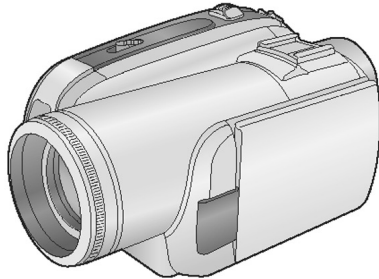


Service Manual

Digital Video Camcorder



PbF
Solder Lead free

NV-GS80E NV-GS80EB
NV-GS80EE NV-GS80EF
NV-GS80EG NV-GS80EK
NV-GS80EP NV-GS85EE
NV-GS85GC NV-GS88GK

Vol. 2

Colours

(S).....Silver Type

⚠ 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.

CONTENTS

	Page		Page
1 Service Navigation	3	4.2. MAIN SCHEMATIC DIAGRAMS	20
1.1. Introduction	3	4.3. VOLTAGE CHART	41
1.2. About Lead Free Solder (PbF)	3	5 Printed Circuit Board	45
2 Service Fixture & Tools	4	5.1. MAIN P.C.B.	45
2.1. Service Position	4	6 Appendix Information of Schematic Diagram	49
2.2. Replacement Procedures for CSP (Chip Size Package) IC	6	6.1. CHECKING POINT TABLE OF THE CSP IC	49
3 Block Diagrams	9	6.2. WAVEFORM TABLE	55
4 Schematic Diagrams	19	7 Replacement Parts Lists	57
4.1. SCHEMATIC DIAGRAM & CIRCUIT BOARD LAYOUT	19	7.1. ELECTRICAL REPLACEMENT PARTS LIST	57
NOTES	19		

1 Service Navigation

1.1. Introduction

This service manual contains technical information which will allow service personnel's to understand and service this model. Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, this information will be followed by supplement service manual to be filed with original service manual.

1.2. About Lead Free Solder (PbF)

Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF stamp on the PCB.

Caution:

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50-70°F (30-40°C) higher.
Please use a high temperature soldering iron. In case of the soldering iron with temperature control, please set it to 700±20°F (370±10°C).
- Pb free solder will tend to splash when heated too high (about 1100°F/600°C).

When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.

2 Service Fixture & Tools

2.1. Service Position

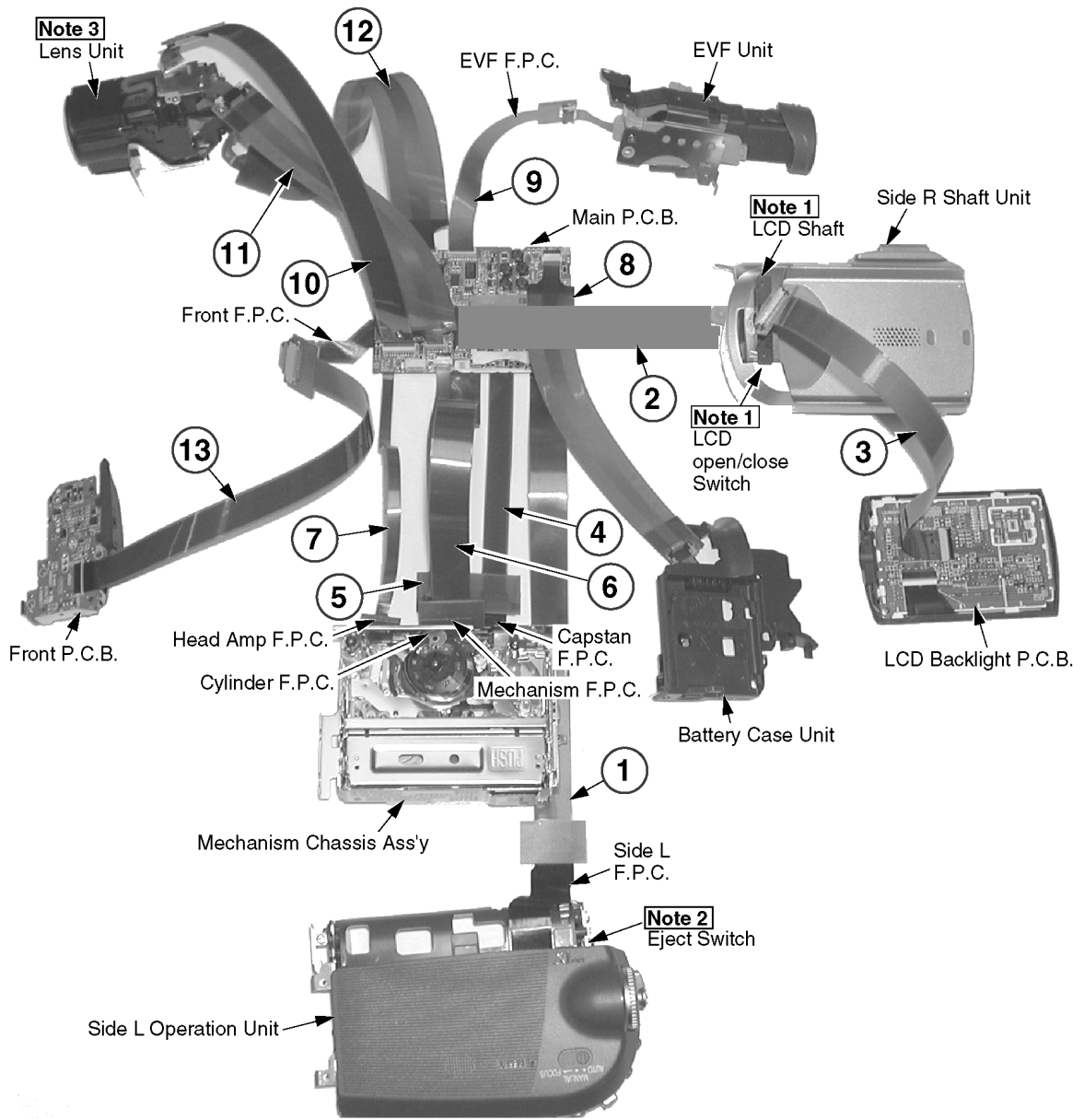
2.1.1. Extension Cables for Service Position

Using the following Extension Cables, place the unit as shown for check and service.

NO.	PART NUMBER	PART NAME	CONNECTION
①	LSUA0021	26Pin Extension Cable	FP61 on Main P.C.B. ~ Side L F.P.C.
②	VFK1174	30Pin Extension Cable	FP81 on Main P.C.B. ~ LCD Shaft F.P.C.
③	VUVS0012	22Pin Extension Cable	LCD Shaft F.P.C. ~ FP8101 on LCD Backlight P.C.B.
④	LSUA0017	18Pin Extension Cable	FP23 on Main P.C.B. ~ Capstan F.P.C. on Mechanism Chassis Ass'y
⑤	LSUA0016	10Pin Extension Cable	FP22 on Main P.C.B. ~ Cylinder F.P.C. on Mechanism Chassis Ass'y
⑥	LSUA0021	26Pin Extension Cable	FP21 on Main P.C.B. ~ Mechanism F.P.C. on Mechanism Chassis Ass'y
⑦	LSUA0019	8Pin Extension Cable	FP24 on Main P.C.B. ~ Head Amp F.P.C. on Mechanism Chassis Ass'y
⑧	VUVS0007	12Pin Extension Cable	FP11 on Main P.C.B. ~ Battery Case F.P.C. on Battery Case Unit
⑨	LSUA0017	18Pin Extension Cable	FP91 on Main P.C.B. ~ EVF F.P.C. on EVF Unit
⑩	VUVS0012	22Pin Extension Cable	FP71 on Main P.C.B. ~ Lens F.P.C. on Lens Unit
⑪	VUVS0007	12Pin Extension Cable	FP72 on Main P.C.B. ~ OIS F.P.C. on Lens Unit
⑫	VFKW0124A	14Pin Extension Cable	FP31 on Main P.C.B. ~ CCD F.P.C. on CCD P.C.B.
⑬	VUVS0012	22Pin Extension Cable	FP41 on Main P.C.B. (Front F.P.C.) ~ FP6501 on Front P.C.B.

Note:

1. The LCD open/close Switch is for changing between LCD Display and EVF Display. When turning on EVF Display, close the LCD Shaft so that LCD open/close Switch stays ON.
2. To eject the Mechanism, hold down the Eject Switch on the Side L Operation Unit for a short time, or open the Cassette Cover of the Side L Operation Unit.
3. Use a grounded ESD wrist strap while disassembling the Lens portion.
4. Connect the F.P.C.s to the connectors, verifying the direction of F.P.C.s.
5. Use extreme care when plugging in or unplugging connectors.



Non ZIF connectors are on the Main P.C.B. as shown in gray.

Direction of F.P.C.s connection

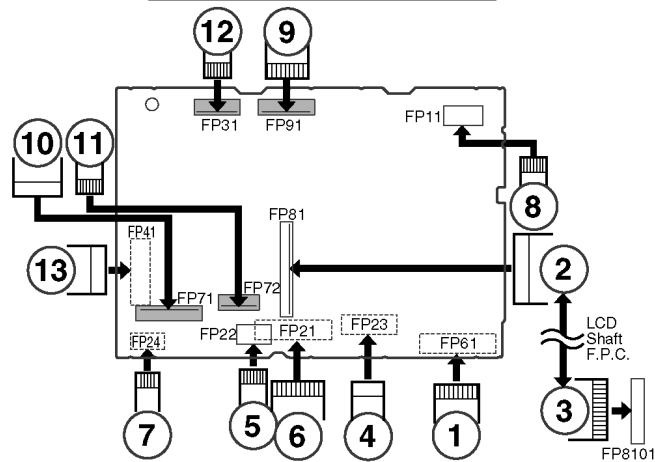


Fig. 3

2.2. Replacement Procedures for CSP (Chip Size Package) IC

2.2.1. EQUIPMENT

1. Pre-Heater
2. Spot Heater
3. Vacuum Pick-up
4. P.C.B. Holder

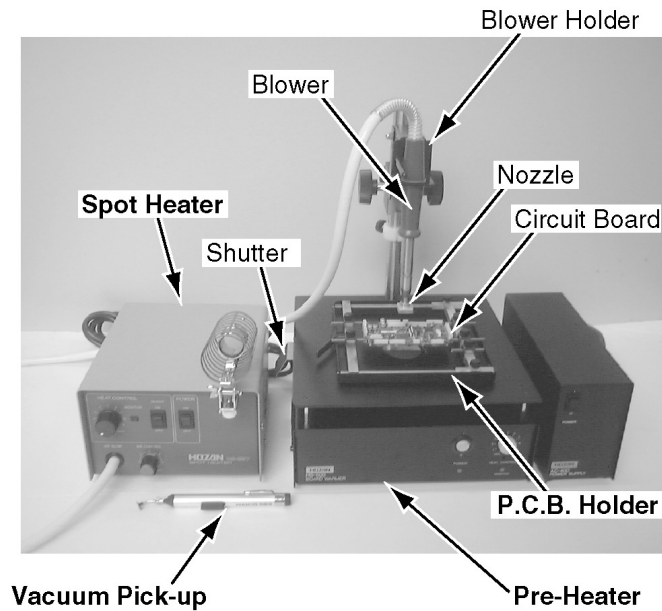
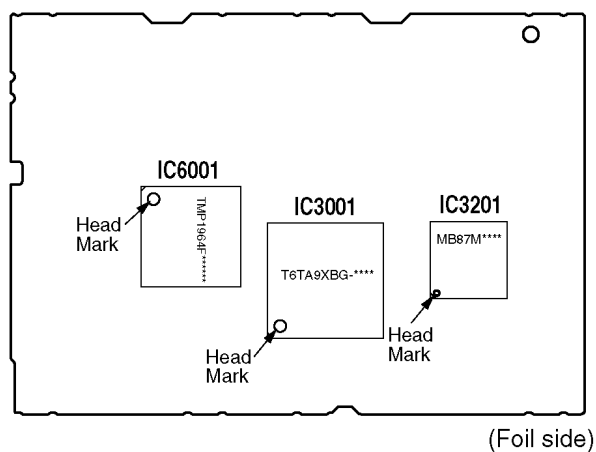


Fig. 8-1

2.2.2. CSP IC Location

Make sure to install CSP IC in the correct position on the Main P.C.B. as shown.

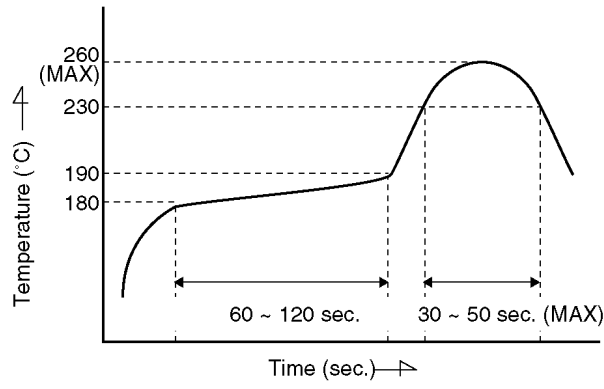
Main P.C.B.



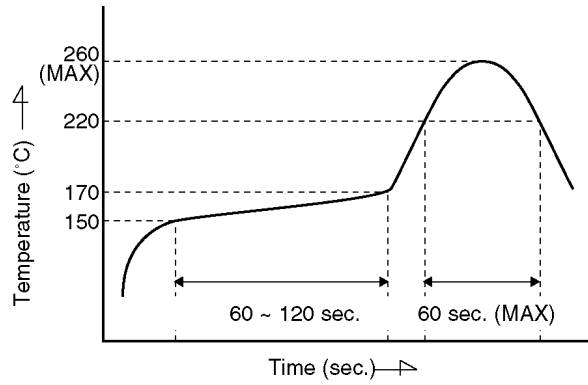
2.2.3. Temperature Profile for Heat Resistance of CSP IC

Refer to the temperature profile. CSP ICs in the 2007 model have the following temperature profile.

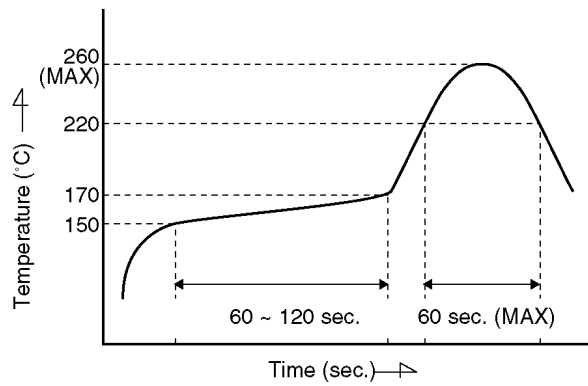
IC6001



IC3201

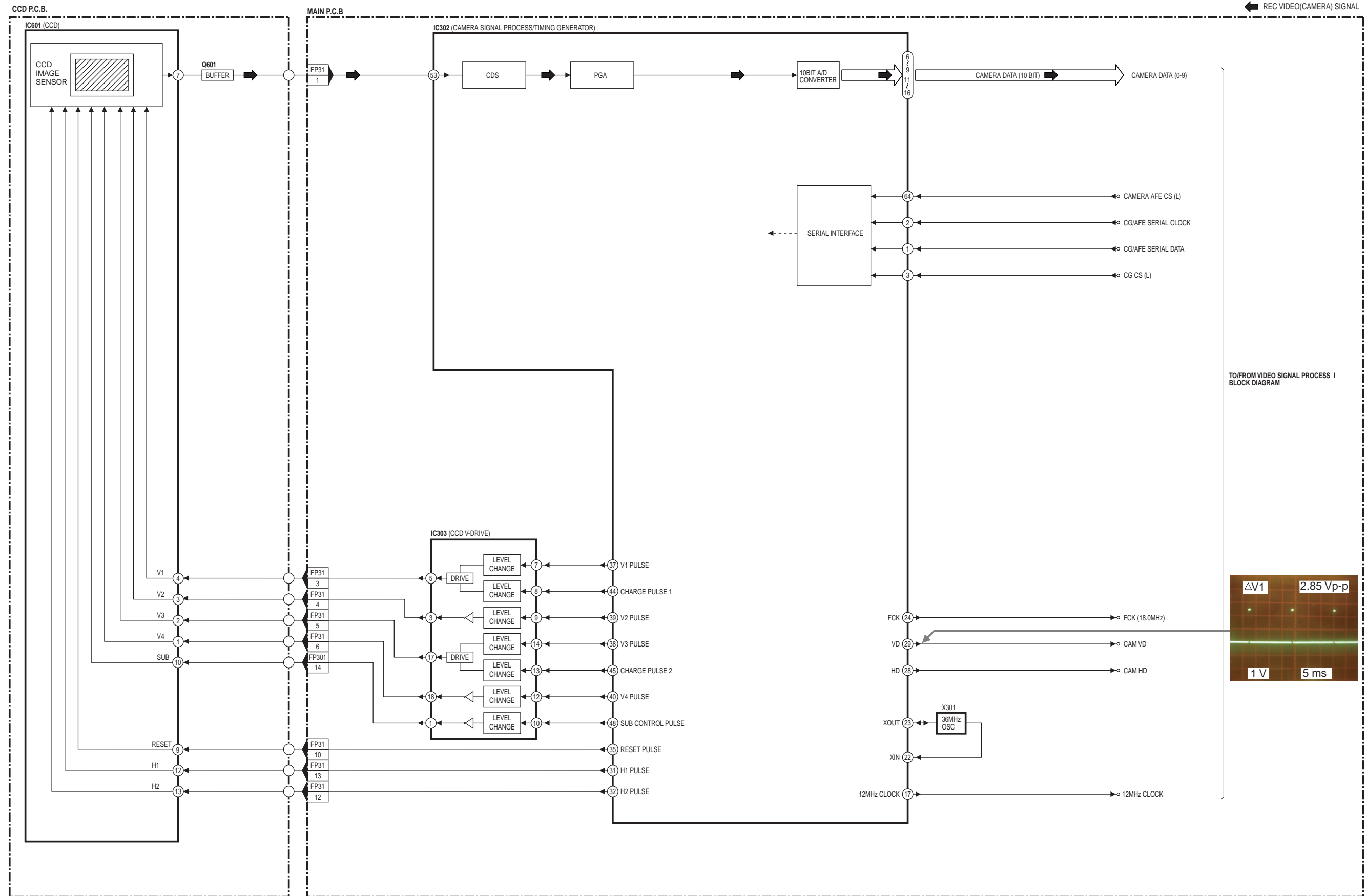


IC3001



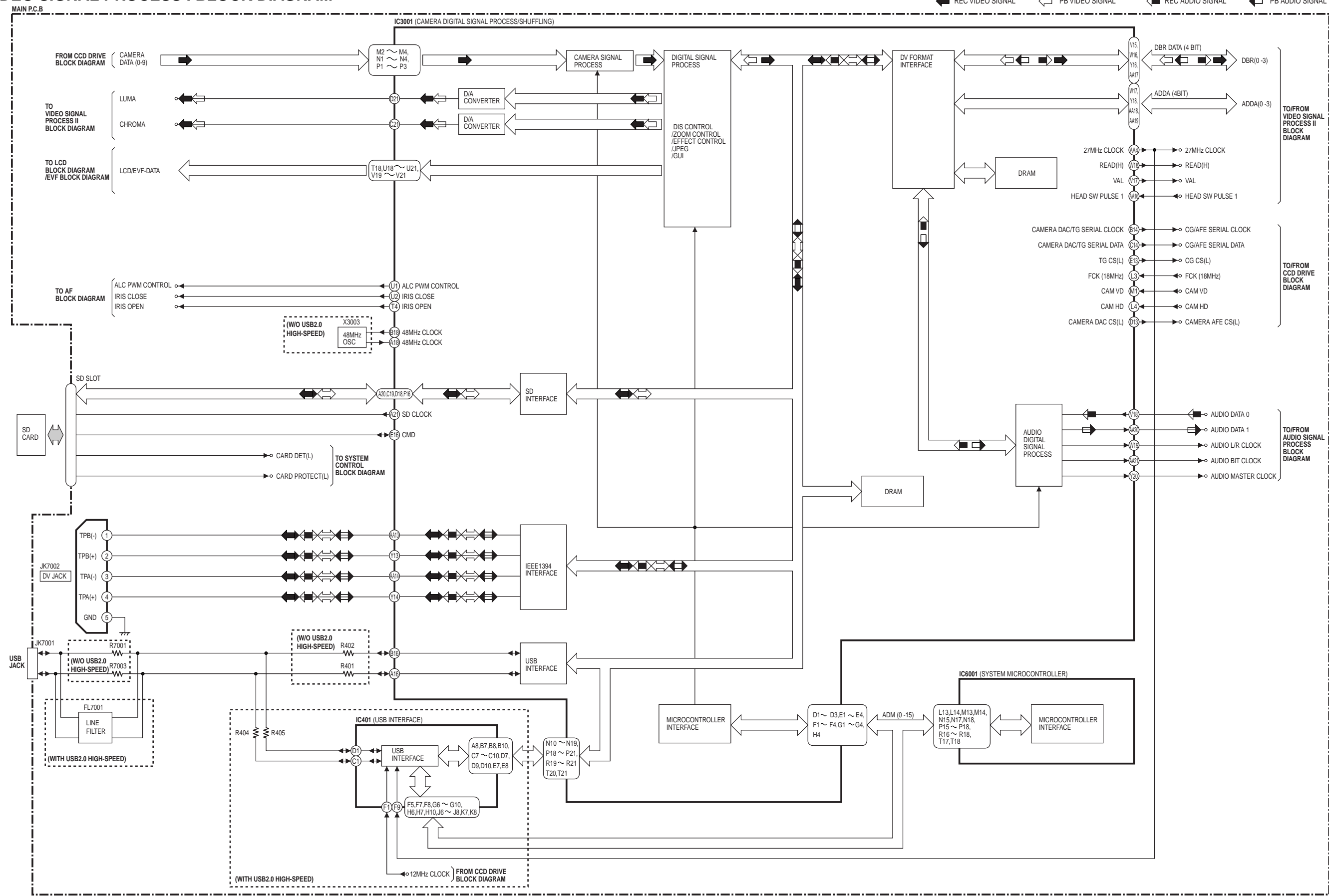
3 Block Diagrams

CCD DRIVE BLOCK DIAGRAM



CCD DRIVE BLOCK DIAGRAM
 NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

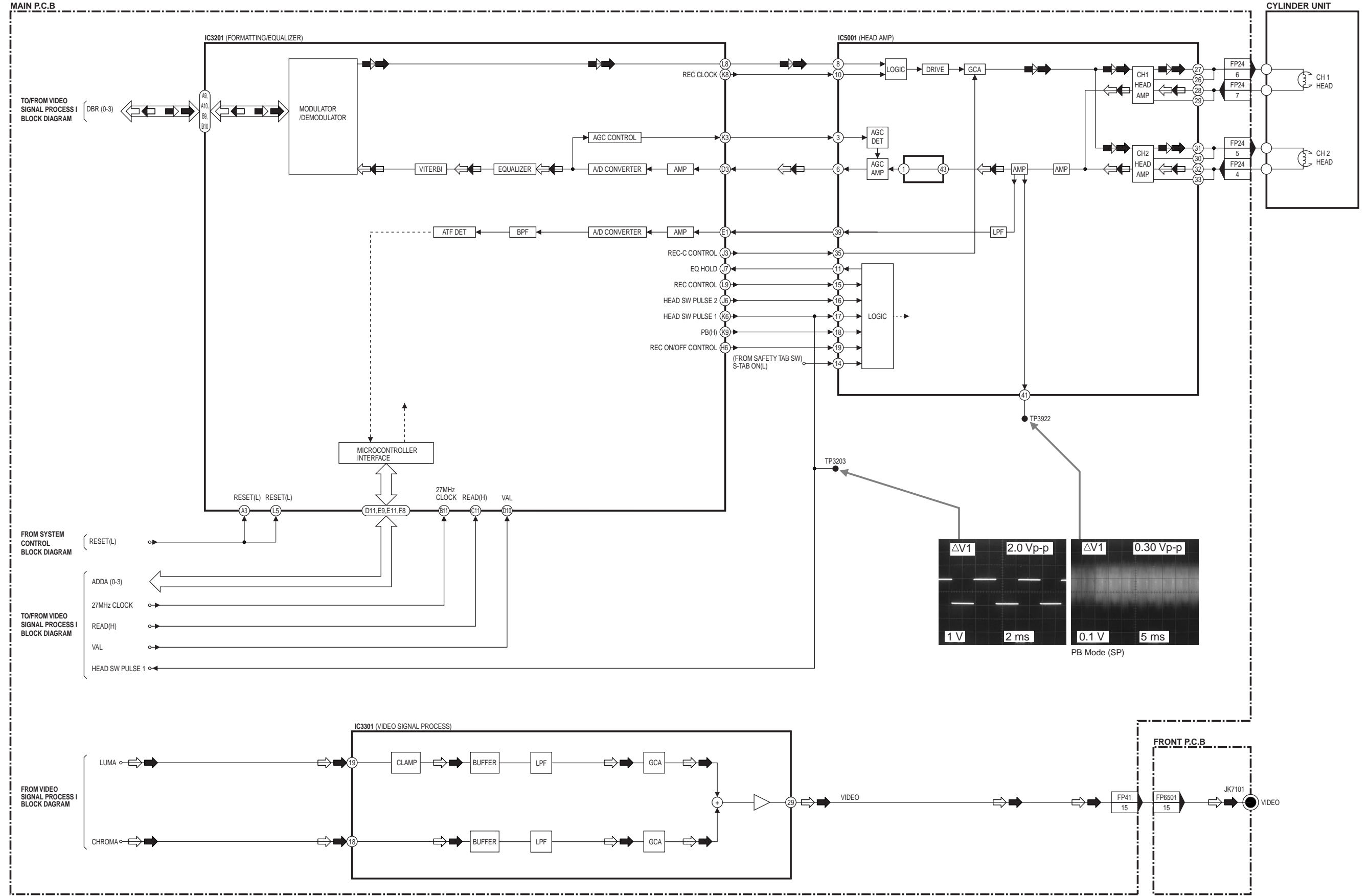
VIDEO SIGNAL PROCESS I BLOCK DIAGRAM



VIDEO SIGNAL PROCESS I BLOCK DIAGRAM
 NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

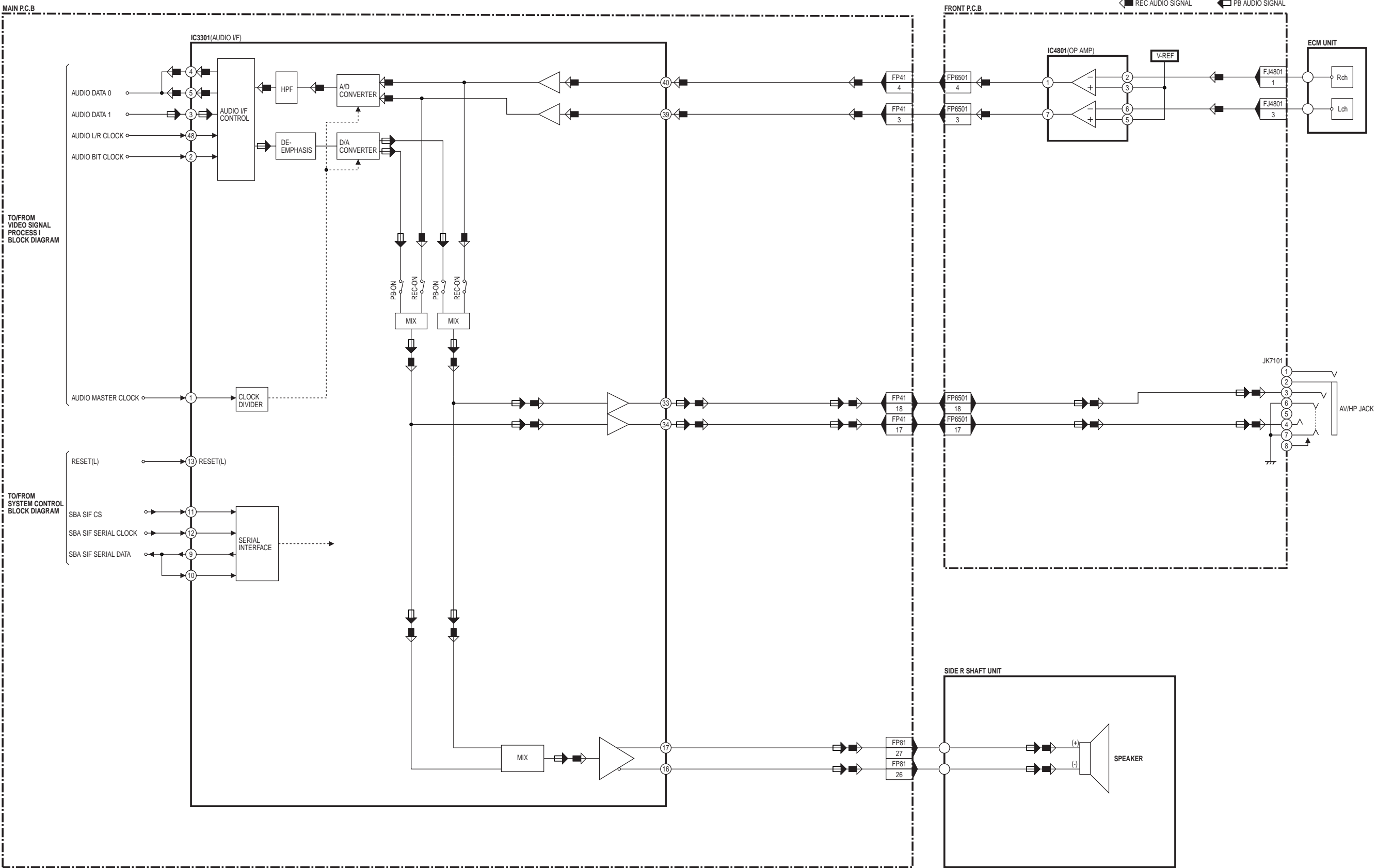
VIDEO SIGNAL PROCESS II BLOCK DIAGRAM

REC VIDEO SIGNAL
 PB VIDEO SIGNAL
 REC AUDIO SIGNAL
 PB AUDIO SIGNAL



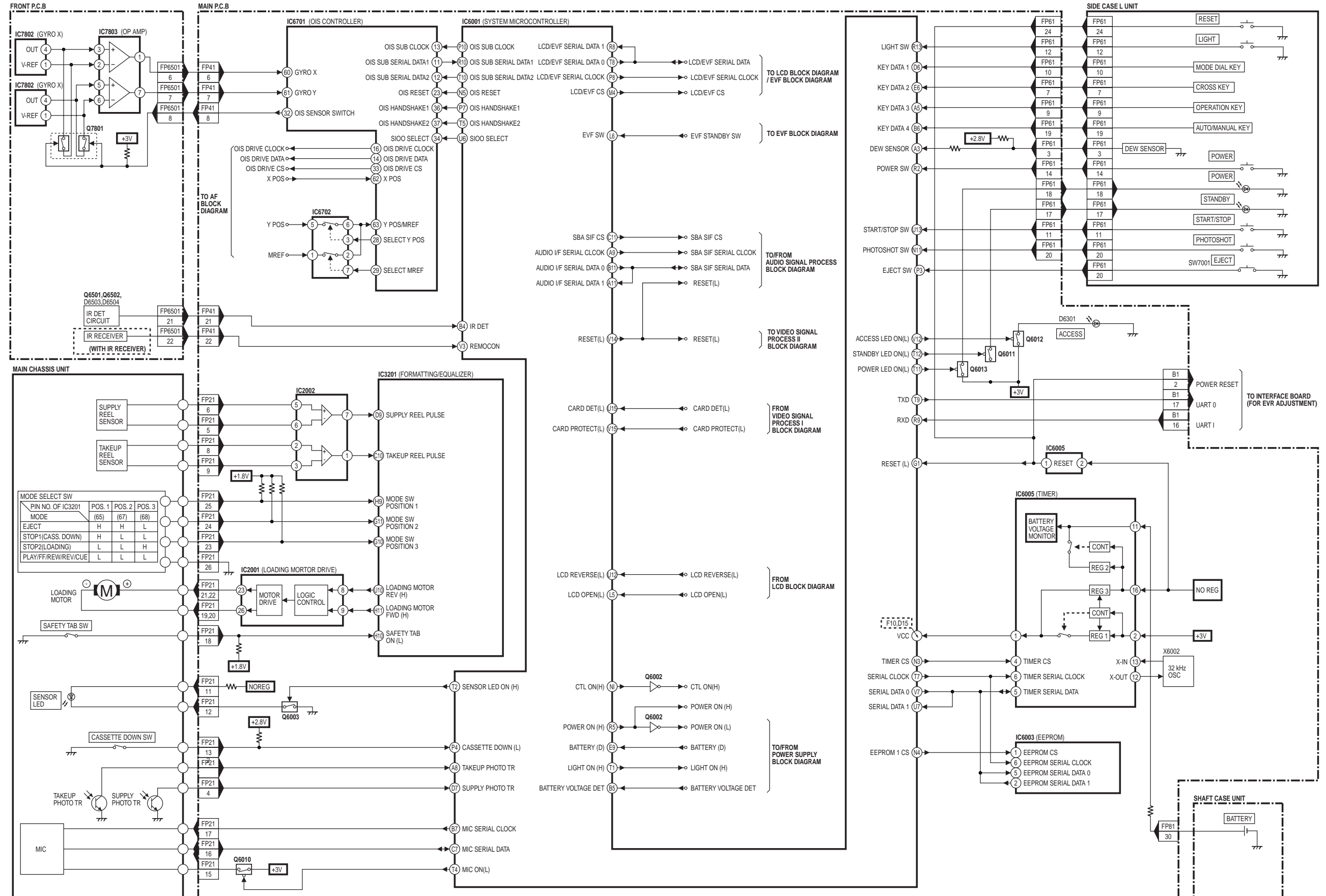
VIDEO SIGNAL PROCESS II BLOCK DIAGRAM
 NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

AUDIO SIGNAL PROCESS BLOCK DIAGRAM



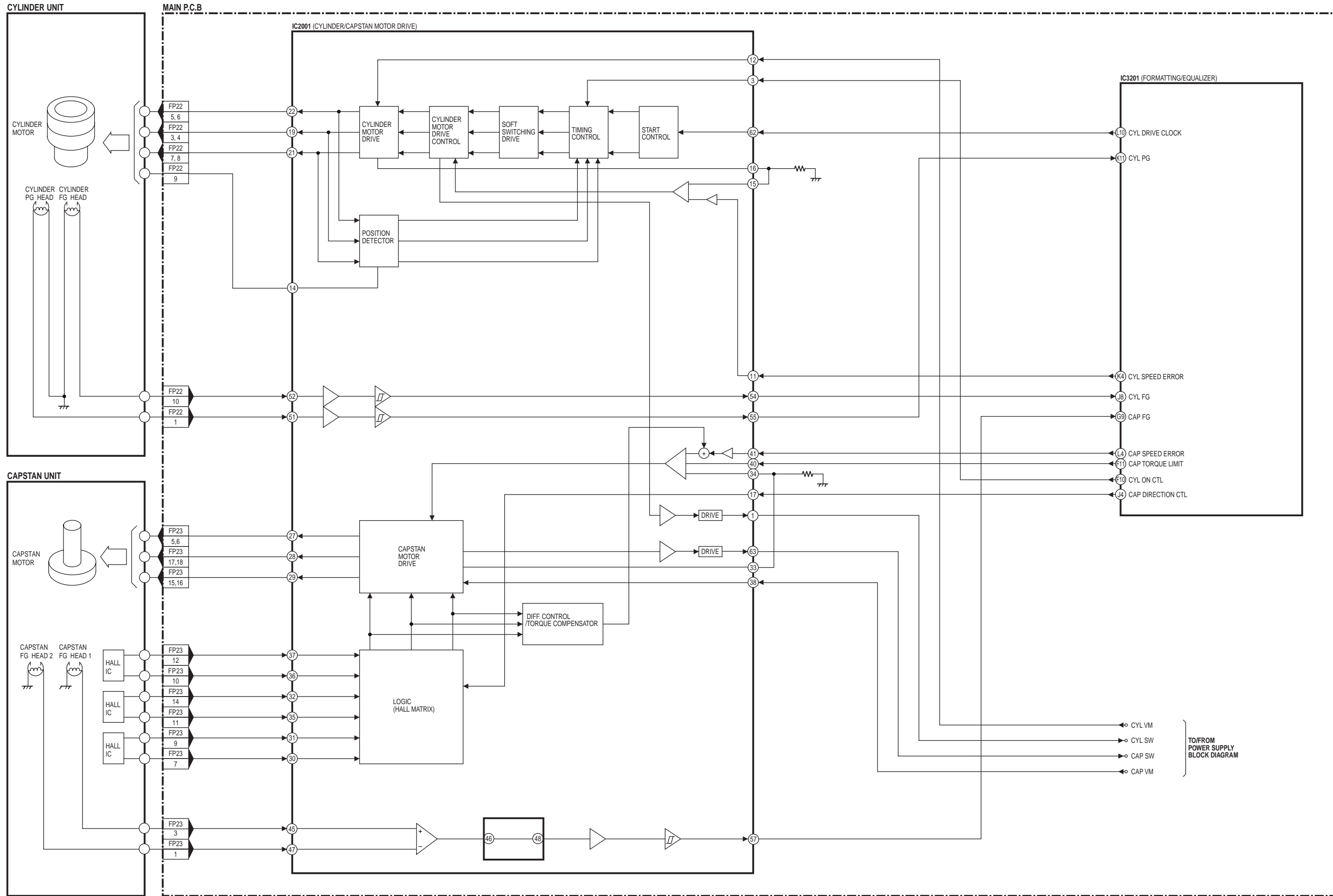
AUDIO SIGNAL PROCESS BLOCK DIAGRAM
 NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

