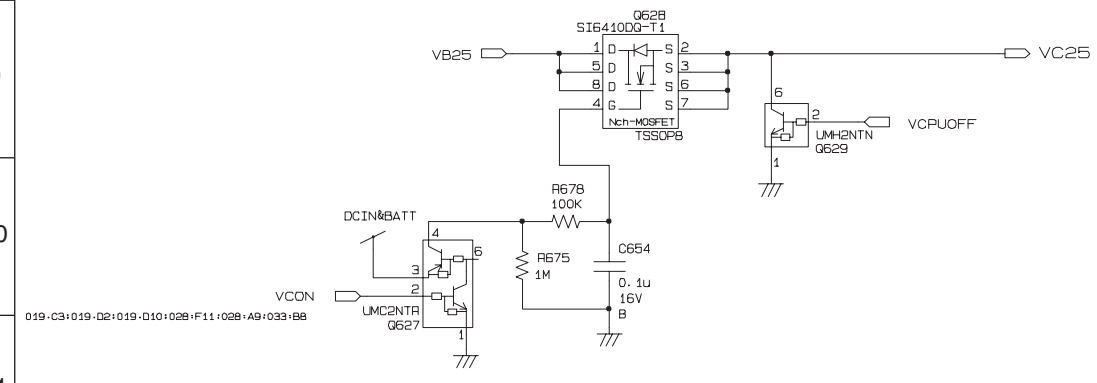
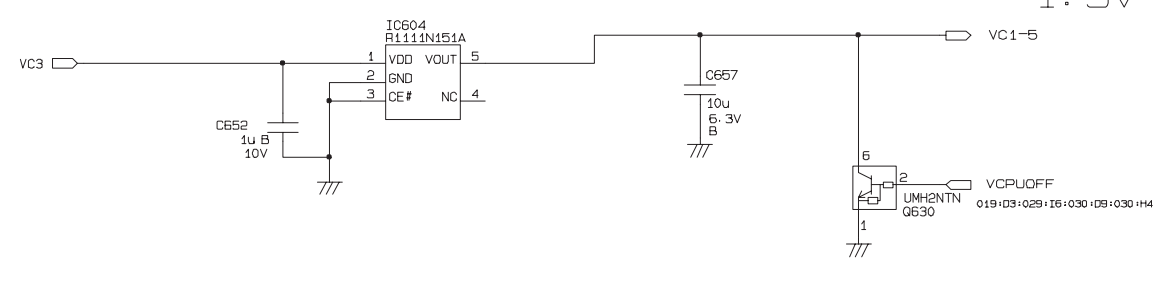
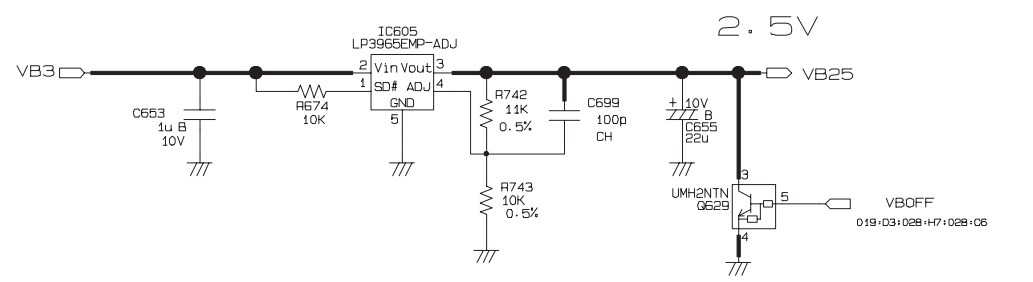
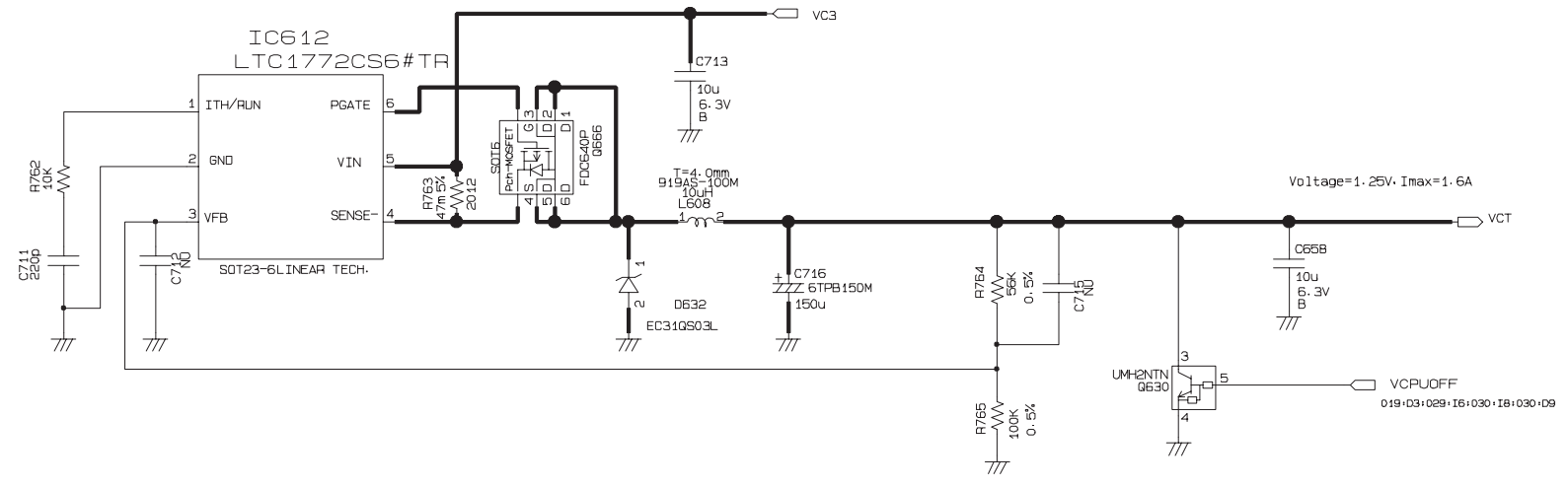
$$V_{out} = 0.8 \cdot (1 + R2/R1)$$

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A B C D E F G H I J

30. Main 2.5V,1.5V

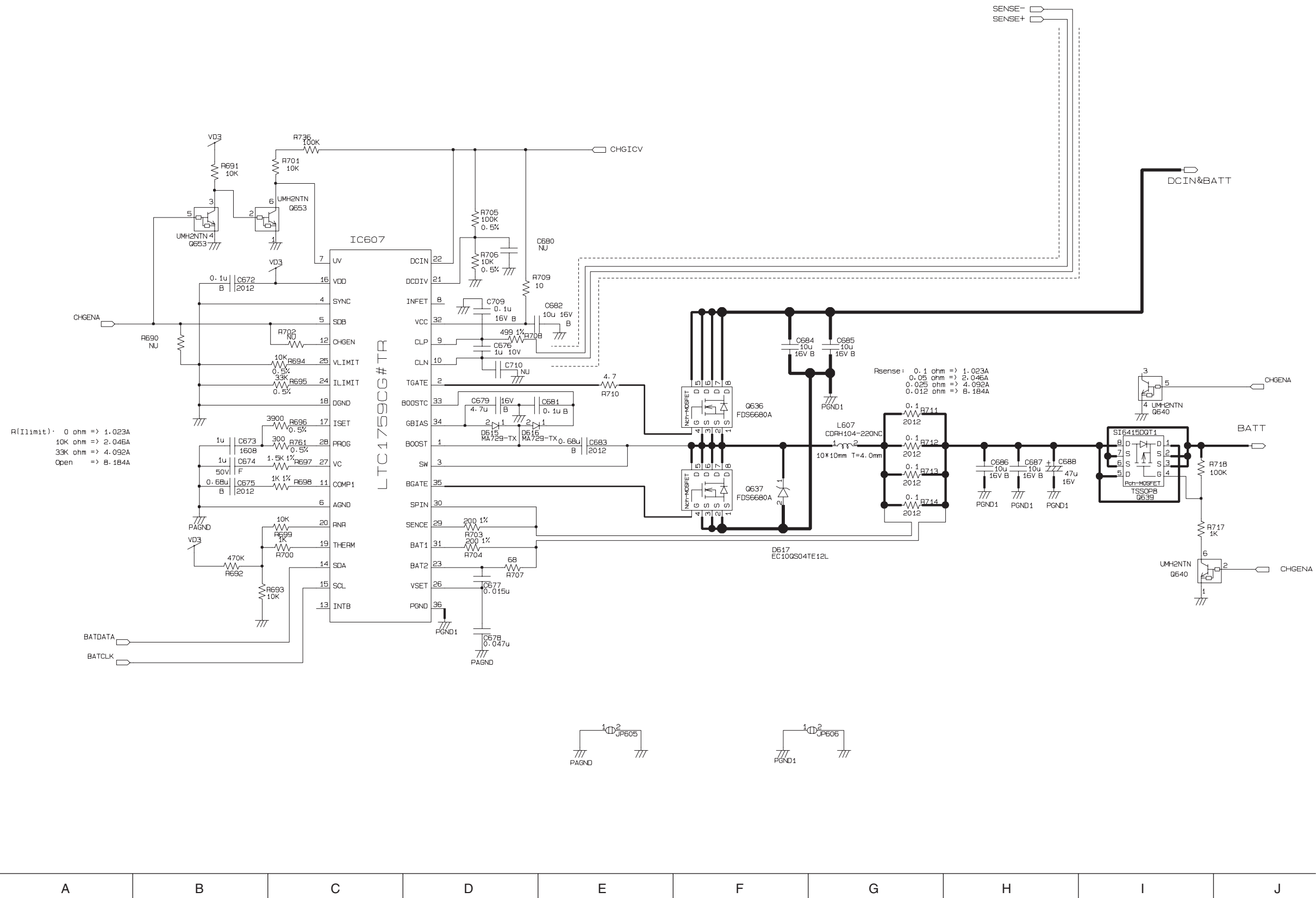
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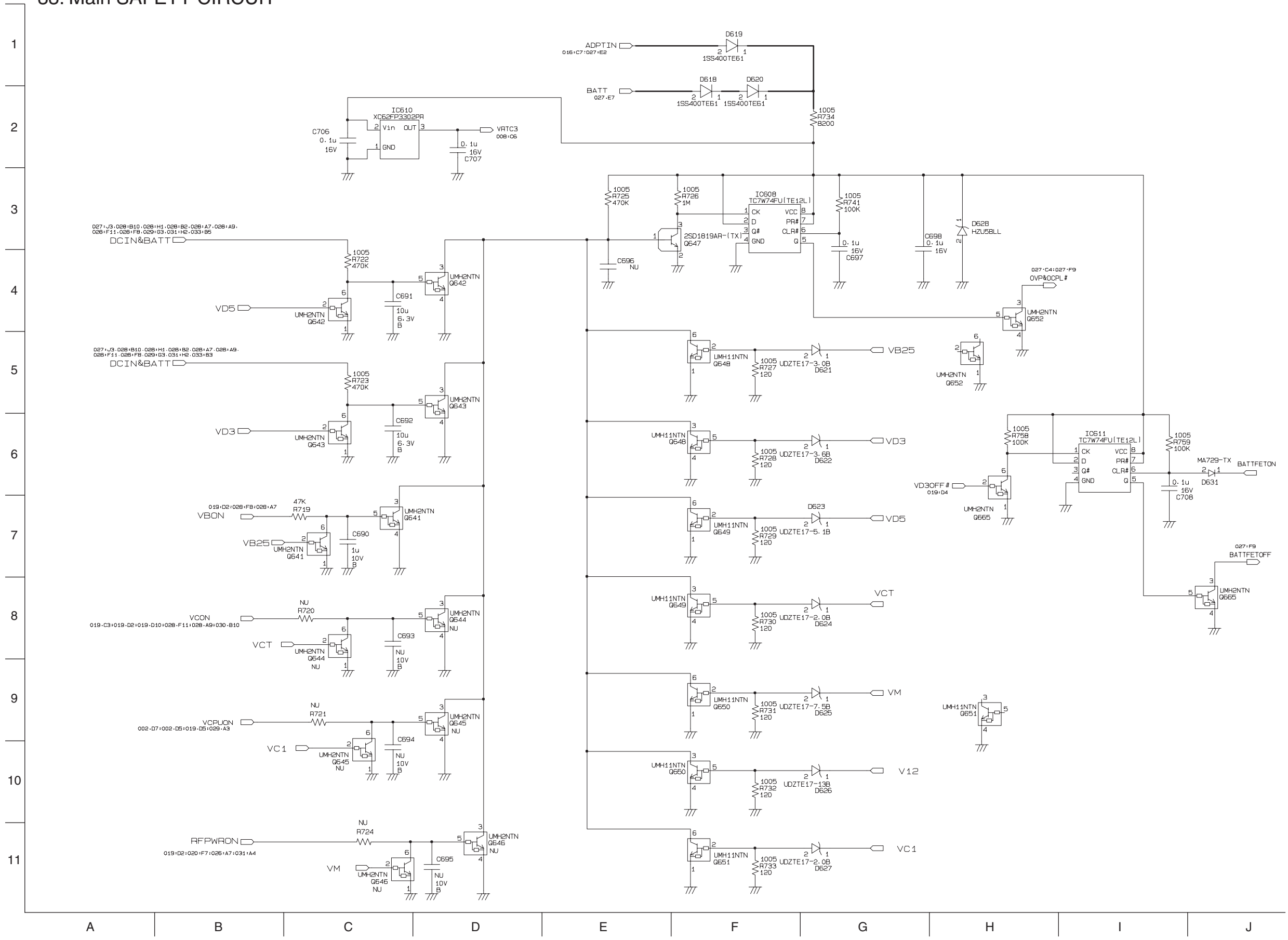
# 32. Main CHARGER

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A B C D E F G H I J

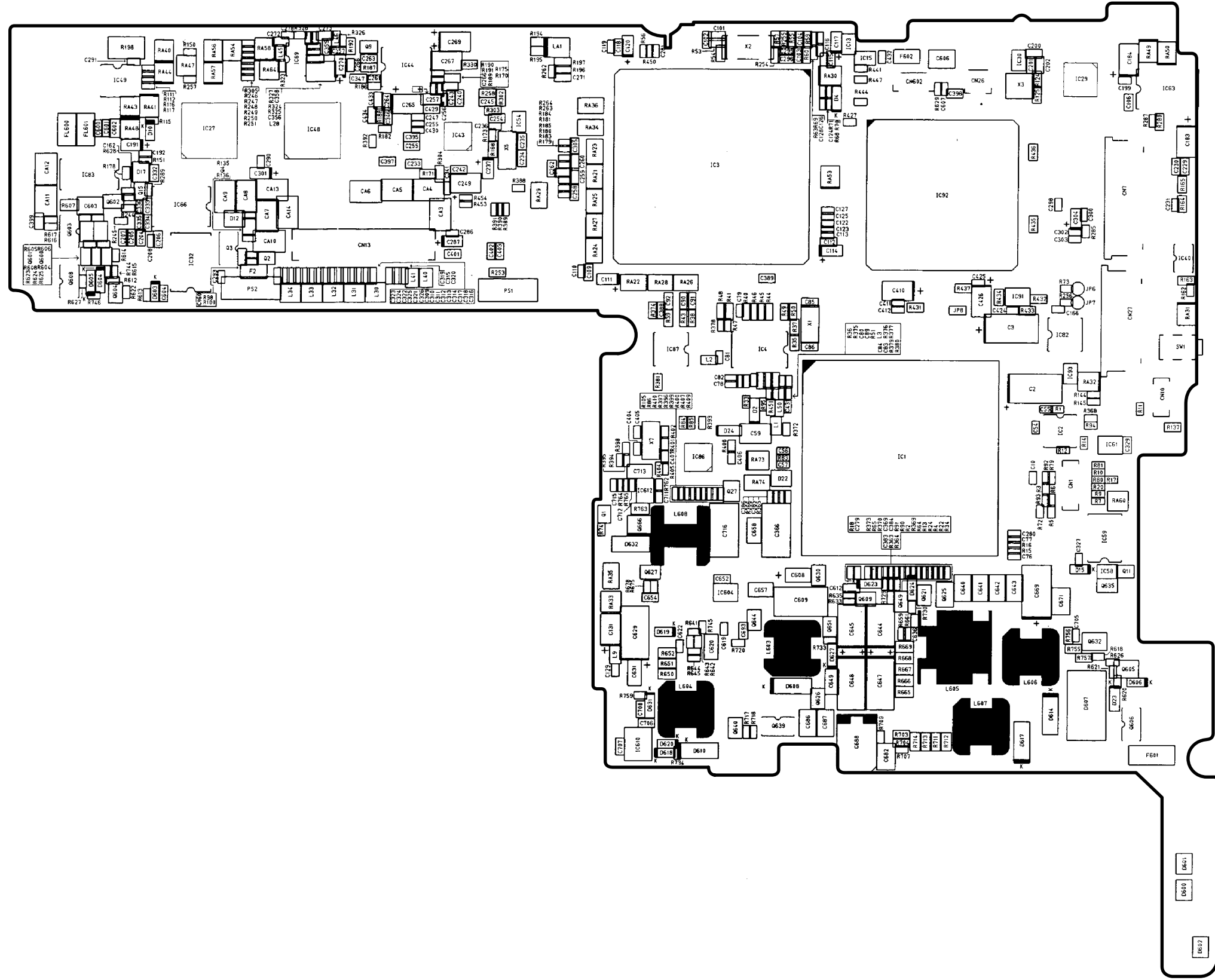
### 33. Main SAFETY CIRCUIT



# Printed Circuit Board

Main PCB <Top View>

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A B C D E F G H I J

Main PCB <Bottom View>





# Service Manual

Notebook Computer

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**Simplified**


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This is the Service Manual for the following areas.

- M**...for U.S.A. and Canada
- E**...for U.K.
- G**...for Germany
- F**...for France
- S**...for Sweden
- T**...for Italy
- P**...for Spain

## CF-M34

**TOUGHBOOK**

### Model Number Reference

The following models are numbered in accordance with the types of CPU, LCD and HDD etc. featured by product.

## Model No. CF-M341 2 3 Z 4 5

#### 1: CPU type

N: for Intel® Mobile Pentium® III Processor 700 MHz

#### 2: LCD /HDD type

E: for 8.4" TFT Color / 20 GB

P: for 8.4" TFT Color / 20 GB

#### 3: RAM size / Modem - LAN

F: 256 MB / Combo

#### 4: Operation System

C: Microsoft® Windows NT®

D: Microsoft® Windows® 2000

E: Microsoft® Windows® 98

F: Multi-Language (Microsoft® Windows® 2000)

P: Dual OS (Microsoft® Windows NT® -- Microsoft® Windows® 2000)

#### 4: Area

M/ E /G /F /S /T /P: Refer to above area table

### **WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

# Panasonic®

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# WARNINGS

## For U.K.

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 3 amp fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 3 amps and that it is approved by ASTA or BSI to BS 1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

Important

The wires in this mains lead are coloured in accordance with the following code:


Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured RED.

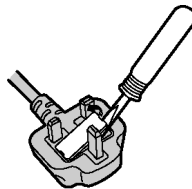
Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol .

The mains plug on this equipment must be used to disconnect the mains power.

Please ensure that a socket outlet is available near the equipment and shall be easily accessible.

### How to replace the fuse

Open the fuse compartment with a screw-driver and replace the fuse.



### Warnings

This equipment is not designed for connection to an IT power system.

(An IT system is a system having no direct connections between live parts and Earth; the exposed-conductive-parts of the electrical installation are earthed.)

An IT system is not permitted where the computer is directly connected to public supply systems in the U.K.)

Disconnect the mains plug from the supply socket when the computer is not in use.

This equipment is produced to BS800/1983.

## LITHIUM BATTERY ⚠

- **CAUTION**

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the equipment manufacture.

Discard used batteries according to the manufacturer's instructions.

## LITHIUMBATTERIES ⚠

**Vorsicht!**

Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

## PILE AU LITHIUM ⚠

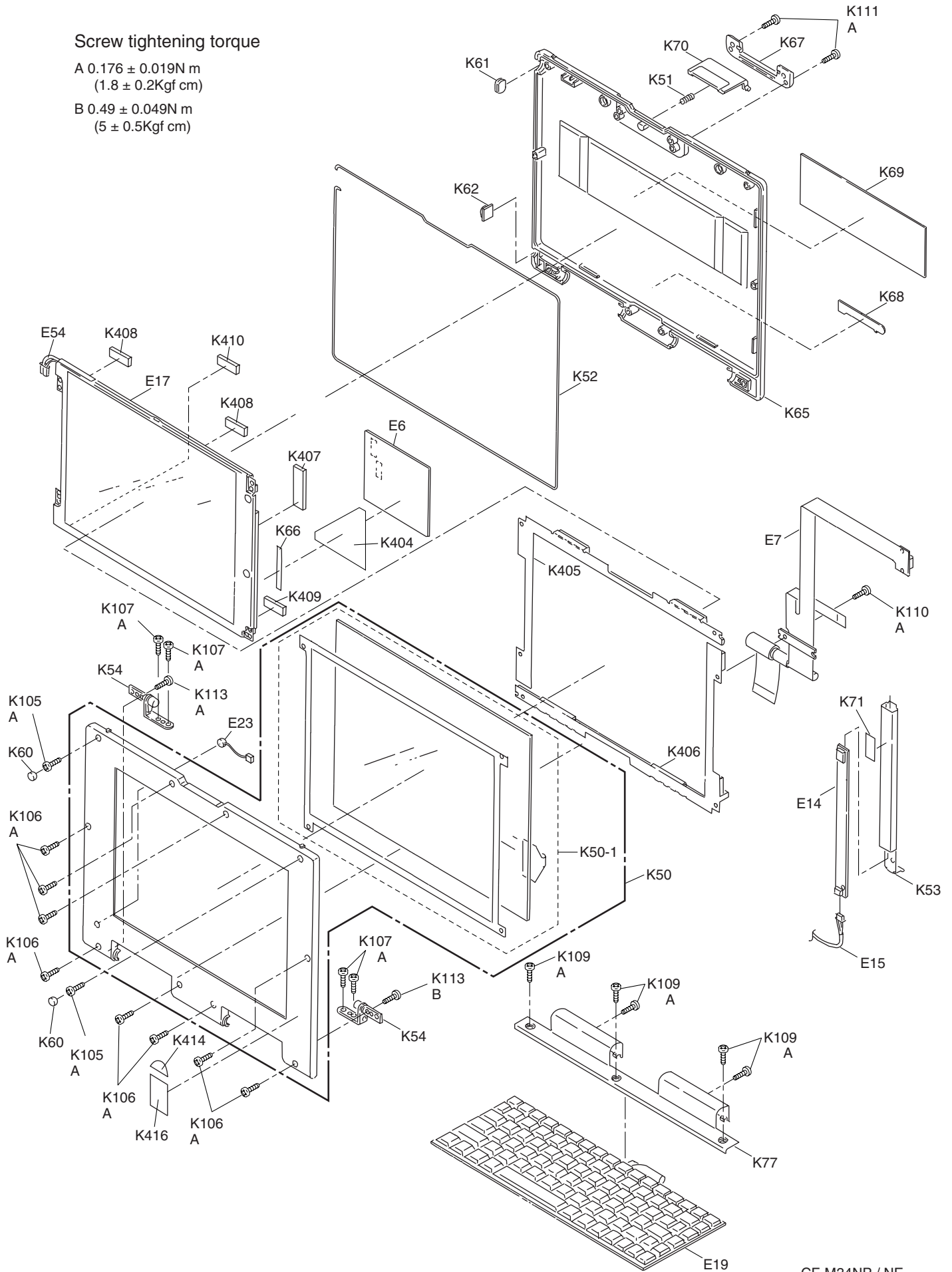
ATTENTION: IL Y A DANGER D'EXPLOSION S' IL Y A REMPLACEMENT INCORRECT DE LA PILE. REMPLACER UNIQUEMENT AVEC UNE PILE DU MÊME TYPE OU D'UN TYPE RECOMMANDÉ PAR LE CONSTRUCTEUR. METTRE AU RÉBUT LES PILES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT.



### Screw tightening torque


A  $0.176 \pm 0.019\text{N m}$   
( $1.8 \pm 0.2\text{Kgf cm}$ )

B  $0.49 \pm 0.049\text{N m}$   
( $5 \pm 0.5\text{Kgf cm}$ )












## Replacement Parts List

**Note: Important Safety Notice**

Components identified by  mark have special characteristics important for safety.

When replacing any of these components, use only manufacturer's specified parts.

**CF-M34NPFZxM /M34NEFZxx**

REF.NO.and AREA	PART NO.	DESCRIPTION	Q'TY
<b>Main Block Unit</b>			
E 1	 DL3U17119AAA	PCB, MAIN	RTL 1
E 3	DL3U27057FAA	PCB, MODEM JACK	RTL 1
E 4	DL3U37057FAA	PCB, DOCKING CONNECTOR	RTL 1
E 5	DL3U47057FAA	PCB, LED	RTL 1
E 6	DL3UP7046ABA	PCB, TOUCH SCREEN PANEL	RTL 1
E 7	DFWV48C0604	FPC, LCD	1
E 8	DL3UP7048BAA	FPC, HDD	1
E 9	N2EABEC00001	TOUCH PAD	1
E 10	DFAS28P01ZAF	SPEAKER	1
E 11	DFJE9102ZA	FFC, TOUCH PAD	1
E 12	DFJE9103ZA	FFC, LED	1
E 13	CR2025/S5H	BATTERY, LITHIUM	1
E 14	 DFWP0123ZA	PCB, INVERTER	1
E 15	DFJS703ZA	CABLE, INVERTER	1
E 16	DFJS552ZA	CABLE, SPEAKER	1
E 17(M)	DL3DW9037IAA	LCD (CF-M34NPFZxM)	1
E 17(M,E,G,F,T,S)	DL3DW9037JAA	LCD (CF-M34NEFZxx)	1
E 18	N3CABPD00009	HDD(20GB)	1
E 19(M)	DFSX1A91XBTR	KEYBOARD	1
E 19(E)	DFSX1A92XBTR	KEYBOARD	1
E 19(G)	DFSX1A93XBTR	KEYBOARD	1
E 19(F)	DFSX1A94XBTR	KEYBOARD	1
E 19(T)	DFSX1A98XBTR	KEYBOARD	1
E 19(S)	DFSX1F01XBTR	KEYBOARD	1
E 20	DFJS550YA	CABLE, MODEM	1
E 21	DFWP0133ZA	COMBO CARD	1
E 22	DFUB0018ZA	EJECTOR, PCMCIA	1
E 23	DFJS640ZA	CABLE WITH MIC	1
E 24	DL3U17124AAA	PCB,MPCI RELAY CARD3	RTL 1
E 51	DL3U17122AAA	PCB, DIMM	1
E 52	DFJS641YA	CABLE, LAN	1
E 53	C3JCUM000002	MODULE, SODIMM	1
E 54(M)	A2CA00000042	LCD BACK LIGHT (CF-M34NPFZxM)	1
E 54(M,E,G,F,T,S)	A2CA00000043	LCD BACK LIGHT (CF-M34NEFZxx)	1
<b>Accessories</b>			
A 1(M)	 DFQX5278ZA	OPERATING INSTRUCTION MANUAL	1
A 1(E,G,F,T,S)	 *OPERATING INSTRUCTION MANUAL		1
A 3	 CF-AA1527C4	AC ADAPTOR	1
A 4(M)	 DFJA0047ZAKK	AC CABLE	1
A 4(E)	 DFJA0042ZAKK	AC CABLE	1
A 4(G,F,T,S)	 DFJA0044ZAKK	AC CABLE	1
A 5	DFJS535ZA	MODEM CABLE	1
A 6	 DFWV95F0008	BATTERY PACK	1
A 8	DFQC9006ZA-0	SHOULDER BELT	1

Note: About the parts which written " \* " above, please order to Computer Products Europe (CPE) written below.

Matsushita Electric (U.K.) Ltd. Computer Products Europe (CPE) TEL: +44-1222-736060 FAX: +44-1222-735500


<b>Packing Material</b>			
P 1	DFPK1061YA	CASE, PACKING	1
P 2	DFPE0598ZA	CUSHON	1
<b>Mechanical Parts</b>			
K 2	DFMD7584ZA	PLATE, DOCKING COVER	1
K 4	DFWV84F0080	COVER, KEYBOARD FPC	1
K 5	DFWV84F0081	COVER, LCD FPC	1
K 6	DFMD7589ZA	PLATE, RF FRONT	1
K 7	DFMD7592ZA	PLATE, AUDIO JACK	1
K 8	DFMD7594ZA-0	HOLDER, PCMCIA COVER	1
K 9	DFMX0635ZB	TAPE	1
K 10	DFMX0719XA	INSULATION SHEET, LED CARD	1
K 11	DFMX0736YA	SPACER, AUDIO JACK	1
K 14	DFMY0218ZA	SHEET, CPU HEAT SINK	3
K 15	DFWV56F0001	HEAT PIPE	1
K 16	DFMY5010ZA	PLATE, HEAT SINK	1
K 19	DFWV80C0438	CABINET, BOTTOM	1
K19-1	DFHG1209ZA	RUBBER FOOT	2
K 20	DFWV80A0289	CABINET, TOP	1
K 21	DFHG1270ZB	SHIELD SHEET, AUDIO JACK BEZEL	1
K 22	DFHG1271ZA	SHIELD FOAM, AUDIO JACK	1
K 23	DFHG1276ZA	PLATE, SPEAKER	1
K 25	DFHG1293ZA-0	COVER, AUDIO JACK	1
K 26	DFHG1385ZA-0	COVER, DC JACK	1
K 27	DFHG1295ZB-0	COVER, USB JACK	1
K 28	DFHG1296ZA-0	COVER, SERIAL CONNECTOR	1
K 29	DFHG1297ZA-0	COVER, PCMCIA	1
K 30	DFHG1302ZA-0	COVER, MODEM JACK	1
K 31	DFHG1304ZA	RUBBER, ANTENNA CABLE	1
K 32	DFHR7632ZA-0	SHEET, HANDLE SCREW BLIND	2
K 34	DFHG1330ZA	PAD, TOUCH PAD	1
K 35	DFHE0326ZA	CONDUCTIVE CUSHION, USB	1
K 36	DFKE0488ZA-0	COVER, BATTERY	1
K 37	DFHG1209ZA	FOOT	2
K 38	DFKE0489ZA-0	AUDIO JACK BEZEL	1
K 40	DFKE0490XA	HOLDER, SPEAKER/RTC BATTERY	1
K 41	DFKE0491YA-0	COVER, DOCKING CONNECTOR	1
K 42	DFKE0492ZA	STOPPER, COVER	1
K 43	DFKE9040VA-0	PALM REST COVER	1
K 45	DFBC0239ZA	CLICK BUTTON	1
K 46	DFBD0121ZA-0	KNOB, POWER SW	1
K 47	DFBD9002XA-0	KNOB, BATTERY COVER	1
K 50(M)	DFWV80A0290	CABINET, LCD FRONT/TS PANEL (CF-M34NP)	1
K 50(M,E,G,F,S,T)	DFWV80A0299	CABINET, LCD FRONT/TS PANEL (CF-M34NE)	1
K 50-1(M)	DFWV84A0198	KIT, TS PANEL (CF-M34NP)	1
K 50-1(M,E,G,F,S,T)	DFWV84A0210	KIT, TS PANEL (CF-M34NE)	1
K 51	DFUS0254ZA	SPRING, BUCKLE	1
K 52	DFMC0539ZA	WATER RESISTING SHEET	1
K 53	DFMX0762ZB	CASE, INVERTER PCB	1
K 54	DFBH1100ZA	HINGE	2
K 60	DFHG1299ZA-0	LCD RUBBER	2
K 61	DFHG1300ZA-0	CAP, ANTENNA	1
K 62	DFHG1301ZA-0	CAP, ANTENNA HOLDER	1
K 65	DFWV80C0437	CABINET, LCD REAR	1
K 66	DFHP7069ZA	TAPE, TOUCH SCREEN PANEL PCB	1
K 67	DFKE0496ZA-1	HOLDER, BUCKLE	1
K 68	DFGB0075ZA-0	LOGO BADGE	1

K 69		DFGB0077ZA-1	TOUGHBOOK LABEL	1
K 70		DFBS0055ZA-1	BUCKLE	1
K 71		DFQT6077YA	LABEL, CAUTION, INVERTER	1
K 74		DFMD7581ZA	HDD CASE UPPER	1
K 75		DFMD7582ZA	HDD CASE LOWER	1
K 76		DFHG1260ZC	CUSHION, HDD	1
K 77		DFMD7591ZA-1	COVER, HINGE	1
K 80(M)	△	DFGT0753ZA-0	LABEL, RATING	1
K 80(E,G,F,S,T)	△	DFGT0775ZA	LABEL, RATING	1
K 82		DFQC9005ZA-0	STRAP	1
K 401		DFMX0574ZA	INSULATION SHEET	1
K 402		DFHE0533ZA	GASKET	1
K 403		DFHE0534ZA	PCMCIA ASSIST	1
K 404		DFMX0965ZA	PCB, INSULATION SHEET T-P	1
K 405		DFHG826ZA	ASS'Y, UPPER LCD-TP SHEET	1
K 406		DFHG827ZA	ASS'Y, LOWER LCD-TP SHEET	1
K 407		DFHG828ZA	RUBBER, INVERTER HOLD	1
K 408		DFHE0507ZA	UPPER, LCD CUSHION	2
K 409		DFHE0508ZA	LOWER, LCD CUSHION	1
K 410		DFHE0514ZA	LOWER L, LCD CUSHION	1
K 411		DFHG1434ZA	COVER, JACK, LAN	1
K 412		DFHE0509ZA	HOLD, DIMM	1
K 413		DFQT9669ZA	LABEL, MS	1
K 414		DFQT9675ZA	LABEL, ENERGY STAR	1
K 415		DFQT9736ZA	LABEL, AMBIT COMBO	1
K 416		DFQT9778ZA	LABEL, PENTIUM3-M	1
K 417		DFQX3987YA	LABEL, COA	1
K 418		DFMD7653ZA	PLATE, MINI PCI TYPE313 CARD	1
K 419		DFMX0797ZA	INSULATION SHEET MINI PCI TYPE3 RELAY	1
K 420		DFHG807ZB	HOLDER, MINI PCI 3A	1
K 421		DFHE0381ZA	GASKET	1
K 422		DFHG1282YA	SHEET,UPPER,INVERTER CABLE	1
K 423		DFGX0236ZA-0	SHEET	1
K 101		XSB2+4FNL	SCREW	18
K 103		XYN2+J10FN	SCREW	2
K 104		XYN2+J4FN	SCREW	3
K 105		XYN2+J6FN	SCREW	20
K 106		XYN2+J8FZ	SCREW	10
K 107		XYN26+J8FN	SCREW	4
K 108		IKT0104AA	SCREW	2
K 109		DFHE5117ZA	SCREW	9
K 110		XYN2+J6	SCREW	1
K 111		XYN2+J8FN	SCREW	2
K 112		XYN2+J8FZ	SCREW	8
K 113		XYN3+J7FN	SCREW	2
K 114		XYN4+J9FZ	SCREW	2
K 115		XYN2+J5FZ	SCREW	2



## Replacement Parts List

**Note: Important Safety Notice**

Components identified by  mark have special characteristics important for safety.  
When replacing any of these components, use only manufacturer's specified parts.

