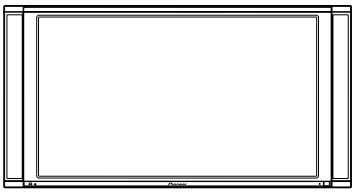
Service Manual



ORDER NO.
ARP2997

PLASMA DISPLAY
PDP-501MX
PLASMA DISPLAY
PDP-V501X

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	Remarks
	PDP-501MX	PDP-V501X		
KUC	○	○	AC120V	

• This manual does not contain the full schematic diagrams and the PCB connection diagrams.

CONTENTS

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PIONEER ELECTRONIC (EUROPE) N.V. Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 501 Orchard Road, #10-00 Wheelock Place, Singapore 238880

O – SZS AUG. 1998 Printed in Japan

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safety repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safety, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of california to cause cancer,birth defects or other reproductive harm.
Health & safety code section 25249.6—Proposition 65

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols  (fast operating fuse) and/or  (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible  (fusible de type rapide) et/ou  (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

1.1 SAFETY PRECAUTIONS

NOTICE : Comply with all cautions and safety related notes located on or inside the cabinet and on the chassis.
The following precautions should be observed :

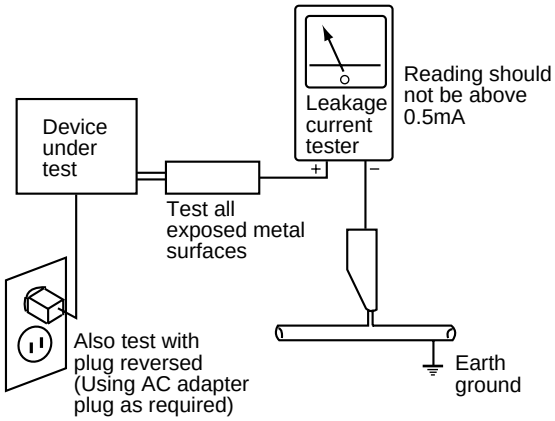
1. When service is required, even though the PDP UNIT an isolation transformer should be inserted between the power line and the set in safety before any service is performed.
2. When replacing a chassis in the set, all the protective devices must be put back in place, such as barriers, nonmetallic knobs, adjustment and compartment covershields, isolation resistor-capacitor, etc.
3. When service is required, observe the original lead dress. Extra precaution should be taken to assure correct lead dress in the high voltage circuitry area.
4. Always use the manufacture's replacement components. Especially critical components as indicated on the circuit diagram should not be replaced by other manufacture's.
   Furthermore where a short circuit has occurred, replace those components that indicate evidence of overheating.
5. Before returning a serviced set to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the set by the manufacture has become defective, or inadvertently defeated during servicing. Therefore, the following checks should be performed for the continued protection of the customer and service technician.
6. Perform the following precautions against unwanted radiation and rise in internal temperature.
   - Always return the internal wiring to the original styling.
   - Attach parts (Ground, Rear Cover, Shield Case) surely after disassembly.
7. Perform the following precautions for the PDP panel.
   - When the front case is removed, make sure nothing hits the panel face, panel corner, and panel edge (so that the glass does not break).
   - Make sure that the panel vent does not break. (Check that the cover is attached.)
   - Handle the FPC connected to the panel carefully. Twisting or pulling the FPC when connecting it to the connector will cause it to peel off from the panel.
8. Pay attention to the following.
   - Be sure to wire the fan. If the fan does not work, the temperature will rise and cause the protection circuit to operate.
   - When the front case is removed, infrared ray is radiated and may disturb reception of the remote control unit.
   - Pay extreme caution when the front case and rear panel are removed because this may cause a high risk of disturbance to TVs and radios in the surrounding.

Leakage Current Cold Check

With the AC plug removed from an AC power source, place a jumper across the two plug prongs. Turn the AC power switch on. Using an insulation tester (DC 500V), connect one lead to the jumpered AC plug and touch the other lead to each exposed metal part (input/output terminals, screwheads, metal overlays, control shafts, etc.), particularly any exposed metal part having a return path to the chassis. Exposed metal parts having a return path to the chassis should have a minimum resistor reading of 0.3MΩ and a maximum resistor reading of 5MΩ. Any resistor value below or above this range indicates an abnormality which requires corrective action. Exposed metal parts not having a return path to the chassis will indicate an open circuit.

Leakage Current Hot Check

Plug the AC line cord directly into an AC power source (do not use an isolation transformer for this check).
Turn the AC power switch on.
Using a "Leakage Current Tester (Simpson Model 229 equivalent)", measure for current from all exposed metal parts of the cabinet (input/output terminals, screwheads, metal overlays, control shaft, etc.), particularly any exposed metal part having a return path to the chassis, to a known earth ground (water pipe, conduit, etc.). Any current measured must not exceed 0.5mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE SET TO THE CUSTOMER.

1.2 PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in PIONEER set have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.
Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire or other hazards.
Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

1.3 CHARGED SECTION AND HIGH VOLTAGE GENERATING POINT

■ Charged Section

The places where the commercial AC power is used without passing through the power supply transformer.
If the places are touched, there is a risk of electric shock. In addition, the measuring equipment can be damaged if it is connected to the GND of the charged section and the GND of the non-charged section while connecting the set directly to the commercial AC power supply. Therefore, be sure to connect the set via an insulated transformer and supply the current.

■ Charged Section

(Power supply primary side)

1. AC Power Cord
2. AC Inlet with Filter
3. Power Switch (S1)
4. Fuse (In the MAIN POWER ASSY)
5. STB Transformer and Converter Transformer (In the MAIN POWER ASSY)
6. Other primary side of the MAIN POWER ASSY

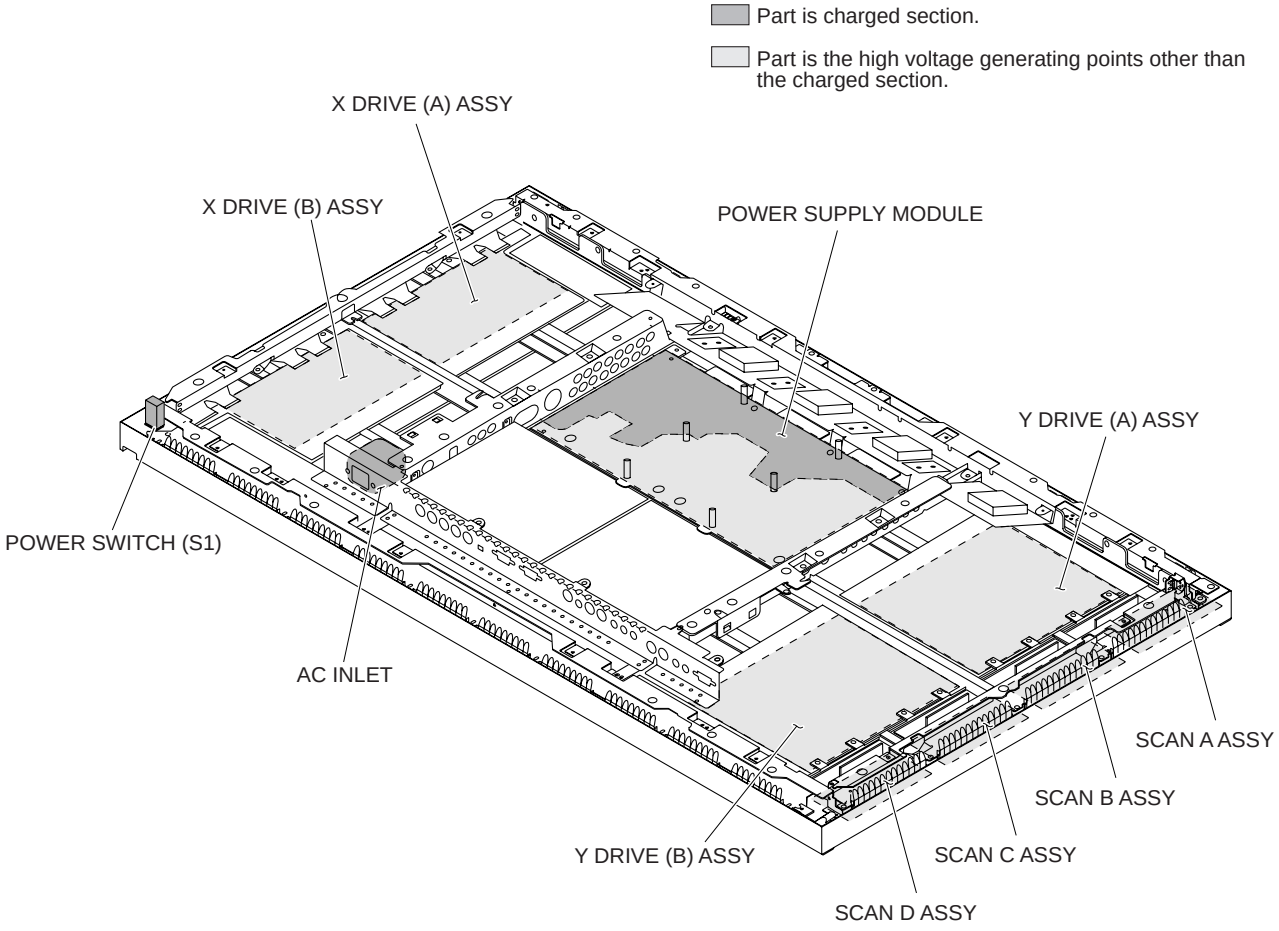
For the places, refer to the EXPLODED VIEWS, the SCHEMATIC DIAGRAM and the PCB CONNECTION DIAGRAM sections.

■ High Voltage Generating Point

The places where voltage is 100V or more except for the charged places described above. If the places are touched, there is a risk of electric shock.

1. POWER SUPPLY MODULE (170V)
2. X DRIVE (A) ASSY (170V)
3. X DRIVE (B) ASSY (170V)
4. Y DRIVE (A) ASSY (170V)
5. Y DRIVE (B) ASSY (170V)
6. SCAN ASSY (A),(B),(C),(D) (150V)

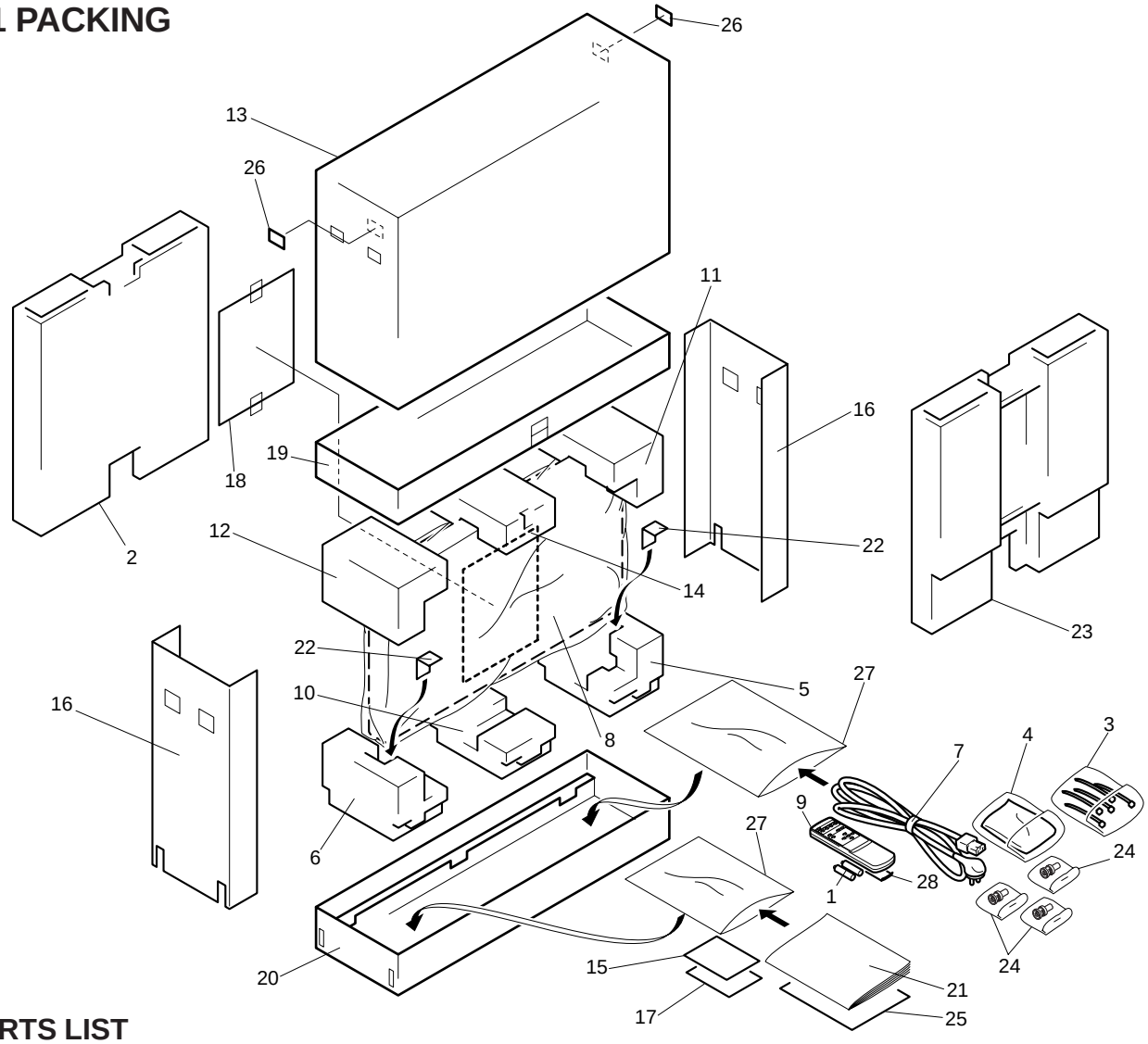
For the places, refer to the EXPLODED VIEWS, the SCHEMATIC DIAGRAM and the PCB CONNECTION DIAGRAM sections.



2. EXPLODED VIEWS AND PARTS LIST

NOTES: ●*Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
●*The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
●*Screws adjacent to ¥mark on the product are used for disassembly.*

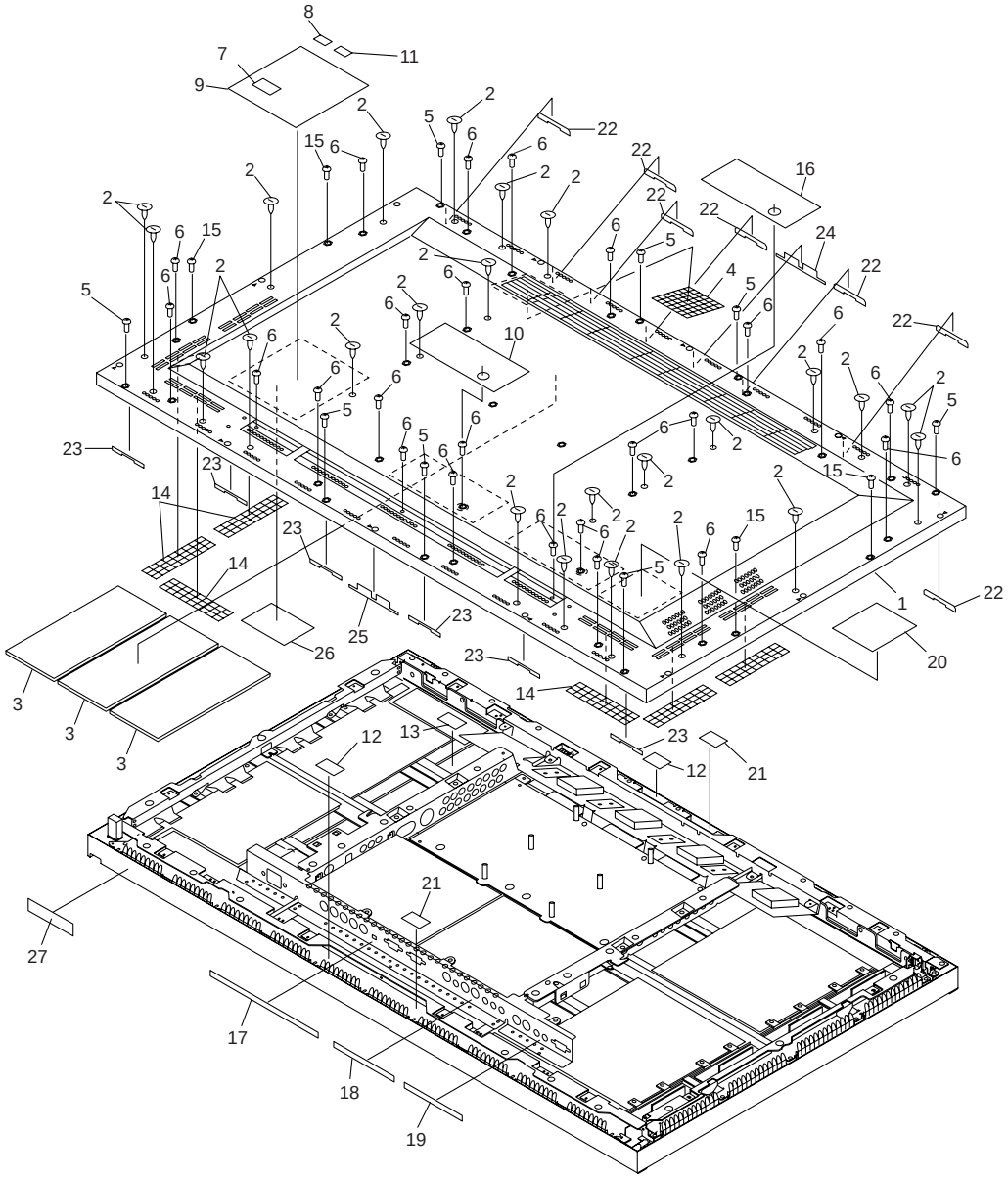
2.1 PACKING



PARTS LIST

Mark	No.	Description	Part No.
NSP	1	Battery (R6P,AA)	AEX-010
	2	Rear Carton	AHB1201
	3	Binder Assy	AEC1758
	4	Wiping Cloth	AED1174
	5	Under Pad R	AHA2213
	6	Under Pad L	AHA2214
⚠	7	AC Power Cord	ADG1178
	8	Mirror Mat	AHG1284
	9	Remote Control (SR)	AXD1437
	10	Under Pad C	AHA2215
	11	Upper Pad R	AHA2216
	12	Upper Pad L	AHA2217
	13	Upper Carton (501MX)	AHD2980
	13	Upper Carton (V501X)	AHD2979
	14	Upper Pad C	AHA2218
	15	Plasma Caution Sheet	ARM1145
	16	Side Carton	AHB1196
	17	Caution Sheet	ARM1146
	18	Protect Sheet	SHC-925
	19	Carton Cover	AHD2975
	20	UNDER CARTON ASSY	AHD2976
	21	Instruction Manual (501MX) (English, French)	ARE1337
	21	Instruction Manual (V501X) (English, French)	ARE1339
	22	Carton Spacer	AHB1198
	23	Front Carton	AHB1200
	24	BNC Conversion Connector (501MX)	AKX1052
NSP	25	Warranty Card (501MX)	ARY1094
NSP	26	Label	VRW1629
NSP	27	Literature Bag	AHG-117
	28	Battery Cover	AZN2379

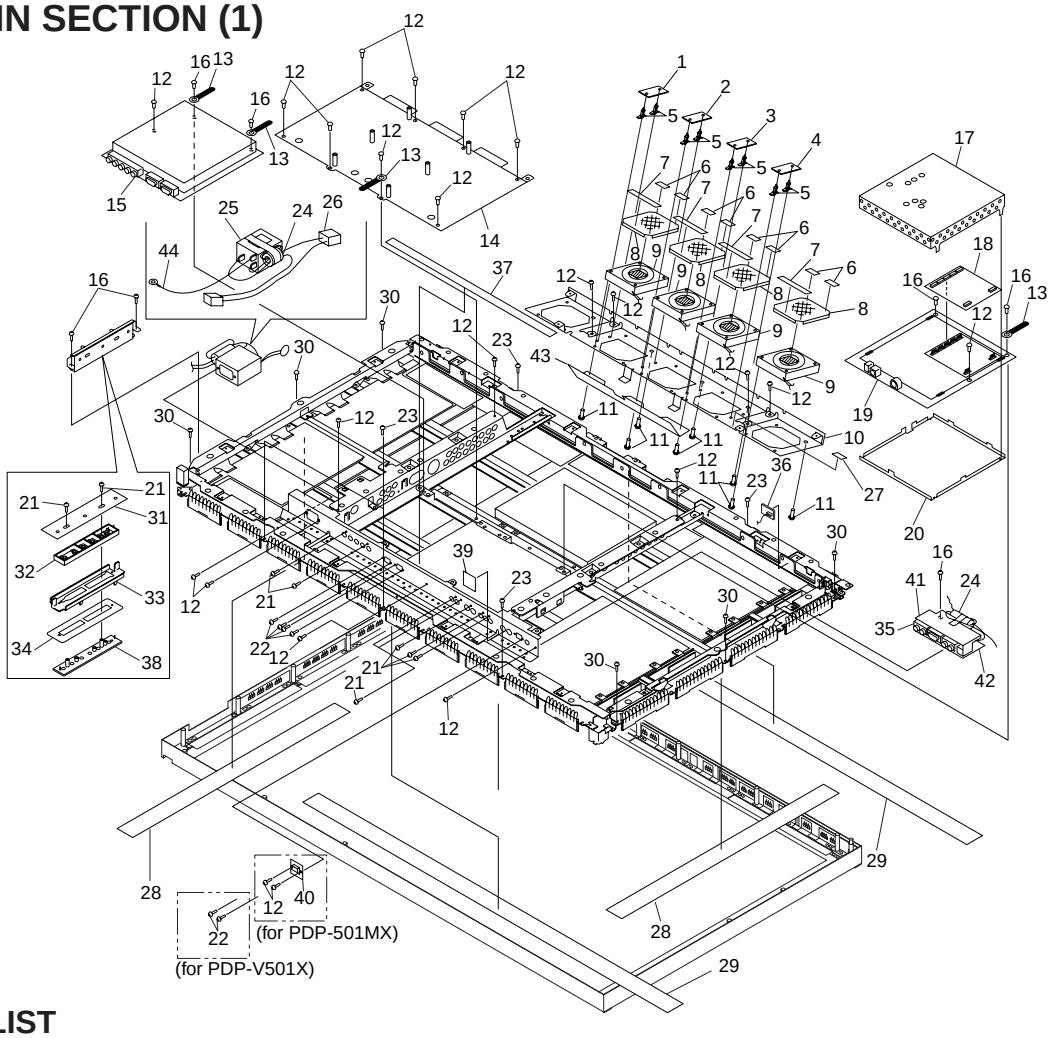
2.2 REAR CASE



PARTS LIST

Mark	No.	Description	Part No.
NSP	1	Rear Case (M) (501MX)	AMR3097
NSP	1	Rear Case (MB) (V501X)	AMR3100
	2	Hole Rivet	AMR2969
	3	Barrier	AMR3049
	4	Net F	AED1185
	5	Screw	BPZ40P160FZK
	6	Screw	AMZ30P100FZK
NSP	7	UPC Code Label (501MX)	AAX2673
NSP	7	UPC Code Label (V501X)	AAX2674
NSP	8	Label	VRW1629
NSP	9	Name Label (501MX)	AAL2274
NSP	9	Name Label (V501X)	AAL2285
	10	Terminal Label L (501MX)	AAX2662
	10	Terminal Label L (V501X)	AAX2680
NSP	11	Manufactured Label	AAX-372
	12	IC Protector Label	AAX2642
NSP	13	Drive Voltage Label	ARW1077
	14	Net R	AED1178
	15	Screw	BMZ40P120FMC
	16	Terminal Label R (501MX)	AAX2663
	16	Terminal Label R (V501X)	AAX2679
	17	Terminal Label 3	AAX2641
	18	Terminal Label 2	AAX2640
	19	Terminal Label 1	AAX2639
NSP	20	Bolt Caution Label (501MX)	AAX2656
NSP	20	Bolt Caution Label (V501X)	AAX2681
	21	IC Protector Label (F)	AAX2675
	22	Rear Shield US	ANK1574
	23	Rear Shield DS	ANK1575
	24	Rear Shield UB	ANK1576
	25	Rear Shield DB	ANK1577
	26	Solder Warning Label	AAX2644
	27	Serial Sheet	AAX1322

2.3 MAIN SECTION (1)

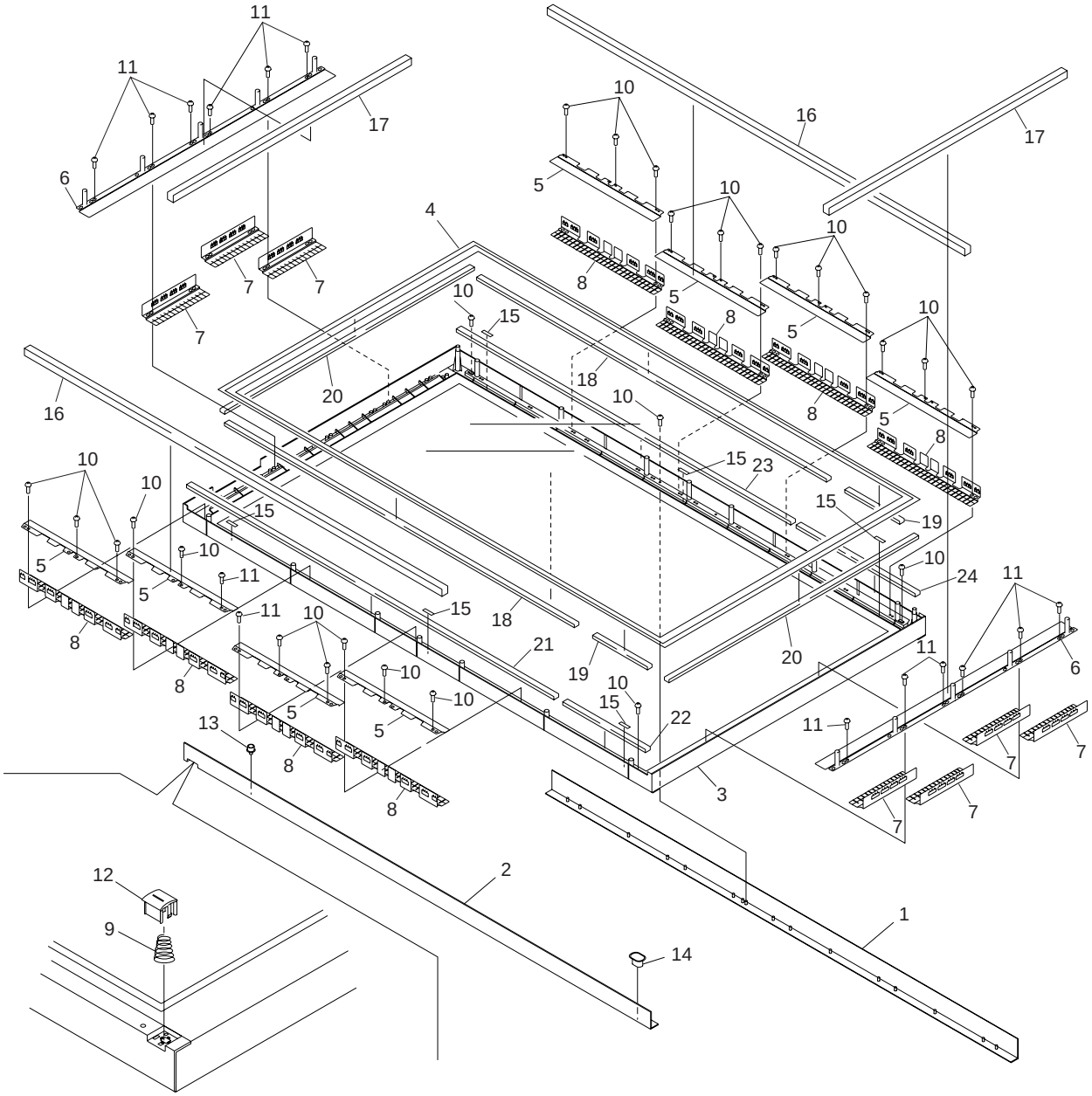


PARTS LIST

Mark	No.	Description	Part No.
	1	DC FAN A ASSY	AWZ6323
	2	DC FAN B ASSY	AWZ6324
	3	DC FAN C ASSY	AWZ6325
	4	DC FAN D ASSY	AWZ6326
	5	Locking Card Spacer	AEC1736
	6	Fan Cushion B	AEC1750
	7	Fan Cushion A	AEC1749
	8	Fan Filter	DNH1548
	9	Fan Motor 80*25	AXM1032
NSP	10	Fan Angle	ANG2237
	11	Screw	PPZ50P100FZK
	12	Screw	BMZ30P060FCU
	13	Binder	AEP-215
	14	Power Supply Module	AXY1029
	15	RGB ASSY	AWV1687
	16	Screw	AMZ30P080FCU
NSP	17	Analog Shield A	ANK1536
	18	PROGRESSIVE BLOCK	AWZ6222
	19	VIDEO ASSY	AWZ6305
NSP	20	Analog Shield B	ANK1537
	21	Screw	BPZ30P080FZK
	22	Screw	BBA1017
	23	Screw	BPZ40P160FZK

Mark	No.	Description	Part No.
	24	Ferrite Core	ATX1031
⚠	25	AC Inlet with Filter	AKP1180
	26	Housing Wire	ADX2406
	27	SENSOR A ASSY	AWZ6309
	28	Panel Sheet B	AMR2958
NSP	29	Panel Sheet H	AMR3035
	30	Screw	BMZ40P120FMC
	31	SIDE SWITCH ASSY	AWZ6315
	32	Control Button	AAC1536
NSP	33	Control PCB Holder	ANG2292
	34	Blind Cover	AMR3098
	35	CONTROL ASSY	AWZ6307
	36	SENSOR B ASSY	AWZ6310
	37	Shield Gusket A	ANK1578
	38	Control Name Plate (501MX)	AAK2719
	38	Control Name Plate (V501X)	AAK2720
	39	Terminal Cover (501MX)	AMR3099
	40	Terminal Cover (232C) (501MX)	ANG2294
NSP	41	232C Case A	ANK1567
NSP	42	232C Case B	ANK1568
	43	Fan Barrier	AMR3124
	44	Ground Wire (J13)	ADX2332

2.4 FRONT CASE SECTION

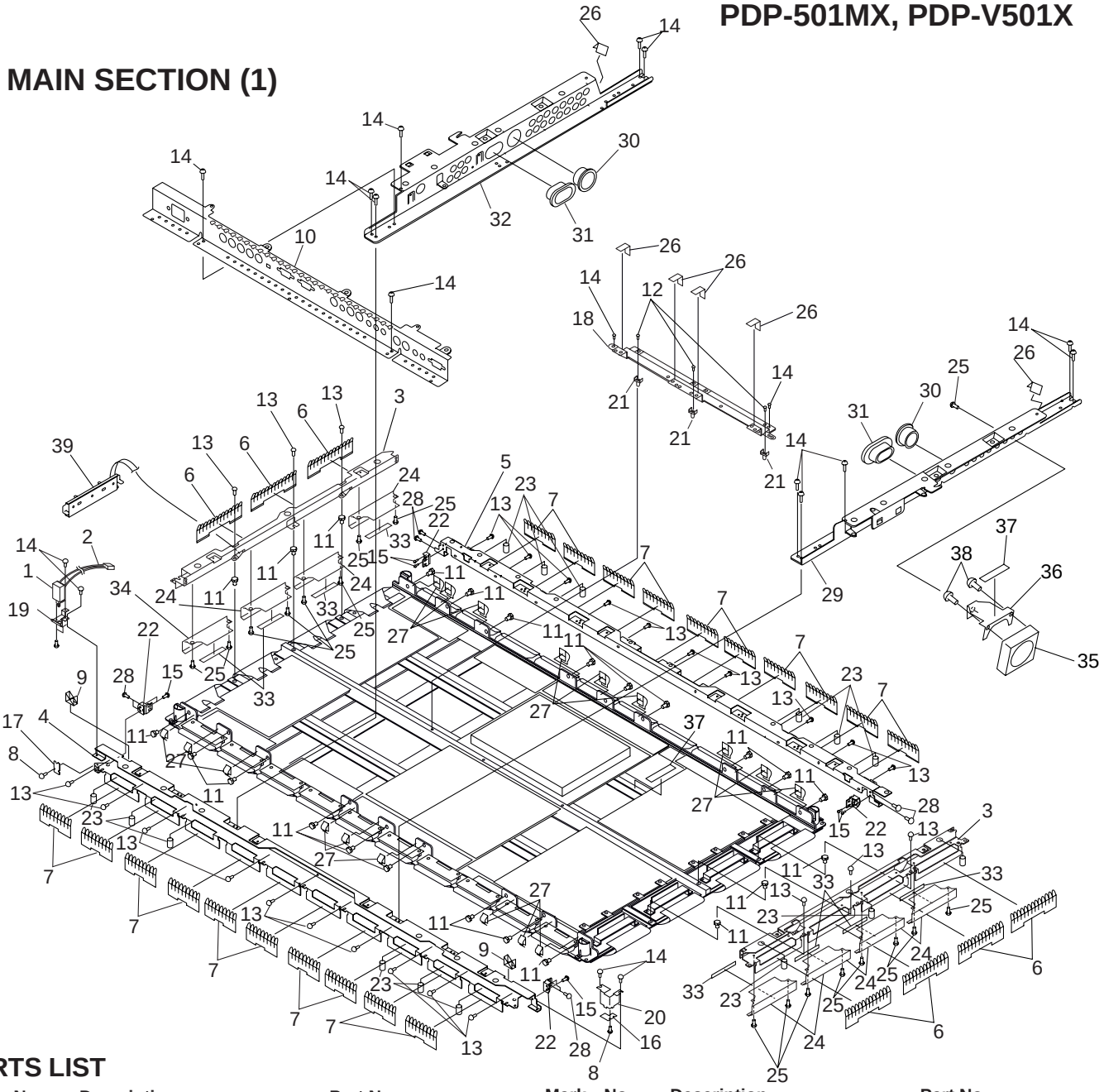


PARTS LIST

Mark	No.	Description	Part No.
	1	Sash U	AAP1583
	2	Sash D (N)	AAP1591
	3	Front Case (M) (501MX)	AMB2632
	3	Front Case (M) (V501X)	AMB2624
	4	PROTECT PANEL ASSY	AMR3065
NSP	5	Panel Holder H	ANG2228
	6	Panel Holder V	ANG2277
	7	Panel Shield FV	ANK1541
	8	Panel Shield FH	ANK1542
	9	Coil Spring	ABH1103
	10	Screw	PMZ40P080FMC
	11	Screw	BPZ40P080FZK
	12	Power Button	AAD4101

Mark	No.	Description	Part No.
	13	LED Lens	AAK2695
	14	Lens	AAK2703
NSP	15	Sheet	AED1176
	16	Panel Cushion 50H	AED1181
	17	Panel Cushion 50V	AED1182
	18	Shield Gusket F	ANK1583
	19	Shield Gusket E	ANK1582
	20	Shield Gusket D	ANK1581
	21	Shield Gusket G	ANK1584
	22	Shield Gusket H	ANK1585
	23	Shield Gusket C	ANK1580
	24	Shield Gusket B	ANK1579