SYSTEM CONTROL BLOCK DIAGRAM



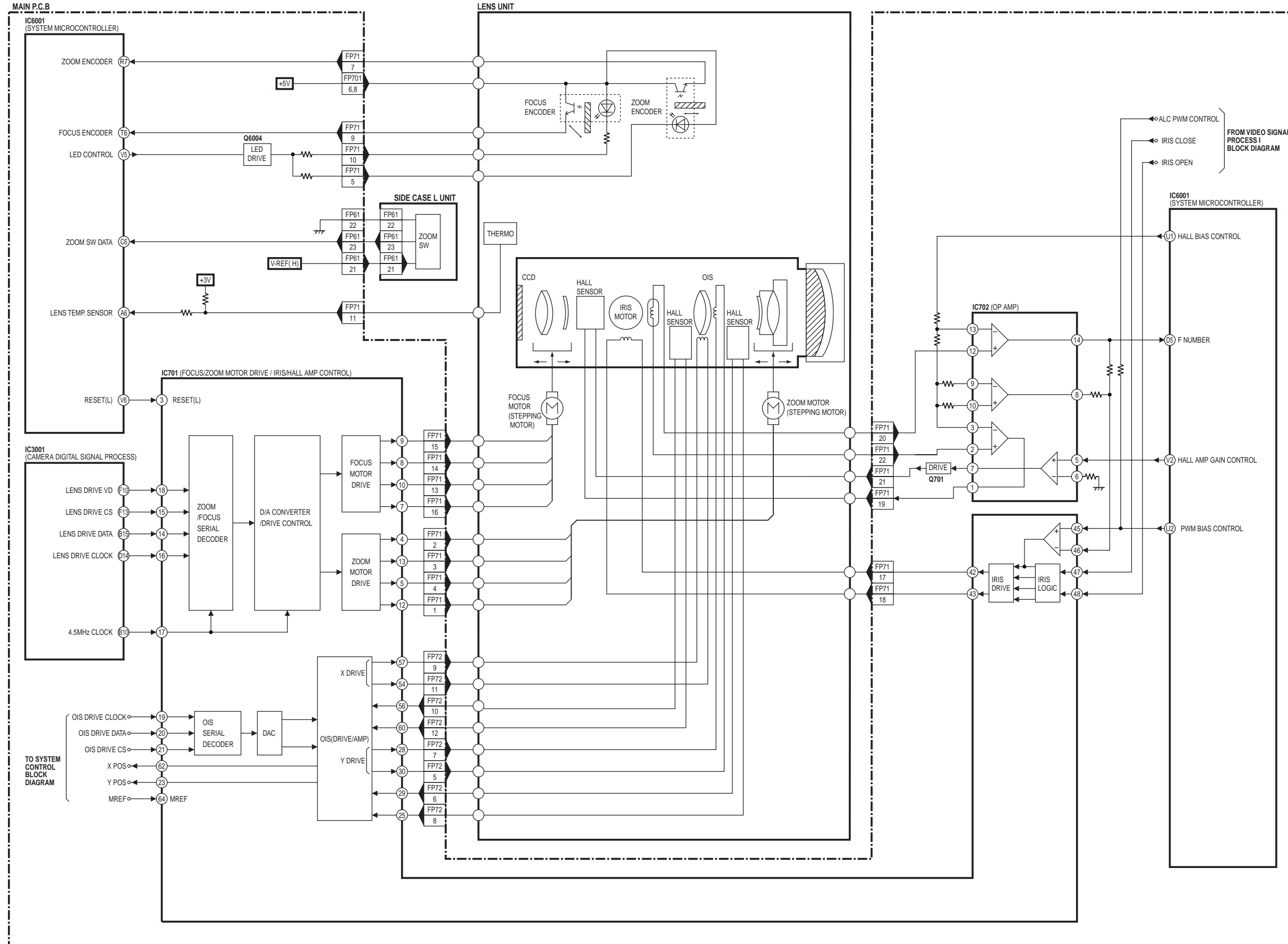
SYSTEM CONTROL BLOCK DIAGRAM
NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

SERVO BLOCK DIAGRAM



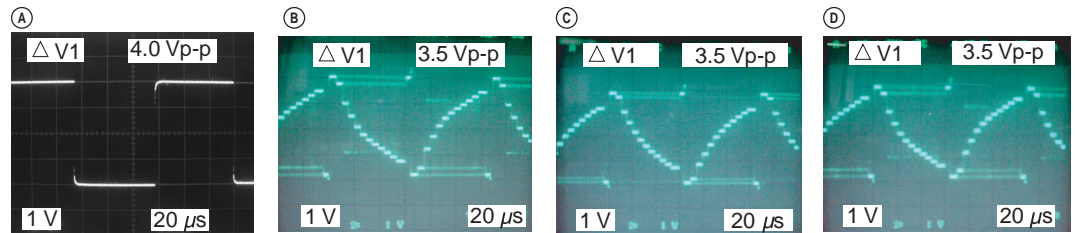
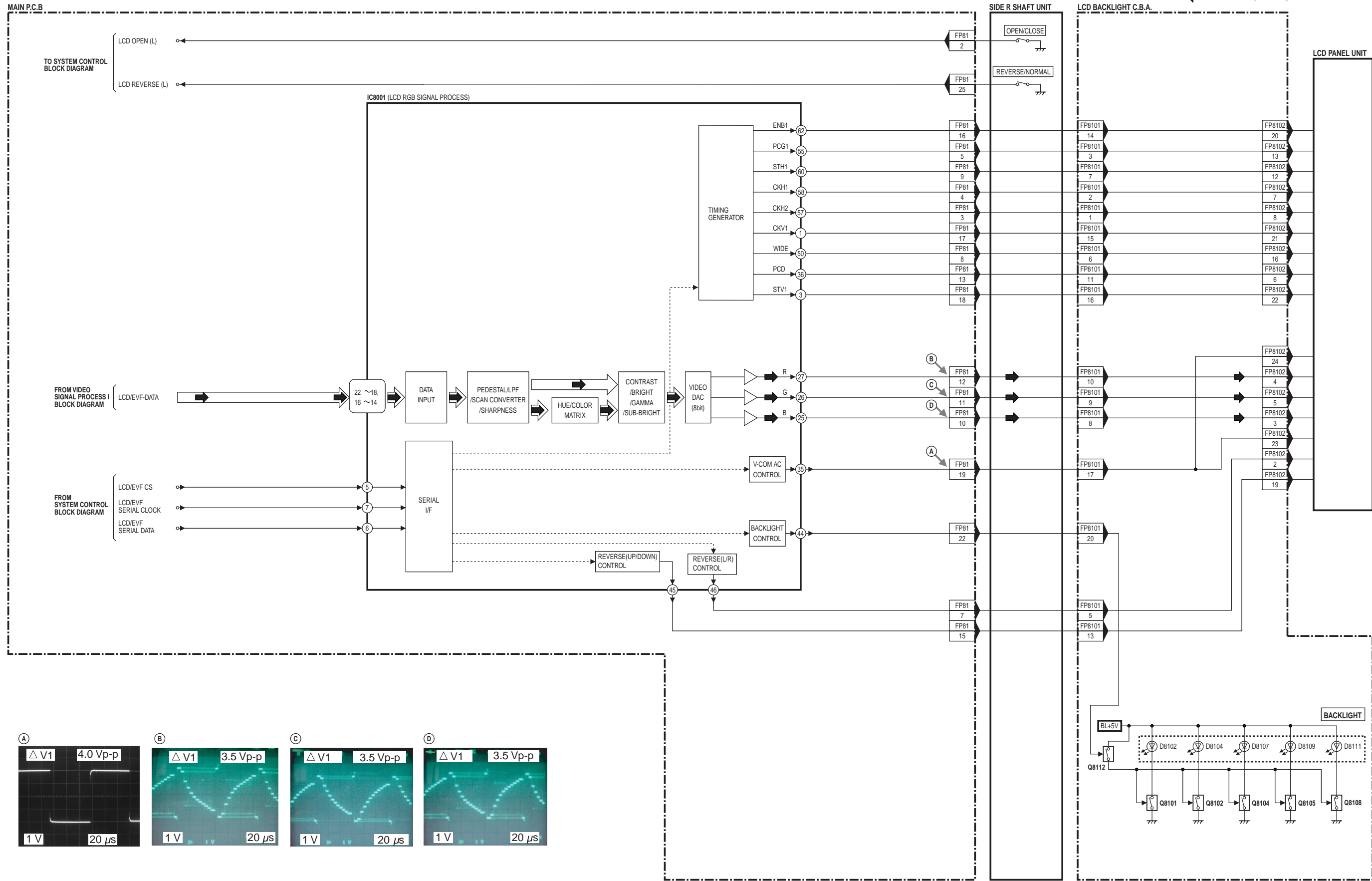
SERVO BLOCK DIAGRAM
 NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

AF BLOCK DIAGRAM



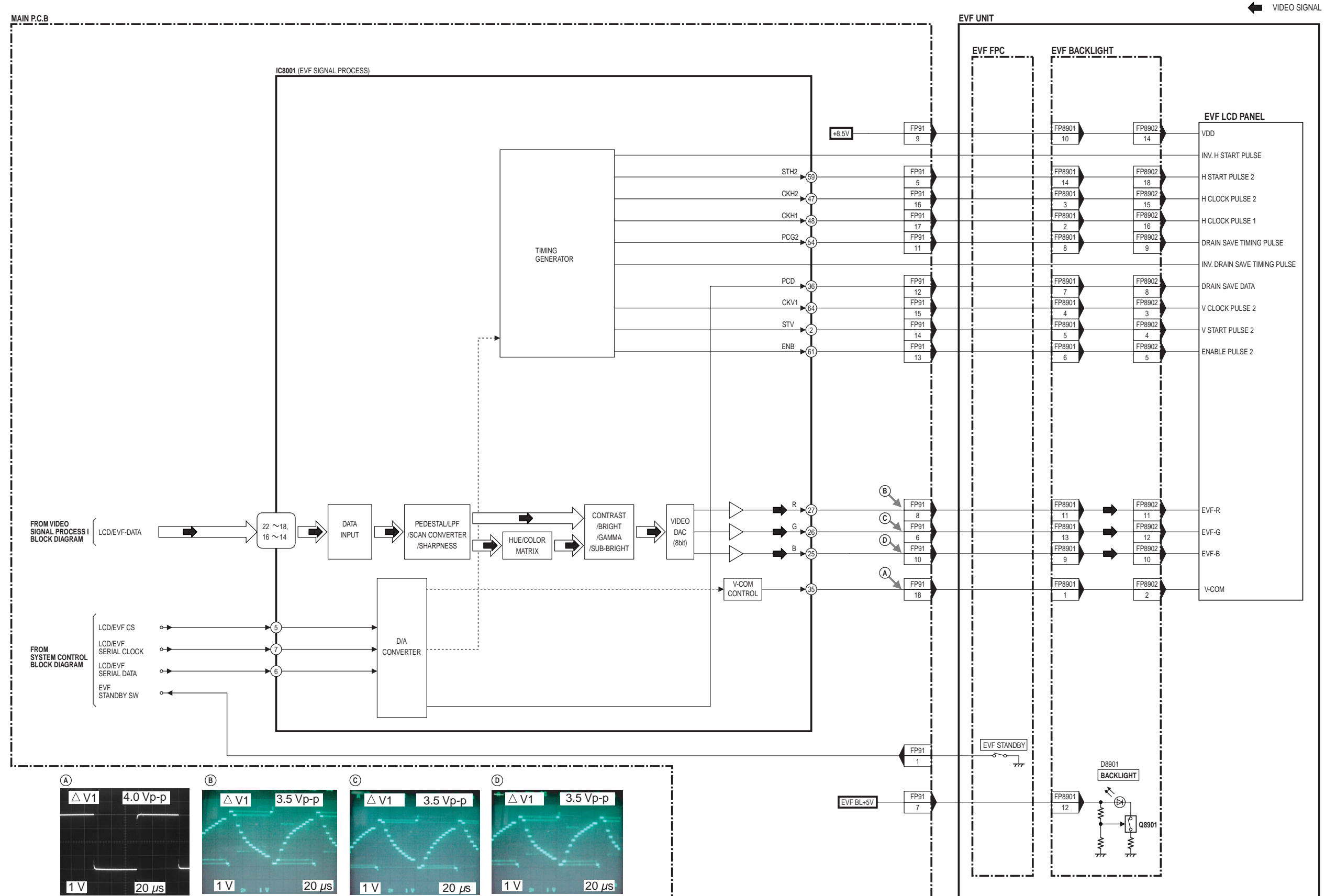
AF BLOCK DIAGRAM
NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

LCD DRIVE BLOCK DIAGRAM



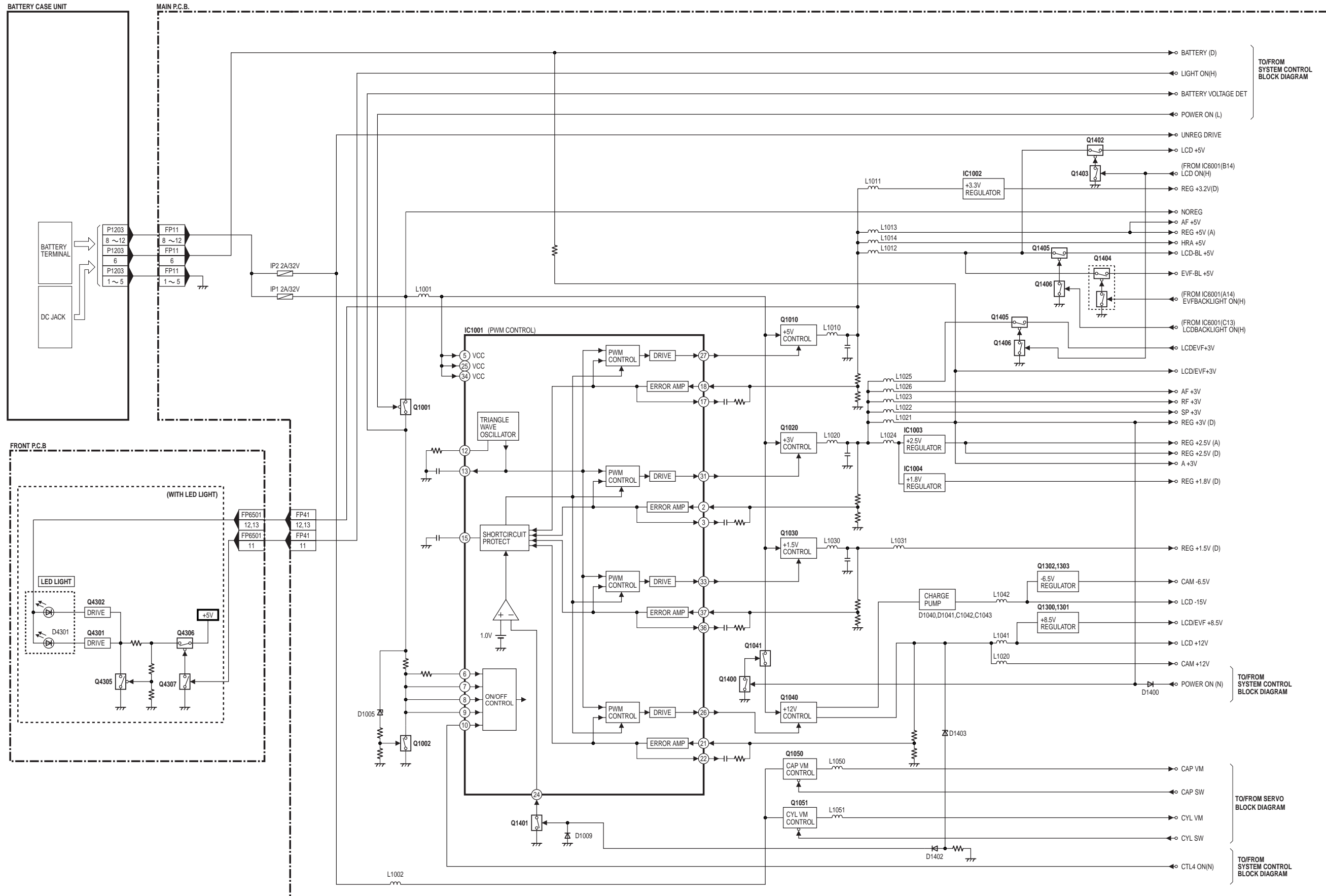
LCD DRIVE BLOCK DIAGRAM
NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

EVF BLOCK DIAGRAM



EVF BLOCK DIAGRAM
NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

POWER SUPPLY BLOCK DIAGRAM




POWER SUPPLY BLOCK DIAGRAM
 NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

4 Schematic Diagrams

4.1. SCHEMATIC DIAGRAM & CIRCUIT BOARD LAYOUT NOTES

1. Important safety notice

Components identified by the sign  have special characteristics important for safety. When replacing any of these components, use only the specified parts.

2. Do not use the part numbers shown on these drawings for ordering.

The correct part number and part value is shown in the parts list, and may be slightly different or amended since this drawing was prepared.


3. Use only original replacement parts:

To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

4. Parts different in shape or size may be used.

However, only interchangeable parts will be supplied as service replacement parts.

5. Test point information

 : Test point with no test pin.

Schematic Diagram Notes

1. Indication for Zener Voltage of Zener Diodes

The Zener Voltages of Zener Diodes are indicated as such on Schematic Diagrams.

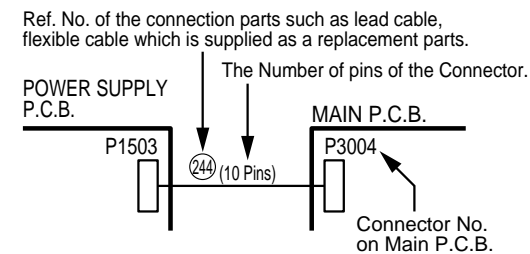
Example:
(6.2V).....Zener Voltage

2. How to identify Connectors

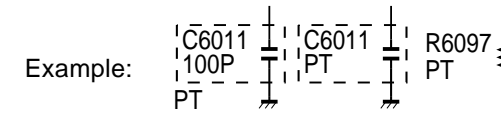
Each connector is labeled with a Connector No. and Pin No. Indicating what it is connected to (its counter part). Use the interconnection schematic diagram to find the connection between associated connectors.

Example:

The connections between two P.C.B.s are shown below.

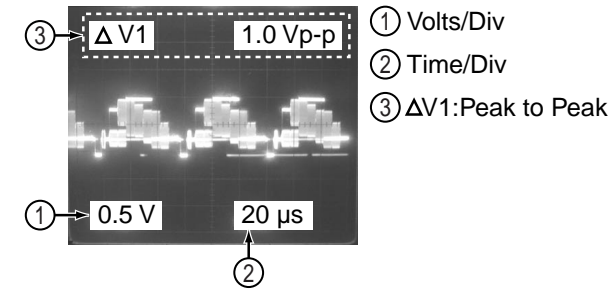


3. Parts marked "PT" are not used in any models included in this service model.



Signal Waveform Note

How to read Signal Waveform



Voltage Chart Note

Voltage Measurement

- a. Color bar signal in SP mode.
- b. ---:Unmeasurable or not necessary to measure.

Circuit Board Layout Note

Circuit Board Layouts show components installed for various models.

For proper parts content for the model you are servicing, please refer to the schematic diagram and parts list.

NOTE:

Circuit Board Layouts include components which are not used.

Model Number Indication

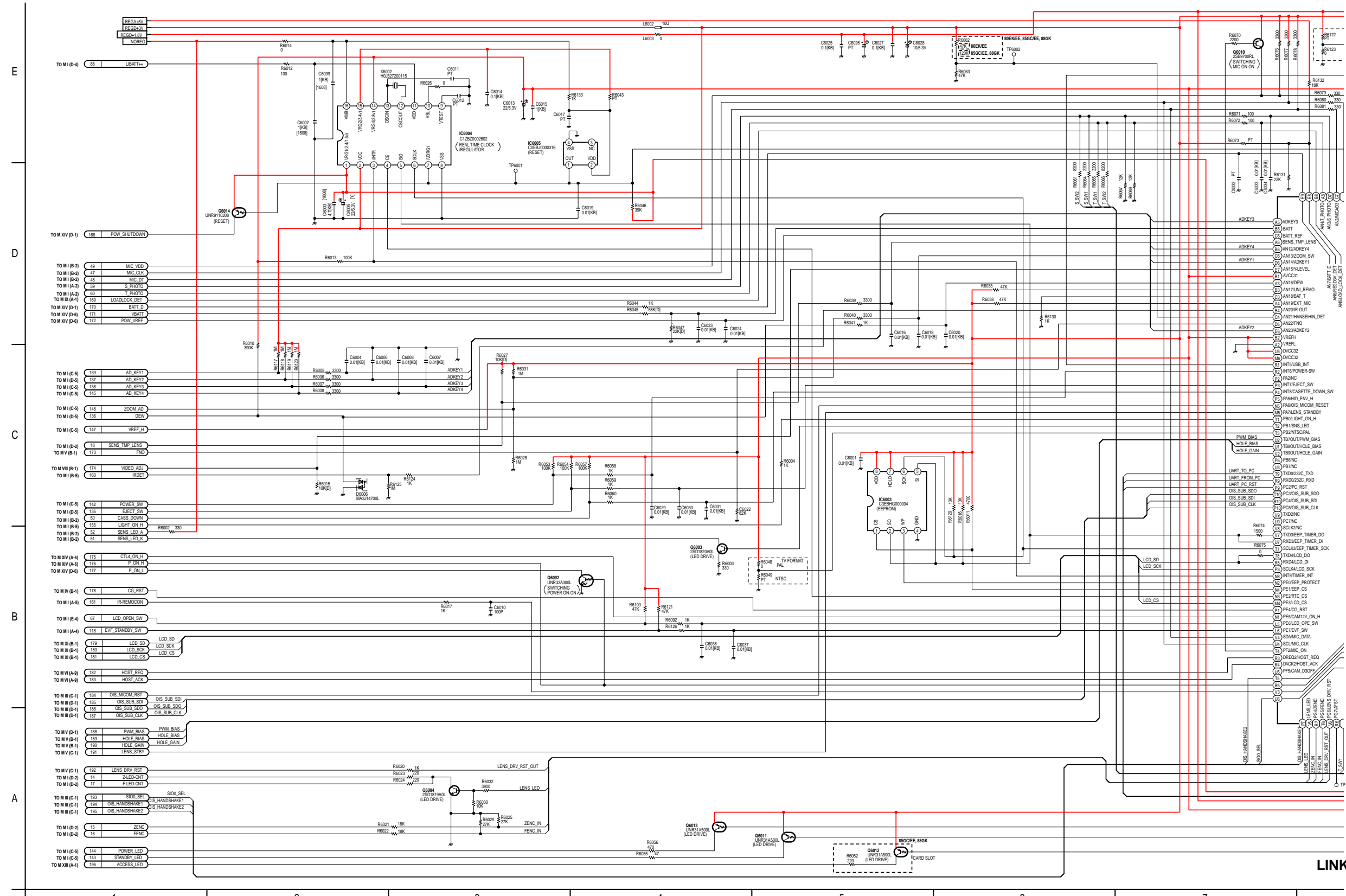
Model numbers are indicated without "NV-GS."

MAIN II SCHEMATIC DIAGRAM (1/2)

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: PARTS MARKED *PT* ARE NOT USED.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.



[LINK TO VOLTAGE CHART](#)

LSJB8361

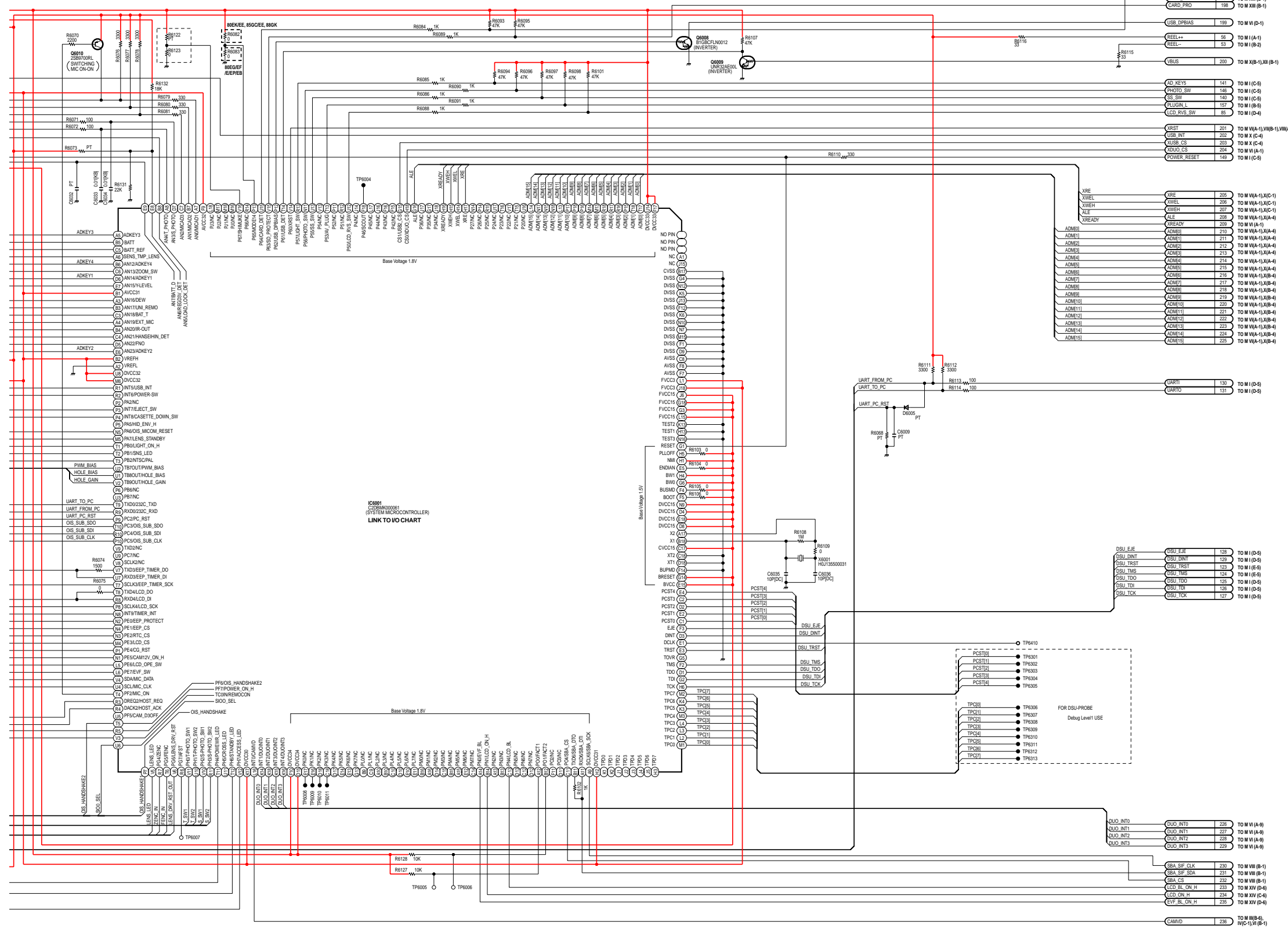
MAIN II SCHEMATIC DIAGRAM (1/2)
 NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

MAIN II SCHEMATIC DIAGRAM (2/2)

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: PARTS MARKED "PT" ARE NOT USED.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.



7 | 8 | 9 | 10 | 11 | 12 | 13

LINK TO VOLTAGE CHART
LSJB8361
MAIN II SCHEMATIC DIAGRAM (2/2)
NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

I/O CHART OF IC6001

Pin No.	I/O	Signal Name	Description
A1	---	NC	(Not used)
A2	I	VREFL	V-Ref (L) (Ground)
A3	I	DEW	Dew Sensor
A4	---	EXT MIC	(Not used)
A5	I	ADKEY3	Key Data 3
A6	I	SENS TMP LENS	Lens Temperature Sensor
A7	I	MICAD1	MIC VDD
A8	I	T PHOTO	Takeup Photo Tr
A9	O	SBA SCK	Sub Audio / SIF Serial Clock
A10	---	NC	(Not used)
A11	I	SBA DTI	Sub Audio / SIF Serial Data
A12	---	FACT1	(Not used)
A13	---	NC	(Not used)
A14	O	EVF BL	EVF Backlight On : High
A15	---	NC	(Not used)
A16	---	NC	(Not used)
A17	O	X2	13.5MHz Oscillation
B1	I	AVCC31	+2.8V
B2	I	VREFH	V-Ref (H) (+2.8V)
B3	---	UNI REMO	(Not used)
B4	I	IR OUT	IR Detect
B5	I	BATT	Battery Voltage Detect
B6	I	ADKEY4	Key Data 4
B7	I	MICAD2	MIC Serial Clock
B8	I	LOAD LOCK DET	Loading Motor Lock Detect
B9	---	NC	(Not used)
B10	---	NC	(Not used)
B11	O	SBA DTO	Sub Audio / SIF Serial Data
B12	---	FACT2	(Not used)
B13	---	NC	(Not used)
B14	O	LCD ON H	LCD On : High
B15	---	NC	(Not used)
B16	---	NC	(Not used)
B17	---	CVSS	Ground
B18	I	X1	13.5MHz Oscillation
C1	---	PCST0	(Not used)
C2	---	PCST3	(Not used)
C3	---	BAT T	(Not used)
C4	---	HANSEIHIN DET	(Not used)
C5	I	BATT REF	V-Ref for Battery
C6	I	ZOOM SW	Zoom Switch Data
C7	I	MICAD3	MIC Serial Data
C8	---	AVSS	Ground
C9	---	NC	(Not used)
C10	---	NC	(Not used)
C11	O	SBA CS	Sub Audio Chip Select
C12	---	NC	(Not used)
C13	O	LCD BL	LCD Backlight On : High
C14	---	NC	(Not used)
C15	---	NC	(Not used)
C16	---	NC	(Not used)
C17	I	CVCC15	+1.5V
C18	---	XT2	(Not used)
D1	---	TDO	(Not used)
D2	---	PCST2	(Not used)
D3	---	DINT	(Not used)
D4	I	DVCC15	+1.5V
D5	I	FNO	F Number
D6	I	ADKEY1	Key Data 1
D7	I	S PHOTO	Supply Photo Tr
D8	I	DVCC15	+1.5V
D9	---	DVSS	Ground
D10	---	NC	(Not used)
D11	---	NC	(Not used)
D12	---	NC	(Not used)
D13	---	NC	(Not used)
D14	---	NC	(Not used)
D15	I	DVCC34	+1.8V
D16	---	NC	(Not used)
D17	---	NC	(Not used)
D18	---	XT1	(Not used)

Pin No.	I/O	Signal Name	Description
E1	---	DCLK	(Not used)
E2	---	PCST1	(Not used)
E3	---	TRST	(Not used)
E4	---	PCST4	(Not used)
E5	---	ENDIAN	(Not used)
E6	I	ADKEY2	Key Data 2
E7	I	Y LEVEL	Video Level
E8	I	REGD3V DET	+3.0V Detect
E9	I	BATT D	Battery Detect
E10	---	NC	(Not used)
E11	---	NC	(Not used)
E12	---	NC	(Not used)
E13	---	NC	(Not used)
E14	---	NC	(Not used)
E15	I	BVCC	+1.5V
E16	---	NC	(Not used)
E17	---	NC	(Not used)
E18	I	DVCC15	+1.5V
F1	---	DVSS	Ground
F2	---	TMS	(Not used)
F3	---	EJE	(Not used)
F4	---	BUSMD	(Not used)
F5	---	BOOT	(Not used)
F7	---	AVSS	Ground
F8	---	AVSS	Ground
F9	---	AVCC32	+2.8V
F10	I	DVCC34	+1.8V
F11	---	NC	(Not used)
F12	---	DVSS	Ground
F14	---	BUVPM	(Not used)
F15	---	NC	(Not used)
F16	---	NC	(Not used)
F17	---	DVCC33	+1.8V
F18	---	SCOUT	(Not used)
G1	I	RESET	Reset : Low
G2	---	TDI	(Not used)
G3	I	FVCC15	+1.5V
G4	---	DVSS	Ground
G5	---	TOVR	(Not used)
G6	---	BW0	(Not used)
G13	---	NC	(Not used)
G14	---	BRESET	(Not used)
G15	O	CS1/USB2 CS	IC401 Chip Select
G16	O	ALE	Latch Enable
G17	---	NC	(Not used)
G18	I	FVCC15	+1.5V
H1	---	NMI	(Not used)
H2	O	DVCC31	+2.8V
H3	---	TPD7	(Not used)
H4	---	BW1	(Not used)
H5	---	PLLOFF	(Not used)
H6	---	TCK	(Not used)
H13	---	TEST1	(Not used)
H14	O	XWEL	Write Enable : Low
H15	O	XWEH	Write Enable : Low
H16	I	XREADY	Ready : Low
H17	O	XRE	Read Enable : Low
H18	O	CS0/XDUO CS	IC3001 Chip Select
J1	---	TPD2	(Not used)
J2	---	TPD3	(Not used)
J3	---	TPD4	(Not used)
J4	---	TPD5	(Not used)
J5	---	TPD6	(Not used)
J6	I	FVCC15	+1.5V
J13	---	DVSS	Ground
J14	---	NC	(Not used)
J15	---	NC	(Not used)
J16	---	NC	(Not used)
J17	---	NC	(Not used)
J18	---	NC	(Not used)
K1	---	TPD0	(Not used)

Pin No.	I/O	Signal Name	Description
K2	---	TPD1	(Not used)
K3	---	TPC5	(Not used)
K4	---	TPC6	(Not used)
K5	---	DVSS	Ground
K6	---	DVSS	Ground
K13	---	TEST2	(Not used)
K14	I	DUJOINT0	IC3001 Interrupt 0
K15	I	DUJOINT2	IC3001 Interrupt 2
K16	I	DUJOINT3	IC3001 Interrupt 3
K17	I	DVCC30	+2.8V
K18	I	DUJOINT1	IC3001 Interrupt 1
L1	I	FVCC3	+2.8V
L2	---	TPC1	(Not used)
L3	---	TPC2	(Not used)
L4	---	TPC3	(Not used)
L5	I	LCD OPE SW	LCD Open Switch
L6	I	EVF SW	EVF Standby Switch
L13	I/O	ADM[11]	Address / Data 11
L14	I/O	ADM[15]	Address / Data 15
L15	I	FVCC15	+1.5V
L16	I	CAMVD	Camera V-sync
L17	---	NC	(Not used)
L18	---	NC	(Not used)
M1	---	TPC0	(Not used)
M2	---	TPC7	(Not used)
M3	---	TPC4	(Not used)
M4	O	LCD CS	LCD Chip Select
M5	O	LENS STANDBY	Lens standby
M6	I	DVCC32	+2.8V
M13	I/O	ADM[6]	Address / Data 6
M14	I/O	ADM[7]	Address / Data 7
M15	---	DVSS	Ground
M16	---	NC	(Not used)
M17	---	NC	(Not used)
M18	---	NC	(Not used)
N1	O	CAM+12V ON H	Camera+12V On : High
N2	O	EPPROTECT	EEPROM Protect
N3	O	RTC CS	Timer Chip Select
N4	O	EPPROTECT	EEPROM Chip Select
N5	O	OIS MICOM RESET	IC6701 Reset
N7	---	DVSS	Ground
N8	I	TIMER INT	Timer Interrupt
N9	I	DVCC15	+1.5V
N10	---	DVSS	Ground
N11	I	PHOTO SW	Photoshot Switch
N12	---	DVSS	Ground
N14	---	NC	(Not used)
N15	I/O	ADM[13]	Address / Data 13
N16	---	TEST3	(Not used)
N17	I/O	ADM[14]	Address / Data 14
N18	I/O	ADM[12]	Address / Data 12
P1	O	CG RST	IC302 Reset : Low
P2	---	NC	(Not used)
P3	I	ELECT SW	Eject Switch
P4	I	CASSETTE DOWN SW	Cassette Down : Low
P5	---	HID ENV H	(Not used)
P6	---	NC	(Not used)
P7	O	OIS HANDSHAKE	Communication control of IC6701
P8	O	LCD SCK	LCD Serial Clock
P9	I	PC RST	PC Reset
P10	O	OIS SUB CLK	OIS Serial Clock
P11	---	NC	(Not used)
P12	O	USB DPBIAS	USB Bias Addition
P13	---	MODE14	(Not used)
P14	---	NC	(Not used)
P15	I/O	ADM[2]	Address / Data 2
P16	I/O	ADM[8]	Address / Data 8
P17	I/O	ADM[10]	Address / Data 10
P18	I/O	ADM[9]	Address / Data 9
R1	I	USB INT	USB Interrupt
R2	I	POWER-SW	Power Switch

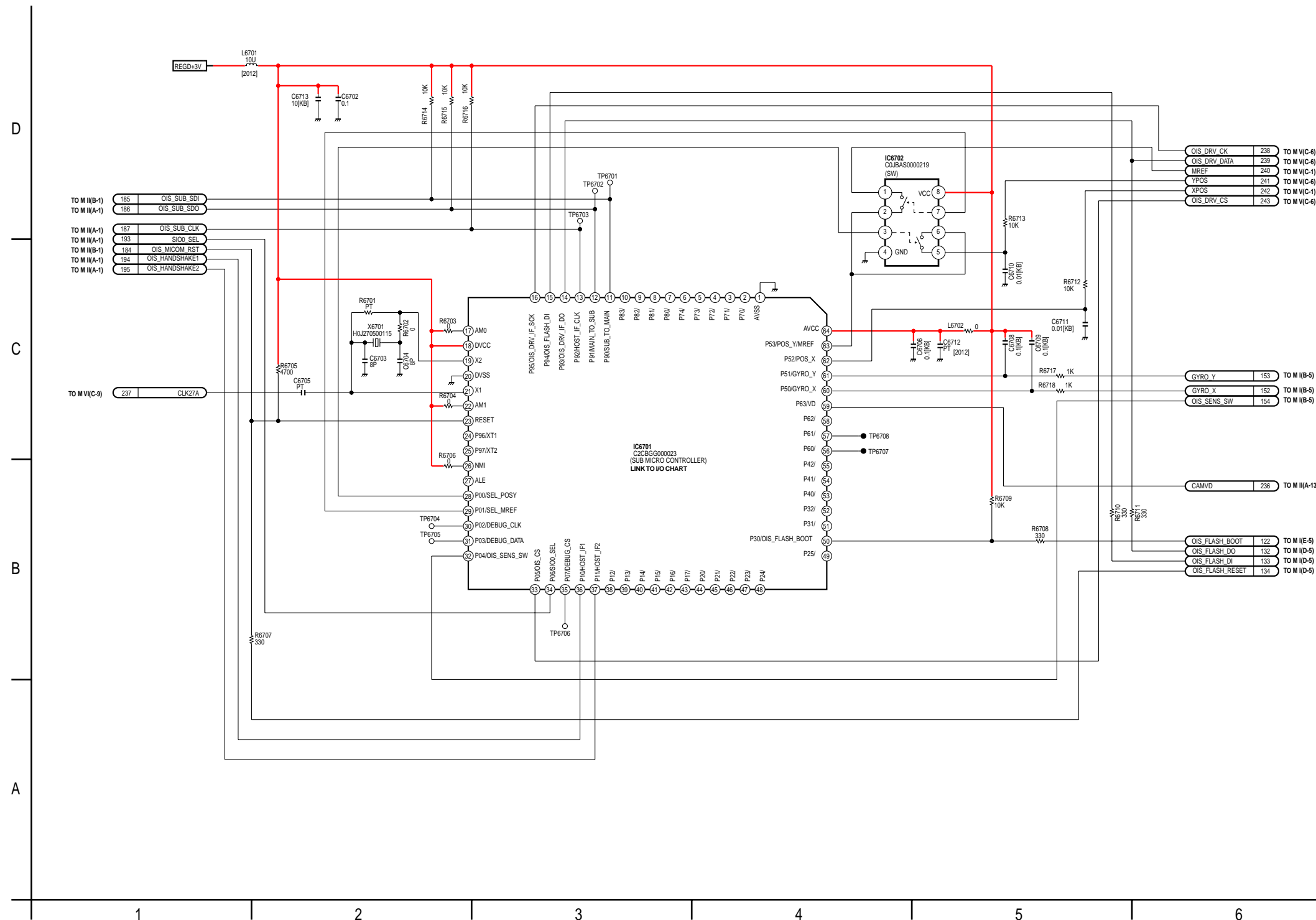
Pin No.	I/O	Signal Name	Description
R3	I	HOST REQ	Request from IC3001
R4	O	HOST ACK	Acknowledge for IC3001
R5	O	POWER ON H	Power On : High
R6	---	AFST	(Not used)
R7	I	ZENC	Zoom Encoder
R8	I	LCD DI	LCD Serial Data
R9	I	232C RXD	RS-232C Received Data
R10	I	OIS SUB SDI	OIS Serial Data
R11	I/O	S-PHOTO SW2	Supply Photo TR Switch 2
R12	---	NC	(Not used)
R13	I	LIGHT SW	Light Switch
R14	---	NC	(Not used)
R15	---	NC	(Not used)
R16	I/O	ADM[3]	Address / Data 3
R17	I/O	ADM[4]	Address / Data 4
R18	I/O	ADM[5]	Address / Data 5
T1	O	LIGHT ON H	Light On : High
T2	O	SENS LED	Sensor LED On : High
T3	---	NTSC/PAL	(Not used)
T4	O	MIC ON	MIC On : Low
T5	O	OIS HANDSHAKE2	Communication control of IC6701
T6	I	FENC	Focus Encoder
T7	O	EPPROTECT	EEPROM / Timer Serial Clock
T8	O	LCD DO	LCD Serial Data
T9	O	232C TXD	RS-232C Transmission Data
T10	O	OIS SUB SDO	OIS Serial Data
T11	O	POWER LED	Power LED On : Low
T12	O	STANDBY LED	Standby LED On : Low
T13	I	AV PLUG	AV Plug In Detect : Low
T14	I	USB DET	USB Detect : Low
T15	---	NC	(Not used)
T16	---	NC	(Not used)
T17	I/O	ADM[0]	Address / Data 0
T18	I/O	ADM[1]	Address / Data 1
U1	O	HOLE BIAS	Hall Bias Control
U2	O	PWM BIAS	PWM Bias Control
U3	---	NC	(Not used)
U4	O	MIC CLK	MIC Serial Clock
U5	---	CAM D3OFF	(Not used)
U6	O	SIO0 SEL	IC6701 chip select
U7	I	EPPROTECT	EEPROM / Timer Serial Data
U8	I	DVCC32	+2.8V
U9	---	NC	(Not used)
U10	I/O	T-PHOTO SW2	Takeup Photo TR Switch 2
U11	---	CROSS LED	(Not used)
U12	I	LCD RVS SW	LCD Reverse : Low
U13	I	SS SW	Start /Stop Switch
U14	I	DVCC33	+1.8V
U15	I	CARD DET	SD Card Detect : Low
U16	---	NC	(Not used)
U17	---	NC	(Not used)
U18	I	DVCC3	+2.8V
V2	O	HOLE GAIN	Hall Amp Gain Control
V3	I	REMOCON	IR Remote Control Data
V4	I/O	MIC DATA	MIC Serial Data
V5	O	LENS LED	LED Control
V6	O	LENS DRV RST	IC701 Reset : Low
V7	O	EPPROTECT	EEPROM Timer Serial Data
V8	---	NC	(Not used)
V9	---	NC	(Not used)
V10	I/O	S-PHOTO SW1	Supply Photo TR Switch 1
V11	I/O	T-PHOTO SW1	Takeup Photo TR Switch 1
V12	O	ACCESS LED	Access LED On : Low
V13	---	NC	(Not used)
V14	O	XRST	Reset : Low
V15	I	SD PROTECT	SD Card Protect : Low
V16	---	SHIMUKE	(Not used)
V17	---	NC	(Not used)

MAIN III SCHEMATIC DIAGRAM

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: PARTS MARKED "PT" ARE NOT USED.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.