**CF-M34NPFZxM/M34NEFZxx**

REF.NO.and AREA	PART NO.	DESCRIPTION	Q'TY
<b>Main PCB</b>			
C 1	DCS0ETC221M	CAPACITOR, 2.5V, 220 $\mu$ F	1
C 2 3 366	DCS0ETC221M	CAPACITOR, 2.5V, 220 $\mu$ F	3
C 4 8 13 18 23 28 33 38 46 51 186 691 692	ICUV0J106KBX	CAPACITOR, 6.3V, 10 $\mu$ F	13
C 5 9 14 19 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75	DCUM1H103ZFL	CAPACITOR, 50V, 0.01 $\mu$ F	20
C 6 7 11 12 15 16 17 20 21 22 24 25 26 27 29 30 31 32 34 35 36 37 39 40 41 42 43 44 45 47 48 49 50 52 53 93 95 97 99 130 164 187 203 209 212 215 216 217 218 223 289 299 331 337 348 349 350 361 364 367 368 390 408 409 416 417 418 419 420 421 422 423 427 428 717 718	F1G1C104A031	CAPACITOR, 16V, 0.1 $\mu$ F	76
C 10 55 56 57 76 77 78 79 80 81 82 83 84 110 113 116 119 122 123 124 125 126 127 128 129 162 192 199 208 231 236 247 256 261 266 268 278 279 280 281 286 290 291 293 298 300 302 303 327 336 341 358 369 383 384 385 386 406 411 412 424 425 431 432	F1G1C104A031	CAPACITOR, 16V, 0.1 $\mu$ F	64
C 54	F1G1H222A401	CAPACITOR, 50V, 2200pF	1
C 59	F3G0G336A004	CAPACITOR, 4V, 33 $\mu$ F	1
C 87 88 219 288 297 306 308 344 353 393 413	DCSG0JP100RR	CAPACITOR, 6.3V, 10 $\mu$ F	11
C 89 272 273 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326	ICUV1H100DCS	CAPACITOR, 50V, 10pF	21
C 101	ICUV1H220JCS	CAPACITOR, 50V, 22pF	1
C 102 234 235 338	ICUV1H150JCS	CAPACITOR, 50V, 15pF	4
C 103 104 201 202 295 296	ICUV1H470JCS	CAPACITOR, 50V, 47pF	6
C 105 190 275 400	DCUJ1H102KBL	CAPACITOR, 50V, 1000pF	4
C 106 346 347 398 399 401	DCUJ1H102KBL	CAPACITOR, 50V, 1000pF	6
C 108 197 198 338 345	EEJK1AS106R	CAPACITOR, 10V, 10 $\mu$ F	5
C 109 112 115 118 160 229	ICUV1H103ZFS	CAPACITOR, 50V, 0.01 $\mu$ F	6

C 111 114 117 120 191 237 287 301 304	DCSG0JP100RR	CAPACITOR, 6.3V, 10 $\mu$ F	9
C 121 225 360 363	DCUJ1A105ZFL	CAPACITOR, 10V, 1 $\mu$ F	4
C 131 183 184 265 410 426	ECST1AX226R	CAPACITOR, 10V, 22 $\mu$ F	6
C 185	ICUV1C475ZFX	CAPACITOR, 16V, 4.7 $\mu$ F	1
C 188 189	ICUV1H680JCS	CAPACITOR, 50V, 68pF	2
C 200 230 258 259 260 305	ICUV1H101JCS	CAPACITOR, 50V, 100pF	6
C 204 205 206 207 239 262 271 329 332 333 334 335 355 356 654 706 707 708	ICUV1C104KBS	CAPACITOR, 50V, 0.1 $\mu$ F	18
C 214 226 330 613 638 697 698 709	ICUV1C104KBS	CAPACITOR, 50V, 0.1 $\mu$ F	8
C 220 221	ICUV1H120JCS	CAPACITOR, 50V, 12pF	2
C 240 242 429 430	DCUJ1A105ZFL	CAPACITOR, 10V, 1 $\mu$ F	4
C 243 245	ICUV1C224ZFS	CAPACITOR, 16V, 0.22 $\mu$ F	2
C 249 267 269	DCSG1AB470RR	CAPACITOR, 10V, 47 $\mu$ F	3
C 254 255	F1G1H821A471	CAPACITOR, 50V, 820pF	2
C 263 264 604 652	DCUM1A1051JBD	CAPACITOR, 10V, 1 $\mu$ F	4
C 270	EEJK1AS106R	CAPACITOR, 10V, 10 $\mu$ F	1
C 307 328 354 391 392	ICUV1H103ZFS	CAPACITOR, 50V, 0.01 $\mu$ F	5
C 357	ICUV1H471JCS	CAPACITOR, 50V, 470pF	1
C 359	ICUV1C224ZFS	CAPACITOR, 16V, 0.22 $\mu$ F	1
C 372 373 374 375 376 377 637	DCUA0J475MBY	CAPACITOR, 6.3V, 4.7 $\mu$ F	7
C 407	DCUM1H103ZFL	CAPACITOR, 50V, 0.01 $\mu$ F	1
C 600	ICUV1H221KBS	CAPACITOR, 50V, 220pF	1
C 601 612	ICUV1H103KBS	CAPACITOR, 50V, 0.01 $\mu$ F	2
C 602	DCUA1H105ZFY	CAPACITOR, 50V, 1 $\mu$ F	1
C 603 606 640 641 642 643 671 682 686 687	DCUE1C106MBY	CAPACITOR, 16V, 10 $\mu$ F	10
C 607 619 622 636	F1G1H102A401	CAPACITOR, 50V, 1000pF	4
C 608 620 631 649 657 658 713	ICUV0J106KBX	CAPACITOR, 6.3V, 10 $\mu$ F	7
C 609	DCS1ATB101M	CAPACITOR, 10V, 100 $\mu$ F	1
C 611 633 700	ICUV1H103KBS	CAPACITOR, 50V, 0.01 $\mu$ F	3
C 614	ICUV1C334KBA	CAPACITOR, 16V, 0.33 $\mu$ F	1
C 615 616 627 628 667 668 684 685	DCUE1C106MBY	CAPACITOR, 16V, 10 $\mu$ F	8
C 617 621 703	F1G1H102A401	CAPACITOR, 50V, 1000pF	3
C 618 623 672 681 704	ICUV1E104KBA	CAPACITOR, 25V, 0.1 $\mu$ F	5
C 624 653 673 676 690	DCUM1A1051BD	CAPACITOR, 10V, 1 $\mu$ F	5
C 625 626 678	ICUV1E473KBS	CAPACITOR, 25V, 0.047 $\mu$ F	3
C 629 716	DCS0JTB151M	CAPACITOR, 6.3V, 150 $\mu$ F	2
C 632 699 702	DCUM1H101JCL	CAPACITOR, 50V, 100pF	3
C 635 650	DCUM1H470JCL	CAPACITOR, 50V, 47pF	2
C 639	ICUV1E224KBA	CAPACITOR, 25V, 0.22 $\mu$ F	1
C 644 645 647	DCS0GTB471M	CAPACITOR, 4V, 470 $\mu$ F	3
C 655	ECST1AX226R	CAPACITOR, 10V, 22 $\mu$ F	1
C 669	DCS1ATB221M	CAPACITOR, 10V, 220 $\mu$ F	1
C 674	DCUA1H105ZFY	CAPACITOR, 50V, 1 $\mu$ F	1
C 675 683	F1J1C684A097	CAPACITOR, 16V, 0.68 $\mu$ F	2
C 677	DCUJ1H153KBL	CAPACITOR, 50V, 0.015 $\mu$ F	1

C 679		DCUC1C475KBY	CAPACITOR, 16V, 4.7µF	1
C 688		16CV47FH	CAPACITOR, 16V, 47µF	1
C 701		ICUV1H222KBS	CAPACITOR, 50V, 2200pF	1
C 711		F1G1H221A401	CAPACITOR, 50V, 220pF	1
CA 3 4 5 6 7 8 9 10 11 12 13 14		EZASCE101M	CAPACITOR ARRAY	12
CN 2		DFJS548ZA004	CONNECTOR, USB PORT	1
CN 3		DFJP050ZA003	CONNECTOR, FOR RTC BATTERY	1
CN 4		FH12-50S05SV	CONNECTOR, FOR HDD	1
CN 5		DFJP224ZA068	CONNECTOR, FOR PC CARD SLOT	1
CN 6		DFJP214ZA100	CONNECTOR, FOR DOCKING CONNECTOR PCB	1
CN 7		DFJS16N23ZAJ	CONNECTOR, FOR KEYBOARD	1
CN 8		DFJS547ZA012	CONNECTOR, FOR TOUCH PAD	1
CN 11		DFJP050ZA002	CONNECTOR, FOR SPEAKER	1
CN 12		1123258-1	CONNECTOR, FOR RAM CARD	1
CN 13		DFJS207YA045	CONNECTOR, FOR LCD/TOUCH SCREEN PANEL PCB	1
CN 14		DFJS549ZA006	CONNECTOR	1
CN 17		K1KAA0A00079	CONNECTOR, FOR MODEM CONNECTOR PCB	1
CN 18		DFJS208ZA022	CONNECTOR	1
CN 19 20		DFJS207ZA030	CONNECTOR	2
CN 21		DFJP099YA004	CONNECTOR	1
CN 22		IHC0721AA	JK, HEADPHONE	1
CN 23		IHC0721AA	JK, MICROPHONE	1
CN 25		DFJS207ZA015	CONNECTOR, FOR LED PCB	1
CN 27		DFJS13N24ZAJ	CONNECTOR, FOR KEYBOARD	1
CN 32		DFJS207ZA006	CONNECTOR	1
CN 29		DFJP236ZA009	CONNECTOR, SERIAL PORT	1
CN 600		3900170-08	CONNECTOR, FOR MAIN BATTERY	1
CN 601		IHC0626AA	JK, DC-IN	1
CN 602		DFJP217ZA005	CONNECTOR, FOR INVERTER PCB	1
D 2 4 23 631		MA729-TX	DIODE	4
D 3 13 14		B0JDBE000002	DIODE	3
D 5 7 8 600 601 602		DEDDA204UT	DIODE	6
D 6 9 18 21 611 615 616		MA729-TX	DIODE	7
D 10 15 603 606 618 619 620		DED1SS400T61	DIODE	7
D 17 22		B0JDBE000002	DIODE	2
D 604		DEDUDZ11BT	DIODE	1
D 605		DEDUDZ15BT	DIODE	1
D 607		EA60QC04-FT	DIODE	1
D 608 610 617		DED10QS04TL	DIODE	3
D 609		MA792WATX	DIODE	1
D 612 614 632		DEDEC31QS03L	DIODE	3
D 621		DFWV03C0186	DIODE	1
D 622		B0BC3R700004	DIODE	1
D 623		B0BC5R000002	DIODE	1
D 624 627		B0BC2R100007	DIODE	2
D 625		B0BC7R500005	DIODE	1
D 626		UDZTE1713B	DIODE	1
D 628		HZU5BLLTRF	DIODE	1
F 1 2 602	⚠	XBADMMCT010U	FUSE (1A)	3
F 600	⚠	451004	FUSE (4A)	1
F 601	⚠	XBAD4515R00	FUSE (5A)	1
FL 600 601		ELKE103FA	FILTER	2
IC 1		C2GBC0000136	CPU	1
IC 2		DA1021ARQX1P	IC, SYSTEM TEMPERATURE MONITOR	1
IC 3		DA2443MX100I	IC, CHIPSET	1

IC 4	DA9716CTBX3A	IC, CLOCK	1
IC 5 7 9 11	DASM716FTL80	IC, SDRAM	4
IC 13 15 30	DA7S04UT85L0	IC, INVERTER	3
IC 14 53	C0DBZH00003	IC, USB POWER CONTROL SWITCH	2
IC 22 23	DA7ST08U85L0	IC, AND GATE	2
IC 27 48	DA97338VJA2N	IC, SUPER I/O	2
IC 29	DA38802M280M	IC, KBC	1
IC 32 66	ADM211EARSRL	IC, SERIAL DRIVER	2
IC 33	C3FAKC000008	IC, BIOS	1
IC 34	RN5VD27CA-TR	IC, DETECTOR	1
IC 35	DA7W14UT12L0	IC, INVERTER	1
IC 36 67 89	DA7W08UT12L0	IC, AND GATE	3
IC 37 608 611	TC7W74FUTE	IC, F1IP FLOP	3
IC 38	DAF3434T000H	IC, PMC	1
IC 39 52 75 76	DA7W66UT12L0	IC, ANALOG SWITCH	4
IC 40	DAC555CMMX-N	IC, CMOS TIMER	1
IC 43	C1BB00000670	IC, AC97	1
IC 44	DA7787FSE2E	IC, SPEAKER AMP	1
IC 47	DAI1450GJG-T	IC, PCMCIA CONTROLELR	1
IC 49	TVHC32FTL	IC, OR GATE	1
IC 54	DA7S08UT85L0	IC, AND GATE	1
IC 56 57 90	DA7S08UT85L0	IC, AND GATE	3
IC 58	DA7S00UT85L0	IC, CMOS	1
IC 59	DA5C3384X1T	IC, QUICK SW	1
IC 61	DAN5VD45CARR	IC, RESET	1
IC 62	DA3125QXX1T	IC, QUICK SW	1
IC 63	DAS2206IDBLT	IC, PCMCIA POWER CONTROLLER	1
IC 68 74 84	DA7S04UT85L0	IC, INVERTER	3
IC 69	DAM3414AVTEP	IC, OP AMP	1
IC 70	DA121N331BRR	IC, REGULATER	1
IC 72	DA7W125FU0	IC, BUFFER	1
IC 83	DA32X384CBT	IC, QUICK SW	1
IC 86	C1DB00000822	IC, LSI	1
IC 87	DAB664ETBX3A	IC,CLOCK BUFFER	1
IC 88	DA7S32UT85L0	IC,OR GATE	1
IC 91	DA121N331BRR	IC, REGULATER	1
IC 92	C1DB00000749	IC, VGA CONTROLLER	1
IC 93	LVL0023	IC, CMOS	1
IC 601	DAM2370R121P	IC, BIPOLAR LINEAR	1
IC 602	MAX786CAI-T	IC, REGULATER	1
IC 603	C0DBAFH00006	IC, STEP-UP REGULATOR	1
IC 604	C0CBCAC00023	IC, REGULATOR	1
IC 605	C0DBEHG00002	IC, REGULATOR	1
IC 607	C0DBDJH00003	IC, CHARGER	1
IC 609	DAC1624CS8XU	IC, BIPOLAR LINEAR	1
IC 610	XC62FP3302PR	IC, REGULATOR	1
IC 612	C0DBAHH00009	IC, DC/DC	1
L 1	MLF2012A4R7K	FERRITE BEAD	1
L 2 3 50	DDB5Z024E-L	FERRITE BEAD	3
L 4 5	DDB5Z032A-L	FERRITE BEAD	2
L 6 7	DDB5Z031J-L	FERRITE BEAD	2
L 9	DDB5Z031J-L	FERRITE BEAD	1
L 14 16	NFM39R12C221	FILTER	2
L 15 17 21 39	DEAM51R0P506	FILTER	4
L 20 22	G1CYYYYZ00036	FILTER	2
L 23	NFM39R12C221	FILTER	1
L 24 26	NFM60R00T221	FILTER	2

L 27	DEAM60R3T222	FILTER	1
L 28	G1C100KA0002	FERRITE BEAD	1
L 30 31 32 33 34	ILH0070AA	TRANSFORMER	5
L 44	DDB5Z024E-L	FERRITE BEAD	1
L 45 46	G1C22NJA0007	COIL	2
L 603 604	G1A100ZA0004	COIL	2
L 605	DDAZS1R8MTZE	COIL	1
L 606	G1A150ZA0004	COIL	1
L 607	G1A220ZA0004	COIL	1
L 608	DDAZS100MT3T	COIL	1
LA 1 2	MCZ2525AT102	FERRITE BEAD ARRAY	2
PS 1	MINISMDC0752	POLY SWITCH	1
PS 2	MINISMDC1002	POLY SWITCH	1
Q 1 2 11 15	DETC114EETL	TRANSISTOR	4
Q 3	DASI6963DQ	TRANSISTOR	1
Q 6 7 8 28 29 607 611 620 629 641 642 643 652 653 662 663 665	UMH2NTN	TRANSISTOR	17
Q 12 17 18 19	DETA114EETL	TRANSISTOR	4
Q 13	DETC114YETL	TRANSISTOR	1
Q 14 25	DASI6963DQ	TRANSISTOR	2
Q 20 21 24	DETC114EETL	TRANSISTOR	3
Q 22	DETU3904T106	TRANSISTOR	1
Q 27	DETU3904T106	TRANSISTOR	1
Q 600 601 602 604 621 626 630 635 640	UMH2NTN	TRANSISTOR	9
Q 603 606 608 639	DASI6415DQT1	TRANSISTOR	4
Q 609 627	DETUMC2NTR	TRANSISTOR	2
Q 610 618 619 628 633 660	DASI6410DQT1	TRANSISTOR	6
Q 612 616	B1DFED000012	TRANSISTOR	2
Q 614 615 661	DETUMC2NTR	TRANSISTOR	3
Q 622 623 624 636 637	B1DFGD000013	TRANSISTOR	5
Q 625 632	DAFDV301N	TRANSISTOR	2
Q 647 664	2SD1819ARTX	TRANSISTOR	2
Q 648 650	UMH11NTN	TRANSISTOR	2
Q 649 651	UMH11NTN	TRANSISTOR	2
Q 666	B1DHDC000010	TRANSISTOR	1
R 1 6 7 368 397 441 444 447 454 629 642 644 745	ERJ2GE0R00X	RESISTOR, 1/16W, 0Ω	13
R 2	D0HA111ZA001	RESISTOR, 1/16W, 110Ω	1
R 3 12 14 22 24 34 65 68 98 115 150 151 179 180 181 263 372 409 427 608 613 614 617 621 628 717 744 746	ERJ2GEJ102X	RESISTOR, 1/16W, 1kΩ	28
R 5 10	ERJ2GEJ241X	RESISTOR, 1/16W, 240Ω	2
R 9 93	ERJ2GEJ390X	RESISTOR, 1/16W, 39Ω	2
R 15 83 365 366	D0HA102ZA001	RESISTOR, 1/16W, 1kΩ	4
R 16	D0HA202ZA001	RESISTOR, 1/16W, 2kΩ	1
R 17 72 369	D1BA56R2A003	RESISTOR, 1/16W, 56.2Ω	3
R 18 90 91	ERJ2GEJ152X	RESISTOR, 1/16W, 1.5KΩ	3
R 19	ERJ2GEJ681X	RESISTOR, 1/16W, 680Ω	1
R 20 79	ERJ2GEJ201X	RESISTOR, 1/16W, 200Ω	2
R 21 87 88 89 361 362 411	ERJ2GEJ152X	RESISTOR, 1/16W, 1.5KΩ	7

R 23 66 67 75 82 272 301 321 371 382 417 424 425 426 700	ERJ2GEJ102X	RESISTOR, 1/16W, 1k $\Omega$	15
R 28 58 76 77 138 139 142 143 166 329 334 339 342 346 383 415 448 601 634 656 660 674 691 693 699 701 760	ERJ2GEJ103X	RESISTOR, 1/16W, 10k $\Omega$	27
R 33 36 47 56 63 71 73 74 86 116 117 136 144 145 189 190 191 244 245 246 248 250 256 257 289 305 323 324 325 379 380 394 404 407 408 450 605 606 612762	ERJ2GEJ103X	RESISTOR, 1/16W, 10k $\Omega$	40
R 35	ERJ3GEYJ181V	RESISTOR, 1/16W, 180 $\Omega$	1
R 38 39 43	ERJ3GEYJ220V	RESISTOR, 1/16W, 22 $\Omega$	3
R 40 41 44 45 46 48 49 50 194 195 451	ERJ3GEYJ330V	RESISTOR, 1/16W, 33 $\Omega$	11
R 42 52	ERJ3GEYJ100V	RESISTOR, 1/16W, 10 $\Omega$	2
R 51	ERJ3GEYJ100V	RESISTOR, 1/16W, 10 $\Omega$	1
R 53	ERJ3GEYJ106V	RESISTOR, 1/16W, 10M $\Omega$	1
R 54 165	ERJ3GEYJ154V	RESISTOR, 1/16W, 150k $\Omega$	2
R 55 57 187 188	ERJ3GEYJ153V	RESISTOR, 1/16W, 15k $\Omega$	4
R 59 60 254 255	ERJ3GEYJ270V	RESISTOR, 1/16W, 27 $\Omega$	4
R 61 62	ERJ3GEYJ153V	RESISTOR, 1/16W, 15k $\Omega$	2
R 64	D1BA14R0A003	RESISTOR, 1/16W, 14 $\Omega$	1
R 69 410	DBJ2GEJ472VE	RESISTOR, 1/16W, 4.7k $\Omega$	2
R 78	ERJ3GEYJ562V	RESISTOR, 1/16W, 5.6k $\Omega$	1
R 80	D0HA511ZA001	RESISTOR, 1/16W, 510 $\Omega$	1
R 92	ERJ2GEJ151X	RESISTOR, 1/16W, 150 $\Omega$	1
R 94	ERJ2GEJ562X	RESISTOR, 1/16W, 5.6k $\Omega$	1
R 96 97 141 332 333	ERJ3GEYJ222V	RESISTOR, 1/16W, 2.2k $\Omega$	5
R 99 101 102	ERJ3EKF75R0V	RESISTOR, 1/16W, 75 $\Omega$	3
R 100 162 173 262 326 616 627 635 645 678 718 759	ERJ2GEJ104X	RESISTOR, 1/16W, 100k $\Omega$	12
R 103	ERJ2GEJ302X	RESISTOR, 1/16W, 3K $\Omega$	1
R 104	D1BA2491A004	RESISTOR, 1/16W, 2.49k $\Omega$	1
R 111 112 183 184 251 264 285 287 327 328 392 615 622 626	ERJ2GEJ473X	RESISTOR, 1/16W, 47K $\Omega$	14
R 118 119 120 121 268 269 293 294 295 296 297 298 299 300 319 343 351 352 357 358 428 438 439	ERJ3GEY0R00V	RESISTOR, 1/16W, 0 $\Omega$	23
R 125 253 280 431 435	ERJ3GEY0R00V	RESISTOR, 1/16W, 0 $\Omega$	5
R 137 436	ERJ3GEYJ101V	RESISTOR, 1/16W, 100 $\Omega$	2
R 149 284	ERJ3GEYJ471V	RESISTOR, 1/16W, 470 $\Omega$	2
R 152	ERJ2GE0R00X	RESISTOR, 1/16W, 0 $\Omega$	1
R 158 266 317 600 719	ERJ2GEJ473X	RESISTOR, 1/16W, 47K $\Omega$	5
R 164	ERJ3GEYJ753V	RESISTOR, 1/16W, 75k $\Omega$	1
R 170 302	ERJ3GEYJ472V	RESISTOR, 1/16W, 4.7k $\Omega$	2
R 175 303	ERJ3GEYJ103V	RESISTOR, 1/16W, 10k $\Omega$	2
R 185	ERJ3GEYJ333V	RESISTOR, 1/16W, 33k $\Omega$	1
R 192	ERJ3GEYJ474V	RESISTOR, 1/16W, 470k $\Omega$	1

R 196 197	ERJ3GEYJ682V	RESISTOR, 1/16W, 6.8kΩ	2
R 198	ERJ12YJ3R3H	RESISTOR, 1/2W, 3.3Ω	1
R 235 270 273 274 279 282 307 310 311 320 322 335 336 338 648 649 736 741 750 758	ERJ2GEJ104X	RESISTOR, 1/16W, 100KΩ	20
R 265 286 292	ERJ3GEYJ101V	RESISTOR, 1/16W, 100Ω	3
R 271	ERJ3GEYJ332V	RESISTOR, 1/16W, 3.3kΩ	1
R 304	ERJ3GEYJ223V	RESISTOR, 1/16W, 22KΩ	1
R 313 314 315	ERJ3GEYJ271V	RESISTOR, 1/16W, 270Ω	3
R 363 437	RR0816P751D	RESISTOR, 1/16W, 750Ω	2
R 364	D0HA561ZA001	RESISTOR, 1/16W, 560Ω	1
R 374 381	ERJ3GEYJ180V	RESISTOR, 1/16W, 18Ω	2
R 433	ERJ3GEYJ105V	RESISTOR, 1/16W, 1MΩ	1
R 602 603	ERJ2GEJ101X	RESISTOR, 1/16W, 100Ω	2
R 604	ERJ2GEJ222X	RESISTOR, 1/16W, 2.2kΩ	1
R 607	RL1220SR47F	RESISTOR, 1/4W, 0.47Ω	1
R 619 692 722 723 725	ERJ2GEJ474X	RESISTOR, 1/16W, 470kΩ	5
R 620	RR0816P103D	RESISTOR, 1/16W, 10kΩ	1
R 623 624 625	RL1220SR12F	RESISTOR, 1/4W, 0.12Ω	3
R 632 646 647 726 751	ERJ2GEJ105X	RESISTOR, 1/16W, 1MΩ	5
R 633 675	RL1220TR033J	RESISTOR, 1/4W, 0.033Ω	2
R 636 638	RL1220TR033J	RESISTOR, 1/4W, 0.033Ω	2
R 650 651	RL1220TR033J	RESISTOR, 1/4W, 0.033Ω	2
R 655	RR0816P273D	RESISTOR, 1/16W, 27kΩ	1
R 657	D0HB913ZA004	RESISTOR, 1/16W, 91kΩ	1
R 659 661 709	ERJ2GEJ100X	RESISTOR, 1/16W, 10Ω	3
R 663 664	ERJ2GEJ100X	RESISTOR, 1/16W, 10Ω	2
R 666 667 668 669	RL1220TR022J	RESISTOR, 1/4W, 0.022Ω	4
R 670 672	D1BB5492A006	RESISTOR, 1/16W, 54.9kΩ	2
R 671 694 706 743	RR0816P103D	RESISTOR, 1/16W, 10kΩ	4
R 688 689	DBJ14RR068VM	RESISTOR, 1/4W, 0.068Ω	2
R 695	RR0816P333D	RESISTOR, 1/16W, 33kΩ	1
R 696	RR0816P392D	RESISTOR, 1/16W, 3.9kΩ	1
R 697	ERJ3EKF1501V	RESISTOR, 1/16W, 1.5kΩ	1
R 698	ERJ3EKF1001V	RESISTOR, 1/16W, 1kΩ	1
R 703 704	ERJ3EKF2000V	RESISTOR, 1/16W, 200Ω	2
R 705	RR0816P104D	RESISTOR, 1/16W, 100kΩ	1
R 707	ERJ2GEJ680X	RESISTOR, 1/16W, 68Ω	1
R 708	ERJ3EKF4990V	RESISTOR, 1/16W, 499Ω	1
R 710	ERJ2GEJ4R7X	RESISTOR, 1/4W, 4.7Ω	1
R 711 712 713 714	RL1220SR10F	RESISTOR, 1/4W, 0.1Ω	4
R 727 728 731 732	ERJ2GEJ121X	RESISTOR, 1/16W, 120Ω	4
R 729 730 733	ERJ2GEJ121X	RESISTOR, 1/16W, 120Ω	3
R 734	ERJ2GEJ822X	RESISTOR, 1/16W, 8.2KΩ	1
R 742	RR0816P113D	RESISTOR, 1/16W, 11KΩ	1
R 752 753	ERJ3GEYJ223V	RESISTOR, 1/16W, 22KΩ	2
R 754	RR0816P101D	RESISTOR, 1/16W, 100Ω	1
R 755	RR0816R563D	RESISTOR, 1/16W, 56KΩ	1
R 756	RR0816P333D	RESISTOR, 1/16W, 33KΩ	1
R 757	DBJ3GD1202VM	RESISTOR, 1/16W, 12KΩ	1
R 761	D0HB301ZA002	RESISTOR, 1/16W, 300Ω	1
R 763	RL1220TR047J	RESISTOR, 1/4W, 0.047Ω	1
R 764	D0HA563ZA001	RESISTOR, 1/16W, 56kΩ	1
R 765	D0HA104ZA001	RESISTOR, 1/16W, 100kΩ	1
RA 1 14 19	DEARA8AJ121M	RESISTOR ARRAY, 120Ω	3

RA 21 22 23 24 25 26 27 28 29	DEARA8CJ100M	RESISTOR ARRAY, 10Ω	9
RA 30 31 32 48 53 56 57 58 73	DEARA8AJ103M	RESISTOR ARRAY, 10kΩ	9
RA 33	EXBV8V330JV	RESISTOR ARRAY, 33Ω	1
RA 34 35 36	DEARA8CJ330M	RESISTOR ARRAY, 33Ω	3
RA 37 38	EXBV8VR000V	RESISTOR ARRAY, 0Ω	2
RA 40 43	DEARA8AJ102M	RESISTOR ARRAY, 1kΩ	2
RA 41 49 50	DEARA8AJ472M	RESISTOR ARRAY, 4.7kΩ	3
RA 44	DEARA8AJ473M	RESISTOR ARRAY, 47kΩ	1
RA 45	EXBV8V103JV	RESISTOR ARRAY, 10kΩ	1
RA 46 51 52	DEARA8AJ103M	RESISTOR ARRAY, 10kΩ	3
RA 47	EXBV8V472JV	RESISTOR ARRAY, 4.7kΩ	1
RA 54 60 64	EXBV8V473JV	RESISTOR ARRAY, 47kΩ	3
RA 62 68	EXBV8V473JV	RESISTOR ARRAY, 47kΩ	2
RA 65 66	DEARA8AJ473M	RESISTOR ARRAY, 47kΩ	2
SW 1	EVQPSD02K	SW, RESET	1
SW 3	SSST01-3A	SW, POWER	1
SW 5	DFSS2D17ZAXA	SW, DIP	1
X 1	DECU14318L5U	OSCILLATOR (14.318MHz)	1
X 2	IEV0352AA	OSCILLATOR (32.768KHz)	1
X 3	H2D800400012	OSCILLATOR ( 8.0MHz )	1
X 4	DECU08000L3U	OSCILLATOR (8.0MHz)	1
X 5	DECU24576L3U	OSCILLATOR ( 24.576MHz )	1
<b>Touch Screen Panel PCB</b>			
C 401 402 403 404	ICUV1H103KBS	CAPACITOR, 50V, 0.01μF	4
C 405 408 413	ICUV1E104ZFS	CAPACITOR, 25V, 0.1μF	3
C 409 410	ECST1AY106R	CAPACITOR, 10V, 10μF	2
CN 401	DFJS440ZA008	CONNECTOR, FOR MAIN PCB	1
CN 402	DFJS440ZA008	CONNECTOR, FOR TOUCH SCREEN PANEL	1
D 401	DED1SS355T17	DIODE	1
D 402 403 404 405 406 407 408 409	DEDDA204UT	DIODE	8
IC 403	C1DB00000509	IC, TOUCH SCREEN PANEL CONTROLLER	1
Q 401 402 404	2SA1576RT107	TRANSISTOR	3
Q 403 405 406	2SC4081RT107	TRANSISTOR	3
R 401 402 403 404 405 406 409	ERJ3GEYJ472V	RESISTOR, 1/16W, 4.7kΩ	7
R 407	ERJ3GEYJ103V	RESISTOR, 1/16W, 10kΩ	1
R 408	ERJ3GEYJ104V	RESISTOR, 1/16W, 100kΩ	1
R 415 416 417	ERJ3GEY0R00V	RESISTOR, 1/16W, 0Ω	3
RA 401	EXBV8V102JV	RESISTOR ARRAY, 1kΩ	1
RA 404 405	EXBV8VR000V	RESISTOR ARRAY, 0Ω	2
X 401	DEBB4R91N1GX	OSCILLATOR (4.9152MHz)	1
<b>LED PCB</b>			
CN 511	DFJS207ZA015	CONNECTOR, FOR MAIN PCB	1
D 510 512 513 514 515	SEC1703C	L.E.D.	5
D 511	SEC2764C	L.E.D.	1
R 511 513 514 515 516 517	ERJ3GEYJ331V	RESISTOR, 1/16W, 330Ω	6
R 512	ERJ3GEYJ471V	RESISTOR, 1/16W, 470Ω	1
SW 511	DFSE057ZA	SW, MAGNETIC LEAD	1
SW 512	EVQPLDA15	SW, LEFT CLICK	1
SW 513	EVQPLDA15	SW, RIGHT CLICK	1
<b>MODEM JACK PCB</b>			
C 541	F1L3D102A003	CAPACITOR, 2000V, 1000pF	1
CN 541	DFJS555ZA004	JK, MODEM	1
CN 542	DFJS554ZA008	JK	1
CN 543	K1KA10B00151	CONNECTOR	1



CN 544	DFJP02C75YAJ	CONNECTOR, FOR INTERNAL MODEM PCB	1
R 541 542	ERJ3GEYJ750V	RESISTOR, 1/16W, 75Ω	2
<b>DOCKING CONNECTOR PCB</b>			
CN 551	DFJS553ZA100	CONNECTOR, FOR PORT REPLICATOR	1
CN 552	DFJS226ZA100	CONNECTOR, FOR MAIN PCB	1
<b>HDD FPC</b>			
CN 1	DFJS502ZA044	CONNECTOR, FOR HDD	1
<b>LCD FPC</b>			
CN 1	K1KB30A00066	CONNECTOR, FOR LCD	1
<b>MPCI RELAY CARD PCB</b>			
C 1 2 3 4 9 10 19 20	F1G1C104A031	CAPACITOR, 16V, 0.1μF	8
C 13	F1G1C103A046	CAPACITOR, 16V, 0.01μF	1
C 14 15	EEJK1AS106R	CAPACITOR, 10V, 10μF	2
CN 1	DFJS511ZA124	CONNECTOR, FOR MINI PCI	1
CN 4	DFJS226ZA100	CONNECTOR	1
L 1	DDB5Z005-L	INDUCTOR	1
Q 1	DETC114EETL	TRANSISTOR	1
Q 6	DASI6963DQ	TRANSISTOR	1
R 1 4 20 23	ERJ2GE0R00X	RESISTOR, 1/16W, 0Ω	4
R 8	ERJ2GEJ103X	RESISTOR, 1/16W, 10KΩ	1
R 14	ERJ2GEJ102X	RESISTOR, 1/16W, 1KΩ	1
R 15	ERJ2GEJ104X	RESISTOR, 1/16W, 100KΩ	1

# Service Manual

Notebook Computer

CF-M34

*Simplified*

**TOUGHBOOK**

## Model Number Reference

The following models are numbered in accordance with the types of CPU, LCD and HDD etc. featured by product.

Model No. CF-M34 1 2 DW 3 4

1: CPU type

J: for Intel® Mobile Pentium® III Processor 400 MHz LV

2: HDD type

A: for 10 GB

3: Operation System

D: Microsoft® Windows® 2000

4: Area

L: Belgium

### **WARNING**


This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

**Panasonic®**

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## Replacement Parts List Comparison Table

Note: Important Safety Notice

Components identified by  mark have special characteristics important for safety.  
When replacing any of these components, use only manufacturer's specified parts.