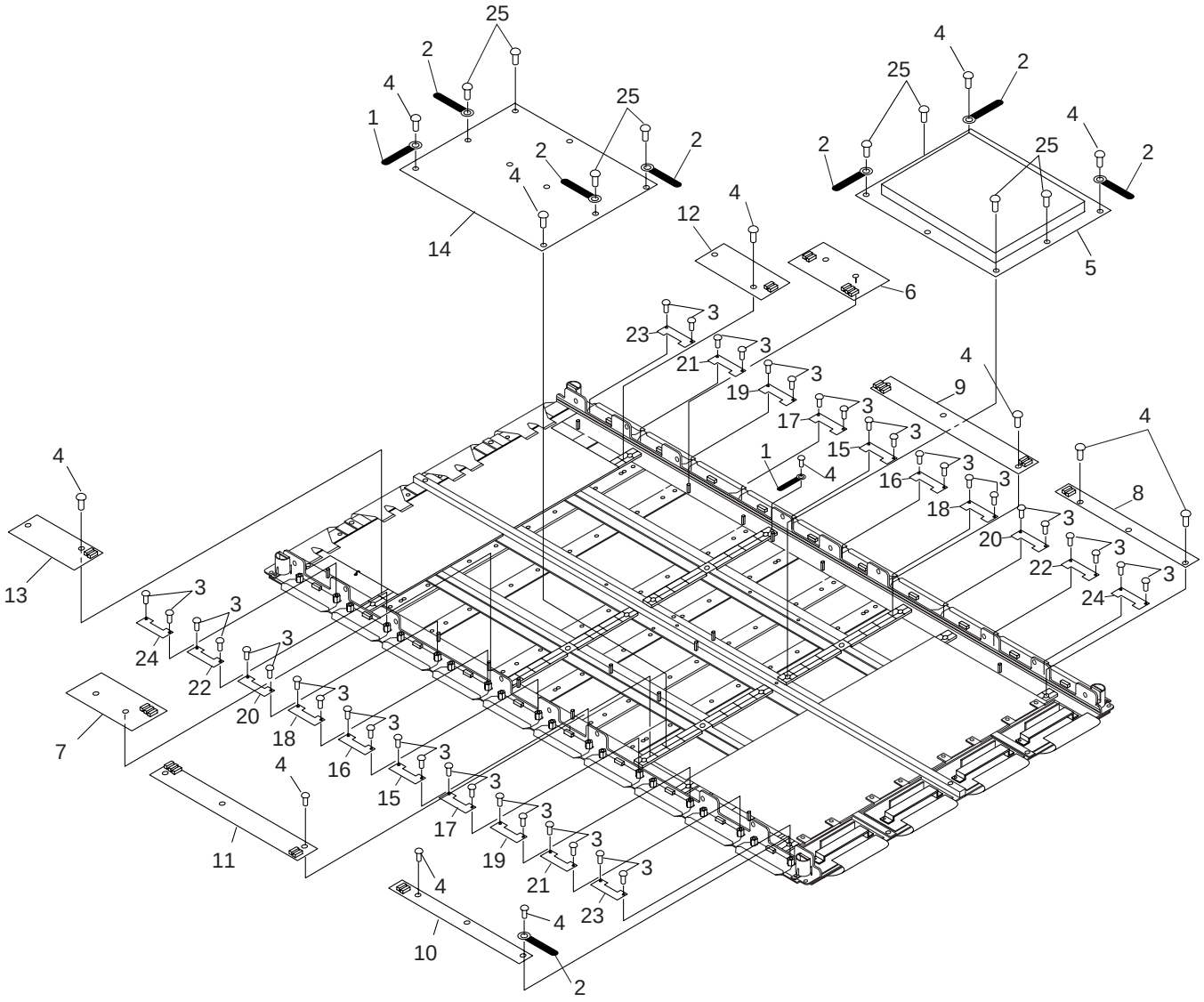
2.5 MAIN SECTION (1)



PARTS LIST

Mark	No.	Description	Part No.
⚠	1	Power Switch	ASG1082
	2	Housing Wire (J12)	ADX2407
	3	Frame V	ANG2232
	4	Frame HD	ANG2233
	5	Frame HU	ANG2234
	6	Panel Shield RV	ANK1539
	7	Panel Shield RH	ANK1540
	8	Nyron Rivet	AEC1671
	9	Edging Saddle	AEC1737
	10	Terminal Panel	ANG2310
	11	Well Nut	ABN1029
	12	Screw	AMZ30P140FCU
	13	Screw	BMB30P140FZK
	14	Screw	BMZ30P060FCU
	15	Screw	
	16	IR RECEIVER ASSY	AWZ6224
	17	INDICATOR ASSY	AWZ6225
NSP	18	Center Frame	ANG2230
NSP	19	Switch Holder	ANG2239
NSP	20	Holder	ANG2240
NSP	21	PCB Mold	AMR2115
	22	Corner Holder	AMR3067
	23	VCP Cap	AEC1760
	24	FPC Shield	ANK1550
	25	Screw	BBZ30P060FMC
	26	Frame Sheet	AED1173
	27	Shield Finger	ABX1004
	28	Screw	AMZ30P100FZK
	29	Sub Frame R	ANG2303
NSP	30	Bush A	AEC1738
NSP	31	Bush C	AEC1740
	32	Sub Frame L	ANG2236
	33	FPC Cushion	AEB1341
	34	FPC Shield (M)	ANK1561
	35	Fan Motor	AXM1026
	36	Fan Angle B	ANG2301
	37	Fan Cushion B	AEC1750
	38	Screw	PPZ50P100FZK
	39	Side Switch Assy	AWZ6315

2.6 MAIN SECTION (3)

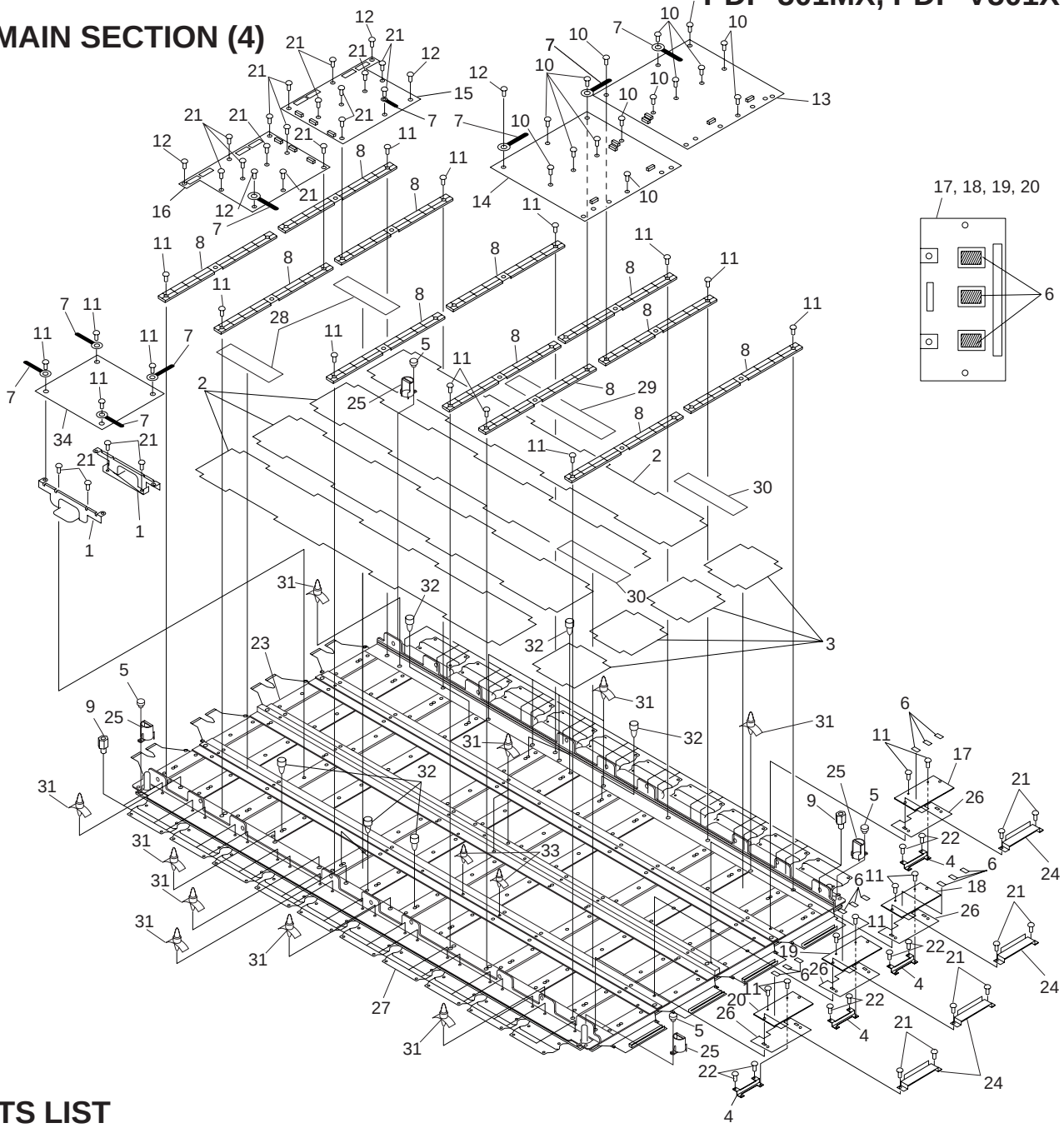


PARTS LIST

Mark	No.	Description	Part No.
	1	Binder	AEC-826
	2	Binder	AEP-215
	3	Screw	BMZ30P040FMC
	4	Screw	BPZ30P080FZK
	5	DIGITAL VIDEO ASSY	AWV1728
	6	CABLE E ASSY	AWZ6218
	7	CABLE F ASSY	AWZ6219
	8	CABLE A ASSY	AWZ6214
	9	CABLE B ASSY	AWZ6215
	10	CABLE C ASSY	AWZ6216
	11	CABLE D ASSY	AWZ6217
	12	CABLE G ASSY	AWZ6220
	13	CABLE H ASSY	AWZ6221

Mark	No.	Description	Part No.
	14	U-CON ASSY	AWV1689
	15	PUMP UP A ASSY	AWZ6249
	16	PUMP UP B ASSY	AWZ6250
	17	PUMP UP C ASSY	AWZ6251
	18	PUMP UP D ASSY	AWZ6252
	19	PUMP UP E ASSY	AWZ6253
	20	PUMP UP F ASSY	AWZ6254
	21	PUMP UP G ASSY	AWZ6255
	22	PUMP UP H ASSY	AWZ6256
	23	PUMP UP K ASSY	AWZ6257
	24	PUMP UP L ASSY	AWZ6258
	25	Screw	AMZ30P140FCU

2.7 MAIN SECTION (4)

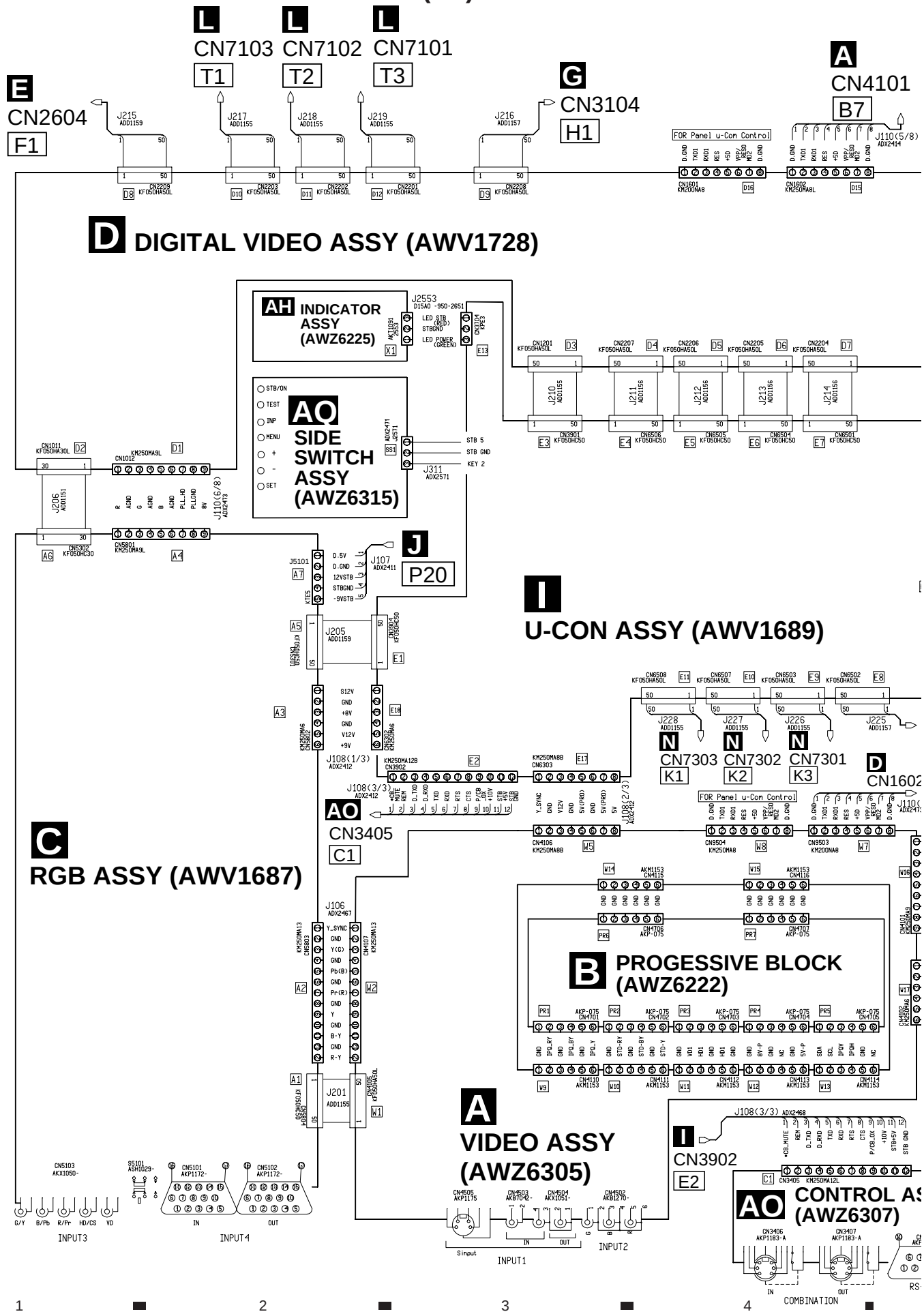


PARTS LIST

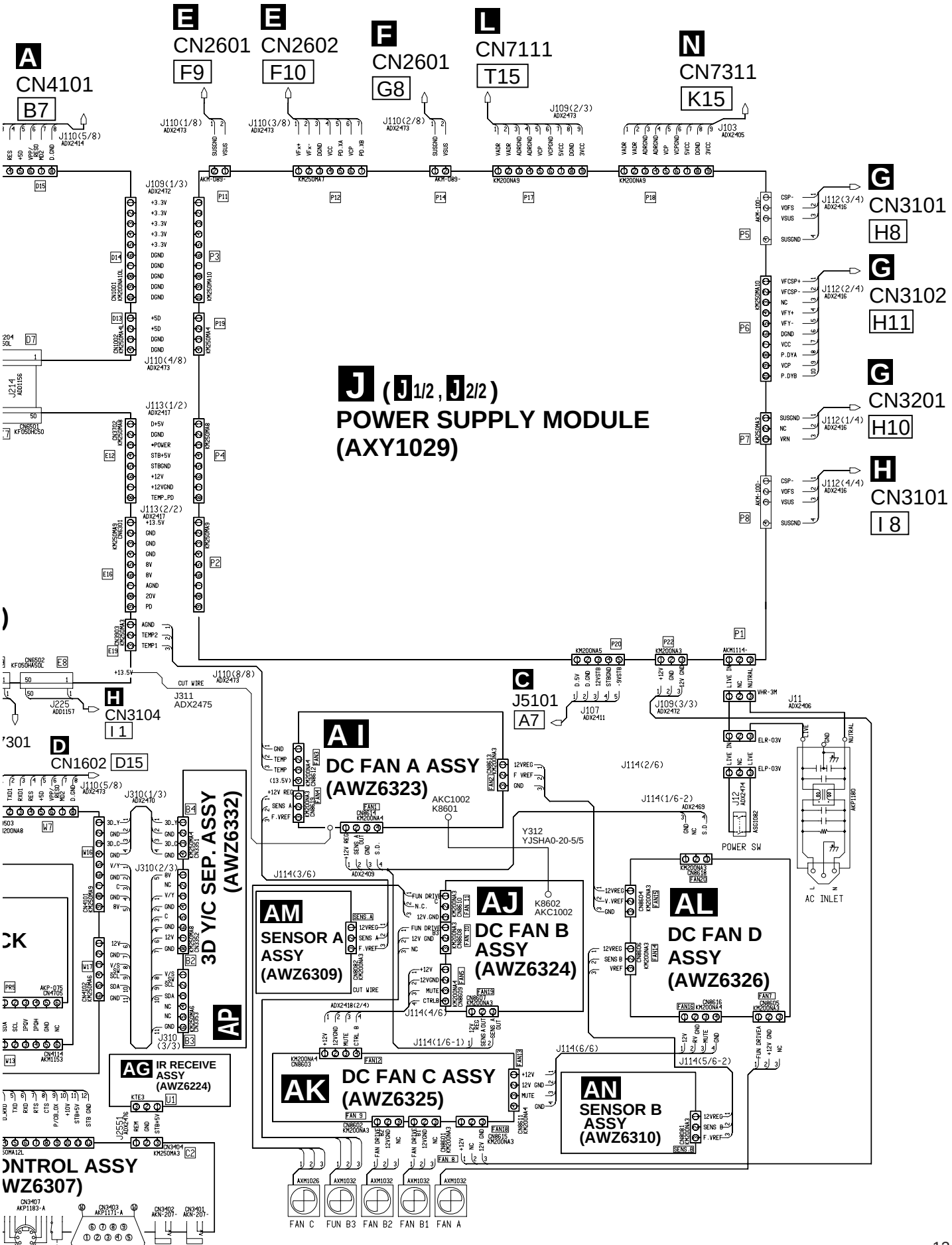
Mark	No.	Description	Part No.
NSP	1	3D Y/C Holder	ANG2293
	2	Panel Shield L	ANK1548
	3	Panel Shield S	ANK1553
	4	Hot Plate	ANG2231
NSP	5	Rivet	AEC1748
	6	Sheet	AEH1027
	7	Binder	AEP-215
	8	PCB Spacer	AMR3037
	9	Spacer	AEF1026
	10	Screw	AMZ30P140FCU
	11	Screw	BMZ30P060FCU
	12	Screw	BPZ30P080FZK
	13	Y DRIVE A ASSY	AWV1695
	14	Y DRIVE B ASSY	AWV1696
	15	X DRIVE A ASSY	AWZ6242
	16	X DRIVE B ASSY	AWZ6243
	17	SCAN A ASSY	AWZ6226
	18	SCAN B ASSY	AWZ6227
	19	SCAN C ASSY	AWZ6228
	20	SCAN D ASSY	AWZ6229
	21	Screw	AMZ30P080FCU
	22	Screw	IPZ30P080FCU
NSP	23	FRAME ASSY(AL)	ANA1544
NSP	24	Scan Heatsink	ANH1544
NSP	25	Tube Cover	AMR3036
NSP	26	PVC Sheet	AMR3038
NSP	27	PLASMA PANEL ASSY	AAV1229
NSP	28	Frame Barrier X	AMR3062
NSP	29	Frame Barrier C	AMR3063
NSP	30	Frame Barrier Y	AMR3064
NSP	31	Circuit Board Spacer	AEC1744
NSP	32	PCB Spacer	AEC1573
NSP	33	Circuit Board Spacer	AEC1743
	34	3D Y/C SEP. ASSY	AWZ6332

3. SCHEMATIC DIAGRAM

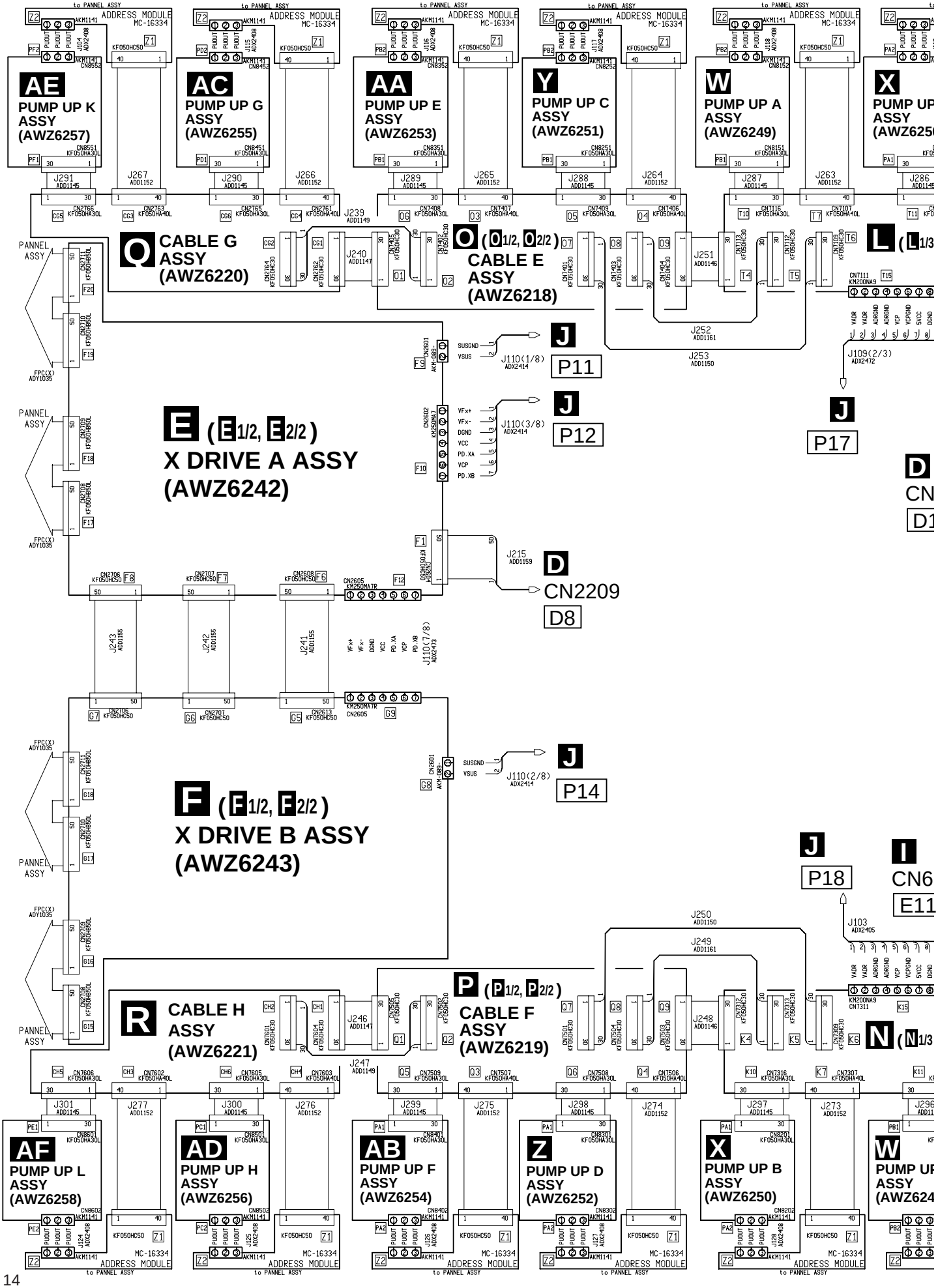
3.1 OVERALL CONNECTION DIAGRAM (1/2)

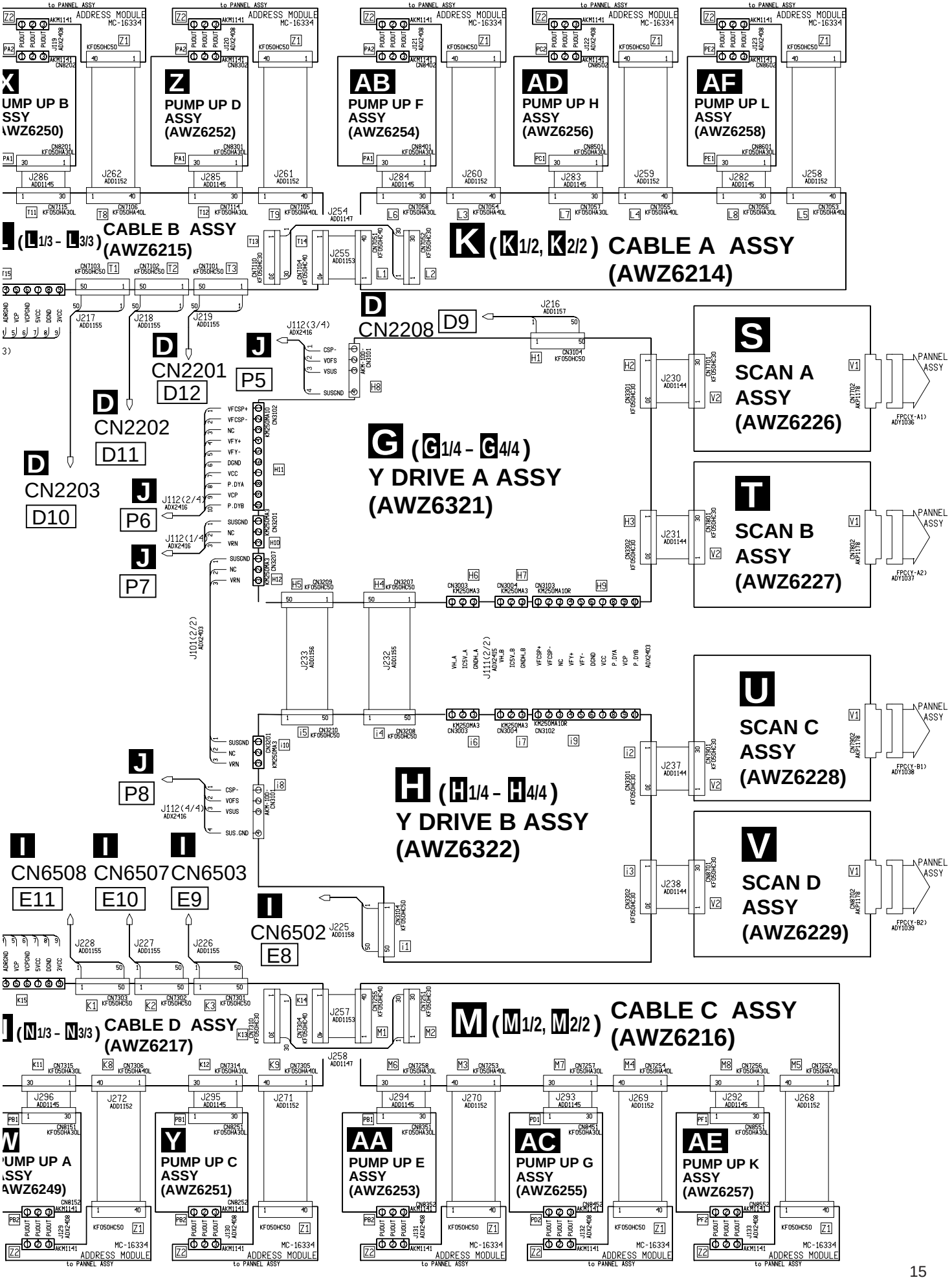


Note: When ordering service parts, be sure to refer to “EXPLODED VIEWS and PARTS LIST” or “PCB PARTS LIST”



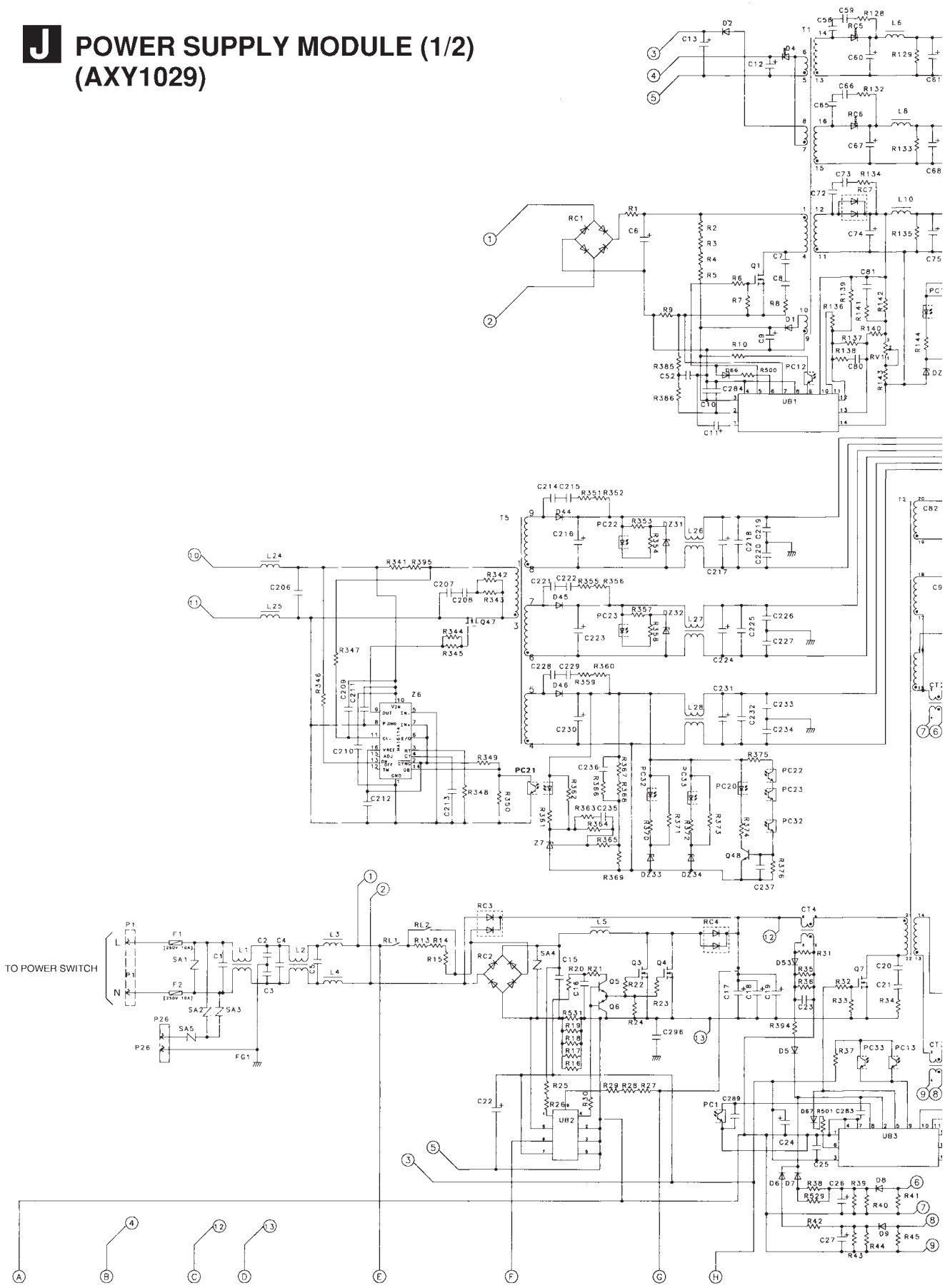
PDP-501MX, PDP-V501X 3.2 OVERALL CONNECTION DIAGRAM (2/2)

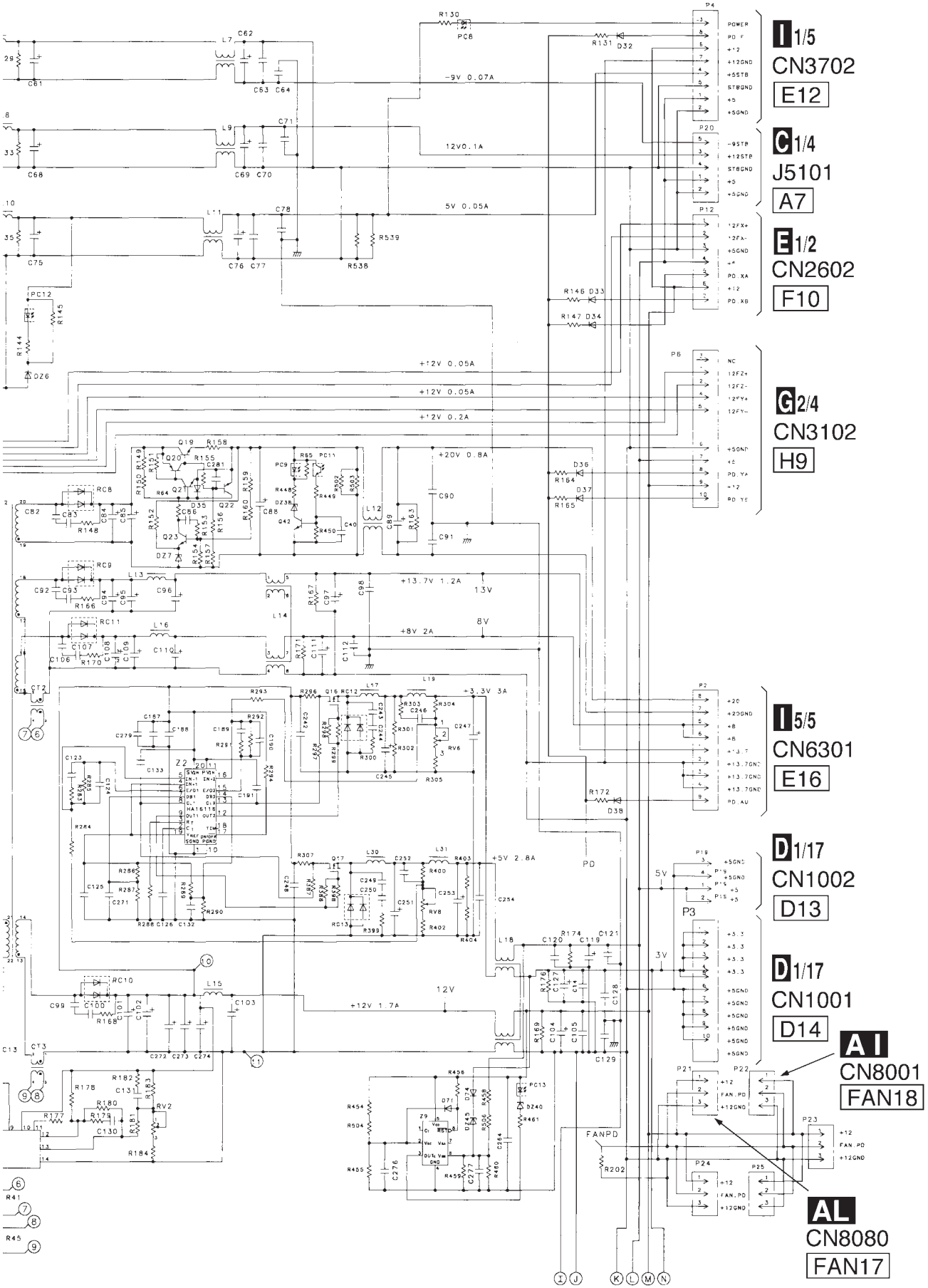



X
UMP UP B
SSY
WZ6250)
Z
PUMP UP D
ASSY
(AWZ6252)
AB
PUMP UP F
ASSY
(AWZ6254)
AD
PUMP UP H
ASSY
(AWZ6256)
AF
PUMP UP L
ASSY
(AWZ6258)
L (L1/3 - L3/3) CABLE B ASSY (AWZ6215)
K (K1/2, K2/2) CABLE A ASSY (AWZ6214)
D CN2208 D9
D CN2201 D12
D CN2202 D11
D CN2203 D10
J P5
J P6
J P7
J P8
G (G1/4 - G4/4) Y DRIVE A ASSY (AWZ6321)
H (H1/4 - H4/4) Y DRIVE B ASSY (AWZ6322)
I CN6508 E11
I CN6507 E10
I CN6503 E9
I CN6502 E8
S SCAN A ASSY (AWZ6226)
T SCAN B ASSY (AWZ6227)
U SCAN C ASSY (AWZ6228)
V SCAN D ASSY (AWZ6229)
PANNEL ASSY
M (M1/2, M2/2) CABLE C ASSY (AWZ6216)
N (N1/3 - N3/3) CABLE D ASSY (AWZ6217)
W
UMP UP A
SSY
WZ6249)
Y
PUMP UP C
ASSY
(AWZ6251)
AA
PUMP UP E
ASSY
(AWZ6253)
AC
PUMP UP G
ASSY
(AWZ6255)
AE
PUMP UP K
ASSY
(AWZ6257)
to PANNEL ASSY
ADDRESS MODULE
MC-16334