I/O CHART OF IC6701

Pin No.	I/O	Signal Name	Description
1	---	AVSS	Ground
2	---	P70	(Not used)
3	---	P71	(Not used)
4	---	P72	(Not used)
5	---	P73	(Not used)
6	---	P74	(Not used)
7	---	P80	(Not used)
8	---	P81	(Not used)
9	---	P82	(Not used)
10	---	P83	(Not used)
11	O	SUB TO MAIN	OIS Serial Data
12	I	MAIN TO SUB	OIS Serial Data
13	I	HOST IF CLK	OIS Serial Clock
14	O	OIS DRV IF DO	OIS Drive Data
15	---	OIS FLASH DI	(Not used)
16	O	OIS DRV IF SCK	OIS Drive Clock
17	---	AM0	(Not used)
18	I	DVCC	+3V
19	O	X2	27MHz Oscillation
20	---	DVSS	Ground
21	I	X1	27MHz Oscillation
22	---	AM1	(Not used)
23	I	RESET	Reset
24	---	XT1	(Not used)
25	---	XT2	(Not used)
26	---	NMI	(Not used)
27	---	ALE	(Not used)
28	O	SEL POSY	Select Position Y
29	O	SEL MREF	Select MREF
30	---	DEBUG CLK	(Not used)
31	---	DEBUG DATA	(Not used)
32	O	OIS SENS SW	OIS Sens Select
33	O	OIS CS	OIS Chip Select
34	I	SIOO SEL	Chip Select
35	---	DEBUG CS	(Not used)
36	I	HOST IF1	Communication control from IC6001
37	I	HOST IF2	Communication control from IC6001
38	---	P12	(Not used)
39	---	P13	(Not used)
40	---	P14	(Not used)
41	---	P15	(Not used)
42	---	P16	(Not used)
43	---	P17	(Not used)
44	---	P20	(Not used)
45	---	P21	(Not used)
46	---	P22	(Not used)
47	---	P23	(Not used)
48	---	P24	(Not used)
49	---	P25	(Not used)
50	---	OIS FLASH BOOT	(Not used)
51	---	P31	(Not used)
52	---	P32	(Not used)
53	---	P40	(Not used)
54	---	P41	(Not used)
55	---	P42	(Not used)
56	---	P60	(Not used)
57	---	P61	(Not used)
58	---	P62	(Not used)
59	I	VD	Camera V-sync
60	I	GYRO X	Gyro Sensor (X)
61	I	GYRO Y	Gyro Sensor (Y)
62	O	POS X	X Position
63	O	POS Y/MREF	Y Position
64	I	AVCC	+3V

LINK TO VOLTAGE CHART

LSJB8361

MAIN III SCHEMATIC DIAGRAM

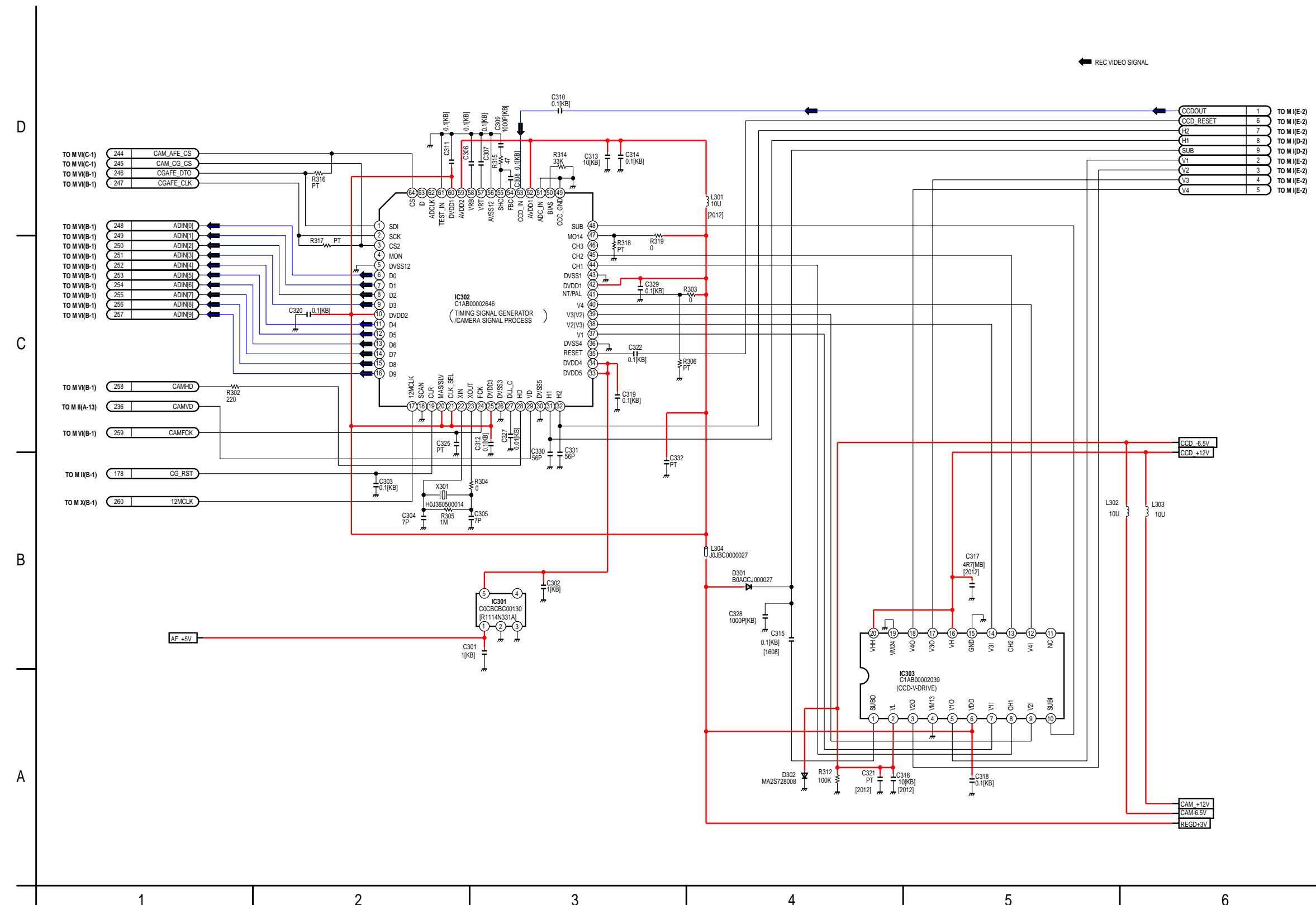
NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

MAIN IV SCHEMATIC DIAGRAM

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: PARTS MARKED "PT" ARE NOT USED.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

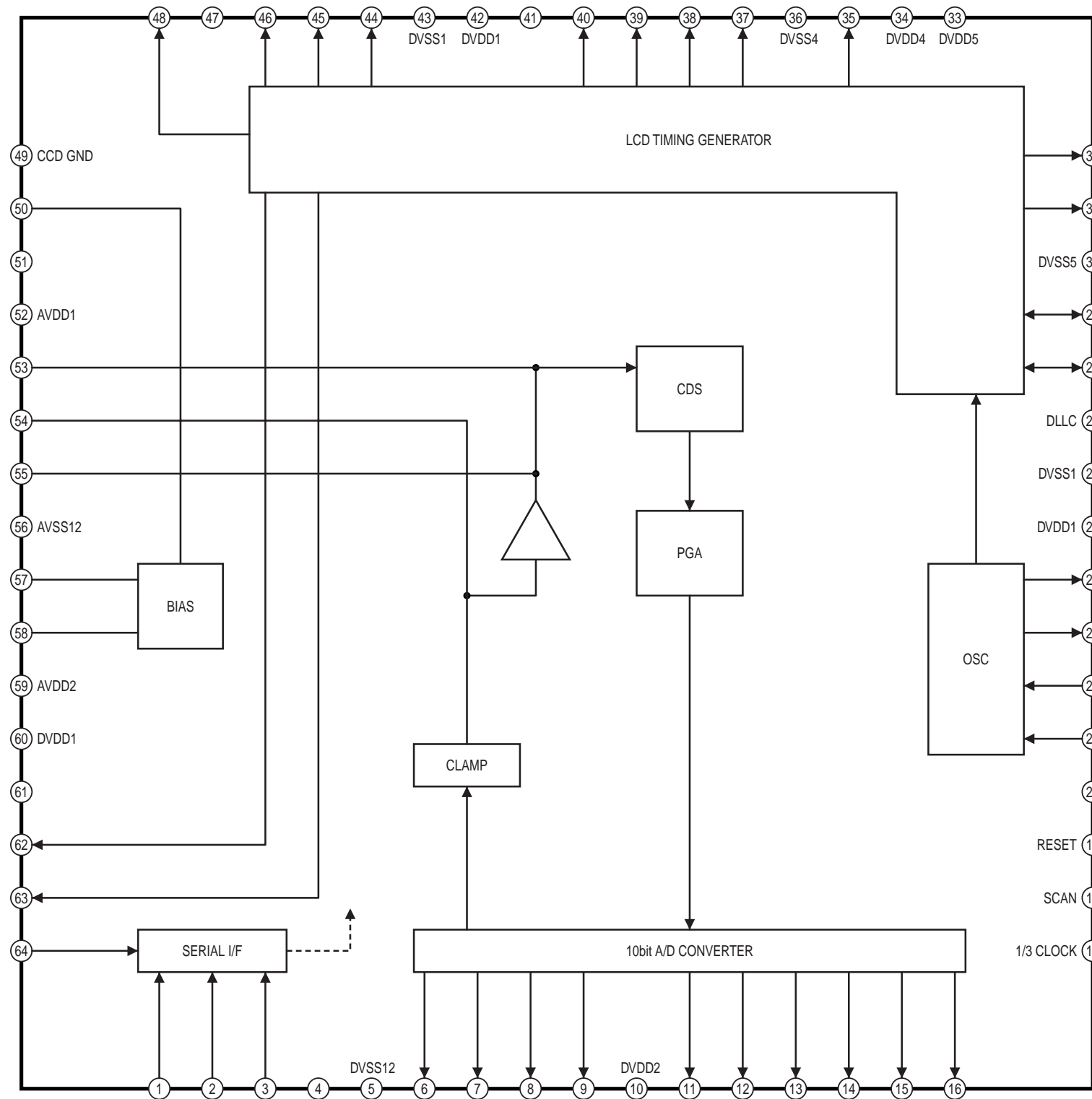


D
C
B
A

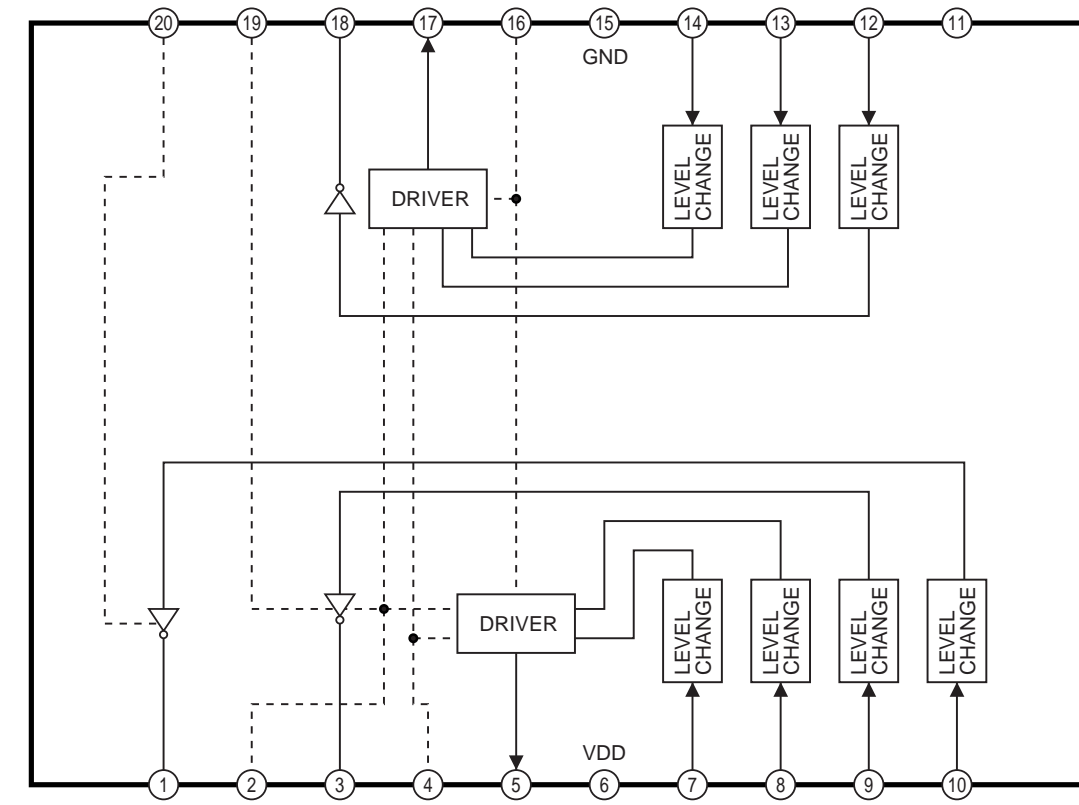
1 2 3 4 5 6

LINK TO VOLTAGE CHART
LSJB8361
MAIN IV SCHEMATIC DIAGRAM
NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

IC302 IC- DETAIL BLOCK DIAGRAM



IC303 IC- DETAIL BLOCK DIAGRAM



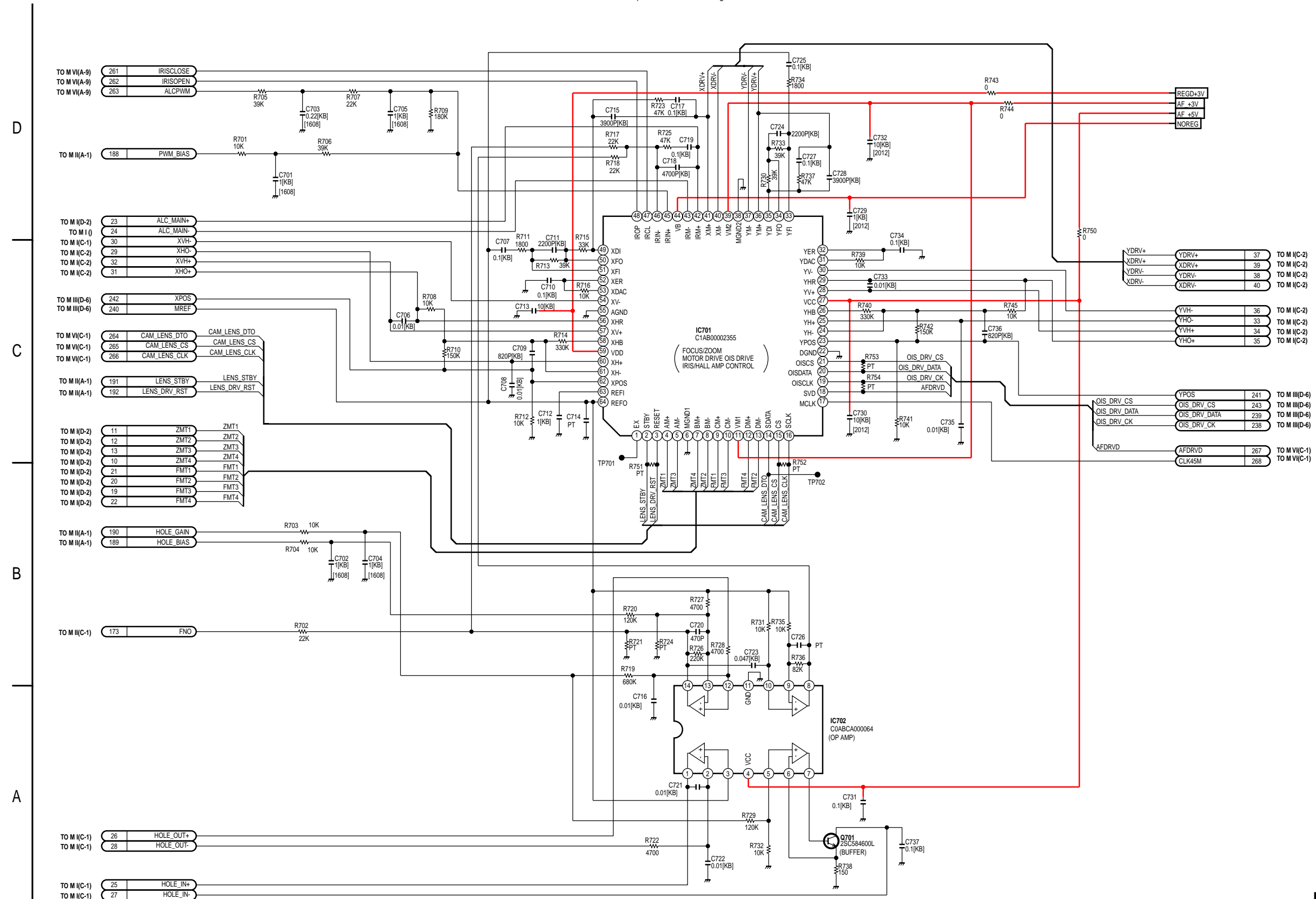
**IC302 IC-DETAIL BLOCK DIAGRAM
IC303 IC-DETAIL BLOCK DIAGRAM
PV-GS80P/PV-GS80PC/PV-GS83P/PV-GS85P/PV-GS85PC**

MAIN V SCHEMATIC DIAGRAM

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

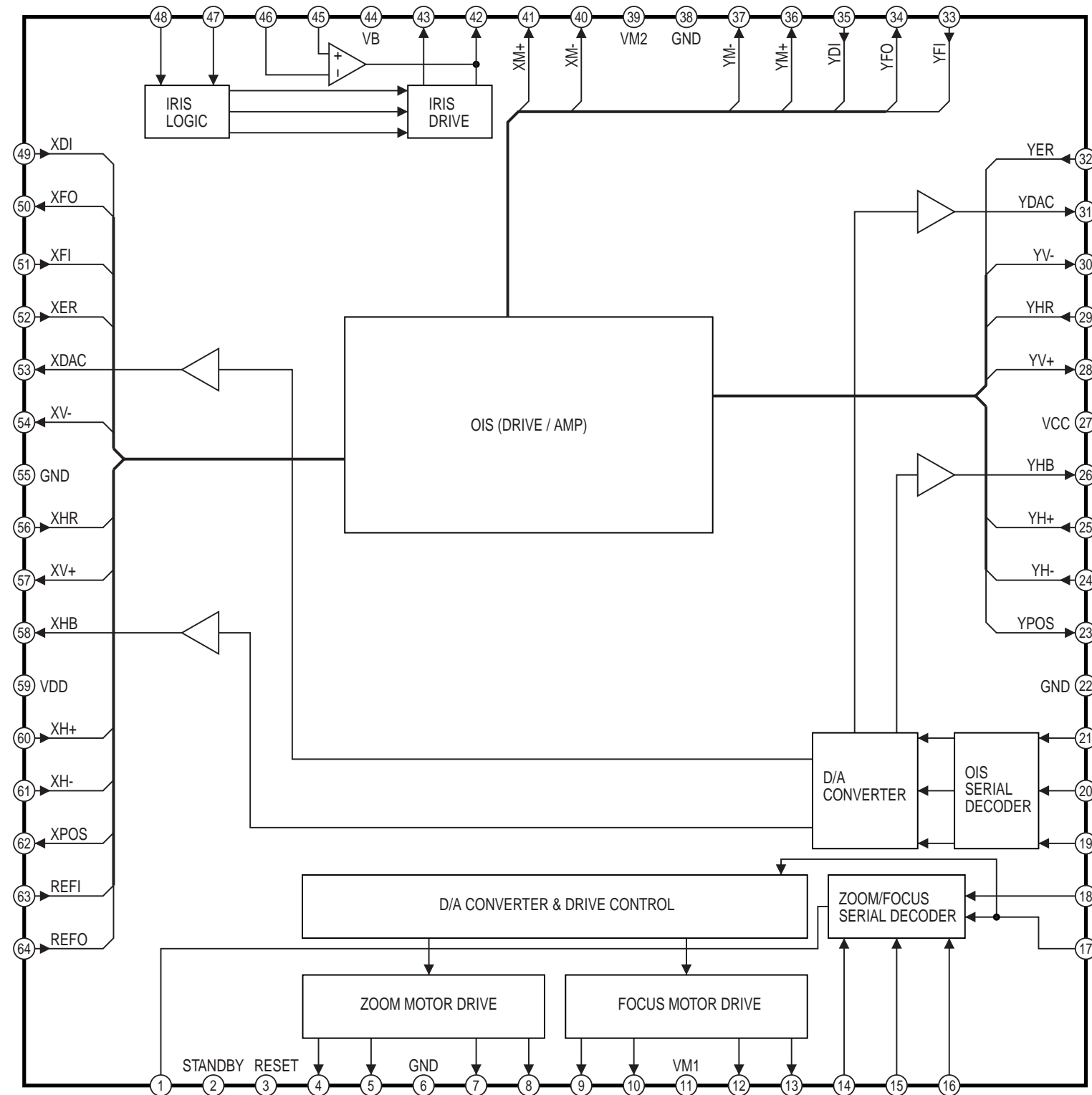
NOTE: PARTS MARKED "PT" ARE NOT USED.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.



LINK TO VOLTAGE CHART
LSJB8361
MAIN V SCHEMATIC DIAGRAM
NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

IC701 IC- DETAIL BLOCK DIAGRAM

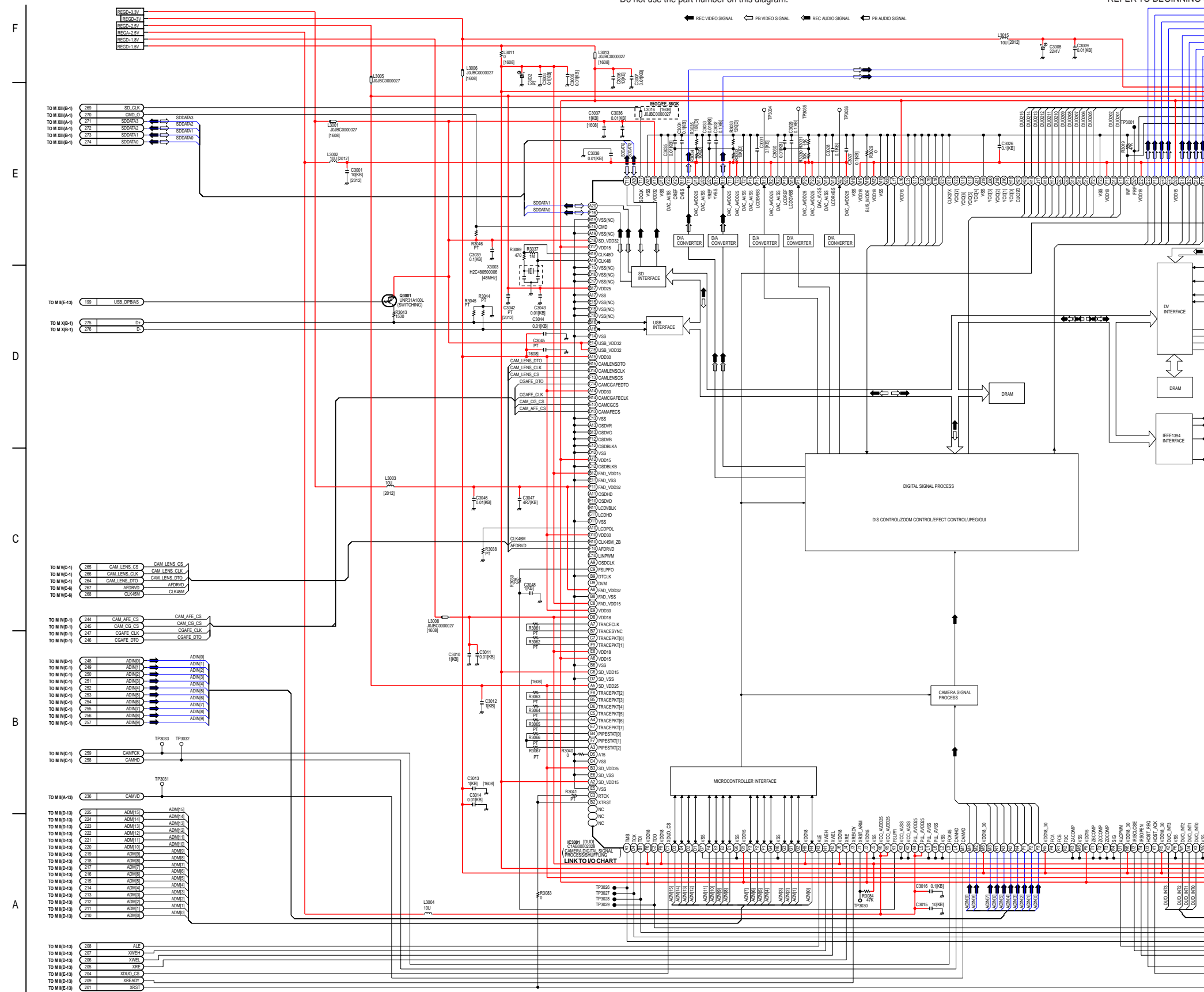


MAIN VI SCHEMATIC DIAGRAM (1/2)

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: PARTS MARKED "PT" ARE NOT USED.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.



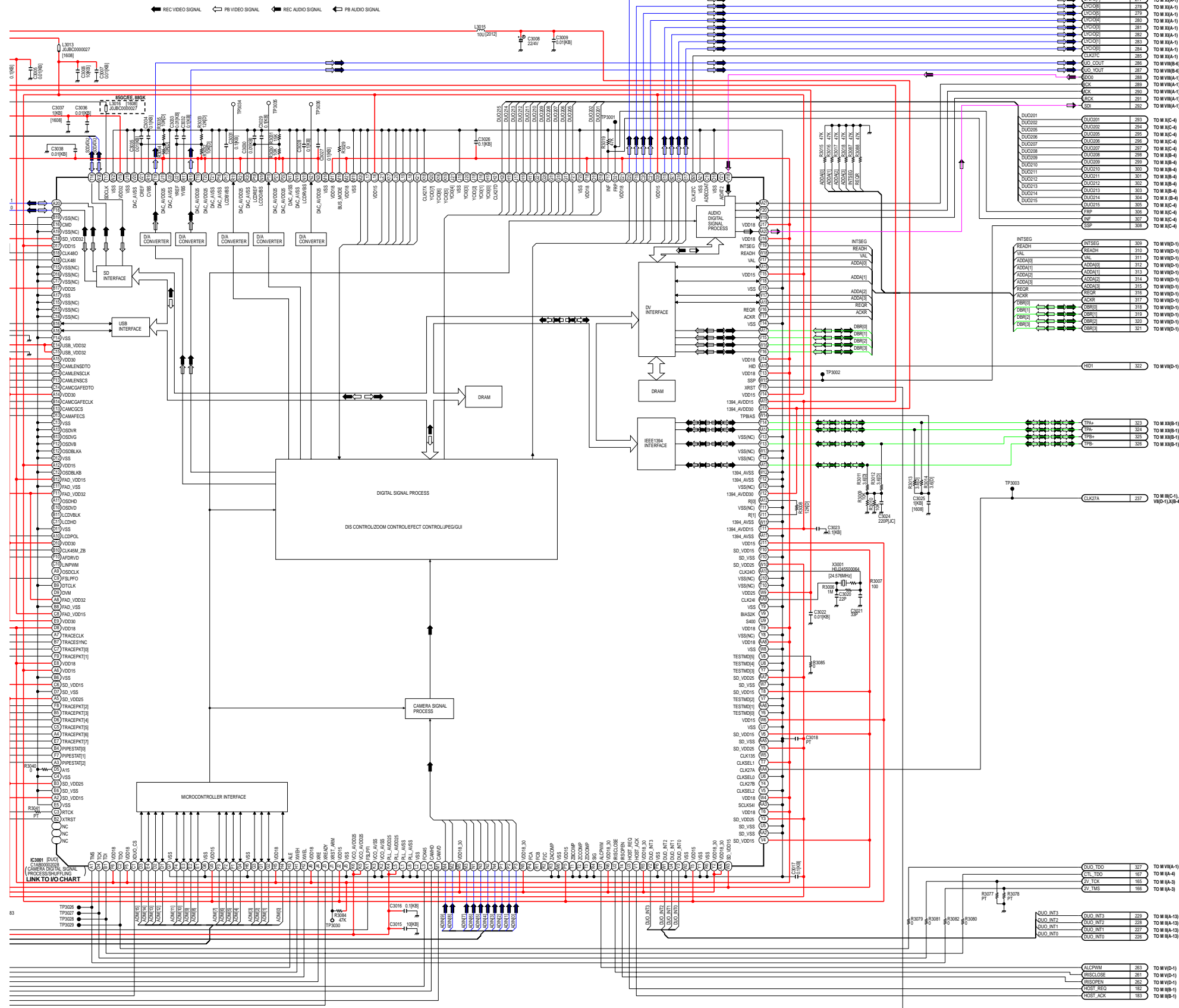
LINK TO VOLTAGE CHART
 LJSB8361
 MAIN VI SCHEMATIC DIAGRAM (1/2)
 NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

MAIN VI SCHEMATIC DIAGRAM (2/2)

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: PARTS MARKED "PT" ARE NOT USED.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.



[LINK TO VOLTAGE CHART](#)
LSJB8361

MAIN VI SCHEMATIC DIAGRAM (2/2)

NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

I/O CHART OF IC3001

Pin No.	I/O	Signal Name	Description
A1	I	TMS	Test Mode Select
A2	I	SD VDD15	+1.5V
A3	---	PIPESTAT (2)	(Not used)
A4	---	TRACEPKT (6)	(Not used)
A5	I	SD VDD25	+2.5V
A6	I	VDD15	+1.5V
A7	---	TRACECLK	(Not used)
A8	I	FAD VDD32	+3.2V
A9	---	OSDCLK	(Not used)
A10	---	LCDPOL	(Not used)
A11	---	OSDHD	(Not used)
A12	I	VDD15	+1.5V
A13	---	OSDVR	(Not used)
A14	I	VDD30	+3.0V
A15	I	VDD30	+3.0V
A16	I/O	USB DM	USB Data (-)
A17	---	VSS	Ground
A18	I	CLK48I	48MHz Clock
A19	---	VSS (NC)	Ground
A20	I/O	DATA (1)	SD Data 1
A21	O	SDCLK	SD Serial Clock
B1	I	TDI	Test Data
B2	I	XTRST	Reset Low
B3	I	SD VDD25	+2.5V
B4	---	PIPESTAT (0)	(Not used)
B5	---	TRACEPKT (3)	(Not used)
B6	---	VSS	Ground
B7	---	TRACESYNC	(Not used)
B8	---	FAD VSS	Ground
B9	---	DTCLK	(Not used)
B10	O	CLK45M ZB	4.5MHz Clock
B11	O	LCDVBLK	LCD V-Sync Pulse
B12	I	FAD VDD15	+1.5V
B13	---	OSDVG	(Not used)
B14	O	CAMCGAFECK	Camera DAC/ TG Serial Clock
B15	O	CAMLENSDIO	Lens Drive Serial Data
B16	I/O	USB DP	USB Data (+)
B17	I	VDD25	+2.5V
B18	O	CLK48O	48MHz Clock
B19	---	VSS (NC)	Ground
B20	---	VSS	Ground
B21	---	DAC AVSS	Ground
C1	I	XDUO CS	IC3001 Chip Select : Low
C2	O	TDO Test	Data
C3	---	RTCK	(Not used)
C4	---	VSS	Ground
C5	---	TRACEPKT (5)	(Not used)
C6	I	SD VDD15	+1.5V
C7	---	TRACEPKT (0)	(Not used)
C8	I	FAD VDD15	+1.5V
C9	O	FSLPFO	FSPLL LPF Out
C10	---	LINPWM	(Not used)
C11	O	LCDHD	LCD H-Sync Pulse
C12	---	OSDBLK	(Not used)
C13	---	VSS	Ground
C14	O	CAMCGAFEDIO	Camera DAC/ TG Serial Data
C15	I	USB VDD32	+3.2V
C16	---	VSS (NC)	Ground
C17	---	VSS (NC)	Ground
C18	I	SD VDD32	+3.2V
C19	I/O	DATA (3)	SD Data 3
C20	I	DAC AVDD25	+2.5V
C21	O	COUT	Chrominance Signal
D1	I/O	ADM (12)	Address / Data 12
D2	I/O	ADM (13)	Address / Data 13
D3	I/O	ADM (15)	Address / Data 15
D4	I	TCK	Test Clock
D5	---	A15	(Not used)
D6	---	TRACEPKT (4)	(Not used)
D7	---	SD VSS	Ground
D8	I	VDD18	+1.8V
D9	---	DVM	(Not used)
D10	I	VDD30	+3.0V

Pin No.	I/O	Signal Name	Description
D11	---	VSS	Ground
D12	---	VSS	Ground
D13	O	CAMAFEC	Camera DAC Chip Select
D14	O	CAMLENSCLK	Lens Drive Serial Clock
D15	---	VSS (NC)	Ground
D16	---	VSS (NC)	Ground
D17	I	VDD15	+1.5V
D18	I/O	DATA (2)	SD Data 2
D19	---	DAC AVSS	Ground
D20	I	CVBS	C Bias
D21	O	YOUT	Luminance Signal
E1	I/O	ADM (8)	Address / Data 8
E2	I/O	ADM (9)	Address / Data 9
E3	I/O	ADM (10)	Address / Data 10
E4	I/O	ADM (14)	Address / Data 14
E5	---	VSS	Ground
E6	---	SD VSS	Ground
E7	---	TRACEPKT (7)	(Not used)
E8	I	VDD18	+1.8V
E9	I	VDD30	+3.0V
E10	---	OSDVD	(Not used)
E11	---	FAD VSS	Ground
E12	---	OSDBLK	(Not used)
E13	O	CAMCGCS	TG Chip Select
E14	I	USB VDD32	+3.2V
E15	---	VSS (NC)	Ground
E16	I/O	CMD	CMD for SD
E17	I	VSD32	+3.2V
E18	I	DAC AVDD25	+2.5V
E19	I	CREF	C Reference Voltage
E20	I	YREF	Y Reference Voltage
E21	I	YVBS	Y Bias
F1	I/O	ADM (5)	Address / Data 5
F2	I/O	ADM (6)	Address / Data 6
F3	I/O	ADM (7)	Address / Data 7
F4	I/O	ADM (11)	Address / Data 11
F5	I	VDD18	+1.8V
F6	I	VDD18	+1.8V
F7	---	PIPESTAT (1)	(Not used)
F8	---	TRACEPKT (2)	(Not used)
F9	---	TRACEPKT (1)	(Not used)
F10	O	AHDRVD	Lens Drive VD Pulse
F11	I	FAD VDD32	+3.2V
F12	---	OSDVB	(Not used)
F13	O	CAMLENSCS	Lens Drive Chip Select
F14	---	VSS	Ground
F15	---	VSS (NC)	Ground
F16	I/O	DATA (0)	SD Data 0
F17	I	DAC AVDD25	+2.5V
F18	---	DAC AVSS	Ground
F19	---	DAC AVSS	Ground
F20	---	LCDBVBS	(Not used)
F21	---	LCDBOUT	(Not used)
G1	I/O	ADM (2)	Address / Data 2
G2	I/O	ADM (1)	Address / Data 1
G3	I/O	ADM (3)	Address / Data 3
G4	I/O	ADM (4)	Address / Data 4
G5	I	VDD15	+1.5V
G6	---	VSS	Ground
G7	---	VSS	Ground
G16	---	VSS	Ground
G17	I	DAC AVDD25	+2.5V
G18	---	DAC AVSS	Ground
G19	I	LCDREF	LCD Reference Voltage
G20	---	LCDGVBS	(Not used)
G21	---	LCDGOUT	(Not used)
H1	I	XWEH	Write Enable Low
H2	I	XWEL	Write Enable Low
H3	I	ALE	Latch Enable
H4	I/O	ADM (0)	Address / Data 0
H5	I	VDD18	+1.8V
H6	---	VSS	Ground
H16	I	DAC AVDD25	+2.5V