### CF-M34JADWDL

REF. NO. and AREA	PART NO.		DESCRIPTION	Q'TY
	CF-M34JA2Bxx	CF-M34JADWDL		
<b>Main Block Unit</b>				
E3	DL3U27057BAA	-----	PCB, MODEM JACK RTL	0
E3	-----	DL3UP7057DAA	PCB, COMBO JACK RTL	1
E19 (L)	-----	N2ABZJ000010	KEYBOARD	1
E21	DFWP0125WA	-----	INTERNAL MODEM	0
E21	-----	DFWP0133ZA	COMBO CARD, MINI PCI	1
E41	-----	DL3UP7054EAA	PCB, DIMM RTL	1
K26	DFHG1294ZA-0	DFHG1385ZA-0	CARD HOLDER RUBBER	1
K81	DFQT9718ZA	-----	LABEL, MODEM CAUTION	0
K81	-----	DFQT9736ZA	LABEL, COMBO	1
E40	-----	DFJS641ZA	CABLE, LAN	1
K301	-----	DFHG1434ZA	COVER, LAN JACK	1
K302	-----	DFHG807ZA	HOLDER, MINI PCI 3A	1
K303	-----	DFMX0574ZA	TAPE	1

# Service Manual

Notebook Computer

CF-M34

*Simplified*

**TOUGHBOOK**

This is the Service Manual for  
the following areas.

...for Italy

## Model Number Reference

The following models are numbered in accordance with the types of CPU, LCD and HDD etc. featured by product.

Model No. CF-M34 1 2 DU 3 4

1: CPU type

J: for Intel® Mobile Pentium® III Processor 400 MHz LV

2: HDD type

A: for 10 GB

3: Operation System

E: Microsoft® Windows® 98

4: Area

T: Refer to above area table

## WARNING

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**Panasonic®**

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# WARNINGS

For U.K.

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 3 amp fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 3 amps and that it is approved by ASTA or BSI to BS 1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

Important

The wires in this mains lead are coloured in accordance with the following code:


Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured RED.

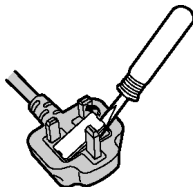
Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol .

The mains plug on this equipment must be used to disconnect the mains power.

Please ensure that a socket outlet is available near the equipment and shall be easily accessible.

## How to replace the fuse

Open the fuse compartment with a screw-driver and replace the fuse.



## Warnings

This equipment is not designed for connection to an IT power system.

(An IT system is a system having no direct connections between live parts and Earth; the exposed-conductive-parts of the electrical installation are earthed.)

An IT system is not permitted where the computer is directly connected to public supply systems in the U.K.)

Disconnect the mains plug from the supply socket when the computer is not in use.

This equipment is produced to BS800/1983.

## LITHIUM BATTERY ⚠

- **CAUTION**

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the equipment manufacture.

Discard used batteries according to the manufacturer's instructions.

## LITHIUMBATTERIES ⚠

**Vorsicht!**


Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

## PILE AU LITHIUM ⚠

ATTENTION: IL Y A DANGER D'EXPLOSION S' IL Y A REMPLACEMENT INCORRECT DE LA PILE. REMPLACER UNIQUEMENT AVEC UNE PILE DU MÊME TYPE OU D'UN TYPE RECOMMANDÉ PAR LE CONSTRUCTEUR. METTRE AU RÉBUT LES PILES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT.

## Replacement Parts List Comparison Table

Note: Important Safety Notice

Components identified by  mark have special characteristics important for safety.  
When replacing any of these components, use only manufacturer's specified parts.

### CF-M34JADUET

REF. NO. and AREA	PART NO.		DESCRIPTION	Q'TY
	CF-M34JA2BxT	CF-M34JADUET		
<b>Main Block Unit</b>				
E3	DL3U27057BAA	-----	PCB, MODEM JACK RTL	0
E3	-----	DL3UP7057DAA	PCB, COMBO JACK RTL	1
E8	DL3UP7048AAA	DL3UP7048BAA	FPC, HDD	1
E21	DFWP0125wA	-----	INTERNAL MODEM	0
E21	-----	DFWP0133ZA	COMBO CARD, MINI PCI	1
E40	-----	DFJS641ZA	CABLE, LAN	1
E41	-----	DL3UP7054EAA	PCB, DIMM RTL	1
K26	DFHG1294ZA-0	DFHG1385ZA-0	CARD HOLDER RUBBER	1
K69	DFGB0077ZA-1	DFQT6235ZA	LABEL, CARABINIERI	1
K81	DFQT9718ZA	-----	LABEL, MODEM CAUTION	0
K81	-----	DFQT9736ZA	LABEL, COMBO	1
K92	DFME0112ZA	-----	RUBBER, CARD HOLDER	0
K301	-----	DFHG1434ZA	COVER, LAN JACK	1
K302	-----	DFHG807ZA	HOLDER, MINI PCI 3A	1
K303	-----	DFMX0574ZA	TAPE	1
<b>HDD FPC</b>				
CN1	7-0176135-6	DFJS502ZA044	CONNECTOR, HDD	1





# Service Manual

Notebook Computer

CF-M34

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**Simplified**


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This is the Service Manual for the following areas.

- E** ...for U.K.
- G** ...for Germany
- F** ...for France
- S** ...for Sweden
- T** ...for Italy
- P** ...for Spain



## Model Number Reference

The following models are numbered in accordance with the types of CPU, LCD and HDD etc. featured by product.

## Model No. CF-M341 2 BB 3 4

### 1: CPU type

J: for Intel® Mobile Pentium® III Processor 400 MHz LV

### 2: HDD type

A: for 10 GB

### 3: Operation System

C: Microsoft® Windows NT®

D: Microsoft® Windows® 2000

E: Microsoft® Windows® 98

### 4: Area

M/ E /G /F /S /T /P: Refer to above area table

CF-M34JABBxx is the model number that installed Combo Card Kit (CF-WLM342)) to CF-M34JA2Bxx.

## WARNING

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# WARNINGS

## For U.K.

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 3 amp fuse is fitted in this plug.

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Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR

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Brown: Live

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The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured RED.

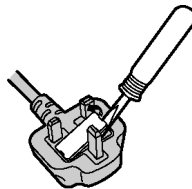
Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol  .

The mains plug on this equipment must be used to disconnect the mains power.

Please ensure that a socket outlet is available near the equipment and shall be easily accessible.

### ■ How to replace the fuse

Open the fuse compartment with a screwdriver and replace the fuse.



### Warnings

● This equipment is not designed for connection to an IT power system.

(An IT system is a system having no direct connections between live parts and Earth; the exposed-conductive-parts of the electrical installation are earthed.

An IT system is not permitted where the computer is directly connected to public supply systems in the U.K.)

● Disconnect the mains plug from the supply socket when the computer is not in use.

This equipment is produced to BS800/1983.

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- **CAUTION**

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## Replacement Parts List Comparison Table

Note: Important Safety Notice

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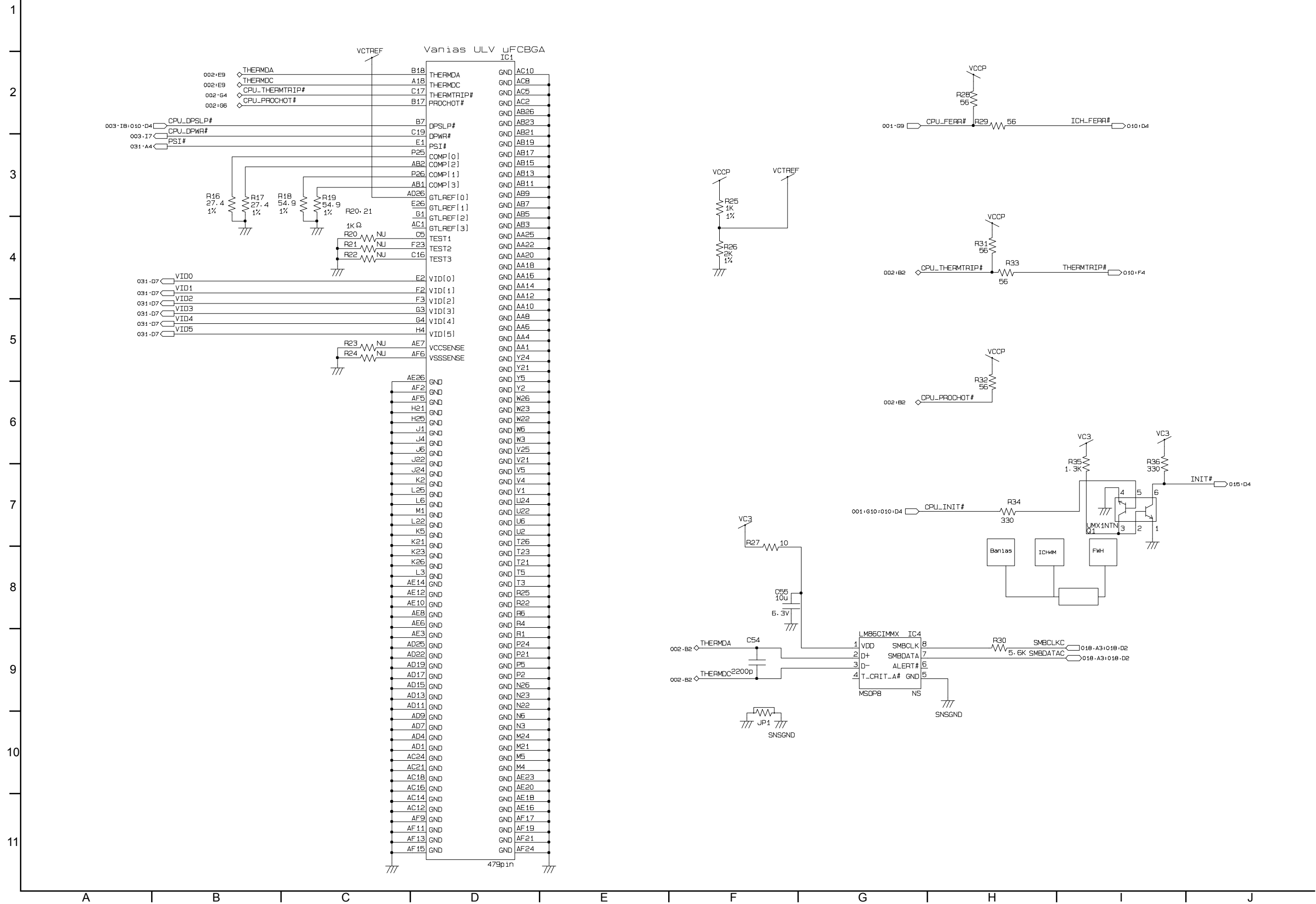
### CF-M34JABBxx

REF. NO. and AREA	PART NO.		DESCRIPTION	Q'TY
	CF-M34JA2Bxx	CF-M34JABBxx		
<b>Main Block Unit</b>				
E3	DL3U27057BAA	-----	PCB, MODEM JACK RTL	0
E3	-----	DL3UP7057DAA	PCB, COMBO JACK RTL	1
E21	DFWP0125wA	-----	INTERNAL MODEM	0
E21	-----	DFWP0133ZA	COMBO CARD, MINI PCI	1
K26	DFHG1294ZA-0	DFHG1385ZA-0	CARD HOLDER RUBBER	1
K81	DFQT9718ZA	-----	LABEL, MODEM CAUTION	0
K81	-----	DFQT9736ZA	LABEL, COMBO	1
E40	-----	DFJS641ZA	CABLE, LAN	1
K301	-----	DFHG1434ZA	COVER, LAN JACK	1
K302	-----	DFHG807ZA	HOLDER, MINI PCI 3A	1
K303	-----	DFMX0574ZA	TAPE	1





# Main 2 CPU POWER





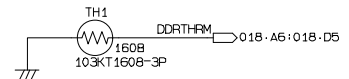
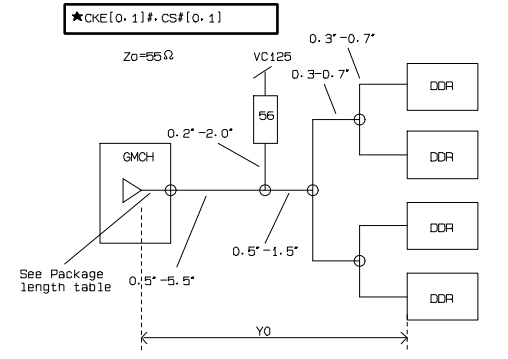
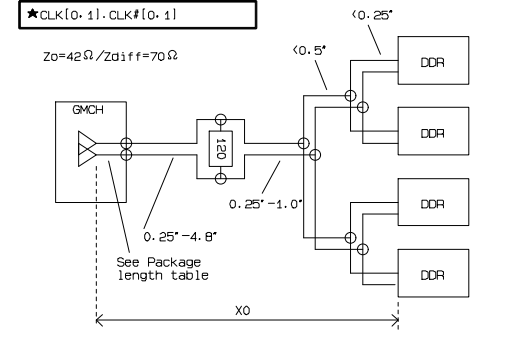
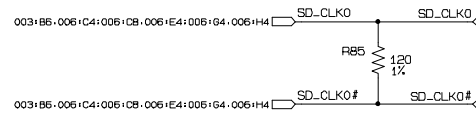
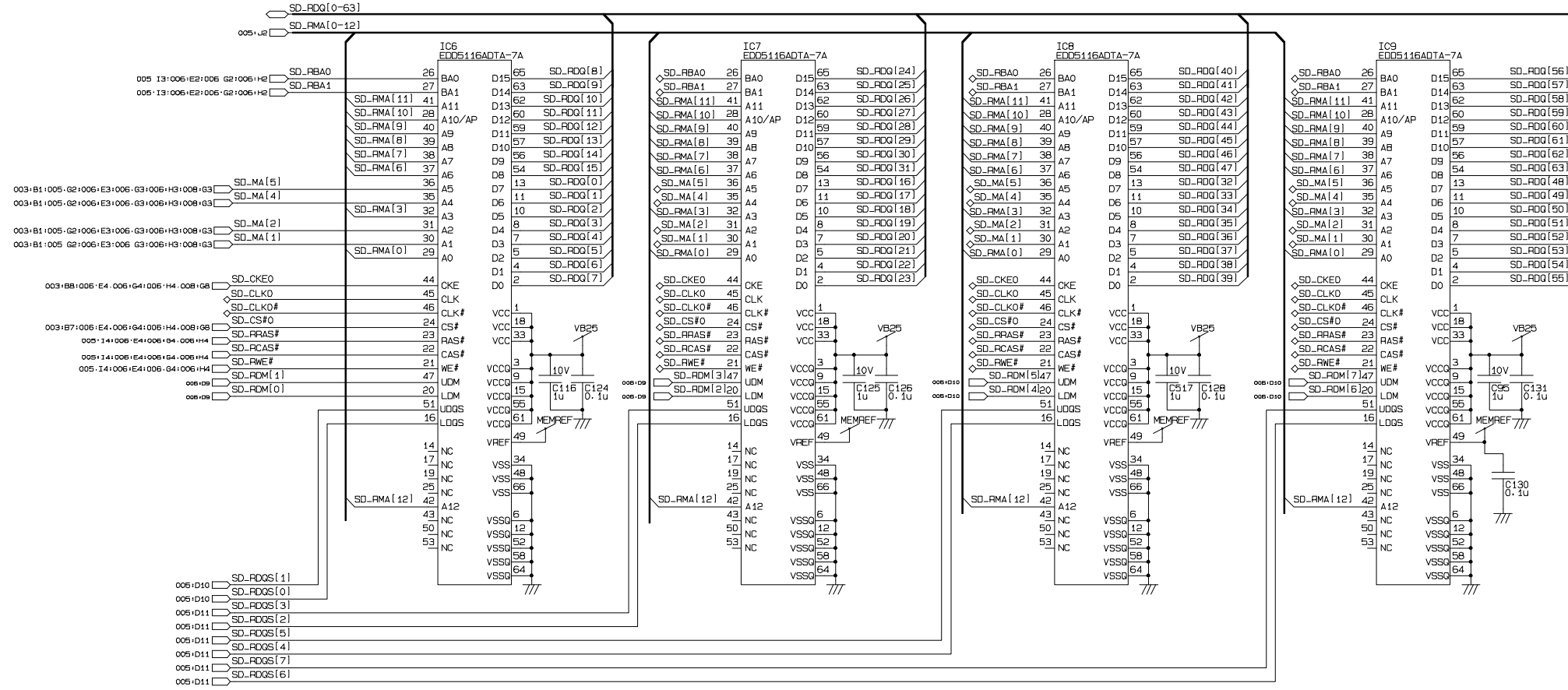






# Main 6 ON BOARD MEMORY BANK 0

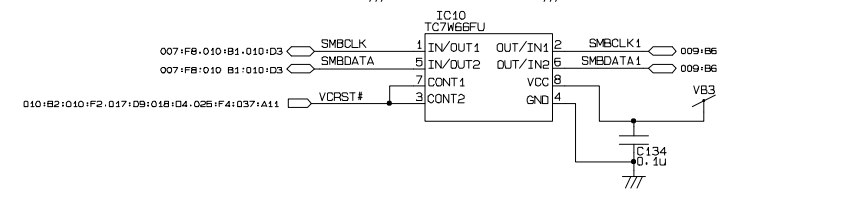
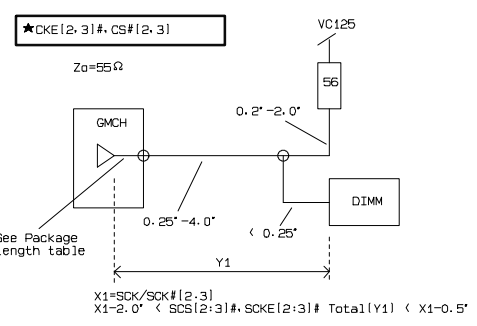
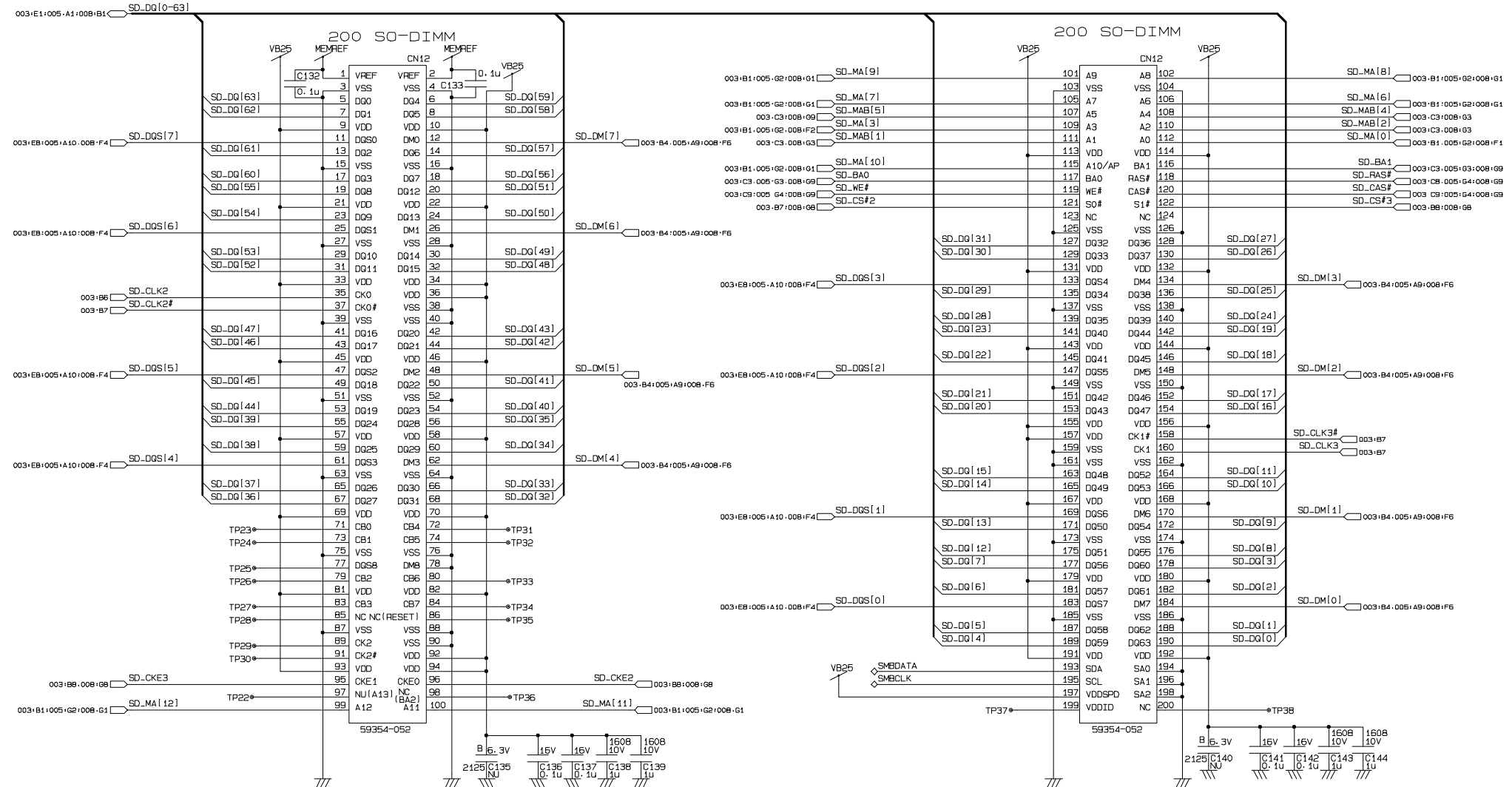
BANK 0 (ON BOARD)



$X_0 = \text{SCK} / \text{SCK}\#[0:1]$   
 $X_0 - 2.0" < \text{CS}[0:1] + \text{SCKE}[0:1] + \text{Total}[Y_0] < X_0 - 0.5"$

# Main 7 SO-DIMM BANK 2/3

## BANK 2/3 (SO-DIMM)

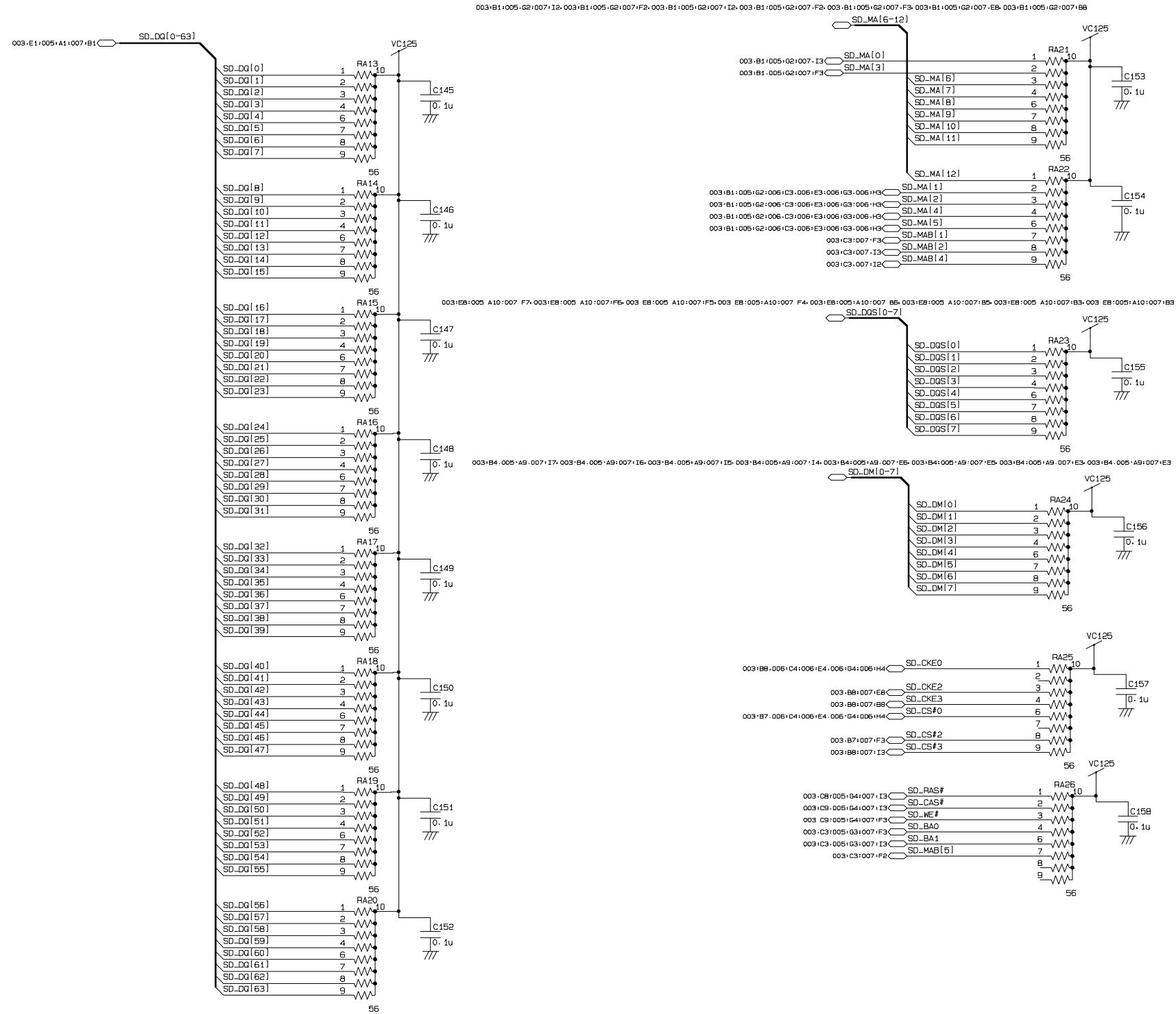


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A | B | C | D | E | F | G | H | I | J

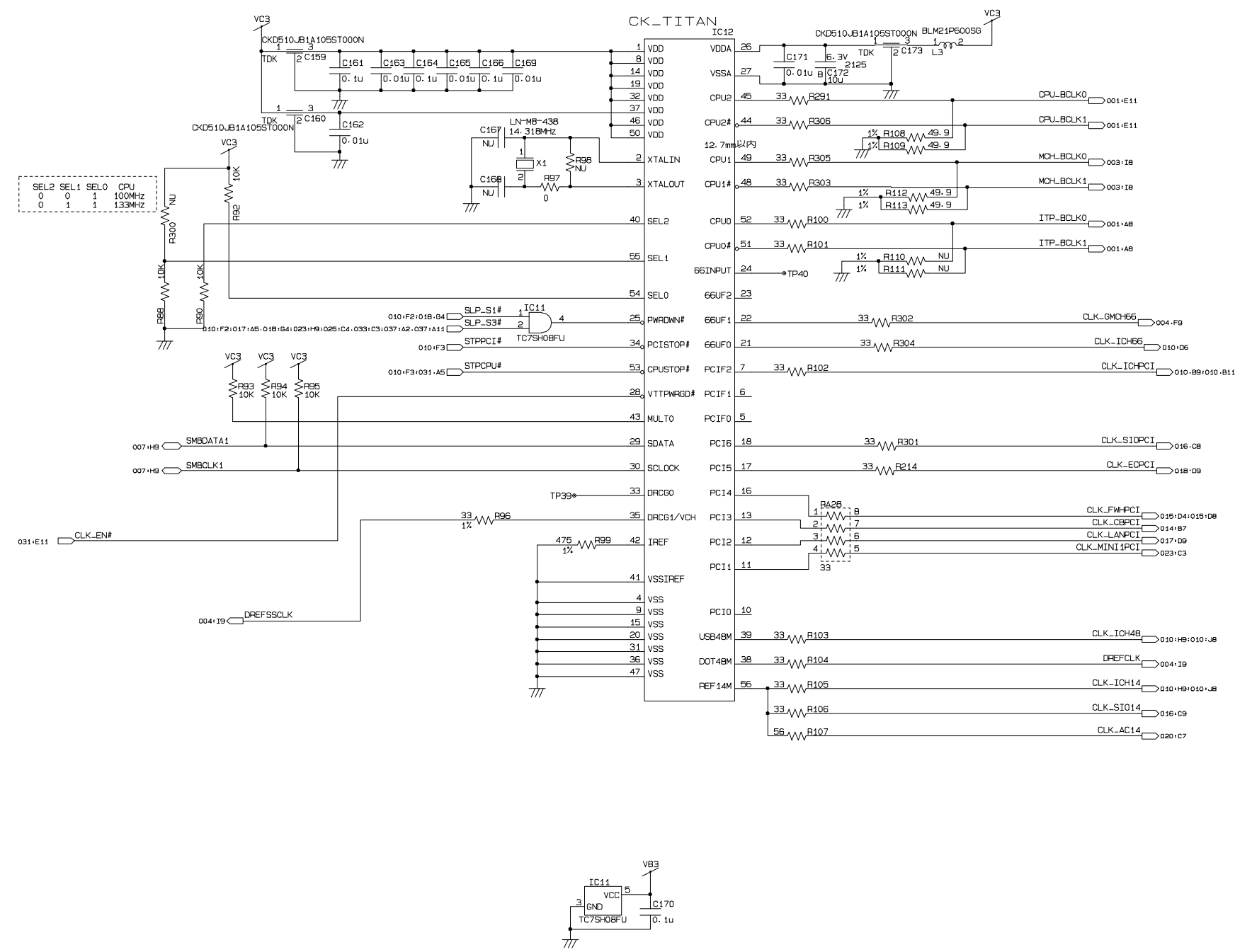
# Main 8 DDR TERM

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A | B | C | D | E | F | G | H | I | J

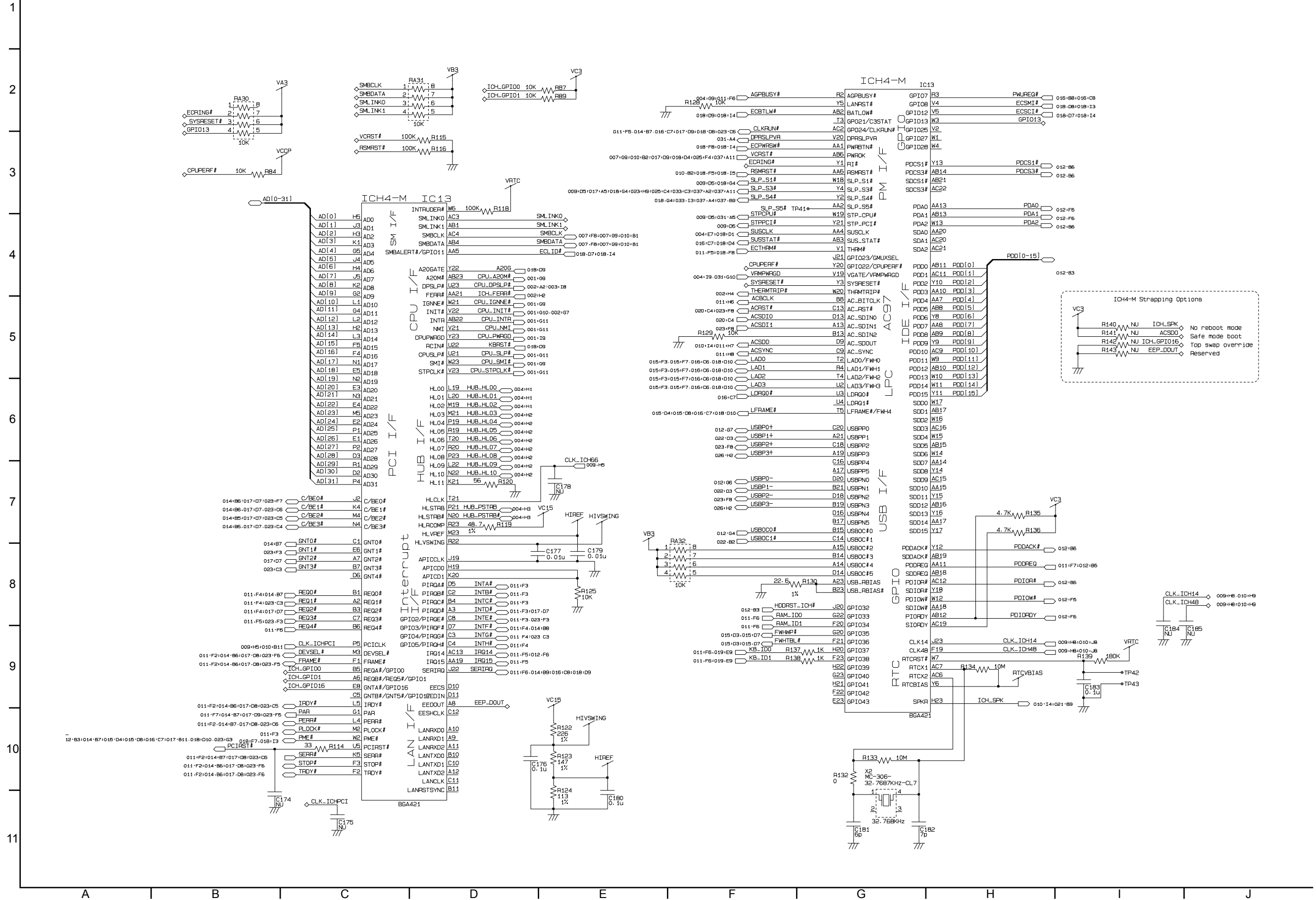
# Main 9 CLOCK GENERATOR



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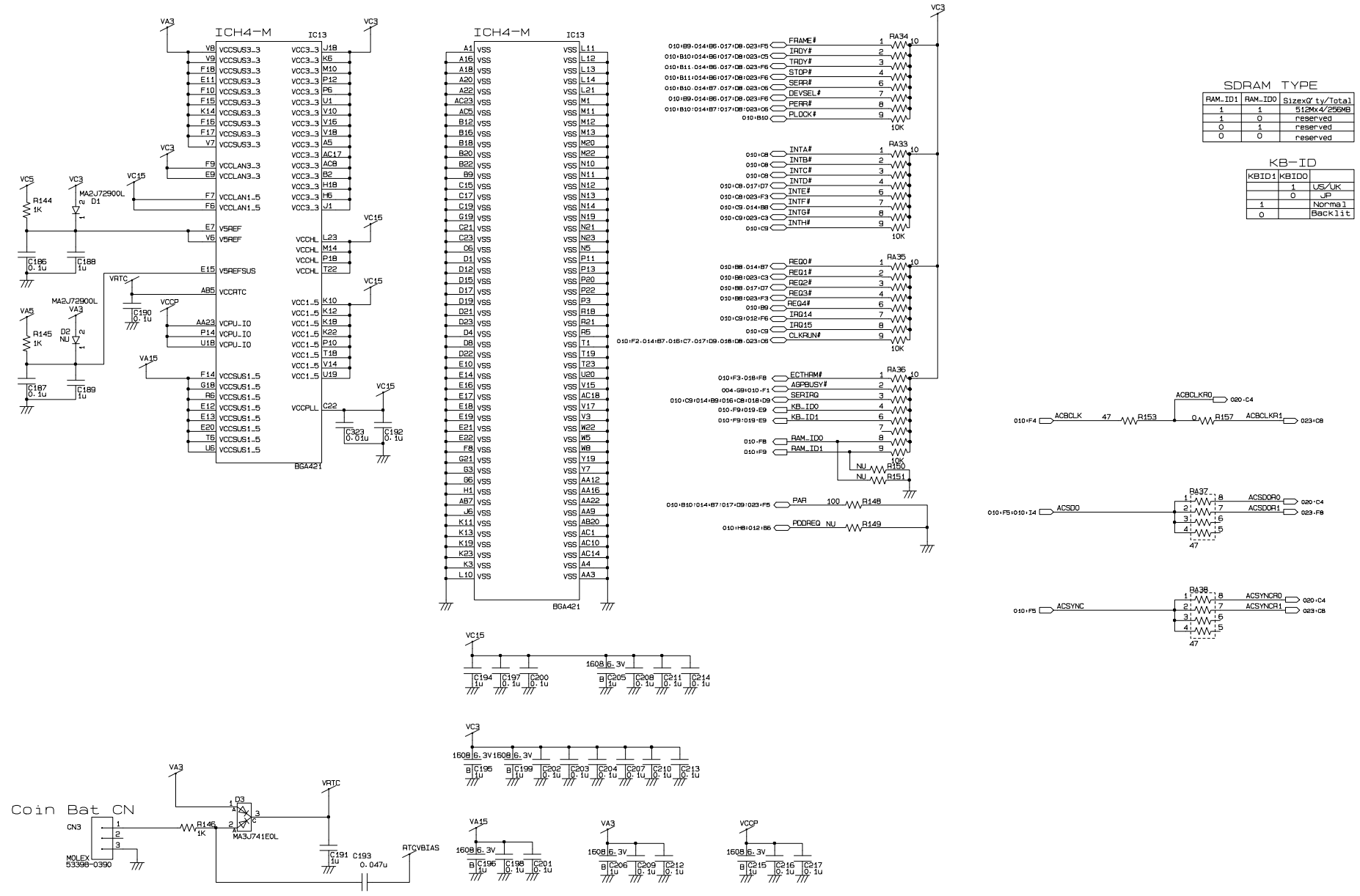
A | B | C | D | E | F | G | H | I | J