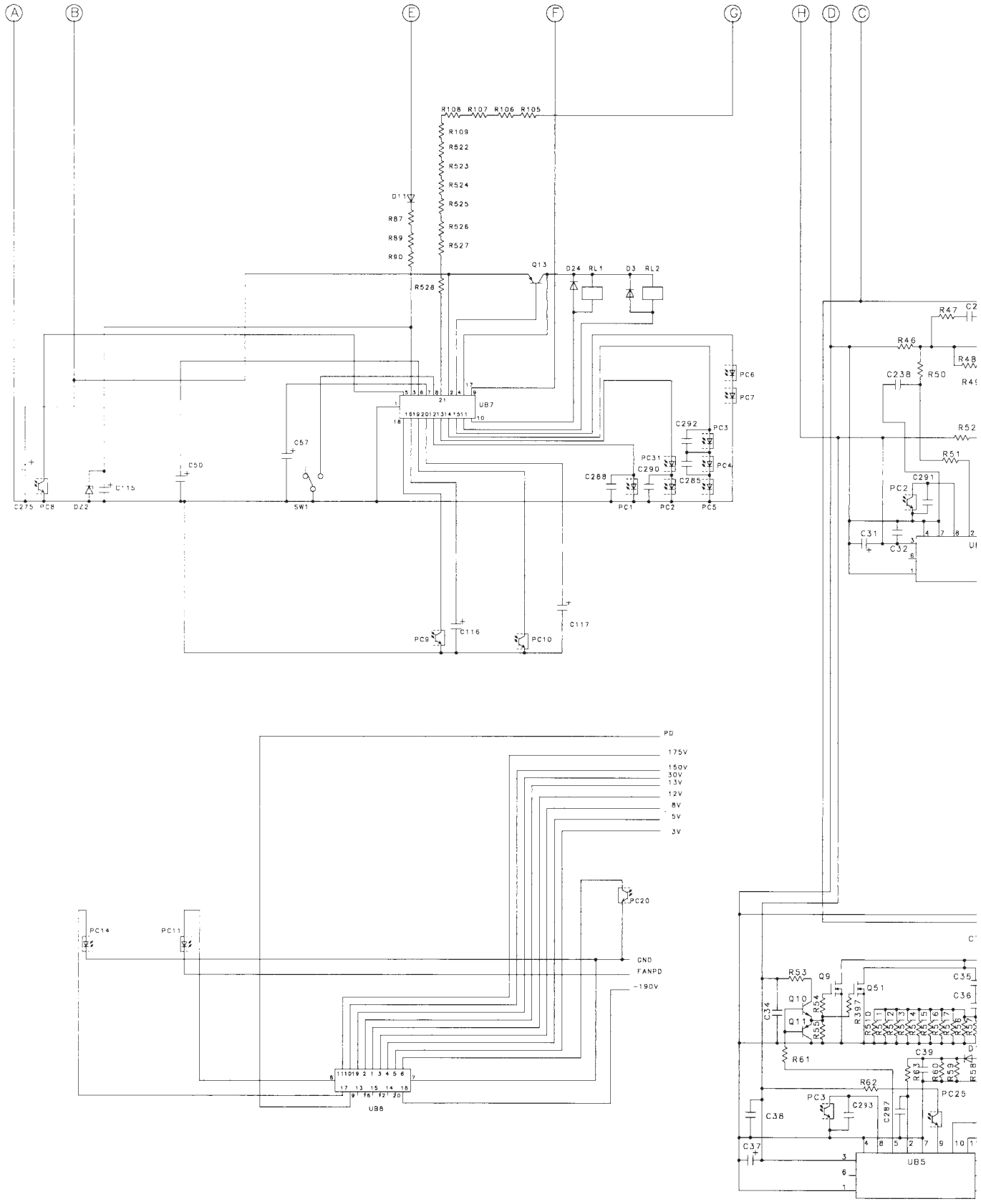
3.3 POWER SUPPLY MODULE (1/2)

J POWER SUPPLY MODULE (1/2) (AXY1029)

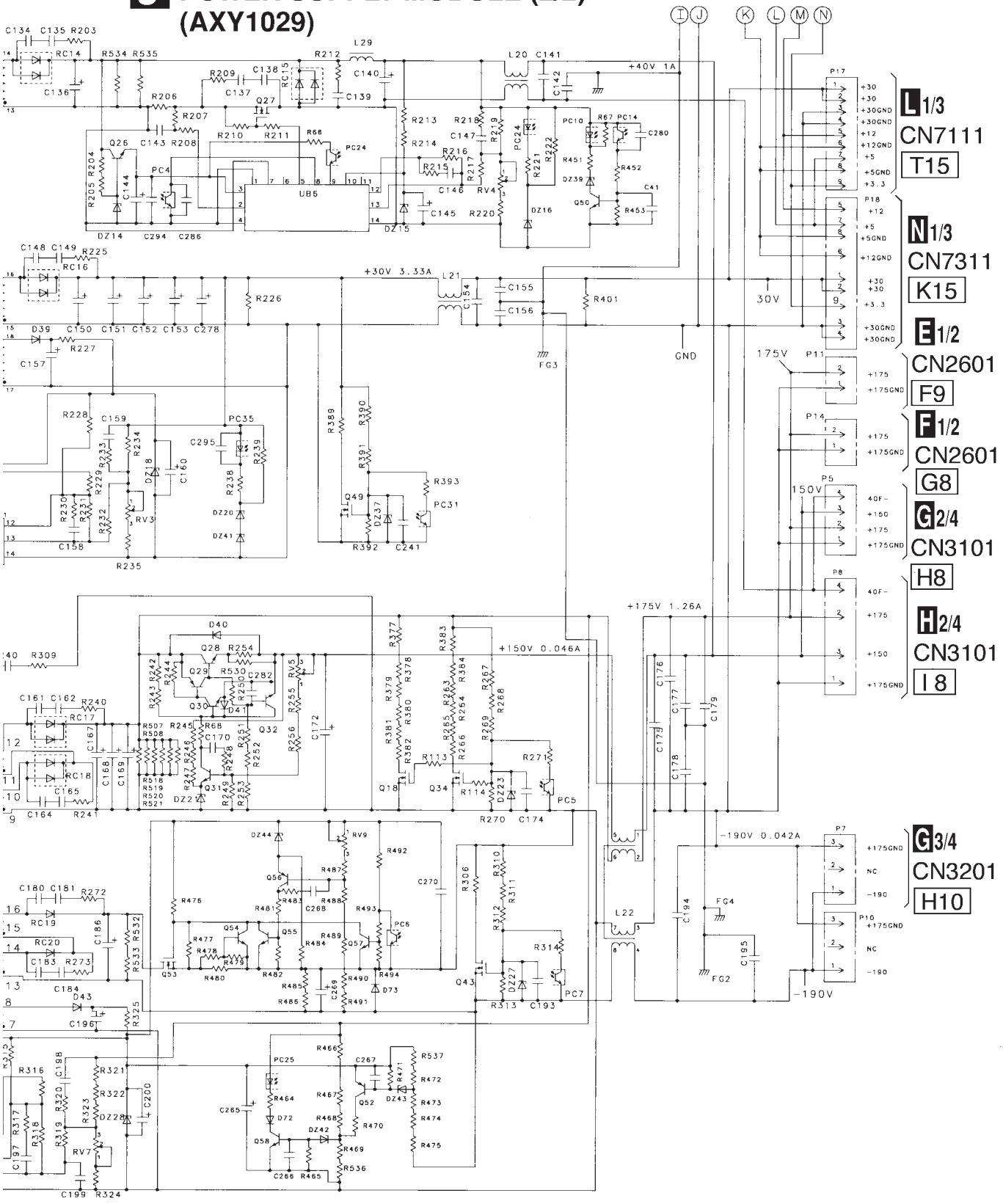



I 1/5
CN3702
E12
C 1/4
J5101
A7
E 1/2
CN2602
F10
G 2/4
CN3102
H9
I 5/5
CN6301
E16
D 1/17
CN1002
D13
D 1/17
CN1001
D14
A I
CN8001
FAN18
AL
CN8080
FAN17
J 1/2
-9V 0.07A
12V0.1A
5V 0.05A
+12V 0.05A
+12V 0.05A
+12V 0.2A
+20V 0.8A
+13.7V 1.2A
13V
+8V 2A
8V
+3.3V 3A
+5V 2.8A
12V
+12V 1.7A
PD
5V
3V
FANPD

3.4 POWER SUPPLY MODULE (2/2)



J POWER SUPPLY MODULE (2/2) (AXY1029)



4. PCB CONNECTION DIAGRAM

There is no information to be shown in this chapter.

5. PCB PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560	→	*56 x 10^1*	→	*561* ····· *RD1/4PU 5 6 1 J*
47k	→	*47 x 10^3*	→	*473* ····· *RD1/4PU 4 7 3 J*
0.5	→	*R50*		····· *RN2H R 5 0 K*
1	→	*1R0*		····· *RS1P 1 R 0 K*

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k	→	*562 x 10^1*	→	*5621* ····· *RN1/4PC 5 6 2 1 F*

Mark	No.	Description	Part No.
LIST OF ASSEMBLIES			
		DIGITAL VIDEO ASS'Y	AWV1728
NSP		CONNECTOR ASS'Y	AWV1647
		├CABLE A ASS'Y	AWZ6214
		├CABLE B ASS'Y	AWZ6215
		├CABLE C ASS'Y	AWZ6216
		├CABLE D ASS'Y	AWZ6217
		├CABLE G ASS'Y	AWZ6220
		└CABLE H ASS'Y	AWZ6221
NSP		SCAN ASS'Y	AWV1653
		├PROGRESSIVE BLOCK	AWZ6222
		├IR RECEIVER ASS'Y	AWZ6224
		├INDICATOR ASS'Y	AWZ6225
		├SCAN A ASS'Y	AWZ6226
		├SCAN B ASS'Y	AWZ6227
		├SCAN C ASS'Y	AWZ6228
		└SCAN D ASS'Y	AWZ6229
NSP		PUMP UP ASSY	AWV1656
		├PUMP UP A ASSY	AWZ6249
		├PUMP UP B ASSY	AWZ6250
		├PUMP UP C ASSY	AWZ6251
		├PUMP UP D ASSY	AWZ6252
		├PUMP UP E ASSY	AWZ6253
		├PUMP UP F ASSY	AWZ6254
		├PUMP UP G ASSY	AWZ6255
		├PUMP UP H ASSY	AWZ6256
		├PUMP UP K ASSY	AWZ6257
		└PUMP UP L ASSY	AWZ6258
NSP		ANALOG VIDEO ASS'Y	AWV1685
		├VIDEO ASS'Y	AWZ6305
		└CONTROL ASS'Y	AWZ6307
		RGB ASS'Y	AWV1687
		U-CON ASS'Y	AWV1689

Mark	No.	Description	Part No.
NSP		X DRIVE A ASS'Y	AWV1692
		├CABLE E ASS'Y	AWZ6218
		├X DRIVE A ASS'Y	AWZ6242
		├SENSER A ASSY	AWZ6309
		└SENSER B ASSY	AWZ6310
		Y DRIVE A ASS'Y	AWV1695
		├Y DRIVE A ASS'Y	AWZ6321
		├DC FAN A ASSY	AWZ6323
		└DC FAN B ASSY	AWZ6324
		Y DRIVE B ASS'Y	AWV1696
		├Y DRIVE B ASS'Y	AWZ6322
		├DC FAN C ASSY	AWZ6325
		└DC FAN D ASSY	AWZ6326
NSP		X DRIVE B ASS'Y	AWV1698
		├CABLE F ASS'Y	AWZ6219
		└X DRIVE B ASS'Y	AWZ6243
		3D Y/C SEP. ASS'Y	AWV1709
		├SIDE SWITCH A	AWZ6315
		└3D Y/C SEP. ASS'Y	AWZ6332
		POWER SUPPLY MODULE	AXY1029

D DIGITAL VIDEO ASS'Y

SEMICONDUCTORS

IC1131,IC1151,IC1171	CXA3026Q
IC1242	CXA3106Q
IC1601	HD64F3048F16
IC1056	KIA431F
IC1301	PD4891B
IC1351	PD4892A
IC1401,IC1451,IC1501	PD4893B
IC1551	PD4894A
IC1271	PD5447A
IC1286	PDY038B
IC1603	PST9146N
IC1001-IC1004	TA78M05F
IC1901,IC1902,IC1951,IC1955-IC1957	TC74LCX541FT
IC1201,IC1221,IC1903-IC1906	TC74VHC541FT
IC1952-IC1954,IC2001-IC2010	TC74VHC541FT

Mark	No.	Description	Part No.
	IC2101-IC2110		TC74VHC541FT
	IC1046		TC74VHCT541AFT
	IC1273		TC7SET00FU
	IC1272		TC7SET08FU
	IC1243,IC1244		TC7SH04FU
	IC1651,IC1652		TC7W08FU
	IC1604		TC7W14FU
	IC1241		UPC78L05T
	IC1701,IC1702,IC1751,IC1752		UPD481850GF-A12
	IC1801,IC1802		UPD481850GF-A12
	Q1072 ,Q1073 ,Q1082 ,Q1083		2SA1037K
	Q1092 ,Q1093		2SA1037K
	Q1071 ,Q1074 ,Q1081 ,Q1084 ,Q1091		2SC2412K
	Q1094 ,Q1102 ,Q1103 ,Q1112 ,Q1113		2SC2412K
	Q1122 ,Q1123		2SC2412K
	D1601 -D1603		1SS352
	D1901		AEL1171
COIL AND FILTERS			
	F1017 -F1020		ATF1184
	F1551 -F1556 ,F1561 ,F1562		ATF1188
	F1901 -F1908 ,F1951 -F1954		ATF1188
	F2001 -F2010 ,F2101 -F2110		ATF1188
	F1001 -F1014 ,F1241 ,F1242 ,F1921		ATF1189
	F1971 ,F1972		ATF1189
SWITCH AND RELAY			
	S1601		ASG9003
CAPACITORS			
	C1262 ,C1268 (0.33µF/16V)		ACE1116
	C1301 -C1310 ,C1351 -C1362 (1µF/16V)		ACG1051
	C1401 -C1412 ,C1451 -C1462 (1µF/16V)		ACG1051
	C1501 -C1512 ,C1551 -C1555 (1µF/16V)		ACG1051
	C1261 ,C1617 -C1621		CCSQCH101J50
	C1203 -C1210 ,C1256 -C1258 ,C1264		CCSQCH220J50
	C1276 -C1278 ,C1285 ,C1298 ,C1299		CCSQCH220J50
	C1078 ,C1114 ,C1124		CCSQCH330J50
	C1274		CCSQCH470J50
	C1263		CCSQSL122J50
	C1003 ,C1009 ,C1015 ,C1021 ,C1033		CEV101M6R3
	C1037 ,C1056 ,C1057 ,C1133 ,C1145		CEV101M6R3
	C1153 ,C1160 ,C1173 ,C1180 ,C1201		CEV101M6R3
	C1243 ,C1245 ,C1254 ,C1271 ,C1289		CEV101M6R3
	C1293 ,C1311 ,C1312 ,C1371 ,C1372		CEV101M6R3
	C1421 ,C1422 ,C1471 ,C1472		CEV101M6R3
	C1521 ,C1522 ,C1561 ,C1562		CEV101M6R3
	C1631 ,C1632 ,C1721 -C1724		CEV101M6R3
	C1771 -C1774 ,C1821 -C1824		CEV101M6R3
	C1922 ,C1923 ,C1972 ,C1973 ,C1975		CEV101M6R3
	C2021 ,C2022 ,C2121 ,C2122		CEV101M6R3
	C1074 ,C1076 ,C1084 ,C1086 ,C1094		CEV1R0M50
	C1096 ,C1275 ,C1606		CEV1R0M50
	C1001 ,C1007 ,C1013 ,C1019 ,C1031		CEV221M10
	C1035 ,C1240		CEV221M10
	C1241		CEV470M16
	C1602		CEV4R7M35
	C1273		CFHSQ103J16
	C1616		CKSQYB102K50
	C1073 ,C1075 ,C1083 ,C1085 ,C1093		CKSQYB103K50
	C1095 ,C1259 ,C1281 ,C1559 ,C1603		CKSQYB103K50
	C1607 ,C1609 ,C1651 ,C1652		CKSQYB103K50
	C1002 ,C1004 ,C1008 ,C1010 ,C1014		CKSQYF104Z25
	C1016 ,C1020 ,C1022 ,C1032 ,C1034		CKSQYF104Z25
	C1036 ,C1038 ,C1047 ,C1058		CKSQYF104Z25
	C1063 ,C1064 ,C1071 ,C1072		CKSQYF104Z25
	C1081 ,C1082 ,C1091 ,C1092		CKSQYF104Z25
	C1102 ,C1103 ,C1112 ,C1113		CKSQYF104Z25
	C1122 ,C1123 ,C1131 ,C1132		CKSQYF104Z25
	C1134 -C1139 ,C1141 ,C1143 ,C1144		CKSQYF104Z25
	C1146 ,C1151 ,C1152 ,C1154 -C1159		CKSQYF104Z25
	C1161 ,C1163 ,C1164 ,C1166		CKSQYF104Z25
	C1171 ,C1172 ,C1174 -C1179 ,C1181		CKSQYF104Z25
	C1183 ,C1184 ,C1186 ,C1202 ,C1222		CKSQYF104Z25
	C1242 ,C1244 ,C1246 -C1253 ,C1255		CKSQYF104Z25
	C1260 ,C1266 ,C1267 ,C1272 ,C1279		CKSQYF104Z25
	C1282 -C1284 ,C1287 ,C1288		CKSQYF104Z25
	C1290 -C1292 ,C1294 ,C1296 ,C1297		CKSQYF104Z25
	C1601 ,C1610 -C1613 ,C1701 -C1712		CKSQYF104Z25
	C1751 -C1762 ,C1801 -C1812		CKSQYF104Z25
	C1901 -C1906 ,C1921 ,C1951 -C1957		CKSQYF104Z25
	C1971 ,C1974 ,C2001 -C2010		CKSQYF104Z25
	C2101 -C2110		CKSQYF104Z25
RESISTORS			
	R1140 -R1143 ,R1160 -R1163		RA4C220J
	R1180 -R1183 ,R1211 ,R1212 ,R1275		RA4C220J
	R1201 ,R1202 ,R1213 ,R1214		RA4C470J
	R1551 -R1558 ,R1561 -R1563		RA4C470J
	R1901 -R1912 ,R1951 -R1958		RA4C470J
	R1964 -R1967 ,R2001 -R2020		RA4C470J
	R2101 -R2120		RA4C470J
	R1278		RD1/4PU103J
	R1295		RD1/4PU220J
	R1059 ,R1061 ,R1271		RN1/10SE1001D
	R1058		RN1/10SE1501D
	R1060		RN1/10SE2001D
	R1256		RN1/10SE2401D
	R1257		RN1/10SE3301D
	R1258 ,R1259 ,R1263 ,R1292		RS1/16S0R0J
	R1311 -R1316		RS1/16S0R0J
	R1021 ,R1248 ,R1252 -R1255 ,R1301		RS1/16S100J
	R1351 ,R1559		RS1/16S100J
	R1245		RS1/16S101J
	R1203 -R1210 ,R1655		RS1/16S103J
	R1246 ,R1609		RS1/16S104J
	R1601 -R1603 ,R1617		RS1/16S123J
	R1022 -R1027 ,R1241 -R1244 ,R1260		RS1/16S220J
	R1262 ,R1272 ,R1273 ,R1287 -R1289		RS1/16S220J
	R1921		RS1/16S221J
	R1616		RS1/16S273J
	R1922		RS1/16S331J

Mark	No.	Description	Part No.
	R1221 ,R1222 ,R1225 ,R1303 ,R1608		RS1/16S470J
	R1620 -R1626 ,R1629 -R1632 ,R1634		RS1/16S470J
	R1653 ,R1654 ,R1913 ,R1914		RS1/16S470J
	R1959 -R1963 ,R1968		RS1/16S470J
	R1223 ,R1604 -R1607 ,R1610 -R1615		RS1/16S472J
	R1618 ,R1619 ,R1627 ,R1628 ,R1633		RS1/16S472J
	R1635 -R1652		RS1/16S472J
	Other Resistors		RS1/10S□□□J
OTHERS			
	K1001 -K1022 ,K1025 -K1034		AKX9002
	K1101 ,K1102 ,K1111 ,K1112		AKX9002
	K1121 ,K1122 ,K1131 ,K1132		AKX9002
	K1151 ,K1152 ,K1171 -K1173		AKX9002
	K1201 -K1209 ,K1241 -K1253		AKX9002
	K1261 -K1266 ,K1351 -K1357 ,K1401		AKX9002
	K1451 ,K1501 ,K1551 -K1556		AKX9002
	K1601 -K1606 ,K1951 -K1956		AKX9002
	9102		ANK1517
	X1552 (90.99MHz)		ASS1131
	CN1011	PLUG 30P	KF050HA30L
	CN1201,CN2201-CN2209	PLUG 50P	KF050HA50L
	CN1001	PLUG 10P	KM200NA10L
	CN1002	PLUG 4P	KM250MA4L
	CN1602	PLUG 8P	KM250MA8L

K CABLE A ASS'Y

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC7001,IC7002		TC74VHC541FT
	IC7003-IC7008		TC74VHC574FT
COIL AND FILTERS			
	F7012 ,F7013		ATF1124
	F7001 -F7009		ATF1188
	L7001 -L7003 (100µH)		ATH1065
CAPACITORS			
	C7010 ,C7011		CEHV101M16
	C7013 -C7015		CEHV470M16
	C7001 -C7009 ,C7012		CKSRYF104Z16
RESISTORS			
	R7001 -R7033		RA4C470J
OTHERS			
	K7001 -K7004		AKX9002
	CN7056-CN7058	30P CONNECTOR	KF050HA30L
	CN7053-CN7055	40P CONNECTOR	KF050HA40L
	CN7052	30P CONNECTOR	KF050HC30
	CN7051	40P CONNECTOR	KF050HC40

L CABLE B ASS'Y

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC7121-IC7126		TC74VHC574FT
COIL AND FILTERS			
	F7130		ATF1124
	F7141 -F7146		ATF1184
	F7122 -F7127		ATF1188
	L7101 -L7104 (100µH)		ATH1065
CAPACITORS			
	C7104 ,C7128		CEHV101M16
	C7129 -C7131		CEHV470M16
	C7103 ,C7121 -C7127		CKSRYF104Z16
RESISTORS			
	R7121 -R7144		RA4C470J
	Other Resistors		RS1/10S□□□J
OTHERS			
	K7101 -K7103		AKX9002
	CN7114-CN7116	30P CONNECTOR	KF050HA30L
	CN7105-CN7107	40P CONNECTOR	KF050HA40L
	CN7109,CN7110,CN7112,CN7113	30P CONNECTOR	KF050HC30
	CN7104	40P CONNECTOR	KF050HC40
	CN7101-CN7103	50P CONNECTOR	KF050HC50

M CABLE C ASS'Y

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC7201,IC7202		TC74VHC541FT
	IC7203-IC7208		TC74VHC574FT
COIL AND FILTERS			
	F7210 ,F7212		ATF1124
	F7201 -F7209		ATF1188
	L7201 -L7203 (100µH)		ATH1065
CAPACITORS			
	C7210 ,C7212		CEHV101M16
	C7213 -C7215		CEHV470M16
	C7201 -C7209 ,C7211		CKSRYF104Z16
RESISTORS			
	R7201 -R7233		RA4C470J
OTHERS			
	K7201 -K7204		AKX9002
	CN7256-CN7258	30P CONNECTOR	KF050HA30L
	CN7252-CN7254	40P CONNECTOR	KF050HA40L
	CN7251	30P CONNECTOR	KF050HC30
	CN7255	40P CONNECTOR	KF050HC40

N CABLE D ASS'Y

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC7321-IC7326		TC74VHC574FT
COIL AND FILTERS			
	F7330		ATF1124
	F7341 -F7346		ATF1184
	F7322 -F7327		ATF1188
	L7301 -L7304 (100µH)		ATH1065
CAPACITORS			
	C7304 ,C7328		CEHV101M16
	C7329 -C7331		CEHV470M16
	C7303 ,C7321 -C7327		CKSRYF104Z16
RESISTORS			
	R7321 -R7344		RA4C470J
	Other Resistors		RS1/10S□□□J
OTHERS			
	K7301 -K7303		AKX9002
	CN7314-CN7316	30P CONNECTOR	KF050HA30L
	CN7305-CN7307	40P CONNECTOR	KF050HA40L
	CN7309,CN7310,CN7312,CN7313	30P CONNECTOR	KF050HC30

Mark	No.	Description	Part No.
	CN7304	40P CONNECTOR	KF050HC40
	CN7301-CN7303	50P CONNECTOR	KF050HC50

Q CABLE G ASS'Y

SEMICONDUCTORS

	IC2762,IC2763	TC74VHC541FT
	IC2764-IC2767	TC74VHC574FT

COIL AND FILTERS

	F2767 ,F2768	ATF1124
	F2761 -F2766	ATF1188
	L2761 ,L2762 (100µH)	ATH1065

CAPACITORS

	C2782 ,C2784	CEHV101M16
	C2785 ,C2786	CEHV470M16
	C2781 ,C2783	CKSQYF104Z50
	C2768 -C2773	CKSRYF104Z16

RESISTORS

	R2767 -R2788	RA4C470J

OTHERS

	K2761 -K2763		AKX9002
	CN2765,CN2766	30P CONNECTOR	KF050HA30L
	CN2761,CN2763	40P CONNECTOR	KF050HA40L
	CN2762,CN2764	30P CONNECTOR	KF050HC30

R CABLE H ASS'Y

SEMICONDUCTORS

	IC7601,IC7602	TC74VHC541FT
	IC7603-IC7606	TC74VHC574FT

COIL AND FILTERS

	F7601 ,F7608	ATF1124
	F7602 -F7607	ATF1188
	L7601 ,L7602 (100µH)	ATH1065

CAPACITORS

	C7601 ,C7611	CEHV101M16
	C7609 ,C7610	CEHV470M16
	C7602 ,C7612	CKSQYF104Z50
	C7603 -C7608	CKSRYF104Z16

RESISTORS

	R7601 -R7622	RA4C470J

OTHERS

	K7601 -K7603		AKX9002
	CN7605,CN7606	30P CONNECTOR	KF050HA30L
	CN7602,CN7603	40P CONNECTOR	KF050HA40L
	CN7601,CN7604	30P CONNECTOR	KF050HC30

SCAN ASS'Y

CAPACITORS

	C2553	CEAS220M50

B PROGRESSIVE BLOCK

SEMICONDUCTORS

	IC4713	CD74HCT4046AM
	IC4722	M51952BML
	IC4720	PE6001A9
	IC4701	PST9146N
	IC4704	SAA4952WP
	IC4719	SAA4990H
	IC4702	SAA7165WP
	IC4718	TC74HC4066AF
	IC4714	TC74HCT04AF
	IC4716	TC74HCT08AF
	IC4703	TDA8755T
	IC4705,IC4706	TMS4C2973-26
	IC4707,IC4708	UPC29L33T
	IC4709-IC4711	UPC78L05T
	Q4707 ,Q4709	2SA1037K
	Q4704 ,Q4706 ,Q4712	2SA1162
	Q4701 ,Q4703 ,Q4705 ,Q4711	2SC2712
	D4706 ,D4712	1SS352
	D4705 ,D4711	1SV232

COIL AND FILTERS

	F4703 ,F4704	ATF1124
	F4701	ATF1186
	L4706	ATG1060
	F4715	ATG1063
	L4704 ,L4705 ,L4710 ,L4713 ,L4714	LCTA100J3225
	L4707 -L4709	LCTA1R5J3225
	L4712	LCTA1R8J3225
	L4701 ,L4702	LCTA221J3225

CAPACITORS

	C4771 ,C4773 ,C4774 ,C4776 ,C4778	CCSQCH121J50
	C4780	CCSQCH121J50
	C4721 ,C4772 ,C4775 ,C4779	CCSQCH150J50
	C4731 ,C4732 ,C4805	CCSQCH220J50
	C4704 ,C4706 ,C4718 ,C4719	CCSQCH221J50
	C4761 ,C4762	CCSQCH221J50
	C4746	CCSQCH270J50
	C4747 ,C4760	CCSQCH331J50
	C4730	CCSQCH390J50
	C4748 ,C4749	CCSQCH680J50
	C4811	CCSQCH8R0D50
	C4702 ,C4703 ,C4715 ,C4717 ,C4765	CEV100M16
	C4810 ,C4816 ,C4817	CEV100M16
	C4785 ,C4787 ,C4789 ,C4791 ,C4812	CEV220M16
	C4814 ,C4819	CEV220M16
	C4711	CEV2R2M50
	C4701 ,C4777	CEV470M6R3
	C4705 ,C4707 ,C4744	CEV4R7M35
	C4763	CKSQYB272K50
	C4712 ,C4713	CKSQYB333K50
	C4708 ,C4710 ,C4743 ,C4764 ,C4806	CKSQYF103Z50
	C4709 ,C4714 ,C4716 ,C4720 ,C4722	CKSQYF104Z50
	C4725 -C4729 ,C4750 ,C4752 -C4756	CKSQYF104Z50
	C4759 ,C4766 -C4770 ,C4781 -C4784	CKSQYF104Z50
	C4786 ,C4788 ,C4790 ,C4792 -C4800	CKSQYF104Z50
	C4804 ,C4808 ,C4809 ,C4813 ,C4815	CKSQYF104Z50
	C4818	CKSQYF104Z50
	C4742	CKSQYF473Z50

RESISTORS

	Other Resistors	RS1/10S□□□J

OTHERS

	K4701 -K4703	AKX9002
	X4701 (12MHz)	ASS1133

Mark	No.	Description	Part No.

AG IR RECEIVER ASS'Y

SEMICONDUCTORS			
	IC2551		SBX8035-H
	Q2551		2SC2712
	D2553		1SS352
CAPACITORS			
	C2554		CKSRYB472K50
	C2551		CKSRYF104Z16
RESISTORS			
	R2564		RS1/16S101J
	R2561 ,R2562		RS1/16S223J
	R2563		RS1/16S472J

AH INDICATOR ASS'Y

SEMICONDUCTORS			
	D2552		AEL1170
OTHERS			
	J2553		D15A03-950-2651

S SCAN A ASS'Y

SEMICONDUCTORS			
	IC7702,IC7703,IC7705-IC7708		HCPL-M611
	IC7701		ICL7667CBA
	IC7709-IC7711		SN755862PJA
	IC7704		UPC78L05T
	Q7701 ,Q7702		2SK2518
COIL AND FILTERS			
	L7701		VTL1007
CAPACITORS			
	C7718 -C7721 ,C7727 -C7730 (0.1µF/250V)		ACG1059
	C7736 -C7739 (0.1µF/250V)		ACG1059
	C7704 ,C7707 ,C7709 ,C7711 ,C7713		CCSQCH220J50
	C7722 -C7726 ,C7731 -C7735		CCSQCH220J50
	C7702		CCSQCH470J50
	C7717		CEHAQ100M2D
	C7715		CEHV101M16
	C7705		CEHV470M16
	C7701 ,C7703 ,C7706 ,C7708 ,C7710		CKSQYF104Z50
	C7712 ,C7714 ,C7716 ,C7740 -C7746		CKSQYF104Z50
RESISTORS			
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN7701	30P CONNECTOR	KF050HC30

T SCAN B ASS'Y

SEMICONDUCTORS			
	IC7802,IC7803,IC7805-IC7808		HCPL-M611
	IC7801		ICL7667CBA
	IC7809-IC7811		SN755862PJA
	IC7804		UPC78L05T
	Q7801 ,Q7802		2SK2518
COIL AND FILTERS			
	L7801		VTL1007
CAPACITORS			
	C7818 -C7821 ,C7827 -C7830 (0.1µF/250V)		ACG1059
	C7836 -C7839 (0.1µF/250V)		ACG1059
	C7804 ,C7807 ,C7809 ,C7811 ,C7813		CCSQCH220J50
	C7822 -C7826 ,C7831 -C7835		CCSQCH220J50
	C7802		CCSQCH470J50
	C7817		CEHAQ100M2D
	C7815		CEHV101M16
	C7805		CEHV470M16
	C7801 ,C7803 ,C7806 ,C7808 ,C7810		CKSQYF104Z50
	C7812 ,C7814 ,C7816 ,C7840 -C7846		CKSQYF104Z50
RESISTORS			
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN7801	30P CONNECTOR	KF050HC30

U SCAN C ASS'Y

SEMICONDUCTORS			
	IC7902,IC7903,IC7905-IC7908		HCPL-M611
	IC7901		ICL7667CBA
	IC7909-IC7911		SN755862PJA
	IC7904		UPC78L05T
	Q7901 ,Q7902		2SK2518
COIL AND FILTERS			
	L7901		VTL1007
CAPACITORS			
	C7918 -C7921 ,C7927 -C7930 (0.1µF/250V)		ACG1059
	C7936 -C7939 (0.1µF/250V)		ACG1059
	C7904 ,C7907 ,C7909 ,C7911 ,C7913		CCSQCH220J50
	C7922 -C7926 ,C7931 -C7935		CCSQCH220J50
	C7902		CCSQCH470J50
	C7917		CEHAQ100M2D
	C7915		CEHV101M16
	C7905		CEHV470M16
	C7901 ,C7903 ,C7906 ,C7908 ,C7910		CKSQYF104Z50
	C7912 ,C7914 ,C7916 ,C7940 -C7946		CKSQYF104Z50
RESISTORS			
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN7901	30P CONNECTOR	KF050HC30

V SCAN D ASS'Y

SEMICONDUCTORS			
	IC8702,IC8703,IC8705-IC8708		HCPL-M611
	IC8701		ICL7667CBA
	IC8709-IC8711		SN755862PJA
	IC8704		UPC78L05T
	Q8701 ,Q8702		2SK2518
COIL AND FILTERS			
	L8701		VTL1007
CAPACITORS			
	C8718 -C8721 ,C8727 -C8730 (0.1µF/250V)		ACG1059
	C8736 -C8739 (0.1µF/250V)		ACG1059
	C8704 ,C8707 ,C8709 ,C8711 ,C8713		CCSQCH220J50

Mark	No.	Description	Part No.
	C8722 -C8726 ,C8731 -C8735		CCSQCH220J50
	C8702		CCSQCH470J50
	C8717		CEHAQ100M2D
	C8715		CEHV101M16
	C8705		CEHV470M16
	C8701 ,C8703 ,C8706 ,C8708 ,C8710		CKSQYF104Z50
	C8712 ,C8714 ,C8716 ,C8740 -C8746		CKSQYF104Z50
RESISTORS			
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN8701	30P CONNECTOR	KF050HC30

W PUMP UP A ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC8151		ICL7667CBA
⚠	IC8152		ICP-S1.0
	Q8151		2SJ327-Z
	Q8152		2SK2796S
	D8151		D1FL20U
CAPACITORS			
	C8154 ,C8155		CCSQCH221J50
	C8152		CEHAQ101M63
	C8151		CFTXA474J50
	C8153		CKSQYF103Z50
	C8156		CKSQYF104Z50
RESISTORS			
	R8151 -R8154		RS2MMF180J
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN8152		AKM1141
	K8151 -K8155		AKX9002
	CN8151	30P CONNECTOR	KF050HA30L

X PUMP UP B ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC8201		ICL7667CBA
⚠	IC8202		ICP-S1.0
	Q8201		2SJ327-Z
	Q8202		2SK2796S
	D8201		D1FL20U
CAPACITORS			
	C8204 ,C8205		CCSQCH221J50
	C8202		CEHAQ101M63
	C8201		CFTXA474J50
	C8203		CKSQYF103Z50
	C8206		CKSQYF104Z50
RESISTORS			
	R8201 -R8204		RS2MMF180J
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN8202		AKM1141
	K8201 -K8205		AKX9002
	CN8201	30P CONNECTOR	KF050HA30L

Y PUMP UP C ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC8251		ICL7667CBA
⚠	IC8252		ICP-S1.0
	Q8251		2SJ327-Z
	Q8252		2SK2796S
	D8251		D1FL20U
CAPACITORS			
	C8254 ,C8255		CCSQCH221J50
	C8252		CEHAQ101M63
	C8251		CFTXA474J50
	C8253		CKSQYF103Z50
	C8256		CKSQYF104Z50
RESISTORS			
	R8251 -R8254		RS2MMF180J
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN8252		AKM1141
	K8252 -K8255		AKX9002
	CN8251	30P CONNECTOR	KF050HA30L

Z PUMP UP D ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC8301		ICL7667CBA
⚠	IC8302		ICP-S1.0
	Q8301		2SJ327-Z
	Q8302		2SK2796S
	D8301		D1FL20U
CAPACITORS			
	C8304 ,C8305		CCSQCH221J50
	C8302		CEHAQ101M63
	C8301		CFTXA474J50
	C8303		CKSQYF103Z50
	C8306		CKSQYF104Z50
RESISTORS			
	R8301 -R8304		RS2MMF180J
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN8302		AKM1141
	K8301 -K8305		AKX9002
	CN8301	30P CONNECTOR	KF050HA30L

AA PUMP UP E ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC8351		ICL7667CBA
⚠	IC8352		ICP-S1.0
	Q8351		2SJ327-Z
	Q8352		2SK2796S
	D8351		D1FL20U
CAPACITORS			
	C8354 ,C8355		CCSQCH221J50
	C8352		CEHAQ101M63
	C8351		CFTXA474J50
	C8353		CKSQYF103Z50
	C8356		CKSQYF104Z50
RESISTORS			
	R8351 -R8354		RS2MMF180J
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN8352		AKM1141
	K8352 -K8355		AKX9002
	CN8351	30P CONNECTOR	KF050HA30L