Pin No.	I/O	Signal Name	Description
H17	I	DAC AVDD25	+2.5V
H18	I	DAC AVDD25	+2.5V
H19	---	DAC AVSS	Ground
H20	---	LCDRVBS	(Not used)
H21	---	LCDRROUT	(Not used)
J1	---	XRST ARM	(Not used)
J2	I	VDD15	+1.5V
J3	I	XREADY	Ready Low
J4	I	XRE	Read Enable Low
J5	---	VSS	Ground
J6	I	VDD18	+1.8V
J16	---	VSS	Ground
J17	---	DAC AVSS	Ground
J18	I	VDD18	+1.8V
J19	I	VDD18	+1.8V
J20	---	BUS MODE	(Not used)
J21	---	VSS	Ground
K1	I	FSLPFI	FSPLL LPF In
K2	---	VCO AVSS	Ground
K3	---	VCO AVSS	Ground
K4	I	PLL AVDD25	+2.5V
K5	I	VCO AVDD25	+2.5V
K6	I	VCO AVDD25	+2.5V
K16	---	YCIN (6)	(Not used)
K17	---	YCIN (0)	(Not used)
K18	---	YCIN (5)	(Not used)
K19	---	YCIN (7)	(Not used)
K20	I	VDD15	+1.5V
K21	---	YCIN (4)	(Not used)
L1	---	PLL AVSS	Ground
L2	---	VSS	Ground
L3	I	FCK45	4.5MHz Clock
L4	I	CAMHD	Camera HD Pulse
L5	I	PLL AVDD25	+2.5V
L6	---	PLL AVSS	Ground
L16	---	YCIO (7)	(Not used)
L17	---	YCIO (6)	(Not used)
L18	---	YCIN (3)	(Not used)
L19	---	YCIN (2)	(Not used)
L20	---	YCIN (1)	(Not used)
L21	---	CLK27X	(Not used)
M1	I	CAMVD	Camera VD Pulse
M2	I	ADIN (8)	Camera Data 8
M3	I	ADIN (7)	Camera Data 7
M4	I	ADIN (9)	Camera Data 9
M5	I	VDD18 30	+3.0V
M6	---	VSS	Ground
M16	---	YCIO (1)	(Not used)
M17	---	YCIO (2)	(Not used)
M18	---	YCIO (3)	(Not used)
M19	---	YCIO (4)	(Not used)
M20	---	YCIO (5)	(Not used)
M21	---	VSS	Ground
N1	I	ADIN (6)	Camera Data 6
N2	I	ADIN (4)	Camera Data 4
N3	I	ADIN (5)	Camera Data 5
N4	I	ADIN (3)	Camera Data 3
N5	I	VDD18 30	+3.0V
N6	I	VDD18 30	+3.0V
N16	I/O	SHMFID1	USB Data 9
N17	I/O	SHMFID5	USB Data 13
N18	I/O	SHMFID6	USB Data 14
N19	I/O	SHMFID7	USB Data 15
N20	---	YCIO (0)	(Not used)
N21	---	CLK27D	(Not used)
P1	I	ADIN (2)	Camera Data 2
P2	I	ADIN (1)	Camera Data 1
P3	I	ADIN (0)	Camera Data 0
P4	---	FXA	(Not used)
P5	I	VDD15	+1.5V
P6	---	VSS	Ground
P16	I	VDD18	+1.8V
P17	---	VSS	Ground

Pin No.	I/O	Signal Name	Description
P18	I/O	SHMFID0	USB Data 8
P19	I/O	SHMFID2	USB Data 10
P20	I/O	SHMFID4	USB Data 12
P21	I/O	SHMFID3	USB Data 11
R1	---	FCB	(Not used)
R2	---	F2C	(Not used)
R3	---	ZACOMP	(Not used)
R4	---	SIG	(Not used)
R5	I	VDD18 30	+3.0V
R6	---	VSS	Ground
R16	I	VDD15	+1.5V
R17	I	VDD18	+1.8V
R18	O	FRP	Frame pulse
R19	I/O	SHMFIWR	USB Data 5
R20	I/O	SHMFICS	USB Data 7
R21	I/O	SHMFIRS	USB Data 6
T1	---	ZBCOMP	(Not used)
T2	---	ZCCOMP	(Not used)
T3	---	ZDCOMP	(Not used)
T4	O	IRISOPEN	Iris Open Control
T5	I	VDD15	+1.5V
T6	I	VDD18	+1.8V
T7	---	CLKSEL1	(Not used)
T8	I	SD VDD15	+1.5V
T9	I	VDD18	+1.8V
T10	---	VSS (NC)	Ground
T11	I	1394 AVDD15	+1.5V
T12	---	VSS (NC)	Ground
T13	I	VDD18	+1.8V
T14	---	VSS	Ground
T15	I	VDD15	+1.5V
T16	---	VSS	Ground
T17	---	VSS	Ground
T18	O	LYCI04	LCD/EVF Data 4
T19	I	INF	Input frame
T20	I/O	SHMFINT	USB Data 1
T21	I/O	SHMFIRD	USB Data 2
U1	O	ALCPWM	ALC PWM Control
U2	O	IRISCLOSE	Iris Close Control
U3	O	HOST REQ	Request for DMA
U4	O	DUO INT1	IC3001 Interrupt 1
U5	---	SD VSS	Ground
U6	---	CLKSEL0	(Not used)
U7	---	VSS	Ground
U8	---	TESTMD (4)	(Not used)
U9	---	S400	(Not used)
U10	---	VSS (NC)	Ground
U11	I	VDD15	+1.5V
U12	---	VSS (NC)	Ground
U13	I	1394 AVDD30	+3.0V
U14	I	VDD18	+1.8V
U15	---	VSS	Ground
U16	I	VDD18	+1.8V
U17	I	VDD18	+1.8V
U18	O	LYCI05	LCD/EVF Data 5
U19	O	LYCI05	LCD/EVF Data 5
U20	O	LYCI06	LCD/EVF Data 6
U21	O	LYCI07	LCD/EVF Data 7
V1	I	HOST ACK	Acknowledge for DMA
V2	O	DUO INT3	IC3001 Interrupt 3
V3	O	DUO INT0	IC3001 Interrupt 0
V4	I	SD VDD15	+1.5V
V5	---	CLKSEL2	(Not used)
V6	I	SD VDD15	+1.5V
V7	---	TESTMD (2)	(Not used)
V8	---	TESTMD (5)	(Not used)
V9	---	BIAS2K	(Not used)
V10	---	SD VSS	Ground
V11	O	R (1)	Current Limit Resistor (1)
V12	I	1394 AVDD30	+3.0V
V13	---	VSS (NC)	Ground
V14	I	VDD15	+1.5V
V15	I/O	DBR1	Digital Rec/ PB Data 1

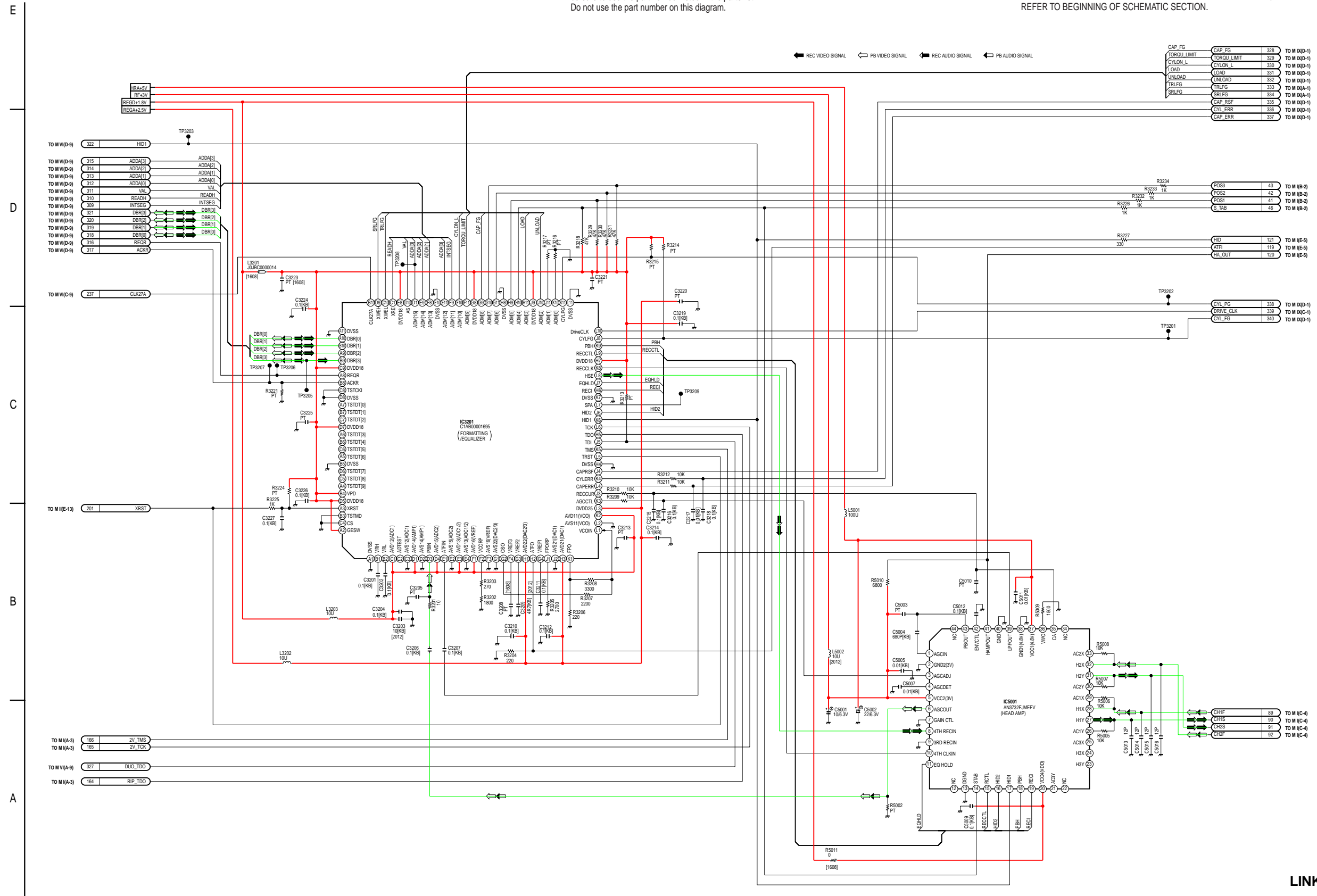
Pin No.	I/O	Signal Name	Description
V16	I/O	REQR	Request for RIP
V17	O	VAL	BUS Control
V18	I	AIDAT1	Digital Audio Data
V19	O	LYCI00	LCD/EVF Data 0
V20	O	LYCI02	LCD/EVF Data 2
V21	O	LYCI03	LCD/EVF Data 3
W1	O	DUO INT2	IC3001 Interrupt 2
W2	---	VSS	Ground
W3	I	SD VDD15	+1.5V
W4	I	VDD18	+1.8V
W5	---	CLK135	(Not used)
W6	I	SD VDD15	+1.5V
W7	---	SD VSS	Ground
W8	---	VSS	Ground
W9	I	VDD25	+2.5V
W10	I	SD VDD25	+2.5V
W11	---	1394 AVSS	Ground
W12	---	1394 AVSS	Ground
W13	---	VSS (NC)	Ground
W14	I/O	TPBIAS	Transaction Bias
W15	---	SSP	(Not used)
W16	I/O	DBR2	Digital Rec/ PB Data 2
W17	I/O	ADDA (2)	Address/ Data 2
W18	O	READH	BUS Control
W19	O	DOLRCK	Digital Audio L/R Clock
W20	---	ADECOAT	(Not used)
W21	O	CLK27C	27MHz Clock
Y1	---	VSS	Ground
Y2	I	VDD18 30	+3.0V
Y3	I	SD VDD25	+2.5V
Y4	---	CLK27B	(Not used)
Y5	I	SD VDD25	+2.5V
Y6	---	TESTMD (0)	(Not used)
Y7	---	TESTMD (3)	(Not used)
Y8	---	VSS (NC)	Ground
Y9	---	VSS	Ground
Y10	I	SD VDD15	+1.5V
Y11	---	VSS (NC)	Ground
Y12	---	1394 AVSS	Ground
Y13	I/O	TPBP	Transaction Data B (+)
Y14	I/O	TPAP	Transaction Data A (+)
Y15	I	XRST	Reset Low
Y16	I/O	DBR3	Digital Rec/ PB Data 3
Y17	O	ACKR	Acknowledge for RIP
Y18	I/O	ADDA (1)	Address/ Data 1
Y19	I/O	INTSEG	Interrupt signal for Servo
Y20	O	DOMCK	Digital Audio Master Clock
Y21	---	AIDAT2	(Not used)
AA1	I	VDD18 30	+3.0V
AA2	---	SD VSS	Ground
AA3	---	SCLK54I	(Not used)
AA4	O	CLK27A	27MHz Clock
AA5	---	SD VSS	Ground
AA6	---	TESTMD (1)	(Not used)
AA7	I	SD VDD25	+2.5V
AA8	I	VDD18	+1.8V
AA9	I	CLK24I	24.576MHz Clock
AA10	O	CLK24O	24.576MHz Clock
AA11	---	1394 AVSS	Ground
AA12	I	R (0)	Current Limit Resistor (0)
AA13	I/O	TPBN	Transaction Data B (-)
AA14	I/O	TPAN	Transaction Data A (-)
AA15	I	1394 AVDD15	+1.5V
AA16	I	HID	Head Switch Pulse
AA17	I/O	DBR0	Digital Rec/ PB Data 0
AA18	I/O		

MAIN VII SCHEMATIC DIAGRAM

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: PARTS MARKED "PT" ARE NOT USED.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.



CAP_FG	CAP_FG	329	TO M (XD-1)
TORQU_LIMIT	TORQU_LIMIT	329	TO M (XD-1)
CYLON_L	CYLON_L	330	TO M (XD-1)
LOAD	LOAD	331	TO M (XD-1)
UNLOAD	UNLOAD	332	TO M (XD-1)
TRLFG	TRLFG	333	TO M (XA-1)
SRLFG	SRLFG	334	TO M (XA-1)
CAP_RSF	CAP_RSF	335	TO M (XD-1)
CYL_ERR	CYL_ERR	336	TO M (XD-1)
CAP_ERR	CAP_ERR	337	TO M (XD-1)

POS3	43	TO M (B-2)
POS2	42	TO M (B-2)
POS1	41	TO M (B-2)
S_TAB	40	TO M (B-2)

HID	121	TO M (E-5)
ATFI	119	TO M (E-5)
HA_OUT	120	TO M (E-5)

CYL_PG	338	TO M (XD-1)
DRIVE_CLK	339	TO M (XD-1)
CYL_FG	340	TO M (XD-1)

CH1F	89	TO M (C-4)
CH1S	90	TO M (C-4)
CH2S	91	TO M (C-4)
CH2F	92	TO M (C-4)

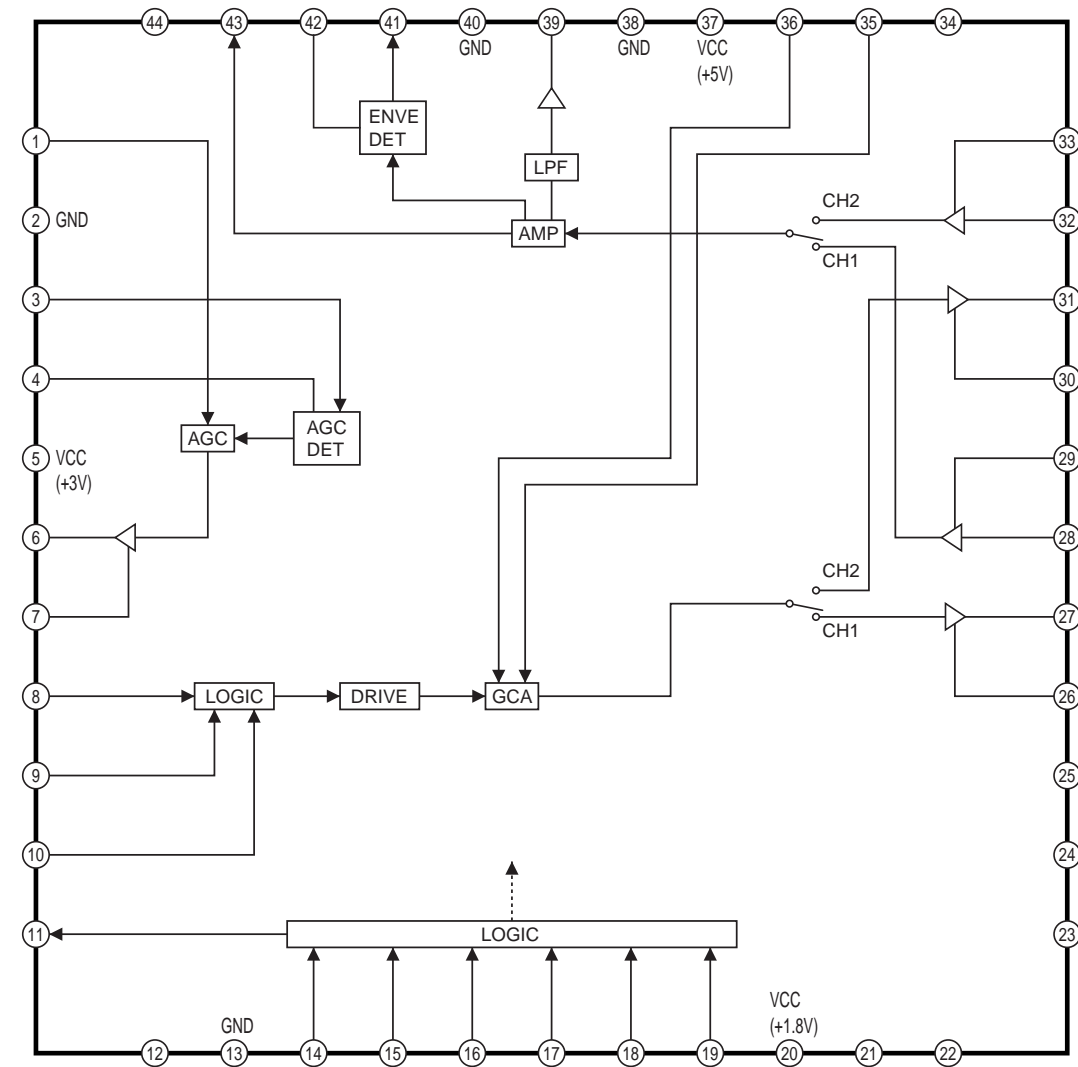
LINK TO VOLTAGE CHART

I/O CHART OF IC3201

Pin No.	I/O	Signal Name	Description
A1	-	DVSS	Ground
A2	-	GESW	(Not used)
A3	I	XRST	Reset : low
A4	-	TSTD1[9]	(Not used)
A5	-	TSTD1[6]	(Not used)
A6	-	TSTD1[3]	(Not used)
A7	-	TSTD1[0]	(Not used)
A8	O	REQR	Request of R10
A9	I/O	DVR[2]	Digital Rec/PB data (2)
A10	I/O	DVR[0]	Digital Rec/PB data (0)
A11	-	DVSS	Ground
B1	-	VRH	V-ref : high
B2	-	VRL	V-ref : low
B3	-	TSTMD	(Not used)
B4	I	VPD	+1.8V
B5	-	DVSS	Ground
B6	-	TSTD1[4]	(Not used)
B7	-	TSTD1[1]	(Not used)
B8	I	ACKR	Acknowledge for R10
B9	I/O	DVR[3]	Digital Rec/PB data (3)
B10	I/O	DVR[1]	Digital Rec/PB data (1)
B11	I	CLK27A	27MHz clock
C1	I	AVD12 (ADC1)	+1.8V
C2	-	ADTEST	Test pin
C3	-	AVS12 (ADC1)	Ground
C4	-	CS	(Not used)
C5	-	TSTD1[8]	(Not used)
C6	-	TSTD1[5]	(Not used)
C7	-	TSTD1[2]	(Not used)
C8	-	TSTCKI	(Not used)
C9	I	DVDD18	+1.8V
C10	I	XWEL	Write enable
C11	I	XRE	Read enable
D1	I	AVD14 (AMP1)	+1.8V
D2	-	AVS14 (AMP1)	Ground
D3	I	PBIN	PB data input (+)
D4	I	AVD15 (ADC2)	+1.8V
D5	I	DVDD18	+1.8V
D6	-	TSTD1[7]	(Not used)
D7	I	DVDD18	+1.8V
D8	-	DVSS	Ground
D9	I	XWEH	Write enable
D10	I	AS	Address strobe
D11	I/O	ADM[15]	Address/data 15
E1	I	ATFIN	ATF input
E2	-	AVS15 (ADC2)	Ground
E3	I	AVD13 (ADC1/2)	+1.8V
E4	-	AVS13 (ADC1/2)	Ground
E8	I	DVDD18	+1.8V
E9	I/O	ADM[14]	Address/data 14
E10	-	DVSS	Ground
E11	I/O	ADM[12]	Address/data 12
F1	I	AVD16 (VREF)	+1.8V
F2	-	VCORP	VCO reference resistor
F3	-	AVS16 (VREF)	Ground
F4	-	VREF3	V-ref3

Pin No.	I/O	Signal Name	Description
F8	I/O	ADM[13]	Address/data 13
F9	I/O	ADM[11]	Address/data 11
F10	I/O	ADM[10]	Address/data 10
F11	I/O	ADM[9]	Address/data 9
G1	-	AVS22 (DAC2/3)	Ground
G2	O	OSO	Offset output
G3	-	VREF2	V-ref2
G4	-	VREF1	V-ref1
G8	I	DVDD18	+1.8V
G9	I/O	ADM[8]	Address/data 8
G10	I/O	ADM[7]	Address/data 7
G11	I/O	ADM[6]	Address/data 6
H1	I	AVD22 (DAC2/3)	+1.8V
H2	O	ATF0	ATF output
H3	I	AVD21 (DAC1)	+1.8V
H4	-	DVSS	Ground
H5	O	TDO	Test data In of JTAG
H6	O	RECI	Rec on/off control
H7	I	DVDD18	+1.8V
H8	-	DVSS	Ground
H9	I/O	ADM[5]	Address/data 5
H10	I/O	ADM[4]	Address/data 4
H11	I/O	ADM[3]	Address/data 3
J1	O	FPORP	Frequency Phase out (+)
J2	-	AVS21 (DAC1)	Ground
J3	O	RECCUR	Rec current control
J4	O	CAPRSF	Capstan motor Reverse(H)/Stop(M)/Forward(L)
J5	I	TDI	Test data out of JTAG
J6	O	HID2	Head switch pulse 2
J7	I	EQHLD	Equalizer hold
J8	I	CYLFG	Cylinder FG head
J9	I	ADD18	+1.8V
J10	I/O	ADM[2]	Address/data 2
J11	-	ADM[1]	(Not used)
K1	-	FRP	(Not used)
K2	I	AVD11 (VCO)	+1.8V
K3	O	AGCCTL	AGC control
K4	O	CYLERR	Cylinder error
K5	I	TMS	Test mode of JTAG
K6	O	HID1	Head switch pulse 1
K7	-	DVSS	Ground
K8	O	RECCLK	Rec clock
K9	O	PBH	PB mode : high
K10	-	ADM[0]	(Not used)
K11	I	CYLPG	Cylinder PG head
L1	I	VCOIN	VCO input
L2	-	AVS11 (VCO)	Ground
L3	I	DVDD25	+2.5V
L4	O	CAPERR	Capstan error
L5	I	TRST	Reset : low
L6	I	TCK	Test clock of JTAG
L7	O	SPA	Sample pulse for ATF
L8	O	HSE	Rec data
L9	O	RECCTL	Rec control
L10	O	DriveCLK	Drive clock
L11	-	DVSS	Ground

IC5001 IC- DETAIL BLOCK DIAGRAM

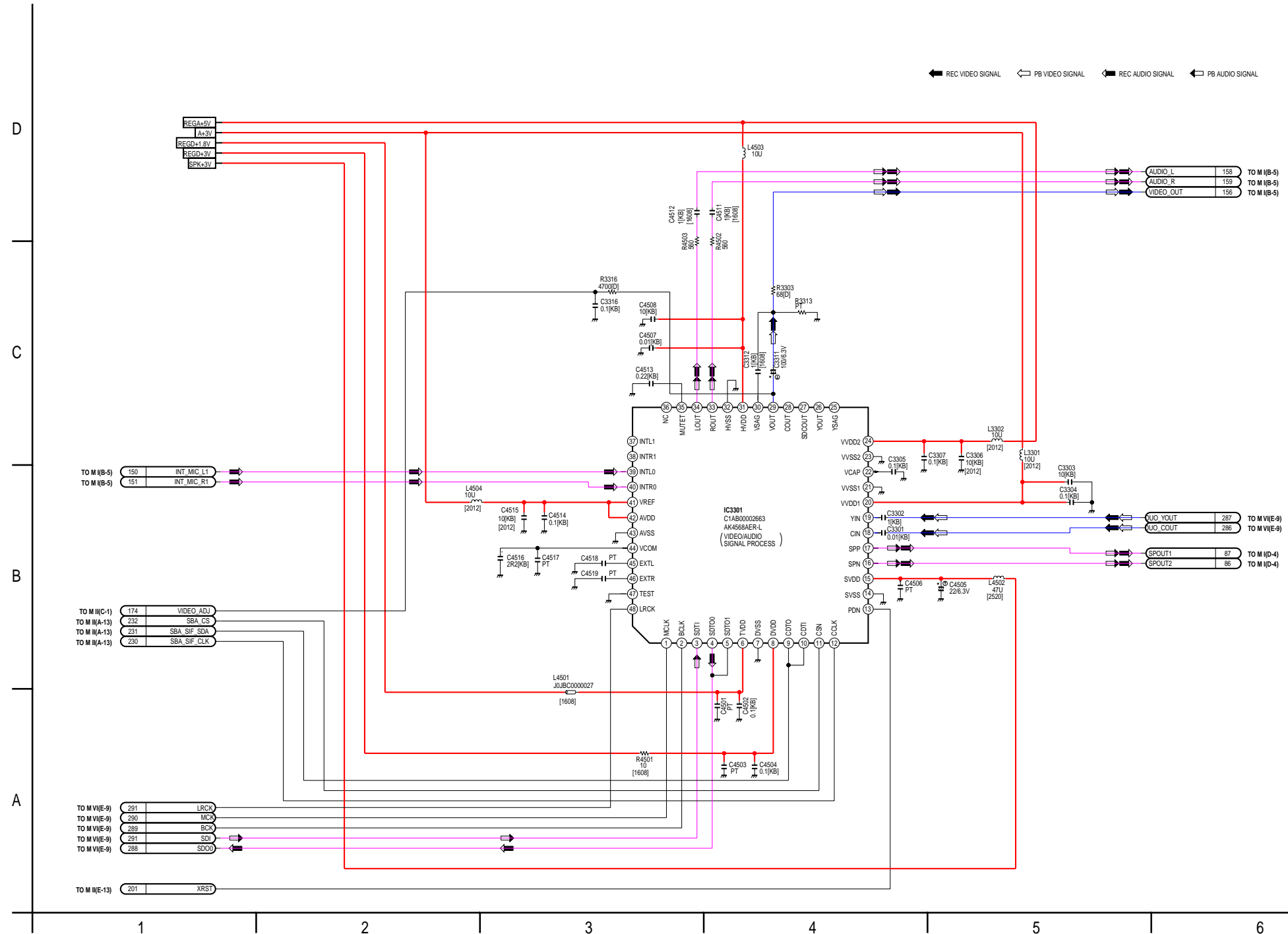


MAIN VIII SCHEMATIC DIAGRAM

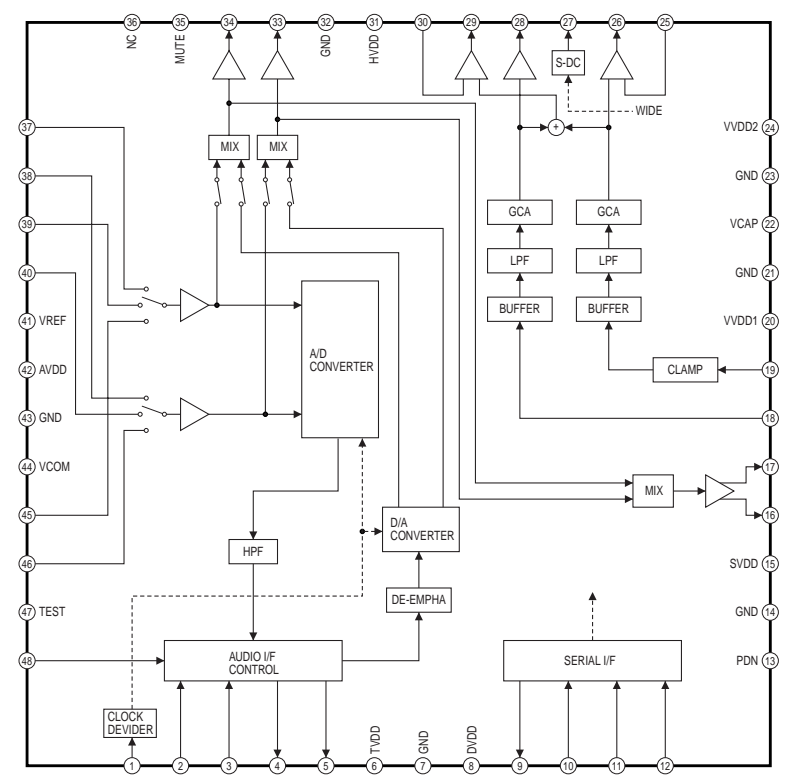
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: PARTS MARKED "PT" ARE NOT USED.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.



IC3301 IC- DETAIL BLOCK DIAGRAM



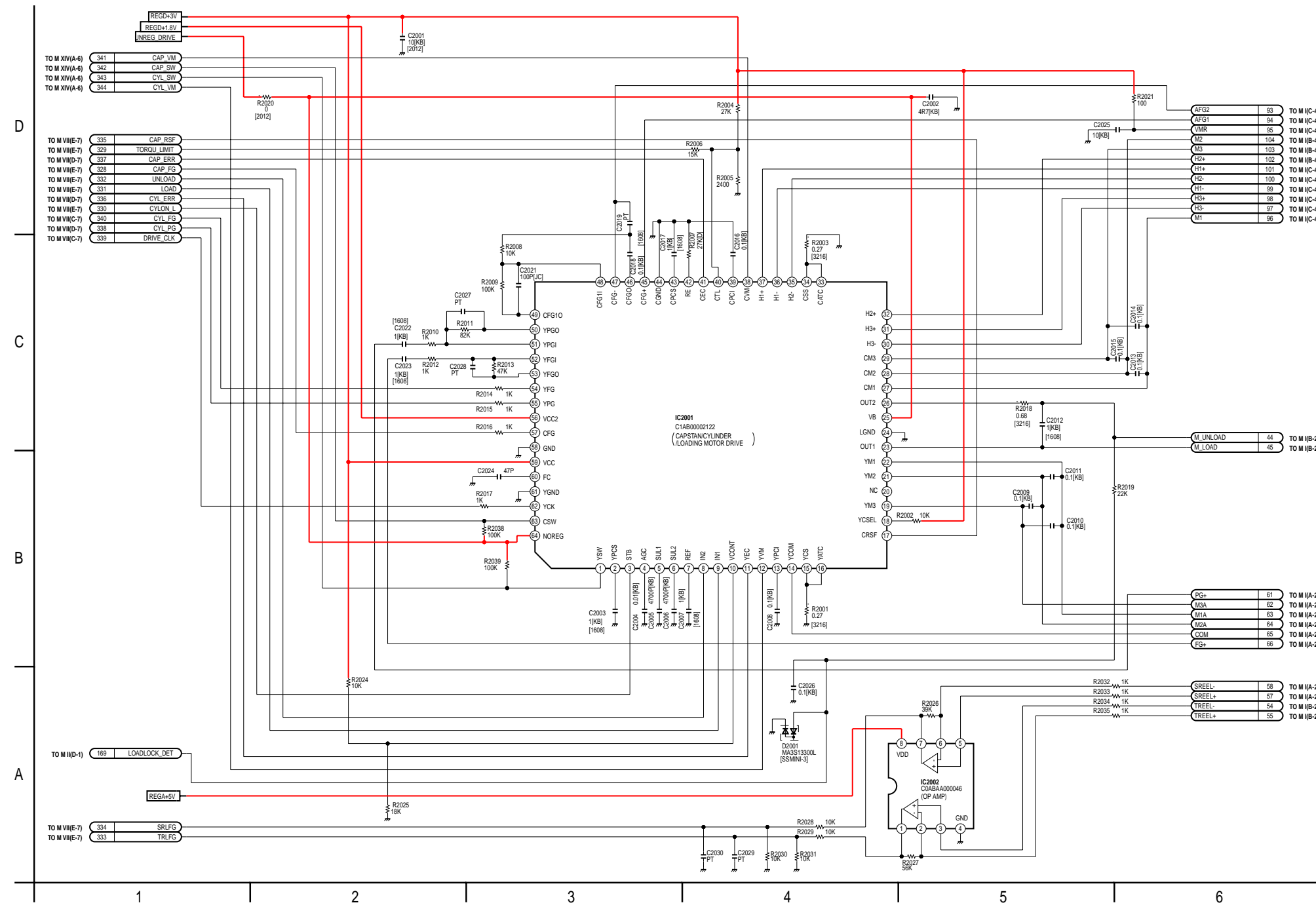
LINK TO VOLTAGE CHART
LSJB8361
MAIN VIII SCHEMATIC DIAGRAM
NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

MAIN IX SCHEMATIC DIAGRAM

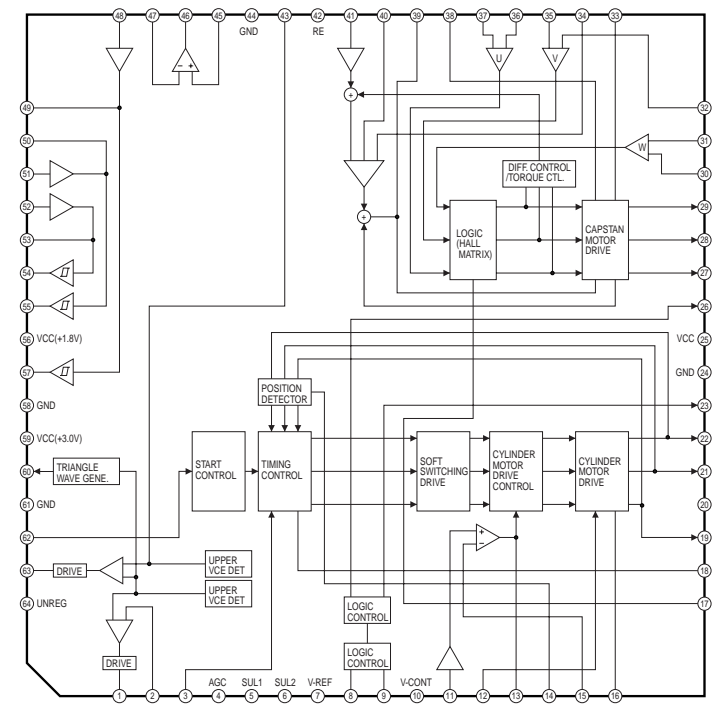
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: PARTS MARKED "PT" ARE NOT USED.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.