# Main 10 ICH4-M



# Main 11 ICH4-M POWER

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11



SDRAM TYPE

RAM_ID1	RAM_ID0	Size	ty/Totals
1	1	512Mx4	256MB
1	0	reserved	
0	1	reserved	
0	0	reserved	

KB-ID

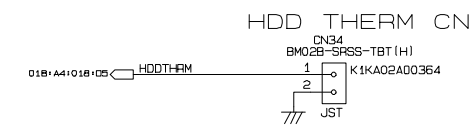
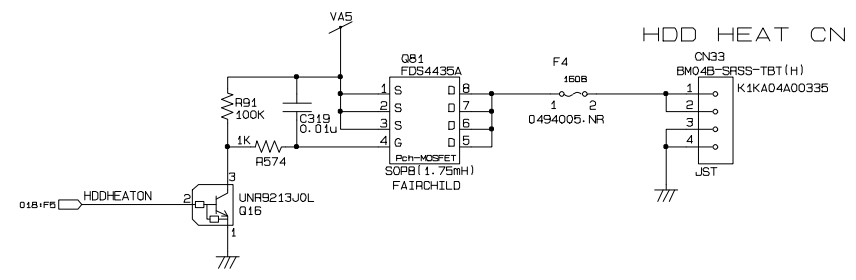
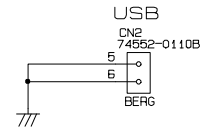
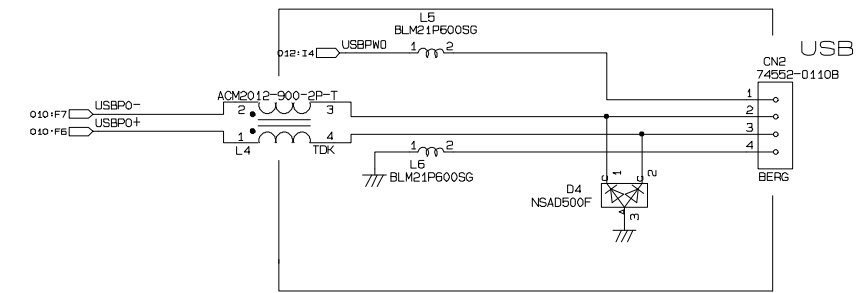
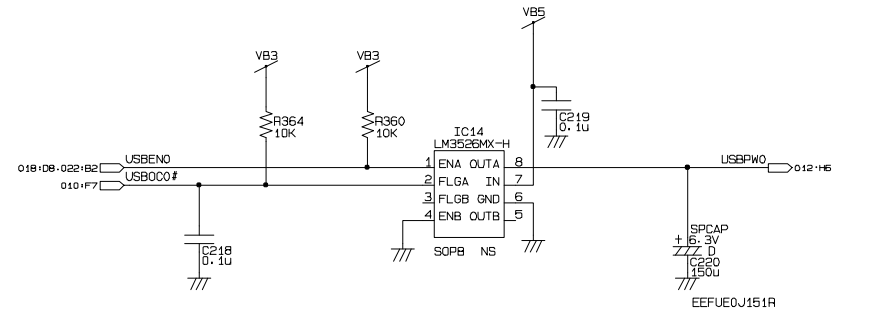
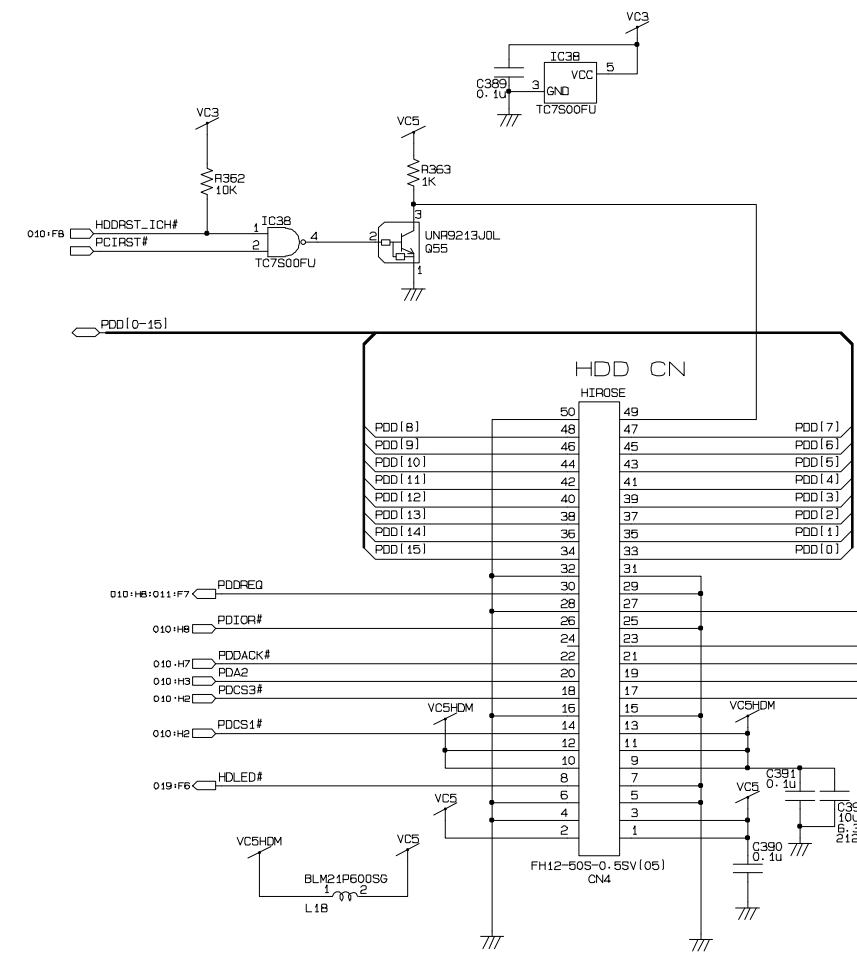
KBID1	KBID0	US/LK
1	0	Normal
0	0	Backlit

A | B | C | D | E | F | G | H | I | J



# Main 12 HDD,HEATER,USB I/F

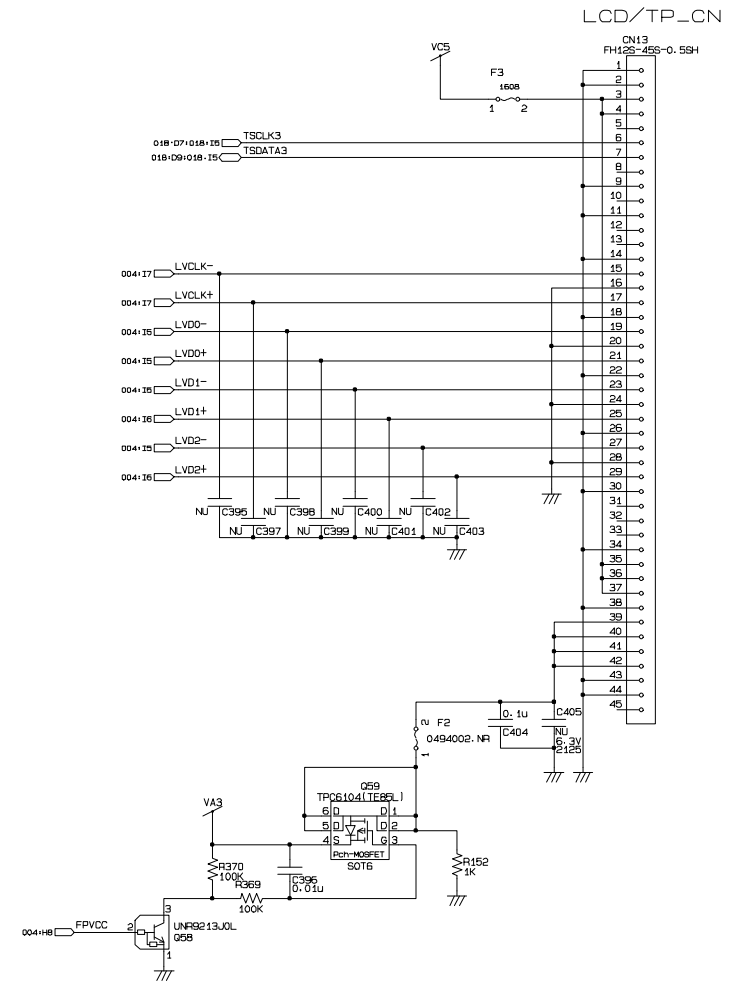
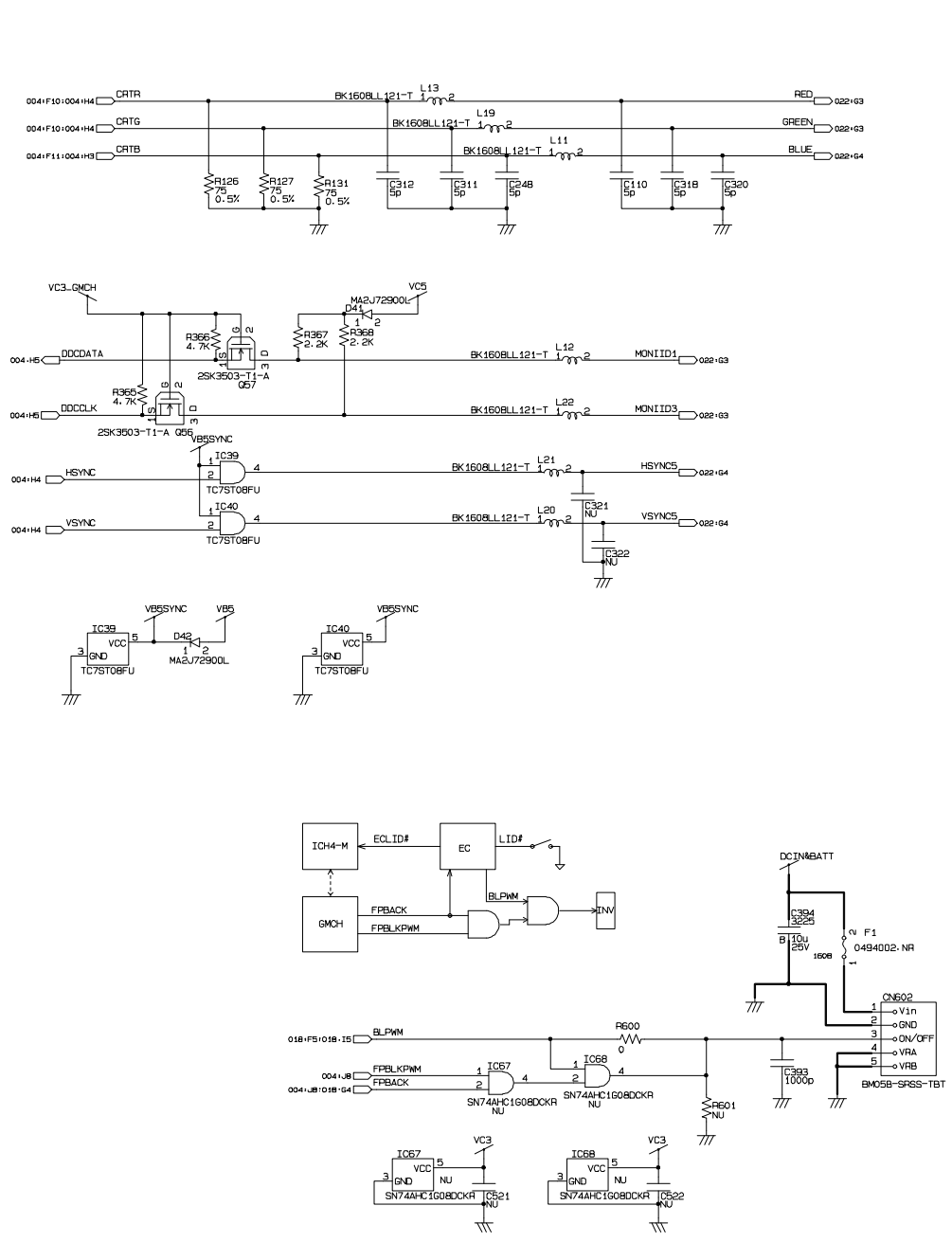
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# Main 13 LCD, BACKLIGHT I/F

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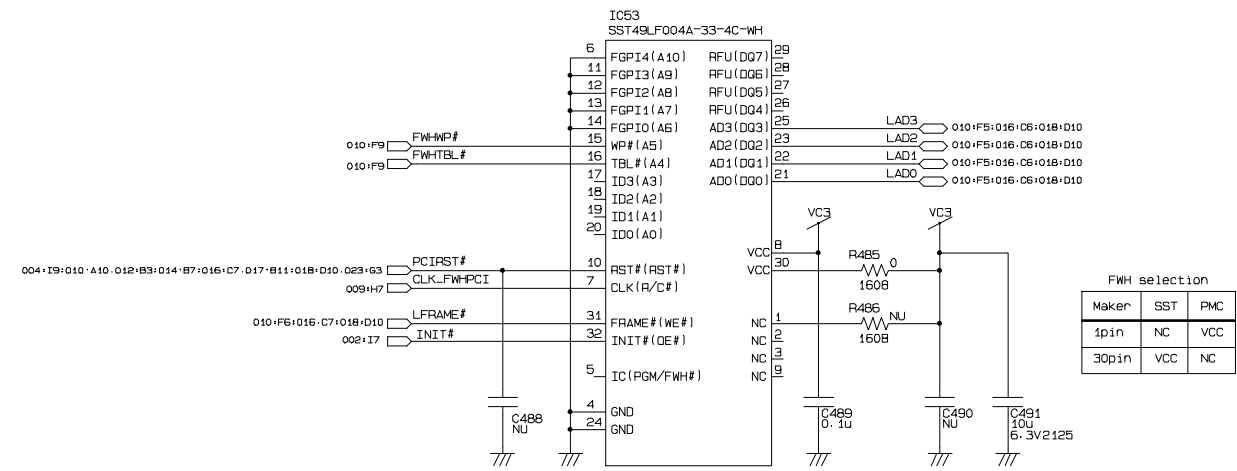
A | B | C | D | E | F | G | H | I | J



# Main 15 FWH

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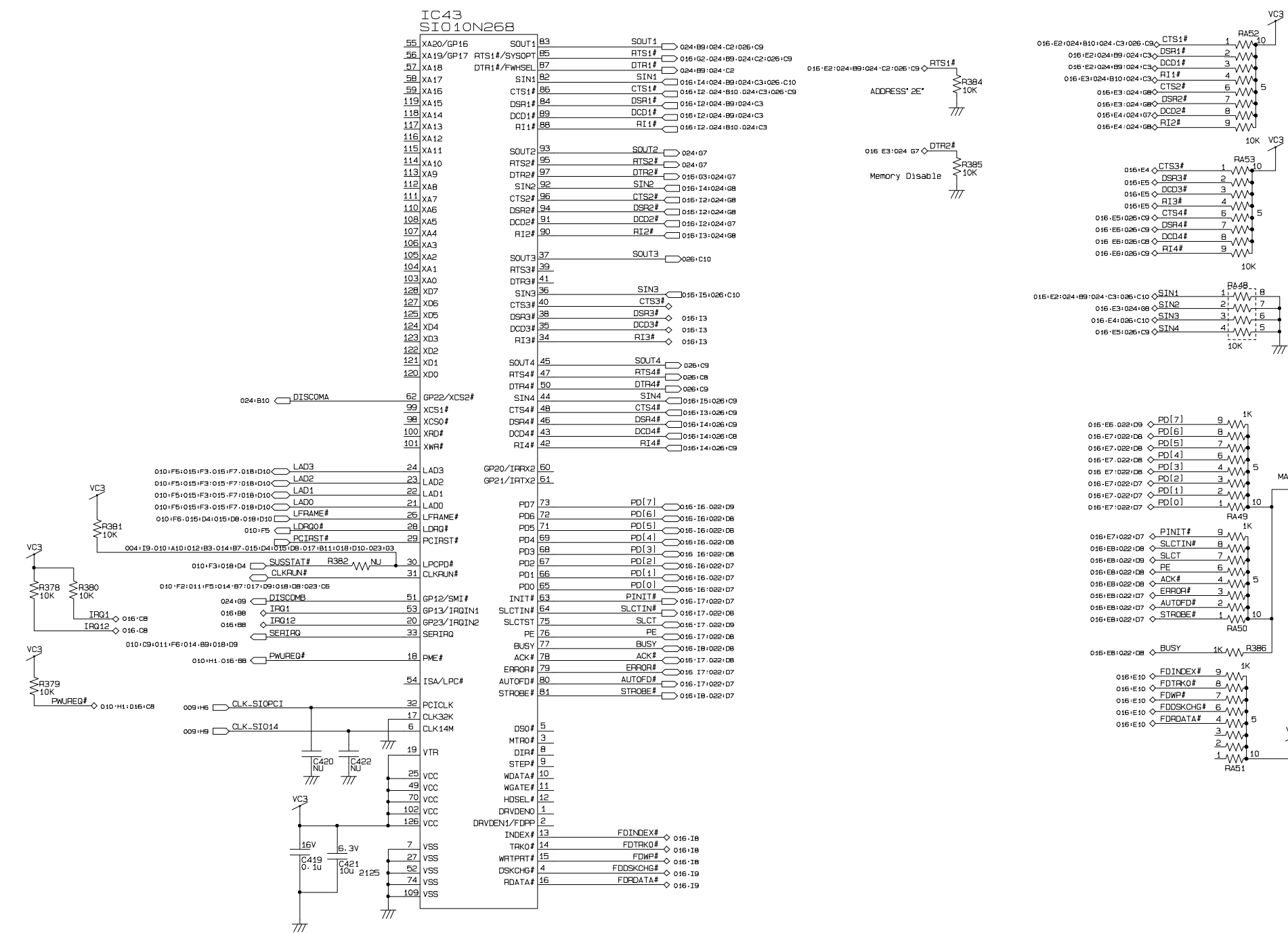
A | B | C | D | E | F | G | H | I | J



# Main 16 SUPER I/O

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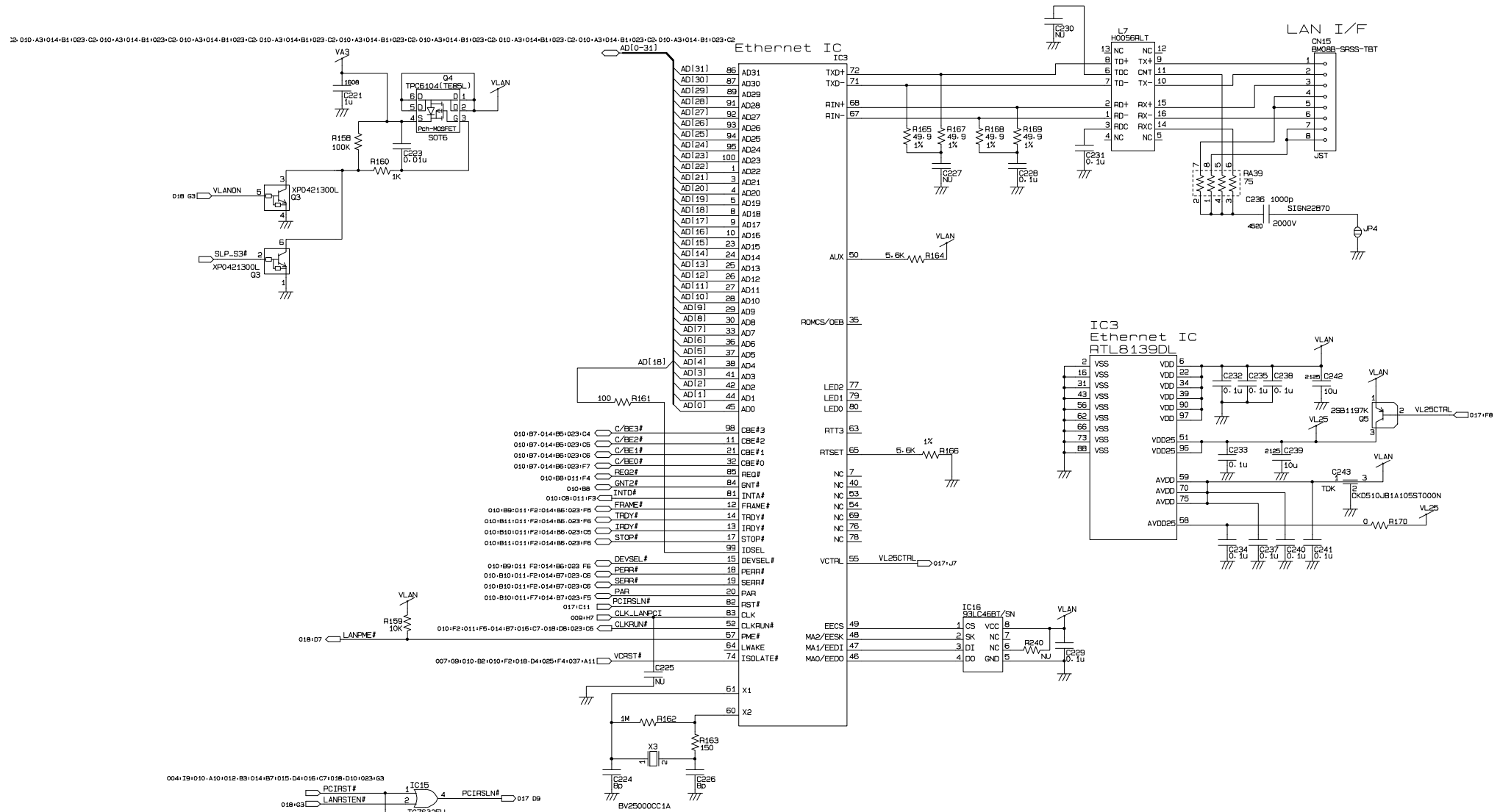
A B C D E F G H I J



# Main 17 LAN

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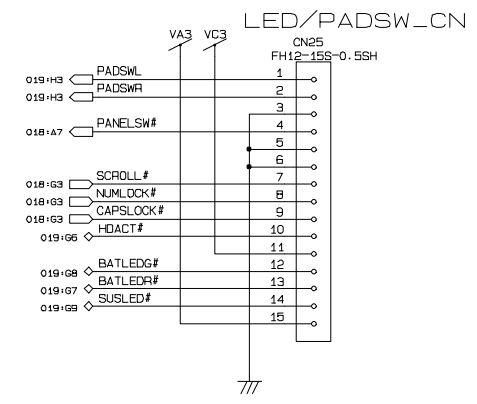
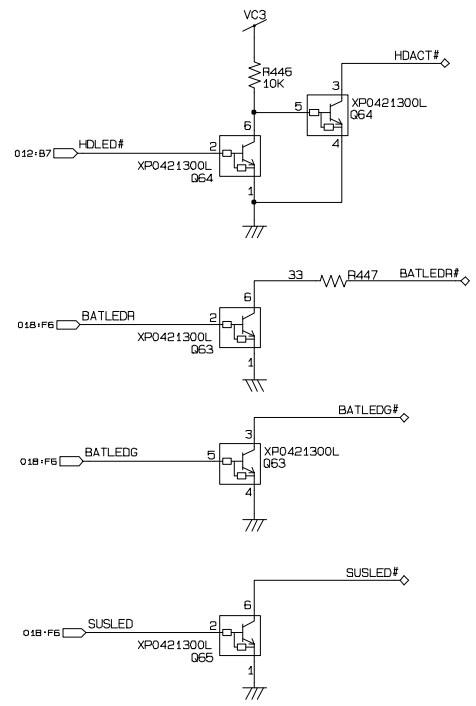
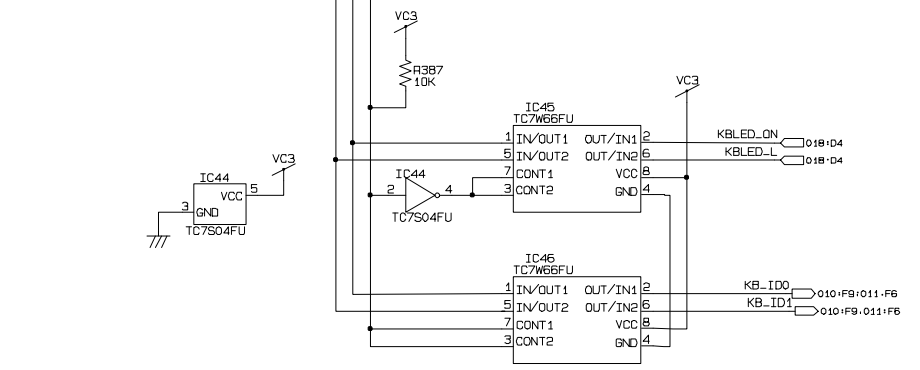
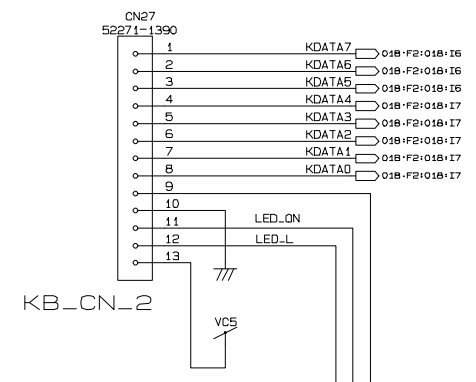
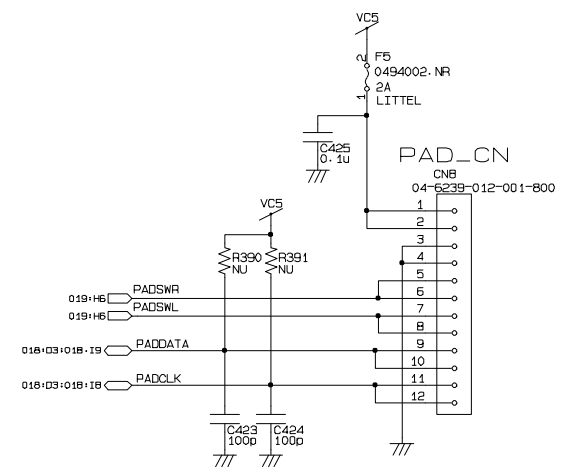
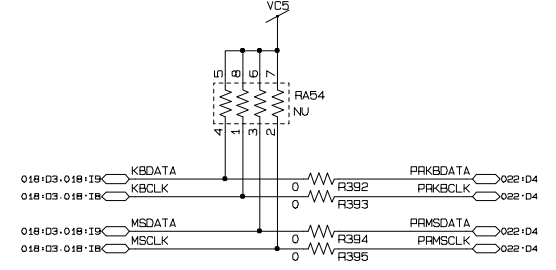
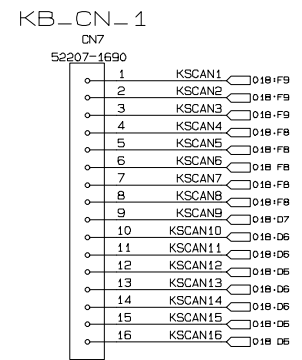
A B C D E F G H I J





# Main 19 KBD,PAD,LED I/F

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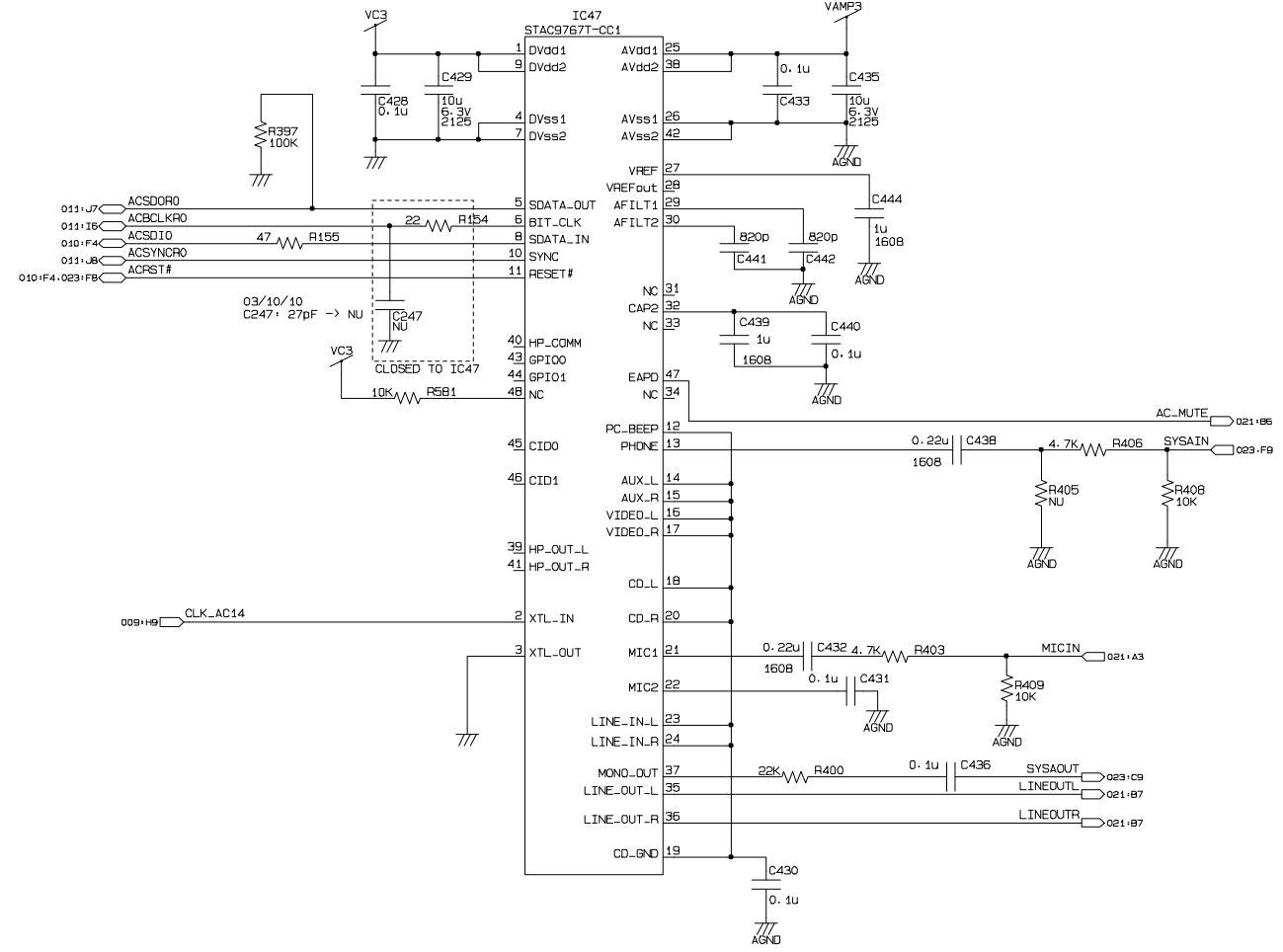


A | B | C | D | E | F | G | H | I | J



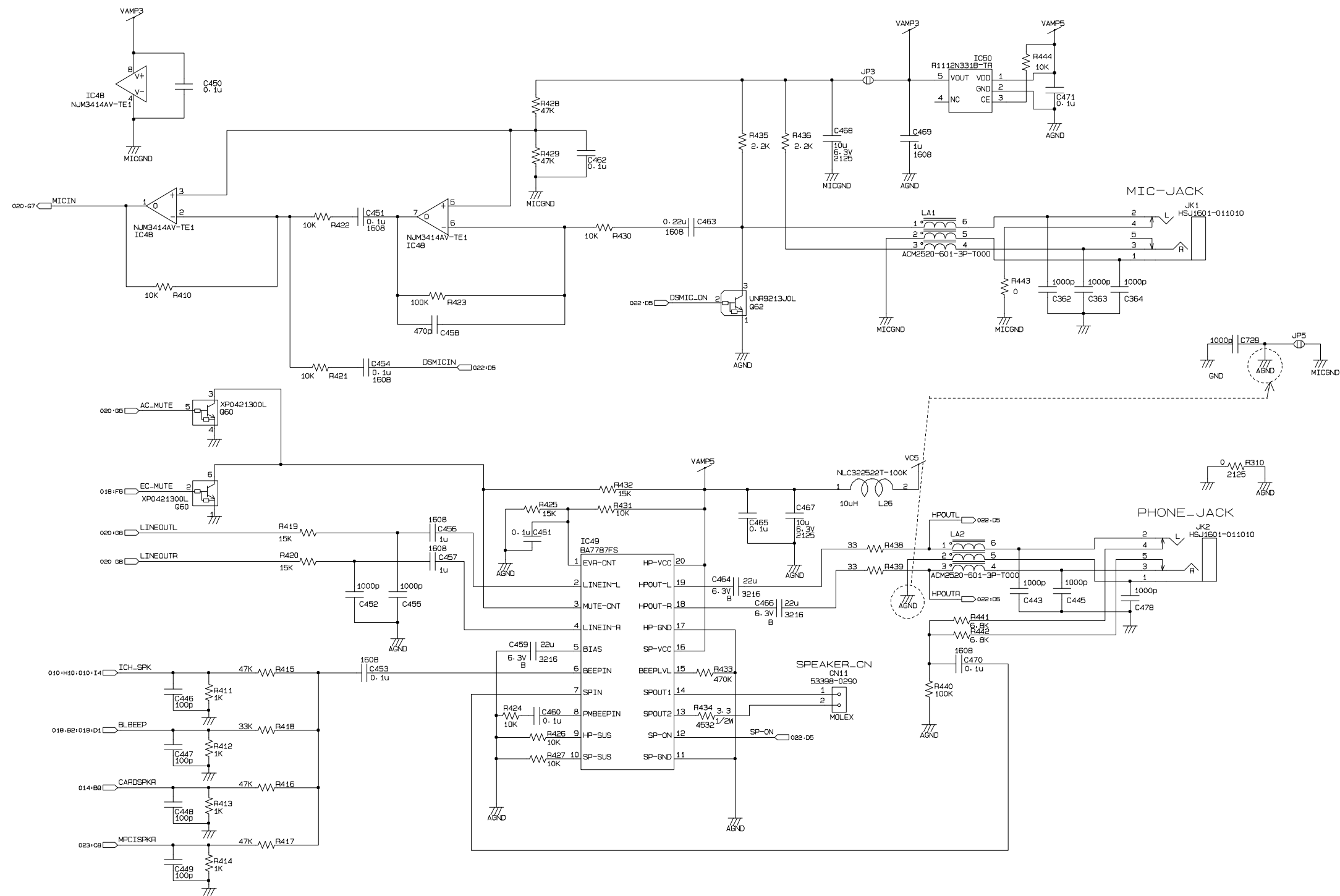
# Main 20 AC97 CODEC

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A | B | C | D | E | F | G | H | I | J