Mark	No.	Description	Part No.
AB	**PUMP UP F ASSY**		
	SEMICONDUCTORS		
	IC8401		ICL7667CBA
⚠	IC8402		ICP-S1.0
	Q8401		2SJ327-Z
	Q8402		2SK2796S
	D8401		D1FL20U
	CAPACITORS		
	C8404 ,C8405		CCSQCH221J50
	C8402		CEHAQ101M63
	C8401		CFTXA474J50
	C8403		CKSQYF103Z50
	C8406		CKSQYF104Z50
	RESISTORS		
	R8401 -R8404		RS2MMF180J
	Other Resistors		RS1/10S□□□J
	OTHERS		
	CN8402		AKM1141
	K8401 -K8405		AKX9002
	CN8401	30P CONNECTOR	KF050HA30L
AC	**PUMP UP G ASSY**		
	SEMICONDUCTORS		
	IC8451		ICL7667CBA
⚠	IC8452		ICP-S1.0
	Q8451		2SJ327-Z
	Q8452		2SK2796S
	D8451		D1FL20U
	CAPACITORS		
	C8454 ,C8455		CCSQCH221J50
	C8452		CEHAQ101M63
	C8451		CFTXA474J50
	C8453		CKSQYF103Z50
	C8456		CKSQYF104Z50
	RESISTORS		
	R8451 -R8454		RS2MMF180J
	Other Resistors		RS1/10S□□□J
	OTHERS		
	CN8452		AKM1141
	K8451 -K8455		AKX9002
	CN8451	30P CONNECTOR	KF050HA30L
AD	**PUMP UP H ASSY**		
	SEMICONDUCTORS		
	IC8501		ICL7667CBA
⚠	IC8502		ICP-S1.0
	Q8501		2SJ327-Z
	Q8502		2SK2796S
	D8501		D1FL20U
	CAPACITORS		
	C8504 ,C8505		CCSQCH221J50
	C8502		CEHAQ101M63
	C8501		CFTXA474J50
	C8503		CKSQYF103Z50
	C8506		CKSQYF104Z50
	RESISTORS		
	R8501 -R8504		RS2MMF180J
	Other Resistors		RS1/10S□□□J
	OTHERS		
	CN8502		AKM1141
	K8501 -K8505		AKX9002
	CN8501	30P CONNECTOR	KF050HA30L
AE	**PUMP UP K ASSY**		
	SEMICONDUCTORS		
	IC8551		ICL7667CBA
⚠	IC8552		ICP-S1.0
	Q8551		2SJ327-Z
	Q8552		2SK2796S
	D8551		D1FL20U
	CAPACITORS		
	C8554 ,C8555		CCSQCH221J50
	C8552		CEHAQ101M63
	C8551		CFTXA474J50
	C8553		CKSQYF103Z50
	C8556		CKSQYF104Z50
	RESISTORS		
	R8551 -R8554		RS2MMF180J
	Other Resistors		RS1/10S□□□J
	OTHERS		
	CN8552		AKM1141
	K8551 -K8555		AKX9002
	CN8551	30P CONNECTOR	KF050HA30L
AF	**PUMP UP L ASSY**		
	SEMICONDUCTORS		
	IC8601		ICL7667CBA
⚠	IC8602		ICP-S1.0
	Q8601		2SJ327-Z
	Q8602		2SK2796S
	D8601		D1FL20U
	CAPACITORS		
	C8604 ,C8605		CCSQCH221J50
	C8602		CEHAQ101M63
	C8601		CFTXA474J50
	C8603		CKSQYF103Z50
	C8606		CKSQYF104Z50
	RESISTORS		
	R8601 -R8604		RS2MMF180J
	Other Resistors		RS1/10S□□□J
	OTHERS		
	CN8602		AKM1141
	K8601 -K8605		AKX9002
	CN8601	30P CONNECTOR	KF050HA30L
A	**VIDEO ASS'Y**		
	SEMICONDUCTORS		
	IC9003,IC9504		BA7655AF
	IC9205		CXA1875AM
	IC4502,IC4503		MC14577CF
	IC4501		NJM2234M
	IC9961		PA0030
	IC9001		TA8759BN

Mark	No.	Description	Part No.
	IC4101		TC4052BF
	IC4102,IC9502		TC4053BF
	IC9505		TC74ACT541FS
	IC9503,IC9801		TC74HC4053AF
	IC9002,IC9507		TC74HC4538AF
	IC9501		TDA4566
	IC9506		UPC1862GS
	Q4104 ,Q4123 ,Q4137 ,Q4520 ,Q9008		2SA1037K
	Q9522 ,Q9523 ,Q9542 ,Q9544 ,Q9547		2SA1037K
	Q9551 ,Q9552 ,Q9801 -Q9803 ,Q9844		2SA1037K
	Q9858 ,Q9874 ,Q9895 ,Q9912		2SA1037K
	Q9921 -Q9923 ,Q9926 ,Q9941 ,Q9944		2SA1037K
	Q4106 ,Q4108 -Q4111 ,Q4113		2SC2412K
	Q4115 ,Q4116 ,Q4121 ,Q4124 ,Q4127		2SC2412K
	Q4129 -Q4132 ,Q4134 ,Q4511 -Q4513		2SC2412K
	Q4521 ,Q9003 -Q9006 ,Q9009 -Q9014		2SC2412K
	Q9101 ,Q9102 ,Q9501 ,Q9503 -Q9507		2SC2412K
	Q9509 -Q9521 ,Q9525 -Q9527		2SC2412K
	Q9530 -Q9536 ,Q9538 -Q9541 ,Q9543		2SC2412K
	Q9545 ,Q9546 ,Q9548 -Q9550 ,Q9821		2SC2412K
	Q9823 -Q9825 ,Q9841 -Q9843		2SC2412K
	Q9855 -Q9857 ,Q9871 -Q9873 ,Q9911		2SC2412K
	Q9913 ,Q9942 ,Q9943 ,Q9945 ,Q9946		2SC2412K
	Q9971		2SC2412K
	Q4114		2SK208
	Q4509 ,Q9508 ,Q9524 ,Q9528 ,Q9529		DTC124EK
	Q9972 ,Q9973		DTC124EK
	D4105 -D4107 ,D4502 -D4508		1SS226
	D9208 ,D9209		1SS226
	D4102 ,D4523 ,D9001 ,D9002 ,D9004		1SS352
	D9501 -D9504 ,D9801 ,D9841		1SS352
	D9003		RD5.1MB
COIL AND FILTERS			
	F4108 ,F9202 ,F9501 -F9508		ATF1124
	F4101 -F4107		ATF1128
	DL9941,DL9942		ATN1029
	L4109 ,L9962		LCTA100J3225
	L4107		LCTA101J3225
	L4106		LCTA120J3225
	L4108		LCTA150J3225
	L9006 ,L9007		LCTA270J3225
	L4110		LCTA3R9J3225
	L9963 ,L9964		LCTA4R7J3225
	L9961		LCTA5R6J3225
	L4105 ,L9855 ,L9871		LCTA6R8J3225
CAPACITORS			
	C9056 ,C9579 (0.22µF/16)		ACE9008
	C9554 ,C9963 -C9965 ,C9967		CCSQCH100D50
	C9061		CCSQCH101J50
	C9563 ,C9586		CCSQCH102J50
	C9004		CCSQCH120J50
	C4111 ,C4122		CCSQCH121J50
	C9961		CCSQCH150J50
	C4129		CCSQCH151J50
	C9005		CCSQCH181J50

Mark	No.	Description	Part No.
	C9941		CCSQCH220J50
	C4110 ,C9030 ,C9032 ,C9055 ,C9555		CCSQCH221J50
	C9561		CCSQCH221J50
	C9576 ,C9855 ,C9871 ,C9962		CCSQCH330J50
	C9003 ,C9577		CCSQCH390J50
	C9553		CCSQCH470J50
	C9049 ,C9050		CCSQCH471J50
	C9856 ,C9872		CCSQCH560J50
	C4123 ,C9029 ,C9031		CCSQCH680J50
	C4109		CCSQCH821J50
	C4112		CCSQSL122J50
	C9560		CCSQSL152J50
	C9578		CCSQSL1R0C50
	C9565		CCSQSL222J50
	C9966		CEAS100M50
	C4107 ,C4115 ,C4116 ,C4522		CEV100M16
	C9039		CEV100M50
	C9518 ,C9971		CEV101M16
	C4514 ,C4517 ,C9225 ,C9583		CEV101M6R3
	C9057 ,C9564 ,C9566 ,C9569		CEV1R0M50
	C4501 ,C4502 ,C4511 ,C4526 ,C9065		CEV220M16
	C9502 ,C9505 -C9507 ,C9511 ,C9512		CEV220M16
	C9544 ,C9545 ,C9570 ,C9896		CEV220M16
	C4121 ,C9102 ,C9103 ,C9230		CEV220M6R3
	C9534 -C9536 ,C9547 ,C9550 ,C9552		CEV220M6R3
	C9592 -C9594 ,C9822 -C9824 ,C9913		CEV220M6R3
	C9925		CEV220M6R3
	C4108 ,C4117		CEV330M10
	C9969		CEV330M25
	C4118 ,C4127 ,C4131 ,C4506 ,C4525		CEV470M16
	C9023 ,C9025 ,C9047 ,C9503 ,C9509		CEV470M16
	C9514 ,C9516 ,C9522 ,C9537 ,C9539		CEV470M16
	C9541 ,C9590 ,C9801 ,C9804 ,C9806		CEV470M16
	C9858 ,C9891 ,C9911 ,C9943		CEV470M16
	C4518 ,C4527 ,C9069 ,C9520 ,C9524		CEV470M6R3
	C9526 ,C9528 ,C9530 ,C9532 ,C9548		CEV470M6R3
	C9551 ,C9567 ,C9573 ,C9574 ,C9588		CEV470M6R3
	C4523 ,C9559 ,C9580		CEV4R7M35
	C9067 ,C9068 ,C9843 ,C9857 ,C9873		CEVNP100M16
	C9916		CEVNP100M16
	C9058		CEVNP1R0M50
	C9007		CEVNP2R2M50
	C9026 ,C9582		CEVR47M50
	C9043		CFHS223J16
	C9045		CFHSP104J16
	C9011 ,C9012 ,C9059		CFHSP563J16
	C4532 ,C9006 ,C9044 ,C9581 ,C9587		CFHSQ103J16
	C9046		CFHSQ472J16
	C9037		CKSQYB102K50
	C4106 ,C4119 ,C4128 ,C4132		CKSQYB103K50
	C4134 ,C4135 ,C4139 ,C4505 ,C4513		CKSQYB103K50
	C4515 ,C4516 ,C4524 ,C4530 ,C4531		CKSQYB103K50
	C4534 ,C9010 ,C9015 ,C9033 ,C9038		CKSQYB103K50
	C9051 ,C9054 ,C9062 -C9064		CKSQYB103K50

Mark	No.	Description	Part No.
	C9070 -C9072 ,C9101 ,C9519 ,C9521		CKSQYB103K50
	C9523 ,C9525 ,C9556 ,C9557 ,C9562		CKSQYB103K50
	C9571 ,C9585 ,C9802 ,C9805 ,C9807		CKSQYB103K50
	C9821 ,C9841 ,C9842 ,C9844 ,C9859		CKSQYB103K50
	C9892 ,C9912 ,C9923 ,C9942 ,C9968		CKSQYB103K50
	C9972 -C9976		CKSQYB103K50
	C4113		CKSQYB392K50
	C9213		CKSQYF102Z50
	C9226 ,C9231 ,C9504 ,C9508 ,C9510		CKSQYF103Z50
	C9513 ,C9515 ,C9517 ,C9527 ,C9529		CKSQYF103Z50
	C9531 ,C9533 ,C9538 ,C9540		CKSQYF103Z50
	C9542 ,C9543 ,C9549 ,C9558 ,C9568		CKSQYF103Z50
	C9572 ,C9575 ,C9584 ,C9589 ,C9591		CKSQYF103Z50
	C9770 ,C9771		CKSQYF103Z50
	C4504 ,C9024 ,C9034 -C9036		CKSQYF104Z50
	C9040 -C9042 ,C9048 ,C9066 ,C9501		CKSQYF104Z50
	C9803		CKSQYF104Z50
	C4519		CKSQYF473Z50
RESISTORS			
	R9988 ,R9989		RD1/4PU471J
	R4232 ,R4233		RD1/4PU681J
	R9113		RD1/4PU821J
	R9713		RN1/10SE8202D
	VR9005		VRTS6VS102
	VR9002-VR9004		VRTS6VS103
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN4502	PIN JACK(3P-AU)	AKB1270
	JA4503	JACK	AKB7096
	CN4505	SIN SOCKET	AKP1175
	CN4504	CONNECTOR	AKX1051
	K4501 ,K4502 ,K9502 ,K9921 ,K9924		AKX9002
	K9961 ,K9971 -K9973		AKX9002
	X9003	(503kHz)	ASS1019
	X9502	CRYSTAL (14.31818MHz)	ASS1056
	X9002	CRYSTAL (3.579545MHz)	ASS1091
	X9501	(503kHz)	ASS1112
	CN9501	50P CONNECTOR	KF050HA50L
	CN4107	PLUG 12P	KM250MA13
	CN4102	PLUG 6P	KM250MA6
	CN9502	PLUG 8P	KM250MA8B
	CN4101	PLUG 9P	KM250MA9
	5001	SCREW TERMINAL	VNE1949

AO CONTROL ASS'Y

SEMICONDUCTORS

IC3401		MC145407F
IC3402		TC74HC00AF
Q3405 ,Q3409 ,Q3411		2SA1162
Q3404 ,Q3406 -Q3408 ,Q3410		2SC2712
D3401 ,D3402 ,D3416 -D3418		1SS352
D3404 -D3411		RD15MB

Mark	No.	Description	Part No.
SWITCHES AND RELAYS			
	S3401		ASH1010
CAPACITORS			
	C3404 ,C3406 ,C3409 ,C3410		CEV100M35
	C3403 ,C3408 ,C3412		CEV470M16
	C3405 ,C3407 ,C3411		CKSQYB103K50
	C3402		CKSQYB472K50
RESISTORS			
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN3401,CN3402	JACK	AKN-207
	CN3403	SOCKET (9P D-SUB)	AKP1171
	CN3406,CN3407	6P MINIDIN SOCKET	AKP1183
	CN3404	PLUG 3P	KM250MA3
	3401	SCREW TERMINAL	VNE1949

C RGB ASS'Y

SEMICONDUCTORS

IC5102	24LCS21A
IC6001	AN5390FBS
IC6002	AN5395FBP
IC5101,IC5802,IC6003	BA7657F
IC5109	LT1260CS
IC5307	M52036SP
IC5801	M52337SP
IC5805	M62358FP
IC6145	NJM072BM-E
IC5112	NJM2234M
IC5103-IC5106	NJM360M
IC5301	PDY052A
IC5310	PE1007A
IC6005	PQ20VZ1U
IC5107,IC5309,IC6006	TA78M05F
IC5108	TA79L05F
IC6004	TC74HC4066AF
IC5312	TC74HC4538AFS
IC5311	TC74VHC123AFT
IC5111,IC5302,IC5303,IC5306,IC5308	TC74VHCT541AFT
IC5803	TC74VHCT541AFT
IC5304	TC74VHCU04FS
IC5804	TC7S32F
Q5118 ,Q5120 ,Q5127 ,Q5132 ,Q5134	2SA1037K
Q5136 ,Q5155 -Q5158 ,Q5282 ,Q5302	2SA1037K
Q5808 -Q5810 ,Q5825 -Q5827	2SA1037K
Q5954 -Q5956 ,Q6008 ,Q6010 -Q6019	2SA1037K
Q6146 ,Q6148	2SA1037K
Q5103 ,Q5106 ,Q5117 ,Q5119	2SC2412K
Q5125 ,Q5126 ,Q5128 ,Q5131 ,Q5133	2SC2412K
Q5135 ,Q5303 ,Q5304 ,Q5801	2SC2412K
Q5804 -Q5807 ,Q5811 ,Q5814 -Q5818	2SC2412K
Q5821 -Q5824 ,Q6001 -Q6007 ,Q6009	2SC2412K
Q6147 ,Q6149	2SC2412K
Q5123 ,Q5301 ,Q5305	DTC124EK
Q5283	FS30AS-06
D5108 ,D5802 -D5805 ,D5807 ,D5808	1SS184

Mark	No.	Description	Part No.
	D5103 ,D5105 ,D5106 ,D5109 -D5111		1SS226
	D5113 -D5120 ,D5125 -D5130		1SS226
	D6003 ,D6004		1SS226
	D5102 ,D5104 ,D5121 ,D5122		1SS352
	D5303 -D5306 ,D5806 ,D6145		1SS352
	D6148 ,D6149		HSS104-02
	D6005 ,D6006		RD10MB
	D5112 ,D6001		RD6.8MB
COIL AND FILTERS			
	F5301 -F5304		ATF1116
	F5803 -F5805 ,F6001 -F6007		ATF1124
	L5101 -L5104		LCTA470J3225
	L6002		LCTA820J3225
	L6001		LCTAR22J3225
SWITCHES AND RELAYS			
	S5101		ASH1029
CAPACITORS			
	C6044 ,C6079 ,C6080 ,C6084	(0.22µF/16V)	ACE9008
	C6108 -C6110		CCDSL121J50
	C5331 ,C5338		CCSQCH151J50
	C5326 ,C5813 ,C5820 ,C5826 ,C6081		CCSQCH221J50
	C5334 ,C5353 -C5356 ,C5359 -C5361		CCSQCH471J50
	C5365 ,C5369		CCSQCH471J50
	C5303 ,C5304		CCSQCH7R0D50
	C6056		CCSQCH820J50
	C6023 ,C6025 ,C6026		CEAS3R3M50
	C5118 ,C5121 ,C5145 ,C5148 ,C5324		CEV100M16
	C6006 -C6008 ,C6021 ,C6073 ,C6146		CEV100M16
	C6149		CEV100M16
	C5170 ,C5176 ,C5178 ,C5193		CEV101M6R3
	C5808 ,C5809 ,C5836 ,C5860		CEV101M6R3
	C5877 ,C5878 ,C5889 ,C5890 ,C5897		CEV101M6R3
	C6093		CEV101M6R3
	C5325 ,C5814 ,C5819 ,C5825		CEV1R0M50
	C6001 ,C6002 ,C6022 ,C6031		CEV1R0M50
	C5197 ,C6020		CEV220M16
	C5198		CEV220M6R3
	C5157 ,C5174 ,C5180 ,C5307		CEV470M16
	C5311 -C5314 ,C5329 ,C5332 ,C5333		CEV470M16
	C5344 ,C5345 ,C5363 ,C5364 ,C5806		CEV470M16
	C5811 ,C5816 ,C5821 ,C5823 ,C5838		CEV470M16
	C5841 -C5843 ,C5845 ,C5847 ,C5862		CEV470M16
	C5866 ,C5868 ,C5875 ,C5880 ,C5887		CEV470M16
	C5892 ,C5894 ,C6010 ,C6012 ,C6014		CEV470M16
	C6030 ,C6034 ,C6037 ,C6038 ,C6040		CEV470M16
	C6048 ,C6070 ,C6075 ,C6078 ,C6083		CEV470M16
	C6086 ,C6088 ,C6091 ,C6096 ,C6098		CEV470M16
	C6107		CEV470M16
	C5119 ,C5122 ,C5123 ,C5126 ,C5133		CEV470M6R3
	C5140 ,C5142 ,C5146 ,C5149 ,C5150		CEV470M6R3
	C5154 ,C5196 ,C5199		CEV470M6R3
	C5335 ,C5336 ,C6047 ,C6060		CEV4R7M35
	C5120 ,C5147		CEVNP100M16
	C6016 ,C6032 ,C6033		CEVNP1R0M50
	C5101 ,C5112 ,C5113 ,C5128 ,C5129		CEVNP470M10
	C5135 ,C5137 ,C5139 ,C5152 ,C5153		CEVNP470M10
	C5114 -C5116 ,C5899 ,C5901 ,C5903		CEVNP470M6R3
	C6100 ,C6102 ,C6104		CEVNP470M6R3
	C5117 ,C5144		CEVNP4R7M16
	C6003 -C6005		CEVR10M50
	C5102 -C5107 ,C5134 ,C5136 ,C5138		CFHSQ103J16
	C5367 ,C6017 ,C6018 ,C6042 ,C6052		CFHSQ103J16
	C6061 ,C6062 ,C6064 ,C6065 ,C6069		CFHSQ103J16
	C5337		CFHSQ472J16
	C6145		CFTYA474J50
	C5109 ,C5111 ,C5124 ,C5125 ,C5127		CKSQYB103K50
	C5130 -C5132 ,C5141 ,C5143 ,C5151		CKSQYB103K50
	C5155 ,C5156 ,C5169 ,C5192		CKSQYB103K50
	C5194 ,C5195 ,C5200 ,C5201 ,C5301		CKSQYB103K50
	C5328 ,C5339 ,C5341 -C5343		CKSQYB103K50
	C5347 ,C5348 ,C5357 ,C5358 ,C5805		CKSQYB103K50
	C5807 ,C5810 ,C5812 ,C5829 -C5831		CKSQYB103K50
	C5837 ,C5844 ,C5846 ,C5848 ,C5861		CKSQYB103K50
	C5863 ,C5867 ,C5869 ,C5874 ,C5876		CKSQYB103K50
	C5879 ,C5881 ,C5886 ,C5888 ,C5891		CKSQYB103K50
	C5893 ,C5895 ,C5896 ,C5898 ,C5900		CKSQYB103K50
	C5902 ,C5904 ,C5906 ,C6011 ,C6013		CKSQYB103K50
	C6015 ,C6019 ,C6035 ,C6036 ,C6039		CKSQYB103K50
	C6041 ,C6043 ,C6046 ,C6049 -C6051		CKSQYB103K50
	C6053 -C6055 ,C6057 -C6059 ,C6063		CKSQYB103K50
	C6066 -C6068 ,C6071 ,C6072 ,C6074		CKSQYB103K50
	C6076 ,C6077 ,C6082 ,C6085 ,C6087		CKSQYB103K50
	C6090 ,C6092 ,C6094 ,C6097 ,C6099		CKSQYB103K50
	C6101 ,C6103 ,C6105 ,C6106		CKSQYB103K50
	C5815 ,C5817 ,C5818 ,C5822 ,C5824		CKSQYB223K50
	C5827 ,C5828 ,C5832 ,C5833		CKSQYB223K50
	C5839 ,C5840 ,C5849 -C5859		CKSQYB223K50
	C5108 ,C5865 ,C6095		CKSQYB471K50
	C6009		CKSQYB473K50
	C5302 ,C5308 -C5310 ,C5315 -C5323		CKSQYF104Z25
	C5330 ,C5340 ,C5346 ,C5362 ,C5366		CKSQYF104Z25
	C6089 ,C6148		CKSQYF104Z25
	C5864 ,C6027 -C6029 ,C6045		CKSQYF104Z50
	C5173 ,C5175 ,C5177 ,C5179		CKSRYF103Z50
RESISTORS			
	R6127 -R6129		RD1/4PU221J
	R6094		RN1/10SE1001D
	R5120 ,R5131 ,R5172 ,R5183		RN1/10SE1002D
	R5833 ,R5835 -R5839		RN1/10SE1301D
	R5868 ,R5878 ,R5879		RN1/10SE3601D
	R5128 ,R5139 ,R5180 ,R5191 ,R5974		RN1/10SE3901D
	R5121 ,R5132 ,R5173 ,R5184 ,R5869		RN1/10SE4701D
	R5873 -R5877 ,R5976 ,R6002 ,R6154		RN1/10SE4701D
	R5127 ,R5138 ,R5179 ,R5190 ,R6153		RN1/10SE5601D
	R6093		RN1/10SE6201D
	R6130		RN1/4PC6201F
	R5975		RS1/10S2201D
	R5840 ,R5842 ,R5843		RS1/2S681J
	Other Resistors		RS1/10S□□□J

Mark	No.	Description	Part No.
OTHERS			
	J5101	BORD IN WIRE	ADX2411
	CN5101,CN5102	15PD-SUB SOCKET	AKP1172
	CN5103		AKX1050
	K5302 -K5306 ,K5311 -K5315		AKX9002
	K5318 -K5321 ,K5802 ,K5803		AKX9002
	K5805 -K5807 ,K6002 ,K6003		AKX9002
	K6005 -K6008 ,K6020 -K6023		AKX9002
	X5301 (16.000MHz)		ASS1128
	CN5302	30P CONNECTOR	KF050HC30
	CN5301,CN5804	50P CONNECTOR	KF050HC50
	CN5803	PLUG 12P	KM250MA13
	CN5802	PLUG 6P	KM250MA6

I U-COM ASS'Y

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC3704		24LC64(I)SN
	IC6471		HG62G010R29FB
	IC3703		PD5435A9
	IC6302,IC6303,IC6401		PQ20VZ1U
	IC6301,IC6304		PQ30RV21
	IC3702,IC3705		PST9146N
	IC6305,IC6402		TA78M05F
	IC6441		TA8667F
	IC6431		TC35071F
	IC6481		TC74ACT74FS
	IC3906		TC74HC02AF
	IC6482		TC74HC4040AF
	IC6505,IC6506		TC74LCX541FT
	IC6507,IC6510		TC74VHC541FT
	IC3901,IC3903		TC74VHCT541AFT
	Q3710 -Q3713 ,Q3715 ,Q3717 ,Q3718		2SA1162
	Q3725 ,Q3726 ,Q6423		2SA1162
	Q3701 ,Q3716 ,Q6411 -Q6413 ,Q6417		2SC2712
	Q6421 ,Q6441 ,Q6451 ,Q6452		2SC2712
	Q6461 ,Q6462		2SC2712
	Q6418 ,Q6419 ,Q6442		2SC2714
	Q3709		2SC2878
	Q6422		2SK208
	D3706 ,D3707 ,D3709 -D3712		1SS226
	D6423		1SS269
	D6421 ,D6422 ,D6451		1SS352
	D3721		HSS104-02
	D3704 ,D3705 ,D3708 ,D3713		RD6.8MB
COIL AND FILTERS			
	L6401		ATC1037
	F6401 -F6404		ATF1128
	F6507 -F6509 ,F6514		ATF1188
	L3701		LCTA100J3225
	L6411		LCTA4R7J3225
CAPACITORS			
	C6433		CCSRCH101J50
	C6413 ,C6415		CCSRCH121J50
	C3710 ,C3711 ,C3916 ,C3917		CCSRCH220J50
	C6410 ,C6421 ,C6453		CCSRCH221J50
	C6414		CCSRCH820J50
	C6301 ,C6305 ,C6309		CEAS471M25
	C3744 ,C3906 ,C6420		CEV100M16
	C3703 ,C3704 ,C3706 ,C3742 ,C3924		CEV101M6R3
	C6317 ,C6321 ,C6408 ,C6471 ,C6477		CEV101M6R3
	C6481		CEV101M6R3
	C3747 ,C6446		CEV1R0M50
	C3746		CEV220M16
	C6304 ,C6324		CEV2R2M50
	C3714 ,C3749 ,C6310 ,C6314 ,C6315		CEV470M16
	C6319 ,C6401 ,C6404 ,C6406 ,C6411		CEV470M16
	C6441 ,C6519		CEV470M16
	C6431		CEV470M6R3
	C6416		CEVNP100M16
	C6302 ,C6303 ,C6306 -C6308		CKSQYF103Z50
	C6311 -C6313 ,C6316 ,C6318 ,C6320		CKSQYF103Z50
	C6322 ,C6323		CKSQYF103Z50
	C3725 ,C3726 ,C3730 ,C3731		CKSRYB102K50
	C3735 -C3741 ,C3743 ,C3745 ,C3754		CKSRYB102K50
	C6419 ,C6422 ,C6473		CKSRYB102K50
	C3705 ,C3707 -C3709 ,C3712 ,C3713		CKSRYB103K50
	C3715 ,C3901 ,C3905 ,C3907		CKSRYB103K50
	C6445		CKSRYB822K50
	C6402 ,C6403 ,C6405 ,C6407 ,C6409		CKSRYF103Z50
	C6412 ,C6417		CKSRYF103Z50
	C6418 ,C6432 ,C6434 ,C6435		CKSRYF104Z16
	C6442 -C6444 ,C6452 ,C6462 ,C6472		CKSRYF104Z16
	C6474 -C6476 ,C6482 -C6484		CKSRYF104Z16
	C6506 -C6508 ,C6510 ,C6520		CKSRYF104Z16
RESISTORS			
	R6517 ,R6518 ,R6520 ,R6521		RA4C470J
	R6523 ,R6524 ,R6530 ,R6535 -R6537		RA4C470J
	R4019		RD1/4PM473J
	R3784 ,R3827 ,R3898 ,R3914 -R3925		RS1/16S0R0J
	R3932 -R3935 ,R4007		RS1/16S0R0J
	R3701 ,R3702 ,R3720 ,R3721		RS1/16S101J
	R3748 -R3750 ,R3765 ,R3816 ,R3886		RS1/16S101J
	R3909 -R3913 ,R3949 -R3956		RS1/16S101J
	R3986 ,R3987 ,R3990 -R3992 ,R6411		RS1/16S101J
	R6418 ,R6425 ,R6427 ,R6437		RS1/16S101J
	R6440 ,R6441 ,R6448 ,R6451 ,R6453		RS1/16S101J
	R6457 ,R6460 ,R6461 ,R6467		RS1/16S101J
	R6471 -R6473 ,R6481 ,R6482		RS1/16S101J
	R3783 ,R3826 ,R3877 ,R3899		RS1/16S102J
	R3901 -R3908 ,R3926 -R3929		RS1/16S102J
	R3941 -R3948 ,R3988 ,R3989		RS1/16S102J
	R6474 -R6478		RS1/16S102J
	R3736 ,R3741 ,R3811 ,R3813 ,R3818		RS1/16S103J
	R3823 ,R3824 ,R3878 ,R3889 ,R6434		RS1/16S103J
	R6439 ,R6454 ,R6455 ,R6464 ,R6465		RS1/16S103J
	R6416		RS1/16S104J
	R6415		RS1/16S122J
	R3897		RS1/16S123J
	R6413		RS1/16S151J
	R3887		RS1/16S152J

Mark	No.	Description	Part No.
	R3879 ,R6447		RS1/16S153J
	R6412		RS1/16S162J
	R6442		RS1/16S183J
	R3705 ,R3706 ,R3710 -R3712 ,R3719		RS1/16S221J
	R3722 -R3735 ,R3737 -R3740		RS1/16S221J
	R3742 -R3747 ,R3751 -R3764 ,R3767		RS1/16S221J
	R3774 -R3778 ,R3780 -R3782		RS1/16S221J
	R3814 ,R3815 ,R3817 ,R3819 -R3821		RS1/16S221J
	R3707 ,R3708 ,R3766 ,R3768 ,R3769		RS1/16S222J
	R3844 ,R3883 ,R6423 ,R6459		RS1/16S222J
	R3810 ,R3839 ,R3869 ,R3870 ,R3881		RS1/16S223J
	R3939 ,R6420 -R6422 ,R6458		RS1/16S223J
	R3822 ,R3867		RS1/16S224J
	R6431		RS1/16S271J
	R6426		RS1/16S272J
	R3885		RS1/16S392J
	R6446		RS1/16S393J
	R6452 ,R6462		RS1/16S432J
	R3884 ,R6519 ,R6522 ,R6525		RS1/16S470J
	R3888		RS1/16S471J
	R3713 -R3715 ,R3812 ,R3825		RS1/16S472J
	R3832 ,R3833 ,R3846 ,R3872 ,R3873		RS1/16S472J
	R4009 -R4014 ,R6456 ,R6466		RS1/16S472J
	R3847 -R3854 ,R3856 -R3866 ,R3868		RS1/16S473J
	R3874 ,R3875 ,R3882 ,R3995 ,R4006		RS1/16S473J
	R4020 ,R6435		RS1/16S473J
	R3880		RS1/16S562J
	R3779		RS1/16S563J
	R6414		RS1/16S681J
	R4003 ,R4005 ,R6436 ,R6444		RS1/16S682J
	R6445		RS1/16S754J
	R3834 ,R3835 ,R3840 -R3843 ,R3871		RS1/16S822J
	R3930 ,R3931 ,R6424 ,R6443		RS1/16S822J
	R3703		RS1LMFR47J
	R6311		RS2LMF150J
	R6401		RS2LMF220J
	R6315 ,R6316		RS3LMF100J
	R6317		RS3LMF3R3J
	Other Resistors		RS1/10S□□□J
OTHERS			
	K3703 ,K3706 -K3713		AKX9002
	KN6304	GROUND PLATE	ANK-142
	X3702	CRYSTAL (9.8304MHz)	ASS1127
	6303	SCREW	BMZ30P060FCU
	CN6502,CN6503,CN6507,CN6508		
		50P CONNECTOR	KF050HA50L
	CN3901,CN3904,CN6501,CN6504-CN6506		
		50P CONNECTOR	KF050HC50
	CN3902	PLUG 12P	KM250MA12B
	CN3903	PLUG 3P	KM250MA3
	CN6302	PLUG 6P	KM250MA6
	CN3702	PLUG 8P	KM250MA8
	CN6303	PLUG 8P	KM250MA8B
	CN6301	PLUG 9P	KM250MA9
	CN3704	3P CONNECTOR	KPE3

Mark	No.	Description	Part No.
O CABLE E ASS'Y			
SEMICONDUCTORS			
	IC7421,IC7422		TC74VHC541FT
	IC7423-IC7426		TC74VHC574FT
COIL AND FILTERS			
	F7401 ,F7425		ATF1124
	F7421 -F7424 ,F7426 ,F7427		ATF1188
	L7401 ,L7402 (100µH)		ATH1065
CAPACITORS			
	C7404 ,C7428		CEHV101M16
	C7401 ,C7402		CEHV470M16
	C7403 ,C7421 -C7427		CKSRYF104Z16
RESISTORS			
	R7421 -R7442		RA4C470J
OTHERS			
	K7401 -K7404		AKX9002
	CN7408,CN7409	30P CONNECTOR	KF050HA30L
	CN7406,CN7407	40P CONNECTOR	KF050HA40L
	CN7401-CN7405	30P CONNECTOR	KF050HC30
E X DRIVE A ASS'Y			
SEMICONDUCTORS			
	IC2606-IC2609		HCPL-M611
	IC2612		PE1006A
	IC2610,IC2611		STK795-120A
	IC2605		TC74ACT541FS
	IC2613		TC74VHC541FT
	IC2601-IC2604		UPC78L05T
	Q2603 ,Q2605 ,Q2608 ,Q2611 ,Q2714		2SA1162
	Q2604 ,Q2606 ,Q2607 ,Q2609 ,Q2610		2SC2712
	Q2612 ,Q2614 ,Q2713		2SC2712
	Q2702 ,Q2703		2SJ281
	Q2708		2SK2167
	D2604 ,D2605 ,D2607 ,D2703		1SS352
	D2601 ,D2602		D1FL20U
COIL AND FILTERS			
	L2601 -L2604		ATH1020
	L2605 ,L2606 ,L2701		ATH1064
	L2607 (100µH)		ATH1066
	L2609 (47µH)		ATH1067
	L2608 (22µH)		ATH1068
CAPACITORS			
	C2622 ,C2623	(2.2µF/250V)	ACE1113
	C2620 ,C2621	(470µF/200V)	ACH1293
	C2708	(100µF/250V)	ACH1301
	C2608 ,C2609 ,C2611 ,C2612 ,C2619		CEHV101M16
	C2713 ,C2714		CEHV101M16
	C2613 ,C2626		CEHV221M16
	C2607 ,C2610		CEHV331M16
	C2614 -C2618		CEHV470M16
	C2602 -C2604 ,C2606		CKSQYF104Z50
	C2601 ,C2605 ,C2625 ,C2627 ,C2629		CKSRYB103K50
RESISTORS			
	R2620 ,R2624 ,R2626 ,R2632 ,R2634		RA4C470J
	R2616 ,R2617		RD1/2PM4R7J
	R2734		RS1LMF563J

Mark	No.	Description	Part No.
	R2730		RS2LMF562J
	R2738		RS3LMF122J
	R2737		RS3LMF561J
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN2601	PLUG 2P	AKM-089
	K2601 ,K2602 ,K2604 -K2606		AKX9002
	K2608 ,K2609 ,K2611 ,K2613 -K2616		AKX9002
	K2702		AKX9002
	KN2601	GROUND PLATE	ANK-142
	CN2708-CN2711	50P CONNECTOR	KF050HB50L
	CN2604,CN2608,CN2706,CN2707	50P CONNECTOR	KF050HC50
	CN2602	PLUG 7P	KM250MA7
	CN2605	PLUG 7P	KM250MA7R

AM SENSER A ASSY

SEMICONDUCTORS			
	IC8058		LM50CIM3
CAPACITORS			
	C8079		CKSQYF103Z50
	C8091		CKSQYF104Z50
RESISTORS			
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN8084	3P SOCKET	KP200IA3L

AN SENSER B ASSY

SEMICONDUCTORS			
	IC8055		LM50CIM3
CAPACITORS			
	C8078		CKSQYF103Z50
	C8093		CKSQYF104Z50
RESISTORS			
	Other Resistors		RS1/10S□□□J