IC2001 IC- DETAIL BLOCK DIAGRAM



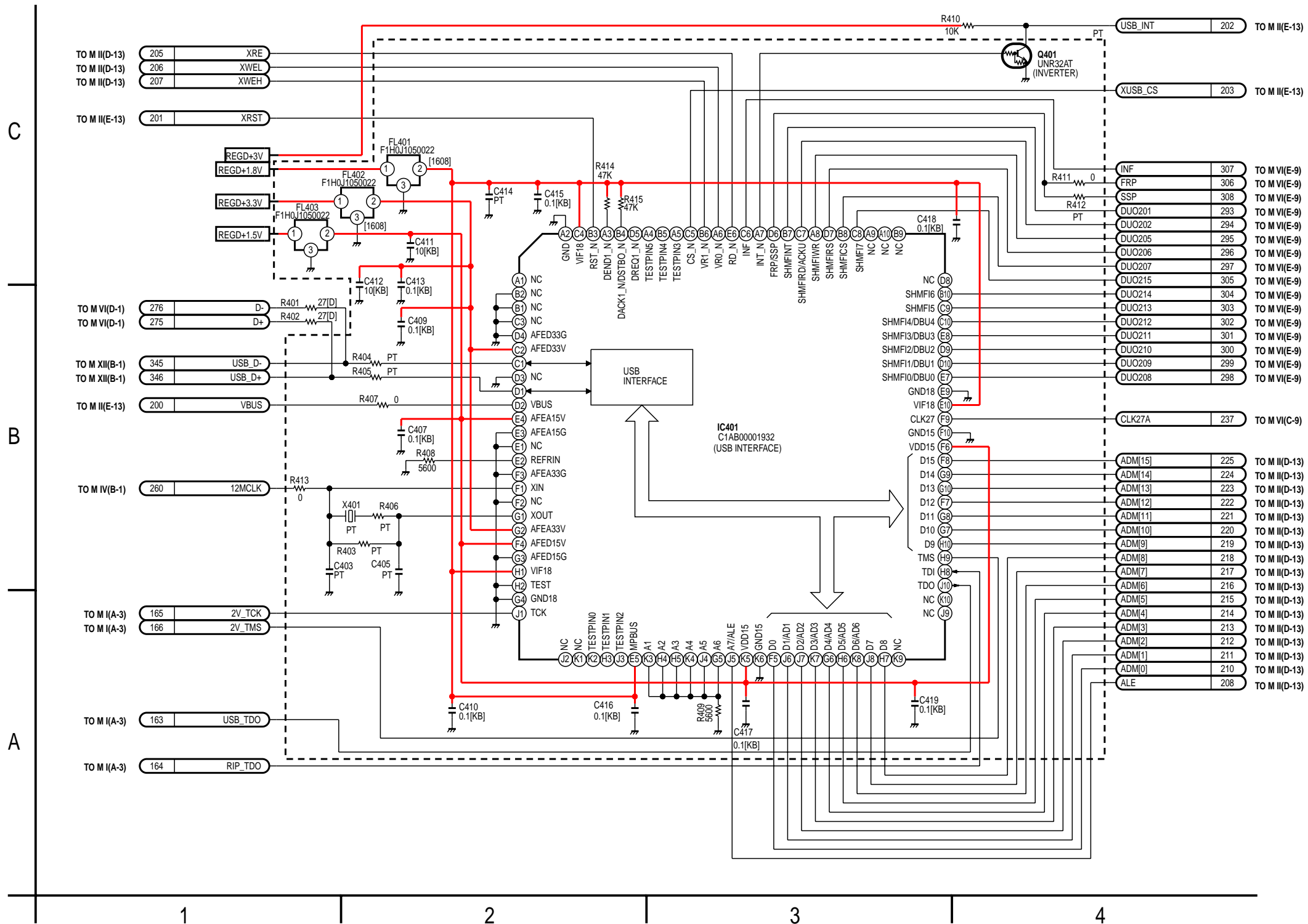
LINK TO VOLTAGE CHART
 LSJB8361
 MAIN IX SCHEMATIC DIAGRAM
 NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

MAIN X SCHEMATIC DIAGRAM

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: PARTS MARKED "PT" ARE NOT USED.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

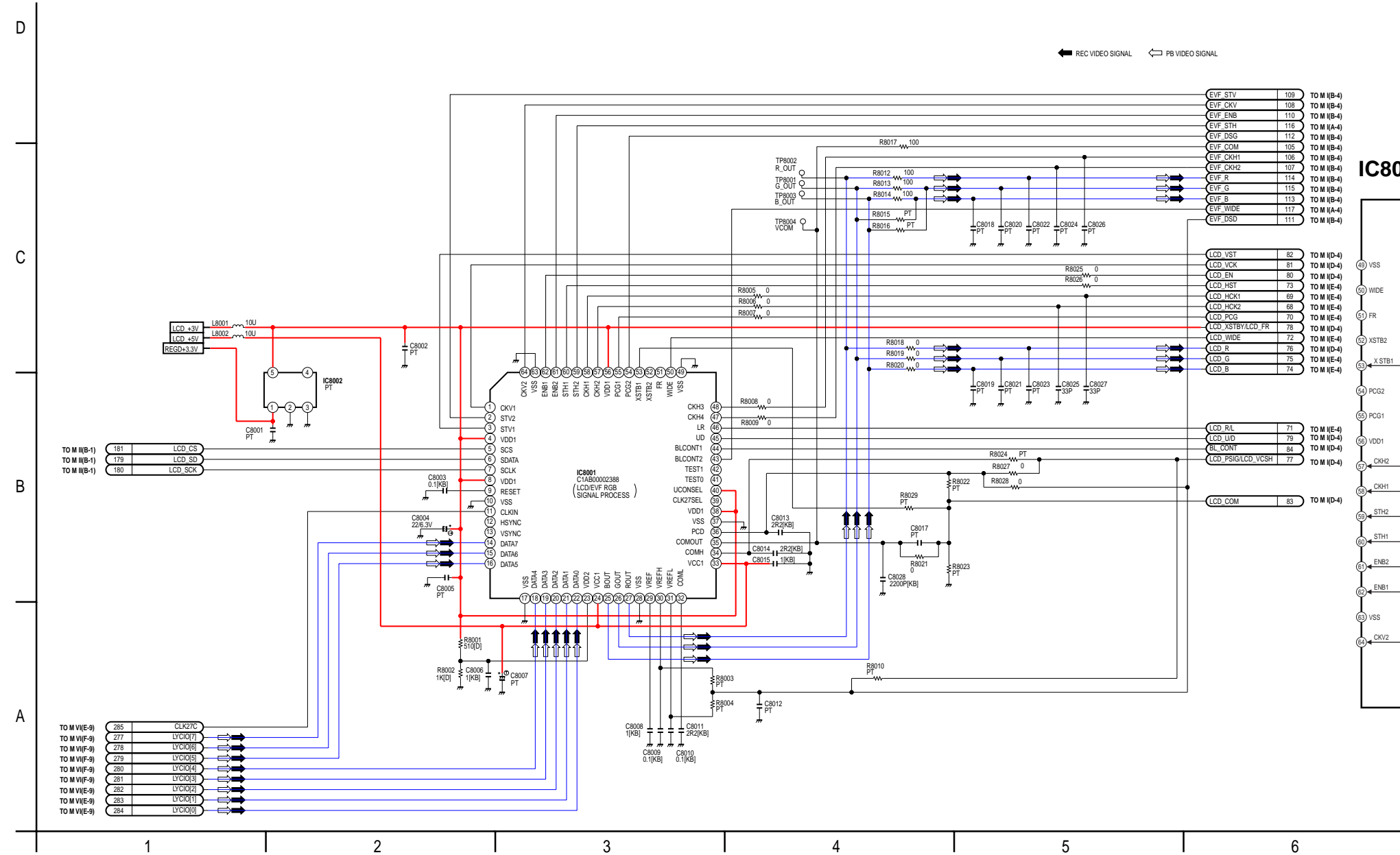


MAIN XI SCHEMATIC DIAGRAM

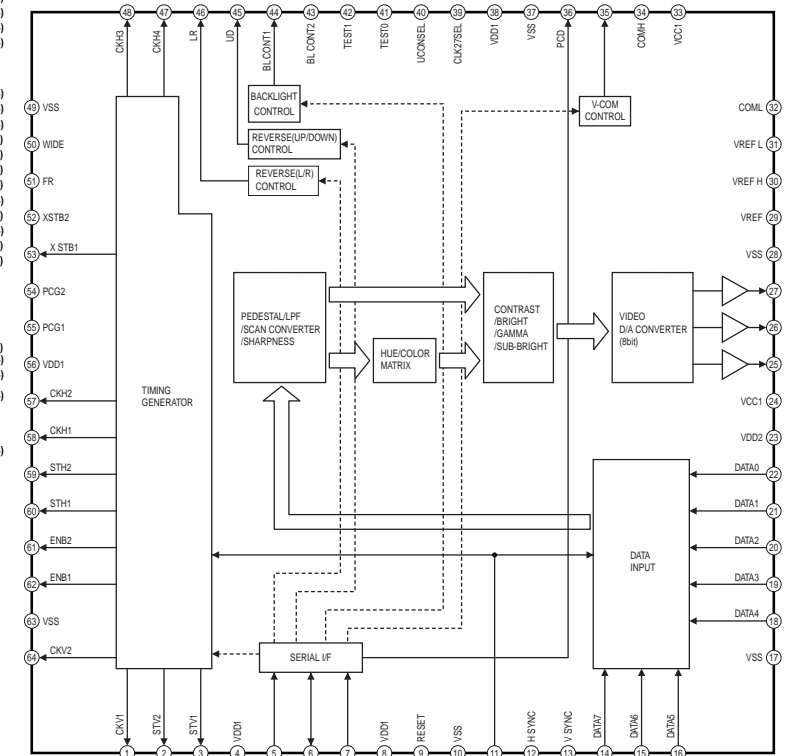
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: PARTS MARKED "PT" ARE NOT USED.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.



IC8001 IC- DETAIL BLOCK DIAGRAM



LINK TO VOLTAGE CHART
LSJB8361

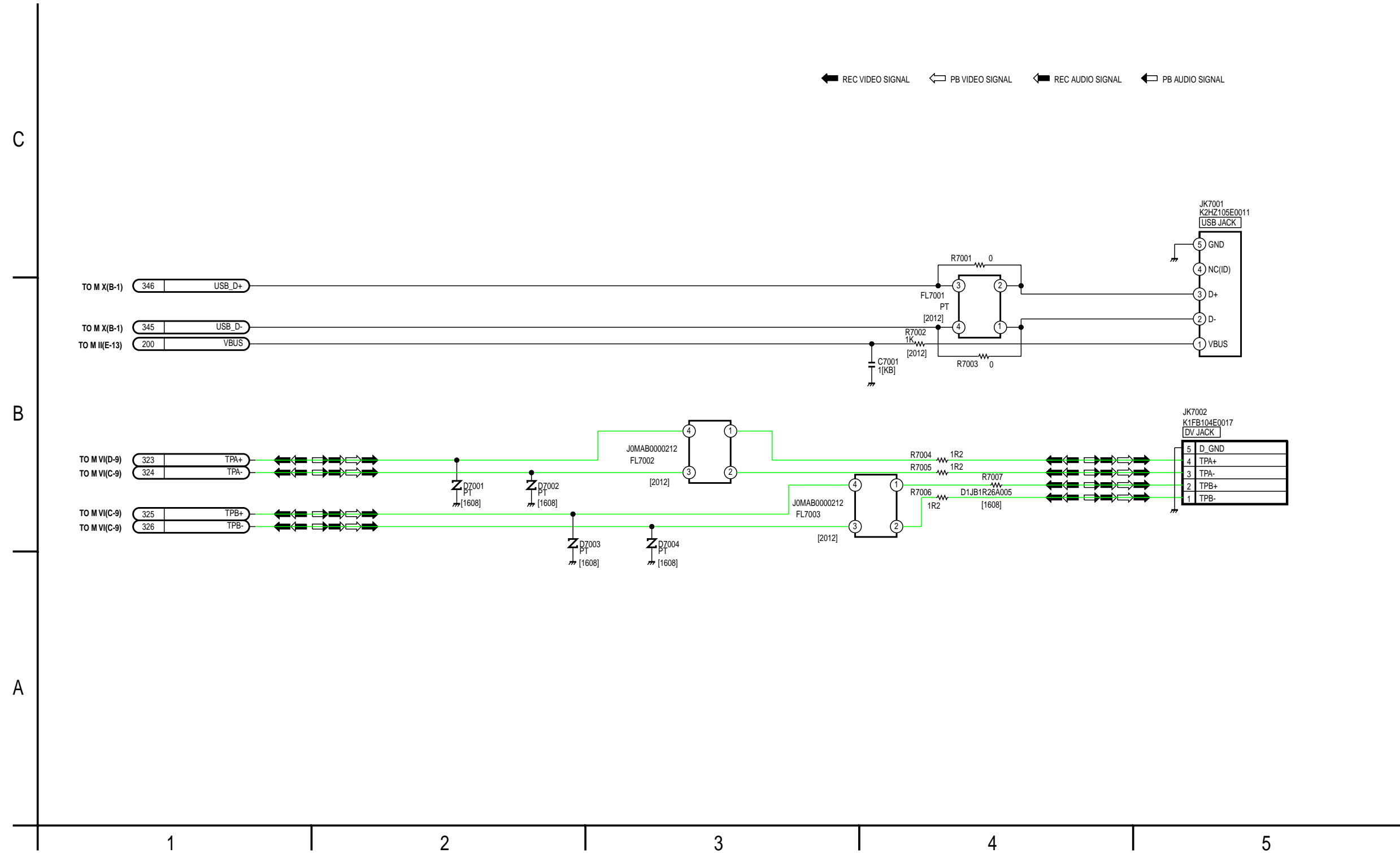
MAIN XI SCHEMATIC DIAGRAM
NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

MAIN XII SCHEMATIC DIAGRAM

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: PARTS MARKED "PT" ARE NOT USED.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

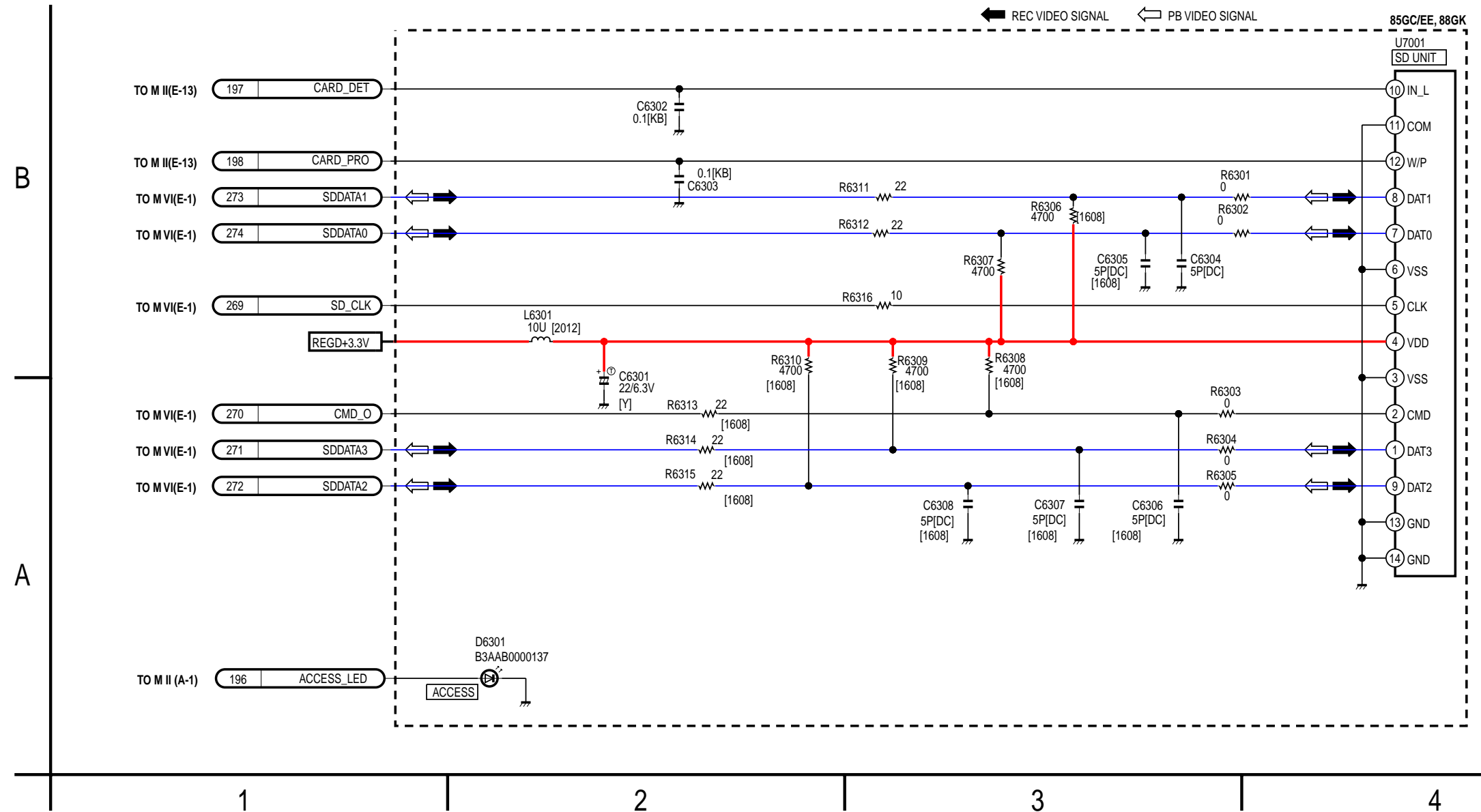


MAIN XIII SCHEMATIC DIAGRAM

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: PARTS MARKED "PT" ARE NOT USED.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.



MAIN XIV SCHEMATIC DIAGRAM

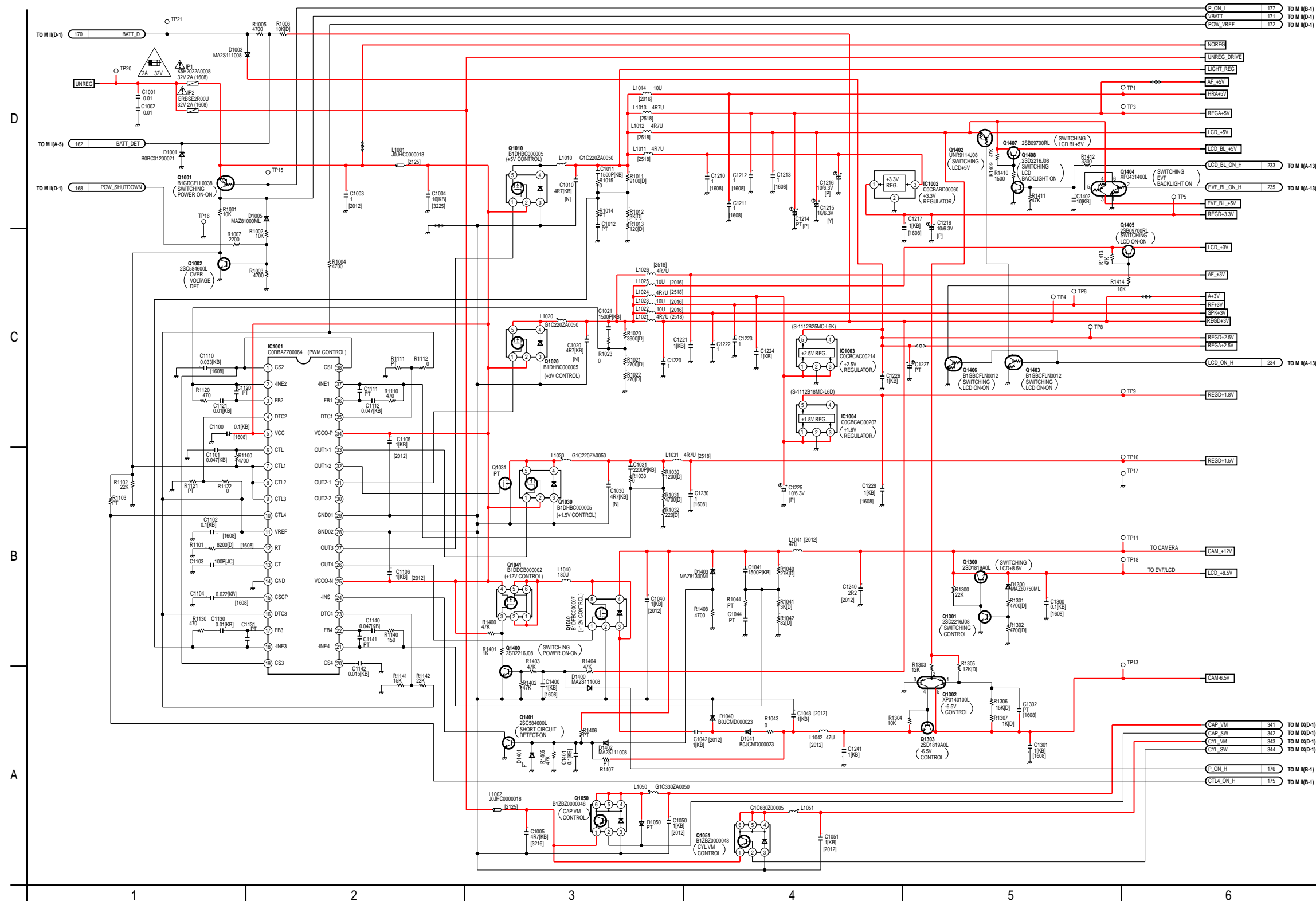
CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE 2A 32V FUSE.
 ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D'INCENDIE N'UTILISER QUE DES FUSIBLES DE MÊME TYPE 2A 32V



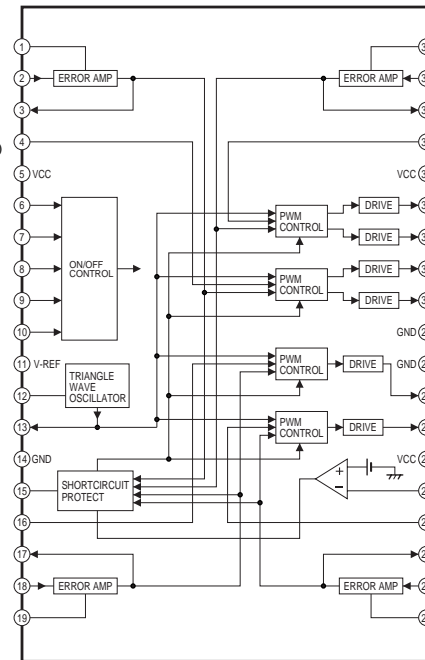
IMPORTANT SAFETY NOTICE: COMPONENTS IDENTIFIED BY THE SIGN HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.



IC1001 IC- DETAIL BLOCK DIAGRAM



LINK TO VOLTAGE CHART
 LSJB8361

MAIN XIV SCHEMATIC DIAGRAM
 NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

4.3. VOLTAGE CHART

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

MAIN P.C.B.

MODE PINNO.	REC	MODE PINNO.	REC	MODE PINNO.	REC	MODE PINNO.	REC	MODE PINNO.	REC	MODE PINNO.	REC	MODE PINNO.	REC	MODE PINNO.	REC	MODE PINNO.	REC	MODE PINNO.	REC	MODE PINNO.	REC	MODE PINNO.	REC	MODE PINNO.	REC
IC301		49	0	18	0	8	1.5	5	2.6	48	1.2	29	0.1	35	0.8	18	2.9	8	2.9	54	0.2	Q1050		1	8.1
1	5.0	50	1.3	19	2.8	9	1.5	IC1004		49	1.2	30	0	36	0	19	1.4	IC8001		55	0.2	1	8.1		
2	0	51	0	20	1.2	10	1.5	1	2.9	50	1.2	31	4.9	37	5.0	20	0.1	1	1.3	56	2.9	2	7.5		
3	0	52	2.9	21	2.6	11	0	2	0	51	1.2	32	0	38	0	21	1.3	2	0	57	1.4	3	0		
4	---	53	2.0	22	0	12	1.5	3	2.9	52	1.2	33	0	39	2.6	22	2.9	3	0	58	1.4	4	8.2		
5	5.0	54	2.0	23	1.5	13	1.5	4	---	53	1.2	34	0	40	0	23	2.9	4	2.9	59	0	5	8.1		
IC302		55	2.0	24	1.5	14	1.7	5	1.9	54	1.0	35	0	41	2.9	24	---	5	0	60	0	6	8.2		
1	2.9	56	0	25	1.5	IC1001		IC2001		55	0.2	36	0.1	42	2.9	25	---	6	2.8	61	2.2	Q1051		1	8.1
2	2.9	57	2.0	26	1.4	1	2.0	1	7.5	56	1.9	37	1.5	43	2.1	26	2.9	7	2.9	62	2.2	1	8.1		
3	2.9	58	1.0	27	4.9	2	1.3	2	1.9	57	1.0	38	1.5	44	---	27	---	8	2.9	63	0	2	7.5		
4	1.5	59	2.9	28	1.9	3	0.7	3	0	58	0	39	1.5	IC6003		28	0.1	9	2.8	64	1.3	3	0		
5	0	60	2.9	29	0	4	2.1	4	1.7	59	2.9	40	1.5	1	0.1	29	0.1	10	0	Q701		4	8.1		
6	0.9	61	0	30	0	5	8.1	5	0.4	60	1.9	41	2.9	2	2.9	30	0.1	11	0.9	E	0.2	5	8.1		
7	1.0	62	0	31	1.5	6	3.9	6	0.4	61	0	42	2.9	3	0	31	0.1	12	0	C	0.9	6	8.1		
8	0.9	63	0	32	1.5	7	4.1	7	1.2	62	1.0	43	0	4	0	32	1.9	13	0	B	0.8	Q1300		E	8.6
9	0.9	64	2.9	33	1.5	8	4.1	8	0	63	7.7	44	1.5	5	2.9	33	0.1	14	0.4	Q1001		E	8.6		
10	2.9	IC303		34	1.5	9	4.1	9	0	64	7.9	45	1.5	6	2.9	34	2.6	15	1.0	E	8.1	C	12.0		
11	1.0	1	-7.0	35	1.5	10	4.1	10	1.9	IC2002		46	1.5	7	2.8	35	0.1	16	0.9	C	8.1	B	9.2		
12	2.1	2	-7.0	36	1.6	11	2.1	11	1.6	1	---	47	0	8	2.8	36	0.9	17	0	B	0.1	Q1301		E	0
13	1.1	3	-0.2	37	1.4	12	0.8	12	3.0	2	1.5	48	1.8	IC6004		37	0	18	1.2	Q1002		E	0		
14	0.5	4	0	38	0	13	0.7	13	2.2	3	1.5	IC5001		1	2.5	38	---	19	0.6	E	0	C	9.2		
15	0	5	0	39	2.9	14	0	14	1.5	4	0	1	2.9	2	2.8	39	---	20	0.7	C	4.3	B	0.6		
16	0.2	6	3.0	40	1.3	15	0	15	0	5	1.5	2	0	3	2.9	40	---	21	0.7	B	0	Q1302		1	0
17	1.3	7	0.4	41	1.6	16	2.1	16	0	6	1.5	3	1.5	4	0	41	---	22	0.7	Q1010		1	0		
18	0	8	2.9	42	0	17	0.8	17	0	7	---	4	2.4	5	2.9	42	---	23	1.9	1	3.3	2	0.6		
19	2.9	9	0.2	43	0.1	18	1.3	18	2.5	8	5.0	5	3.0	6	2.9	43	---	24	4.8	2	8.1	3	0		
20	2.9	10	2.9	44	0	19	2.0	19	1.5	IC3301		6	0.6	7	2.5	44	---	25	2.6	3	0	4	-11.4		
21	2.9	11	---	45	0	20	2.0	20	---	1	0.6	7	0	8	0	45	---	26	2.6	4	4.5	5	-6.5		
22	0.9	12	2.7	46	1.6	21	1.3	21	1.5	2	0.9	8	0	9	---	46	---	27	2.6	5	4.5	Q1303		E	-12.0
23	0.8	13	2.9	47	0	22	0.7	22	1.5	3	0.5	9	0	10	0	47	---	28	0	Q1020		E	-12.0		
24	1.3	14	2.7	48	0	23	0.9	23	0	4	0.6	10	0.8	11	3.3	48	---	29	4.6	1	5.2	C	-6.5		
25	2.9	15	0	49	1.5	24	2.1	24	0	5	0.6	11	0	12	0.5	49	---	30	4.5	2	8.1	B	-11.4		
26	0	16	12.0	50	1.5	25	8.1	25	7.9	6	1.9	12	---	13	0.9	50	2.9	31	0.8	3	0	Q1400		E	0
27	1.1	17	-6.6	51	1.5	26	3.4	26	0	7	0	13	0	14	2.9	51	---	32	0.3	4	2.6	E	0		
28	0.3	18	-6.6	52	1.4	27	3.2	27	0.6	8	2.9	14	0.1	15	3.3	52	---	33	4.8	5	2.6	C	0.1		
29	0.1	19	0	53	1.4	28	0	28	0.5	9	0	15	0	16	8.1	53	---	34	4.3	Q1030		B	0.6		
30	0	20	12.0	54	1.1	29	0	29	0.5	10	0	16	1.9	17	1.0	54	---	35	2.3	1	6.5	Q1401		E	0
31	1.7	IC701		55	0	30	4.0	30	2.4	11	0	17	1.0	IC6701		55	---	36	2.6	2	8.1	C	2.0		
32	1.4	1	0	56	1.5	31	5.1	31	2.4	12	1.9	18	0	1	0	56	0.7	37	0	3	0	B	0		
33	3.4	2	2.9	57	1.9	32	5.3	32	0.6	13	1.9	19	0	2	---	57	0.7	38	2.9	4	1.4	Q1402		E	4.9
34	3.4	3	2.9	58	1.8	33	6.4	33	0	14	0	20	1.9	3	---	58	---	39	0	5	1.4	C	4.8		
35	0.7	4	1.5	59	2.9	34	8.1	34	0	15	2.9	21	---	4	---	59	0.2	40	2.9	Q1040		1	2.2		
36	0	5	1.5	60	1.5	35	2.1	35	0.5	16	0.4	22	---	5	---	60	1.2	41	0	2	0	B	0.1		
37	0.2	6	0	61	1.5	36	0.6	36	1.5	17	0.4	23	---	6	---	61	1.4	42	0	3	7.7	Q1403		E	0
38	2.7	7	1.5	62	1.5	37	1.3	37	1.5	18	0	24	---	7	---	62	2.2	43	0	4	12.0	C	0.1		
39	0.2	8	1.5	63	1.5	38	2.0	38	1.0	19	0	25	---	8	---	63	0.8	44	2.3	5	7.7	B	1.8		
40	2.7	9	1.5	64	1.5	IC1002		39	2.2	20	2.9	26	1.2	9	---	64	2.9	45	2.9	Q1041		1	8.1		
41	0	10	1.5	IC702		1	3.3	40	0.3	21	0	27	1.2	10	---	IC6702		46	2.9	1	8.1	2	8.1		
42	2.9	11	2.9	1	2.1	2	0	41	1.2	22	1.2	28	4.7	11	0.1	1	1.5	47	1.4	3	0.3	3	0.3		
43	0	12	1.5	2	1.5	3	5.0	42	1.2	23	0	29	1.5	12	0	2	1.5	48	1.4	4	8.1	4	8.1		
44	2.9	13	1.5	3	1.5	IC1003		43	1.9	24	4.9	30	4.6	13	2.9	3	2.3	49	0	5	8.1	5	8.1		
45	2.9	14	2.9	4	0	1	2.9	44	0	25	0.3	31	4.6	14	1.2	4	0	50	0	6	8.1	6	8.1		
46	2.9	15	2.9	5	0.2	2	0.2	45	1.4	26	0.3	32	4.6	15	0	5	1.5	51	2.9						
47	2.9	16	2.9	6	0	3	2.9	46	1.4	27	0	33	1.5	16	2.8	6	1.5	52	0						
48	2.9	17	1.0	7	0.8	4	0.2	47	---	28	0.3	34	---	17	2.9	7	2.3	53	2.9						

VOLTAGE CHART

NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

MODE PIN NO.	REC	MODE PIN NO.	REC	MODE PIN NO.	REC	MODE PIN NO.	REC	MODE PIN NO.	REC	MODE PIN NO.	REC	MODE PIN NO.	REC
Q1405		2	0	FP24		8	2.8	FP81		TP6	2.9	TP6008	0
E	2.9	3	2.8	1	0	9	2.8	1	0	TP8	2.6	TP6009	0
C	2.9	4	0	2	0	10	2.0	2	0	TP9	1.9	TP6010	0
B	2.3	5	1.4	3	0	11	1.8	3	1.3	TP10	1.6	TP6011	0
Q1406		6	1.5	4	1.9	12	1.8	4	1.3	TP11	12.0	TP6301	0.5
E	0	7	2.4	5	1.9	13	---	5	0.2	TP13	-6.5	TP6302	0.5
C	0.1	8	1.4	6	1.9	14	0	6	8.6	TP15	0.1	TP6303	0.5
B	1.8	9	1.4	7	1.9	15	---	7	2.8	TP16	0	TP6304	0.5
Q1407		10	0.4	8	0	16	0	8	0	TP17	0	TP6305	0.5
E	4.9	11	8.1	FP31		17	0	9	0	TP18	8.6	TP6306	0
C	4.8	12	7.4	1	8.2	18	1.7	10	2.5	TP20	8.1	TP6307	0
B	4.1	13	0	2	0	19	2.8	11	2.5	TP21	2.8	TP6308	0
Q1408		14	0	3	-0.2	20	2.2	12	2.5	TP701	0	TP6309	0
E	0.7	15	2.8	4	-0.2	21	2.8	13	2.5	TP702	2.9	TP6310	0.1
C	0.1	16	2.8	5	-6.1	22	0	14	2.8	TP3001	0.1	TP6311	0
B	0	17	2.8	6	-6.1	23	1.4	15	2.8	TP3002	0	TP6312	0
Q3001		18	0	7	0	24	1.5	16	2.2	TP3003	0.1	TP6313	0
E	3.2	19	0	8	0	25	---	17	1.2	TP3026	1.8	TP6410	0.5
C	0.5	20	0	9	11.9	26	0	18	0.1	TP3027	0	TP6701	0.2
B	3.2	21	0	10	5.8	FP71		19	2.2	TP3028	1.8	TP6702	0.6
		22	0	11	6.5	1	1.4	20	4.8	TP3029	0.4	TP6703	2.9
Q6004		23	0	12	1.5	2	1.4	21	4.8	TP3030	1.9	TP6704	0
E	0	24	0	13	1.8	3	1.4	22	2.3	TP3031	0.1	TP6705	0
C	4.4	25	0	14	6.6	4	1.4	23	0	TP3032	0.3	TP6706	2.7
B	0	26	0	FP41		5	4.5	24	0	TP3033	1.2	TP6707	0
Q6008		FP22		1	0	6	4.8	25	1.8	TP3034	2.6	TP6708	0
E	0	1	0	2	0	7	0	26	0.3	TP3035	2.6	TP8001	2.6
C	3.2	2	0	3	1.4	8	4.8	27	0.2	TP3036	2.6	TP8002	2.6
B	0	3	1.6	4	1.4	9	0	28	0	TP3201	1.9	TP8003	2.6
		4	1.6	5	2.8	10	4.4	29	---	TP3202	0	TP8004	2.3
Q6010		5	1.6	6	1.2	11	1.2	30	3.2	TP3203	1.9		
E	2.8	6	1.6	7	1.3	12	0	FP91		TP3205	1.9		
C	2.9	7	1.6	8	0	13	1.4	1	2.8	TP3206	0		
B	2.9	8	1.6	9	0	14	1.4	2	0	TP3207	0		
		9	1.6	10	0	15	1.4	3	0	TP3208	0		
Q6014		10	0	11	0	16	1.2	4	0	TP3209	0.1		
E	1.6	FP23		12	4.8	17	2.7	5	0	TP3904	1.8		
C	0	1	1.3	13	4.8	18	0.1	6	2.5	TP3905	0		
B	1.6	2	0	14	4.8	19	2.0	7	-0.7	TP3906	0.6		
		3	1.3	15	0.1	20	1.5	8	2.5	TP3907	1.9		
FP11		4	2.6	16	1.8	21	0.8	9	8.6	TP3908	0		
1	0	5	0.6	17	0.2	22	1.4	10	2.5	TP3911	0		
2	0	6	0.6	18	0.2	FP72		11	0.2	TP3912	0		
3	0	7	2.3	19	0	1	1.6	12	2.5	TP3917	2.9		
4	0	8	2.8	20	0	2	1.3	13	2.1	TP3918	2.8		
5	0	9	2.4	21	2.6	3	1.4	14	0	TP3919	0.1		
6	0	10	1.4	22	0	4	1.4	15	1.2	TP3920	0		
7	---	11	0.5	FP61		5	1.0	16	1.4	TP3921	1.0		
8	8.1	12	1.4	1	2.8	6	1.4	17	1.4	TP3922	2.9		
9	8.1	13	0	2	---	7	1.8	18	2.2	TP6001	1.6		
10	8.1	14	0.5	3	0	8	1.4			TP6002	0		
11	8.1	15	0.6	4	---	9	1.8	TP1	4.9	TP6004	0		
12	8.1	16	0.6	5	0	10	1.4	TP3	0	TP6005	1.9		
FP21		17	0.5	6	---	11	1.0	TP4	2.9	TP6006	1.9		
1	---	18	0.5	7	2.8	12	1.4	TP5	3.3	TP6007	0		

VOLTAGE CHART
NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

LCD BACKLIGHT P.C.B.

MODE PIN NO.	REC
Q8101	
E	0.6
C	1.6
B	1.3
Q8102	
E	0.6
C	1.7
B	1.3
Q8104	
E	0.6
C	1.7
B	1.3
Q8105	
E	0.6
C	1.7
B	1.3
Q8107	
E	1.5
C	0.1
B	0.9
Q8108	
E	0.6
C	1.7
B	1.3
Q8112	
E	0.1
C	0.1
B	0.6
Q8113	
E	0.1
C	-5.5
B	0.1
FP8101	
1	1.3
2	1.3
3	0.2
4	8.6
5	2.8
6	0
7	0
8	2.5
9	2.5
10	2.5
11	2.5
12	2.8
13	2.8
14	2.2
15	1.2
16	0.1
17	2.2
18	4.8
19	4.8
20	2.3
21	0

MODE PIN NO.	REC
22	0
FP8102	
1	1.6
2	2.6
3	2.6
4	2.6
5	2.6
6	2.6
7	1.4
8	1.4
9	0.1
10	1.5
11	1.5
12	0
13	0.2
14	2.9
15	-5.5
16	0
17	0.1
18	8.6
19	2.9
20	2.2
21	1.3
22	0.1
23	2.3
24	2.3

FRONT P.C.B.

MODE PIN NO.	REC
IC4801	
1	2.6
2	2.6
3	2.6
4	0
5	2.6
6	2.6
7	2.6
8	4.9
IC7801	
1	1.4
2	0
3	2.9
4	1.5
IC7802	
1	1.4
2	0
3	2.9
4	1.5
IC7803	
1	1.1
2	1.4
3	1.4
4	0
5	1.4
6	1.4
7	0
8	2.9
Q4801	
E	4.2
C	4.9
B	4.9
Q6501	
E	0.8
C	2.9
B	1.1
Q6502	
E	1.2
C	0
B	0.7
Q7801	
1	1.4
2	0.1
3	1.4
4	1.4
5	0
6	1.4
FJ4801	
1	0
2	0
3	3.1
FP6501	
1	0

MODE PIN NO.	REC
2	0
3	1.4
4	1.4
5	2.8
6	1.2
7	1.3
8	0
9	0
10	0
11	0
12	4.8
13	4.8
14	4.8
15	0.1
16	1.8
17	0.2
18	0.2
19	0
20	0
21	2.6
22	0
TP7801	1.5
TP7802	1.4
TP7803	1.4
TP7804	1.4
TP7805	2.9
TP7806	0

5 Printed Circuit Board

5.1. MAIN P.C.B.

MAIN P.C.B. LSEP8361P1 NV-GS80EG/EF/E/EP/EB
LSEP8361R1 NV-GS80EK/EE
LSEP8361Q1 NV-GS85EE/GC, NV-GS88GK


NOTE: MULTILAYER P.C.B.
 THIS P.C.B. IS Multi-Layer P.C.B. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT PATETRNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.

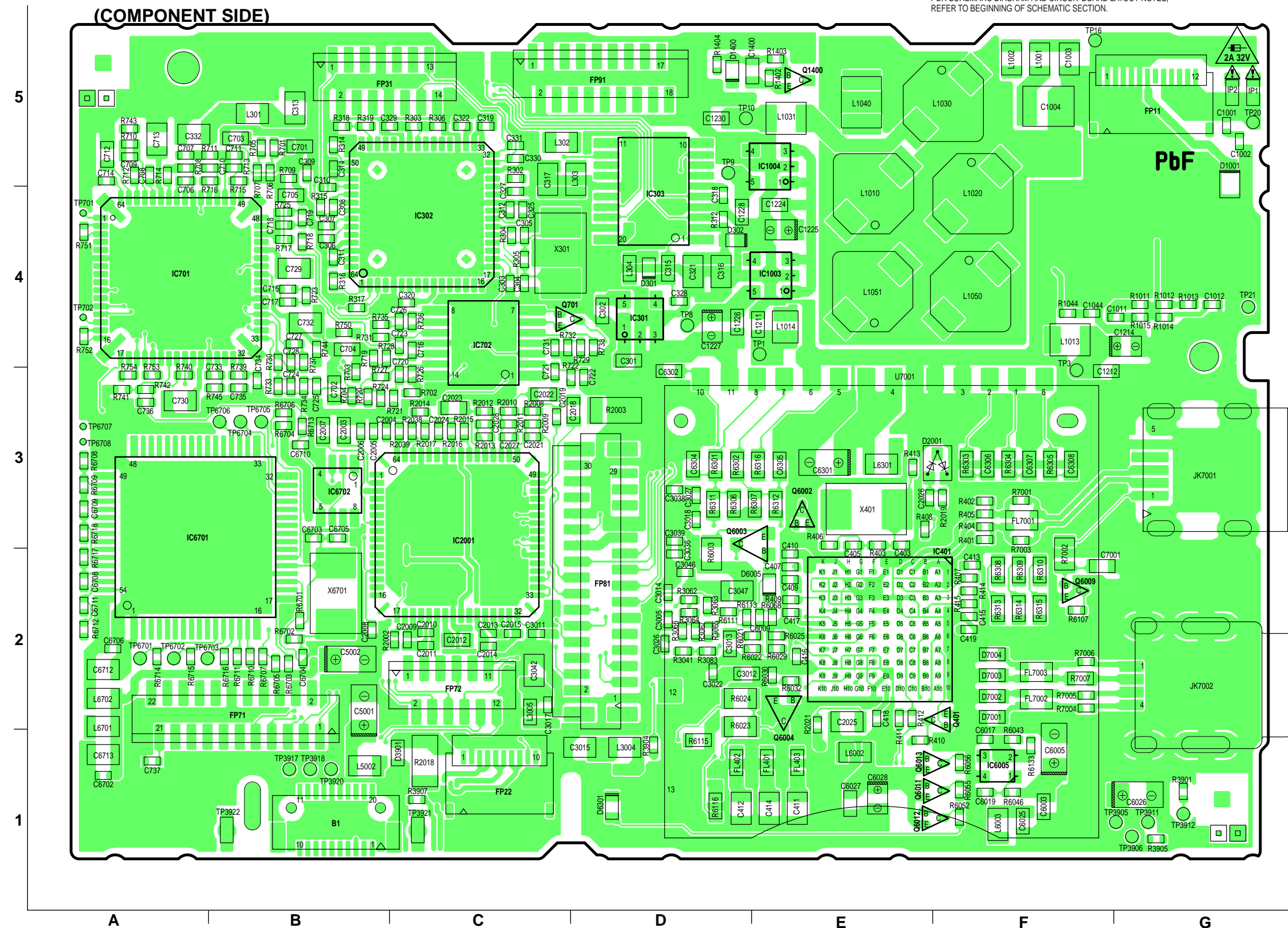
NOTE:
 CIRCUIT BOARD LAYOUT SHOWS COMPONENTS INSTALLED FOR VARIOUS MODELS. FOR PROPER PARTS CONTENT FOR THE MODEL YOU ARE SERVICING, PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST.