# Main 21 AUDIO AMP,H/P,MIC I/F

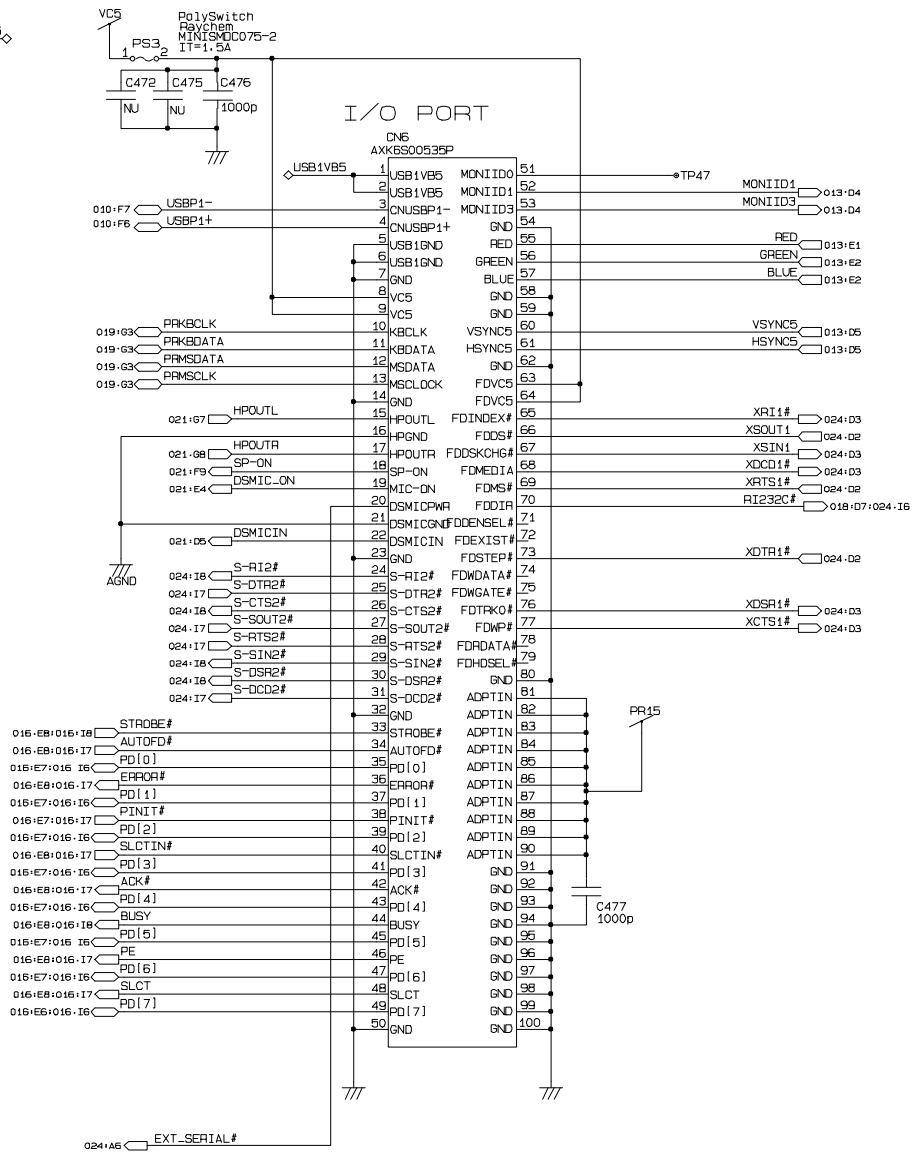
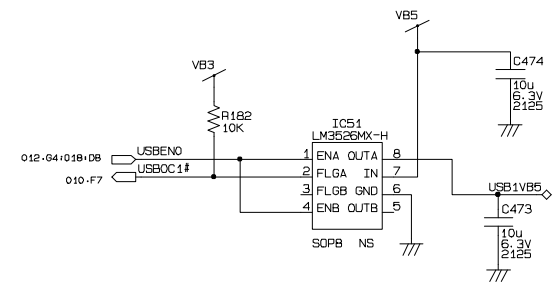


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# Main 22 EXT,I/O I/F

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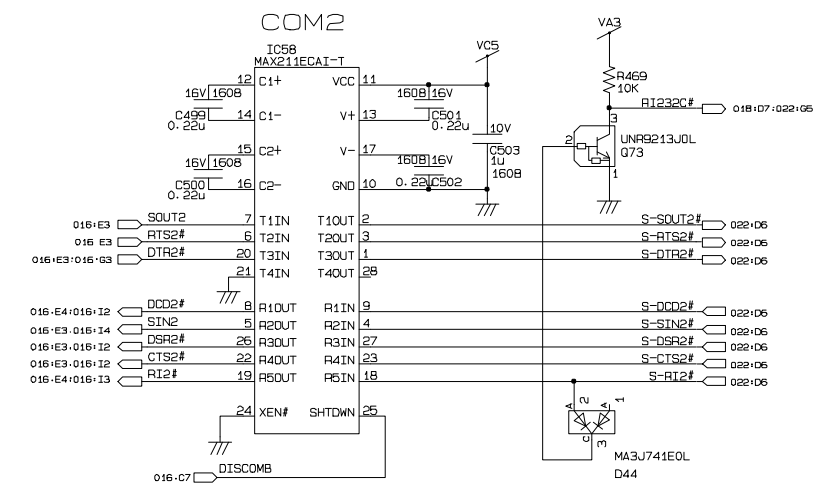
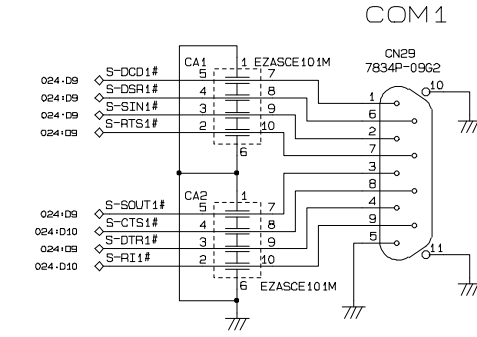
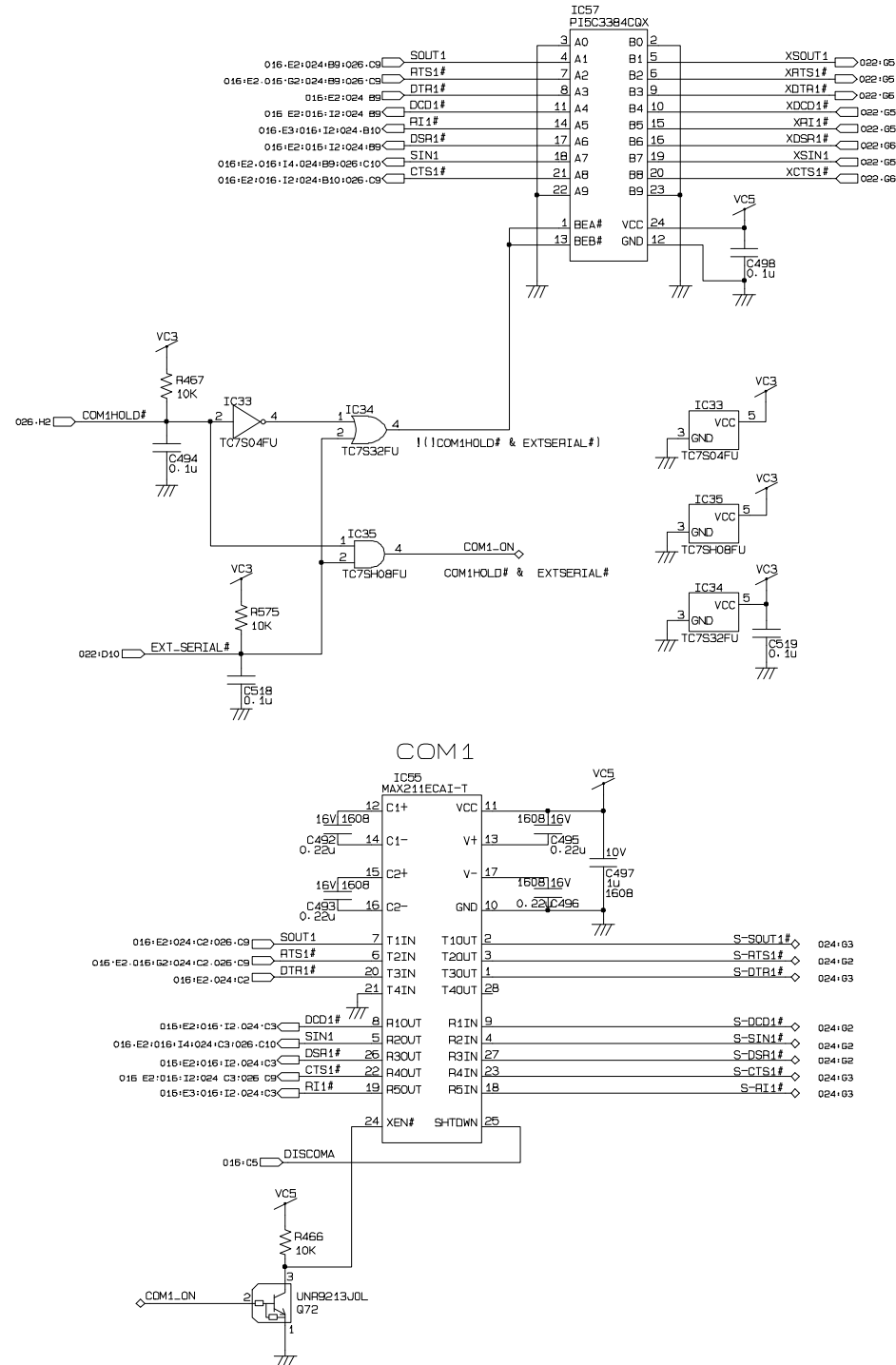


A | B | C | D | E | F | G | H | I | J



# Main 24 RS-232C,COM1

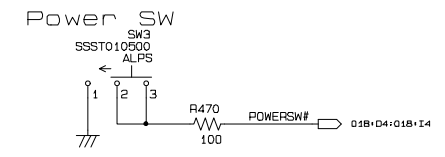
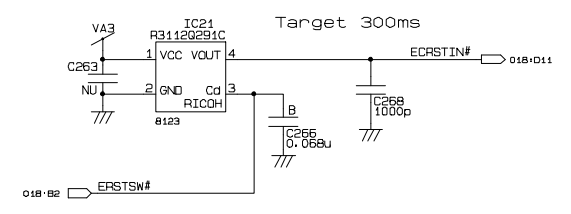
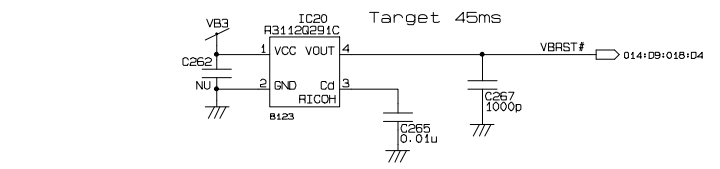
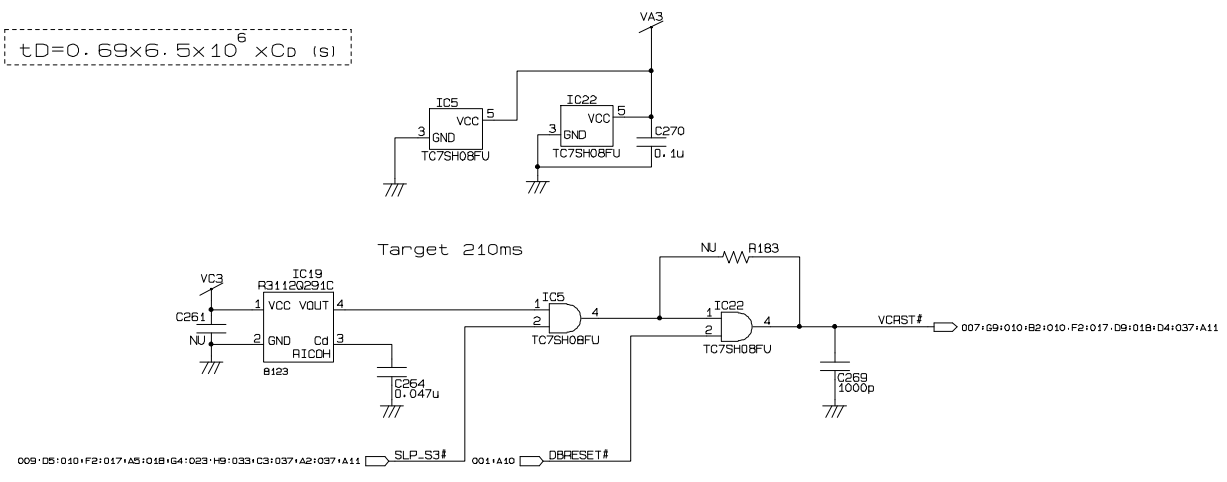
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A | B | C | D | E | F | G | H | I | J

# Main 25 RESETS, POWER SW

$$t_D = 0.69 \times 6.5 \times 10^6 \times C_D \text{ (s)}$$



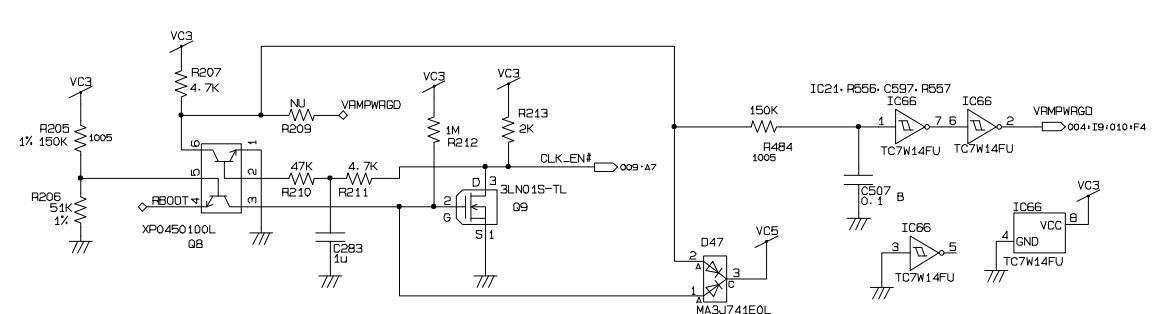
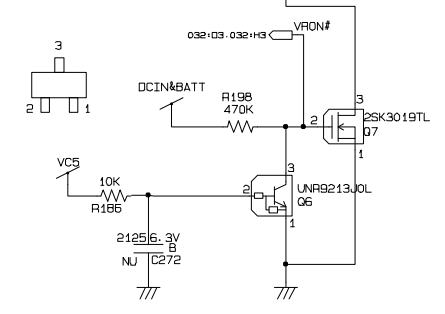
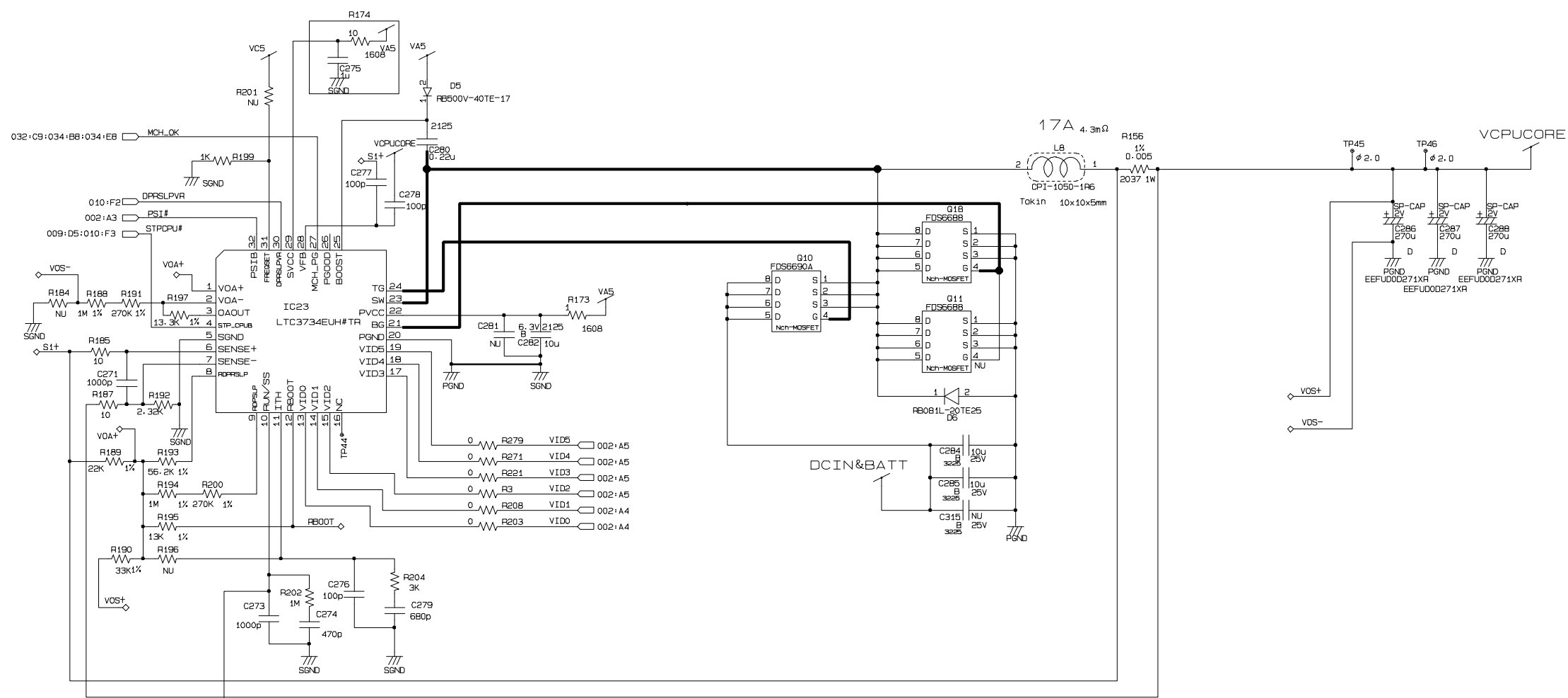
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A | B | C | D | E | F | G | H | I | J



# Main 27 CPU CORE DC/DC

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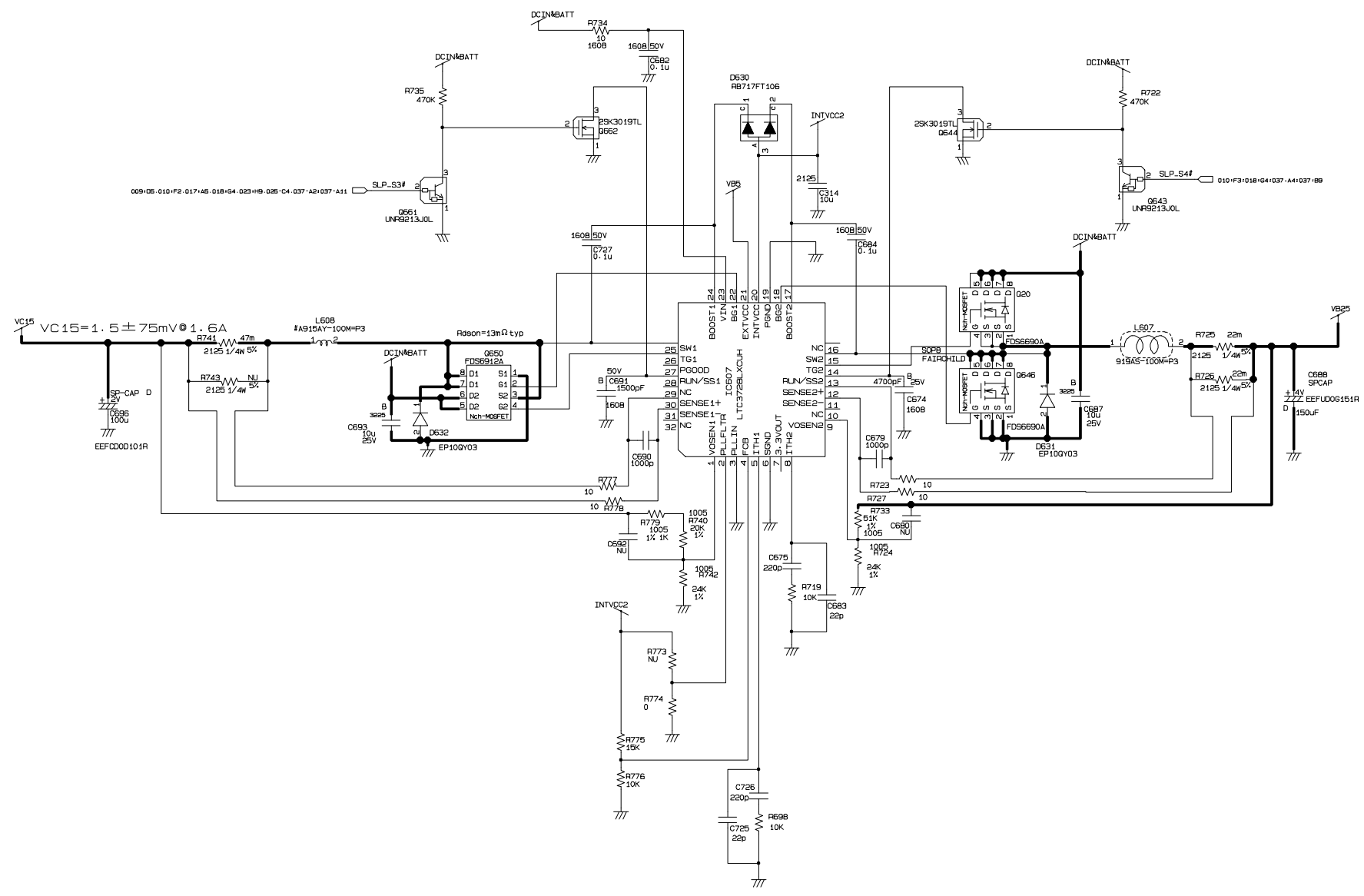
A B C D E F G H I J





# Main 29 2.5V,1.5V DC/DC

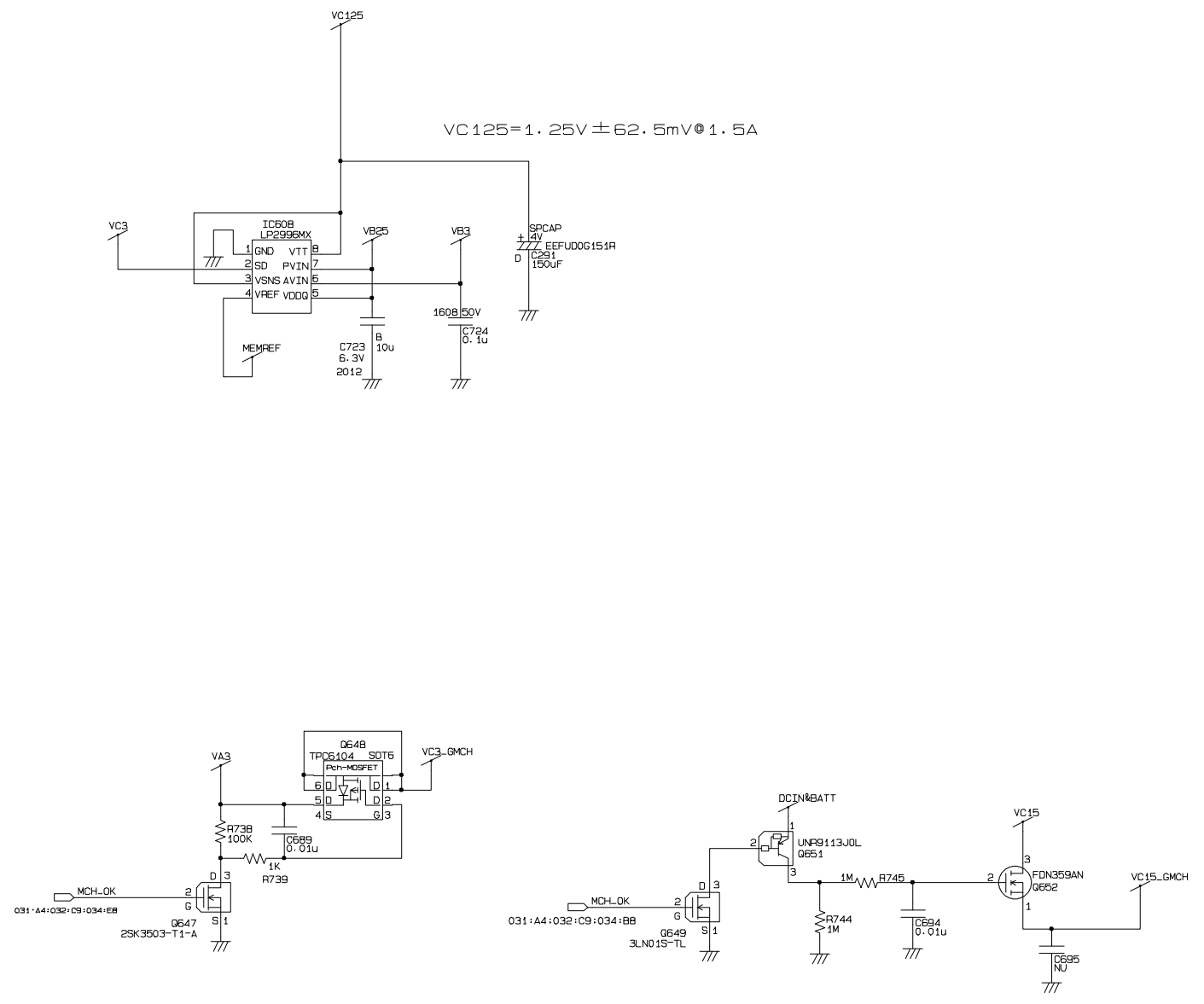
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A | B | C | D | E | F | G | H | I | J

# Main 30 1.25V REGULATOR, GMCH ERATTA

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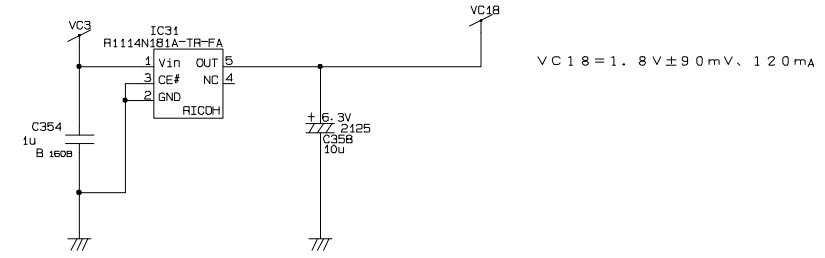
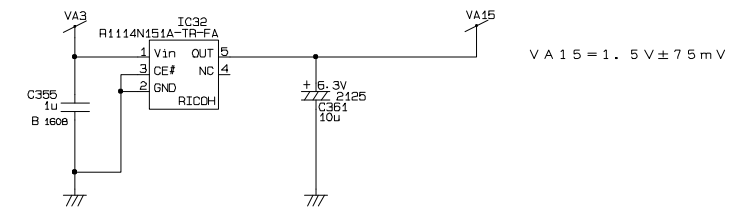


A | B | C | D | E | F | G | H | I | J



# Main 32 1.5V,1.8V REGULATOR

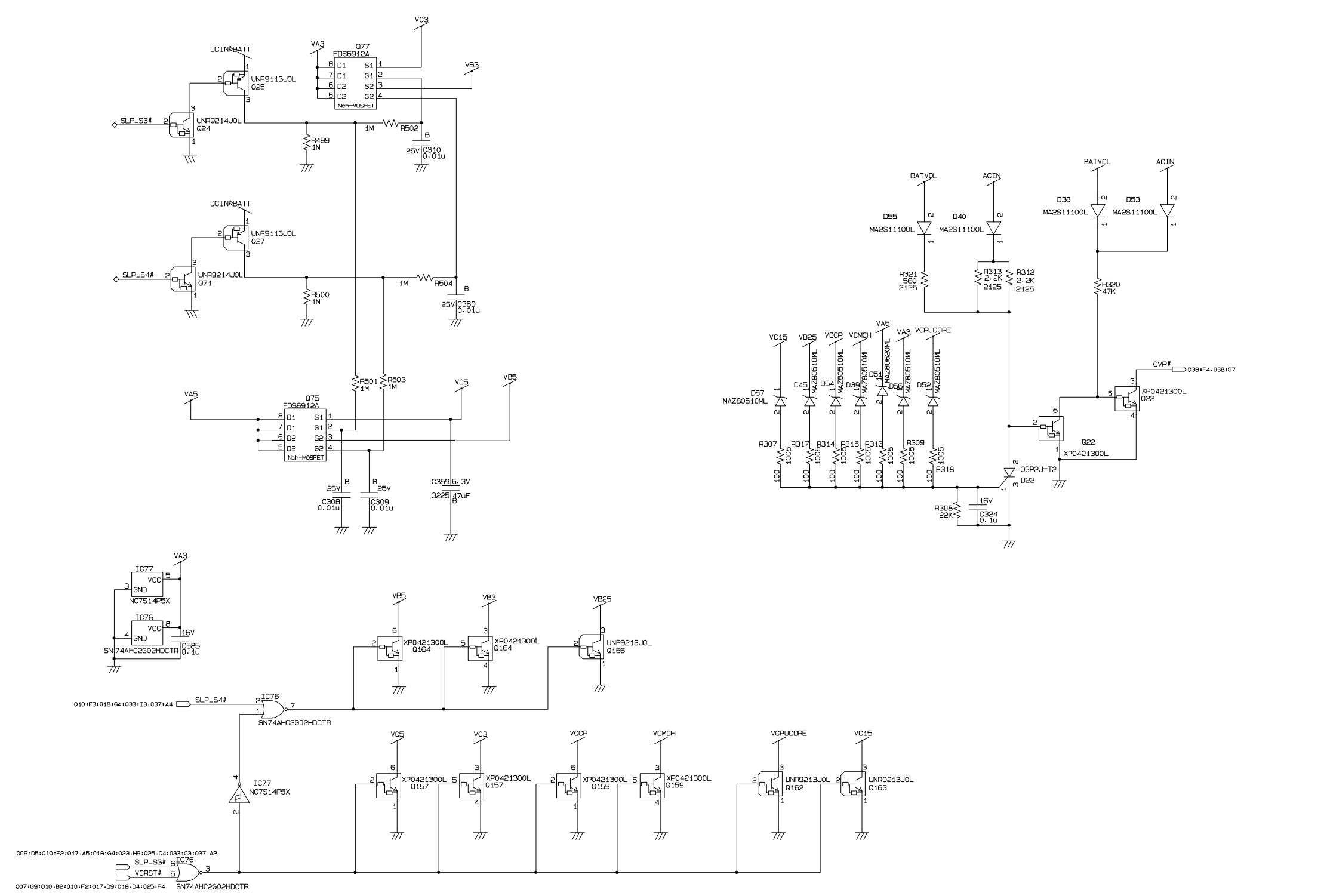
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A | B | C | D | E | F | G | H | I | J

# Main 33 LOAD SW,OFF SW,OVP

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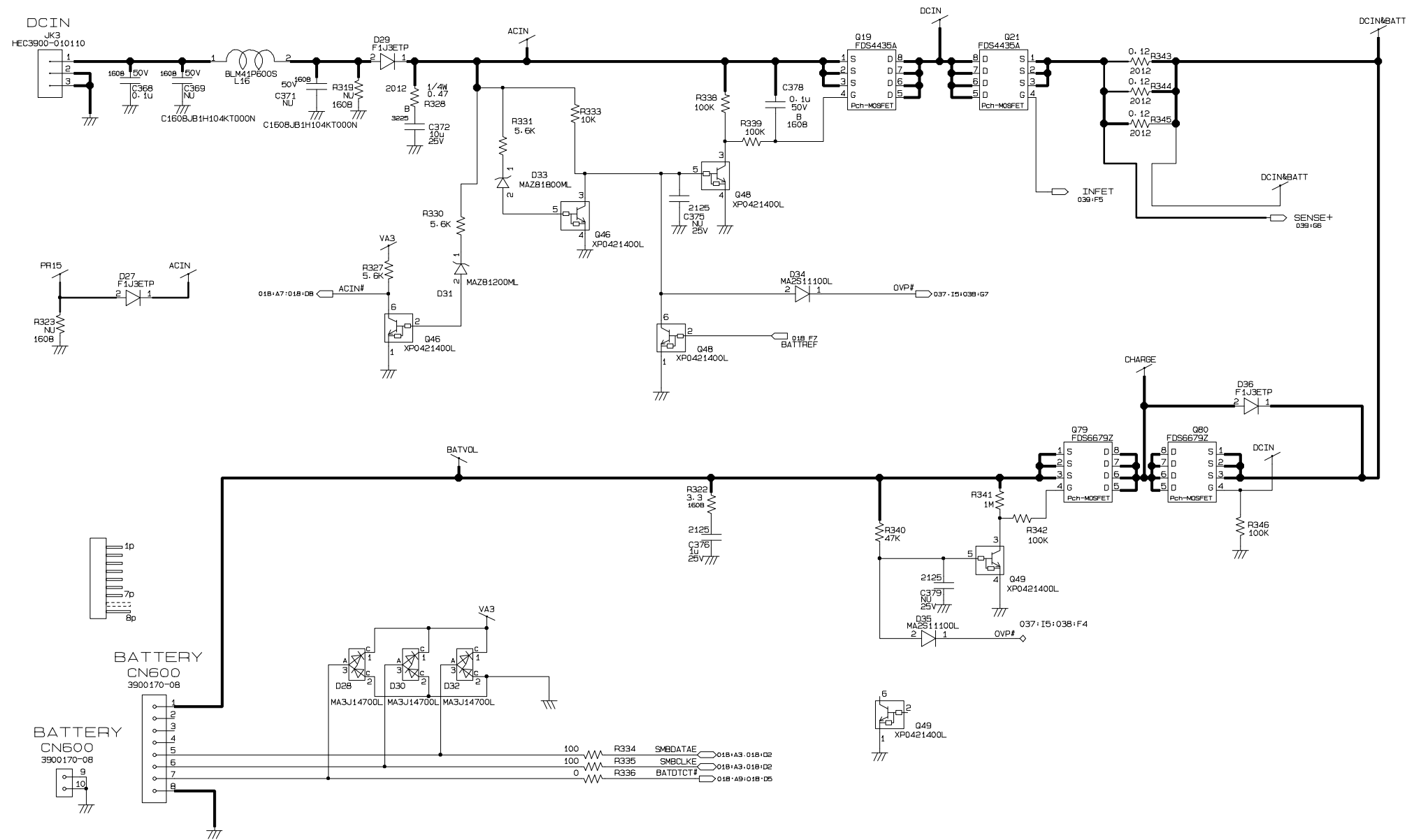