G Y DRIVE A ASS'Y

SEMICONDUCTORS			
	IC3307		AN1431M
	IC3013-IC3018,IC3110-IC3113		HCPL-M611
	IC3205,IC3206		HCPL-M611
	IC3001-IC3003,IC3007-IC3009,IC3201		ICL7667CBA
	IC3203		ICL7667CBA
	IC3308		MIP161
	IC3306,IC3309,IC3311		PC817AB
	IC3109		PDT042A
	IC3310		PQ20VZ1U
	IC3101,IC3106		STK795-120A
	IC3107		TC74ACT541FS
	IC3114-IC3116		TC74VHC541FT
	IC3004-IC3006,IC3010-IC3012		UPC78L05T
	IC3102-IC3105,IC3202,IC3204		UPC78L05T
	Q3102 ,Q3105 ,Q3108 ,Q3111 ,Q3217		2SA1162
	Q3301 ,Q3305		2SA1162
	Q3104 ,Q3106 ,Q3107 ,Q3109 ,Q3110		2SC2712
	Q3112 ,Q3114 ,Q3302 ,Q3306 ,Q3309		2SC2712
	Q3215		2SJ181S
	Q3103 ,Q3202 ,Q3203		2SJ281
	Q3201		2SJ449
	Q3205 ,Q3216		2SK2167
	Q3006 ,Q3012 ,Q3206 -Q3209		2SK2255-01M
	Q3204		2SK2355
	Q3101		2SK2796S
	Q3005 ,Q3011		FS14UM-9
	Q3003 ,Q3004 ,Q3009 ,Q3010		FS30AS-06
	D3104 ,D3105 ,D3107 ,D3209 ,D3320		1SS352
	D3322		1SS352
	D3311		1Z180
	D3001 ,D3002 ,D3004 ,D3005		D1FL20U
	D3101 ,D3102 ,D3106 ,D3201 -D3206		D1FL20U
	D3313 ,D3314 ,D3325 ,D3326		D1FL20U
	D3315		D1FL40
	D3318		RD110P
	D3319		RD15MB
	D3316 ,D3317 ,D3321 ,D3327 ,D3328		RD33MB
	D3312		S2L60
COIL AND FILTERS			
	L3101 ,L3102 ,L3105 ,L3106		ATH1020
	L3001 ,L3002 ,L3103 ,L3107		ATH1064
	L3109 ,L3110 ,L3201 (100µH)		ATH1066
	L3104 ,L3301 ,L3302 (47µH)		ATH1067
	L3108 (22µH)		ATH1068
	T3302		ATK1113
CAPACITORS			
	C3107 ,C3120	(2.2µF/250V)	ACE1113
	C3106 ,C3121	(470µF/200V)	ACH1293
	C3016 ,C3032	(330µF/100V)	ACH1297
	C3015 ,C3031	(180µF/200V)	ACH1307
	C3205 ,C3209		CCSQCH220J50
	C3003 ,C3006 ,C3009 ,C3019 ,C3022		CCSRCH220J50
	C3025		CCSRCH220J50
	C3303 ,C3314 ,C3315		CEHAQ220M2D
	C3201		CEHAQ220M2E
	C3011 -C3013 ,C3027 -C3029 ,C3110		CEHV101M16
	C3115 ,C3116 ,C3118 ,C3119 ,C3204		CEHV101M16
	C3208 ,C3215		CEHV101M16
	C3113 ,C3124		CEHV221M16
	C3114 ,C3117 ,C3319 ,C3321 ,C3325		CEHV331M16
	C3327		CEHV331M16
	C3033 -C3038 ,C3112 ,C3125 -C3128		CEHV470M16
	C3213 ,C3214 ,C3216 ,C3217 ,C3310		CEHV470M16
	C3312 ,C3318 ,C3322 ,C3323		CEHV470M16
	C3001 ,C3002 ,C3004 ,C3005		CKSQYF104Z50
	C3007 ,C3008 ,C3017 ,C3018		CKSQYF104Z50
	C3020 ,C3021 ,C3023 ,C3024		CKSQYF104Z50
	C3103 -C3105 ,C3109 ,C3202 ,C3203		CKSQYF104Z50
	C3206 ,C3207 ,C3313 ,C3316 ,C3317		CKSQYF104Z50
	C3320		CKSQYF104Z50

Mark	No.	Description	Part No.
	C3108 ,C3111 ,C3122 ,C3129 -C3131		CKSRYB103K50
RESISTORS			
	R3122 ,R3123 ,R3129 ,R3130		RA4C470J
	R3146 -R3150 ,R3154		RA4C470J
	R3115		RD1/2PM102J
	R3213 ,R3214		RD1/2PM152J
	R3116 ,R3117		RD1/2PM4R7J
	R3336		RS1/10S1101F
	R3328		RS1/10S1501F
	R3337		RS1/10S3301F
	R3321 -R3324 ,R3326 ,R3327		RS1/10S7502F
	R3246 ,R3248		RS1LMF563J
	R3349		RS2LMF153J
	R3210		RS2LMF562J
	R3014 -R3016 ,R3039 -R3041		RS3LMF1R8J
	R3209 ,R3241		RS3LMF391J
	R3201		RS3LMF6R8J
	VR3302		VRTS6HS102
	Other Resistors		RS1/10S□□□J
OTHERS			
	K3101 -K3106 ,K3108 -K3115		AKX9002
	K3117 -K3124 ,K3203 ,K3204 ,K3206		AKX9002
	K3301 -K3308		AKX9002
	KN3101	GROUND PLATE	ANK-142
	CN3301,CN3302	30P CONNECTOR	KF050HC30
	CN3104,CN3202,CN3203	50P CONNECTOR	KF050HC50
	CN3103	PLUG 10P	KM250MA10
	CN3102	PLUG 10P	KM250MA10R
	CN3003,CN3004,CN3201	PLUG 3P	KM250MA3
	CN3207	PLUG 3P	KM250MA3R
	CN3105,CN3106,CN3303,CN3304	PLUG 4P	KM250MA4B

AI DC FAN A ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC8611		M5223FP
	IC8610		PQ20VZ1U
	Q8616 ,Q8617		2SA1162
	Q8601 ,Q8602 ,Q8620 ,Q8621		2SC2712
	D8611 ,D8613 ,D8615		1SS352
	D8601		UDZ5.1B
CAPACITORS			
	C8624		CEV100M16
	C8601 ,C8602 ,C8622		CEV220M16
	C8623		CEV470M16
	C8625		CKSQYF103Z50
RESISTORS			
	R8724		RD1/4LMF100J
	R8601 ,R8614		RN1/10SE1001D
	R8699		RN1/10SE1002D
	R8712		RN1/10SE1501D
	R8702		RN1/10SE1801D
	R8704		RN1/10SE2001D
	R8695 ,R8700		RN1/10SE2401D
	R8703		RN1/10SE3001D
	R8711		RN1/10SE3301D
	R8602		RN1/10SE3901D
	R8692		RN1/10SE4700D
	R8603 ,R8615		RN1/10SE4701D
	R8696		RN1/10SE6201D
	Other Resistors		RS1/10S□□□J
OTHERS			
	K8609 ,K8610		AKX9002

AJ DC FAN B ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC8609		M5223FP
	IC8606,IC8608		PQ20VZ1U
	Q8610 ,Q8611		2SC2712
CAPACITORS			
	C8614 ,C8616 ,C8618 ,C8620		CEV220M16
	C8619		CKSQYF103Z50
	C8627 ,C8628		CKSQYF104Z50
RESISTORS			
	R8664 -R8666 ,R8668 ,R8679		RN1/10SE1001D
	R8660		RN1/10SE1501D
	R8671		RN1/10SE2401D
	R8667 ,R8675		RN1/10SE3001D
	R8678 ,R8682		RN1/10SE3901D
	R8663		RN1/10SE5601D
	R8661		RN1/10SE6201D
	Other Resistors		RS1/10S□□□J
OTHERS			
	K8606 ,K8607		AKX9002

H Y DRIVE B ASS'Y

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC3302		AN1431M
	IC3013-IC3018,IC3110-IC3113		HCPL-M611
	IC3205,IC3206		HCPL-M611
	IC3001-IC3003,IC3007-IC3009,IC3201		ICL7667CBA
	IC3203		ICL7667CBA
	IC3303		MIP161
	IC3301,IC3304,IC3312		PC817AB
	IC3109		PDT042A
	IC3305		PQ20VZ1U
	IC3101,IC3106		STK795-120A
	IC3107		TC74ACT541FS
	IC3114-IC3116		TC74VHC541FT
	IC3004-IC3006,IC3010-IC3012		UPC78L05T
	IC3102-IC3105,IC3202,IC3204		UPC78L05T
	Q3102 ,Q3105 ,Q3108 ,Q3111 ,Q3217		2SA1162
	Q3303 ,Q3307		2SA1162
	Q3104 ,Q3106 ,Q3107 ,Q3109 ,Q3110		2SC2712
	Q3112 ,Q3114 ,Q3304 ,Q3308 ,Q3310		2SC2712
	Q3215		2SJ181S
	Q3103 ,Q3202 ,Q3203		2SJ281

Mark	No.	Description	Part No.
	Q3201		2SJ449
	Q3205 ,Q3216		2SK2167
	Q3006 ,Q3012 ,Q3206 -Q3209		2SK2255-01M
	Q3204		2SK2355
	Q3101		2SK2796S
	Q3005 ,Q3011		FS14UM-9
	Q3003 ,Q3004 ,Q3009 ,Q3010		FS30AS-06
	D3104 ,D3105 ,D3107 ,D3209 ,D3310		1SS352
	D3324		1SS352
	D3301		1Z180
	D3001 ,D3002 ,D3004 ,D3005		D1FL20U
	D3101 ,D3102 ,D3201 -D3206		D1FL20U
	D3303 ,D3304 ,D3325 ,D3326		D1FL20U
	D3305		D1FL40
	D3308		RD110P
	D3309		RD15MB
	D3306 ,D3307 ,D3323 ,D3327 ,D3328		RD33MB
	D3302		S2L60
COIL AND FILTERS			
	L3101 ,L3102 ,L3105 ,L3106		ATH1020
	L3001 ,L3002 ,L3103 ,L3107		ATH1064
	L3109 ,L3110 ,L3201 (100µH)		ATH1066
	L3104 ,L3301 ,L3302 (47µH)		ATH1067
	L3108 (22µH)		ATH1068
	T3301		ATK1113
CAPACITORS			
	C3107 ,C3120	(2.2µF/250V)	ACE1113
	C3106 ,C3121	(470µF/200V)	ACH1293
	C3016 ,C3032	(330µF/100V)	ACH1297
	C3015 ,C3031	(180µF/200V)	ACH1307
	C3205 ,C3209		CCSQCH220J50
	C3003 ,C3006 ,C3009 ,C3019 ,C3022		CCSRCH220J50
	C3025		CCSRCH220J50
	C3302 ,C3303 ,C3315		CEHAQ220M2D
	C3201		CEHAQ220M2E
	C3011 -C3013 ,C3027 -C3029 ,C3110		CEHV101M16
	C3115 ,C3116 ,C3118 ,C3119 ,C3204		CEHV101M16
	C3208 ,C3215		CEHV101M16
	C3113 ,C3124		CEHV221M16
	C3114 ,C3117 ,C3307 ,C3309		CEHV331M16
	C3326 ,C3327		CEHV331M16
	C3033 -C3038 ,C3112 ,C3125 -C3128		CEHV470M16
	C3213 ,C3214 ,C3216 ,C3217 ,C3306		CEHV470M16
	C3310 ,C3311 ,C3322 ,C3324		CEHV470M16
	C3001 ,C3002 ,C3004 ,C3005		CKSQYF104Z50
	C3007 ,C3008 ,C3017 ,C3018		CKSQYF104Z50
	C3020 ,C3021 ,C3023 ,C3024		CKSQYF104Z50
	C3103 -C3105 ,C3109 ,C3202 ,C3203		CKSQYF104Z50
	C3206 ,C3207 ,C3301 ,C3304 ,C3305		CKSQYF104Z50
	C3308		CKSQYF104Z50
	C3108 ,C3111 ,C3122 ,C3129 -C3131		CKSRYB103K50
RESISTORS			
	R3122 ,R3123 ,R3129 ,R3130		RA4C470J
	R3146 -R3150 ,R3154		RA4C470J
	R3115		RD1/2PM102J
	R3213 ,R3214		RD1/2PM152J
	R3116 ,R3117		RD1/2PM4R7J
	R3317		RS1/10S1101F
	R3309		RS1/10S1501F
	R3318		RS1/10S3301F
	R3302 -R3305 ,R3307 ,R3308		RS1/10S7502F
	R3246 ,R3248		RS1LMF563J
	R3354		RS2LMF153J
	R3210		RS2LMF562J
	R3014 -R3016 ,R3039 -R3041		RS3LMF1R8J
	R3209 ,R3241		RS3LMF391J
	R3201		RS3LMF6R8J
	VR3301		VRTS6HS102
	Other Resistors		RS1/10S□□□J
OTHERS			
	K3101 -K3106 ,K3108 -K3115		AKX9002
	K3117 -K3124 ,K3203 -K3205		AKX9002
	K3301 -K3308		AKX9002
	KN3101	GROUND PLATE	ANK-142
	CN3301,CN3302	30P CONNECTOR	KF050HC30
	CN3104,CN3204,CN3205	50P CONNECTOR	KF050HC50
	CN3102	PLUG 10P	KM250MA10R
	CN3003,CN3004	PLUG 3P	KM250MA3
	CN3201	PLUG 3P	KM250MA3R

AK DC FAN C ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC8605		M5223FP
	IC8604		PQ20VZ1U
	D8612		1SS352
CAPACITORS			
	C8611		CEV100M16
	C8607 ,C8608 ,C8633		CEV220M16
	C8610		CEV470M16
	C8631 ,C8632		CKSQYF103Z50
	C8629		CKSQYF104Z50
RESISTORS			
	R8618 ,R8619 ,R8621 ,R8626		RN1/10SE1001D
	R8620		RN1/10SE3601D
	Other Resistors		RS1/10S□□□J
OTHERS			
	K8605		AKX9002

AL DC FAN D ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	IC8602,IC8603		M5223FP
	IC8601		PQ20VZ1U
	Q8606 ,Q8607		2SA1162
	Q8608 ,Q8609 ,Q8618 ,Q8619		2SC2712
	D8608 ,D8614 ,D8616		1SS352
CAPACITORS			
	C8613		CEV100M16
	C8604 ,C8612 ,C8617 ,C8630		CEV220M16
	C8603		CEV470M16
	C8605 ,C8615		CKSQYF103Z50
	C8626		CKSQYF104Z50

Mark	No.	Description	Part No.
RESISTORS			
	R8637 ,R8638 ,R8640 ,R8643 ,R8655		RN1/10SE1001D
	R8646		RN1/10SE1002D
	R8656		RN1/10SE1501D
	R8651 ,R8722		RN1/10SE2001D
	R8612 ,R8647		RN1/10SE2401D
	R8639		RN1/10SE3601D
	R8650 ,R8721		RN1/10SE3901D
	R8605 ,R8720		RN1/10SE4700D
	R8649		RN1/10SE4701D
	R8653 ,R8657		RN1/10SE5601D
	R8613		RN1/10SE6201D
	Other Resistors		RS1/10S□□□J
OTHERS			
	K8604 ,K8608		AKX9002

P CABLE F ASS'Y

SEMICONDUCTORS			
	IC7525,IC7526		TC74VHC541FT
	IC7521-IC7524		TC74VHC574FT
COIL AND FILTERS			
	F7501 ,F7527		ATF1124
	F7521 -F7526		ATF1188MH
	L7501 ,L7502 (100µH)		ATH1065
CAPACITORS			
	C7504 ,C7528		CEHV101M16
	C7501 ,C7502		CEHV470M16
	C7503 ,C7521 -C7527		CKSRYF104Z16
RESISTORS			
	R7521 -R7542		RA4C470J
OTHERS			
	K7501 -K7504		AKX9002
	CN7508,CN7509	30P CONNECTOR	KF050HA30L
	CN7506,CN7507	40P CONNECTOR	KF050HA40L
	CN7501-CN7505	30P CONNECTOR	KF050HC30

F X DRIVE B ASS'Y

SEMICONDUCTORS			
	IC2606-IC2609		HCPL-M611
	IC2612		PE1006A
	IC2610,IC2611		STK795-120A
	IC2605		TC74ACT541FS
	IC2613		TC74VHC541FT
	IC2601-IC2604		UPC78L05T
	Q2603 ,Q2605 ,Q2608 ,Q2611 ,Q2714		2SA1162
	Q2604 ,Q2606 ,Q2607 ,Q2609 ,Q2610		2SC2712
	Q2612 ,Q2614 ,Q2713		2SC2712
	Q2702 ,Q2703		2SJ281
	Q2708		2SK2167
	D2604 ,D2605 ,D2607 ,D2703		1SS352
	D2601		D1FL20U
COIL AND FILTERS			
	L2601 -L2604		ATH1020
	L2605 ,L2606 ,L2701		ATH1064
	L2607 (100µH)		ATH1066
	L2609 (47µH)		ATH1067
	L2608 (22µH)		ATH1068
CAPACITORS			
	C2622 ,C2623	(2.2µF/250V)	ACE1113
	C2620 ,C2621	(470µF/200V)	ACH1293
	C2708	(100µF/250V)	ACH1301
	C2608 ,C2609 ,C2611 ,C2612 ,C2619		CEHV101M16
	C2713 ,C2714		CEHV101M16
	C2613 ,C2626		CEHV221M16
	C2607 ,C2610		CEHV331M16
	C2614 -C2618		CEHV470M16
	C2602 -C2604 ,C2606		CKSQYF104Z50
	C2601 ,C2605 ,C2625 ,C2627 ,C2629		CKSRYB103K50
RESISTORS			
	R2620 ,R2624 ,R2626 ,R2632 ,R2634		RA4C470J
	R2616 ,R2617		RD1/2PM4R7J
	R2734		RS1LMF563J
	R2730		RS2LMF562J
	R2738		RS3LMF122J
	R2737		RS3LMF561J
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN2601	PLUG 2P	AKM-089
	K2601 ,K2602 ,K2604 -K2606		AKX9002
	K2608 ,K2609 ,K2611 ,K2613 -K2616		AKX9002
	K2702		AKX9002
	KN2601	GROUND PLATE	ANK-142
	CN2708-CN2711	50P CONNECTOR	KF050HB50L
	CN2604,CN2613,CN2706,CN2707	50P CONNECTOR	KF050HC50
	CN2606	10P PLUG	KM200IA3
	CN2602	PLUG 7P	KM250MA7R

AQ SIDE SWITCH ASS'Y

SWITCHES AND RELAYS			
	S2571 -S2577		ASG1034
CAPACITORS			
	C2571		CKSQYF104Z50
RESISTORS			
	Other Resistors		RS1/10S□□□J
OTHERS			
	J2571	HOUSING WIRE	ADX2471

AP 3D Y/C SEP. ASS'Y

SEMICONDUCTORS			
	IC3355		MC14577CP
	IC3205		MN4776AS
	IC3202		MN4777AS
	IC3353		NJM2234M
	IC3350		NJM7805FA
	IC3352		UPC1861GR
	IC3203		UPC1862GS
	IC3201		UPC659AGS
	IC3204		UPD6487GF3BA
	Q3203 ,Q3204 ,Q3206 ,Q3208 ,Q3212		2SA1037K

Mark	No.	Description	Part No.
	Q3351		2SA1037K
	Q3201 ,Q3202 ,Q3205 ,Q3207		2SC2412K
	Q3209 -Q3211 ,Q3213 -Q3217 ,Q3220		2SC2412K
	Q3350 ,Q3352 -Q3357 ,Q3359 ,Q3364		2SC2412K
	D3201		1SS184
	D3350 -D3356		1SS226

COIL AND FILTERS

	F3201 ,F3202		ATF1127
	F3203		ATF1179
	L3350		ATH1046
	DL3350		ATN1023
	L3202 -L3206 ,L3208 ,L3210		ATX1008
	L3352 -L3354 ,L3357 ,L3358		ATX1008
	L3209		LCTA100J3225
	L3355 ,L3356		LCTA150J3225
	L3201 ,L3207		LCTA220J3225

CAPACITORS

	C3362		CCSQCH120J50
	C3271		CCSQCH151J50
	C3234		CCSQCH221J50
	C3228 ,C3267 ,C3360		CCSQCH330J50
	C3201 ,C3230		CCSQCH390J50
	C3270		CCSQCH470J50
	C3219		CCSQCK1R0C50
	C3203		CEAT100M50
	C3204		CEAT101M25
	C3240 ,C3241 ,C3252		CEAT1R0M50
	C3206 ,C3214 ,C3216 ,C3226 ,C3250		CEAT221M10
	C3256 ,C3258 ,C3367		CEAT221M10
	C3368		CEAT2R2M50
	C3350 -C3352 ,C3357		CEAT331M16
	C3221 ,C3236 ,C3243 ,C3260 ,C3262		CEAT470M25
	C3264 ,C3273 ,C3365 ,C3366		CEAT470M25
	C3372 -C3374 ,C3406		CEAT470M25
	C3223 ,C3239		CEAT4R7M50
	C3217		CEATR10M50
	C3274		CEATR22M50
	C3227		CEATR47M50
	C3232		CKSQYB102K50
	C3215 ,C3218 ,C3222 ,C3225 ,C3229		CKSQYB103K50
	C3231 ,C3235 ,C3238 ,C3242		CKSQYB103K50
	C3268 ,C3269		CKSQYB103K50
	C3237		CKSQYB152K50
	C3233		CKSQYB222K50
	C3202 ,C3247 ,C3251 ,C3259 ,C3361		CKSQYF103Z50
	C3363 ,C3364 ,C3370 ,C3371		CKSQYF103Z50
	C3375 -C3379 ,C3382 ,C3383		CKSQYF103Z50
	C3404 ,C3405 ,C3407		CKSQYF103Z50
	C3205 ,C3207 -C3213 ,C3220		CKSQYF104Z50
	C3244 -C3246 ,C3248 ,C3249		CKSQYF104Z50
	C3253 -C3255 ,C3257 ,C3261 ,C3263		CKSQYF104Z50
	C3265 ,C3266 ,C3272 ,C3275		CKSQYF104Z50
	C3380 ,C3381		CKSQYF104Z50
	C3369		CKSQYF222Z50
	C3353 -C3355 ,C3359		CKSQYF472Z50
	C3224		CQMA223J50

RESISTORS

	R3227 ,R3265 ,R3292 ,R3380 ,R3382		RS1/16S0R0J
	R3408 ,R3409		RS1/16S0R0J
	R3387 ,R3406		RS1/16S100J
	R3201 ,R3207 ,R3208 ,R3213		RS1/16S101J
	R3217 ,R3218 ,R3220 ,R3224 ,R3232		RS1/16S101J
	R3236 ,R3238 ,R3254 ,R3266 ,R3267		RS1/16S101J
	R3273 -R3276 ,R3278 ,R3281 ,R3282		RS1/16S101J
	R3285 ,R3286 ,R3352 ,R3358 ,R3359		RS1/16S101J
	R3365 ,R3367 ,R3373 ,R3374		RS1/16S101J
	R3378 ,R3379 ,R3388 -R3390 ,R3399		RS1/16S101J
	R3202 ,R3214 ,R3249 ,R3257 ,R3258		RS1/16S102J
	R3279 ,R3298 ,R3308 ,R3357		RS1/16S102J
	R3216 ,R3226 ,R3235 ,R3250 ,R3251		RS1/16S103J
	R3253 ,R3255 ,R3384 -R3386 ,R3403		RS1/16S103J
	R3412 ,R3417		RS1/16S103J
	R3241 ,R3280		RS1/16S104J
	R3228		RS1/16S105J
	R3211		RS1/16S122J
	R3414 ,R3419		RS1/16S123J
	R3230 ,R3353		RS1/16S151J
	R3203 ,R3248 ,R3360		RS1/16S152J
	R3355		RS1/16S153J
	R3259		RS1/16S162J
	R3369 ,R3372		RS1/16S182J
	R3363 ,R3371		RS1/16S183J
	R3272		RS1/16S201J
	R3240 ,R3243		RS1/16S221J
	R3239 ,R3289 ,R3291 ,R3295 ,R3297		RS1/16S222J
	R3283 ,R3284 ,R3288 ,R3290 ,R3294		RS1/16S223J
	R3296 ,R3375		RS1/16S223J
	R3210		RS1/16S241J
	R3209		RS1/16S242J
	R3222 ,R3223 ,R3245 ,R3262 -R3264		RS1/16S271J
	R3206 ,R3247 ,R3381		RS1/16S272J
	R3215		RS1/16S273J
	R3256		RS1/16S302J
	R3204		RS1/16S331J
	R3219 ,R3221		RS1/16S332J
	R3252 ,R3269 ,R3271 ,R3413 ,R3418		RS1/16S333J
	R3420		RS1/16S361J
	R3260		RS1/16S362J
	R3205 ,R3212 ,R3225 ,R3416 ,R3421		RS1/16S471J
	R3229 ,R3231 ,R3237		RS1/16S472J
	R3242 ,R3244 ,R3293 ,R3376 ,R3377		RS1/16S473J
	R3234		RS1/16S511J
	R3356		RS1/16S512J
	R3287 ,R3366 ,R3368		RS1/16S561J
	R3364 ,R3370		RS1/16S563J
	R3277 ,R3415		RS1/16S621J
	R3233 ,R3307 ,R3354 ,R3361 ,R3362		RS1/16S681J
	R3383 ,R3410		RS1/16S681J
	R3268 ,R3270		RS1/16S683J
	R3246		RS1/16S822J

Mark	No.	Description	Part No.
	R3261		RS1/16S911J
	R3404		RS2MMF1R0J
	VR3350		VRTS6VS222
	VR3351		VRTS6VS471

OTHERS

	X3201	CRYSTAL RESONATOR	ASS1056
	X3202	CERAMIC RESONATOR	ASS1112
	CN3351	PLUG 4P	KM250MA4
	CN3353	PLUG 6P	KM250MA6
	CN3352	PLUG 8P	KM250MA8

POWER SUPPLY MODULE

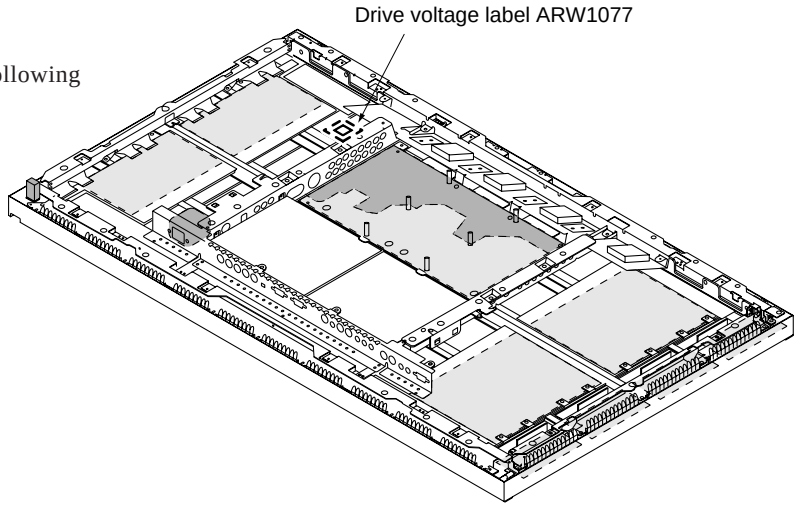
This module has no service part.

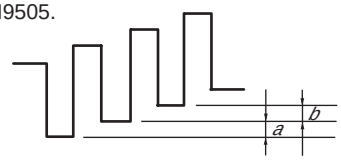
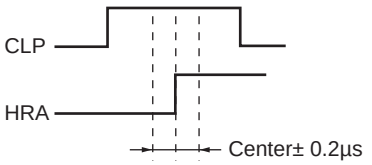
6. ADJUSTMENT

6.1 Adjustments of Parts

Note)
In these adjustments, assembly are indicated by the following symbols.
A:ANALOG VIDEO ASSEMBLY
B:PROGRESSIVE BLOCK
J:POWER SUPPLY MODULE
G:Y DRIVE (A) ASSEMBLY
H:Y DRIVE (B) ASSEMBLY

Note: Position for pasting the drive voltage label



Procedure	Adjusting Item	Input Signal	Adjusting Point	Adjusting Method
1	TINT	Chroma modulation ramp signal	VR9002 (**A**)	Adjust so that the output of Pin ② (R-Y signal) of CN9505 becomes minimum.
2	B-Y demodulation angle	EIA colour bar	VR9005 (**A**)	Adjust so that the amplitudes of a and b become equal at the output of Pin ④ of CN9505. 
3	Colour (B-Y)	EIA colour bar (Colour saturation 75% only)	VR9003 (**A**)	Adjust so that the output of Pin ④ (B-Y signal) of CN9505 becomes 0.525 Vp-p ±10 mV.
4	Colour (R-Y)	EIA colour bar (Colour saturation 75% only)	VR9004 (**A**)	Adjust so that the output of Pin ② of CN9505 becomes 0.525 Vp-p ±10 mV.
5	Deflection PLL adjustment	Any standard signal	L4715 (**B**)	Adjust so that the voltage of TP K4701 becomes 2.6 ± 0.1V.
6	Acquisition PLL adjustment	Any standard signal	L4706 (**B**)	Adjust the timing of the waveforms of Pin ③ (CLP) of CN4703 and TP K4702 (HRA) so that the rising edge of the HRA pulse are at the center of the CLP pulse. 
7	VCO free-run frequency for 910 fH clock	NTSC RAMP signal (with burst and chroma)	VR3350 (**AP**)	Set the input to "C.VIDEO", observe the voltage of Pin ⑦ of IC3352 (TP P3350), and adjust so that the voltage becomes 2.5V ± 0.1V using the digital voltmeter.
8	Y/C mode chroma signal output level	NTSC RAMP signal (S terminal signal with burst and chroma)	VR3351 (**AP**)	Set the input to "S.VIDEO", observe the Q3354 emitter using the oscilloscope, and adjust so that the level of the chroma signal becomes 400 mV ± 20 mV.
9	V_{H_A}, V_{H_B} voltage adjustment	100% white signal	VR3302 (**G**) VR3301 (**H**)	V_{H_A} (Scan IC power supply voltage A) Check the drive voltage label value at the upper left side of the unit inside, and adjust RV3302 so that the voltage between Pin ① (VH_A) and Pin ④ (GND H_A) of the check connector CN3303 becomes that value. V_{H_B} (Scan IC power supply voltage B) Check the drive voltage label value at the upper left side of the unit inside, and adjust VR3301 so that the voltage between Pin ① (VH_B) and Pin ④ (GND H_B) of the check connector CN3304 becomes that value.

Procedure	Adjusting Item	Input Signal	Adjusting Point	Adjusting Method
10	VSUS, VOFS, VADR, VCSP, VRN voltage adjustment	100% white signal	RV7, RV5, RV3, RV4, RV9 (J)	VSUS (Sustain power supply voltage) Check the drive voltage label value at the upper left side of the unit inside, and adjust RV7 so that the value between TP CH24 (175V) and TP-CH25 (175 GND) becomes that value. VOFS (Offset power supply voltage) Check the drive voltage label value at the upper left side of the unit inside, and adjust RV5 so that the value between Pin ① of CN3106 (150V) and Pin ④ of CN3105 (SUS, GND) inside the Y drive assembly becomes that value. VADR (Address power supply voltage) Check the drive voltage label value at the upper left side of the unit inside, and adjust RV3 so that the value between TP CH22 (30V) and TP-CH23 (30V GND) becomes that value. VCSP (CSP power supply voltage) Check the drive voltage label value at the upper left side of the unit inside, and adjust RV4 so that the potential between Pin ④ (CSP) and Pin ① (150V) of CN3106 of the Y drive assembly becomes that value. VRN (Minus reset power supply voltage) Check the drive voltage label value at the upper left side of the unit inside, and adjust RV9 so that the value between TP CH26 (190V) and TP CH25 (175 GND) becomes that value.

If the U-COM assembly has been replaced, mount the former EEPROM (IC3704 24LC64 (I) SN) in the new U-COM assembly.

Note: CSP, GNDH_A, and GNDH_B differ from the GND potential in the unit. The GND potentials are also different each other.

- The adjustment tolerance of the drive voltage label is ± 0.5V.
- The adjustments of the ANALOG VIDEO ASSEMBLY (step 1), (step 2), (step 3), (step 4), (step 5), and (step 6) is not necessary when replacing this assembly.
- Adjusting points which need not be adjusted again in the unit after replacing other assemblies are as follows.

  SW power supply RV8 (+5V)
  RV6 (+3.3V)
  RV2 (+12V)
  RV1 (+5VSTB)
- If the above adjustment controls are rotated by mistake, adjust to the following values;

  RV8 (+5V): Adjust the DC voltage between TP CH16 (5V) and TP CH19 (5V GND) to 5.0V ± 0.1V.
  RV6 (+3.3V): Adjust the DC voltage between TP CH17 (3.3V) and TP CH19 (5V GND) to 3.3V ± 0.066V.
  RV2 (+12V): Adjust the DC voltage between TP CH18 (12V) and TP CH19 (5V GND) to 12.0V ± 0.24V.
  RV1 (+5VSTB): Adjust the DC voltage between TP CH4 (5V) and TP CH19 (5V GND) to 5.0V ± 0.1V.

6.2 White Balance Adjustment

Set COLOUR to minimum and the other video settings to the standard setting in the following measurements.

1. Black level adjustment

1) Input the RAMP signal.
2) Monitor the output TP terminals of the RGB assembly (R:P5802, G:P5801, B:P5803), and adjust R,G,B LOW LIGHT so that the black level (0IRE) becomes 2.6V.

2. LOW LIGHT adjustment

Input the RAMP signal, and adjust R, G, B:LOW LIGHT so that the point which starts to light up becomes gray.

3. HIGH LIGHT adjustment

1) Input the RAMP signal.
2) Monitor the TP terminals of the RGB assembly (R:P5802, G:P5801, B:P5803), and adjust R,G,B HIGH LIGHT so that the white level (100IRE) becomes 4.4V.
3) Input the white signal (80IRE).
4) Adjust R,G,B HIGH LIGHT so that the screen becomes reddish white (T=7200K, dev=0.000uv).

4. Adjusting voltage check

Input the RAMP signal, monitor the TP terminals of the RGB assembly (R:P5802, G:P5801, B:P5803), and check that the black level (0IRE) is 2.6V ± 0.1. The white level (100IRE) value is not specified.

(Reference)

Adjustment values using the Minolta colour-difference meter CA-100
80% window step 0dB

[NTSC] [HDTV]	[RGB]
x=300	x=290
y=315	y=315
Y=58 ± 15cd/m²	Y=35 ± 10cd/m² (20% 2.5cd/m²)
(20% 4.0cd/m² (NTSC) 3.0cd/m² (HDTV))	

Checking picture quality

1. Face colour check (Colour balance check)

After adjusting the white balance, check the face colour of figures in LD still pictures.

If the colour is not natural, adjust COLOUR and TINT and memorize the value.

2. Picture quality check

Set the sharpness to 120 for both NTSC and HDTV, and the detail setting to 70 for NTSC and 65 for HDTV, and check the picture quality.

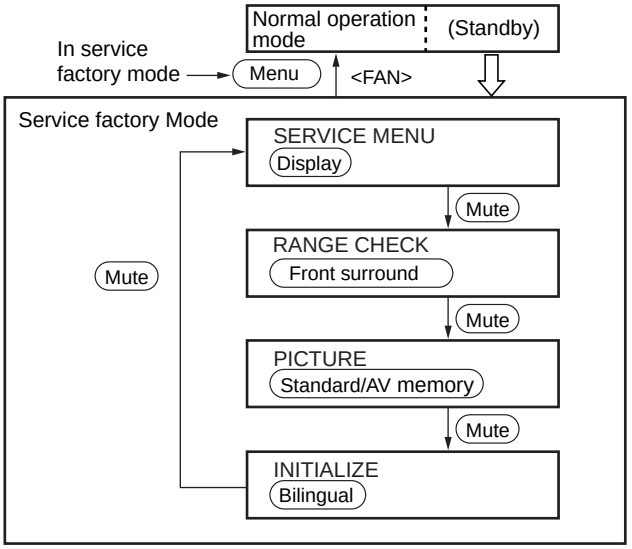
Note: Adjust the white balance and check the picture quality in each NTSC screen mode (natural wide, zoom, etc.) and HDTV (MUSE).

6.3 Service Factory Mode

This mode is used for checking the operations and setting the picture quality.
Perform the operations of the service factory mode using the remote control unit provided with the PDP-501MX (CU-PDP002: AXD1437) and the remote control unit provided with the PDP-501HD (CU-PDP001: AXD1432).