NOTE:
 CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.

NOTE:
 FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE 2A 32V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D'INCENDIE N'UTILISERQUE DES FUSIBLE DE MEME TYPE 2A 32V

IMPORTANT SAFETY NOTICE:
 COMPONENTS IDENTIFIED BY THE SIGN  HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.



MAIN P.C.B.
LSEP8361P1/LSEP8361R1/LSEP8361Q1
NV-GS80EG/EF/E/EP/EB/EK/EE, NV-GS85GC/EE, NV-GS88GK

6 Appendix Information of Schematic Diagram

6.1. CHECKING POINT TABLE OF THE CSP IC

Check Point of IC3001

CSP IC					CSP IC						
Pin	Name	Check point	WF NO.	Remarks	Pin	Name	Check point	WF NO.	Remarks		
A1	TMS	TP3026	D-1	WF1	MAIN P.C.B.(F)	D3	ADM(15)	-----	-----	-----	
A2	SD VDD15	-----	-----	-----	-----	D4	TCK	TP3027	D-1	WF1	MAIN P.C.B.(F)
A3	PIPESTAT[2]	-----	-----	-----	-----	D5	A15	-----	-----	-----	
A4	TRACEPKT[6]	-----	-----	-----	-----	D6	TRACEPKT[4]	-----	-----	-----	
A5	SD VDD25	-----	-----	-----	-----	D7	SD VSS	-----	-----	-----	
A6	VDD15	-----	-----	-----	-----	D8	VDD18	-----	-----	-----	
A7	TRACECLK	-----	-----	-----	-----	D9	DVM	-----	-----	-----	
A8	FAD VDD32	-----	-----	-----	-----	D10	VDD30	-----	-----	-----	
A9	OSDCLK	-----	-----	-----	-----	D11	VSS	-----	-----	-----	
A10	LCDPOL	-----	-----	-----	-----	D12	VSS	-----	-----	-----	
A11	OSDHD	-----	-----	-----	-----	D13	CAMAF ECS	IC302-64	C-4	WF1	MAIN P.C.B.(C)
A12	VDD15	-----	-----	-----	-----	D14	CAMLENSCLK	IC701-16	A-4	WF17	MAIN P.C.B.(C)
A13	OSDVR	-----	-----	-----	-----	D15	VSS(NC)	-----	-----	-----	
A14	VDD30	-----	-----	-----	-----	D16	VSS(NC)	-----	-----	-----	
A15	VDD30	-----	-----	-----	-----	D17	VDD15	-----	-----	-----	
A16	USB-DM	-----	-----	-----	-----	D18	DATA(2)	R6315 (LOWER)	F-2	WF1	MAIN P.C.B.(C)
A17	VSS	-----	-----	-----	-----	D19	DAC AVSS	-----	-----	-----	
A18	CLK48I	R3037 (UPPER)	D-3	WF1	MAIN P.C.B.(F)	D20	CVBS	C3034 (LOWER)	D-3	WF1	MAIN P.C.B.(F)
A19	VSS(NC)	-----	-----	-----	-----	D21	YOUT	C3302 (UPPER)	G-4	WF49	MAIN P.C.B.(F)
A20	DATA(1)	R6311 (LOWER)	D-3	WF1	MAIN P.C.B.(C)	E1	ADM(8)	-----	-----	-----	
A21	SDCLK	L3016 (RIGHT)	D-3	WF1	MAIN P.C.B.(F)	E2	ADM(9)	-----	-----	-----	
B1	TDI	TP3028	D-1	WF1	MAIN P.C.B.(F)	E3	ADM(10)	-----	-----	-----	
B2	XTRST	R3083 (LEFT)	D-2	WF1	MAIN P.C.B.(C)	E4	ADM(14)	-----	-----	-----	
B3	SD VDD25	-----	-----	-----	-----	E5	VSS	-----	-----	-----	
B4	PIPESTAT[0]	-----	-----	-----	-----	E6	SD VSS	-----	-----	-----	
B5	TRACEPKT[3]	-----	-----	-----	-----	E7	TRACEPKT[7]	-----	-----	-----	
B6	VSS	-----	-----	-----	-----	E8	VDD18	-----	-----	-----	
B7	TRACESYNC	-----	-----	-----	-----	E9	VDD30	-----	-----	-----	
B8	FAD VSS	-----	-----	-----	-----	E10	OSDVD	-----	-----	-----	
B9	DTCLK	-----	-----	-----	-----	E11	FAD VSS	-----	-----	-----	
B10	CLK45M ZB	IC701-17	A-4	WF19	MAIN P.C.B.(C)	E12	OSDBLKA	-----	-----	-----	
B11	LCDVBLK	-----	-----	-----	-----	E13	CAMCGCS	IC302-3	C-4	WF1	MAIN P.C.B.(C)
B12	FAD VDD15	-----	-----	-----	-----	E14	USB VDD32	-----	-----	-----	
B13	OSDVG	-----	-----	-----	-----	E15	VSS(NC)	-----	-----	-----	
B14	CAMCGAF ECLK	IC302-2	C-4	WF1	MAIN P.C.B.(C)	E16	CMD	R6313 (LOWER)	F-2	WF1	MAIN P.C.B.(C)
B15	CAMLENSD TO	TP702	A-4	WF17	MAIN P.C.B.(C)	E17	VDD32	-----	-----	-----	
B16	USB DP	-----	-----	-----	-----	E18	DAC AVDD25	-----	-----	-----	
B17	VDD25	-----	-----	-----	-----	E19	CREF	C3035 (LOWER)	D-3	WF1	MAIN P.C.B.(F)
B18	CLK48O	R3037 (LOWER)	D-3	WF1	MAIN P.C.B.(F)	E20	YREF	C3033 (LOWER)	D-3	WF1	MAIN P.C.B.(F)
B19	VSS(NC)	-----	-----	-----	-----	E21	YVBS	C3032 (UPPER)	D-3	WF1	MAIN P.C.B.(F)
B20	VSS	-----	-----	-----	-----	F1	ADM(5)	-----	-----	-----	
B21	DAC AVSS	-----	-----	-----	-----	F2	ADM(6)	-----	-----	-----	
C1	XDUO CS	-----	-----	-----	-----	F3	ADM(7)	-----	-----	-----	
C2	TDO	TP3029	D-1	WF1	MAIN P.C.B.(F)	F4	ADM(11)	-----	-----	-----	
C3	RTCK	-----	-----	-----	-----	F5	VDD18	-----	-----	-----	
C4	VSS	-----	-----	-----	-----	F6	VDD18	-----	-----	-----	
C5	TRACEPKT[5]	-----	-----	-----	-----	F7	PIPESTAT[1]	-----	-----	-----	
C6	SD VDD15	-----	-----	-----	-----	F8	TRACEPKT[2]	-----	-----	-----	
C7	TRACEPKT[0]	-----	-----	-----	-----	F9	TRACEPKT[1]	-----	-----	-----	
C8	FAD VDD15	-----	-----	-----	-----	F10	AFDRVD	IC701-18	A-4	WF1	MAIN P.C.B.(C)
C9	FSLPFO	R3039 (RIGHT)	F-3	WF1	MAIN P.C.B.(F)	F11	FAD VDD32	-----	-----	-----	
C10	LINPWM	-----	-----	-----	-----	F12	OSDVB	-----	-----	-----	
C11	LCDHD	-----	-----	-----	-----	F13	CAMLENSCS	IC701-15	A-4	WF17	MAIN P.C.B.(C)
C12	OSDBLKB	-----	-----	-----	-----	F14	VSS	-----	-----	-----	
C13	VSS	-----	-----	-----	-----	F15	VSS(NC)	-----	-----	-----	
C14	CAMCGAFED TO	IC302-1	C-4	WF18	MAIN P.C.B.(C)	F16	DATA(0)	R6312 (LOWER)	E-3	WF1	MAIN P.C.B.(C)
C15	USB VDD32	-----	-----	-----	-----	F17	DAC AVDD25	-----	-----	-----	
C16	VSS(NC)	-----	-----	-----	-----	F18	DAC AVSS	-----	-----	-----	
C17	VSS(NC)	-----	-----	-----	-----	F19	DAC AVSS	-----	-----	-----	
C18	SD VDD32	-----	-----	-----	-----	F20	LCDBVBS	C3031 (LOWER)	D-3	WF1	MAIN P.C.B.(F)
C19	DATA(3)	R6314 (LOWER)	F-2	WF1	MAIN P.C.B.(C)	F21	LCDBOUT	-----	-----	-----	
C20	DAC AVDD25	-----	-----	-----	-----	G1	ADM(2)	-----	-----	-----	
C21	COU T	C3301 (UPPER)	G-4	WF50	MAIN P.C.B.(F)	G2	ADM(1)	-----	-----	-----	
D1	ADM(12)	-----	-----	-----	-----	G3	ADM(3)	-----	-----	-----	
D2	ADM(13)	-----	-----	-----	-----	G4	ADM(4)	-----	-----	-----	

(C): COMPONENT SIDE (F): FOIL SIDE

CSP IC		Check point	WF NO.	Remarks	CSP IC		Check point	WF NO.	Remarks
Pin	Name				Pin	Name			
G5	VDD15	-----	----	----	M18	YCIO[3]	-----	----	----
G6	VSS	-----	----	----	M19	YCIO[4]	-----	----	----
G7	VSS	-----	----	----	M20	YCIO[5]	-----	----	----
G16	VSS	-----	----	----	M21	VSS	-----	----	----
G17	DAC AVDD25	-----	----	----	N1	ADIN(6)	IC302-13	C-4	WF6 MAIN P.C.B.(C)
G18	DAC AVSS	-----	----	----	N2	ADIN(4)	IC302-11	C-4	WF8 MAIN P.C.B.(C)
G19	LCDREF	C3030 (LOWER)	D-3	WF1 MAIN P.C.B.(F)	N3	ADIN(5)	IC302-12	C-4	WF7 MAIN P.C.B.(C)
G20	LCDGVBS	C3029 (LOWER)	D-3	WF1 MAIN P.C.B.(F)	N4	ADIN(3)	IC302-9	C-4	WF9 MAIN P.C.B.(C)
G21	LCDGOUT	-----	----	----	N5	VDD18 30	-----	----	----
H1	XWEH	-----	----	----	N6	VDD18 30	-----	----	----
H2	XWEL	-----	----	----	N16	SHMFID1	-----	----	----
H3	ALE	-----	----	----	N17	SHMFID5	-----	----	----
H4	ADM[0]	-----	----	----	N18	SHMFID6	-----	----	----
H5	VDD18	-----	----	----	N19	SHMFID7	-----	----	----
H6	VSS	-----	----	----	N20	YCIO[0]	-----	----	----
H16	DAC AVDD25	-----	----	----	N21	CLK27D	-----	----	----
H17	DAC AVDD25	-----	----	----	P1	ADIN(2)	IC302-8	C-4	WF10 MAIN P.C.B.(C)
H18	DAC AVDD25	-----	----	----	P2	ADIN(1)	IC302-7	C-4	WF11 MAIN P.C.B.(C)
H19	DAC AVSS	-----	----	----	P3	ADIN(0)	IC302-6	C-4	WF12 MAIN P.C.B.(C)
H20	LCDRVBS	C3028 (LOWER)	D-3	WF1 MAIN P.C.B.(F)	P4	FCA	-----	----	----
H21	LCDROUT	-----	----	----	P5	VDD15	-----	----	----
J1	XRST ARM	TP3030	D-2	WF1 MAIN P.C.B.(F)	P6	VSS	-----	----	----
J2	VDD15	-----	----	----	P16	VDD18	-----	----	----
J3	XREADY	-----	----	----	P17	VSS	-----	----	----
J4	XRE	-----	----	----	P18	SHMFID0	-----	----	----
J5	VSS	-----	----	----	P19	SHMFID2	-----	----	----
J6	VDD18	-----	----	----	P20	SHMFID4	-----	----	----
J16	VSS	-----	----	----	P21	SHMFID3	-----	----	----
J17	DAC AVSS	-----	----	----	R1	FCB	-----	----	----
J18	VDD18	-----	----	----	R2	F2C	-----	----	----
J19	VDD18	-----	----	----	R3	ZACOMP	-----	----	----
J20	BUS MODE	-----	----	----	R4	SIG	-----	----	----
J21	VSS	-----	----	----	R5	VDD18 30	-----	----	----
K1	FSLPFI	R3039 (LEFT)	D-1	WF1 MAIN P.C.B.(F)	R6	VSS	-----	----	----
K2	VCO AVSS	-----	----	----	R16	VDD15	-----	----	----
K3	VCO AVSS	-----	----	----	R17	VDD18	-----	----	----
K4	PLL AVDD25	-----	----	----	R18	FRP	TP3001	E-3	WF16 MAIN P.C.B.(F)
K5	VCO AVDD25	-----	----	----	R19	SHMFIWR	-----	----	----
K6	VCO AVDD25	-----	----	----	R20	SHMFICS	-----	----	----
K16	YCIN(6)	-----	----	----	R21	SHMFIRS	-----	----	----
K17	YCIN(0)	-----	----	----	T1	ZBCOMP	-----	----	----
K18	YCIN(5)	-----	----	----	T2	ZCCOMP	-----	----	----
K19	YCIN(7)	-----	----	----	T3	ZDCOMP	-----	----	----
K20	VDD15	-----	----	----	T4	IRSOPEN	IC701-48	A-4	WF1 MAIN P.C.B.(C)
K21	YCIN(4)	-----	----	----	T5	VDD15	-----	----	----
L1	PLL AVSS	-----	----	----	T6	VDD18	-----	----	----
L2	VSS	-----	----	----	T7	CLKSEL1	-----	----	----
L3	FCK45	TP3033	E-2	WF2 MAIN P.C.B.(F)	T8	SD VDD15	-----	----	----
L4	CAMHD	TP3032	E-2	WF1 MAIN P.C.B.(F)	T9	VDD18	-----	----	----
L5	PLL AVDD25	-----	----	----	T10	VSS(NC)	-----	----	----
L6	PLL AVSS	-----	----	----	T11	1394 AVDD15	-----	----	----
L16	YCIO[7]	-----	----	----	T12	VSS(NC)	-----	----	----
L17	YCIO[6]	-----	----	----	T13	VDD18	-----	----	----
L18	YCIN(3)	-----	----	----	T14	VSS	-----	----	----
L19	YCIN(2)	-----	----	----	T15	VDD15	-----	----	----
L20	YCIN(1)	-----	----	----	T16	VSS	-----	----	----
L21	CLK27X	-----	----	----	T17	VSS	-----	----	----
M1	CAMVD	TP3031	E-2	WF3 MAIN P.C.B.(F)	T18	LYC14	IC8001-18	F-5	WF20 MAIN P.C.B.(F)
M2	ADIN[8]	IC302-15	C-4	WF4 MAIN P.C.B.(C)	T19	INF	R3019 (LOWER)	E-3	WF1 MAIN P.C.B.(F)
M3	ADIN(7)	IC302-14	C-4	WF5 MAIN P.C.B.(C)	T20	SHMFINT	-----	----	----
M4	ADIN[9]	IC302-16	C-4	WF1 MAIN P.C.B.(C)	T21	SHMFIRD	-----	----	----
M5	VDD18 30	-----	----	----	U1	ALCPWM	R705 (UPPER)	B-5	WF13 MAIN P.C.B.(C)
M6	VSS	-----	----	----	U2	IRISCLOSE	IC701-47	A-4	WF1 MAIN P.C.B.(C)
M16	YCIO[1]	-----	----	----	U3	HOST REQ	-----	----	----
M17	YCIO[2]	-----	----	----	U4	DUO INT1	-----	----	----

(C): COMPONENT SIDE (F): FOIL SIDE

CSP IC		Check point	WF NO.	Remarks	
Pin	Name				
U5	SD VSS	-----	----	----	
U6	CLKSELO	-----	----	----	
U7	VSS	-----	----	----	
U8	TESTMD[4]	-----	----	----	
U9	S400	-----	----	----	
U10	VSS(NC)	-----	----	----	
U11	VDD15	-----	----	----	
U12	VSS(NC)	-----	----	----	
U13	1394 AVDD30	-----	----	----	
U14	VDD18	-----	----	----	
U15	VSS	-----	----	----	
U16	VDD18	-----	----	----	
U17	VDD18	-----	----	----	
U18	LYCI1	IC8001-21	F-5	WF20	MAIN P.C.B.(F)
U19	LYCI5	IC8001-16	F-5	WF20	MAIN P.C.B.(F)
U20	LYCI6	IC8001-15	F-5	WF20	MAIN P.C.B.(F)
U21	LYCI7	IC8001-14	F-5	WF20	MAIN P.C.B.(F)
V1	HOST ACK	-----	----	----	
V2	DUO INT3	-----	----	----	
V3	DUO INT0	-----	----	----	
V4	SD VDD15	-----	----	----	
V5	CLKSEL2	-----	----	----	
V6	SD VDD15	-----	----	----	
V7	TESTMD[2]	-----	----	----	
V8	TESTMD[5]	-----	----	----	
V9	BIAS2K	-----	----	----	
V10	SD VSS	-----	----	----	
V11	R[1]	R3008 (RIGHT)	E-3	WF1	MAIN P.C.B.(F)
V12	1394 AVDD30	-----	----	----	
V13	VSS(NC)	-----	----	----	
V14	VDD15	-----	----	----	
V15	DBR1	-----	----	----	
V16	REQR	TP3206	E-3	WF25	MAIN P.C.B.(F)
V17	VAL	-----	----	----	
V18	AIDAT1	C3302 (UPPER)	G-4	WF31	MAIN P.C.B.(F)
V19	LYCI0	IC8001-22	F-5	WF20	MAIN P.C.B.(F)
V20	LYCI2	IC8001-20	F-5	WF20	MAIN P.C.B.(F)
V21	LYCI3	IC8001-19	F-5	WF20	MAIN P.C.B.(F)
W1	DUO INT2	-----	----	----	
W2	VSS	-----	----	----	
W3	SD VDD15	-----	----	----	
W4	VDD18	-----	----	----	
W5	CLK135	-----	----	----	
W6	VDD15	-----	----	----	
W7	SD VSS	-----	----	----	
W8	VSS	-----	----	----	
W9	VDD25	-----	----	----	
W10	SD VDD25	-----	----	----	
W11	1394 AVSS	-----	----	----	
W12	1394 AVSS	-----	----	----	
W13	VSS(NC)	-----	----	----	
W14	TPBIAS	C3025 (UPPER)	E-3	WF1	MAIN P.C.B.(F)
W15	SSP	TP3002	E-3	WF1	MAIN P.C.B.(F)
W16	DBR2	-----	----	----	
W17	ADDA[2]	-----	----	----	
W18	READH	-----	----	----	
W19	DOLRCK	IC3301-3	G-4	WF28	MAIN P.C.B.(F)
W20	ADECDAT	-----	----	----	
W21	CLK27C	IC8001-11	F-5	WF21	MAIN P.C.B.(F)
Y1	VSS	-----	----	----	
Y2	VDD18 30	-----	----	----	
Y3	SD VDD25	-----	----	----	
Y4	CLK27B	-----	----	----	
Y5	SD VDD25	-----	----	----	
Y6	TESTMD[0]	-----	----	----	

CSP IC		Check point	WF NO.	Remarks	
Pin	Name				
Y7	TESTMD[3]	-----	----	----	
Y8	VSS(NC)	-----	----	----	
Y9	VSS	-----	----	----	
Y10	SD VDD15	-----	----	----	
Y11	VSS(NC)	-----	----	----	
Y12	1394 AVSS	-----	----	----	
Y13	TPBP	R3012 (LEFT)	E-1	WF1	MAIN P.C.B.(F)
Y14	TPAP	R3014 (LEFT)	E-1	WF1	MAIN P.C.B.(F)
Y15	XRST	R3083 (RIGHT)	D-2	WF1	MAIN P.C.B.(C)
Y16	DBR3	TP3205	F-3	WF23	MAIN P.C.B.(F)
Y17	ACKR	TP3207	F-3	WF24	MAIN P.C.B.(F)
Y18	ADDA[1]	-----	----	----	
Y19	INTSEG	-----	----	----	
Y20	DOMCK	IC3301-1	G-4	WF29	MAIN P.C.B.(F)
Y21	AIDAT2	-----	----	----	
AA1	VDD18 30	-----	----	----	
AA2	SD VSS	-----	----	----	
AA3	SCLK54I	-----	----	----	
AA4	CLK27A	TP3003	E-2	WF14	MAIN P.C.B.(F)
AA5	SD VSS	-----	----	----	
AA6	TESTMD[1]	-----	----	----	
AA7	SD VDD25	-----	----	----	
AA8	VDD18	-----	----	----	
AA9	CLK24I	R3006 (LOWER)	E-3	WF15	MAIN P.C.B.(F)
AA10	CLK24O	R3006 (UPPER)	E-2	WF15	MAIN P.C.B.(F)
AA11	1394 AVSS	-----	----	----	
AA12	R[0]	R3008 (LEFT)	E-3	WF1	MAIN P.C.B.(F)
AA13	TPBN	R3011 (LEFT)	E-1	WF1	MAIN P.C.B.(F)
AA14	TPAN	R3013 (LEFT)	E-1	WF1	MAIN P.C.B.(F)
AA15	1394 AVDD15	-----	----	----	
AA16	HID	TP3203	G-3	WF22	MAIN P.C.B.(F)
AA17	DBR0	-----	----	----	
AA18	ADDA[3]	TP3208	F-3	WF26	MAIN P.C.B.(F)
AA19	ADDA[0]	-----	----	----	
AA20	DODAT	IC3301-3	G-4	WF27	MAIN P.C.B.(F)
AA21	DOBCK	IC3301-2	G-4	WF30	MAIN P.C.B.(F)

(C): COMPONENT SIDE (F): FOIL SIDE

Check Point of IC3201

CSP IC		Check point	WF NO.	Remarks	CSP IC		Check point	WF NO.	Remarks
Pin	Name				Pin	Name			
A1	DVSS	-----	----	----					
A2	GESW	-----	----	----					
A3	XRST	R3225 (LOWER)	F-3	WF1	MAIN P.C.B.(F)				
A4	TSTDT[9]	-----	----	----					
A5	TSTDT[6]	-----	----	----					
A6	TSTDT[3]	-----	----	----					
A7	TSTDT[0]	-----	----	----					
A8	REQR	TP3206	F-3	WF47	MAIN P.C.B.(F)				
A9	DBR[2]	-----	----	----					
A10	DBR[0]	-----	----	----					
A11	DVSS	-----	----	----					
B1	VRH	C3201 (UPPER)	F-2	WF1	MAIN P.C.B.(F)				
B2	VRL	C3202 (UPPER)	F-2	WF1	MAIN P.C.B.(F)				
B3	TSTMD	-----	----	----					
B4	VPD	-----	----	----					
B5	DVSS	-----	----	----					
B6	TSTDT[4]	-----	----	----					
B7	TSTDT[1]	-----	----	----					
B8	ACKR	TP3207	F-3	WF48	MAIN P.C.B.(F)				
B9	DBR[3]	TP3205	F-3	WF46	MAIN P.C.B.(F)				
B10	DBR[1]	-----	----	----					
B11	CLK27A	TP3003	E-2	WF14	MAIN P.C.B.(F)				
C1	AVD12 (ADC1)	-----	----	----					
C2	ADTEST	-----	----	----					
C3	AVS12 (ADC1)	-----	----	----					
C4	CS	-----	----	----					
C5	TSTDT[8]	-----	----	----					
C6	TSTDT[5]	-----	----	----					
C7	TSTDT[2]	-----	----	----					
C8	TSTCKI	-----	----	----					
C9	DVDD18	-----	----	----					
C10	XWEL	R2029 (UPPER)	E-2	WF1	MAIN P.C.B.(F)				
C11	XRE	-----	----	----					
D1	AVD14 (AMP1)	-----	----	----					
D2	AVS14 (AMP1)	-----	----	----					
D3	PBIN	R3201 (UPPER)	F-2	WF32	MAIN P.C.B.(F)				
D4	AVD15 (ADC2)	-----	----	----					
D5	DVDD18	-----	----	----					
D6	TSTDT[7]	-----	----	----					
D7	DVDD18	-----	----	----					
D8	DVSS	-----	----	----					
D9	XWEH	R2028 (LOWER)	E-1	WF1	MAIN P.C.B.(F)				
D10	AS	-----	----	----					
D11	ADM[15]	TP3208	F-3	WF1	MAIN P.C.B.(F)				
E1	ATFIN	C3207 (UPPER)	F-2	WF33	MAIN P.C.B.(F)				
E2	AVS15 (ADC2)	-----	----	----					
E3	AVD13 (ADC1/2)	-----	----	----					
E4	AVS13 (ADC1/2)	-----	----	----					
E8	DVDD18	-----	----	----					
E9	ADM[14]	R3017 (LEFT)	E-1	WF1	MAIN P.C.B.(F)				
E10	DVSS	-----	----	----					
E11	ADM[12]	R3015 (LEFT)	E-1	WF1	MAIN P.C.B.(F)				
F1	AVD16 (VREF)	-----	----	----					
F2	VCORP	R3203 (UPPER)	F-2	WF1	MAIN P.C.B.(F)				
F3	AVS16 (VREF)	-----	----	----					
F4	VREF3	-----	----	----					
F8	ADM[13]	R3016 (LEFT)	E-1	WF1	MAIN P.C.B.(F)				
F9	ADM[11]	R3087 (LEFT)	E-1	WF1	MAIN P.C.B.(F)				
F10	ADM[10]	IC2001-3	C-3	WF1	MAIN P.C.B.(C)				
F11	ADM[9]	R2006 (RIGHT)	E-1	WF1	MAIN P.C.B.(F)				
G1	AVS22 (DAC2/3)	-----	----	----					
G2	OSO	R3207 (LEFT)	G-2	WF1	MAIN P.C.B.(F)				
G3	VREF2	C3209 (UPPER)	F-2	WF1	MAIN P.C.B.(F)				
G4	VREF1	C3211 (LEFT)	G-3	WF1	MAIN P.C.B.(F)				
G8	DVDD18	-----	----	----					
G9	ADM[8]	R2016 (UPPER)	C-3	WF45	MAIN P.C.B.(C)				
G10	ADM[7]	R3234 (LOWER)	F-3	WF1	MAIN P.C.B.(F)				
G11	ADM[6]	R3233 (LOWER)	F-3	WF1	MAIN P.C.B.(F)				
H1	AVD22 (DAC2/3)	-----	----	----					
H2	ATF0	R3204 (UPPER)	F-2	WF1	MAIN P.C.B.(F)				
H3	AVD21 (DAC1)	-----	----	----					
H4	DVSS	-----	----	----					
H5	TDO	TP3906	G-1	WF1	MAIN P.C.B.(C)				
H6	RECI	IC5001-19	F-1	WF1	MAIN P.C.B.(F)				
H7	DVDD18	-----	----	----					
H8	DVSS	-----	----	----					
H9	ADM[5]	R3232 (LOWER)	F-3	WF1	MAIN P.C.B.(F)				
H10	ADM[4]	R3226 (LOWER)	F-3	WF1	MAIN P.C.B.(F)				
H11	ADM[3]	IC2001-9	C-3	WF1	MAIN P.C.B.(C)				
J1	FPORP	R3205 (UPPER)	F-2	WF1	MAIN P.C.B.(F)				
J2	AVS21 (DAC1)	-----	----	----					
J3	RECCUR	R3210 (LEFT)	G-2	WF35	MAIN P.C.B.(F)				
J4	CAPRSF	IC2001-17	C-3	WF1	MAIN P.C.B.(C)				
J5	TDI	R3079 (LEFT)	C-1	WF1	MAIN P.C.B.(F)				
J6	HID2	IC5001-16	F-1	WF1	MAIN P.C.B.(F)				
J7	EQHLD	IC5001-11	F-1	WF38	MAIN P.C.B.(F)				
J8	CYLFG	TP3201	G-3	WF42	MAIN P.C.B.(F)				
J9	DVDD18	-----	----	----					
J10	ADM[2]	IC2001-8	C-3	WF1	MAIN P.C.B.(C)				
J11	ADM[1]	-----	----	----					
K1	FRP	R3206 (UPPER)	G-2	WF1	MAIN P.C.B.(F)				
K2	AVD11 (VCO)	-----	----	----					
K3	AGCCTL	R3209 (LEFT)	G-2	WF34	MAIN P.C.B.(F)				
K4	CYLERR	R3212 (LEFT)	G-3	WF37	MAIN P.C.B.(F)				
K5	TMS	TP3907	F-3	WF1	MAIN P.C.B.(F)				
K6	HID1	TP3203	G-3	WF1	MAIN P.C.B.(F)				
K7	DVSS	-----	----	----					
K8	RECCLK	IC5001-10	F-1	WF40	MAIN P.C.B.(F)				
K9	PBH	IC5001-18	F-1	WF1	MAIN P.C.B.(F)				
K10	ADM[0]	-----	----	----					
K11	CYLPG	TP3202	F-3	WF44	MAIN P.C.B.(F)				
L1	VCOIN	R3207 (RIGHT)	G-2	WF1	MAIN P.C.B.(F)				
L2	AVS11 (VCO)	-----	----	----					
L3	DVDD25	-----	----	----					
L4	CAPERR	R3211 (LEFT)	G-3	WF36	MAIN P.C.B.(F)				
L5	TRST	R3225 (UPPER)	F-3	WF1	MAIN P.C.B.(F)				
L6	TCK	TP3908	F-3	WF1	MAIN P.C.B.(F)				
L7	SPA	TP3209	F-2	WF1	MAIN P.C.B.(F)				
L8	HSE	IC5001-8	F-1	WF39	MAIN P.C.B.(F)				
L9	RECCTL	IC5001-15	F-1	WF41	MAIN P.C.B.(F)				
L10	DriveCLK	R2017 (UPPER)	C-3	WF43	MAIN P.C.B.(C)				
L11	DVSS	-----	----	----					

(C): COMPONENT SIDE (F): FOIL SIDE

Check Point of IC6001

CSP IC		Check point	WF NO.	Remarks	CSP IC		Check point	WF NO.	Remarks		
Pin	Name				Pin	Name					
A1	NC	-----	----	----	E1	DCLK	TP6410	A-3	WF1	MAIN P.C.B.(F)	
A2	VREFL	-----	----	----	E2	PCST1	TP6302	B-1	WF1	MAIN P.C.B.(F)	
A3	DEW	R6041 (RIGHT)	B-4	WF1	MAIN P.C.B.(F)	E3	TRST	-----	----	----	
A4	EXT MIC	R6038 (LOWER)	B-4	WF1	MAIN P.C.B.(F)	E4	PCST4	TP6305	B-1	WF1	MAIN P.C.B.(F)
A5	ADKEY3	R6007 (UPPER)	B-3	WF1	MAIN P.C.B.(F)	E5	ENDIAN	-----	----	----	
A6	SENS TMP LENS	R6039 (RIGHT)	C-4	WF1	MAIN P.C.B.(F)	E6	ADKEY2	R6006 (UPPER)	A-4	WF1	MAIN P.C.B.(F)
A7	MICAD1	R6079 (LOWER)	C-4	WF1	MAIN P.C.B.(F)	E7	Y LEVEL	R3116 (UPPER)	F-4	WF53	MAIN P.C.B.(F)
A8	T PHOTO	R6072 (RIGHT)	A-4	WF1	MAIN P.C.B.(F)	E8	REGD3V DET	R6132 (UPPER)	B-3	WF1	MAIN P.C.B.(F)
A9	SBA SCK	IC3301-12	G-4	WF1	MAIN P.C.B.(F)	E9	BATT D	R6044 (LOWER)	C-4	WF1	MAIN P.C.B.(F)
A10	NC	-----	----	----	E10	NC	-----	----	----	----	
A11	SBA DTI	R6102 (UPPER)	C-3	WF1	MAIN P.C.B.(F)	E11	NC	-----	----	----	
A12	FACT1	TP6005	C-3	WF1	MAIN P.C.B.(F)	E12	NC	-----	----	----	
A13	NC	-----	----	----	E13	NC	-----	----	----	----	
A14	EVF BL	Q1404-2	E-4	WF1	MAIN P.C.B.(F)	E14	NC	-----	----	----	
A15	NC	-----	----	----	E15	BVCC	-----	----	----	----	
A16	NC	-----	----	----	E16	NC	-----	----	----	----	
A17	X2	R6109 (RIGHT)	C-4	WF51	MAIN P.C.B.(F)	E17	NC	-----	----	----	
B1	AVCC31	-----	----	----	E18	DVCC15	-----	----	----	----	
B2	VREFH	-----	----	----	F1	DVSS	-----	----	----	----	
B3	UNI REMO	R6033 (RIGHT)	B-3	WF1	MAIN P.C.B.(F)	F2	TMS	-----	----	----	
B4	IR OUT	R6124 (LOWER)	B-3	WF1	MAIN P.C.B.(F)	F3	EJE	-----	----	----	
B5	BATT	R6045 (LEFT)	B-3	WF1	MAIN P.C.B.(F)	F4	BUSMD	-----	----	----	
B6	ADKEY4	R6008 (UPPER)	A-3	WF1	MAIN P.C.B.(F)	F5	BOOT	-----	----	----	
B7	MICAD2	R6080 (LOWER)	C-4	WF1	MAIN P.C.B.(F)	F7	AVSS	-----	----	----	
B8	LOAD LOCK DET	R2019 (UPPER)	F-3	WF1	MAIN P.C.B.(C)	F8	AVSS	-----	----	----	
B9	NC	-----	----	----	F9	AVCC32	-----	----	----	----	
B10	NC	-----	----	----	F10	DVCC34	-----	----	----	----	
B11	SBA DTO	R6102 (LOWER)	C-3	WF1	MAIN P.C.B.(F)	F11	NC	-----	----	----	
B12	FACT2	TP6006	C-3	WF1	MAIN P.C.B.(F)	F12	DVSS	-----	----	----	
B13	NC	-----	----	----	F14	BUPMD	-----	----	----	----	
B14	LCD ON H	Q1043-B	D-4	WF1	MAIN P.C.B.(F)	F15	NC	-----	----	----	
B15	NC	-----	----	----	F16	NC	-----	----	----	----	
B16	NC	-----	----	----	F17	DVCC33	-----	----	----	----	
B17	CVSS	-----	----	----	F18	SCOUT	TP6004	D-3	WF1	MAIN P.C.B.(F)	
B18	X1	R6108 (RIGHT)	C-4	WF52	MAIN P.C.B.(F)	G1	RESET	TP6001	B-1	WF1	MAIN P.C.B.(F)
C1	PCST0	TP6301	B-3	WF1	MAIN P.C.B.(F)	G2	TDI	-----	----	----	
C2	PCST3	TP6304	B-1	WF1	MAIN P.C.B.(F)	G3	FVCC15	-----	----	----	
C3	BAT T	R6130 (UPPER)	B-3	WF1	MAIN P.C.B.(F)	G4	DVSS	-----	----	----	
C4	HANSEIHIN DET	TP6002	B-3	WF1	MAIN P.C.B.(F)	G5	TOVR	-----	----	----	
C5	BATT REF	R1004 (UPPER)	B-5	WF1	MAIN P.C.B.(F)	G6	BW0	-----	----	----	
C6	ZOOM SW	R6040 (UPPER)	A-4	WF1	MAIN P.C.B.(F)	G13	NC	-----	----	----	
C7	MICAD3	R6081 (LOWER)	C-3	WF1	MAIN P.C.B.(F)	G14	BRESET	-----	----	----	
C8	AVSS	-----	----	----	G15	CS1/USB2 CS	-----	----	----	----	
C9	NC	-----	----	----	G16	ALE	-----	----	----	----	
C10	NC	-----	----	----	G17	NC	-----	----	----	----	
C11	SBA CS	IC3301-11	G-4	WF1	MAIN P.C.B.(F)	G18	FVCC15	-----	----	----	
C12	NC	-----	----	----	H1	NMI	-----	----	----	----	
C13	LCD BL	R1412 (LEFT)	D-3	WF1	MAIN P.C.B.(F)	H2	DVCC31	-----	----	----	
C14	NC	-----	----	----	H3	TPD7	-----	----	----	----	
C15	NC	-----	----	----	H4	BW1	-----	----	----	----	
C16	NC	-----	----	----	H5	PLLOFF	-----	----	----	----	
C17	CVCC15	-----	----	----	H6	TCK	-----	----	----	----	
C18	XT2	-----	----	----	H13	TEST1	-----	----	----	----	
D1	TDO	-----	----	----	H14	XWEL	-----	----	----	----	
D2	PCST2	TP6303	B-1	WF1	MAIN P.C.B.(F)	H15	XWEH	-----	----	----	
D3	DINT	-----	----	----	H16	XREADY	-----	----	----	----	
D4	DVCC15	-----	----	----	H17	XRE	-----	----	----	----	
D5	FNO	C6022 (LOWER)	C-4	WF1	MAIN P.C.B.(F)	H18	CS0/XDUO CS	-----	----	----	
D6	ADKEY1	R6005 (UPPER)	A-4	WF1	MAIN P.C.B.(F)	J1	TPD2	-----	----	----	
D7	S PHOTO	R6071 (RIGHT)	A-4	WF1	MAIN P.C.B.(F)	J2	TPD3	-----	----	----	
D8	DVCC15	-----	----	----	J3	TPD4	-----	----	----	----	
D9	DVSS	-----	----	----	J4	TPD5	-----	----	----	----	
D10	NC	-----	----	----	J5	TPD6	-----	----	----	----	
D11	NC	-----	----	----	J6	FVCC15	-----	----	----	----	
D12	NC	-----	----	----	J13	DVSS	-----	----	----	----	
D13	NC	-----	----	----	J14	NC	-----	----	----	----	
D14	NC	-----	----	----	J15	NC	-----	----	----	----	
D15	DVCC34	-----	----	----	J16	NC	-----	----	----	----	
D16	NC	-----	----	----	J17	NC	-----	----	----	----	
D17	NC	-----	----	----	J18	NC	-----	----	----	----	
D18	XT1	-----	----	----	K1	TPD0	-----	----	----	----	