A | B | C | D | E | F | G | H | I | J

009\*05\*010\*F2\*017-A5\*018\*04\*023-H9\*025-C4\*033-C3\*037-A2  
SLP\_S3# IC76  
VCRST# IC76

007\*09\*010-B2\*010\*F2\*017-D9\*018-D4\*025\*F4  
SN74AHC2G02HDCR

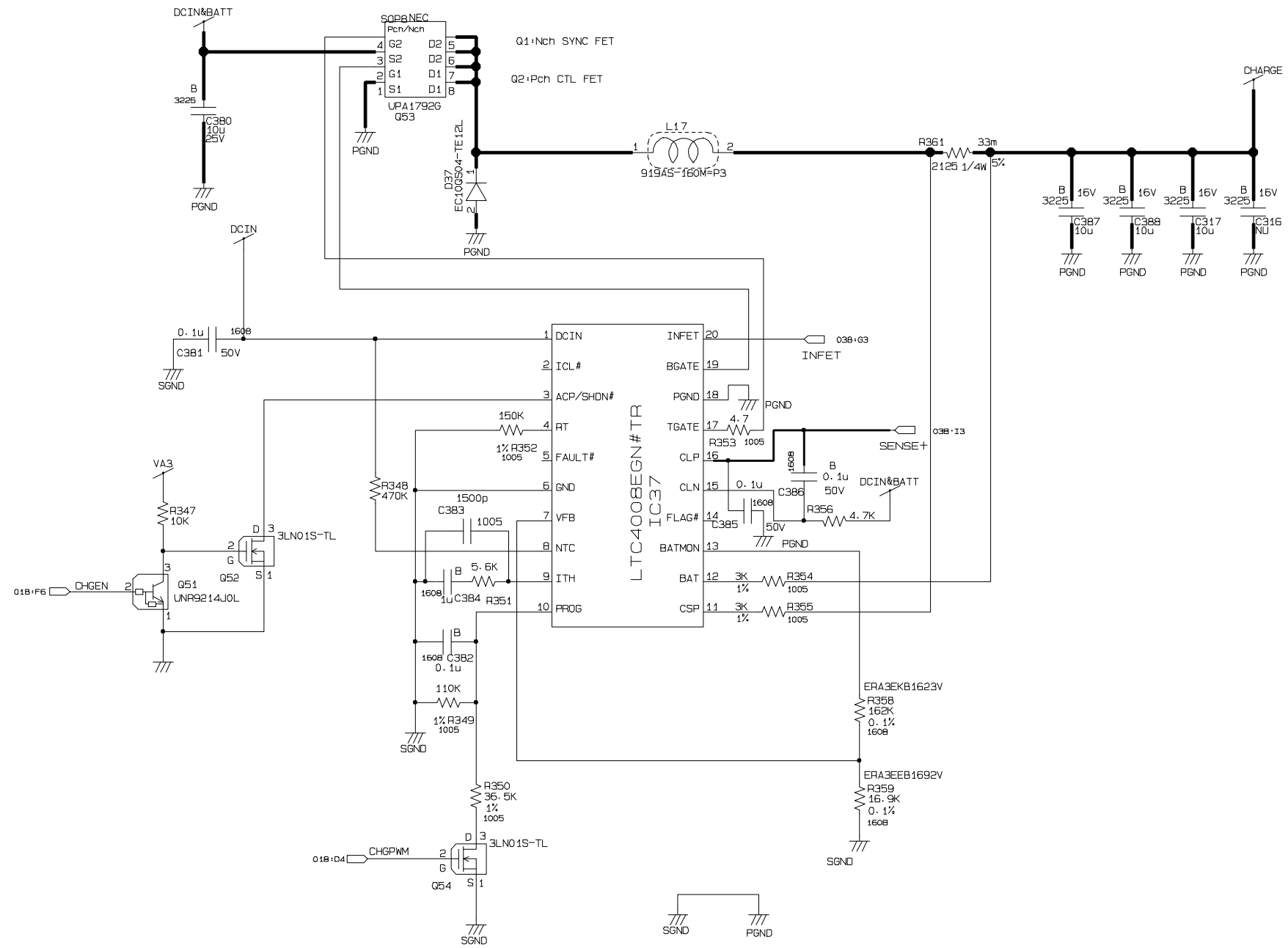
# Main 34 DC IN, BATTERY



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A | B | C | D | E | F | G | H | I | J

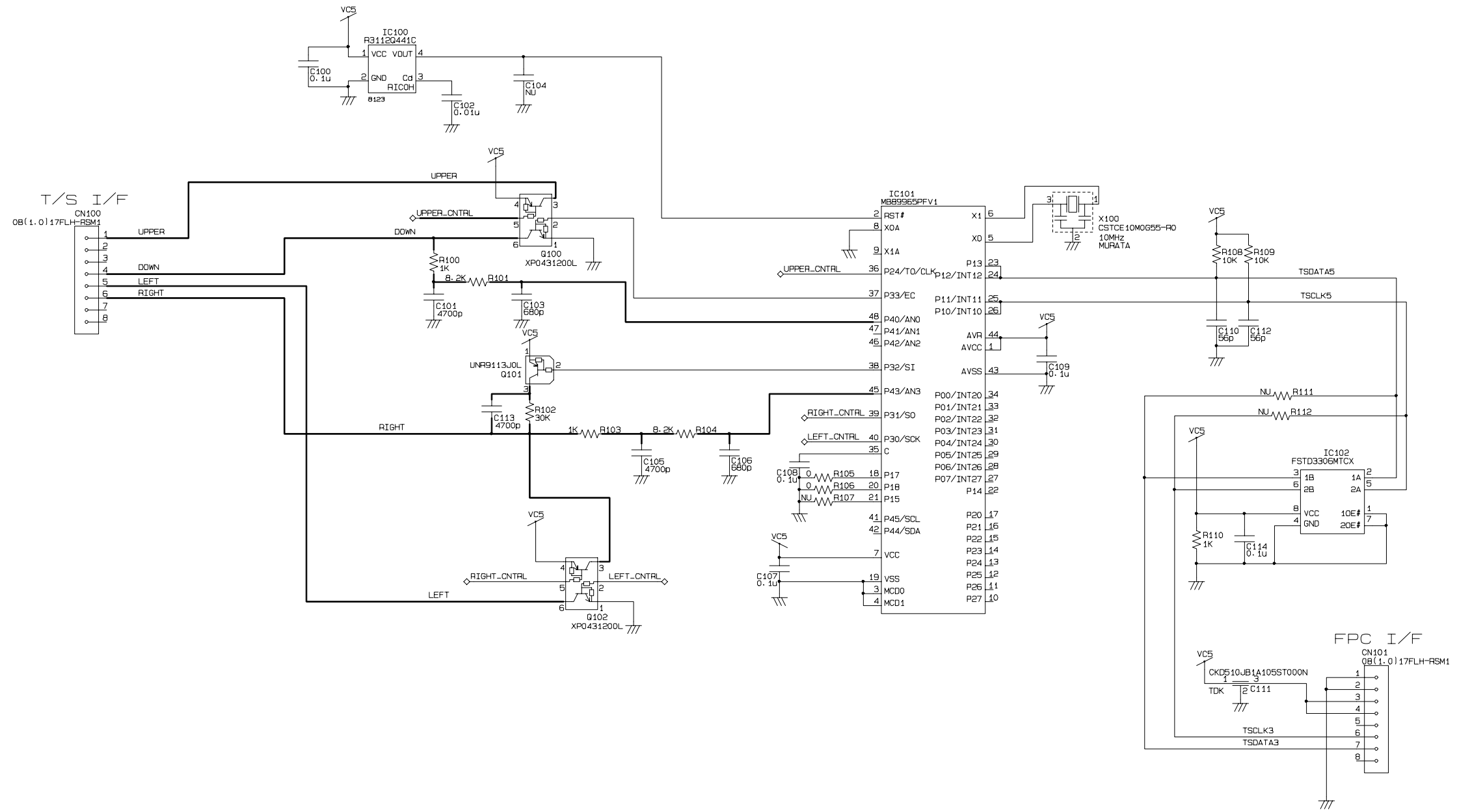
# Main 35 CHARGER





# Sub 1 TS-PS2

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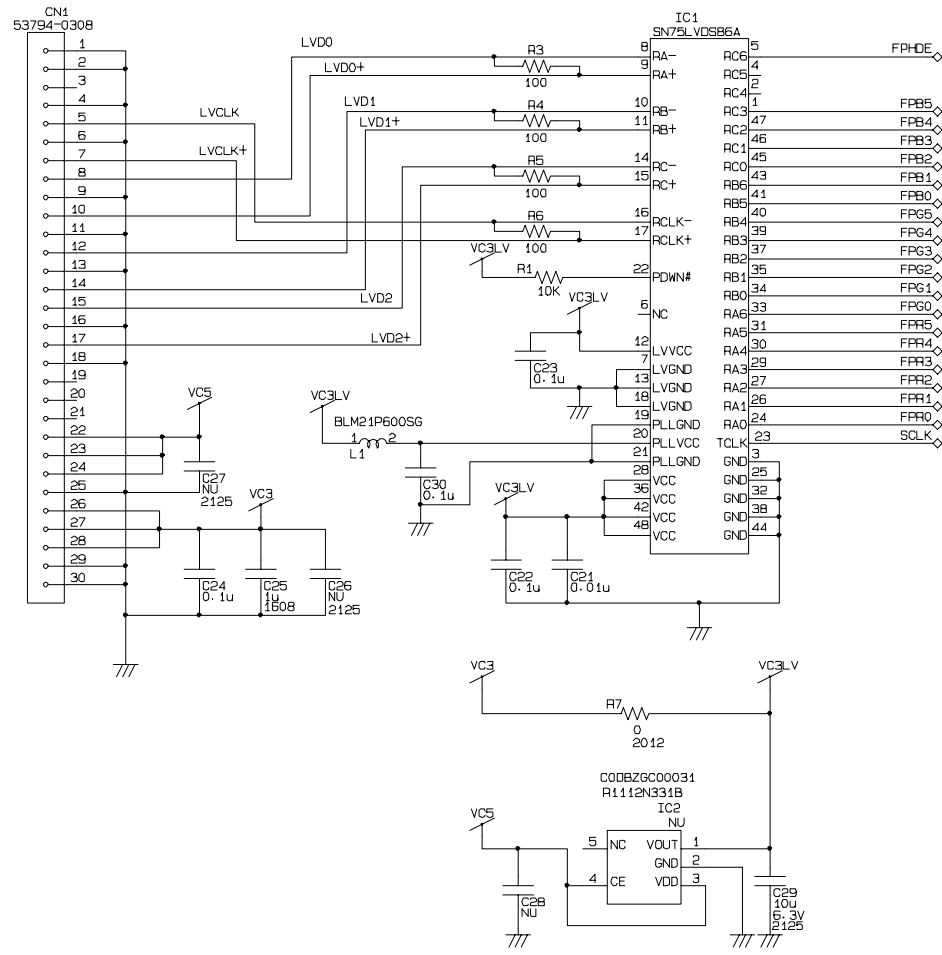
A | B | C | D | E | F | G | H | I | J

# Sub 2 LVDS

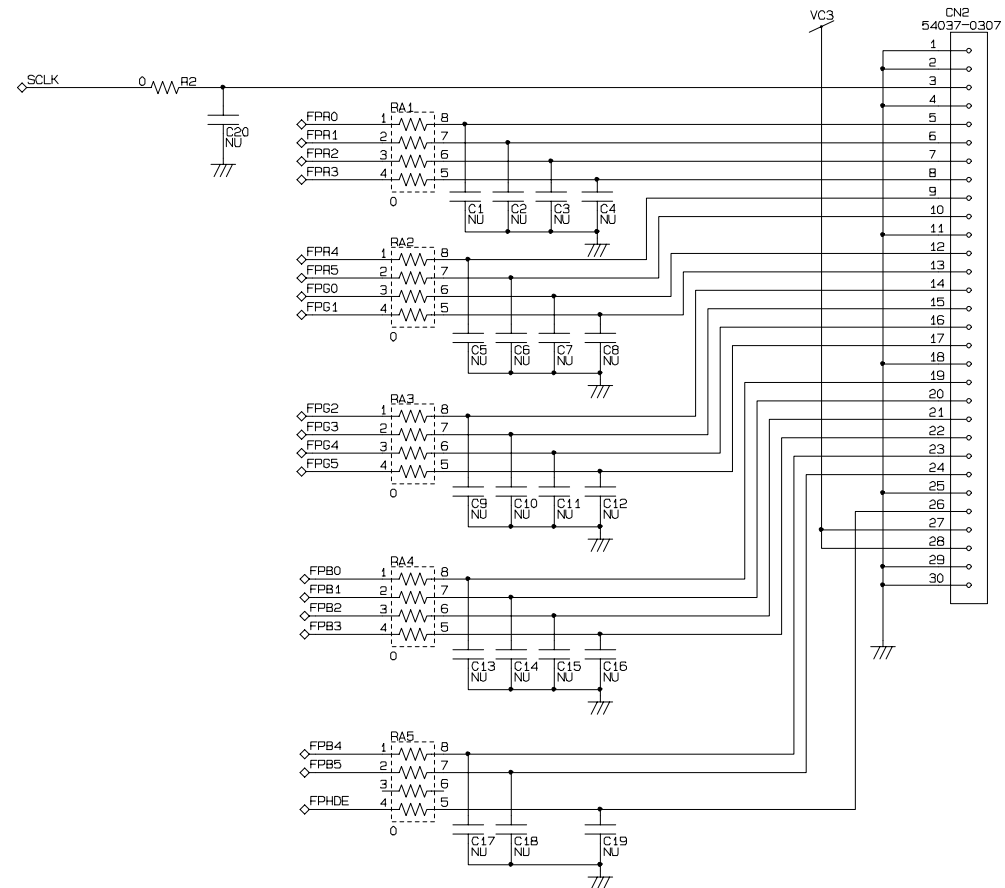
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A B C D E F G H I J

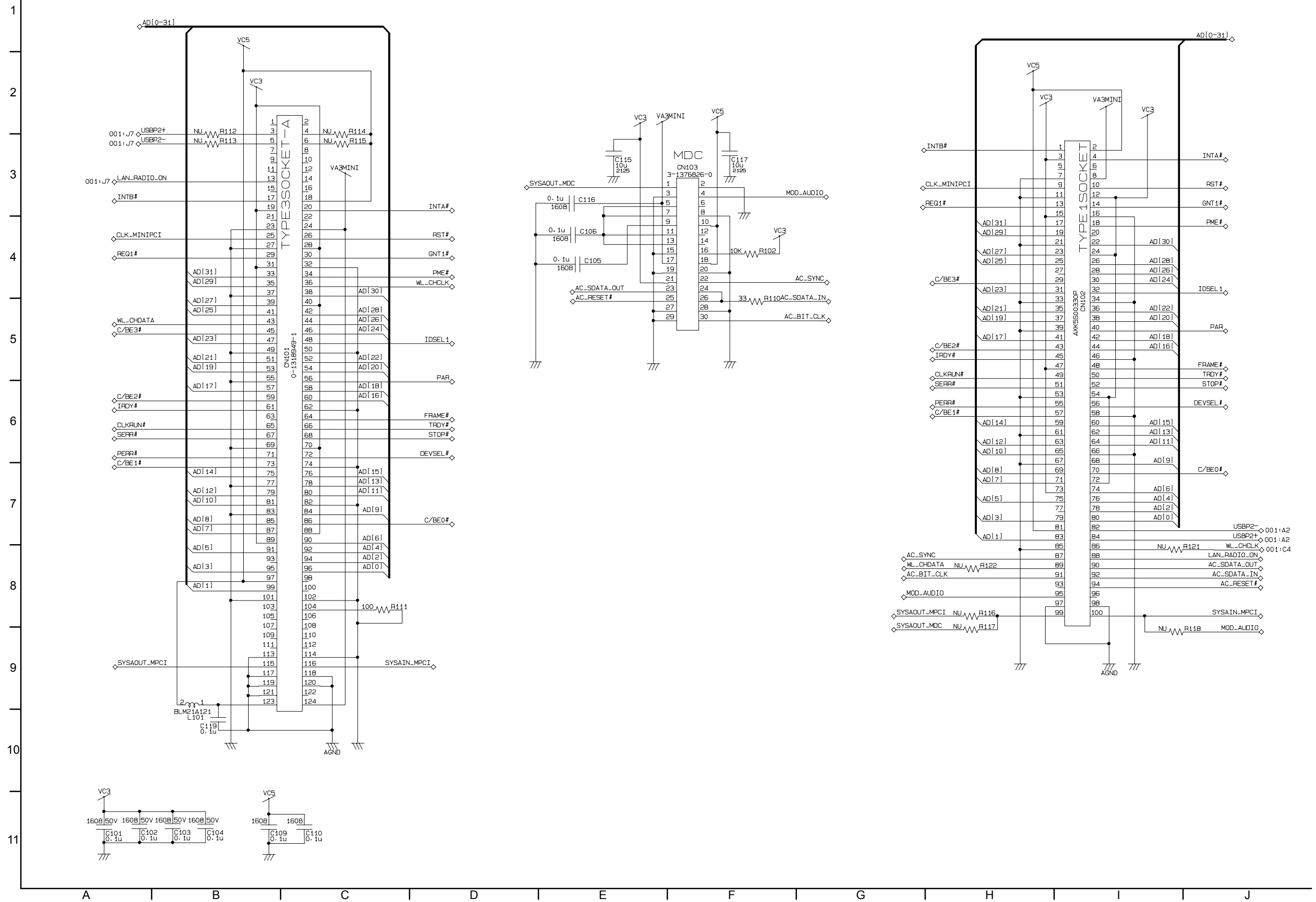
FPC I/F



LCD I/F

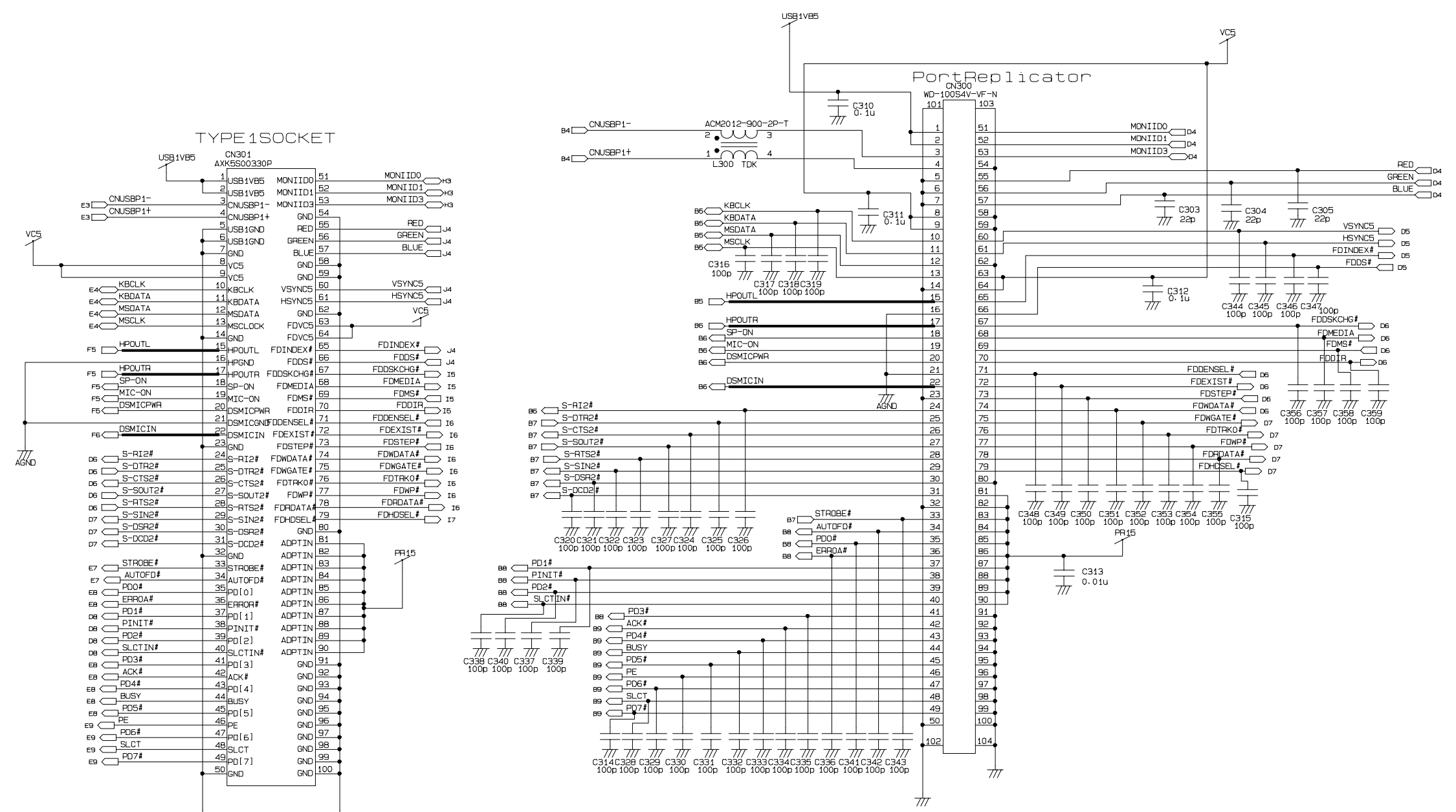


# Sub 3 MINI PCI RELAY CARD



# Sub 4 DOC STACK

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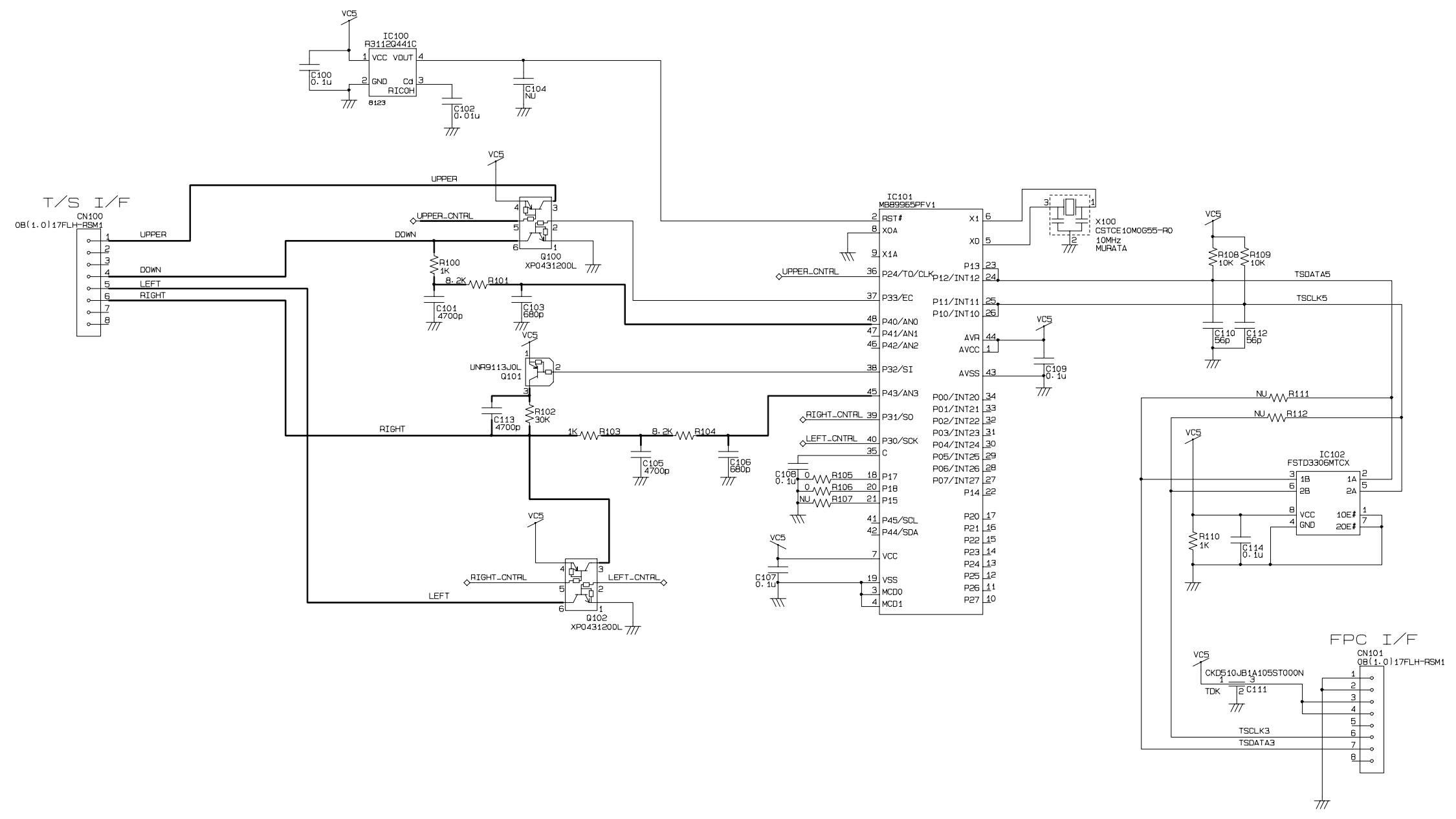


A | B | C | D | E | F | G | H | I | J

# Sub 1 TS-PS2

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A | B | C | D | E | F | G | H | I | J

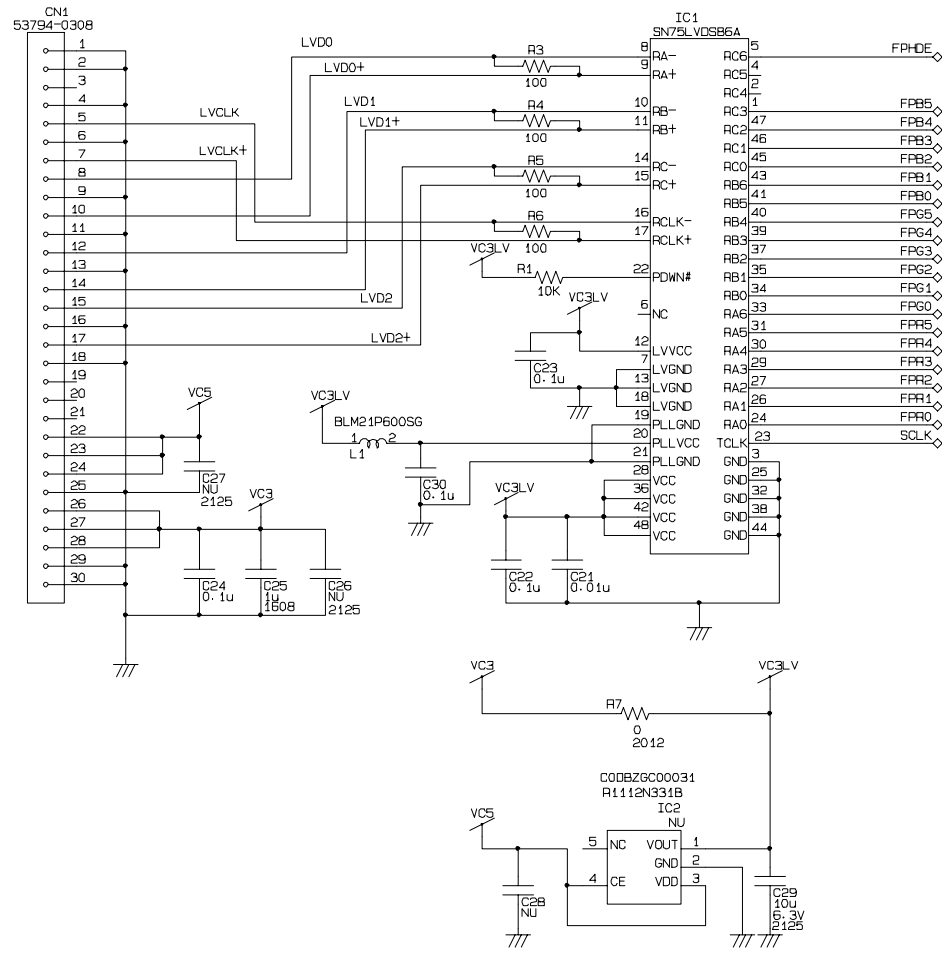


# Sub 2 LVDS

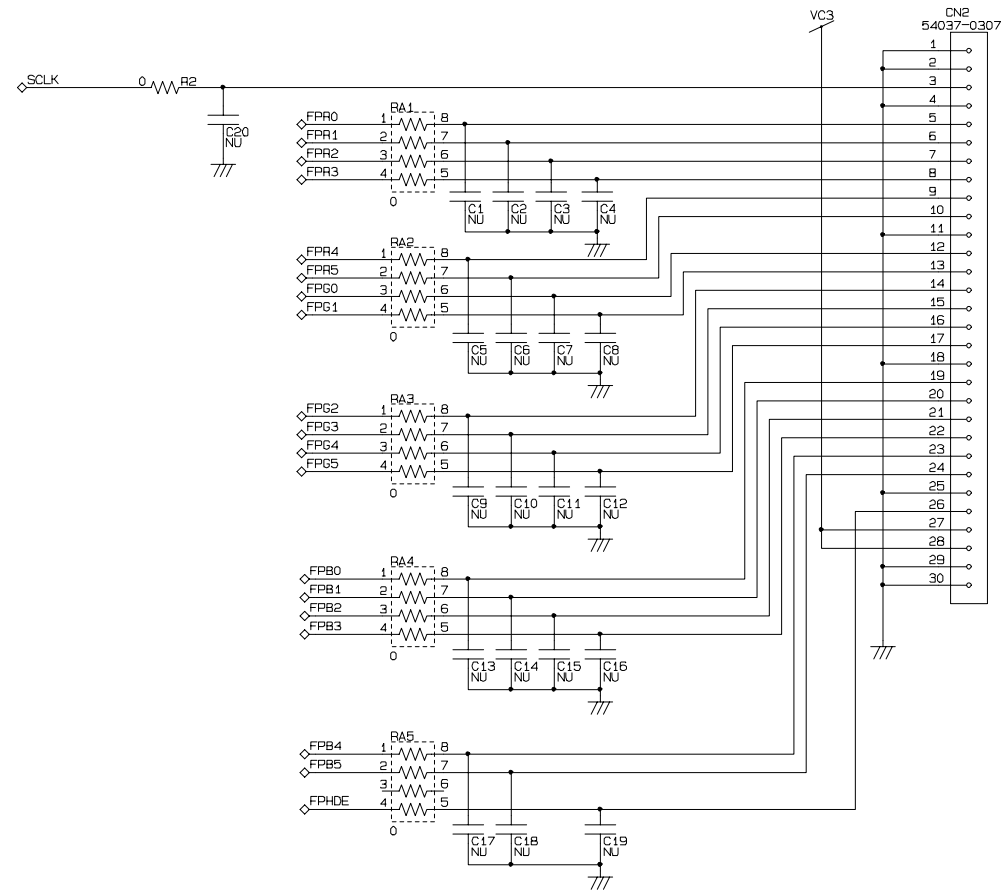
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A | B | C | D | E | F | G | H | I | J