1. Entering the factory mode

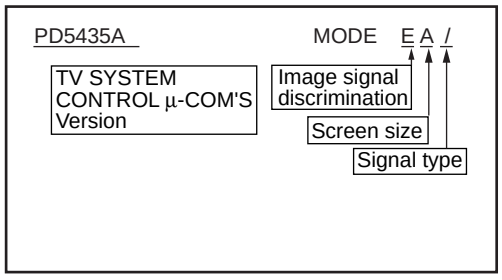
In the standby state, press the remote control keys (Menu) , (Set) , and (Power) in this order within 3 seconds. (See figure below ⇩.)
Or in the ON state, send the <FAY> command of RS-232C.



- When the service factory mode is set, the video and the screen will be reset.
- In the service factory mode, the (Mute) key functions to change the mode in the following order;
  SERVICE MENU→RANGE CHK.→PICTURE→INIT.
  The other keys (Display) , (Front Surround) , (Standard/AV memory) , and (Bilingual) function to switch the mode directly.
- In the factory mode, press the (Menu) key to set the normal operation mode.

2. SERVICE MENU ((Display Call) key)

Information mode

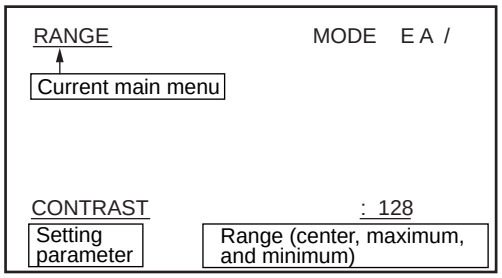


- Refer to the table on the next page for details on the video signal type and screen size.
- Signal state [/]:Composite, Y/C
  [+]:Component (Colour difference signal)
  [None]:RGB

Note: The EA/ in the above example indicates that the signal input is the NTSC (15.7 kHz/60 Hz) and screen size is NATURAL WIDE.

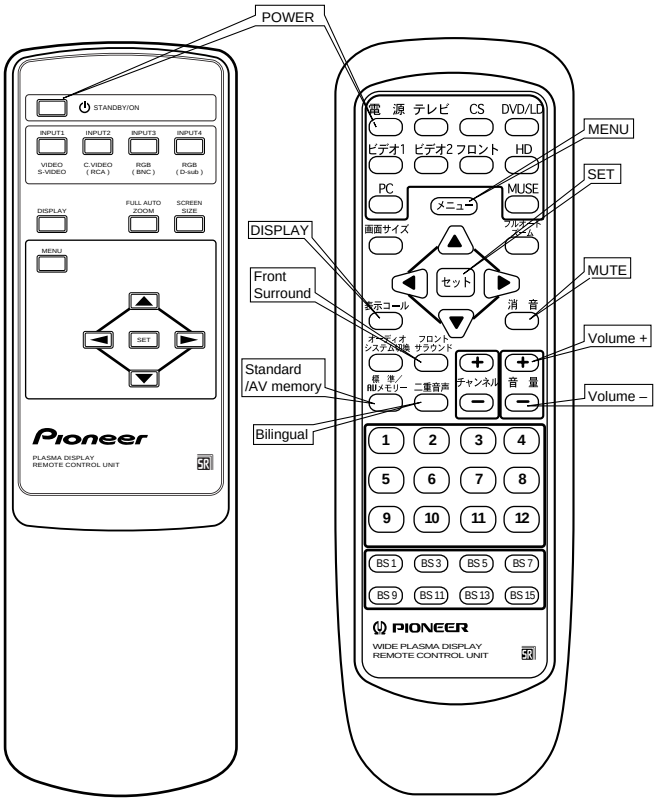
3. RANGE CHECK ((Front Surround) key)

Mode for checking the operations of the circuits.
Each time this key is pressed, the mode changes from center, maximum, to minimum.



Keys
1 COLOUR
  Center→Maximum→Minimum (Each time key 1 is pressed)
2 CONTRAST
  Center→Maximum→Minimum (Each time key 2 is pressed)
3 SHARP (NESS)
  Center→Maximum→Minimum (Each time key 3 is pressed)
4 CLK FRQ.
  Center→Maximum→Minimum (Each time key 4 is pressed)

COLOUR and SHARP cannot be used for RGB (PC/VIDEO (RGB input)).



Remote control unit provided with the PDP-501MX (CU-PDP002: AXD1437)

Remote control unit provided with the PDP-501HD (CU-PDP001: AXD1432)

<Note> Do not press keys nor make changes in the factory mode other than the adjustment items indicated in the service manual.

List of Input Signals

(1) Table of video input signals (When setting INPUT 1,2/INPUT 3,4:VIDEO)

Input signal	Horizontal frequency Fh (kHz)	Vertical frequency Fv (Hz)	Signal format	Screen size...On Screen Display				
				4:3NORMAL	FULL	ZOOM	CINEMA WIDE	NATURAL WIDE
NTSC, SDTV480i	15.734	60.0	S/video	E6/	E7/	E8/	E9/	EA/
			Component	E6+	E7+	E8+	E9+	EA+
			RGB (Note)	EB	EC	ED	EE	EF
Double-speed NTSC, SDTV480i	31.5	60.0	Component	F6+	F7+	F8+	F9+	FA+
			RGB	F6	F7	F8	F9	FA
HDTV 720P	45.0	60.0	Component		J2+			
			RGB		J2			
HDTV1080i	33.75	60.0	Component		G2+			
			RGB		G2			

Note: The NTSC-RGB signal can be used only when the key 10 STD-RGB (standard speed RGB enable setting) of "5. INITIALIZE MODE" is set to on. It is not displayed at the factory setting (OFF).

(2) List of PC input signals (When setting INPUT 3, 4:PC)

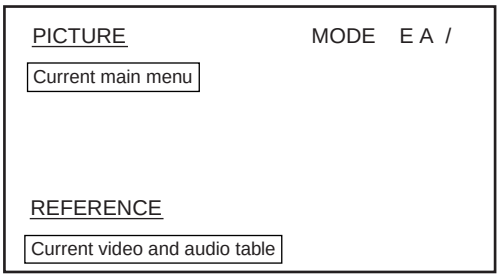
Model	Input signal Dot x line	Horizontal Frequency Fh (kHz) (Note)	Vertical Frequency Fv (Hz) (Note)	Screen size .... On Screen Display			
				ORIGINAL or ORIGINAL (TYPE)	4:3 NORMAL or 4:3 (TYPE)	FULL or FULL (TYPE)	ZOOM
NEC PC-9800 series	640∗400	24.8	56.4	B0	B1	B2	
		31.5	70.1	N0	N1	N2	
	640∗480	31.5	59.9	F0	F1	F2	
		37.5	75.0	R0			
	800∗600	37.9	60.3	I0	I1	I2	
		46.9	75.0	S0	S1	S2	
	1024∗768	56.5	70.1	O1		O2	
		60.0	75.0	U1		U2	
	1280∗1024	64.0	60.0		L1	L2	L3
IBM PC/AT compatibility	640∗400	31.5	70.1	N0	N1	N2	
	640∗480	31.5	59.9	F0	F1	F2	
		37.9	72.8	P0			
		37.5	75.0	R0			
	800∗600	35.2	56.3	C0	C1	C2	
		37.9	60.3	I0	I1	I2	
		48.1	72.2	Q0	Q1	Q2	
		46.9	75.0	S0	S1	S2	
	1024∗768	48.4	60.0	K1		K2	
		56.5	70.1	O1		O2	
		60.0	75.0	U1		U2	
		35.5	87.0	21		22	
	1280∗1024	64.0	60.0		L1	L2	L3
Apple Macintosh	640∗480	35.0	66.7	M0	M1	M2	
	832∗624	49.7	74.6	T0	M2	T3	
	1024∗768	60.2	74.9	U1		U2	
	1152∗870	68.7	75.1		V1	V2	
Exclusive Videocard	1280∗768	45.1	56.3		D1	D2	

Note: The input signal frequency displayed when the remote control key DISPLAY is pressed is the typical values of each signal mode, and may differ from the actual input signal frequency.

4. PICTURE (Standard/AV Memory Key)

Mode for selecting the video tables to be adjusted.

(1) Menu in mode



Keys

- 1 REFERENCE
- 5 COLOUR TEMP1
- 6 COLOUR TEMP2
- 7 COLOUR TEMP3
- 8 COLOUR TEMP4

Colour temperature offset
Not necessary to readjust
Fix at the factory setting

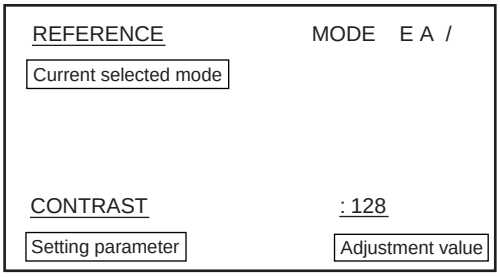
- 9 GAME
- 10 LIVING
- 11 CINEMA
- 12 SPORTS

Offset memorized for selection
Not necessary to readjust
Fix at the factory setting

Keys 2 to 12 cannot be used when INPUT SETTING is set to PC.

→ (Set) key
Sets the mode and moves to the lower level.

(2) Parameter adjustment (When REFERENCE is selected)



Keys			Commands
1	CONTRAST	(000 to 255)	<CNT>
2	BRIGHT (NESS)	(000 to 255)	<BRT>
3	COLOUR	(000 to 127)	<COL>
4	TINT	(000 to 127)	<TNT>
5	SHARP (NESS)	(000 to 255)	<SHP>
6	DETAIL	(000 to 255)	<DTL>
7	R HIGH	(000 to 255)	<RHI>
8	G HIGH	(000 to 255)	<GHI>
9	B HIGH	(000 to 255)	<BHI>
10	R LOW	(000 to 255)	<RLW>
11	G LOW	(000 to 255)	<GLW>
12	B LOW	(000 to 255)	<BLW>
BS5	B-Y GAIN	(000 to 063)	
BS9	BLK LEV START	(000 to 015)	
BS11	BLK LEV GAIN	(000 to 015)	

Not necessary to readjust
Fix at the factory setting

Note: Do not change the factory settings for (BS1) and (BS3). If changed, the panel may be damaged.

→ (Volume +) Increases the value of the parameter selected for adjustment <UPn> *

(Volume –) Decreases the value of the parameter selected for adjustment <DWn> *

(Set) Memorizes the adjusted value and moves to a higher level

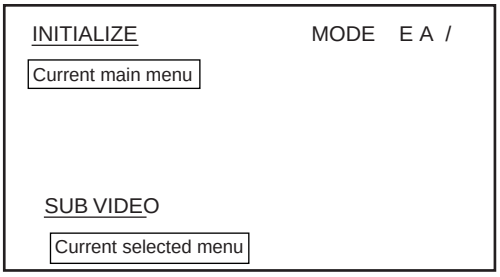
* n: 0~9, F
1→1
2→2
•
•
•
0→10
F→Full

<NOTE>
When messages not indicated in the service manual are displayed on the screen, turn OFF the power promptly. And exit the service factory mode.
Changing the data not indicated in the service manual unintentionally may result in the damage of the unit.

5. INITIALIZE (Bilingual key)

Mode for changing and checking the initial settings.

(1) Menu in mode



Keys	Commands
1	SUB VIDEO (Set using the SET key.)
2	MIRROR_MODE (Inverted Picture mode) OFF/XY cyclic (OFF at the factory setting) <MMN>/<MMZ>
3	FULL MASK ON/OFF-cyclic (OFF at the factory setting) <FMY>/<FMN>
5	HOUR METER (Displays the current hours meter) <HMD>
6	BAUD RATE (Sets the RS-232C communication speed with PC) <BRm> * 1200 to 19200 cyclic (4800) at the factory setting
7	EEPROM INIT. (For manufacturing line only)
8	MASK CONTROL (Automatic mask position change setting) ON/OFF cyclic (ON at the factory setting) <MCY>/<MCN>
10	STD-RGB (Standard speed (15. 734kHz) RGB enable setting) ON/OFF (OFF at the factory setting) <NRY>/<NRN>
11	INTE. MODE (Integrator mode setting) FREE, ON, LOCK cyclic (FREE at the factory setting) (Menu OFF) <IMF>/<IMY>/<IMN>
BS1	FINAL SETUP (factory setting) Set using the Set key (Recovers the initial setting) Refer to next page. <FST>
BS3	IPQ ADJ (Progressive conversion parameter adjustment) — Not necessary to readjust / Fix at the factory setting

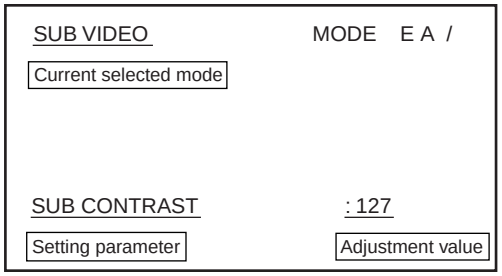
Set (1, BS1)
Sets the mode and moves to the lower level.

Note: 1) Do not change the factory settings for the modes of keys 9 . If changed, the panel may be damaged.
2) Be sure to turn the key 3 FULL MASK off when the power is turned off.

* (m: 1~5
1→1200bps
2→2400bps
3→4800bps
4→9600bps
5→19200bps)

(2) Parameter adjustments (SUB VIDEO)

Common picture quality adjustment for all input signal modes.



Keys			
1	SUB CONTRAST	(000 to 127)	Not necessary to readjust / Fix at the factory setting
2	ACL START	(000 to 015)	
3	ACL GAIN	(000 to 015)	
9	ACL SW	ACL SW ON/OFF cyclic	
10	VAP GAIN	(000 to 007)	
11	VAP INV	(000 to 031)	
BS3	R SIDE LEV	(000 to 255)	
BS5	G SIDE LEV	(000 to 255)	
BS7	B SIDE LEV	(000 to 255)	
BS11	R FULL LEV	(000/255)	
BS13	G FULL LEV	(000/255)	
BS15	B FULL LEV	(000/255)	

Note: Do not change the factory settings for keys 6 and 8. If changed, the panel may be damaged.

Volume +	Increases the value of the parameter selected for adjustment
Volume –	Decreases the value of the parameter selected for adjustment
Set	Memorizes the adjusted value and moves to a higher level

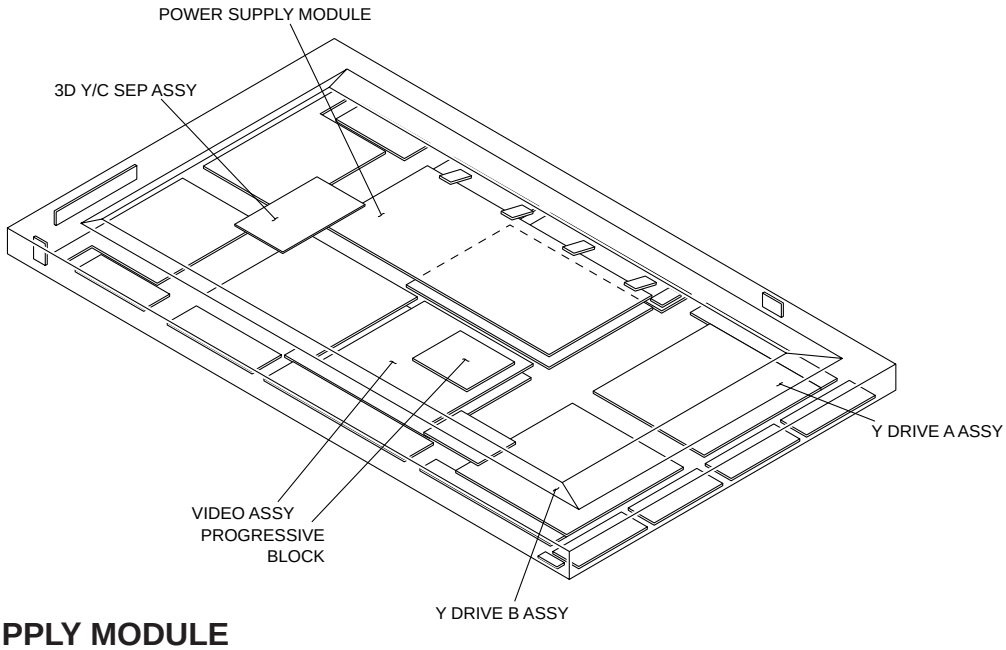
(3) Details of FINAL SETUP

Item	Initial Setting	Remarks	Commands
Input function	INPUT1		<IN1~4>
FULL AUTO ZOOM	OFF	Common for all input functions	<AZY> / <AZN>
Screen size	NATURAL WIDE	VIDEO	<SM0~5> note 1
	PC① 4:3 NORMAL (Including TYPE)	mode D,E,L,V	
	PC② ORIGINAL (Including TYPE)	mode B,C,F,I,K,M,N,O,P,Q,R,S,T,U,X,Y,Z,2	
V.POSITION	0	Input functions	<UPS>
KEY LOCK	UNLOCK		<KLY> / <KLN>
PICTURE	Center value for all adjustment items		note 2
SCREEN	Center value for all adjustment items		note 3
V MEMORY (RECALL)	STANDARD	Input functions (VIDEO)	
	STANDARD	Input functions (VIDEO-RGB)	
	STANDARD	Input functions (PC-RGB)	
V MEMORY (MEMORY)	GAME (MEMORY 1)	VIDEO	
	LIVING (MEMORY 2)		
	CINEMA (MEMORY 3)		
	SPORTS (MEMORY 4)		
	USER A to D (STANDARD for all memory contents)	RGB	
	USER A to D (STANDARD for all memory contents)	PC	
AUTO POWER OFF	OFF	Common for all input functions	<APY> / <APN>
3D Y/C MODE	STILL		<YCS / <YCM>
INPUT SETTING SIGNAL	COMPONENT 2(SMPTE170M)	INPUT2	
	PC / RGB (Fixed) (PDP-V501X) / VIDEO / COMPONENT 1 (PDP-501MX/KUC)	INPUT3	
	PC / RGB (Fixed)	INPUT4	
CLAMP	MODE1	For each setting-INPUT 3, 4	<CL1> / <CL2>
ABL	ON	For each setting-INPUT 3, 4 PC	<ABY> / <ABN>
MP MODE	ON	For each setting-INPUT 3, 4 PC	<MPY> / <MPN>
PICTURE	(Adjustment values for all adjustment items)	Memory contents cleared for PC	note 2
WHITE BALANCE	(Adjustment values for all adjustment items)	Memory contents cleared for PC	
SCREEN	Center value for all adjustment items		note 3
COLOUR MODE	1		<CM1> / <CM2>
BAUD RATE	4800BPS		<BR1~5>
HOUR METER	————		
MIRROR MODE	OFF	Common for all input functions	<MMN> / <MMZ>
STD-RGB	OFF	Common for input functions	<NRY> / <NRN>
SIDE MASK	R LEVEL: 56		<RSL>
	G LEVEL: 56		<GSL>
	B LEVEL: 112		<BSL>
FULL MASK	OFF		<FMY> / <FMN>
MASK CONTROL	ON		<MCY> / <MCN>
INTE. MODE	FREE (PDP-V501X) LOCK (PDP-501MX/KUC)		<IMF>/<IMY>/<IMN>
ACL SW	ON		
CTI	ON		
VNR	3		
ID No.	——		<IDS> / <IDC>
OSD	ON		<DIY> / <DIN>

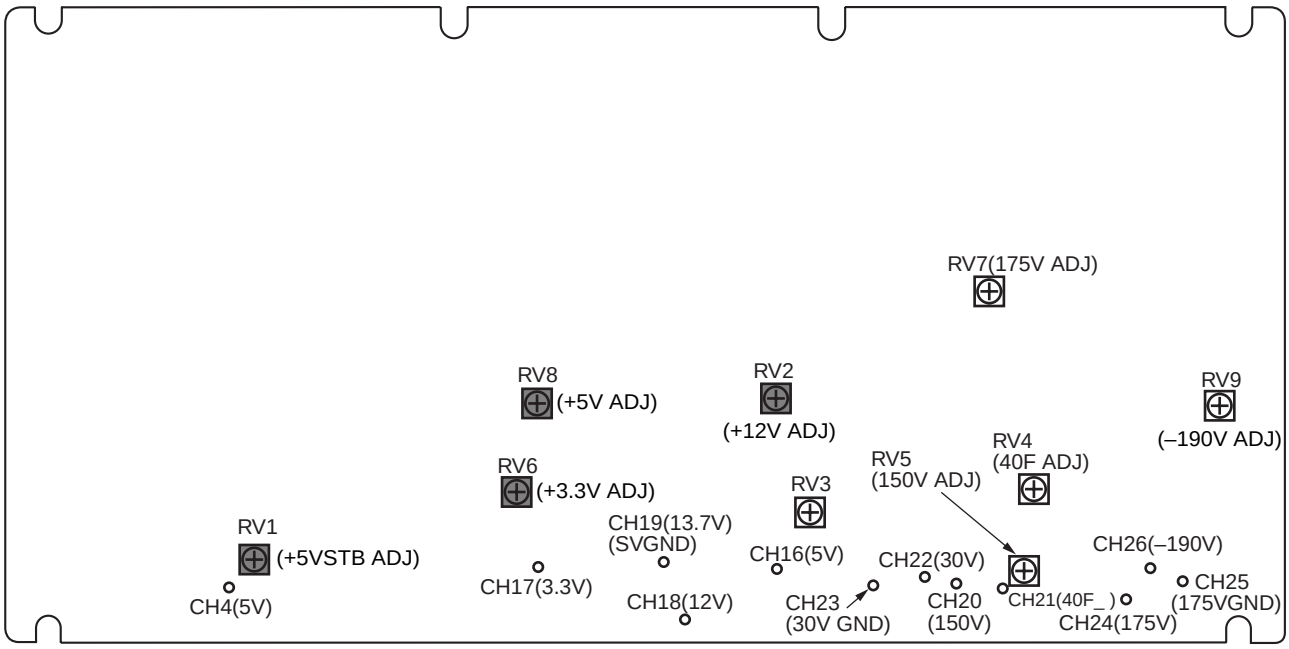
note 1
<SM0>: Original
<SM1>: 4:3 Normal
<SM2>: Full
<SM3>: Zoom
<SM4>: Cinema Wide
<SM5>: Natural Wide

note 2
<CNT>: Contrast
<COL>: Color
<TNT>: Tint
<SHP>: Sharp
<BRT>: Bright
<DTL>: Detail
<RHI>: R High
<RLW>: R Low
<GHI>: G High
<GLW>: G Low
<BHI>: B High
<BLW>: B Low

note 3
<VPS>: V. Pos 1
<HPS>: H. Pos 1
<CFR>: CLK FRQ
<CPH>: CLK PHS

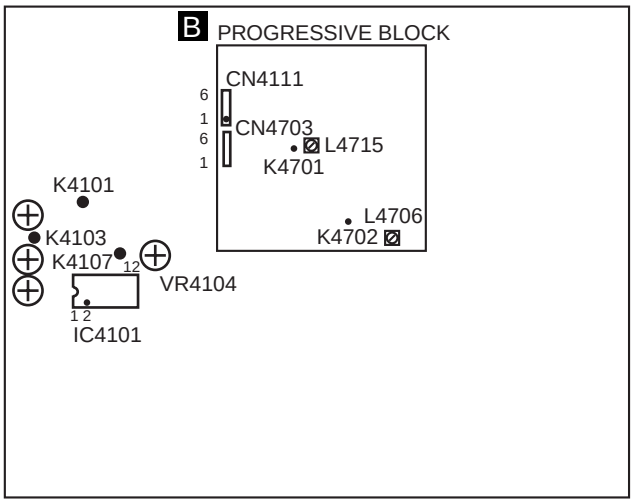


J POWER SUPPLY MODULE

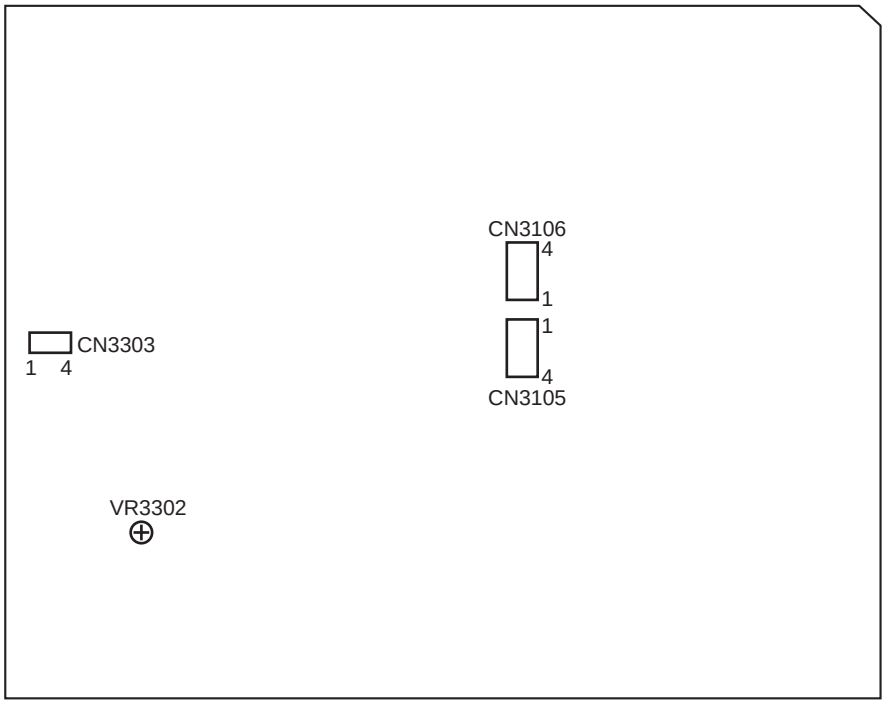


Note: Shaded VR, RV1, RV2, RV6, and RV8 have already been adjusted. Do not adjust them.

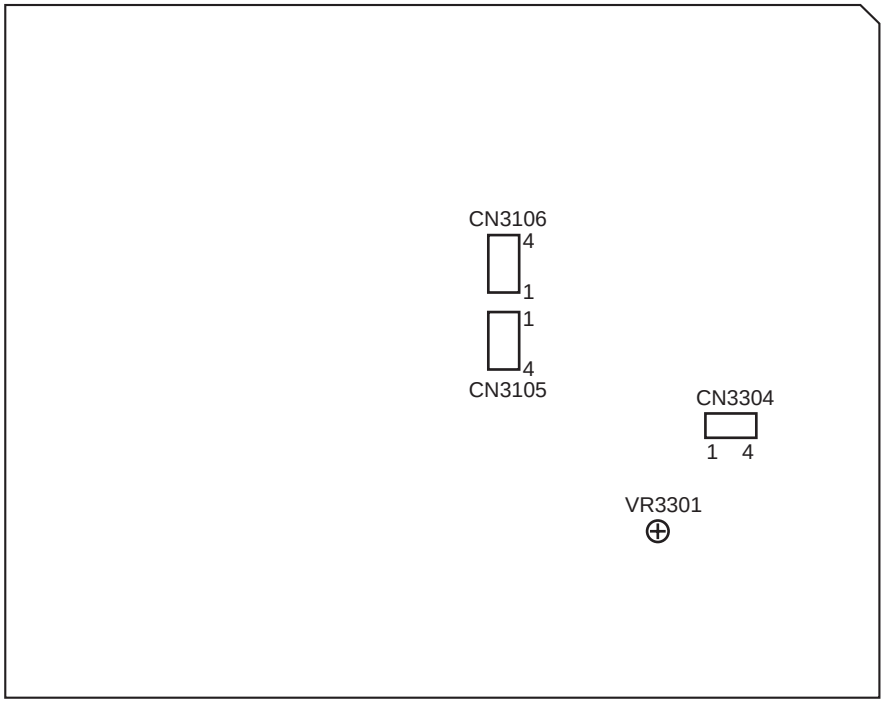
A ANALOG VIDEO ASSY



G Y DRIVE A ASSY



H Y DRIVE B ASSY



7. GENERAL INFORMATION

7.1 IC

7.1.1 LIST OF IC

The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

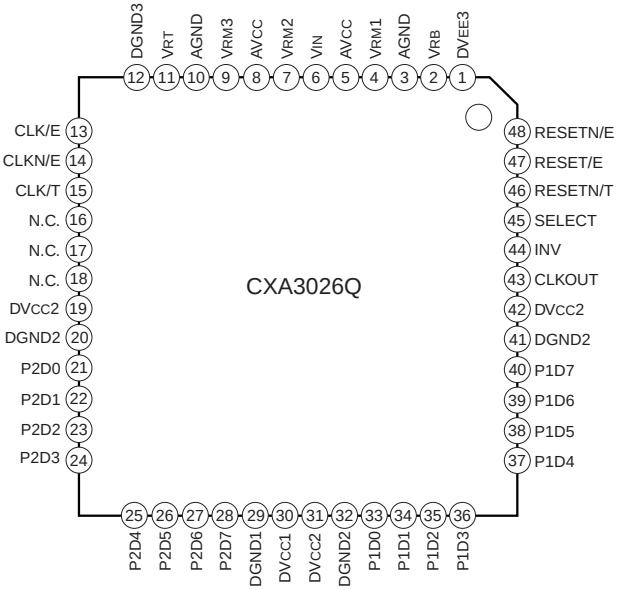
CXA3026Q, CXA3106Q, PD4891B, PD4892A, PD4893B, PD4894A, PD5447A, PDY038B, UPD481850GF, HD64F3048F16, PDT042A, STK795-120A, PE1006A, PD5435A9, 24LC64(I)SN, AN5390FBS, AN5395FBP, BA7657F, M52337SP, PDY052A, PE1007A, CD74HCT4046AM, SAA4990H, SAA7165WP, TDA8755T, PE6001A9, SAA4952WP, TMS4C2973-26, SN755862PJA

■ CXA3026Q

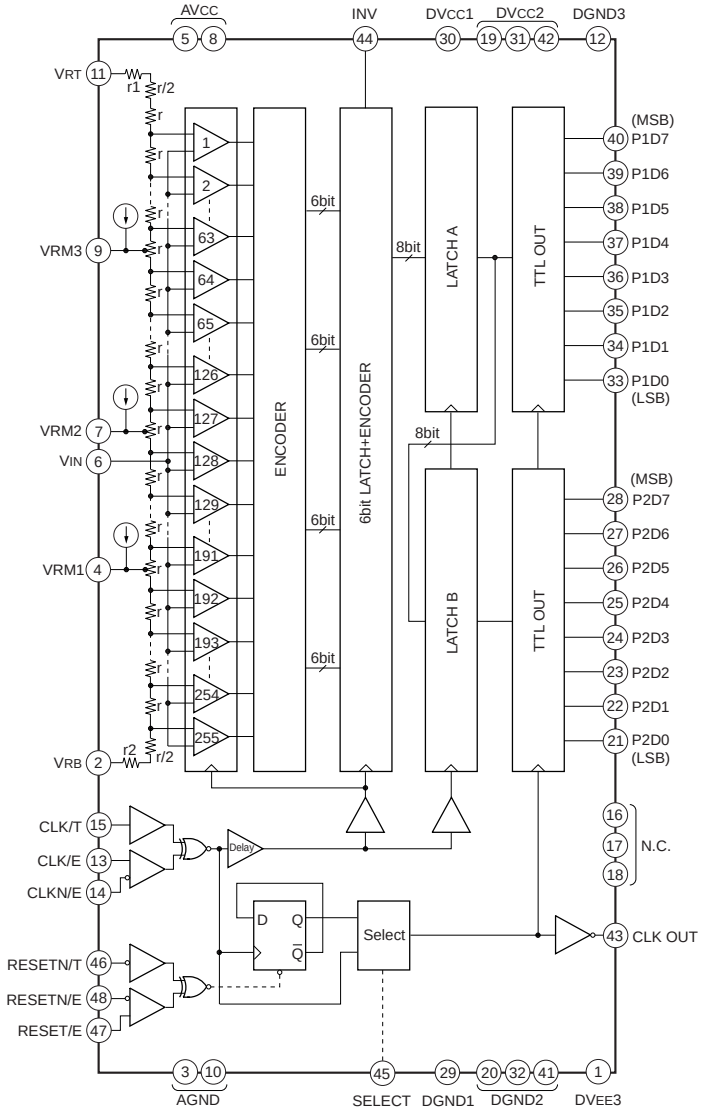
(DIGITAL VIDEO ASSY: IC1131)

A/D CONVERTOR

● **Pin Assignment**



● **Block Diagram**

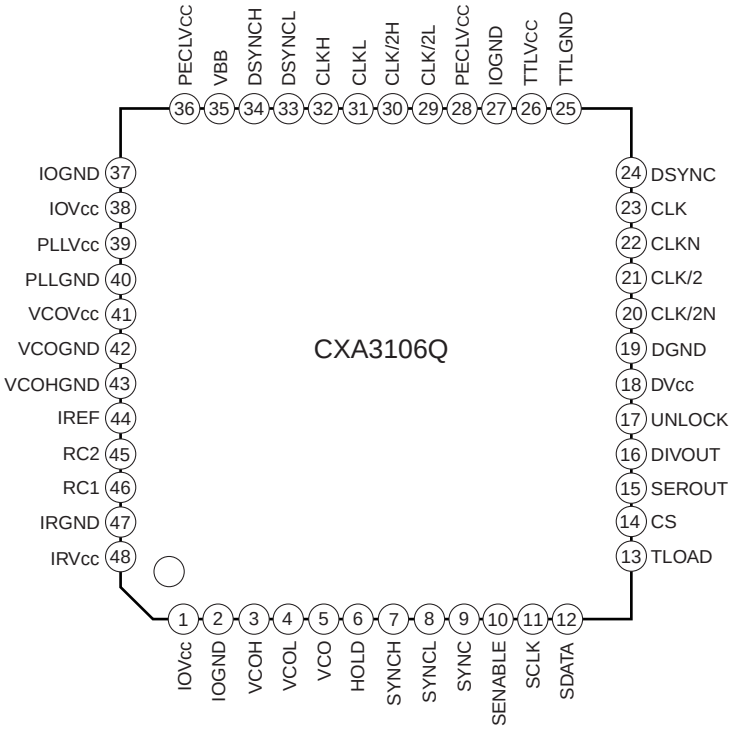


■ CXA3106Q

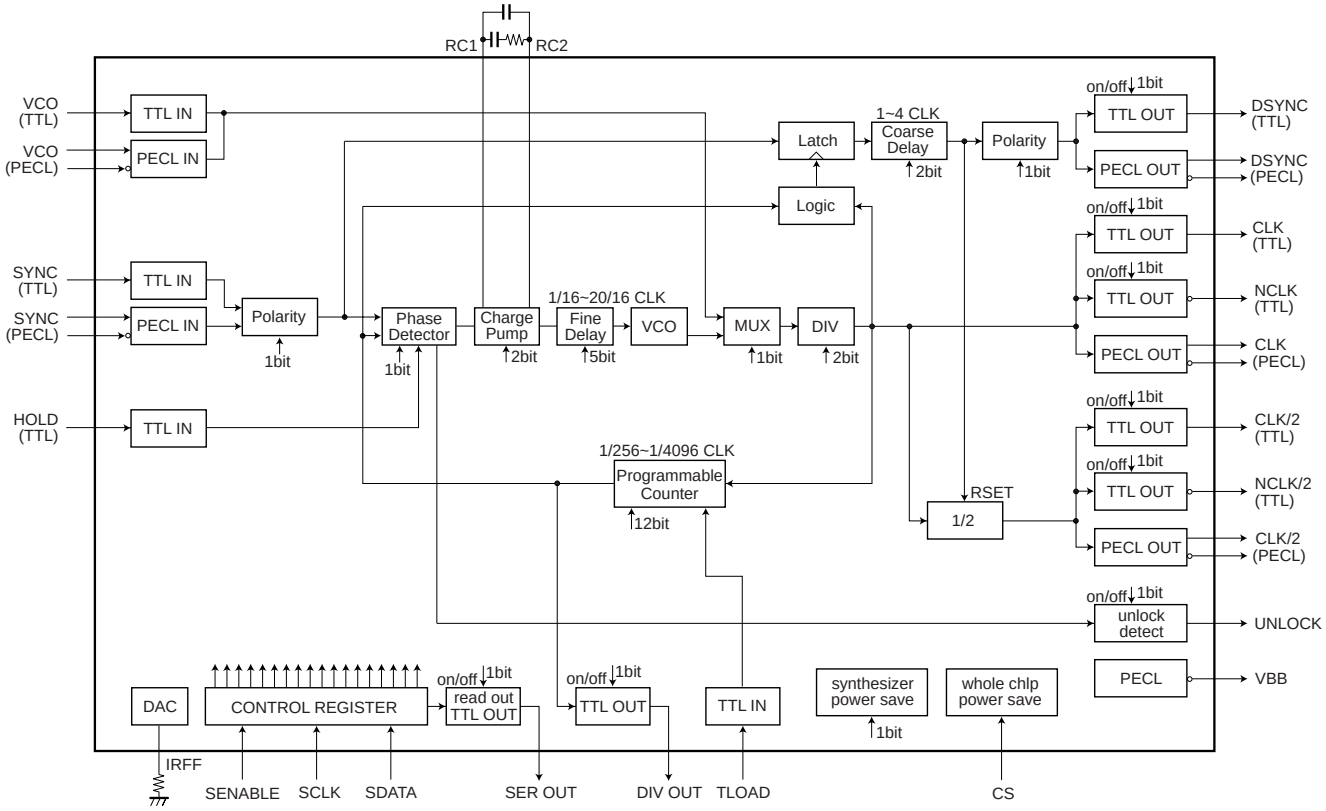
(DIGITAL VIDEO ASSY: IC1242)