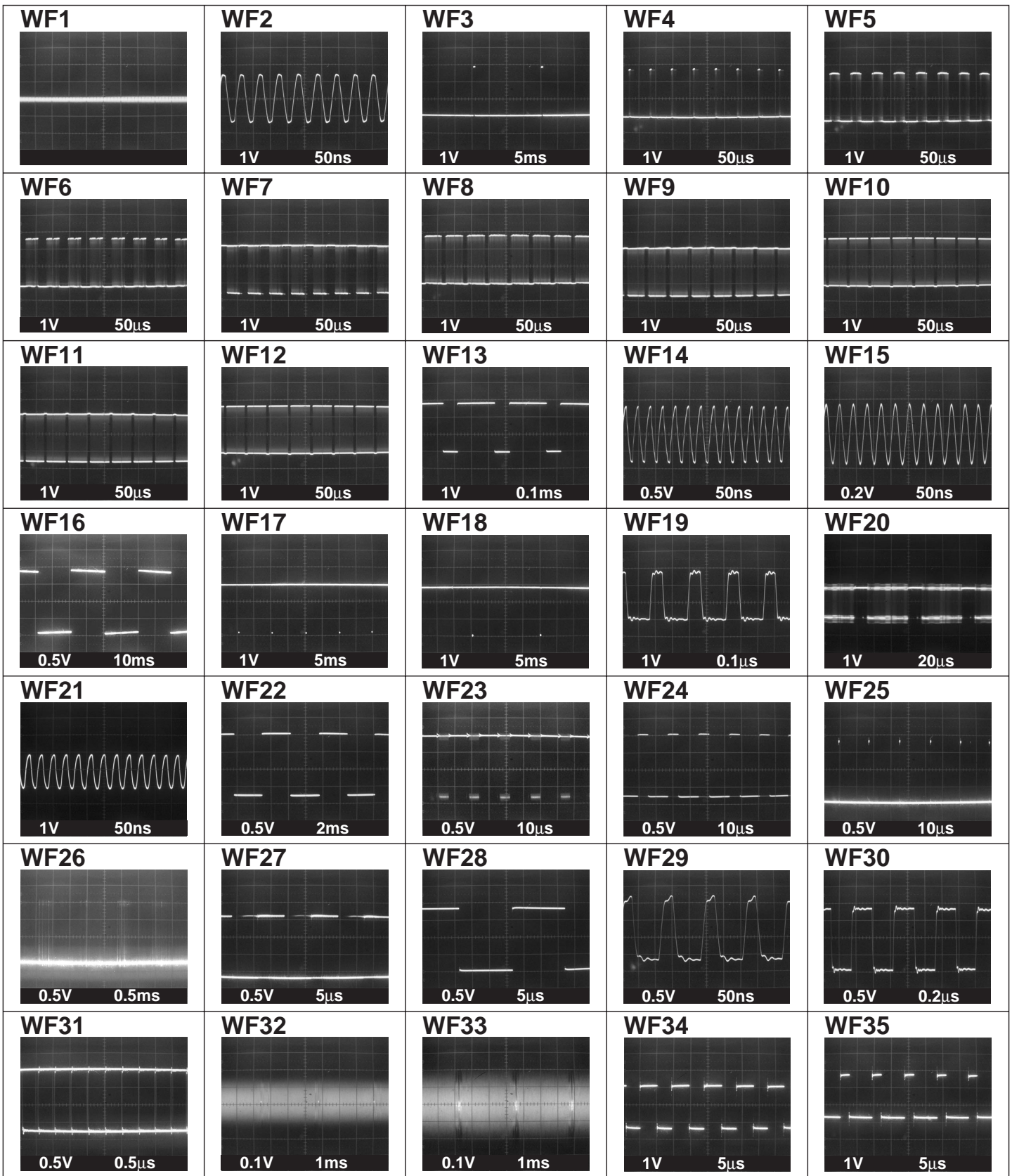
(C): COMPONENT SIDE (F): FOIL SIDE

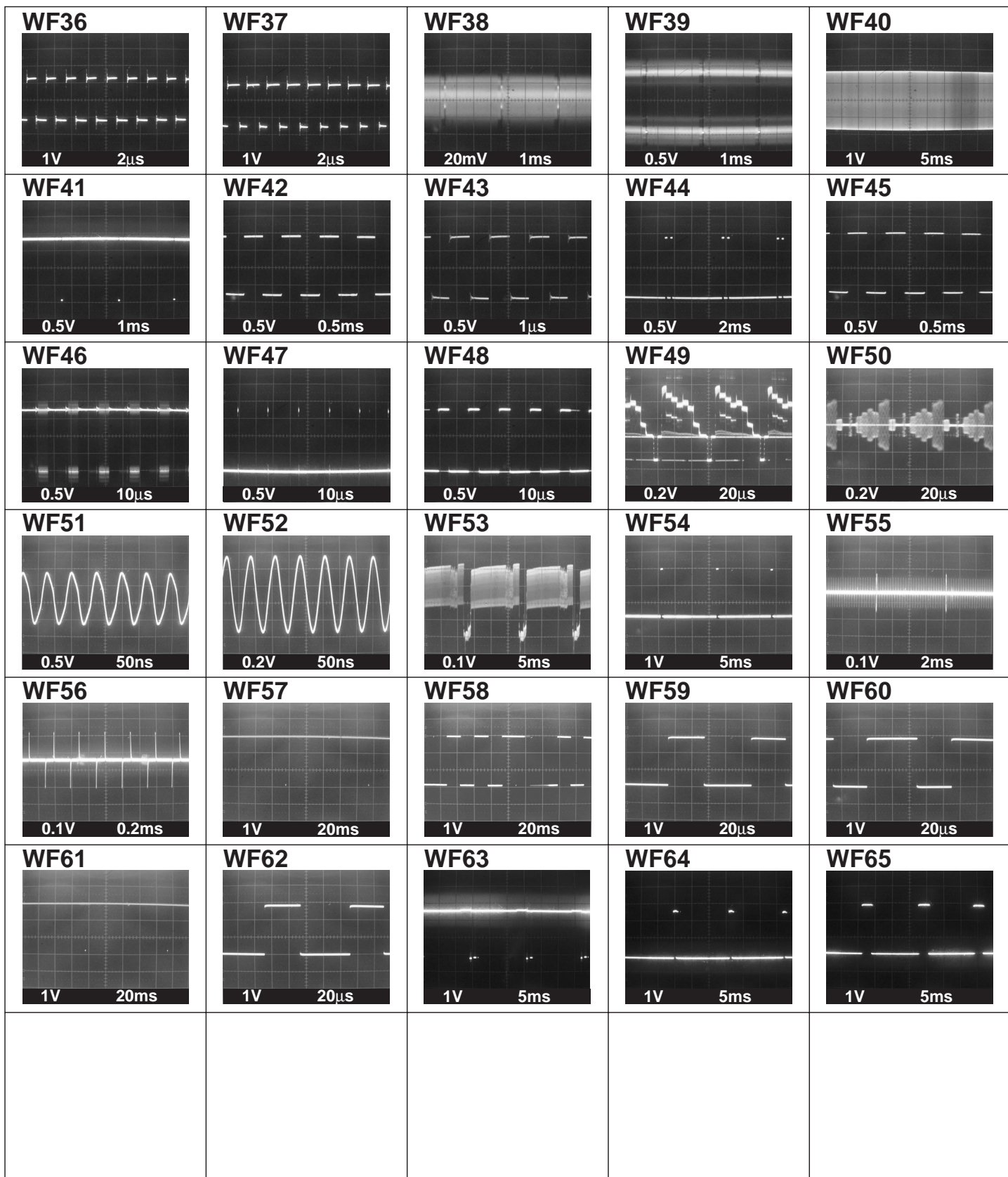
CSP IC		Check point	WF NO.	Remarks
Pin	Name			
K2	TPD1	-----	----	----
K3	TPC5	TP6311	B-1 WF1	MAIN P.C.B.(F)
K4	TPC6	TP6312	C-1 WF1	MAIN P.C.B.(F)
K5	DVSS	-----	----	----
K6	DVSS	-----	----	----
K13	TEST2	-----	----	----
K14	DUOINT0	-----	----	----
K15	DUOINT2	-----	----	----
K16	DUOINT3	-----	----	----
K17	DVCC30	-----	----	----
K18	DUOINT1	-----	----	----
L1	FVCC3	-----	----	----
L2	TPC1	TP6307	B-1 WF1	MAIN P.C.B.(F)
L3	TPC2	TP6308	B-1 WF1	MAIN P.C.B.(F)
L4	TPC3	TP6309	C-1 WF1	MAIN P.C.B.(F)
L5	LCD OPE SW	R6092 (UPPER)	B-3 WF1	MAIN P.C.B.(F)
L6	EVF SW	R6126 (LOWER)	B-3 WF1	MAIN P.C.B.(F)
L13	ADM[11]	-----	----	----
L14	ADM[15]	-----	----	----
L15	FVCC15	-----	----	----
L16	CAMVD	TP3031	E-2 WF54	MAIN P.C.B.(F)
L17	NC	-----	----	----
L18	NC	-----	----	----
M1	TPC0	TP6306	B-3 WF1	MAIN P.C.B.(F)
M2	TPC7	TP6313	B-3 WF1	MAIN P.C.B.(F)
M3	TPC4	TP6310	C-1 WF1	MAIN P.C.B.(F)
M4	LCD CS	IC8001-5	F-5 WF1	MAIN P.C.B.(F)
M5	LENS STANDBY	IC701-2	A-4 WF1	MAIN P.C.B.(C)
M6	DVCC32	-----	----	----
M13	ADM[6]	-----	----	----
M14	ADM[7]	-----	----	----
M15	DVSS	-----	----	----
M16	NC	-----	----	----
M17	NC	-----	----	----
M18	NC	-----	----	----
N1	CAM12V ON H	IC1001-10	B-5 WF1	MAIN P.C.B.(F)
N2	EEP PROTECT	IC6003-3	C-2 WF1	MAIN P.C.B.(F)
N3	RTC CS	IC6004-4	B-2 WF1	MAIN P.C.B.(F)
N4	EEP CS	IC6003-1	C-2 WF1	MAIN P.C.B.(F)
N5	OIS MICOM RESET	IC6701-23	A-3 WF2	MAIN P.C.B.(C)
N7	DVSS	-----	----	----
N8	TIMER INT	IC6004-3	B-2 WF1	MAIN P.C.B.(F)
N9	DVCC15	-----	----	----
N10	DVSS	-----	----	----
N11	PHOTO SW	R6090 (UPPER)	C-2 WF1	MAIN P.C.B.(F)
N12	DVSS	-----	----	----
N14	NC	-----	----	----
N15	ADM[13]	-----	----	----
N16	TEST3	-----	----	----
N17	ADM[14]	-----	----	----
N18	ADM[12]	-----	----	----
P1	CG RST	IC302-19	C-4 WF1	CAMERA P.C.B. (C)
P2	NC	-----	----	----
P3	ELECT SW	R6059 (UPPER)	A-2 WF1	MAIN P.C.B.(F)
P4	CASSETTE DOWN SW	R6060 (UPPER)	A-2 WF1	MAIN P.C.B.(F)
P5	HID ENV H	-----	----	----
P6	NC	-----	----	----
P7	OIS HANDSHAKE	IC6701-36	A-3 WF1	MAIN P.C.B.(C)
P8	LCD SCK	IC8001-7	F-5 WF1	MAIN P.C.B.(F)
P9	PC RST	-----	----	----
P10	OIS SUB CLK	TP6703	A-2 WF63	MAIN P.C.B.(C)
P11	NC	-----	----	----
P12	USB DPBIAS	Q6008-B	C-2 WF1	MAIN P.C.B.(F)
P13	MODE14	-----	----	----
P14	NC	-----	----	----
P15	ADM[2]	-----	----	----
P16	ADM[8]	-----	----	----
P17	ADM[10]	-----	----	----
P18	ADM[9]	-----	----	----
R1	USB INT	Q401-C	F-2 WF1	MAIN P.C.B.(C)
R2	POWER-SW	R6058 (UPPER)	B-2 WF1	MAIN P.C.B.(F)

(C): COMPONENT SIDE (F): FOIL SIDE

CSP IC		Check point	WF NO.	Remarks
Pin	Name			
R3	HOST REQ	-----	----	----
R4	HOST ACK	-----	----	----
R5	POWER ON H	Q6002-B	E-3 WF1	MAIN P.C.B.(C)
R6	AFST	-----	----	----
R7	ZENC	R6021 (RIGHT)	D-2 WF55	MAIN P.C.B.(C)
R8	LCD DI	R6075 (LOWER)	B-2 WF1	MAIN P.C.B.(F)
R9	232C RXD	R6113 (UPPER)	B-2 WF1	MAIN P.C.B.(C)
R10	OIS SUB SDI	TP6701	A-2 WF64	MAIN P.C.B.(C)
R11	S-PHOTO SW2	R6061 (RIGHT)	A-4 WF1	MAIN P.C.B.(F)
R12	NC	-----	----	----
R13	LIGHT SW	R6085 (UPPER)	B-2 WF1	MAIN P.C.B.(F)
R14	NC	-----	----	----
R15	NC	-----	----	----
R16	ADM[3]	-----	----	----
R17	ADM[4]	-----	----	----
R18	ADM[5]	-----	----	----
T1	LIGHT ON H	R6004 (UPPER)	B-2 WF1	MAIN P.C.B.(F)
T2	SENS LED	Q6003-B	D-3 WF1	MAIN P.C.B.(C)
T3	NTSC/PAL	R6049 (UPPER)	B-2 WF1	MAIN P.C.B.(F)
T4	MIC ON	R6070 (RIGHT)	B-2 WF1	MAIN P.C.B.(F)
T5	OIS HANDSHAKE2	IC6701-37	A-3 WF1	MAIN P.C.B.(C)
T6	FENC	R6022 (RIGHT)	D-2 WF56	MAIN P.C.B.(C)
T7	EEP TIMER SCK	IC6003-6	C-2 WF57	MAIN P.C.B.(F)
T8	LCD DO	R6075 (UPPER)	B-2 WF58	MAIN P.C.B.(F)
T9	232C TXD	R6114 (UPPER)	C-2 WF1	MAIN P.C.B.(F)
T10	OIS SUB SDO	TP6702	A-2 WF65	MAIN P.C.B.(C)
T11	POWER LED	Q6013-B	E-1 WF1	MAIN P.C.B.(C)
T12	STANDBY LED	Q6011-B	E-1 WF1	MAIN P.C.B.(C)
T13	AV PLUG	R6091 (UPPER)	B-2 WF1	MAIN P.C.B.(F)
T14	USB DET	Q6009-C	F-2 WF1	MAIN P.C.B.(C)
T15	NC	-----	----	----
T16	NC	-----	----	----
T17	ADM[0]	-----	----	----
T18	ADM[1]	-----	----	----
U1	HOLE BIAS	R704 (UPPER)	B-3 WF59	MAIN P.C.B.(C)
U2	PWM BIAS	R701 (UPPER)	B-5 WF60	MAIN P.C.B.(C)
U3	NC	-----	----	----
U4	MIC CLK	R6077 (LOWER)	C-4 WF1	MAIN P.C.B.(F)
U5	CAM D3OFF	-----	----	----
U6	LENS TEST1	-----	----	----
U7	EEP TIMER DI	R6074 (UPPER)	B-2 WF61	MAIN P.C.B.(F)
U8	DVCC32	-----	----	----
U9	NC	-----	----	----
U10	T-PHOTO SW2	R6066 (RIGHT)	A-4 WF1	MAIN P.C.B.(F)
U11	CROSS LED	-----	----	----
U12	LCD RVSW SW	R6088 (UPPER)	C-2 WF1	MAIN P.C.B.(F)
U13	SS SW	R6086 (UPPER)	B-2 WF1	MAIN P.C.B.(F)
U14	DVCC33	-----	----	----
U15	CARD DET	R6084 (LEFT)	C-2 WF1	MAIN P.C.B.(F)
U16	NC	-----	----	----
U17	NC	-----	----	----
U18	DVCC3	-----	----	----
V2	HOLE GAIN	R703 (LOWER)	B-3 WF62	MAIN P.C.B.(C)
V3	REMOCON	R6017 (UPPER)	C-2 WF1	MAIN P.C.B.(F)
V4	MIC DATA	R6078 (LOWER)	C-4 WF1	MAIN P.C.B.(F)
V5	LENS LED	R6032 (RIGHT)	E-2 WF1	MAIN P.C.B.(C)
V6	LENS DRV RST	R6020 (UPPER)	B-2 WF1	MAIN P.C.B.(F)
V7	EEP TIMER DO	R6021 (UPPER)	B-2 WF61	MAIN P.C.B.(F)
V8	NC	-----	----	----
V9	NC	-----	----	----
V10	S-PHOTO SW1	R6064 (RIGHT)	A-4 WF1	MAIN P.C.B.(F)
V11	T-PHOTO SW1	R6065 (RIGHT)	A-4 WF1	MAIN P.C.B.(F)
V12	ACCESS LED	Q6012-B	E-1 WF1	MAIN P.C.B.(C)
V13	NC	-----	----	----
V14	XRST	R3083 (RIGHT)	D-2 WF1	MAIN P.C.B.(C)
V15	SD PROTECT	R6089 (LEFT)	C-2 WF1	MAIN P.C.B.(C)
V16	SHIMUKE	-----	----	----
V17	NC	-----	----	----

6.2. WAVEFORM TABLE





7 Replacement Parts Lists

BEFORE REPLACING PARTS, READ THE FOLLOWING:

1. Use only original replacement parts:

To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list.

2. IMPORTANT SAFETY NOTICE

Components identified by the sign \triangle have special characteristics important for safety. When replacing any of these components, use only the specified parts.

3. Definition of Parts supplier:

a. All parts are supplied from PSEC.

4. Model Number Indication:

Model numbers are indicated in the Remarks column without "NV-GS."

5. Parts whose Ref. Nos. are the same are interchangeable as replacement parts. Any of these parts may be ordered and used as a replacement part.

6. Unless otherwise specified;

All resistors are in Ω , K = 1,000 Ω , M = 1,000 k Ω .

7. Abbreviation

RTL: Retention Time Limited

This indicates that the retention time is limited for this item. After the discontinuation of this item in production, it will no longer be available.

NR: Non Repairable Board Ass'y

MGF CHIP: Metal Glaze Film Chip

C CHIP: Ceramic Chip

COMPLX CMP: Complex Component

W FLMPRF: Wirewound Flameproof

P.C.B.: Printed Circuit Board

E.S.D.: Electrostatically Sensitive Devices

CSP: Chip Size Package

7.1. ELECTRICAL REPLACEMENT PARTS LIST

Definition of Parts supplier:

1. All parts are supplied from PSEC.

PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E10	LSEP8361P1	MAIN P.C.B.	E.S.D. RTL 80EG/EF /E/EP/EB
E10	LSEP8361R1	MAIN P.C.B.	E.S.D. RTL 80EK/EE
E10	LSEP8361Q1	MAIN P.C.B.	E.S.D. RTL 85EE/GC ,88GK

7.1.1. MAIN P.C.B.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC301	C0CBBC00130	IC, LINEAR	
IC302	CLAB00002646	IC, LINEAR	
IC303	CLAB00002039	IC, LOGIC	E.S.D.
or IC303	MN31121SASE1	IC, LOGIC	E.S.D.
IC701	CLAB00002355	IC, LINEAR	
IC702	COABCA000064	IC, LINEAR	
or IC702	COABCZ000008	IC, LINEAR	
IC1001	C0DBAZZ00064	IC, LINEAR	
IC1002	C0CBABD00060	IC, LINEAR	
IC1003	C0CBAC000214	IC, LINEAR	
IC1004	C0CBAC000207	IC, LINEAR	
IC2001	CLAB00002122	IC, LINEAR	
IC2002	COABAA000046	IC, LINEAR	
IC3001	CLAB00002028	IC, LOGIC	E.S.D. CSP
IC3201	CLAB00001695	IC, LOGIC	E.S.D. CSP
IC3301	CLAB00002663	IC, LINEAR	
IC5001	AN3732FJMEFV	IC, LINEAR	
IC6001	C2DBMK000061	IC, 32BIT MICROCONTROLLER	E.S.D. CSP
IC6003	C3EBHG000004	IC, EEP ROM	E.S.D.
IC6004	CLZBZ0002602	IC, CMOS GATE ARRAYS	E.S.D.
IC6005	COEBJ0000316	IC, LINEAR	
or IC6005	COEBJ0000150	IC, LINEAR	
IC6701	C2CBGG000023	IC, 16BIT MICROCONTROLLER	E.S.D.
IC6702	COJBAS000219	IC, LOGIC	E.S.D.
IC8001	CLAB00002388	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q701	2SC584600L	TRANSISTOR SI NPN CHIP	
or Q701	BLABCF000218	TRANSISTOR SI NPN CHIP	
or Q701	BLABCF000226	TRANSISTOR SI NPN CHIP	
Q1001	B1GDCFL0038	TRANSISTOR SI PNP CHIP	
or Q1001	B1GDBEKK0002	TRANSISTOR SI PNP CHIP	
or Q1001	UNR31A200L	TRANSISTOR SI PNP CHIP	
Q1002	2SC584600L	TRANSISTOR SI NPN CHIP	
or Q1002	BLABCF000218	TRANSISTOR SI NPN CHIP	
or Q1002	BLABCF000226	TRANSISTOR SI NPN CHIP	
Q1010	B1DHBC000005	TRANSISTOR FET CHIP	
Q1020	B1DHBC000005	TRANSISTOR FET CHIP	
Q1030	B1DHBC000005	TRANSISTOR FET CHIP	
Q1040	B1DFBC000007	TRANSISTOR FET CHIP	
Q1041	B1DDCB000002	TRANSISTOR FET CHIP	
Q1050	B1ZBZ0000048	IC PROTECTOR CHIP	
Q1051	B1ZBZ0000048	IC PROTECTOR CHIP	
Q1300	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q1300	BLABCF000020	TRANSISTOR SI NPN CHIP	
or Q1300	BLABCF000112	TRANSISTOR SI NPN CHIP	
Q1301	2SD2216J08	TRANSISTOR SI NPN CHIP	
or Q1301	BLABCF000104	TRANSISTOR SI NPN CHIP	
or Q1301	BLABCF000110	TRANSISTOR SI NPN CHIP	
Q1302	XP0140100L	TRANSISTOR COMPLX CMP SI PNP CHIP	
Q1303	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q1303	BLABCF000020	TRANSISTOR SI NPN CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
or Q1303	BLABCF000112	TRANSISTOR SI NPN CHIP	
Q1400	2SD2216J08	TRANSISTOR SI NPN CHIP	
or Q1400	BLABCF000104	TRANSISTOR SI NPN CHIP	
or Q1400	BLABCF000110	TRANSISTOR SI NPN CHIP	
Q1401	2SC584600L	TRANSISTOR SI NPN CHIP	
or Q1401	BLABCF000218	TRANSISTOR SI NPN CHIP	
or Q1401	BLABCF000226	TRANSISTOR SI NPN CHIP	
Q1402	UNR9114J08	TRANSISTOR SI PNP CHIP	
or Q1402	BIGDCFJN0017	TRANSISTOR SI PNP CHIP	
Q1403	BIGBCFLN0012	TRANSISTOR SI NPN CHIP	
or Q1403	BIGBCFLN0015	TRANSISTOR SI NPN CHIP	
or Q1403	UNR32AT00L	TRANSISTOR SI NPN CHIP	
Q1404	XP0431400L	TRANSISTOR COMPLX CMP SI NPN/PNP CHIP	
Q1405	2SB09700RL	TRANSISTOR SI PNP CHIP	
Q1406	BIGBCFLN0012	TRANSISTOR SI NPN CHIP	
or Q1406	BIGBCFLN0015	TRANSISTOR SI NPN CHIP	
or Q1406	UNR32AT00L	TRANSISTOR SI NPN CHIP	
Q1407	2SB09700RL	TRANSISTOR SI PNP CHIP	
Q1408	2SD2216J08	TRANSISTOR SI NPN CHIP	
or Q1408	BLABCF000104	TRANSISTOR SI NPN CHIP	
or Q1408	BLABCF000110	TRANSISTOR SI NPN CHIP	
Q3001	UNR31A100L	TRANSISTOR SI PNP CHIP	
or Q3001	BIGDCFJJ0042	TRANSISTOR SI PNP CHIP	
or Q3001	BIGDCFJJ0050	TRANSISTOR SI PNP CHIP	
Q6002	UNR32A300L	TRANSISTOR SI NPN CHIP	
or Q6002	BIGBCFNN0015	TRANSISTOR SI NPN CHIP	
or Q6002	BIGBCFNN0042	TRANSISTOR SI NPN CHIP	
Q6003	2SD1820A0L	TRANSISTOR SI NPN CHIP	
Q6004	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6004	BLABCF000020	TRANSISTOR SI NPN CHIP	
or Q6004	BLABCF000112	TRANSISTOR SI NPN CHIP	
Q6008	BIGBCFLN0012	TRANSISTOR SI NPN CHIP	
or Q6008	BIGBCFLN0015	TRANSISTOR SI NPN CHIP	
or Q6008	UNR32AT00L	TRANSISTOR SI NPN CHIP	
Q6009	UNR32AE00L	TRANSISTOR SI NPN CHIP	
or Q6009	BIGBCFNL0017	TRANSISTOR SI NPN CHIP	
Q6010	2SB09700RL	TRANSISTOR SI PNP CHIP	
Q6011	UNR31A500L	TRANSISTOR SI PNP CHIP	
or Q6011	BIGDCFJA0025	TRANSISTOR SI PNP CHIP	
or Q6011	BIGDCFJA0027	TRANSISTOR SI PNP CHIP	
Q6012	UNR31A500L	TRANSISTOR SI PNP CHIP	85EE/GC ,88GK
or Q6012	BIGDCFJA0025	TRANSISTOR SI PNP CHIP	85EE/GC ,88GK
or Q6012	BIGDCFJA0027	TRANSISTOR SI PNP CHIP	85EE/GC ,88GK
Q6013	UNR31A500L	TRANSISTOR SI PNP CHIP	
or Q6013	BIGDCFJA0025	TRANSISTOR SI PNP CHIP	
or Q6013	BIGDCFJA0027	TRANSISTOR SI PNP CHIP	
Q6014	UNR9110J08	TRANSISTOR SI PNP CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D301	B0ACCJ000027	DIODE SI CHIP	
or D301	MA2S111008	DIODE SI CHIP	
D302	MA2S728008	DIODE SI CHIP	
or D302	B0JCDD000002	DIODE SI CHIP	
or D302	MA2S72800L	DIODE SI CHIP	
D1001	B0BC01200021	DIODE ZENER CHIP 12V	
D1003	MA2S111008	DIODE SI CHIP	
or D1003	B0ACCK000003	DIODE SI CHIP	
or D1003	MA2S11100L	DIODE SI CHIP	
D1005	MAZ81000ML	DIODE SI CHIP	
D1040	B0JCMD000023	DIODE SI CHIP	
D1041	B0JCMD000023	DIODE SI CHIP	
D1300	MAZ80750ML	DIODE ZENER CHIP 7.5V	
D1400	MA2S111008	DIODE SI CHIP	
or D1400	B0ACCK000003	DIODE SI CHIP	
or D1400	MA2S11100L	DIODE SI CHIP	
D1402	MA2S111008	DIODE SI CHIP	
or D1402	B0ACCK000003	DIODE SI CHIP	
or D1402	MA2S11100L	DIODE SI CHIP	
D1403	MAZ81300ML	DIODE ZENER CHIP 13V	
D2001	MA3S13300L	DIODE SI CHIP	
D3901	D4ED1120A005	SURGE ABSORBER	
D6006	MA3J14700L	DIODE SI CHIP	
D6301	B3AAB0000137	LIGHT EMITTING DIODE RED	85EE/GC ,88GK

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R302	ERJ2GEJ221X	MGF CHIP 1/16W 220	
R303	ERJ2GEOR00X	MGF CHIP 1/16W 0	
R304	ERJ2GEOR00X	MGF CHIP 1/16W 0	
R305	ERJ2GEJ105X	MGF CHIP 1/16W 1M	
R312	ERJ2GEJ104X	MGF CHIP 1/16W 100K	
R314	D0GA333JA015	MGF CHIP 1/16W 33K	
R315	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R319	ERJ2GEOR00X	MGF CHIP 1/16W 0	
R401	ERJ2RKD270X	MGF CHIP 1/16W 27	
R402	ERJ2RKD270X	MGF CHIP 1/16W 27	
R410	D0GA103JA015	MGF CHIP 1/16W 10K	
R701	D0GA103JA015	MGF CHIP 1/16W 10K	
R702	D0GA223JA015	MGF CHIP 1/16W 22K	
R703	D0GA103JA015	MGF CHIP 1/16W 10K	
R704	D0GA103JA015	MGF CHIP 1/16W 10K	
R705	D0GA393JA015	MGF CHIP 1/16W 39K	
R706	D0GA393JA015	MGF CHIP 1/16W 39K	
R707	D0GA223JA015	MGF CHIP 1/16W 22K	
R708	D0GA103JA015	MGF CHIP 1/16W 10K	
R709	ERJ2GEJ184X	MGF CHIP 1/16W 180K	
R710	ERJ2GEJ154X	MGF CHIP 1/16W 150K	
R711	D0GA182JA015	MGF CHIP 1/16W 1.8K	
R712	D0GA103JA015	MGF CHIP 1/16W 10K	
R713	D0GA393JA015	MGF CHIP 1/16W 39K	
R714	ERJ2GEJ334X	MGF CHIP 1/16W 330K	
R715	D0GA333JA015	MGF CHIP 1/16W 33K	
R716	D0GA103JA015	MGF CHIP 1/16W 10K	
R717	D0GA223JA015	MGF CHIP 1/16W 22K	
R718	D0GA223JA015	MGF CHIP 1/16W 22K	
R719	ERJ2GEJ684X	MGF CHIP 1/16W 680K	
R720	ERJ2GEJ124X	MGF CHIP 1/16W 120K	
R722	D0GA472JA015	MGF CHIP 1/16W 4.7K	
R723	D0GA473JA015	MGF CHIP 1/16W 47K	
R725	D0GA473JA015	MGF CHIP 1/16W 47K	
R726	ERJ2GEJ224X	MGF CHIP 1/16W 220K	
R727	D0GA472JA015	MGF CHIP 1/16W 4.7K	
R728	D0GA472JA015	MGF CHIP 1/16W 4.7K	
R729	ERJ2GEJ124X	MGF CHIP 1/16W 120K	
R730	D0GA393JA015	MGF CHIP 1/16W 39K	

Ref. No.	Part No.	Part Name & Description	Remarks
R731	DOGA103JA015	MGF CHIP 1/16W 10K	
R732	DOGA103JA015	MGF CHIP 1/16W 10K	
R733	DOGA393JA015	MGF CHIP 1/16W 39K	
R734	DOGA182JA015	MGF CHIP 1/16W 1.8K	
R735	DOGA103JA015	MGF CHIP 1/16W 10K	
R736	DOGA823JA015	MGF CHIP 1/16W 82K	
R737	DOGA473JA015	MGF CHIP 1/16W 47K	
R738	ERJ2GEJ151X	MGF CHIP 1/16W 150	
R739	DOGA103JA015	MGF CHIP 1/16W 10K	
R740	ERJ2GEJ334X	MGF CHIP 1/16W 330K	
R741	DOGA103JA015	MGF CHIP 1/16W 10K	
R742	ERJ2GEJ154X	MGF CHIP 1/16W 150K	
R743	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R744	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R745	DOGA103JA015	MGF CHIP 1/16W 10K	
R750	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R1001	DOGA103JA015	MGF CHIP 1/16W 10K	
R1002	DOGA103JA015	MGF CHIP 1/16W 10K	
R1003	DOGA472JA015	MGF CHIP 1/16W 4.7K	
R1004	DOGA472JA015	MGF CHIP 1/16W 4.7K	
R1005	DOGA472JA015	MGF CHIP 1/16W 4.7K	
R1006	ERJ2RHD103X	MGF CHIP 1/16W 10K	
R1007	DOGA222JA015	MGF CHIP 1/16W 2.2K	
R1011	ERJ2RHD912X	MGF CHIP 1/16W 9.1K	
R1012	ERJ2RHD302X	MGF CHIP 1/16W 3K	
R1013	ERJ2RHD121X	MGF CHIP 1/16W 120	
R1015	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R1020	ERJ2RHD392X	MGF CHIP 1/16W 3.9K	
R1021	ERJ2RHD272X	MGF CHIP 1/16W 2.7K	
R1022	ERJ2RHD271X	MGF CHIP 1/16W 270	
R1023	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R1030	ERJ2RHD122X	MGF CHIP 1/16W 1.2K	
R1031	ERJ2RHD472X	MGF CHIP 1/16W 4.7K	
R1032	ERJ2RHD221X	MGF CHIP 1/16W 220	
R1033	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R1040	ERJ2RHD273X	MGF CHIP 1/16W 27K	
R1041	ERJ2RHD302X	MGF CHIP 1/16W 3K	
R1042	ERJ2RHD820X	MGF CHIP 1/16W 82	
R1043	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R1100	DOGA472JA015	MGF CHIP 1/16W 4.7K	
R1101	ERA3YED822V	MGF CHIP 1/16W 8.2K	
R1102	DOGA223JA015	MGF CHIP 1/16W 22K	
R1110	ERJ2GEJ471X	MGF CHIP 1/16W 470	
R1112	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R1120	ERJ2GEJ471X	MGF CHIP 1/16W 470	
R1122	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R1130	ERJ2GEJ471X	MGF CHIP 1/16W 470	
R1140	ERJ2GEJ151X	MGF CHIP 1/16W 150	
R1141	DOGA153JA015	MGF CHIP 1/16W 15K	
R1142	DOGA223JA015	MGF CHIP 1/16W 22K	
R1300	DOGA223JA015	MGF CHIP 1/16W 22K	
R1301	ERJ2RHD472X	MGF CHIP 1/16W 4.7K	
R1302	ERJ2RHD472X	MGF CHIP 1/16W 4.7K	
R1303	DOGA123JA015	MGF CHIP 1/16W 12K	
R1304	DOGA103JA015	MGF CHIP 1/16W 10K	
R1305	ERJ2RHD123X	MGF CHIP 1/16W 12K	
R1306	ERJ2RHD153X	MGF CHIP 1/16W 15K	
R1307	ERJ2RHD102X	MGF CHIP 1/16W 10K	
R1400	DOGA473JA015	MGF CHIP 1/16W 47K	
R1401	DOGA102JA015	MGF CHIP 1/16W 1K	
R1402	DOGA473JA015	MGF CHIP 1/16W 47K	
R1403	DOGA473JA015	MGF CHIP 1/16W 47K	
R1404	DOGA473JA015	MGF CHIP 1/16W 47K	
R1405	DOGA473JA015	MGF CHIP 1/16W 47K	
R1408	DOGA472JA015	MGF CHIP 1/16W 4.7K	
R1409	DOGA473JA015	MGF CHIP 1/16W 47K	
R1410	DOGA152JA015	MGF CHIP 1/16W 1.5K	
R1411	DOGA473JA015	MGF CHIP 1/16W 47K	
R1412	DOGA332JA015	MGF CHIP 1/16W 3.3K	
R1413	DOGA473JA015	MGF CHIP 1/16W 47K	
R1414	DOGA103JA015	MGF CHIP 1/16W 10K	
R2001	ERJ8GEYJR27V	MGF CHIP 1/8W 0.27	
R2002	DOGA103JA015	MGF CHIP 1/16W 10K	

Ref. No.	Part No.	Part Name & Description	Remarks
R2003	ERJ8GEYJR27V	MGF CHIP 1/8W 0.27	
R2004	DOGA273JA015	MGF CHIP 1/16W 27K	
R2005	DOGA242JA015	MGF CHIP 1/16W 2.4K	
R2006	DOGA153JA015	MGF CHIP 1/16W 15K	
R2007	ERJ2RHD273X	MGF CHIP 1/16W 27K	
R2008	DOGA103JA015	MGF CHIP 1/16W 10K	
R2009	ERJ2GEJ104X	MGF CHIP 1/16W 100K	
R2010	DOGA102JA015	MGF CHIP 1/16W 1K	
R2011	DOGA823JA015	MGF CHIP 1/16W 82K	
R2012	DOGA102JA015	MGF CHIP 1/16W 1K	
R2013	DOGA473JA015	MGF CHIP 1/16W 47K	
R2014	DOGA102JA015	MGF CHIP 1/16W 1K	
R2015	DOGA102JA015	MGF CHIP 1/16W 1K	
R2016	DOGA102JA015	MGF CHIP 1/16W 1K	
R2017	DOGA102JA015	MGF CHIP 1/16W 1K	
R2018	ERJ8GEYJR68V	MGF CHIP 1/8W 0.68	
R2019	DOGA223JA015	MGF CHIP 1/16W 22K	
R2020	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R2021	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R2024	DOGA103JA015	MGF CHIP 1/16W 10K	
R2025	DOGA183JA015	MGF CHIP 1/16W 18K	
R2026	DOGA393JA015	MGF CHIP 1/16W 39K	
R2027	DOGA563JA015	MGF CHIP 1/16W 56K	
R2028	DOGA103JA015	MGF CHIP 1/16W 10K	
R2029	DOGA103JA015	MGF CHIP 1/16W 10K	
R2030	DOGA103JA015	MGF CHIP 1/16W 10K	
R2031	DOGA103JA015	MGF CHIP 1/16W 10K	
R2032	DOGA102JA015	MGF CHIP 1/16W 1K	
R2033	DOGA102JA015	MGF CHIP 1/16W 1K	
R2034	DOGA102JA015	MGF CHIP 1/16W 1K	
R2035	DOGA102JA015	MGF CHIP 1/16W 1K	
R2038	ERJ2GEJ104X	MGF CHIP 1/16W 100K	
R2039	ERJ2GEJ104X	MGF CHIP 1/16W 100K	
R3006	ERJ2GEJ105X	MGF CHIP 1/16W 1M	
R3007	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R3008	ERJ2RHD123X	MGF CHIP 1/16W 12K	
R3009	DOGA103JA015	MGF CHIP 1/16W 10K	
R3010	DOGA103JA015	MGF CHIP 1/16W 10K	
R3011	ERJ2RKD53R6X	MGF CHIP 1/16W 3.6	
R3012	ERJ2RKD53R6X	MGF CHIP 1/16W 3.6	
R3013	ERJ2RKD53R6X	MGF CHIP 1/16W 3.6	
R3014	ERJ2RKD53R6X	MGF CHIP 1/16W 3.6	
R3015	DOGA473JA015	MGF CHIP 1/16W 47K	
R3016	DOGA473JA015	MGF CHIP 1/16W 47K	
R3017	DOGA473JA015	MGF CHIP 1/16W 47K	
R3018	DOGA473JA015	MGF CHIP 1/16W 47K	
R3019	DOGA473JA015	MGF CHIP 1/16W 47K	
R3029	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R3030	DOGA103JA015	MGF CHIP 1/16W 10K	
R3031	DOGA153JA015	MGF CHIP 1/16W 15K	
R3032	ERJ2RHD103X	MGF CHIP 1/16W 10K	
R3033	ERJ2RHD123X	MGF CHIP 1/16W 12K	
R3034	ERJ2RHD103X	MGF CHIP 1/16W 10K	
R3035	ERJ2RHD103X	MGF CHIP 1/16W 10K	
R3037	ERJ2GEJ105X	MGF CHIP 1/16W 1M	
R3039	DOGA223JA015	MGF CHIP 1/16W 22K	
R3040	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R3043	DOGA152JA015	MGF CHIP 1/16W 1.5K	
R3079	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R3080	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R3081	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R3082	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R3083	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R3084	DOGA473JA015	MGF CHIP 1/16W 47K	
R3085	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R3087	DOGA473JA015	MGF CHIP 1/16W 47K	
R3088	DOGA473JA015	MGF CHIP 1/16W 47K	
R3089	ERJ2GEJ471X	MGF CHIP 1/16W 470	
R3201	ERJ2GEJ100X	MGF CHIP 1/16W 10	
R3202	DOGA182JA015	MGF CHIP 1/16W 1.8K	
R3203	ERJ2GEJ271X	MGF CHIP 1/16W 270	
R3204	ERJ2GEJ221X	MGF CHIP 1/16W 220	
R3205	DOGA272JA015	MGF CHIP 1/16W 2.7K	