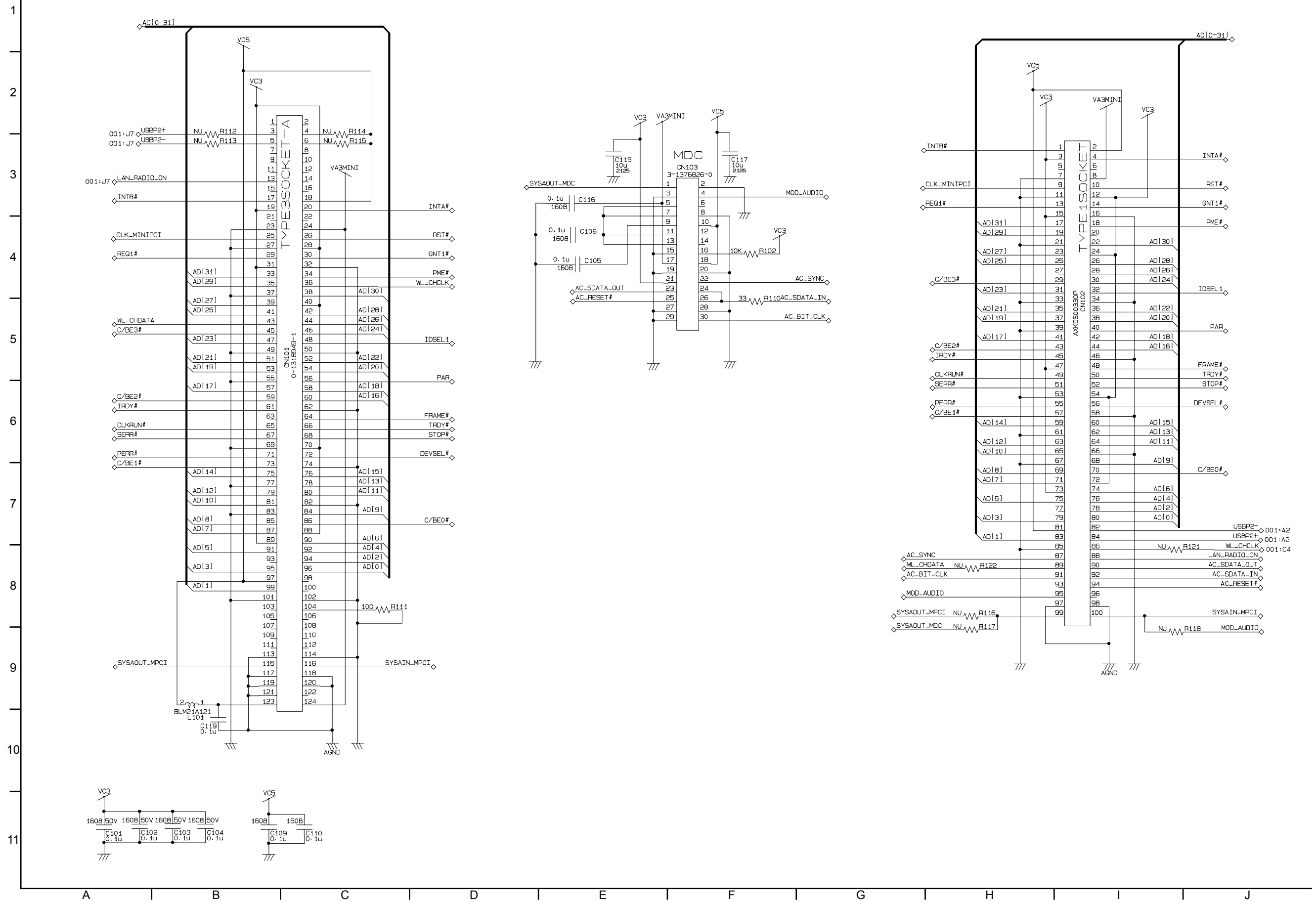
FPC I/F



LCD I/F

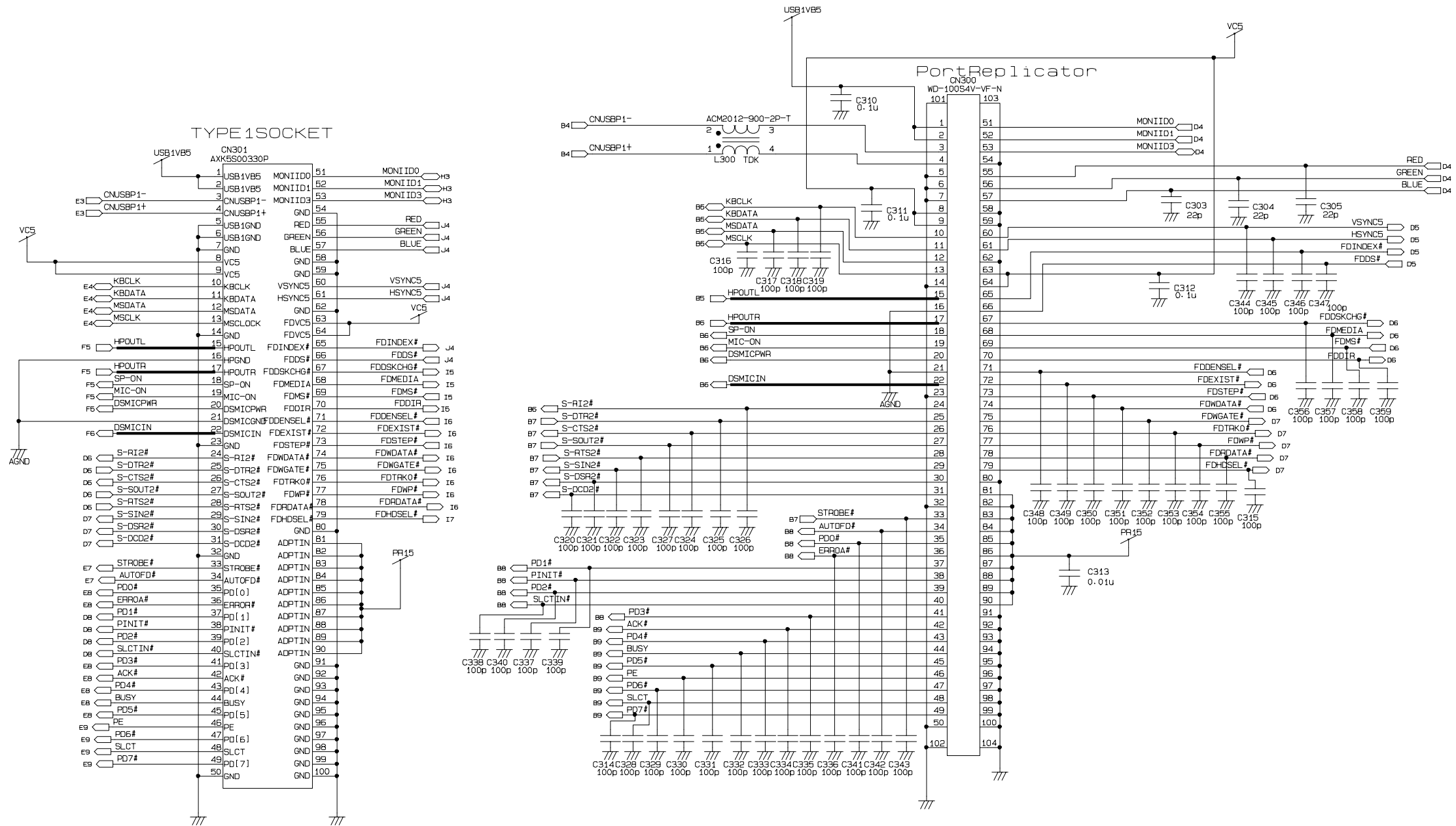


# Sub 3 MINI PCI RELAY CARD



# Sub 4 DOC STACK

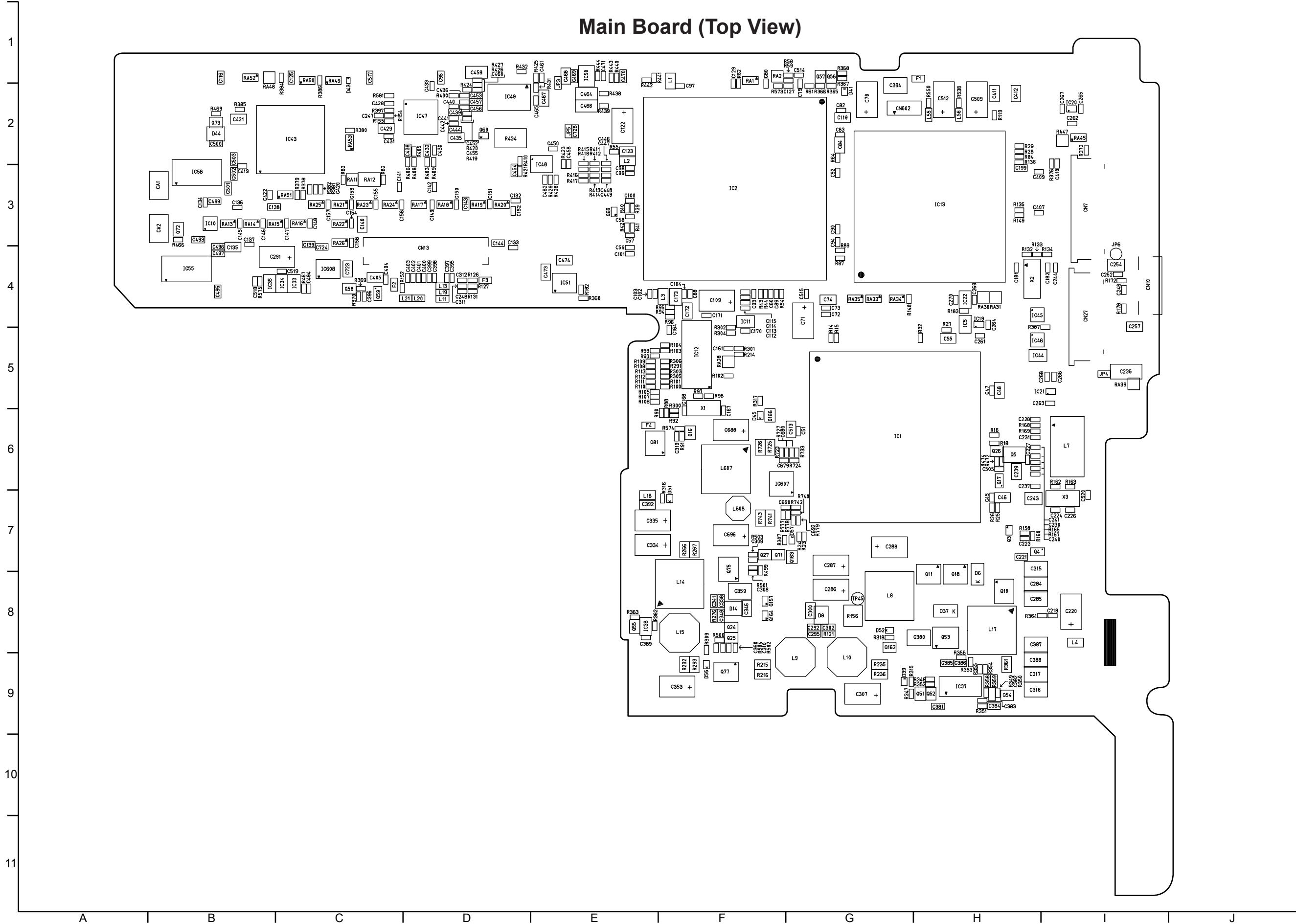
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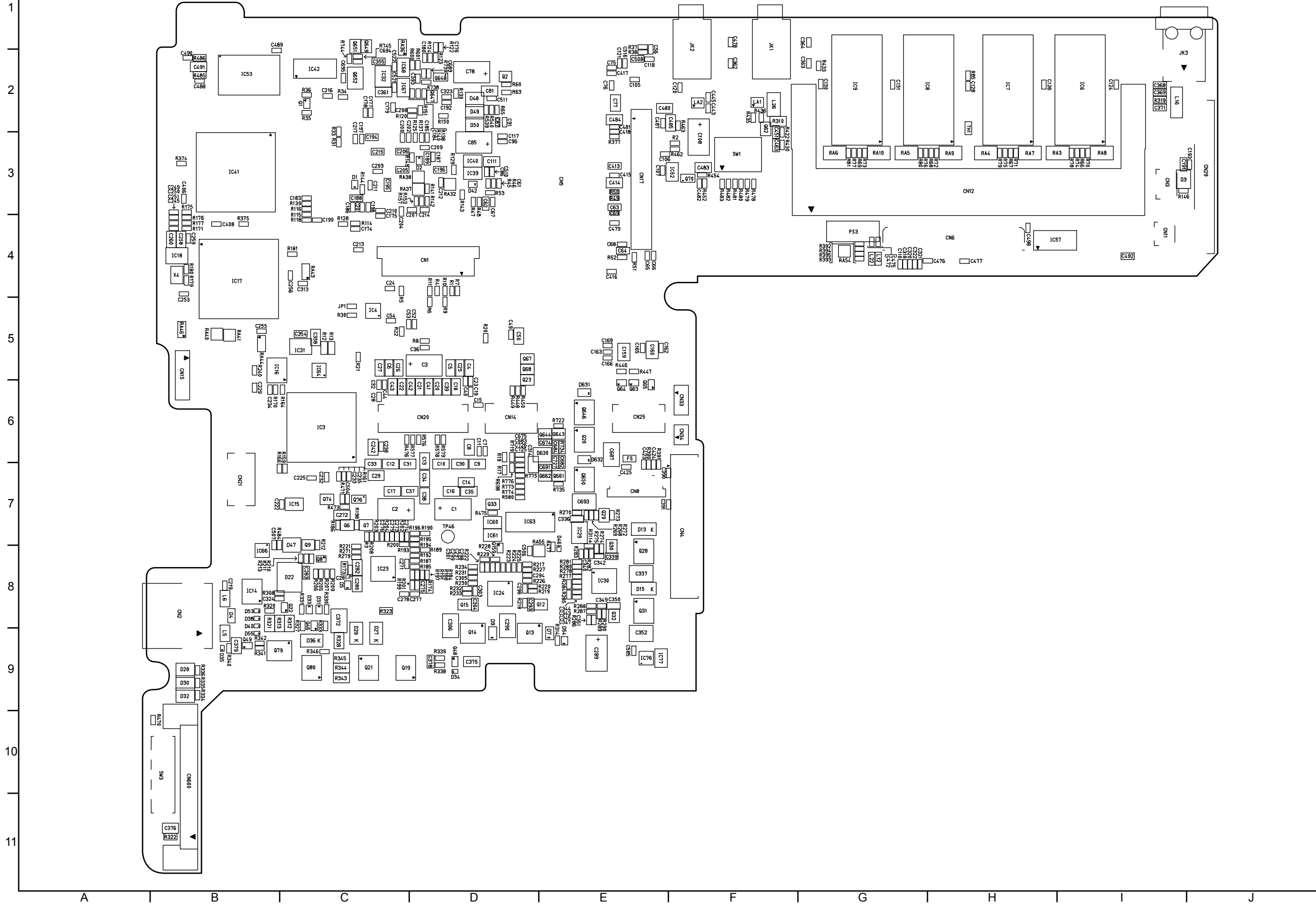
A | B | C | D | E | F | G | H | I | J



# Main Board (Top View)

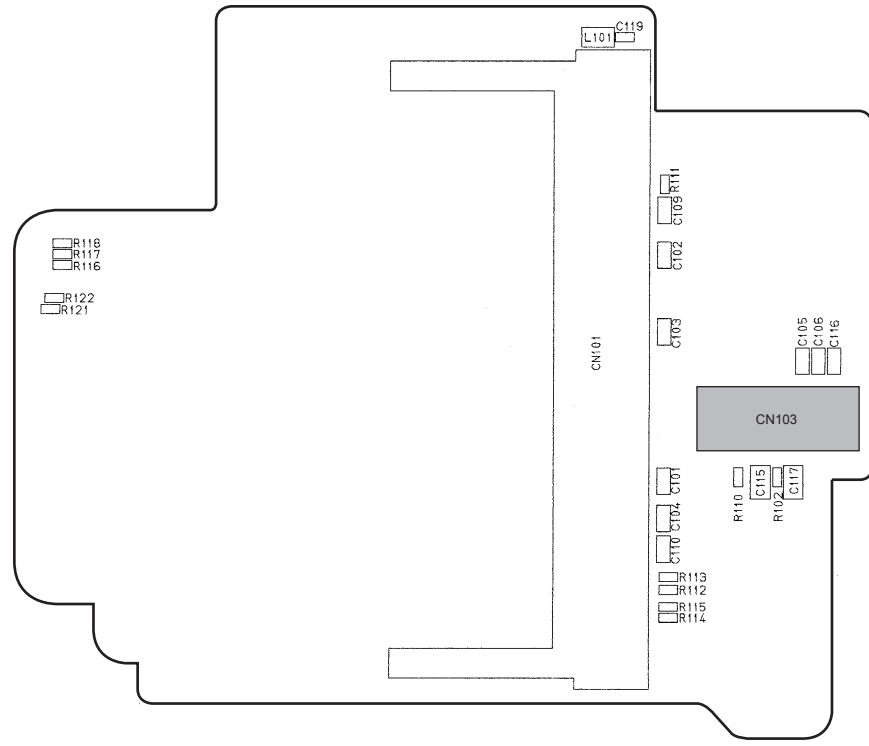


# Main Board (Bottom View)

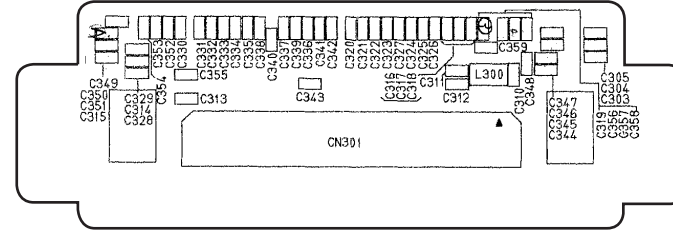


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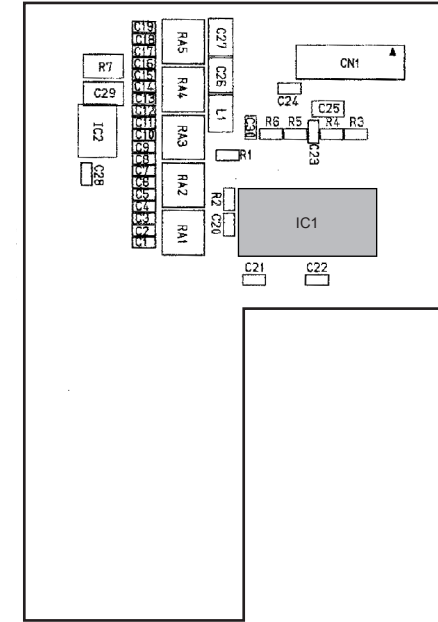
**Mini PCI Board (Top View)**



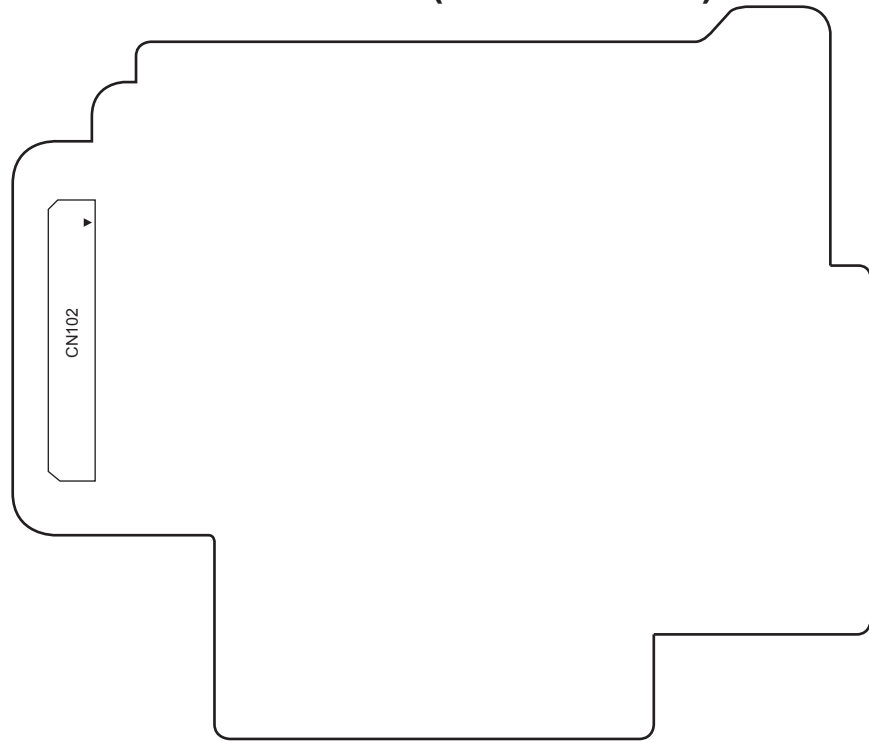
**Dock Stack Board (Top View)**



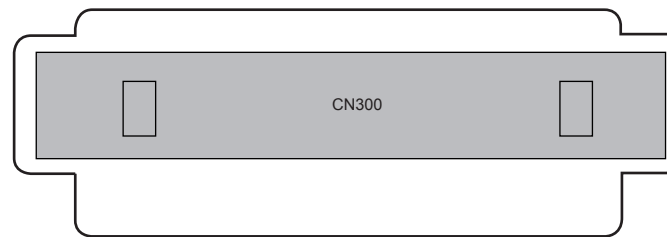
**LVDS Board (Top View)**



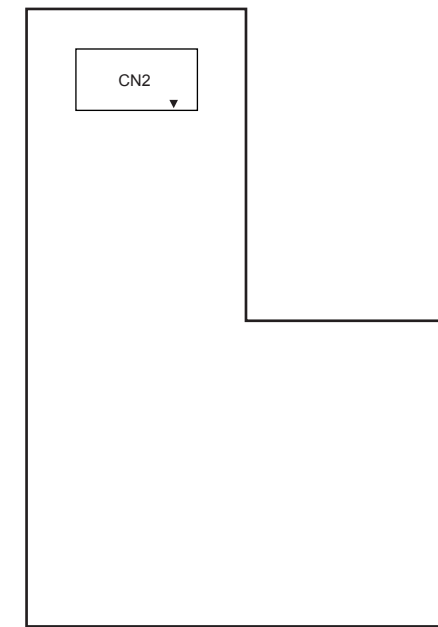
**Mini PCI Board (Bottom View)**



**Dock Stack Board (Bottom View)**



**LVDS Board (Bottom View)**



A | B | C | D | E | F | G | H | I | J

# Service Manual

Notebook Computer

CF-M34

*Simplified*

**TOUGHBOOK**

This is the Service Manual for  
the following areas.  
M ...for U.S.A. and Canada

Model No. CF-M34CGFZ12

1: Operation System

D: Microsoft® Windows® 2000

K: Microsoft® Windows® XP Professional

2: Area

M: Refer to above area table

## **WARNING**


This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

**Panasonic**<sup>®</sup>

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Unauthorized copying and distribution is a violation of law.

# Replacement Parts List

**Note: Important Safety Notice**

Components identified by  mark have special characteristics important for safety.  
When replacing any of these components, use only manufacturer's specified parts.

## CF-M34CGFZxM

REF.NO. and AREA	PART NO.	DESCRIPTION	Q'TY
<b>Main Block Unit</b>			
E 1	DL3U11351AAA	PCB, MAIN	RTL 1
E 3	DL3U27057HAA	PCB, MODEM JACK	RTL 1
E 5	DL3U47057HAA	PCB, LED	RTL 1
E 7	DFWV48C0648	FPC, LCD	1
E 8	DL3UP7048CAA	FPC, HDD	1
E 9	N2EABEC00001	TOUCH PAD	1
E 10	DFAS28P01ZAF	SPEAKER	1
E 11	DFJE9102ZA	FFC, TOUCH PAD	1
E 12	DFJE9103ZA	FFC, LED	1
E 13	CR2025/S5H	BATTERY, LITHIUM	1
E 14	 DFWP0123ZA	PCB, INVERTER	1
E 15	DFJS703ZB	CABLE, INVERTER	1
E 16	DFJS552ZA	CABLE, SPEAKER	1
E 17	DL3DW0163LAA	LCD	1
E 18	N3CABRD00005	HDD	1
E 19	DFSX1A91VBTR	KEYBOARD	1
E 22	DFUB0018ZA	EJECTOR, PCMCIA	1
E 54	A2CA00000051	LCD BACK LIGHT	1
E700	DL3U11356AAA	PCB, LVDS	RTL 1
E701	DL3U21356AAA	PCB, MINI PCI	RTL 1
E702	DL3U31356AAA	PCB, PORT /DOCK	RTL 1
E703	DL3UP1357AAA	PCB, TS PS2	RTL 1
E704	DL3UP1369AAA	PCB, WLAN ANTENNA	1
E704-1	DFUP1369ZA	ANTENNA PCB	2
E704-2	DFJS834ZA	CABLE, ANT	1
E704-3	DFJS873ZA	CABLE, ANT	1
E704-4	DFHG1714YA	ANT CABLE PACKING	1
E705	DFJS890ZA	CABLE	1
E706	DFJS891ZB	LAN CABLE	1
E707	N5HAZ0000008	MDC MODEM	1
E708	N5HZC0000005	WIRELESS MODULE	1
<b>Accessories</b>			
A 1	 DFQX5436ZA	OPERATING INSTRUCTION MANUAL	1
A 3	 CF-AA1653M1	AC ADAPTOR	1
A 4	 K2CG3DR00003	AC CABLE	1
A 5	DFJS535ZB	MODEM CABLE	1
A 6	 DFWV95F0008	BATTERY PACK	1
A 8	DFQC9006ZA-0	SHOULDER BELT	1
A 20	DFHS9017ZA	CLOTH	1
A 21	DFHR9084YA	STYLUS PEN	1
<b>Packing Material</b>			
P 1	DFPK1061WA	CASE, PACKING	1

P 2	DFPE0598ZA	CUSHION	1
<b>Mechanical Parts</b>			
K 1	DFMD7583ZC	PLATE, DOCKING CONNECTOR PCB	1
K 2	DFMD7584YA	PLATE, DOCKING COVER	1
K 4	DFWV84F0080	COVER, KEYBOARD FPC	1
K 5	DFWV84F0081	COVER, LCD FPC	1
K 6	DFMD7589ZB	PLATE, RF FRONT	1
K 7	DFMD7592ZA	PLATE, AUDIO JACK	1
K 8	DFMD7594ZA-0	HOLDER, PCMCIA COVER	1
K 9	DFMX0635ZB	TAPE	2
K 10	DFMX0719XA	INSULATION SHEET, LED CARD	1
K 11	DFMX0736YA	SPACER, AUDIO JACK	1
K 15	DFMY5009ZB	HEAT PIPE	1
K 16	DFMY5010ZA	PLATE, HEAT SINK	1
K 19	DFWV80C0464	CABINET, BOTTOM	1
K 19-1	DFHG1209ZA	RUBBER FOOT	2
K 20	DFWV80A0331	CABINET, TOP	1
K 21	DFHG1270ZB	SHIELD SHEET, AUDIO JACK BEZEL	1
K 22	DFHG1271ZA	SHIELD FOAM, AUDIO JACK	1
K 23	DFHG1276ZA	PLATE, SPEAKER	1
K 25	DFHG1293ZA-0	COVER, AUDIO JACK	1
K 26	DFHG1713ZA	COVER, DC JACK	1
K 27	DFHG1295ZB-0	COVER, USB JACK	1
K 28	DFHG1296ZA-0	COVER, SERIAL CONNECTOR	1
K 29	DFHG1297ZA-0	COVER, PCMCIA	1
K 30	DFHG1302ZA-0	COVER, MODEM JACK	1
K 31	DFHG1304ZA	RUBBER, ANTENNA CABLE	1
K 32	DFHR7632ZA-0	SHEET, HANDLE SCREW BLIND	2
K 34	DFHG1330ZA	PAD, TOUCH PAD	1
K 35	DFHE0326ZA	CONDUCTIVE CUSHION, USB	1
K 36	DFKE0488ZA-0	COVER, BATTERY	1
K 37	DFHG1209ZA	FOOT	2
K 38	DFKE0489ZB-0	AUDIO JACK BEZEL	1
K 40	DFKE0490XB	HOLDER, SPEAKER/RTC BATTERY	1
K 41	DFKE0491YA-0	COVER, DOCKING CONNECTOR	1
K 42	DFKE0492ZA	STOPPER, COVER	1
K 43	DFKE9040VB-0	PALM REST COVER	1
K 45	DFBC0239ZA	CLICK BUTTON	1
K 46	DFBD0121ZA-0	KNOB, POWER SW	1
K 47	DFBD9002XA-0	KNOB, BATTERY COVER	1
K 50	DFWV80A0332	CABINET, LCD FRONT/TS PANEL	1
K 50-1	DFWV84A0236	KIT, TOUCH SCREEN PANEL	1
K 50-2	DFHR9064ZA	PROTECTION FILM	1
K 51	DFUS0254ZA	SPRING, BUCKLE	1
K 52	DFMC0539ZA	WATER RESISTING SHEET	1
K 53	DFMX0762ZB	CASE, INVERTER PCB	1
K 54	DFBH1161ZA	HINGE	2
K 60	DFHG1299ZA-0	LCD RUBBER	2
K 61	DFHG1300ZA-0	CAP, ANTENNA	1
K 62	DFHG1301ZA-0	CAP, ANTENNA HOLDER	1
K 65	DFWV80C0437	CABINET, LCD REAR	1
K 66	DFHP7069ZA	TAPE, TOUCH SCREEN PANEL PCB	1
K 67	DFKE0496ZA-1	HOLDER, BUCKLE	1


K 68		DFGB0075ZA-0	LOGO BADGE	1
K 69		DFGB0077ZA-1	TOUGHBOOK LABEL	1
K 70		DFBS0055YA-1	BUCKLE	1
K 71		DFQT6077YA	LABEL, CAUTION, INVERTER	1
K 74		DFMD7581ZB	HDD CASE UPPER	1
K 75		DFMD7582ZA	HDD CASE LOWER	1
K 76		DFHG1613ZA	CUSHION, HDD	1
K 77		DFMD7591ZA-1	COVER, HINGE	1
K 80	△	DFGT0753YA-0	LABEL, RATING	1
K 82		DFQC9005ZA-0	STRAP	1
K 86		DFMD7593YA	PLATE, REFLECT PCMCIA	1
K 87		DFMX0735ZB	SHEET, KBD FPC	1
K 88		DFHG1272ZB	SHIELD SHEET, SERIAL CONNECTOR	1
K 89		DFHG1280YA	COVER SHEET, PCMCIA	1
K 402		DFHE0533ZA	GASKET	1
K 403		DFHE0534ZA	PCMCIA ASSIST	1
K 404		DFMX0965ZA	PCB, INSULATION SHEET T-P	1
K 405		DFHG826ZA	ASS'Y, UPPER LCD-TP SHEET	1
K 406		DFHG827YA	ASS'Y, LOWER LCD-TP SHEET	1
K 407		DFHG828ZA	RUBBER, INVERTER HOLD	1
K 408		DFHE0507ZA	UPPER, LCD CUSHION	2
K 409		DFHE0508ZA	LOWER, LCD CUSHION	1
K 410		DFHE0514ZA	LOWER L, LCD CUSHION	1
K 411		DFHG1434ZA	COVER, JACK, LAN	1
K 413		DFQT9669ZB	LABEL, MS	1
K 414		DFQT9675ZA	LABEL, ENERGY STAR	1
K 415		DFQT6263ZA	MODEM LABEL-4	1
K 418		DFMD7981ZA	PLATE, LAN/MDC	1
K 421		DFHE0381ZA	GASKET	1
K 422		DFHG1282YA	SHEET, UPPER, INVERTER CABLE	1
K 423		DFGX0236ZA-0	SHEET	1
K 552		DFHE0638ZA	SHIELD SHEET, DSUB	1
K 553		DFHR7649ZA	SHEET B	1
K 554		L9DZAA000003	HEATER	1
K 555		D4CZ71030001	THERMISTOR, NTC	1
K 558		DFMX1031ZA	SHEET, PCMCIA	1
K 559		DFMD3096ZA	HOLDER, USB CONNECTOR	1
K 560		DFHG1556ZA	LCD CUSHION UPPER-2	1
K 561		DFMC0567ZA	SHIELD SHEET B	1
K 565		XSB2+4	SCREW	1
K 101		XSB2+4FNL	SCREW	20
K 103		XYN2+J10FN	SCREW	2
K 104		XYN2+J4FN	SCREW	3
K 105		XYN2+J6FN	SCREW	22
K 106		XYN2+J8FZ	SCREW	8
K 107		XYN26+J8FN	SCREW	4
K 108		IKT0104AA	SCREW	2
K 109		DFHE5117ZA	SCREW	9
K 110		XYN2+J6	SCREW	1
K 111		XYN2+J8FN	SCREW	2
K 112		XYN2+J8FZ	SCREW	10
K 113		XYN3+J7FNL	SCREW	2
K 114		XYN4+J9FZ	SCREW	2

K 115	XYN2+J5FZ	SCREW	2
K700	DFHE0891ZA	INSU SHEET, DOCKING PCB	1
K701	DFMX1119ZA	INSU SHEET, RELAY PCB	1
K702	XSB2+4FNL	SCREW	3
K703	DFHR3571YA	LCD BACK CUSHION S	1
K704	DFHR3800ZA	MINI PCI CARD TAPE	1
K705	DFHR3801ZA	MDC MODEM TAPE	1
K706	XYN2+J8FZ	SCREW	3
K707	DXHM0063ZB	SCREW	4
K708	DFHE5025XA	SCREW	4
K709	DFKE0752ZA-0	WIRELESS ANT COVER	1
K710	DFMY0351ZA	THERMAL RUBBER A	1
K711	DFMY3162ZA	HEAT SINK DDR DIMM	1
K712	DFHG1326ZA	CABLE PROTECT SHEET	1
K713	DFHG1717ZA	DDR DIMM HOLDER	1
K714	DFHE0883ZA	GASKET	2
K715	DFHP7167ZA	TAPE	1
K716	DFHG1716ZB	CABLE HOLDER	1
K717	DFHE5104ZA	SCREW	2
K718	DFMY0230ZA	SHEET A	1
K719	DFMY0297ZA	HEAT RUBBER	1
K720	XSB2+4FNL	SCREW	2
K721	DFMD7982ZA	DC JACK COVER HOLDER	1



# Replacement Parts List

Note: Important Safety Notice

Components identified by  mark have special characteristics important for safety.

When replacing any of these components use only manufacturer's specified parts.