PLL IC

● Pin Assignment



● Block Diagram



■ PD4891B

(DIGITAL VIDEO ASSY: IC1301)

GATE ARRAY

● Pin Function

Pin No.	PinName	I/O	BLOCK TYPE	Pin No.	Pin Name	I/O	BLOCK TYPE
1	GND	-	-	51	GND	-	-
2	GND	-	-	52	GND	-	-
3	N.C.	-	-	53	VDD	-	-
4	N.C.	-	-	54	FIELD	O	FO09
5	HWRB	I	FIV1	55	V_ACTB	O	FO09
6	UA12	I	FIV1	56	V	O	FO09
7	UA11	I	FIV1	57	H	O	FO09
8	UA10	I	FIV1	58	VLD_B	O	FO09
9	UA9	I	FIV1	59	VLD_A	O	FO09
10	UA8	I	FIV1	60	BB0	O	FO09
11	UA7	I	FIV1	61	BB1	O	FO09
12	UA6	I	FIV1	62	BB2	O	FO09
13	GND	-	-	63	BB3	O	FO09
14	UA5	I	FIV1	64	GND	-	-
15	UA4	I	FIV1	65	BB4	O	FO09
16	UA3	I	FIV1	66	BB5	O	FO09
17	UA2	I	FIV1	67	BB6	O	FO09
18	UA1	I	FIV1	68	BB7	O	FO09
19	UA0	I	FIV1	69	BA0	O	FO09
20	GND	-	-	70	BA1	O	FO09
21	UD15	B	BX01	71	BA2	O	FO09
22	UD14	B	BX01	72	BA3	O	FO09
23	UD13	B	BX01	73	BA4	O	FO09
24	UD12	B	BX01	74	BA5	O	FO09
25	UD11	B	BX01	75	BA6	O	FO09
26	GND	-	-	76	BA7	O	FO09
27	VDD	-	-	77	GB0	O	FO09
28	UD10	B	BX01	78	VDD	-	-
29	UD9	B	BX01	79	GND	-	-
30	UD8	B	BX01	80	GB1	O	FO09
31	UD7	B	BX01	81	GB2	O	FO09
32	UD6	B	BX01	82	GB3	O	FO09
33	GND	-	-	83	GB4	O	FO09
34	UD5	B	BX01	84	GB5	O	FO09
35	UD4	B	BX01	85	GB6	O	FO09
36	UD3	B	BX01	86	GB7	O	FO09
37	UD2	B	BX01	87	GA0	O	FO09
38	UD1	B	BX01	88	GA1	O	FO09
39	UD0	B	BX01	89	GA2	O	FO09
40	VDD	-	-	90	GA3	O	FO09
41	RESETB	I	FIF1	91	GND	-	-
42	GND	-	-	92	GA4	O	FO09
43	PRG_INTB	I	FDV1	93	GA5	O	FO09
44	LN_DTB	I	FDV1	94	GA6	O	FO09
45	SELB0	I	FIV1	95	GA7	O	FO09
46	CSB4	I	FIV1	96	RB0	O	FO09
47	CSB5	I	FIV1	97	RB1	O	FO09
48	W_NB	I	FDV1	98	RB2	O	FO09
49	GND	-	-	99	RB3	O	FO09
50	CLK3	I	FI01	100	RB4	O	FO09

Note: I/O B: I/O Buffer (TTL Low Noise (5V))

Pin No.	Pin Name	I/O	BLOCK TYPE	Pin No.	Pin Name	I/O	BLOCK TYPE
101	RB5	O	FO09	155	GND	-	-
102	RB6	O	FO09	156	GND	-	-
103	RB7	O	FO09	157	VDD	-	-
104	VDD	-	-	158	BEI7	I	FDV1
105	GND	-	-	159	BEI6	I	FDV1
106	GND	-	-	160	BEI5	I	FDV1
107	RA0	O	FO09	161	BEI4	I	FDV1
108	RA1	O	FO09	162	BEI3	I	FDV1
109	RA2	O	FO09	163	BEI2	I	FDV1
110	RA3	O	FO09	164	BEI1	I	FDV1
111	RA4	O	FO09	165	BEI0	I	FDV1
112	RA5	O	FO09	166	BOI7	I	FIV1
113	RA6	O	FO09	167	BOI6	I	FIV1
114	RA7	O	FO09	168	BOI5	I	FIV1
115	VDD	-	-	169	BOI4	I	FIV1
116	N.C.	-	-	170	BOI3	I	FIV1
117	ADRSTB	O	FO04	171	BOI2	I	FIV1
118	GND	-	-	172	BOI1	I	FIV1
119	REI7	I	FDV1	173	BOI0	I	FIV1
120	REI6	I	FDV1	174	GND	-	-
121	REI5	I	FDV1	175	HDI	I	FIV1
122	REI4	I	FDV1	176	VDI	I	FIV1
123	REI3	I	FDV1	177	FLDI	I	FIV1
124	REI2	I	FDV1	178	GND	-	-
125	REI1	I	FDV1	179	S_DB	I	FI01
126	REI0	I	FDV1	180	GND	-	-
127	ROI7	I	FIV1	181	VCLK2	I	FIV1
128	ROI6	I	FIV1	182	GND	-	-
129	ROI5	I	FIV1	183	VDD	-	-
130	VDD	-	-	184	DRI	I	FDV1
131	GND	-	-	185	DBI	I	FDV1
132	ROI4	I	FIV1	186	DGI	I	FDV1
133	ROI3	I	FIV1	187	DBLKI	I	FDV1
134	ROI2	I	FIV1	188	HRET	O	FV04
135	ROI1	I	FIV1	189	VRET	O	FV04
136	ROI0	I	FIV1	190	BUNRI	I	FIU1
137	GEI7	I	FDV1	191	N.C.	-	-
138	GEI6	I	FDV1	192	N.C.	-	-
139	GEI5	I	FDV1	193	N.C.	-	-
140	GEI4	I	FDV1	194	N.C.	-	-
141	GEI3	I	FDV1	195	N.C.	-	-
142	GEI2	I	FDV1	196	TMB2	I	FIU1
143	GEI1	I	FDV1	197	TMB1	I	FIU1
144	GEI0	I	FDV1	198	TMB0	I	FIU1
145	GOI7	I	FIV1	199	GND	-	-
146	GOI6	I	FIV1	200	TO7	O	FO09
147	GOI5	I	FIV1	201	TO6	O	FO09
148	GOI4	I	FIV1	202	TO5	O	FO09
149	GOI3	I	FIV1	203	TO4	O	FO09
150	GOI2	I	FIV1	204	TO3	O	FO09
151	GOI1	I	FIV1	205	TO2	O	FO09
152	GOI0	I	FIV1	206	TO1	O	FO09
153	GND	-	-	207	TO0	O	FO09
154	VCLK	I	FIV1	208	VDD	-	-

K1264 (FDLI) Output (Input Field Discrimination Signal)

No.	Input Signal	Output Signal State (177 Pin Input)
1	NTSC (double speed)	Fixed at H
2	HDTV	ODD:L EVEN:H
3	PC	Fixed at L

■ PD4892A

(DIGITAL VIDEO ASSY: IC1351)

GATE ARRAY

● Pin Function

Pin No.	Pin Name	I/O	BLOCK TYPE	Pin No.	Pin Name	I/O	BLOCK TYPE
1	GND	-	-	51	RESETB	I	FIF1
2	GND	-	-	52	PRG_INTB	I	FDV1
3	EVLD_AI	I	FUI1	53	LN_DTB	I	FDV1
4	EVLD_BI	I	FUI1	54	SEL1B	I	FIV1
5	EHDI	I	FUI1	55	CS4B	I	FIV1
6	EVDI	I	FUI1	56	TEST	I	FIU1
7	EV_ACTBI	I	FUI1	57	GND	-	-
8	EFLDI	I	FUI1	58	CLK3	I	FI01
9	TMB7	I	FUI1	59	GND	-	-
10	TMB6	I	FUI1	60	GND	-	-
11	TMB5	I	FUI1	61	VDD	-	-
12	GND	-	-	62	BB0	O	FO09
13	APLP	O	FV09	63	BB1	O	FO09
14	RDB	I	FIV1	64	BB2	O	FO09
15	HWRB	I	FIV1	65	BB3	O	FO09
16	UA12	I	FIV1	66	BB4	O	FO09
17	UA11	I	FIV1	67	BB5	O	FO09
18	UA10	I	FIV1	68	BB6	O	FO09
19	UA9	I	FIV1	69	BB7	O	FO09
20	GND	-	-	70	BB8	O	FO09
21	VDD	-	-	71	BB9	O	FO09
22	UA8	I	FIV1	72	BB10	O	FO09
23	UA7	I	FIV1	73	BB11	O	FO09
24	UA6	I	FIV1	74	BA0	O	FO09
25	UA5	I	FIV1	75	BA1	O	FO09
26	UA4	I	FIV1	76	BA2	O	FO09
27	UA3	I	FIV1	77	BA3	O	FO09
28	UA2	I	FIV1	78	BA4	O	FO09
29	UA1	I	FIV1	79	BA5	O	FO09
30	UA0	I	FIV1	80	GND	-	-
31	GND	-	-	81	VDD	-	-
32	UD15	B	BX01	82	BA6	O	FO09
33	UD14	B	BX01	83	BA7	O	FO09
34	UD13	B	BX01	84	BA8	O	FO09
35	UD12	B	BX01	85	BA9	O	FO09
36	UD11	B	BX01	86	BA10	O	FO09
37	UD10	B	BX01	87	BA11	O	FO09
38	UD9	B	BX01	88	FIELD	O	FO04
39	UD8	B	BX01	89	V_ACTB	O	FO04
40	VDD	-	-	90	V	O	FO04
41	GND	-	-	91	GND	-	-
42	UD7	B	BX01	92	H	O	FO04
43	UD6	B	BX01	93	VLD_B	O	FO04
44	UD5	B	BX01	94	VLD_A	O	FO04
45	UD4	B	BX01	95	GB0	O	FO09
46	UD3	B	BX01	96	GB1	O	FO09
47	UD2	B	BX01	97	GB2	O	FO09
48	UD1	B	BX01	98	GB3	O	FO09
49	UD0	B	BX01	99	GB4	O	FO09
50	GND	-	-	100	VDD	-	-

Pin No.	Pin Name	I/O	BLOCK TYPE	Pin No.	Pin Name	I/O	BLOCK TYPE
101	GND	-	-	155	TOB4	O	FO09
102	GB5	O	FO09	156	TOB5	O	FO09
103	GB6	O	FO09	157	TOB6	O	FO09
104	GB7	O	FO09	158	TOB7	O	FO09
105	GB8	O	FO09	159	TOB8	O	FO09
106	GB9	O	FO09	160	VDD	-	-
107	GB10	O	FO09	161	GND	-	-
108	GB11	O	FO09	162	TOA0	O	FO09
109	GA0	O	FO09	163	TOA1	O	FO09
110	GA1	O	FO09	164	TOA2	O	FO09
111	GA2	O	FO09	165	TOA3	O	FO09
112	GA3	O	FO09	166	TOA4	O	FO09
113	GA4	O	FO09	167	TOA5	O	FO09
114	GA5	O	FO09	168	TOA6	O	FO09
115	GA6	O	FO09	169	TOA7	O	FO09
116	GA7	O	FO09	170	TOA8	O	FO09
117	GA8	O	FO09	171	GND	-	-
118	GA9	O	FO09	172	BUNRI	I	FIU1
119	GA10	O	FO09	173	TMB0	I	FIU1
120	VDD	-	-	174	TMB1	I	FIU1
121	GND	-	-	175	TMB2	I	FIU1
122	GND	-	-	176	TMB3	I	FIU1
123	GA11	O	FO09	177	TMB4	I	FIU1
124	RB0	O	FO09	178	RAI7	I	FI01
125	RB1	O	FO09	179	GND	-	-
126	RB2	O	FO09	180	GND	-	-
127	RB3	O	FO09	181	VDD	-	-
128	RB4	O	FO09	182	RAI6	I	FI01
129	RB5	O	FO09	183	RAI5	I	FI01
130	RB6	O	FO09	184	RAI4	I	FI01
131	RB7	O	FO09	185	RAI3	I	FI01
132	RB8	O	FO09	186	RAI2	I	FI01
133	RB9	O	FO09	187	RAI1	I	FI01
134	RB10	O	FO09	188	RAI0	I	FI01
135	RB11	O	FO09	189	RBI7	I	FI01
136	RA0	O	FO09	190	RBI6	I	FI01
137	RA1	O	FO09	191	RBI5	I	FI01
138	RA2	O	FO09	192	RBI4	I	FI01
139	GND	-	-	193	RBI3	I	FI01
140	VDD	-	-	194	RBI2	I	FI01
141	RA3	O	FO09	195	RBI1	I	FI01
142	RA4	O	FO09	196	RBI0	I	FI01
143	RA5	O	FO09	197	GAI7	I	FI01
144	RA6	O	FO09	198	GAI6	I	FI01
145	RA7	O	FO09	199	GAI5	I	FI01
146	RA8	O	FO09	200	GND	-	-
147	RA9	O	FO09	201	VDD	-	-
148	RA10	O	FO09	202	GAI4	I	FI01
149	RA11	O	FO09	203	GAI3	I	FI01
150	GND	-	-	204	GAI2	I	FI01
151	TOB0	O	FO09	205	GAI1	I	FI01
152	TOB1	O	FO09	206	GAI0	I	FI01
153	TOB2	O	FO09	207	GBI7	I	FI01
154	TOB3	O	FO09	208	GBI6	I	FI01

Pin No.	Pin Name	I/O	BLOCK TYPE	Pin No.	Pin Name	I/O	BLOCK TYPE
209	GBI5	I	FI01	225	BBI7	I	FI01
210	GBI4	I	FI01	226	BBI6	I	FI01
211	GBI3	I	FI01	227	BBI5	I	FI01
212	GBI2	I	FI01	228	BBI4	I	FI01
213	GBI1	I	FI01	229	BBI3	I	FI01
214	GBI0	I	FI01	230	BBI2	I	FI01
215	BAI7	I	FI01	231	BBI1	I	FI01
216	BAI6	I	FI01	232	BB10	I	FI01
217	BAI5	I	FI01	233	GND	-	-
218	BAI4	I	FI01	234	VLD_AI	I	FI01
219	BAI3	I	FI01	235	VLD_BI	I	FI01
220	VDD	-	-	236	HDI	I	FI01
221	GND	-	-	237	VDI	I	FI01
222	BAI2	I	FI01	238	V_ACTB	I	FI01
223	BAI1	I	FI01	239	FLDI	I	FI01
224	BAI0	I	FI01	240	VDD	-	-

■ PD4893B

(DIGITAL VIDEO ASSY: IC1401)

GATE ARRAY

● Pin Function

Pin No.	Pin Name	I/O	BLOCK TYPE	Pin No.	Pin Name	I/O	BLOCK TYPE
1	GND	-	-	32	DO26	O	FE04
2	GND	-	-	33	DO25	O	FE04
3	RESETB	I	FIF1	34	DO24	O	FE04
4	GND	-	-	35	DO23	O	FE04
5	BIT3	I	FIV1	36	DO22	O	FE04
6	BIT2	I	FIV1	37	DO21	O	FE04
7	BIT1	I	FIV1	38	DO20	O	FE04
8	BIT0	I	FIV1	39	MY_A3	O	FO09
9	SFSTB	I	FIV1	40	VDD	-	-
10	CYCLEB	I	FIV1	41	GND	-	-
11	ER_ON	I	FIV1	42	MY_A2	O	FO09
12	ER_EN	I	FIV1	43	MY_A1	O	FO09
13	GND	-	-	44	MY_A0	O	FO09
14	ABFLD	O	FV09	45	PC_CHGB	I	FIU1
15	RFLD	O	FV09	46	MY_A9	O	FO09
16	DO39	O	FE04	47	MY_CSB	O	FO09
17	DO38	O	FE04	48	MY_RASB	O	FO09
18	DO37	O	FE04	49	MY_CASB	O	FO09
19	DO36	O	FE04	50	MY_WB	O	FO09
20	GND	-	-	51	MY_DQ23	B	B00U
21	VDD	-	-	52	MY_DQ22	B	B00U
22	DO35	O	FE04	53	MY_DQ21	B	B00U
23	DO34	O	FE04	54	MY_DQ20	B	B00U
24	DO33	O	FE04	55	MY_DQ19	B	B00U
25	DO32	O	FE04	56	MY_DQ18	B	B00U
26	DO31	O	FE04	57	MY_DQ17	B	B00U
27	DO30	O	FE04	58	MY_DQ16	B	B00U
28	GND	-	-	59	GND	-	-
29	DO29	O	FE04	60	GND	-	-
30	DO28	O	FE04	61	VDD	-	-
31	DO27	O	FE04	62	MY_DQ7	B	B00U

Note: I/O B: I/O Buffer (3.3V)

Pin No.	Pin Name	I/O	BLOCK TYPE	Pin No.	Pin Name	I/O	BLOCK TYPE
63	MY_DQ6	B	B00U	117	MX_A8	O	FO09
64	MY_DQ5	B	B00U	118	MX_A7	O	FO09
65	MY_DQ4	B	B00U	119	MX_A6	O	FO09
66	MY_DQ3	B	B00U	120	VDD	-	-
67	MY_DQ2	B	B00U	121	GND	-	-
68	MY_DQ1	B	B00U	122	GND	-	-
69	MY_DQ0	B	B00U	123	MX_A5	O	FO09
70	MX_A3	O	FO09	124	MX_A4	O	FO09
71	MX_A2	O	FO09	125	MY_DQ31	B	B00U
72	MX_A1	O	FO09	126	MY_DQ30	B	B00U
73	MX_A0	O	FO09	127	MY_DQ29	B	B00U
74	MULTB	O	FV09	128	MY_DQ28	B	B00U
75	MX_A9	O	FO09	129	MY_DQ27	B	B00U
76	MX_CSB	O	FO09	130	MY_DQ26	B	B00U
77	MX_RASB	O	FO09	131	MY_DQ25	B	B00U
78	MX_CASB	O	FO09	132	MY_DQ24	B	B00U
79	MX_WB	O	FO09	133	MY_DQ15	B	B00U
80	GND	-	-	134	MY_DQ14	B	B00U
81	VDD	-	-	135	MY_DQ13	B	B00U
82	MX_DQ23	B	B00U	136	MY_DQ12	B	B00U
83	MX_DQ22	B	B00U	137	MY_DQ11	B	B00U
84	MX_DQ21	B	B00U	138	MY_DQ10	B	B00U
85	MX_DQ20	B	B00U	139	GND	-	-
86	MX_DQ19	B	B00U	140	VDD	-	-
87	MX_DQ18	B	B00U	141	MY_DQ9	B	B00U
88	MX_DQ17	B	B00U	142	MY_DQ8	B	B00U
89	MX_DQ16	B	B00U	143	DQM	O	FE04
90	MX_DQ7	B	B00U	144	GND	-	-
91	MX_DQ6	B	B00U	145	MY_A8	O	FO09
92	MX_DQ5	B	B00U	146	MY_A7	O	FO09
93	MX_DQ4	B	B00U	147	MY_A6	O	FO09
94	MX_DQ3	B	B00U	148	MY_A5	O	FO09
95	MX_DQ2	B	B00U	149	MY_A4	O	FO09
96	MX_DQ1	B	B00U	150	GND	-	-
97	MX_DQ0	B	B00U	151	DO0	O	FE04
98	MX_DQ31	B	B00U	152	DO1	O	FE04
99	MX_DQ30	B	B00U	153	DO2	O	FE04
100	VDD	-	-	154	DO3	O	FE04
101	GND	-	-	155	DO4	O	FE04
102	MX_DQ29	B	B00U	156	DO5	O	FE04
103	MX_DQ28	B	B00U	157	DO6	O	FE04
104	MX_DQ27	B	B00U	158	DO7	O	FE04
105	MX_DQ26	B	B00U	159	DO8	O	FE04
106	MX_DQ25	B	B00U	160	VDD	-	-
107	MX_DQ24	B	B00U	161	GND	-	-
108	MX_DQ15	B	B00U	162	DO9	O	FE04
109	MX_DQ14	B	B00U	163	DO10	O	FE04
110	MX_DQ13	B	B00U	164	DO11	O	FE04
111	MX_DQ12	B	B00U	165	DO12	O	FE04
112	MX_DQ11	B	B00U	166	DO13	O	FE04
113	MX_DQ10	B	B00U	167	DO14	O	FE04
114	MX_DQ9	B	B00U	168	DO15	O	FE04
115	MX_DQ8	B	B00U	169	DO16	O	FE04
116	MCLK	O	FO01	170	DO17	O	FE04

Pin No.	Pin Name	I/O	BLOCK TYPE	Pin No.	Pin Name	I/O	BLOCK TYPE
171	DO18	O	FE04	206	DINB2	I	FI01
172	DO19	O	FE04	207	DINB1	I	FI01
173	GND	-	-	208	DINB0	I	FI01
174	TI0	I	FIU1	209	VLD_AI	I	FI01
175	TI1	I	FIU1	210	VLD_BI	I	FI01
176	TI2	I	FIU1	211	HI	I	FI01
177	TI3	I	FIU1	212	VI	I	FI01
178	TI4	I	FIU1	213	FILEDI	I	FI01
179	GND	-	-	214	TMB5	I	FIU1
180	GND	-	-	215	TMB4	B	BOUU
181	VDD	-	-	216	TMB3	B	BOUU
182	MUTEB	I	FIU1	217	TMB2	I	FIU1
183	DINA11	I	FI01	218	TMB1	I	FIU1
184	DINA10	I	FI01	219	TMB0	I	FIU1
185	DINA9	I	FI01	220	VDD	-	-
186	DINA8	I	FI01	221	GND	-	-
187	DINA7	I	FI01	222	CLK2A	I	FI01
188	DINA6	I	FI01	223	GND	-	-
189	DINA5	I	FI01	224	CLK2B	I	FI01
190	DINA4	I	FI01	225	GND	-	-
191	DINA3	I	FI01	226	CLK2C	I	FIO1
192	DINA2	I	FI01	227	GND	-	-
193	DINA1	I	FI01	228	MODE2	I	FDV1
194	DINA0	I	FI01	229	MODE1	I	FDV1
195	DINB11	I	FI01	230	MODE0	I	FDV1
196	DINB10	I	FI01	231	LN_DTB	I	FDV1
197	DINB9	I	FI01	232	PROG_INT	I	FDV1
198	DINB8	I	FI01	233	W_NB	I	FDV1
199	DINB7	I	FI01	234	GND	-	-
200	GND	-	-	235	SDT	I	FIV1
201	VDD	-	-	236	SENB	I	FIV1
202	DINB6	I	FI01	237	SCLK	I	FIV1
203	DINB5	I	FI01	238	GND	-	-
204	DINB4	I	FI01	239	CLK3	I	FI01
205	DINB3	I	FI01	240	VDD	-	-

■ PD4894A

(DIGITAL VIDEO ASSY: IC1551)

GATE ARRAY

● Pin Function

Pin No.	Pin Name	I/O	BLOCK TYPE	Pin No.	Pin Name	I/O	BLOCK TYPE
1	VDD	-	-	11	IJ9	O	FO01
2	IJ0	O	FO01	12	IJ10	O	FO01
3	IJ1	O	FO01	13	IJ11	O	FO01
4	IJ2	O	FO01	14	IJ12	O	FO01
5	IJ3	O	FO01	15	IJ13	O	FO01
6	IJ4	O	FO01	16	IJ14	O	FO01
7	IJ5	O	FO01	17	IJ15	O	FO01
8	IJ6	O	FO01	18	GH0	O	FO01
9	IJ7	O	FO01	19	GND	-	-
10	IJ8	O	FO01	20	GH1	O	FO01

Pin No.	Pin Name	I/O	BLOCK TYPE	Pin No.	Pin Name	I/O	BLOCK TYPE
21	GH2	O	FO01	73	VDD	-	-
22	GH3	O	FO01	74	CD6	O	FO01N
23	GH4	O	FO01	75	CD7	O	FO01N
24	GH5	O	FO01	76	CD8	O	FO01N
25	GH6	O	FO01	77	CD9	O	FO01N
26	GH7	O	FO01	78	CD10	O	FO01N
27	GH8	O	FO01	79	CD11	O	FO01N
28	GH9	O	FO01	80	CD12	O	FO01N
29	GH10	O	FO01	81	CD13	O	FO01N
30	GH11	O	FO01	82	CD14	O	FO01N
31	GH12	O	FO01	83	CD15	O	FO01N
32	GH13	O	FO01	84	CLK1B	O	FO01
33	GH14	O	FO01	85	CLK1	O	FO01
34	GH15	O	FO01	86	CLK2C	O	FO01
35	BLK0	O	FO01	87	CLK2B	O	FO01
36	VDD	-	-	88	CLK2A	O	FO01
37	GND	-	-	89	CLK3	O	FO01
38	GND	-	-	90	GND	-	-
39	BLK1	O	FO01	91	CLK6	I	FI01
40	BLK2	O	FO01	92	GND	-	-
41	BLK3	O	FO01	93	CLK_RESB	I	FUS1
42	BLK4	O	FO01	94	BIT0	O	FO01
43	BLK5	O	FO01	95	BIT1	O	FO01
44	BLK6	O	FO01	96	BIT2	O	FO01
45	BLK7	O	FO01	97	BIT3	O	FO01
46	BLK8	O	FO01	98	DLOAD	O	FO01
47	BLK9	O	FO01	99	START	O	FO01
48	EF0	O	FO01	100	PSTOPB	O	FO01
49	EF1	O	FO01	101	TEST_A	I	FID1
50	EF2	O	FO01	102	TEST_B	I	FID1
51	EF3	O	FO01	103	TEST_C	I	FID1
52	EF4	O	FO01	104	BUNRI	I	FIU1
53	EF5	O	FO01	105	UA14	I	FI01H
54	VDD	-	-	106	UA13	I	FI01H
55	EF6	O	FO01	107	UA12	I	FI01H
56	EF7	O	FO01	108	VDD	-	-
57	EF8	O	FO01	109	GND	-	-
58	EF9	O	FO01	110	GND	-	-
59	EF10	O	FO01	111	UA11	I	FI01H
60	EF11	O	FO01	112	UA10	I	FI01H
61	EF12	O	FO01	113	UA9	I	FI01H
62	EF13	O	FO01	114	UA8	I	FI01H
63	EF14	O	FO01	115	UA7	I	FI01H
64	EF15	O	FO01	116	UA6	I	FI01H
65	CD0	O	FO01N	117	UA5	I	FI01H
66	CD1	O	FO01N	118	UA4	I	FI01H
67	CD2	O	FO01N	119	UA3	I	FI01H
68	CD3	O	FO01N	120	UA2	I	FI01H
69	CD4	O	FO01N	121	UA1	I	FI01H
70	CD5	O	FO01N	122	UD15	I	FI01
71	GND	-	-	123	UD14	I	FI01
72	GND	-	-	124	UD13	I	F101H

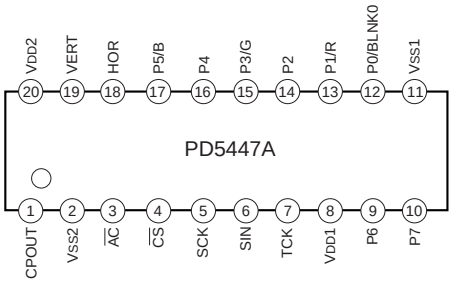
Pin No.	Pin Name	I/O	BLOCK TYPE	Pin No.	Pin Name	I/O	BLOCK TYPE
125	UD12	I	F101H	135	UD2	I	F101H
126	UD11	I	F101H	136	UD1	I	F101H
127	UD10	I	F101H	137	UD0	I	F101H
128	UD9	I	F101H	138	CLRB	I	FIU1
129	UD8	I	F101H	139	SEL2B	I	FIU1
130	UD7	I	F101H	140	CS5B	I	FIU1
131	UD6	I	F101H	141	HWRB	I	FIU1
132	UD5	I	F101H	142	IC_RESB	I	FUS1
133	UD4	I	F101H	143	GND	-	-
134	UD3	I	F101H	144	GND	-	-

■ PD5447A

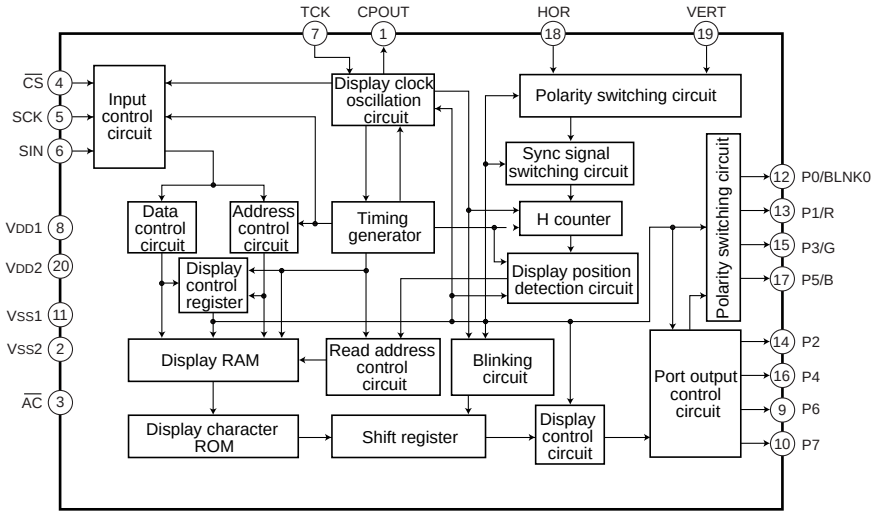
(DIGITAL VIDEO ASSY: IC1271)

OSD IC

● Pin Assignment



● Block Diagram

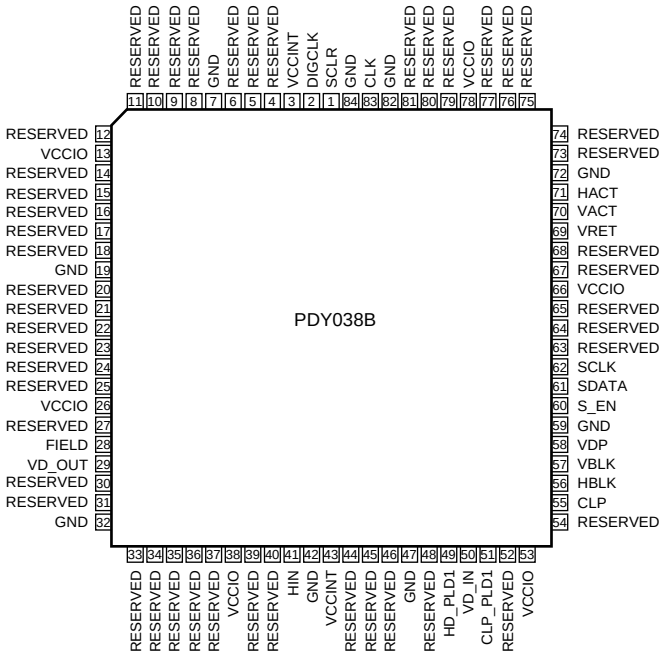


■ PDY038B

(DIGITAL VIDEO ASSY: IC1286)

FPGA

● Pin Assignment



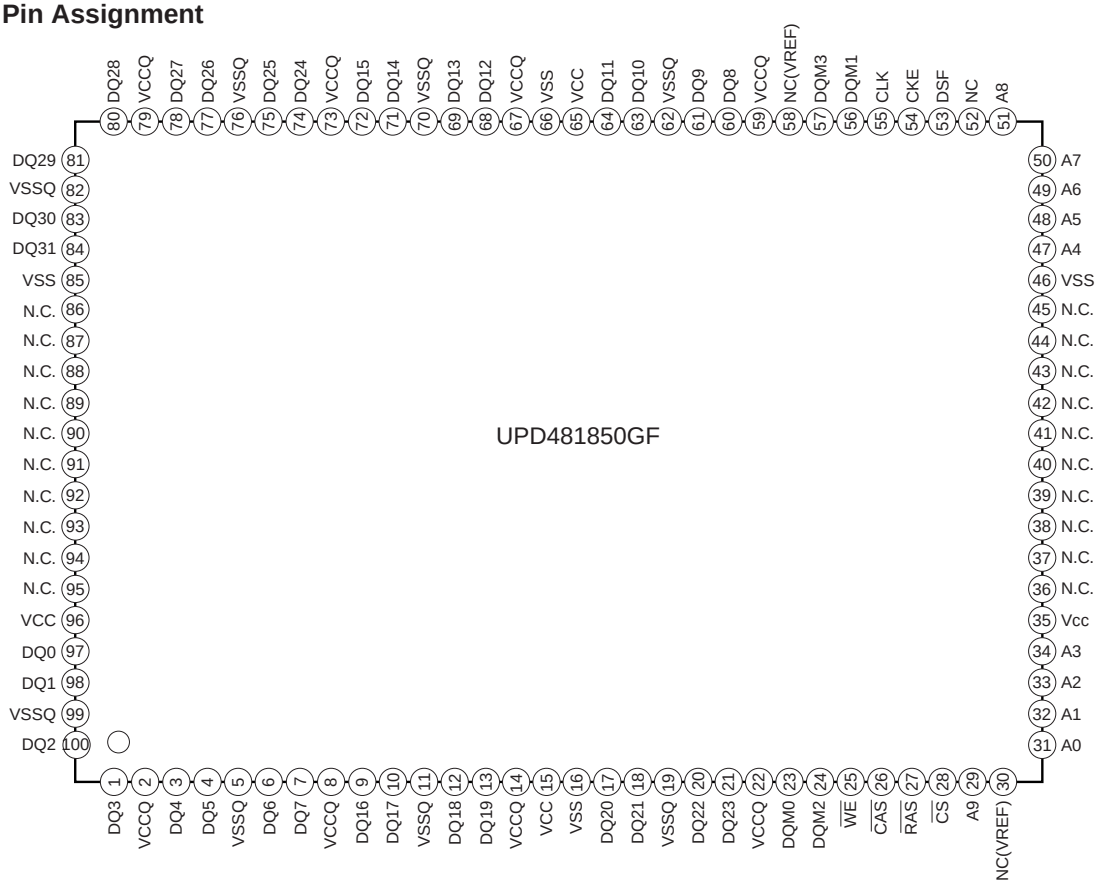
VCCINT = Exclusive power supply pin. Connected to VCC
VCCIO = Exclusive power supply pin. Connected to VCC
GND = Exclusive ground pin or unused exclusive input. Connected to GND
RESERVED = Unused I/O pin. Do not connect.