Ref. No.	Part No.	Part Name & Description	Remarks
R3206	ERJ2GEJ221X	MGF CHIP 1/16W 220	
R3207	DOGA222JA015	MGF CHIP 1/16W 2.2K	
R3208	DOGA332JA015	MGF CHIP 1/16W 3.3K	
R3209	DOGA103JA015	MGF CHIP 1/16W 10K	
R3210	DOGA103JA015	MGF CHIP 1/16W 10K	
R3211	DOGA103JA015	MGF CHIP 1/16W 10K	
R3212	DOGA103JA015	MGF CHIP 1/16W 10K	
R3218	DOGA473JA015	MGF CHIP 1/16W 47K	
R3225	DOGA102JA015	MGF CHIP 1/16W 1K	
R3226	DOGA102JA015	MGF CHIP 1/16W 1K	
R3227	ERJ2GEJ330X	MGF CHIP 1/16W 33	
R3229	DOGA473JA015	MGF CHIP 1/16W 47K	
R3230	DOGA473JA015	MGF CHIP 1/16W 47K	
R3231	DOGA473JA015	MGF CHIP 1/16W 47K	
R3232	DOGA102JA015	MGF CHIP 1/16W 1K	
R3233	DOGA102JA015	MGF CHIP 1/16W 1K	
R3234	DOGA102JA015	MGF CHIP 1/16W 1K	
R3303	ERJ2RKD680X	MGF CHIP 1/16W 68	
R3316	ERJ2RHD472X	MGF CHIP 1/16W 4.7K	
R3901	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R3904	DOGA122JA015	MGF CHIP 1/16W 1.2K	
R3905	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R3906	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R3907	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R4501	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R4502	ERJ2GEJ561X	MGF CHIP 1/16W 560	
R4503	ERJ2GEJ561X	MGF CHIP 1/16W 560	
R5005	DOGA103JA015	MGF CHIP 1/16W 10K	
R5006	DOGA103JA015	MGF CHIP 1/16W 10K	
R5007	DOGA103JA015	MGF CHIP 1/16W 10K	
R5008	DOGA103JA015	MGF CHIP 1/16W 10K	
R5009	DOGA182JA015	MGF CHIP 1/16W 1.8K	
R5010	DOGA682JA015	MGF CHIP 1/16W 6.8K	
R5011	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6002	ERJ6GEYJ330V	MGF CHIP 1/10W 33	
R6003	ERJ6GEYJ330V	MGF CHIP 1/10W 33	
R6004	DOGA102JA015	MGF CHIP 1/16W 1K	
R6005	DOGA332JA015	MGF CHIP 1/16W 3.3K	
R6006	DOGA332JA015	MGF CHIP 1/16W 3.3K	
R6007	DOGA332JA015	MGF CHIP 1/16W 3.3K	
R6008	DOGA332JA015	MGF CHIP 1/16W 3.3K	
R6010	ERJ2GEJ394X	MGF CHIP 1/16W 390K	
R6011	DOGA472JA015	MGF CHIP 1/16W 4.7K	
R6012	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R6013	ERJ2GEJ104X	MGF CHIP 1/16W 100K	
R6014	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6015	ERJ2RHD103X	MGF CHIP 1/16W 10K	
R6016	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R6017	DOGA102JA015	MGF CHIP 1/16W 1K	
R6020	DOGA102JA015	MGF CHIP 1/16W 1K	
R6021	DOGA183JA015	MGF CHIP 1/16W 18K	
R6022	DOGA183JA015	MGF CHIP 1/16W 18K	
R6023	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6024	ERJ6GEYJ221V	MGF CHIP 1/10W 220	
R6025	DOGA273JA015	MGF CHIP 1/16W 27K	
R6026	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R6027	ERJ2RHD103X	MGF CHIP 1/16W 10K	
R6028	ERJ2GEJ105X	MGF CHIP 1/16W 1M	
R6029	DOGA273JA015	MGF CHIP 1/16W 27K	
R6030	DOGA103JA015	MGF CHIP 1/16W 10K	
R6031	ERJ2GEJ105X	MGF CHIP 1/16W 1M	
R6032	DOGA392JA015	MGF CHIP 1/16W 3.9K	
R6033	ERJ2GEJ473X	MGF CHIP 1/16W 47K	
R6038	ERJ2GEJ473X	MGF CHIP 1/16W 47K	
R6039	DOGA332JA015	MGF CHIP 1/16W 3.3K	
R6040	DOGA332JA015	MGF CHIP 1/16W 3.3K	
R6041	DOGA102JA015	MGF CHIP 1/16W 1K	
R6044	DOGA102JA015	MGF CHIP 1/16W 1K	
R6045	ERJ2RHD683X	MGF CHIP 1/16W 68K	
R6046	DOGA393JA015	MGF CHIP 1/16W 39K	
R6047	ERJ2RHD223X	MGF CHIP 1/16W 22K	
R6048	ERJ2GE0R00X	MGF CHIP 1/16W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
R6052	ERJ2GEJ221X	MGF CHIP 1/16W 220	85EE/GC,88GK
R6053	ERJ2GEJ104X	MGF CHIP 1/16W 100K	
R6054	ERJ2GEJ104X	MGF CHIP 1/16W 100K	
R6055	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R6056	ERJ2GEJ471X	MGF CHIP 1/16W 470	
R6057	ERJ2GEJ104X	MGF CHIP 1/16W 100K	
R6058	DOGA102JA015	MGF CHIP 1/16W 1K	
R6059	DOGA102JA015	MGF CHIP 1/16W 1K	
R6060	DOGA102JA015	MGF CHIP 1/16W 1K	
R6061	DOGA822JA015	MGF CHIP 1/16W 8.2K	
R6062	DOGA473JA015	MGF CHIP 1/16W 47K	80EK/EE
R6062	ERJ2GEJ124X	MGF CHIP 1/16W 120K	85EE/GC,88GK
R6063	DOGA473JA015	MGF CHIP 1/16W 47K	
R6064	DOGA222JA015	MGF CHIP 1/16W 2.2K	
R6065	DOGA222JA015	MGF CHIP 1/16W 2.2K	
R6066	DOGA822JA015	MGF CHIP 1/16W 8.2K	
R6067	DOGA123JA015	MGF CHIP 1/16W 12K	
R6069	DOGA123JA015	MGF CHIP 1/16W 12K	
R6070	DOGA222JA015	MGF CHIP 1/16W 2.2K	
R6071	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R6072	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R6074	DOGA152JA015	MGF CHIP 1/16W 1.5K	
R6075	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R6076	DOGA332JA015	MGF CHIP 1/16W 3.3K	
R6077	DOGA332JA015	MGF CHIP 1/16W 3.3K	
R6078	DOGA332JA015	MGF CHIP 1/16W 3.3K	
R6079	ERJ2GEJ331X	MGF CHIP 1/16W 330	
R6080	ERJ2GEJ331X	MGF CHIP 1/16W 330	
R6081	ERJ2GEJ331X	MGF CHIP 1/16W 330	
R6082	ERJ2GE0R00X	MGF CHIP 1/16W 0	80EK/EE,85EE/GC,88GK
R6083	ERJ2GE0R00X	MGF CHIP 1/16W 0	80EG/EF/E/EP/EB
R6084	DOGA102JA015	MGF CHIP 1/16W 1K	
R6085	DOGA102JA015	MGF CHIP 1/16W 1K	
R6086	DOGA102JA015	MGF CHIP 1/16W 1K	
R6088	DOGA102JA015	MGF CHIP 1/16W 1K	
R6089	DOGA102JA015	MGF CHIP 1/16W 1K	
R6090	DOGA102JA015	MGF CHIP 1/16W 1K	
R6091	DOGA102JA015	MGF CHIP 1/16W 1K	
R6092	DOGA102JA015	MGF CHIP 1/16W 1K	
R6093	DOGA473JA015	MGF CHIP 1/16W 47K	
R6094	DOGA473JA015	MGF CHIP 1/16W 47K	
R6095	DOGA473JA015	MGF CHIP 1/16W 47K	
R6096	DOGA473JA015	MGF CHIP 1/16W 47K	
R6097	DOGA473JA015	MGF CHIP 1/16W 47K	
R6098	DOGA473JA015	MGF CHIP 1/16W 47K	
R6100	DOGA473JA015	MGF CHIP 1/16W 47K	
R6101	DOGA473JA015	MGF CHIP 1/16W 47K	
R6102	DOGA102JA015	MGF CHIP 1/16W 1K	
R6103	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R6104	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R6105	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R6106	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R6107	DOGA473JA015	MGF CHIP 1/16W 47K	
R6108	ERJ2GEJ105X	MGF CHIP 1/16W 1M	
R6109	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R6110	ERJ2GEJ331X	MGF CHIP 1/16W 330	
R6111	DOGA332JA015	MGF CHIP 1/16W 3.3K	
R6112	DOGA332JA015	MGF CHIP 1/16W 3.3K	
R6113	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R6114	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R6115	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R6116	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R6117	ERJ2GEJ105X	MGF CHIP 1/16W 1M	
R6118	ERJ2GEJ105X	MGF CHIP 1/16W 1M	
R6119	ERJ2GEJ105X	MGF CHIP 1/16W 1M	
R6120	ERJ2GEJ105X	MGF CHIP 1/16W 1M	
R6121	DOGA473JA015	MGF CHIP 1/16W 47K	
R6123	ERJ2GE0R00X	MGF CHIP 1/16W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
R6124	DOGA102JA015	MGF CHIP 1/16W 1K	
R6125	ERJ2GEJ105X	MGF CHIP 1/16W 1M	
R6126	ERJ2GEJ102X	MGF CHIP 1/16W 1K	
R6127	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R6128	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R6129	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R6130	DOGA102JA015	MGF CHIP 1/16W 1K	
R6131	DOGA223JA015	MGF CHIP 1/16W 22K	
R6132	DOGA183JA015	MGF CHIP 1/16W 18K	
R6133	DOGA102JA015	MGF CHIP 1/16W 1K	
R6301	ERJ3GEY0R00V	MGF CHIP 1/16W 0	85EE/GC ,88GK
R6302	ERJ3GEY0R00V	MGF CHIP 1/16W 0	85EE/GC ,88GK
R6303	ERJ3GEY0R00V	MGF CHIP 1/16W 0	85EE/GC ,88GK
R6304	ERJ3GEY0R00V	MGF CHIP 1/16W 0	85EE/GC ,88GK
R6305	ERJ3GEY0R00V	MGF CHIP 1/16W 0	85EE/GC ,88GK
R6306	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	85EE/GC ,88GK
R6307	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	85EE/GC ,88GK
R6308	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	85EE/GC ,88GK
R6309	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	85EE/GC ,88GK
R6310	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	85EE/GC ,88GK
R6311	ERJ3GEYJ220V	MGF CHIP 1/16W 22	85EE/GC ,88GK
R6312	ERJ3GEYJ220V	MGF CHIP 1/16W 22	85EE/GC ,88GK
R6313	ERJ3GEYJ220V	MGF CHIP 1/16W 22	85EE/GC ,88GK
R6314	ERJ3GEYJ220V	MGF CHIP 1/16W 22	85EE/GC ,88GK
R6315	ERJ3GEYJ220V	MGF CHIP 1/16W 22	85EE/GC ,88GK
R6316	ERJ3GEYJ100V	MGF CHIP 1/16W 10	85EE/GC ,88GK
R6702	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R6703	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R6704	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R6705	DOGA472JA015	MGF CHIP 1/16W 4.7K	
R6706	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R6707	ERJ2GEJ331X	MGF CHIP 1/16W 330	
R6708	ERJ2GEJ331X	MGF CHIP 1/16W 330	
R6709	DOGA103JA015	MGF CHIP 1/16W 10K	
R6710	ERJ2GEJ331X	MGF CHIP 1/16W 330	
R6711	ERJ2GEJ331X	MGF CHIP 1/16W 330	
R6712	DOGA103JA015	MGF CHIP 1/16W 10K	
R6713	DOGA103JA015	MGF CHIP 1/16W 10K	
R6714	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R6715	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R6716	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R6717	DOGA102JA015	MGF CHIP 1/16W 1K	
R6718	DOGA102JA015	MGF CHIP 1/16W 1K	
R7001	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7002	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R7003	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7004	DOGA1R2JA014	MGF CHIP 1/16W 1.2	
R7005	DOGA1R2JA014	MGF CHIP 1/16W 1.2	
R7006	DOGA1R2JA014	MGF CHIP 1/16W 1.2	
R7007	D1JB1R26A005	RESISTER FUSE 0.2A 50V	
R8001	ERJ2RHD511X	MGF CHIP 1/16W 510	
R8002	ERJ2RHD102X	MGF CHIP 1/16W 10K	
R8005	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8006	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8007	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8008	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8009	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8012	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R8013	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R8014	ERJ2GEJ101X	MGF CHIP 1/16W 100	

Ref. No.	Part No.	Part Name & Description	Remarks
R8017	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R8018	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8019	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8020	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8021	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8025	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8026	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8027	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8028	ERJ2GE0R00X	MGF CHIP 1/16W 0	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C301	FIH1A105A036	C CHIP 10V 1UF	
C302	FIH1A105A036	C CHIP 10V 1UF	
C303	FIG1A1040006	C CHIP 10V 0.1UF	
C304	ECJ0EC1H070D	C CHIP 50V 7PF	
C305	ECJ0EC1H070D	C CHIP 50V 7PF	
C306	FIG1A1040006	C CHIP 10V 0.1UF	
C307	FIG1A1040006	C CHIP 10V 0.1UF	
C308	FIG1A1040006	C CHIP 10V 0.1UF	
C309	FIG1H1020008	C CHIP 50V 1000PF	
C310	FIG1A1040006	C CHIP 10V 0.1UF	
C311	FIG1A1040006	C CHIP 10V 0.1UF	
C312	FIG1A1040006	C CHIP 10V 0.1UF	
C313	FLJ1A106A023	C CHIP 10V 10UF	
C314	FIG1A1040006	C CHIP 10V 0.1UF	
C315	FIH1C104A041	C CHIP 16V 0.1UF	
C316	FLJ1A106A023	C CHIP 10V 10UF	
C317	FIJ1C4750003	C CHIP 16V 4.7UF	
C318	FIG1A1040006	C CHIP 10V 0.1UF	
C319	FIG1A1040006	C CHIP 10V 0.1UF	
C320	FIG1A1040006	C CHIP 10V 0.1UF	
C322	FIG1A1040006	C CHIP 10V 0.1UF	
C327	FIG1C103A048	C CHIP 16V 0.01UF	
C328	FIG1H1020008	C CHIP 50V 1000PF	
C329	FIG1A1040006	C CHIP 10V 0.1UF	
C330	FIG1H560A565	C CHIP 50V 56PF	
C331	FIG1H560A565	C CHIP 50V 56PF	
C701	FIH1A105A036	C CHIP 10V 1UF	
C702	FIH1A105A036	C CHIP 10V 1UF	
C703	FIH1A224A012	C CHIP 10V 0.22UF	
C704	FIH1A105A036	C CHIP 10V 1UF	
C705	FIH1A105A036	C CHIP 10V 1UF	
C706	FIG1C103A048	C CHIP 16V 0.01UF	
C707	FIG1A1040006	C CHIP 10V 0.1UF	
C708	FIG1C103A048	C CHIP 16V 0.01UF	
C709	ECJ0EB1H821K	C CHIP 50V 820PF	
C710	FIG1A1040006	C CHIP 10V 0.1UF	
C711	FIG1H222A571	C CHIP 50V 2200PF	
C712	FIH1A105A036	C CHIP 10V 1UF	
C713	FLJ1A106A023	C CHIP 10V 10UF	
C715	ECJ0EB1H392K	C CHIP 50V 3900PF	
C716	FIG1C103A048	C CHIP 16V 0.01UF	
C717	FIG1A1040006	C CHIP 10V 0.1UF	
C718	FIG1E472A059	C CHIP 25V 4700PF	
C719	FIG1A1040006	C CHIP 10V 0.1UF	
C720	FIG1H471A459	C CHIP 50V 470PF	
C721	FIG1C103A048	C CHIP 16V 0.01UF	
C722	FIG1C103A048	C CHIP 16V 0.01UF	
C723	FIG1A473A012	C CHIP 10V 0.047UF	
C724	FIG1H222A571	C CHIP 50V 2200PF	
C725	FIG1A1040006	C CHIP 10V 0.1UF	
C727	FIG1A1040006	C CHIP 10V 0.1UF	
C728	ECJ0EB1H392K	C CHIP 50V 3900PF	
C729	FLJ1C1050028	C CHIP 16V 1UF	
C730	FLJ1A106A023	C CHIP 10V 10UF	
C731	FIG1A1040006	C CHIP 10V 0.1UF	
C732	FLJ1A106A023	C CHIP 10V 10UF	
C733	FIG1C103A048	C CHIP 16V 0.01UF	
C734	FIG1A1040006	C CHIP 10V 0.1UF	
C735	FIG1C103A048	C CHIP 16V 0.01UF	
C736	ECJ0EB1H821K	C CHIP 50V 820PF	
C737	FIG1A1040006	C CHIP 10V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C1001	FIG1H103A465	C CHIP 50V 0.01UF	
C1002	FIG1H103A465	C CHIP 50V 0.01UF	
C1003	FLJ1C105A063	C CHIP 16V 1UF	
C1004	FL1C106A011	C CHIP 16V 10UF	
C1005	FK1C4750017	C CHIP 16V 4.7UF	
C1010	FLJ0J4750005	C CHIP 6.3V 4.7UF	
C1011	FIG1H152A459	C CHIP 50V 1500PF	
C1020	FLJ0J4750005	C CHIP 6.3V 4.7UF	
C1021	FIG1H152A459	C CHIP 50V 1500PF	
C1030	FLJ0J4750005	C CHIP 6.3V 4.7UF	
C1031	FIG1H222A571	C CHIP 50V 2200PF	
C1040	FLJ1C1050028	C CHIP 16V 1UF	
C1041	FIG1H152A459	C CHIP 50V 1500PF	
C1042	FLJ1C1050028	C CHIP 16V 1UF	
C1043	FLJ1C1050028	C CHIP 16V 1UF	
C1050	FLJ1C1050028	C CHIP 16V 1UF	
C1051	FLJ1C1050028	C CHIP 16V 1UF	
C1100	FIH1C104A041	C CHIP 16V 0.1UF	
C1101	FIG1A473A012	C CHIP 10V 0.047UF	
C1102	FIH1C104A041	C CHIP 16V 0.1UF	
C1103	FIG1H101A566	C CHIP 50V 100PF	
C1104	FIH1E223A029	C CHIP 25V 0.022UF	
C1105	FLJ1C1050028	C CHIP 16V 1UF	
C1106	FLJ1C1050028	C CHIP 16V 1UF	
C1110	ECJ1VB1E333K	C CHIP 25V 0.033UF	
C1112	FIG1A473A012	C CHIP 10V 0.047UF	
C1121	FIG1C103A048	C CHIP 16V 0.01UF	
C1130	FIG1C103A048	C CHIP 16V 0.01UF	
C1140	FIG1A473A012	C CHIP 10V 0.047UF	
C1142	FIG1C153A048	C CHIP 16V 0.015UF	
C1210	FIH1A105A019	C CHIP 10V 1UF	
C1211	FIH1A105A019	C CHIP 10V 1UF	
C1212	FIH1A105A019	C CHIP 10V 1UF	
C1213	FIH1A105A019	C CHIP 10V 1UF	
C1215	F3F0J106A032	TANTALUM CHIP 6.3V 10UF	
C1216	F3E0J106A009	TANTALUM CHIP 6.3V 10UF	
C1217	FIH1A105A036	C CHIP 10V 1UF	
C1218	F3E0J106A009	TANTALUM CHIP 6.3V 10UF	
C1220	FIH1A105A019	C CHIP 10V 1UF	
C1221	FIH1A105A036	C CHIP 10V 1UF	
C1222	FIH1A105A019	C CHIP 10V 1UF	
C1223	FIH1A105A019	C CHIP 10V 1UF	
C1224	FIH1A105A036	C CHIP 10V 1UF	
C1225	F3E0J106A009	TANTALUM CHIP 6.3V 10UF	
C1226	FIH1A105A036	C CHIP 10V 1UF	
C1228	FIH1A105A036	C CHIP 10V 1UF	
C1230	FIH1A105A019	C CHIP 10V 1UF	
C1240	FLJ1C2250003	C CHIP 16V 2.2UF	
C1241	FLJ1C1050028	C CHIP 16V 1UF	
C1300	FIH1C104A041	C CHIP 16V 0.1UF	
C1301	FIH1A105A036	C CHIP 10V 1UF	
C1400	FIH1A105A036	C CHIP 10V 1UF	
C1401	FIG1A1040006	C CHIP 10V 0.1UF	
C1402	FLJ0J106A004	C CHIP 6.3V 10UF	
C2001	FLJ1A106A023	C CHIP 10V 10UF	
C2002	FLJ1A475A023	C CHIP 10V 4.7UF	
C2003	FIH1A105A036	C CHIP 10V 1UF	
C2004	FIG1C103A048	C CHIP 16V 0.01UF	
C2005	FIG1E472A059	C CHIP 25V 4700PF	
C2006	FIG1E472A059	C CHIP 25V 4700PF	
C2007	FIH1A105A036	C CHIP 10V 1UF	
C2008	FIG1A1040006	C CHIP 10V 0.1UF	
C2009	FIG1A1040006	C CHIP 10V 0.1UF	
C2010	FIG1A1040006	C CHIP 10V 0.1UF	
C2011	FIG1A1040006	C CHIP 10V 0.1UF	
C2012	FIH1A105A036	C CHIP 10V 1UF	
C2013	FIG1A1040006	C CHIP 10V 0.1UF	
C2014	FIG1A1040006	C CHIP 10V 0.1UF	
C2015	FIG1A1040006	C CHIP 10V 0.1UF	
C2016	FIG1A1040006	C CHIP 10V 0.1UF	
C2017	FIH1A105A036	C CHIP 10V 1UF	
C2018	FIH1C104A041	C CHIP 16V 0.1UF	
C2021	FIG1H101A566	C CHIP 50V 100PF	

Ref. No.	Part No.	Part Name & Description	Remarks
C2022	F1H1A105A036	C CHIP 10V 1UF	
C2023	F1H1A105A036	C CHIP 10V 1UF	
C2024	FIG1H470A557	C CHIP 50V 47PF	
C2025	F1J0J106A004	C CHIP 6.3V 10UF	
C2026	FIG1A1040006	C CHIP 10V 0.1UF	
C3001	FLJ1A106A023	C CHIP 10V 10UF	
C3003	FIG1A1040006	C CHIP 10V 0.1UF	
C3005	FIG1C103A048	C CHIP 16V 0.01UF	
C3006	FLJ1A106A023	C CHIP 10V 10UF	
C3007	FIG1C103A048	C CHIP 16V 0.01UF	
C3008	F3FOG226A030	TANTALUM CHIP 4V 220UF	
C3009	FIG1C103A048	C CHIP 16V 0.01UF	
C3010	F1H1A105A036	C CHIP 10V 1UF	
C3011	FIG1C103A048	C CHIP 16V 0.01UF	
C3012	F1H1A105A036	C CHIP 10V 1UF	
C3013	F1H1A105A036	C CHIP 10V 1UF	
C3014	FIG1C103A048	C CHIP 16V 0.01UF	
C3015	FLJ1A106A023	C CHIP 10V 10UF	
C3016	FIG1A1040006	C CHIP 10V 0.1UF	
C3017	FIG1A1040006	C CHIP 10V 0.1UF	
C3020	FIG1H220A557	C CHIP 50V 22PF	
C3021	FIG1H330A557	C CHIP 50V 33PF	
C3022	FIG1C103A048	C CHIP 16V 0.01UF	
C3023	FIG1A1040006	C CHIP 10V 0.1UF	
C3024	FIG1H221A495	C CHIP 50V 220PF	
C3025	F1H1A105A036	C CHIP 10V 1UF	
C3026	FIG1A1040006	C CHIP 10V 0.1UF	
C3027	FIG1A1040006	C CHIP 10V 0.1UF	
C3028	FIG1A1040006	C CHIP 10V 0.1UF	
C3029	FIG1A1040006	C CHIP 10V 0.1UF	
C3030	FIG1C103A048	C CHIP 16V 0.01UF	
C3031	FIG1A1040006	C CHIP 10V 0.1UF	
C3032	FIG1A1040006	C CHIP 10V 0.1UF	
C3033	FIG1C103A048	C CHIP 16V 0.01UF	
C3034	FIG1A1040006	C CHIP 10V 0.1UF	
C3035	FIG1C103A048	C CHIP 16V 0.01UF	
C3036	FIG1C103A048	C CHIP 16V 0.01UF	
C3037	F1H1A105A036	C CHIP 10V 1UF	
C3038	FIG1C103A048	C CHIP 16V 0.01UF	
C3039	FIG1A1040006	C CHIP 10V 0.1UF	
C3043	FIG1C103A048	C CHIP 16V 0.01UF	
C3044	FIG1C103A048	C CHIP 16V 0.01UF	
C3046	FIG1C103A048	C CHIP 16V 0.01UF	
C3047	FLJ0J4750005	C CHIP 6.3V 4.7UF	
C3048	F1H1A105A036	C CHIP 10V 1UF	
C3201	FIG1A1040006	C CHIP 10V 0.1UF	
C3202	FIG1A1040006	C CHIP 10V 0.1UF	
C3203	FLJ1A106A023	C CHIP 10V 10UF	
C3204	FIG1A1040006	C CHIP 10V 0.1UF	
C3206	FIG1A1040006	C CHIP 10V 0.1UF	
C3207	FIG1A1040006	C CHIP 10V 0.1UF	
C3209	FLJ0J4750005	C CHIP 6.3V 4.7UF	
C3210	FIG1A1040006	C CHIP 10V 0.1UF	
C3211	FIG1A1040006	C CHIP 10V 0.1UF	
C3212	FIG1A1040006	C CHIP 10V 0.1UF	
C3214	FIG1A1040006	C CHIP 10V 0.1UF	
C3215	FIG1A1040006	C CHIP 10V 0.1UF	
C3216	FIG1A1040006	C CHIP 10V 0.1UF	
C3217	FIG1C103A048	C CHIP 16V 0.01UF	
C3218	FIG1A1040006	C CHIP 10V 0.1UF	
C3219	FIG1A1040006	C CHIP 10V 0.1UF	
C3224	FIG1A1040006	C CHIP 10V 0.1UF	
C3226	FIG1A1040006	C CHIP 10V 0.1UF	
C3227	FIG1A1040006	C CHIP 10V 0.1UF	
C3301	FIG1C103A048	C CHIP 16V 0.01UF	
C3302	FIG0J1050007	C CHIP 6.3V 1UF	
C3303	FLJ1A106A023	C CHIP 10V 10UF	
C3304	FIG1A1040006	C CHIP 10V 0.1UF	
C3305	FIG1A1040006	C CHIP 10V 0.1UF	
C3306	FLJ1A106A023	C CHIP 10V 10UF	
C3307	FIG1A1040006	C CHIP 10V 0.1UF	
C3311	F3G0J107A017	TANTALUM CHIP 6.3V 100UF	
C3312	F1H1A105A036	C CHIP 10V 1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C3316	F1G1A1040006	C CHIP 10V 0.1UF	
C4502	F1G1A1040006	C CHIP 10V 0.1UF	
C4504	F1G1A1040006	C CHIP 10V 0.1UF	
C4505	F3F0J226A032	TANTALUM CHIP 6.3V 22UF	
C4507	F1G1C103A048	C CHIP 16V 0.01UF	
C4508	FLJ1A106A023	C CHIP 10V 10UF	
C4511	F1H1A105A036	C CHIP 10V 1UF	
C4512	F1H1A105A036	C CHIP 10V 1UF	
C4513	F1H1A224A012	C CHIP 10V 0.22UF	
C4514	F1G1A1040006	C CHIP 10V 0.1UF	
C4515	FLJ1A106A023	C CHIP 10V 10UF	
C4516	FLJ1A2250007	C CHIP 10V 2.2UF	
C5001	F3F0J106A032	TANTALUM CHIP 6.3V 10UF	
C5002	F3F0J226A032	TANTALUM CHIP 6.3V 22UF	
C5004	F1G1H681A571	C CHIP 50V 680PF	
C5005	F1G1C103A048	C CHIP 16V 0.01UF	
C5007	F1G1C103A048	C CHIP 16V 0.01UF	
C5009	F1G1A1040006	C CHIP 10V 0.1UF	
C5011	F1G1C103A048	C CHIP 16V 0.01UF	
C5012	F1G1A1040006	C CHIP 10V 0.1UF	
C5013	F1G1H120A422	C CHIP 50V 12PF	
C5014	F1G1H120A422	C CHIP 50V 12PF	
C5015	F1G1H120A422	C CHIP 50V 12PF	
C5016	F1G1H120A422	C CHIP 50V 12PF	
C6001	F1G1C103A048	C CHIP 16V 0.01UF	
C6002	F1H1A105A036	C CHIP 10V 1UF	
C6003	F1H0J4750005	C CHIP 6.3V 4.7UF	
C6004	F1G1C103A048	C CHIP 16V 0.01UF	
C6005	F3F0J226A030	TANTALUM CHIP 6.3V 22UF	85EE/GC ,88GK
C6005	F3F0J226A032	TANTALUM CHIP 6.3V 22UF	80EG/EF /E/EP/E B/EK/EE
C6006	F1G1C103A048	C CHIP 16V 0.01UF	
C6007	F1G1C103A048	C CHIP 16V 0.01UF	
C6008	F1G1C103A048	C CHIP 16V 0.01UF	
C6010	ECJ0EB1E101K	C CHIP 25V 100PF	
C6013	F3F0J226A032	TANTALUM CHIP 6.3V 22UF	
C6014	F1G1A1040006	C CHIP 10V 0.1UF	
C6015	F1H1A105A036	C CHIP 10V 1UF	
C6016	F1G1C103A048	C CHIP 16V 0.01UF	
C6018	F1G1C103A048	C CHIP 16V 0.01UF	
C6019	F1G1C103A048	C CHIP 16V 0.01UF	
C6020	F1G1C103A048	C CHIP 16V 0.01UF	
C6022	DOGA823JA015	MGF CHIP 1/16W 82K	
C6023	F1G1C103A048	C CHIP 16V 0.01UF	
C6024	F1G1C103A048	C CHIP 16V 0.01UF	
C6025	F1H1C104A041	C CHIP 16V 0.1UF	
C6027	F1H1C104A041	C CHIP 16V 0.1UF	
C6028	F3E0J106A009	TANTALUM CHIP 6.3V 10UF	
C6029	F1G1C103A048	C CHIP 16V 0.01UF	
C6030	F1G1C103A048	C CHIP 16V 0.01UF	
C6031	F1G1C103A048	C CHIP 16V 0.01UF	
C6033	F1G1C103A048	C CHIP 16V 0.01UF	
C6034	F1G1C103A048	C CHIP 16V 0.01UF	
C6035	F1G1H100A420	C CHIP 50V 10PF	
C6036	F1G1H100A420	C CHIP 50V 10PF	
C6037	F1G1C103A048	C CHIP 16V 0.01UF	
C6038	F1G1C103A048	C CHIP 16V 0.01UF	
C6039	F1H1A105A036	C CHIP 10V 1UF	
C6301	F3F0J226A030	TANTALUM CHIP 6.3V 22UF	85EE/GC ,88GK
C6302	F1H1C104A041	C CHIP 16V 0.1UF	85EE/GC ,88GK
C6303	F1H1C104A041	C CHIP 16V 0.1UF	85EE/GC ,88GK
C6304	ECJ1VC1H050D	C CHIP 50V 5PF	85EE/GC ,88GK
C6305	ECJ1VC1H050D	C CHIP 50V 5PF	85EE/GC ,88GK
C6306	ECJ1VC1H050D	C CHIP 50V 5PF	85EE/GC ,88GK
C6307	ECJ1VC1H050D	C CHIP 50V 5PF	85EE/GC ,88GK

Ref. No.	Part No.	Part Name & Description	Remarks
C6308	ECJ1VC1H050D	C CHIP 50V 5PF	85EE/GC ,88GK
C6702	F1G1C104A045	C CHIP 16V 0.1UF	
C6703	F1G1H8R0A420	C CHIP 50V 8PF	
C6704	F1G1H8R0A420	C CHIP 50V 8PF	
C6706	F1G1A1040006	C CHIP 10V 0.1UF	
C6708	F1G1A1040006	C CHIP 10V 0.1UF	
C6709	F1G1A1040006	C CHIP 10V 0.1UF	
C6710	F1G1C103A048	C CHIP 16V 0.01UF	
C6711	F1G1C103A048	C CHIP 16V 0.01UF	
C6713	FLJ1A106A023	C CHIP 10V 10UF	
C7001	F1H1A105A036	C CHIP 10V 1UF	
C8003	F1G1A1040006	C CHIP 10V 0.1UF	
C8004	F3F0J226A032	TANTALUM CHIP 6.3V 22UF	
C8006	F1H0J1050012	C CHIP 6.3V 1UF	
C8008	F1H0J1050012	C CHIP 6.3V 1UF	
C8009	F1G1A1040006	C CHIP 10V 0.1UF	
C8010	F1G1A1040006	C CHIP 10V 0.1UF	
C8011	FLJ1A2250007	C CHIP 10V 2.2UF	
C8013	FLJ0J2250003	C CHIP 6.3V 2.2UF	
C8014	FLJ0J2250003	C CHIP 6.3V 2.2UF	
C8015	F1H0J1050012	C CHIP 6.3V 1UF	
C8025	F1G1H330A557	C CHIP 50V 33PF	
C8027	F1G1H330A557	C CHIP 50V 33PF	
C8028	F1G1H222A571	C CHIP 50V 2200PF	

FILTERS

Ref. No.	Part No.	Part Name & Description	Remarks
FL7002	J0MAB0000212	FILTER FILTER	
FL7003	J0MAB0000212	FILTER FILTER	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L301	G1C100KA0055	COIL CHIP 10UH	
L302	G1C100KA0055	COIL CHIP 10UH	
L303	G1C100KA0055	COIL CHIP 10UH	
L304	J0JBC0000027	FERRITE BEAD CHIP	
L1001	J0JHC0000018	EMI FILTER CHIP	
L1002	J0JHC0000018	EMI FILTER CHIP	
L1010	G1C220ZA0050	COIL CHIP 22UH	
L1011	G1C4R7MA0031	COIL CHIP 4.7UH	
L1012	G1C4R7MA0031	COIL CHIP 4.7UH	
L1013	G1C4R7MA0031	COIL CHIP 4.7UH	
L1014	G1C100K00020	COIL CHIP 10UH	
L1020	G1C220ZA0050	COIL CHIP 22UH	
L1021	G1C4R7MA0031	COIL CHIP 4.7UH	
L1022	G1C100K00020	COIL CHIP 10UH	
L1023	G1C100K00020	COIL CHIP 10UH	
L1024	G1C4R7MA0031	COIL CHIP 4.7UH	
L1025	G1C100K00020	COIL CHIP 10UH	
L1026	G1C4R7MA0031	COIL CHIP 4.7UH	
L1030	G1C220ZA0050	COIL CHIP 22UH	
L1031	G1C4R7MA0031	COIL CHIP 4.7UH	
L1040	G1C181MA0203	COIL CHIP 180UH	
L1041	G1C470KA0031	COIL CHIP 47UH	
L1042	G1C470KA0031	COIL CHIP 47UH	
L1050	G1C330ZA0050	COIL CHIP 33UH	
L1051	G1C680Z00005	COIL CHIP 68UH	
L3001	J0JBC0000027	FERRITE BEAD CHIP	
L3002	G1C100KA0055	COIL CHIP 10UH	
L3003	G1C100KA0055	COIL CHIP 10UH	
L3004	G1C100KA0055	COIL CHIP 10UH	
L3005	J0JBC0000027	FERRITE BEAD CHIP	
L3006	J0JBC0000027	FERRITE BEAD CHIP	
L3008	J0JBC0000027	FERRITE BEAD CHIP	
L3011	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L3013	J0JBC0000027	FERRITE BEAD CHIP	
L3015	G1C100KA0055	COIL CHIP 10UH	
L3016	J0JBC0000027	FERRITE BEAD CHIP	85EE/GC ,88GK
L3201	J0JBC0000014	BEAD INDUCTOR	
L3202	G1C100KA0055	COIL CHIP 10UH	
L3203	G1C100KA0055	COIL CHIP 10UH	

Ref. No.	Part No.	Part Name & Description	Remarks
L3301	GLC100KA0055	COIL CHIP 10UH	
L3302	GLC100KA0055	COIL CHIP 10UH	
L4501	J0JBC0000027	FERRITE BEAD CHIP	
L4502	GLC470MA0031	COIL CHIP 47UH	
L4503	GLC100KA0031	COIL CHIP 10UH	
L4504	GLC100KA0031	COIL CHIP 10UH	
L5001	GLC101KA0031	COIL CHIP 100UH	
L5002	GLC100KA0031	COIL CHIP 10UH	
L6002	GLC100KA0031	COIL CHIP 10UH	
L6003	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L6301	GLC100KA0031	COIL CHIP 10UH	85EE/GC ,88GK
L6701	GLC100KA0031	COIL CHIP 10UH	
L6702	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
L8001	GLC100KA0055	COIL CHIP 10UH	
L8002	GLC100KA0055	COIL CHIP 10UH	

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X301	H0J360500014	CRYSTAL OSCILLATOR CHIP	
X3001	H0J245500064	CRYSTAL OSCILLATOR CHIP	
X3003	H2C480500006	CRYSTAL OSCILLATOR CHIP	
X6001	H0J135500031	CRYSTAL OSCILLATOR CHIP	
X6002	H0J327200115	CRYSTAL OSCILLATOR CHIP	
X6701	H0J270500115	CRYSTAL OSCILLATOR CHIP	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
B1	K1KA20BA0052	CONNECTOR 20P	

FPC CONNECTORS

Ref. No.	Part No.	Part Name & Description	Remarks
FP11	K1MN12BA0197	CONNECTOR 12P	
FP21	K1MN26BA0196	CONNECTOR 26P	
FP22	K1MN10BA0197	CONNECTOR 10P	
FP23	K1MN18BA0197	CONNECTOR 18P	
FP24	K1MN08BA0196	CONNECTOR 8P	
FP31	K1MN14A00088	CONNECTOR 14P	
FP41	K1MN22BA0197	CONNECTOR 22P	
FP61	K1MN26BA0196	CONNECTOR 26P	
FP71	K1MN22A00065	CONNECTOR 22P	
FP72	K1MN12A00075	CONNECTOR 12P	
FP81	K1MN30AA0091	CONNECTOR 30P	
FP91	K1MN18A00064	CONNECTOR 18P	

FUSE & PROTECTOR

Ref. No.	Part No.	Part Name & Description	Remarks
IP1	K5H2022A0008	IC PROTECTOR CHIP 32V 2A	⚠
IP2	ERBSE2R00U	FUSE,DC 32V 2A	⚠

JACKS

Ref. No.	Part No.	Part Name & Description	Remarks
JK7001	K2HZ105E0011	USB MINI JACK SOCKET	
JK7002	K1FB104E0017	DV MINI JACK SOCKET	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
U7001	K1NA09E00085	SD UNIT	85EE/GC ,88GK
710	LSJB8369	FRONT F.P.C.	