## CF-M34CGFZxM

REF. NO and AREA	PART NO.	DESCRIPTION	Q'TY
<b>Main PCB</b>			
C 1 2 286 287 288	EEFUD0D271XR	CAPACITOR, 2V, 270µF	5
C 110 181 224 226 248 311 312 318 320	F1G1H5R00004	CAPACITOR, 50V, 5pF	9
C 123	F1J0J475A009	CAPACITOR, 6.3V, 4.7µF	1
C 159 160 173 243 254	F1J1A1050021	CAPACITOR, 10V, 1µF	5
C 182	F1G1H6R0A452	CAPACITOR, 50V, 6pF	1
C 193 264	F1G1C473A004	CAPACITOR, 16V, 0.047µF	2
C 220 334	EEFUE0J151R	CAPACITOR, 6.3V, 150µF	2
C 236	F1L3D102A012	CAPACITOR, 2000V, 1000pF	1
C 244 276 277 278 416 417 423 424 446 447 448 449	F1G1H1010005	CAPACITOR, 50V, 100pF	12
C 266	F1G1A683A014	CAPACITOR, 10V, 0.068µF	1
C 267 268 269 271 273 296 303 313 342 349 362 363 364 393 443 445 452 455 476 477 478 679 690	F1G1H102A496	CAPACITOR, 50V, 1000pF	23
C 274 458	F1G1H471A496	CAPACITOR, 50V, 470pF	2
C 279	F1G1H681A450	CAPACITOR, 50V, 680pF	1
C 280	F1J1E224A081	CAPACITOR, 25V, 0.22µF	1
C 284 285 290 306 337 352 372 380 394 687 693	F1L1E106A017	CAPACITOR, 25V, 10µF	11
C 292 295 302 338 339 341 348 350 368 378 381 382 385 386 451 453 454 470 682 684 724 727	F1H1H104A748	CAPACITOR, 50V, 0.1µF	22
C 293 304	F1H1H182A009	CAPACITOR, 50V, 1800pF	2
C 297 301 343 347 683 725	F1G1H220A451	CAPACITOR, 50V, 22pF	6
C 298 299 344 345 675 726	F1G1H221A495	CAPACITOR, 50V, 220pF	6
C 3 71 78 85 109 122 289 307 696	EEFCD0D101R	CAPACITOR, 2V, 100µF	9
C 317 387 388	DCUI1C106HDB	CAPACITOR, 16V, 10µF	3
C 359	F1L0J4760005	CAPACITOR, 6.3V, 47µF	1
C 376	F1J1E105A009	CAPACITOR, 25V, 1µF	1
C 383	F1G1H152A450	CAPACITOR, 50V, 1500pF	1
C 4 5 6 8 9 10 12 13 14 16 17 18 20 21 22 25 26 27 29 30 31 33 34 35 37 38 39 41 42 43 46 48 50 55 74 77 81 84 111 119 172 239 242 257 258 260 282 300 314 346 358 361 392 411 412 414 421 429 435 467 468 473 474 480 483 484 485 491 513 723	F1J0J106A013	CAPACITOR, 6.3V, 10µF	70
C 432 438 463	F1H1A224A028	CAPACITOR, 10V, 0.22µF	3
C 441 442	F1G1H821A450	CAPACITOR, 50V, 820pF	2
C 45 47 49 51 117 121 127 129 162 163 165 169 171 177 179 223 265 308 309 310 319 323 360 396 418 482 504 505 689 694	F1G1E103A062	CAPACITOR, 25V, 0.01µF	30
C 459 464 466	F1K0J226A004	CAPACITOR, 6.3V, 22µF	3
C 492	ECUV1C224ZfV	CAPACITOR, 16V, 0.22µF	1
C 493 495 496 499 500 501 502	ECUV1C224ZfV	CAPACITOR, 16V, 0.22µF	7
C 509 512	EEFUD0D221R	CAPACITOR, 2V, 220µF	2
C 54	F1G1H222A496	CAPACITOR, 50V, 2200pF	1
C 56 60 61 67 68 69 507	F1G1A104A014	CAPACITOR, 10V, 0.1µF	7

C 62 63 64 95 116 125 138 139 143 144 188 189 191 194 195 196 199 205 206 215 221 275 283 354 355 384 413 439 444 456 457 469 497 503 517	DCUM1A1051BD	CAPACITOR, 10V, 1µF	35
C 674	F1H1E472A050	CAPACITOR, 25V, 4700pF	1
C 691	F1H1H152A748	CAPACITOR, 50V, 1500pF	1
C 7 11 15 19 23 24 28 32 36 40 44 57 58 59 72 73 75 76 79 80 82 83 86 87 88 89 90 91 92 93 94 96 97 98 99 100 101 102 103 104 105 106 107 118 112 113 114 115 120 124 126 128 130 131 132 133 134 136 137 141 142 145 146 147 148 149 150 151 152 153 154 155 156 157 158 161 164 166 170 176 180 183 186 187 190 192 197 198 200 201 202 203 204 207 208 209 210 211 212 213 214 216 217 218 219 228 229 231 232 233 234 235 237 238 240 241 245 249 250 252 253 255 256 270 324 389 390 391 404 406 407 408 409 410 415 419 425 428 430 431 433 436 440 450 460 461 462 465 471 479 481 487 489 494 498 506 510 511 514 515 516 518 519 520 585	DCUN1C104ZFD	CAPACITOR, 16V, 0.1µF	165
C 70 108 291 353 688	EEFUD0G151R	CAPACITOR, 4V, 150µF	5
C 728	ECUV1H102JCV	CAPACITOR, 50V, 1000pF	1
CA 1 2	EZASCE101M	CAPACITOR ARRAY	2
CN 11	DFJP050ZA002	CONNECTOR	1
CN 12	K1MMZZB00005	CONNECTOR	1
CN 13	DFJS207YA045	CONNECTOR	1
CN 14	DFJS549ZA006	CONNECTOR	1
CN 15	K1KA08A00267	CONNECTOR	1
CN 17	K1KAA0A00079	CONNECTOR	1
CN 2	DFJS356ZA004	CONNECTOR	1
CN 20	DFJS207ZA030	CONNECTOR	1
CN 21 25	DFJS207ZA015	CONNECTOR	2
CN 27	DFJS13N24ZAJ	CONNECTOR	1
CN 29	DFJP236ZA009	CONNECTOR	1
CN 3	DFJP050ZA003	CONNECTOR	1
CN 33	K1KA04A00335	CONNECTOR	1
CN 34	K1KA02A00364	CONNECTOR	1
CN 4	K1MN50A00006	CONNECTOR	1
CN 5	DFJP224ZA068	CONNECTOR	1
CN 6	DFJP214ZA100	CONNECTOR	1
CN 600	3900170-08	CONNECTOR	1
CN 602	DFJP217ZA005	CONNECTOR	1
CN 7	DFJS16N23ZAJ	CONNECTOR	1
CN 8	DFJS547ZA012	CONNECTOR	1
D 1 41 42	MA2J72900L	DIODE	3
D 13 15	EC10QS04TL	DIODE	2
D 22	B2ABAM000001	DIODE	1
D 27 29 36	DEDF1J3ETP	DIODE	3
D 28 30 32 48 49 50	MA3J14700L	DIODE	6
D 3 44 47	MA3J741E0L	DIODE	3
D 31	MAZ81200ML	DIODE	1
D 33	MAZ81800ML	DIODE	1
D 34 35 38 40 43 46 53 55	MA2S111-TX	DIODE	8
D 37	EC10QS04TL	DIODE	1
D 39 45 52 54 56 57	MAZ80510ML	DIODE	6
D 4	B0KB00000035	DIODE	1

D 5		B0JCCE000002	DIODE	1
D 51		MAZ80620ML	DIODE	1
D 6		DEDRB081L20	DIODE	1
D 7 9 631 632		B0JCMD000014	DIODE	4
D 8 14 630		B0JDAE000004	DIODE	3
F 1 2 3 5	⚠	K5H202Z00005	FUSE, 2A	4
F 4	⚠	K5H502Z00003	FUSE, 5A	1
IC 1		C2GBC0000191	IC, CPU	1
IC 10 45 46		DA7W66UT12L0	IC, CMOS	3
IC 12		C0JBZZ000300	IC, CROCK GENERATOR	1
IC 13		C1DB00001002	IC, CHIPSET	1
IC 14 51		C0DBZH000004	IC, USB POWER CONTROL	2
IC 15 34		DA7S32UT85L0	IC, CMOS	2
IC 16		93LC46BT/SN	IC, EEPROM	1
IC 17		C2CBHF000243	IC, EC	1
IC 18		DALP298030N	IC, BIPOLAR LINEAR	1
IC 19 20 21		C0EBE0000204	IC, DETECTOR	3
IC 2		C1DB00001121	IC, CHIPSET	1
IC 23		C0DBAFH00022	IC	1
IC 24 30 607		C0DBALH00001	IC, POWER CONTROL	3
IC 29		C0EBE0000187	IC, RESET	1
IC 3		C1DB00000902	IC, LSI	1
IC 31		C0CBCAC00192	IC, REGULATOR	1
IC 32		C0CBCAC00189	IC, REGULATOR	1
IC 33 44		DA7S04UT85L0	IC, CMOS	2
IC 37		C0DBDJH00007	IC	1
IC 38 60 61		DA7S00UT85L0	IC, CMOS	3
IC 39 40		DA7ST08U85L0	IC, CMOS	2
IC 4		C0JBZZ000299	IC, THERMAL SENSOR	1
IC 41		DAR5C4752T-R	IC	1
IC 42		DA2562A1BX2V	IC, BIPOLAR LOGIC	1
IC 43		C1DB00000941	IC, PERIPHERAL LSI	1
IC 47		C1BB00000773	IC	1
IC 48		DAM3414AVTEP	IC, BIPOLAR LINEAR	1
IC 49		DA7787FSE2E	IC, BIPOLAR LINEAR	1
IC 5 11 22 35 52		DA7SH08U85L0	IC, CMOS	5
IC 50		C0CBCBC000030	IC	1
IC 53		C3FBKC000076	IC	1
IC 55 58		C0ZBZ0000526	IC, SERIAL BUFFER	2
IC 57		DA5C3384CX1T	IC, BUS SWITCH	1
IC 6 7 8 9		C3ABSG000006	IC, DRAM	4
IC 608		C0DBEGH00003	IC	1
IC 63		C0JBAZ001945	IC, BUS SWITCH	1
IC 64		C0JBAZ000279	IC, CMOS	1
IC 66		DA7W14UT12L0	IC, CMOS	1
IC 76		C0JBAD000108	IC, CMOS	1
IC 77		C0JBAB000525	IC, CMOS	1
JK 1 2		IHC0721AA	JK	2
JK 3		IHC0626AA	JK	1
L 1		G1C1R0Z00002	INDUCTOR	1
L 11 12 13 19 20 21 22		J0JCC0000186	INDUCTOR	7
L 14 607		DDAZS100MT3T	INDUCTOR	2
L 15		G1C100MA0106	INDUCTOR	1
L 16		DDB5Z028C-L	INDUCTOR	1
L 17		G1A160H00001	INDUCTOR	1
L 2		G1CR68MA0092	INDUCTOR	1
L 26		G1C100KA0002	INDUCTOR	1
L 3 5 6 18		DDB5Z031J-L	INDUCTOR	4
L 4		J0MAB0000116	INDUCTOR	1
L 55 56		G1CR10JA0020	INDUCTOR	2
L 608		G1C100MA0077	INDUCTOR	1
L 7		G5BYC0000008	INDUCTOR	1

L 8	G1C1R6Z00001	INDUCTOR	1
L 9 10	G1C4R7MA0106	INDUCTOR	2
LA 1 2	J0MAB0000159	INDUCTOR ARRAY	2
PS 3	MINISMDC0752	POLY SW	1
Q 1	B1HBCFA00006	TRANSISTOR	1
Q 10 20 646	B1DBGD000002	TRANSISTOR	3
Q 13 14 28 31 75 77 650	DAFDS6912A	TRANSISTOR	7
Q 18	B1DFGD000026	TRANSISTOR	1
Q 19 21 81	B1DHFD000009	TRANSISTOR	3
Q 2 56 57 647	B1CFFB000001	TRANSISTOR	4
Q 23 67 68	UNR9111J0L	TRANSISTOR	3
Q 24 51 71	UNR9214J0L	TRANSISTOR	3
Q 25 27 651	UNR9113J0L	TRANSISTOR	3
Q 3 22 60 63 64 65 69 157 159 164	XP0421300L	TRANSISTOR	10
Q 4 17 59 70 76 648	B1DHDC000021	TRANSISTOR	6
Q 46 48 49	XP0421400L	TRANSISTOR	3
Q 5	B1ADKD000004	TRANSISTOR	1
Q 53	B1MBEDA00008	TRANSISTOR	1
Q 6 16 26 29 33 55 58 62 72 73 74 162 163 166 643 661	UNR9213J0L	TRANSISTOR	16
Q 652	DAFDN359AN	TRANSISTOR	1
Q 7 12 15 30 32 644 662	B1CFGD000004	TRANSISTOR	7
Q 79 80	B1DHGC000005	TRANSISTOR	2
Q 8	XP0450100L	TRANSISTOR	1
Q9 52 54 649	DA3LN01STL	TRANSISTOR	4
R 1	ERJ2GEJ681X	RESISTOR, 1/16W, 680Ω	1
R 119	ERJ2RKF48R7X	RESISTOR, 1/16W, 48.7Ω	1
R 12 485	ERJ3GEY0R00V	RESISTOR, 1/16W, 0Ω	2
R 121 174 276 734	ERJ3GEYJ100V	RESISTOR, 1/16W, 10Ω	4
R 122	ERJ2RKF2260X	RESISTOR, 1/16W, 226Ω	1
R 123	ERJ2RKF1470X	RESISTOR, 1/16W, 147Ω	1
R 124	ERJ2RKF1130X	RESISTOR, 1/16W, 113Ω	1
R 126 127 131	ERJ2RKD750X	RESISTOR, 1/16W, 75Ω	3
R 130	ERJ2RKF22R6X	RESISTOR, 1/16W, 22.6Ω	1
R 133 134	ERJ2GEJ106X	RESISTOR, 1/16W, 10MΩ	2
R 135 136 207 211 356 365 366 403 406	ERJ2GEJ472X	RESISTOR, 1/16W, 4.7KΩ	9
R 139	ERJ2GEJ184X	RESISTOR, 1/16W, 180KΩ	1
R 14 34 36	ERJ2GEJ331X	RESISTOR, 1/16W, 330Ω	3
R 15 28 29 31 32 33 107 120	ERJ2GEJ560X	RESISTOR, 1/16W, 56Ω	8
R 153 155	ERJ2GEJ470X	RESISTOR, 1/16W, 47Ω	2
R 154	ERJ2GEJ220X	RESISTOR, 1/16W, 22Ω	1
R 156	D1ZZ00000046	RESISTOR, 1W, 5MΩ	1
R 162 202 212 341 499 500 501 502 503 504 744 745	ERJ2GEJ105X	RESISTOR, 1/16W, 1MΩ	12
R 166 268 269 282	ERJ2RKF5601X	RESISTOR, 1/16W, 5.6KΩ	4
R 171	ERJ2RKF3901X	RESISTOR, 1/16W, 3.9KΩ	1
R 173	ERJ3GEYJ1R0V	RESISTOR, 1/16W, 1Ω	1
R 175 230 288	ERJ2RKF1002X	RESISTOR, 1/16W, 10KΩ	3
R 176	ERJ2RKF5602X	RESISTOR, 1/16W, 56KΩ	1
R 188 194	ERJ2RKF1004X	RESISTOR, 1/16W, 1MΩ	2
R 189	ERJ2RKF223X	RESISTOR, 1/16W, 22KΩ	1
R 190	ERJ2RKF3302X	RESISTOR, 1/16W, 33KΩ	1
R 191 200	ERJ2RKF2703X	RESISTOR, 1/16W, 270KΩ	2
R 192	ERJ2RKF2321X	RESISTOR, 1/16W, 2.32KΩ	1
R 193	ERJ2RKF5622X	RESISTOR, 1/16W, 56.2KΩ	1
R 195 270	ERJ2RKF1302X	RESISTOR, 1/16W, 13KΩ	2
R 197	ERJ2RKF1332X	RESISTOR, 1/16W, 13.3KΩ	1
R 198 273 348 433 722 735	ERJ2GEJ474X	RESISTOR, 1/16W, 470KΩ	6

R 2 148 161 172 307 309 314 315 316 317 318 334 335 374 462 470	ERJ2GEJ101X	RESISTOR, 1/16W, 100Ω	16
R 204	ERJ2GEJ302X	RESISTOR, 1/16W, 3KΩ	1
R 205 352 484	ERJ2RKF1503X	RESISTOR, 1/16W, 150KΩ	3
R 206 733	ERJ2RKF5102X	RESISTOR, 1/16W, 51KΩ	2
R 210 272 320 340 377 415 416 417 428 429 463	ERJ2GEJ473X	RESISTOR, 1/16W, 47KΩ	11
R 215 235 741	D1BDR0470002	RESISTOR, 1/8W, 0.047Ω	3
R 216 236 292 293 361	D1BDR0330001	RESISTOR, 1/8W, 0.033Ω	5
R 222 277 419 420 425 432 775	ERJ2GEJ153X	RESISTOR, 1/16W, 15KΩ	7
R 226	ERJ2RKF4701X	RESISTOR, 1/16W, 4.7KΩ	1
R 227	ERJ2RKF1502X	RESISTOR, 1/16W, 15KΩ	1
R 231 283 740	ERJ2RKF2002X	RESISTOR, 1/16W, 20KΩ	3
R 25 779	ERJ2RKF1001X	RESISTOR, 1/16W, 1KΩ	2
R 26 213	ERJ2RKF2001X	RESISTOR, 1/16W, 2KΩ	2
R 266 267 725 726	D1BDR0220001	RESISTOR, 1/8W, 0.022Ω	4
R 27 82 83 185 187 219 220 232 233 274 275 289 290 723 727 777 778	ERJ2GEJ100X	RESISTOR, 1/16W, 10Ω	17
R 287	ERJ2RKF3002X	RESISTOR, 1/16W, 30KΩ	1
R 3 97 132 157 170 180 203 208 221 225 271 273 279 281 336 392 393 394 395 443 600 774	ERJ2GE0R00X	RESISTOR, 1/16W, 0Ω	22
R 30 164 327 330 331 351	ERJ2GEJ562X	RESISTOR, 1/16W, 5.6KΩ	6
R 308 400	ERJ2GEJ223X	RESISTOR, 1/16W, 22KΩ	2
R 310	ERJ6GEY0R00V	RESISTOR, 1/10W, 0Ω	1
R 311	ERJ2RKF1003X	RESISTOR, 1/16W, 100KΩ	1
R 312 313	ERJ6GEYJ222V	RESISTOR, 1/10W, 2.2KΩ	2
R 321	ERJ6GEYJ561V	RESISTOR, 1/10W, 560Ω	1
R 322	ERJ3GEYJ3R3V	RESISTOR, 1/16W, 3.3Ω	1
R 328	RL1220SR47F	RESISTOR, 1/4W, 0.47Ω	1
R 343 344 345	D1BDR1200001	RESISTOR, 1/8W, 0.12Ω	3
R 349	ERJ2RKF1103X	RESISTOR, 1/16W, 110KΩ	1
R 35	ERJ2GEJ132X	RESISTOR, 1/16W, 1.3KΩ	1
R 350	ERJ2RKF3652X	RESISTOR, 1/16W, 36.5KΩ	1
R 353	ERJ2GEJ4R7X	RESISTOR, 1/16W, 4.7Ω	1
R 354 355	ERJ2RKF3001X	RESISTOR, 1/16W, 3KΩ	2
R 358	ERA3EKB1623V	RESISTOR, 1/16W, 162KΩ	1
R 359	ERA3EEB1692V	RESISTOR, 1/16W, 16.9KΩ	1
R 367 368 435 436	ERJ2GEJ222X	RESISTOR, 1/16W, 2.2KΩ	4
R 37 38	ERJ2RKF60R4X	RESISTOR, 1/16W, 60.4Ω	2
R 39 42 44 46	ERJ2RKF1500X	RESISTOR, 1/16W, 150Ω	4
R 4 16 17 53 54 62	ERJ2RKF27R4X	RESISTOR, 1/16W, 27.4Ω	6
R 40 41	ERJ2RKF6040X	RESISTOR, 1/16W, 604Ω	2
R 418	ERJ2GEJ333X	RESISTOR, 1/16W, 33KΩ	1
R 43 45	ERJ2RKF3010X	RESISTOR, 1/16W, 301Ω	2
R 434	ERJ12YJ3R3H	RESISTOR, 1/2W, 3.3Ω	1
R 441 442	ERJ2GEJ682X	RESISTOR, 1/16W, 6.8KΩ	2
R 448 449 450 576 577 578	ERJ2GEJ271X	RESISTOR, 1/16W, 270Ω	6
R 47 49 51 108 109 112 113 165 167 168 169	ERJ2RKF49R9X	RESISTOR, 1/16W, 49.9Ω	11
R 48 50 52	ERJ2RKF101X	RESISTOR, 1/16W, 100Ω	3
R 5 8 163	ERJ2GEJ151X	RESISTOR, 1/16W, 150Ω	3
R 55 538 550	ERJ2GEJ1R0X	RESISTOR, 1/16W, 1Ω	3
R 58 59 60 137 138 144 145 146 152 160 199 363 386 411 412 413 414 452 574 739	ERJ2GEJ102X	RESISTOR, 1/16W, 1KΩ	20
R 61	ERJ2RKF40R2X	RESISTOR, 1/16W, 40.2Ω	1

R 63 84 87 88 89 90 92 93 94 95 125 128 129 159 178 182 186 218 223 228 229 278 284 285 333 347 360 362 364 376 378 379 380 381 384 385 387 408 409 410 421 422 424 426 427 430 431 444 446 466 467 469 475 575 580 581 698 719 776	ERJ2GEJ103X	RESISTOR, 1/16W, 10KΩ	59
R 64 286	ERJ2RKF1501X	RESISTOR, 1/16W, 1.5KΩ	2
R 65	ERJ2RKF1270X	RESISTOR, 1/16W, 127Ω	1
R 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 96 100 101 102 103 104 105 106 114 214 291 301 302 303 304 305 306 438 439 447	ERJ2GEJ330X	RESISTOR, 1/16W, 33Ω	36
R 7	ERJ2RKF39R2X	RESISTOR, 1/16W, 39.2Ω	1
R 724 742	ERJ2RKF2402X	RESISTOR, 1/16W, 24KΩ	2
R 85	ERJ2RKF1200X	RESISTOR, 1/16W, 120Ω	1
R 9 6 18 19	ERJ2RKF54R9X	RESISTOR, 1/16W, 54.9Ω	4
R 91 115 116 118 158 338 339 342 346 369 370 397 423 440 454 471 472 473 474 476 477 478 479 480 481 482 483 539 540 573 579 738	ERJ2GEJ104X	RESISTOR, 1/16W, 100KΩ	32
R 99	ERJ2RKF4750X	RESISTOR, 1/16W, 475Ω	1
RA 1	D1HA2228A004	RESISTOR ARRAY	1
RA 11	D1H81004A024	RESISTOR ARRAY	1
RA 12	D1HG1008A001	RESISTOR ARRAY	1
RA 13 14 15 16 17 18 19 20 21 22 23 24 25 26	D1HA56080001	RESISTOR ARRAY	14
RA 2	D1H81044A024	RESISTOR ARRAY	1
RA 28	D1H83304A024	RESISTOR ARRAY	1
RA 3 4 5 6 7 8 9 10	DEARA8CJ330M	RESISTOR ARRAY	8
RA 30 31 32 40 41 48 55	D1H81034A024	RESISTOR ARRAY	7
RA 33 34 35 36 43 44 45 46 52 53	DEARA8AJ103M	RESISTOR ARRAY	10
RA 37 38	D1H84704A024	RESISTOR ARRAY	2
RA 39	D1H87504A024	RESISTOR ARRAY	1
RA 47	D1H84734A024	RESISTOR ARRAY	1
RA 49 50 51	DEARA8AJ102M	RESISTOR ARRAY	3
SW 1	K0D166A00003	SW	1
SW 3	SSST01-3A	SW	1
TH 1	DBT10KC1513P	THERMISTOR	1
X 1	HOJ143500040	OSCILLATOR, 14.318MHz	1
X 2	HOJ327200051	OSCILLATOR, 32.768KHz	1
X 3	HOJ250500025	OSCILLATOR, 25MHz	1
X 4	H2D800400015	OSCILLATOR, 8MHz	1
<b>LVDS PCB</b>			
C 21	F1G1E103A062	CAPACITOR, 25V, 0.01μF	1
C 22 23 24	DCUN1C104ZFD	CAPACITOR, 16V, 0.1μF	3
C 25	DCUM1A1051BD	CAPACITOR, 10V, 1μF	1
C 29	F1J0J106A004	CAPACITOR, 6.3V, 10μF	1
C 30	F1G1A104A014	CAPACITOR, 10V, 0.1μF	1
CN 1	K1KA30A00091	CONNECTOR	1
CN 2	K1KB30A00066	CONNECTOR	1
IC 1	C0ZBZ0000602	IC, LVDS RECEIVER	1
L 1	DDB5Z031J-L	INDUCTOR	1
R 1	ERJ2GEJ103X	RESISTOR, 1/16W, 10KΩ	1
R 2	ERJ2GE0R00X	RESISTOR, 1/16W, 0Ω	1
R 3 4 5 6	ERJ2GEJ101X	RESISTOR, 1/16W, 100Ω	4
R 7	ERJ6GEY0R00V	RESISTOR, 1/10W, 0Ω	1
RA 1 2 3 4 5	EXBV8VR000V	RESISTOR ARRAY	5
<b>MINI PCI</b>			
C 101 102 103 104 105 106 109 110 116	F1H1H104A748	CAPACITOR, 50V, 0.1μF	9
C 115 117	F1J0J1060004	CAPACITOR, 6.3V, 10μF	2

C 119	DCUN1C104ZFD	CAPACITOR, 16V, 0.1µF	1
CN 101	DFJS511ZA124	CONNECTOR	1
CN 102	DFJS226ZA100	CONNECTOR	1
CN 103	K1KB30A00139	CONNECTOR	1
L 101	DDB5Z005-L	INDUCTOR	1
R 102	ERJ2GEJ103X	RESISTOR, 1/16W, 10KΩ	1
R 110	ERJ2GEJ330X	RESISTOR, 1/16W, 33Ω	1
R 111	ERJ2GEJ101X	RESISTOR, 1/16W, 100Ω	1
<b>PORT DOCK PCB</b>			
C 303 304 305	F1G1H220A451	CAPACITOR, 50V, 22pF	3
C 310 311 312	DCUN1C104ZFD	CAPACITOR, 16V, 0.1µF	3
C 313	F1G1E103A062	CAPACITOR, 25V, 0.01µF	1
C 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359	F1G1H1010005	CAPACITOR, 50V, 100pF	46
CN 300	DFJS553ZA100	CONNECTOR	1
CN 301	DFJS226ZA100	CONNECTOR	1
L 300	J0MAB0000116	INDUCTOR	1
<b>TS PS2 PCB</b>			
C 100 107 108 109 114	DCUN1C104ZFD	CAPACITOR, 16V, 0.1µF	5
C 101 105 113	F1G1E472A062	CAPACITOR, 25V, 4700pF	3
C 102	F1G1E103A062	CAPACITOR, 25V, 0.01µF	1
C 103 106	F1G1H681A450	CAPACITOR, 50V, 680pF	2
C 110 112	F1G1H560A451	CAPACITOR, 50V, 56pF	2
C 111	F1J1A1050021	CAPACITOR, 10V, 1µF	1
CN 100 101	DFJS440ZA008	CONNECTOR	2
IC 100	C0EBH0000278	IC	1
IC 101	C1DB00001042	IC, TOUCH SCREEN CONTROLLER	1
IC 102	C0JBAZ002074	IC, LOGIC	1
Q 100 102	XP0431200L	TRANSISTOR	2
Q 101	UNR9113J0L	TRANSISTOR	1
R 100 103 110	ERJ2GEJ102X	RESISTOR, 1/16W, 1KΩ	3
R 101 104	ERJ2GEJ822X	RESISTOR, 1/16W, 8.2KΩ	2
R 102	ERJ2GEJ303X	RESISTOR, 1/16W, 30KΩ	1
R 105 106	ERJ2GE0R00X	RESISTOR, 1/16W, 0Ω	2
R 108 109	ERJ2GEJ103X	RESISTOR, 1/16W, 10KΩ	2
X 100	H2D100500002	OSCILLATOR, 10MHz	1
<b>MODEM JACK PCB</b>			
C 541	F1L3D102A003	CAPACITOR,	1
CN 541	DFJS555ZA004	CONNECTOR	1
CN 542	DFJS554ZA008	CONNECTOR	1
CN 543	K1KA10B00151	CONNECTOR	1
CN 544	DFJP02C75YAJ	CONNECTOR	1
R 541 542	ERJ3GEYJ750V	RESISTOR, 1/16W, 75Ω	2
<b>LED PCB</b>			
CN 511	DFJS207ZA015	CONNECTOR	1
D 510 512 513 514 515	SEC1703C	DIODE	5
D 511	SEC2764C	DIODE	1
R 511 513 514 515 516 517	ERJ3GEYJ331V	RESISTOR, 1/16W, 330Ω	6
R 512	ERJ3GEYJ471V	RESISTOR, 1/16W, 470Ω	1
SW 511	DFSE057ZA	SW	1
SW 512 513	EVQPLDA15	SW	2

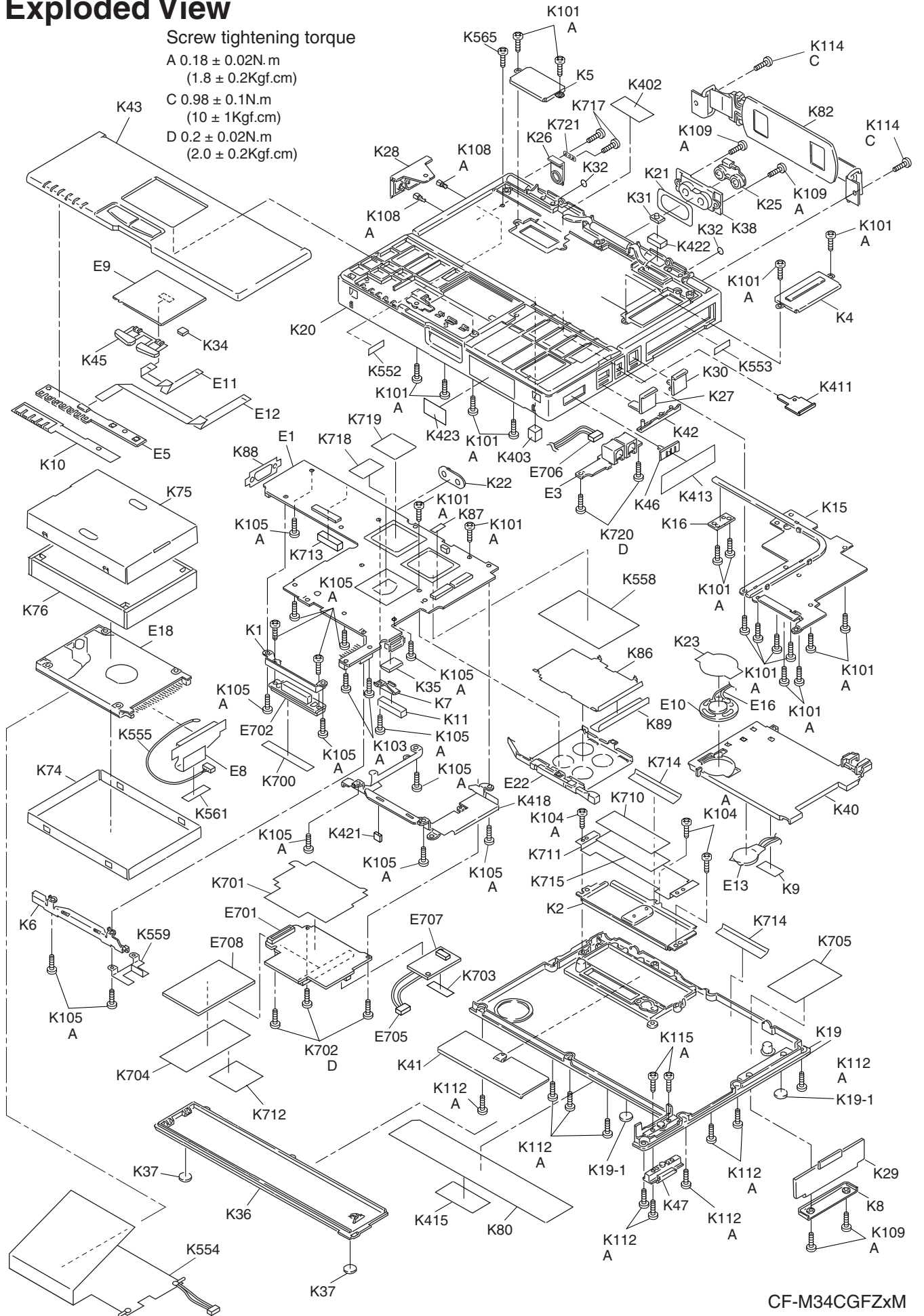
# Exploded View

## Screw tightening torque

A  $0.18 \pm 0.02\text{N}\cdot\text{m}$   
( $1.8 \pm 0.2\text{Kgf}\cdot\text{cm}$ )

C  $0.98 \pm 0.1\text{N}\cdot\text{m}$   
( $10 \pm 1\text{Kgf}\cdot\text{cm}$ )

D  $0.2 \pm 0.02\text{N}\cdot\text{m}$   
( $2.0 \pm 0.2\text{Kgf}\cdot\text{cm}$ )



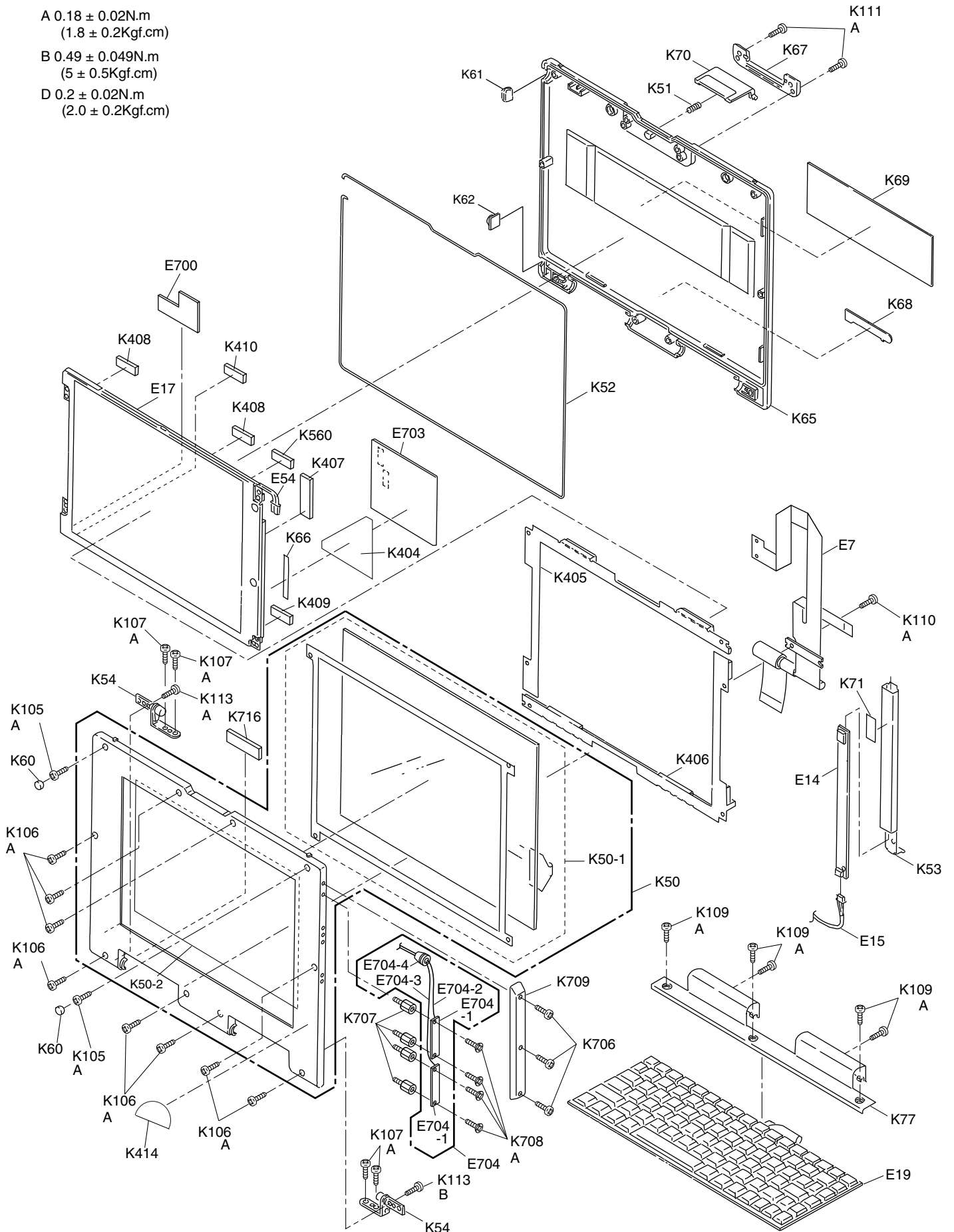


## Screw tightening torque

A  $0.18 \pm 0.02\text{N.m}$   
( $1.8 \pm 0.2\text{Kgf.cm}$ )

B  $0.49 \pm 0.049\text{N.m}$   
( $5 \pm 0.5\text{Kgf.cm}$ )

D  $0.2 \pm 0.02\text{N.m}$   
( $2.0 \pm 0.2\text{Kgf.cm}$ )



CF-M34CGFzXM

# Service Manual

Notebook Computer

## CF-M34



**Supplement-3**

This is the Service Manual for the following areas.

**M**...for U.S.A. and Canada

**E**...for U.K.

**G**...for Germany

**F**...for France

**S**...for Sweden

**T**...for Italy

## Applied Model

CF-M34T42AAx

## Parts Comparison Table

REF. NO. and AREA	PART NO.		DESCRIPTION	Q'TY
	ORIGINAL	NEW		
<b>Main PCB</b>				
D623	DFWV03C0182	<b>BOBC5R000002</b>	DIODE	1
D624	DFWV03C0183	<b>BOBC3R700001</b>	DIODE	1
D625, 627, 629	DFWV03C0184	<b>BOBC2R100007</b>	DIODE	3
D630	DFWV03C0185	<b>BOBC7R500005</b>	DIODE	1

### WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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