■ UPD481850GF

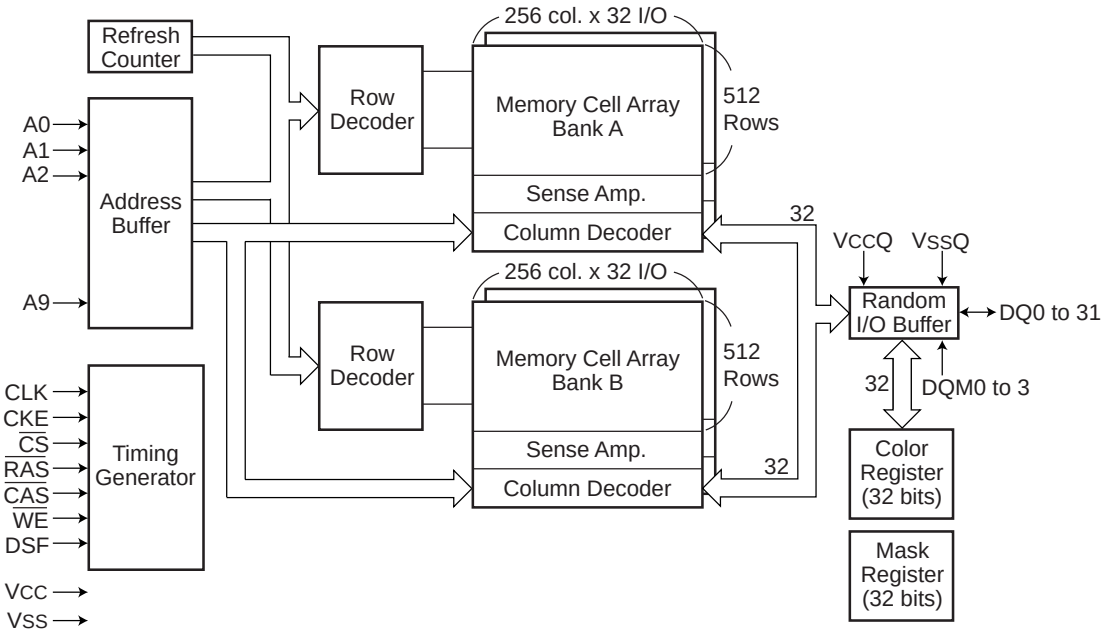
(DIGITAL VIDEO ASSY: IC1701)

SGRAM

● Pin Assignment



● Block Diagram



■ HD64F3048F16

(DIGITAL VIDEO ASSY: IC1601)

PANEL µ-COM

● Pin Function

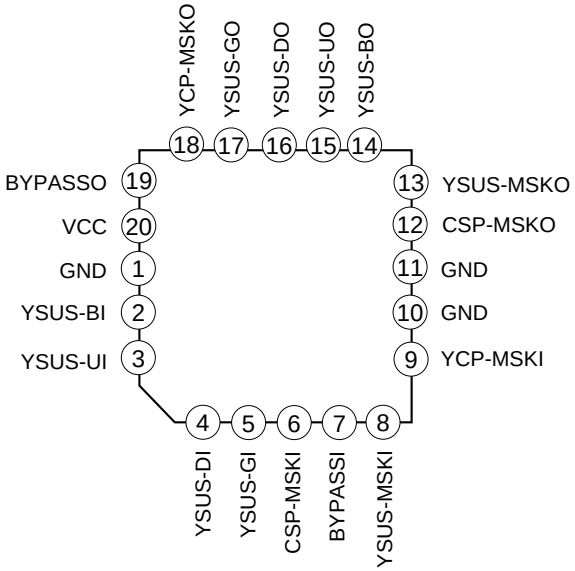
Pin No.	Pin Name	I/O	Pin Function	Pin No.	Pin Name	I/O	Pin Function
1	VCC	-	+5D	51	A14	O	ADRESS14
2	PB0	O	SEL0B	52	A15	O	-
3	PB1	O	SEL1B	53	A16	O	-
4	PB2	O	SEL2B	54	A17	O	-
5	PB3	O	LN_DTB	55	A18	O	-
6	PB4	O	PRG_INT12	56	A19	O	-
7	PB5	O	PRG_INTB	57	VSS	-	DGND
8	PB6	I	STOPB	58	P60	O	MODE0
9	PB7	O	CLRB	59	P61	O	MODE1
10	RES0	-	VPP/RESO	60	P62	O	MODE2
11	VSS	-	DGND	61	Ø	O	-
12	P90	O	ERR	62	STBY	I	-
13	TXD1	O	D_TXD	63	RES	I	RESET
14	RXD0	I	D_DATA	64	NMI	-	-
15	RXD1	I	D_RXD	65	VSS	-	DGND
16	SCK0	I	D_CLK	66	EXTAL	I	CLK1
17	P95	O	BUSY	67	XTAL	I	-
18	D0	I/O	DATA0	68	VCC	-	+5D
19	D1	I/O	DATA1	69	AS	O	-
20	D2	I/O	DATA2	70	RD	O	RDB
21	D3	I/O	DATA3	71	HWR	O	HWRB
22	VSS	-	DGND	72	LWR	O	-
23	D4	I/O	DATA4	73	MD0	I	MD0
24	D5	I/O	DATA5	74	MD1	I	MD1
25	D6	I/O	DATA6	75	MD2	I	MD2
26	D7	I/O	DATA7	76	AVCC	-	AVCC
27	D8	I/O	DATA8	77	VREF	-	VREF
28	D9	I/O	DATA9	78	P70	I	RFLD
29	D10	I/O	DATA10	79	P71	I	VACT_BL
30	D11	I/O	DATA11	80	P72	I	ABFLD
31	D12	I/O	DATA12	81	P73	I	PLL_ULK
32	D13	I/O	DATA13	82	P74	-	-
33	D14	I/O	DATA14	83	P75	-	-
34	D15	I/O	DATA15	84	P76	-	-
35	VCC	-	+5D	85	P77	-	-
36	A0	O	ADRESS0	86	AVSS	-	DGND
37	A1	O	ADRESS1	87	P80	O	SENB
38	A2	O	ADRESS2	88	P80/IRQ1	I	VDL
39	A3	O	ADRESS3	89	IRQ2	I	APLP
40	A4	O	ADRESS4	90	P83/IRQ3	I	EMG_U
41	A5	O	ADRESS5	91	P84	-	-
42	A6	O	ADRESS6	92	VSS	-	DGND
43	A7	O	ADRESS7	93	PA0	-	-
44	VSS	-	DGND	94	PA1	O	SCLK_P
45	A8	O	ADRESS8	95	PA2	O	ENABLE
46	A9	O	ADRESS9	96	PA3	O	SDT
47	A10	O	ADRESS10	97	PA4	O	SCLK
48	A11	O	ADRESS11	98	PA5	O	CSB5
49	A12	O	ADRESS12	99	PA6	O	CSB4
50	A13	O	ADRESS13	100	PA7	O	RESETB

■ PDY042A

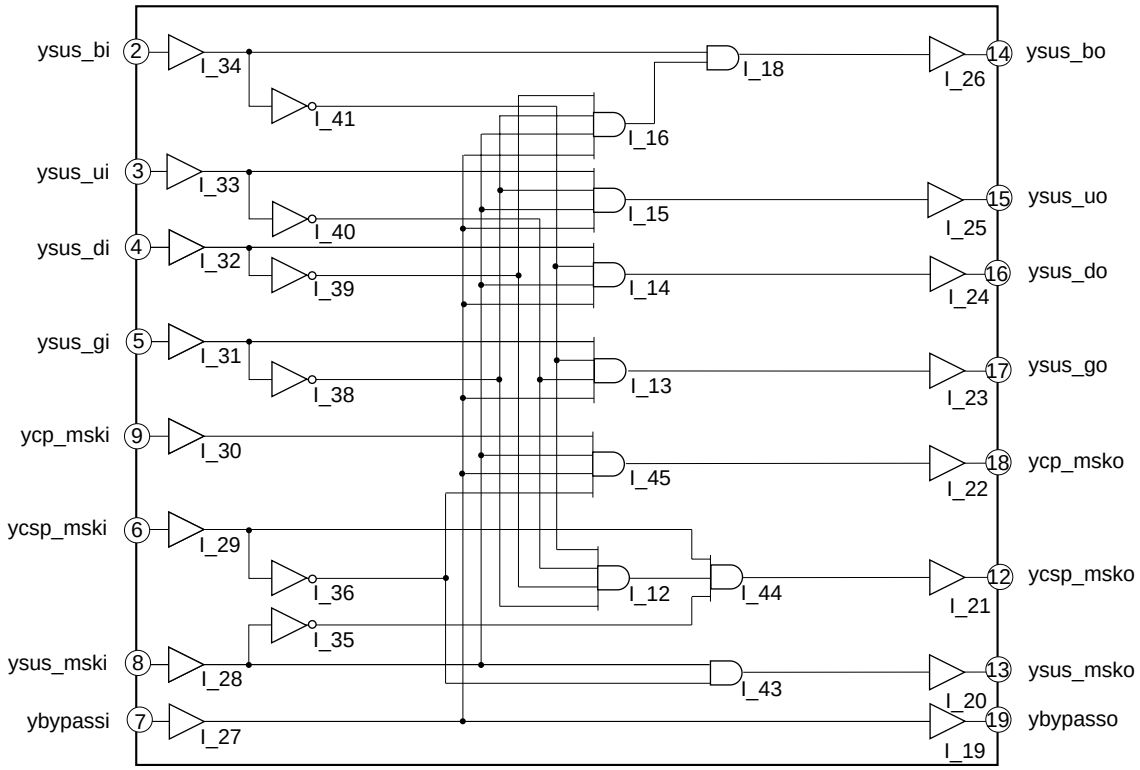
(Y DRIVE A ASSY: IC3109)

PLD

● Pin Assignment



● Block Diagram

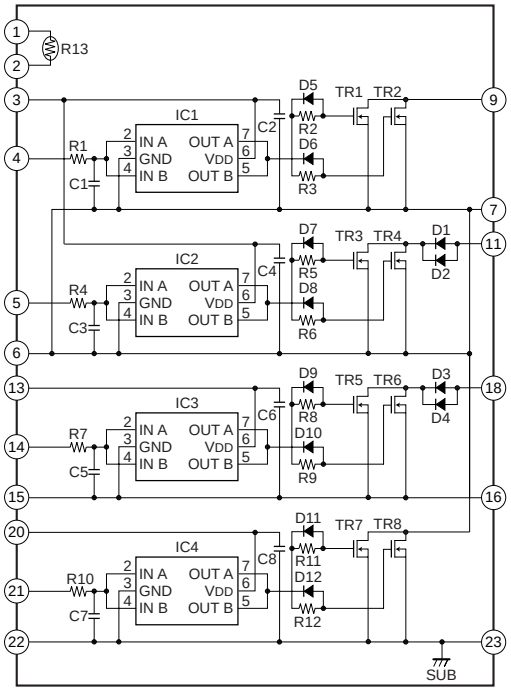


■ STK795-120A

(Y DRIVE A ASSY: IC3101)

PDP PULSE MODULE IC

● Pin Assignment

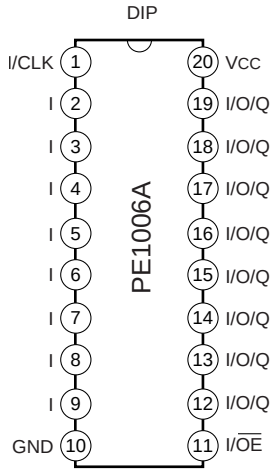


■ PE1006A

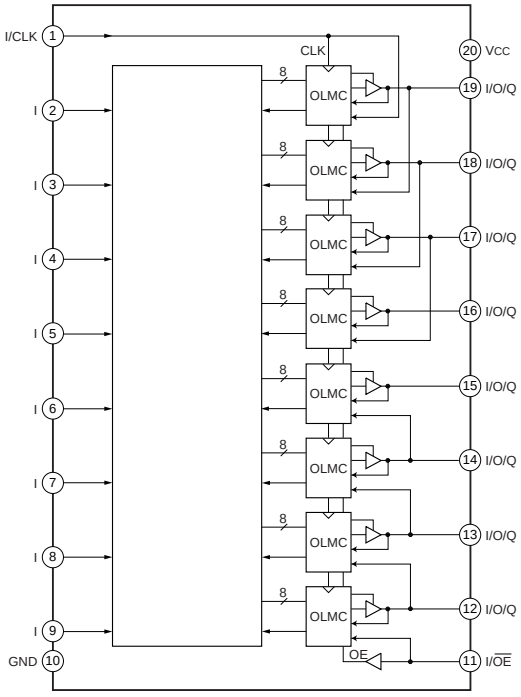
(X DRIVE A ASSY: IC2612)

PLD IC

● Pin Assignment



● Block Diagram



■ PD5435

(µ-CON ASSY : IC3703)

TV SYSTEM CONTROL µ-COM

● **Pin Function**

Pin No..	Pin Name	I/O	Pin Function
1	KEY2	I	A/D key input
2	P/CB OX	I	Refer to separate sheet
3	S2DET	I	0 to 1.3V:normal, 1.4 to 2.4V:letter box, 2.5 to 5V:squeeze
4	PH	I	SYNC polarity (H) for PC discrimination. When not input:L
5	PV	I	SYNC polarity (V) for PC discrimination. When not input:L
6	Y OX	I	-
7	SCL	O	I^2C BUS data
8	SDA	I/O	I^2C BUS clock
9	CLK2	O	Clock for serial 3 lines
10	DATA2	I/O	Data for serial 3 lines
11	RTS	O	Transmission request signal to C BOX
12	VOL	O	AUDIO VOLUME 0.6V:MIN, 5V:MAX
13	-	-	-
14	HDM	I	SYNCK (H) for PC discrimination
15	VDM	I	SYNCK (L) for PC discrimination
16	CTS	I	Transmission approval to C BOX
17	BUSY	I	Reception rejection signal from panel microprocessor
18	*EMG P	-	NOT USED.
19	EP RST	O	EEPROM reset
20	(E)SDA	I/O	I^2C BUS data for EEPROM
21	(E)SCL	O	I^2C BUS clock for EEPROM
22	TXD	O	Transmission to outside (169 C BOX, 43 PC)
23	RXD	I	Reception with outside (169 C BOX, 43 PC)
24	REM	I	Remote control signal
25	KEY	I	Key scan input
26	(CNVSS)	-	-
27	(*RESET)	-	-
28	POWER	O	POWER ON/OFF
29	*S OX	I	S input:L/composite input:H
30	(X IN)	-	-
31	(X OUT)	-	-
32	(VSS)	-	-
33	PLL_ULK	I/O	PLL asynchronous state
34	50/60	O	50/60
35	RGB SW1	O	BNC:H (RGB1)/Dsub:(RGB2)
36	ERR	I	Communication NG from panel microprocessor
37	PN RST	O	Panel microprocessor reset signal
38	V MUTE	O	Screen muting
39	*LED GRN	O	Green LED lighting
40	*LED RED	O	Red LED lighting
41	*LED YLW	-	Yellow LED lighting
42	CLOCK	-	-
43	COL2	-	-
44	COL1	-	-
45	*SW3	-	-
46	*SW2	-	-
47	*SW1	-	-
48	*EWG U	-	NOT USED.
49	*PN MUTE	O	Panel muting (NOT USED)
50	PMV	I	V SYNC when G ON SYNKCOMP SYNC

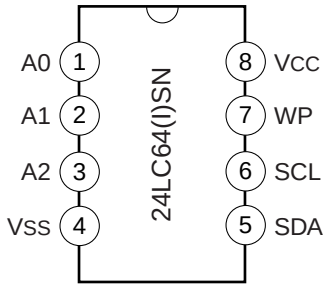
Pin No.	Pin Name	I/O	Pin Function
51	PMH	I	H SYNC when G ON SYNKCOMP SYNC
52	A MUTE	O	NOT USED
53	*PNL CE	O	Enable for panel microprocessor
54	PLD1 CE	O	Enable for PLD1
55	OSD CE	O	Enable for OSD
56	DAC CE	O	Enable for DAC
57	ON MUTE	O	NOT USED
58	PLD3 CE	O	-
59	PLD3 RST	O	Enable for PLD3
60	GATE CE	O	Reset for PLD3
61	AFC SET	O	NOT USED
62	EMG S1	-	NOT USED
63	EMG S2	-	NOT USED
64	FR SEL	O	When free-running is selected: H
65	*OSD CLR	O	When OSD is cleared: L
66	*RESET2	I	AC disconnection: L (includes PD detection)
67	FAN	O	NOT USED
68	TEMP PD	O	PD output for abnormally high temperature
69	*CB MUTE	O	When ID is set:H
70	EMG	O	NOT USED
71	SYNC OX2	I	Input for power management
72	SYNC OX1	I	Input for power management
73	(VCC)	-	-
74	(VRF)	-	-
75	(AVSS)	-	-
76	TEMP1	I	Temperature detection data input. L: Luminance change.
77	TEMP2	I	Temperature detection data input. L: POF.
78	TEMP3	I	Temperature detection data input (NOT USED).
79	TEMP4	I	Temperature detection data input (NOT USED).
80	TEMP5	I	Temperature detection data input (NOT USED).

■ 24LC64(I)SN

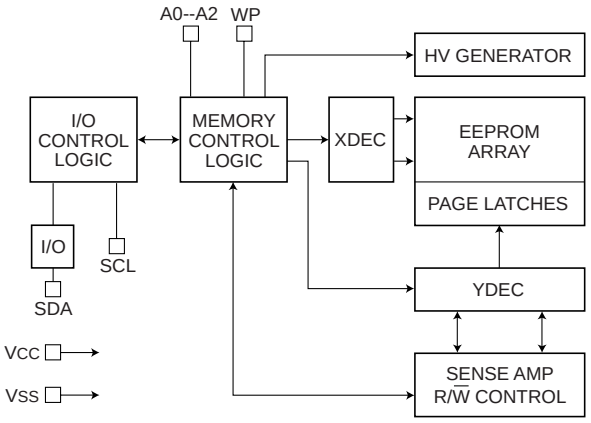
(µ-CON ASSY (1/5) : IC3704)

EEPROM

● Pin Assignment



● Block Diagram

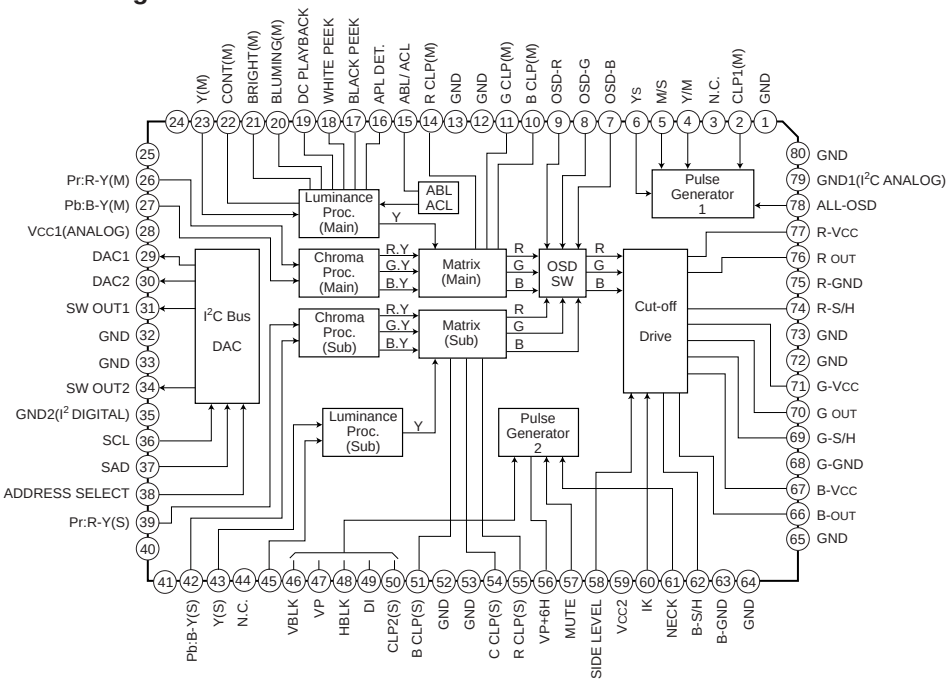


■ AN5390FBS

(RGB ASSY: IC6001)

HDTV IC

● Pin Assignment



● Pin Function

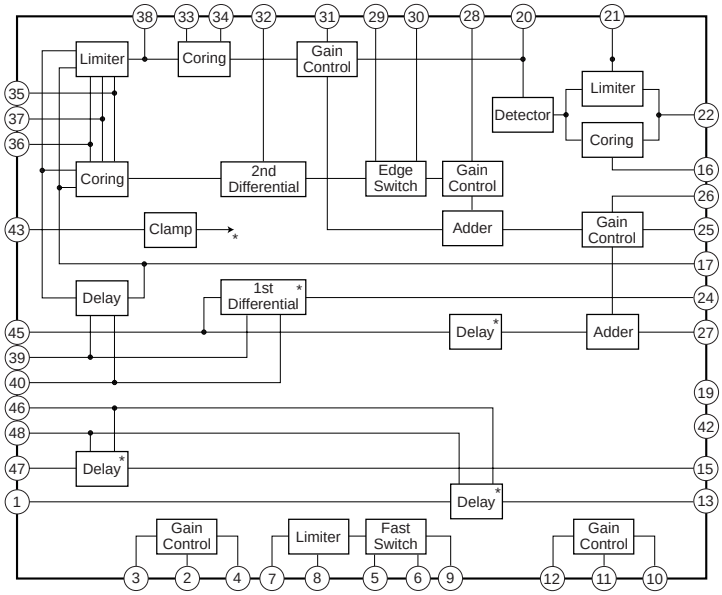
Pin No.	Pin Function	Pin No.	Pin Function	Pin No.	Pin Function
1	GND	28	VCC1 (analog)	55	R-CLP (S) filter terminal
2	CLP1 input terminal	29	DAC1 output terminal	56	VP+6H output terminal
3	Non connection	30	DAC2 output terminal	57	MUTE input terminal
4	YM input terminal	31	SW output 1	58	Side level variable terminal
5	M/S input terminal	32	GND	59	VCC2 (I^2C)
6	Ys input terminal	33	GND	60	IK input terminal
7	OSD-B input terminal	34	SW output 2	61	Neck detection input terminal
8	OSD-G input terminal	35	GND2 (FC)	62	B-S/H filter terminal
9	OSD-R input terminal	36	SCL input terminal	63	GND (For B output)
10	B-CLP (M) filter terminal	37	SDA input terminal	64	GND
11	G-CLP (M) filter terminal	38	Slave address switching terminal	65	GND
12	GND	39	Pr (S) signal input terminal	66	B output terminal
13	GND	40	GND	67	VCC (For B output)
14	R-CLP (M) filter terminal	41	GND	68	GND (For G output)
15	ABL/ACL signal filter terminal	42	Pb (S) signal input terminal	69	G-S/H filter terminal
16	APL detection filter terminal	43	Y (S) signal input terminal	70	G output terminal
17	Black peak detection filter terminal	44	Non connection	71	VCC (For G output)
18	White peak detection filter terminal	45	Y(S) signal slice level	72	GND
19	DC playback rate variable terminal	46	VBLK input terminal	73	GND
20	Blooming level input terminal	47	VP input terminal	74	R-S/H filter terminal
21	ABL input terminal	48	H BLK input terminal	75	GND (For R output)
22	ACL input terminal	49	DI input terminal	76	R output terminal
23	Y (M) signal input terminal	50	CLP2 input terminal	77	VCC (For R output)
24	GND	51	B-CLP (S) filter terminal	78	All screen OSD signal input terminal
25	GND	52	GND	79	GND1 (Analog)
26	Pr (M) signal input terminal	53	GND	80	GND
27	Pb (M) signal input terminal	54	G-CLP (S) filter terminal		

■ AN5395FBP

(RGB ASSY : IC6002)

HDTV IC

● Block Diagram



● Pin Function

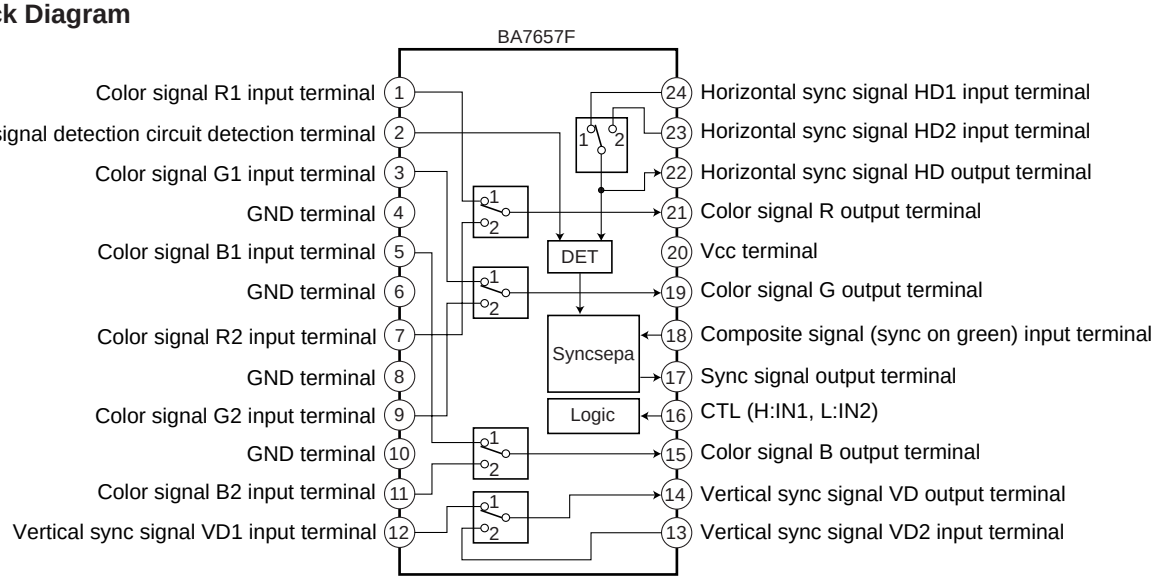
Pin No.	Pin Function	Pin No.	Pin Function
1	PR input	25	Sharpness mute control
2	VM preamplifier gain control	26	Sharpness control
3	VM preamplifier input	27	Y output
4	VM preamplifier output	28	Contour gain control
5	Sub screen Ys input	29	Contour bias
6	Ys input	30	Secondary differential input
7	VM limiter amplifier input	31	Fine gain control
8	VM limiter amplifier gain control	32	Post-correction primary differential output
9	VM limiter amplifier output	33	Fine coring control
10	Sub screen amplifier output	34	Fine coring bias
11	Sub screen amplifier gain control	35	Differential signal bias 1
12	Sub screen amplifier output	36	Contour, fine separation level control
13	PR output	37	Differential signal bias 2
14	NC	38	Fine limiter output
15	PB output	39	Y delay line switch 1
16	DSC large signal gain control	40	Y delay line switch 2
17	Pre-correction primary differential input	41	NC
18	NC	42	GND
19	VCC	43	Clamp pulse input
20	DSC detection output	44	NC
21	DSC small signal gain control	45	Y input
22	DSC input	46	C delay line switch 1
23	DSC bias	47	PB input
24	Pre-correction primary differential output	48	C delay line switch 2

■ BA7657F

(RGB ASSY : IC5101)

VIDEO SW IC

● Block Diagram

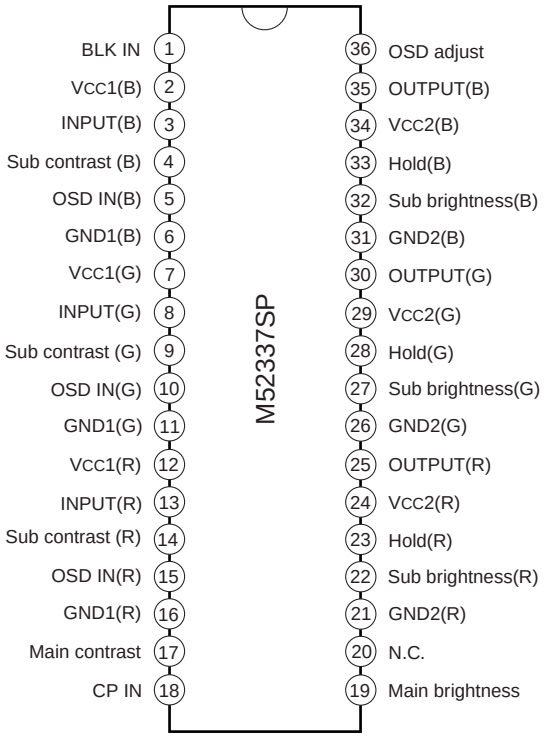


■ M52337SP

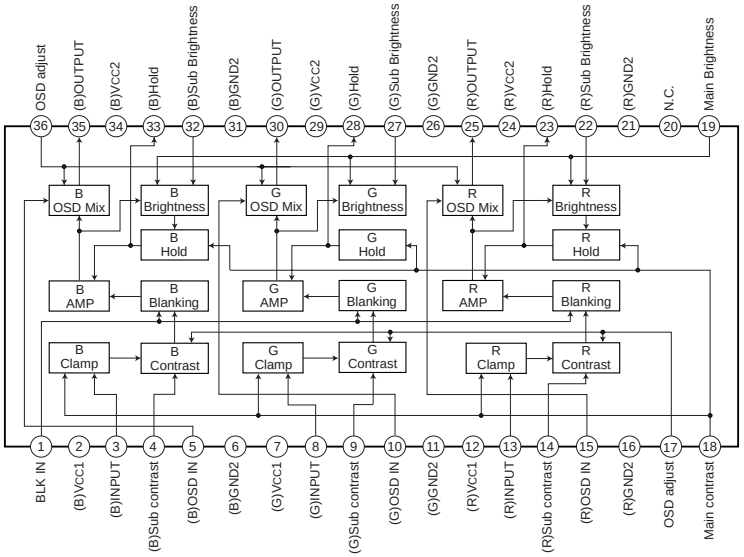
(RGB ASSY : IC5801)

3 channel video preamp

● Pin Assignment



● Block Diagram

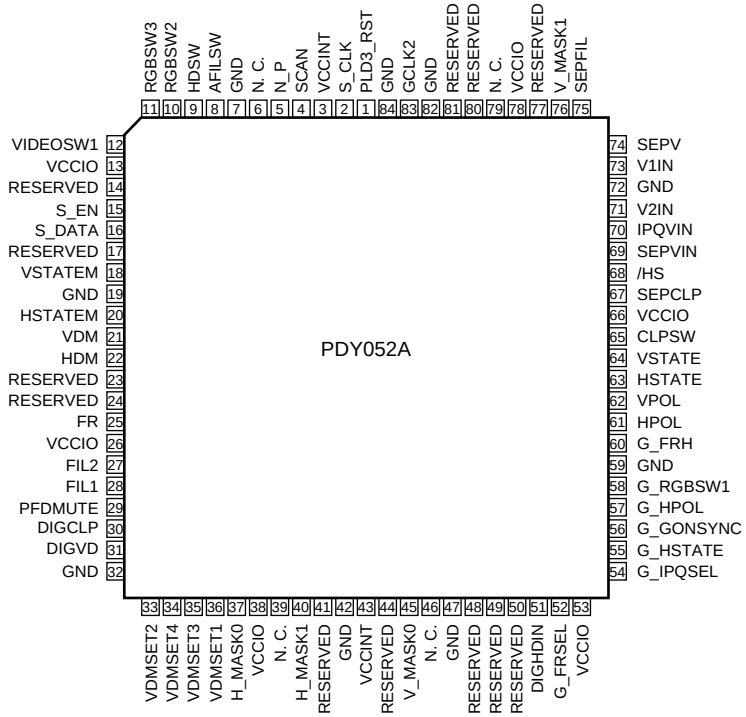


■ PDY052A

(RGB ASSY : IC5301)

CMOS EPLD

● Pin Assignment

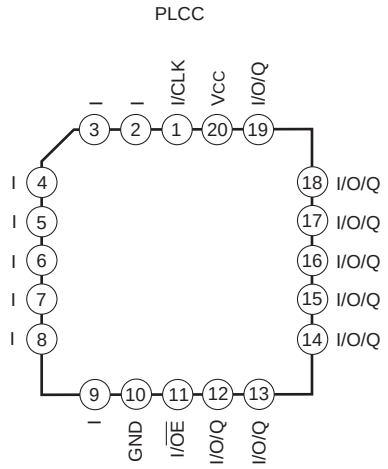


■ PE1007A

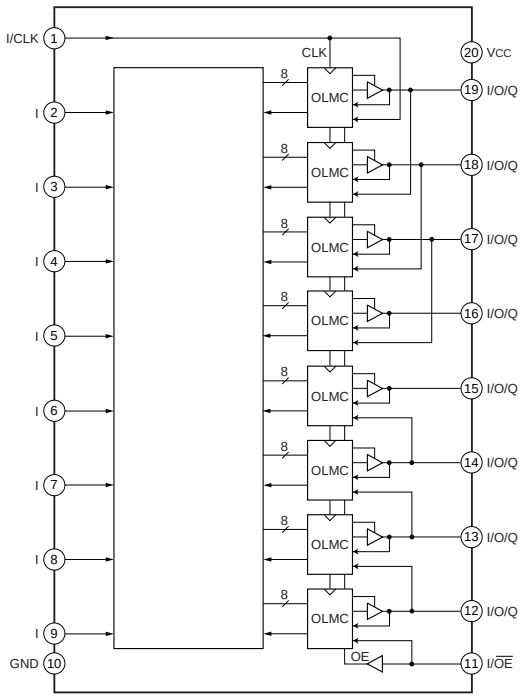
(RGB ASSY : IC5310)

PLD IC

● Pin Assignment



● Block Diagram

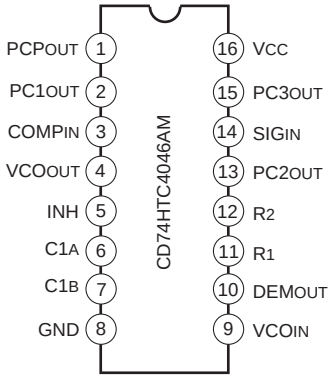


■ CD74HCT4046AM

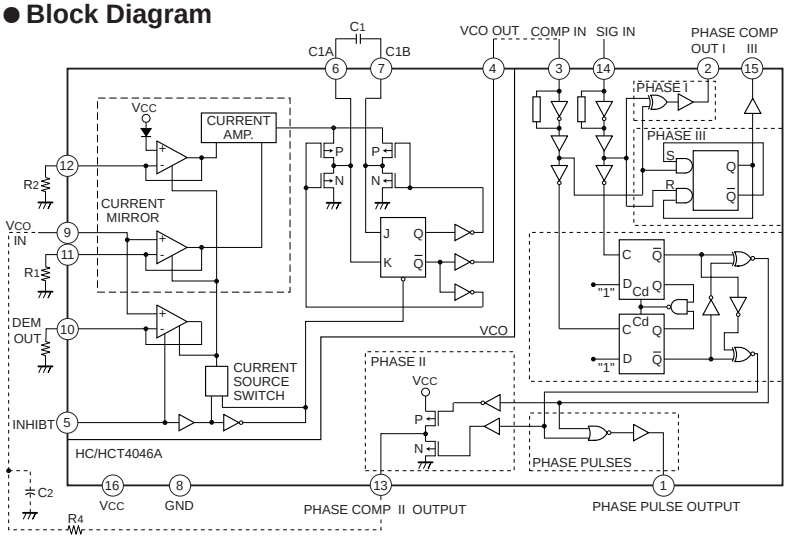
(PROGRESSIVE BLOCK : IC4713)

PLL IC

● Pin Assignment



● Block Diagram



● Pin Function

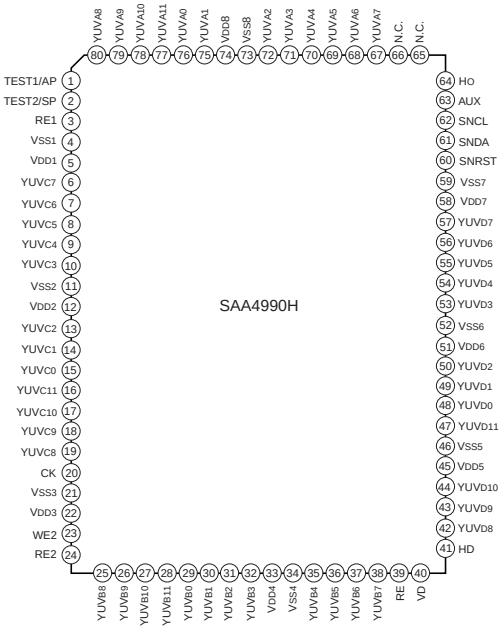
Pin No.	Pin Name	Pin Function	Pin No.	Pin Name	Pin Function
1	PCP_{OUT}	Phase comparator pulse output	9	VCO_{IN}	VCO input
2	$PC1_{OUT}$	Phase comparator 1 output	10	DEM_{OUT}	Demodulator output
3	$COMP_{IN}$	Comparator input	11	R_1	Resistor R1 connection
4	VCO_{OUT}	VCO output	12	R_2	Resistor R2 connection
5	INH	Inhibit input	13	$PC2_{OUT}$	Phase comparator 2 output
6	$C1_A$	Capacitor C1 connection A	14	SIG_{IN}	Signal input
7	$C1_B$	Capacitor C1 connection B	15	$PC3_{OUT}$	Phase comparator 3 output
8		Ground(0V)	16		Positive supply voltage

■ SAA4990H

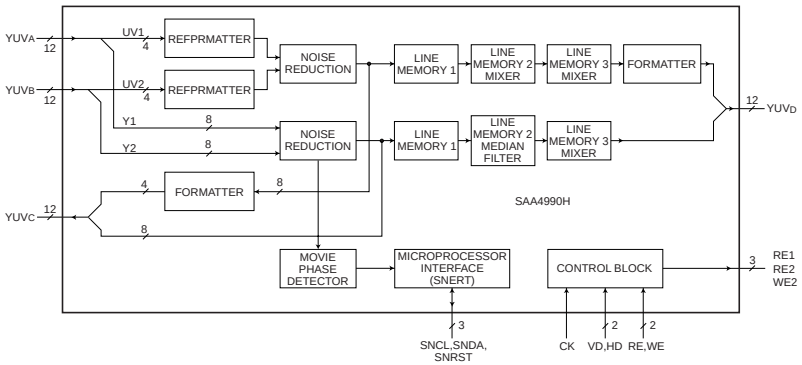
(PROGRESSIVE BLOCK : IC4719)

PROZONIC IC

● Pin Assignment



● Block Diagram



● **Pin Function**

Pin No.	Pin Name	TYPE	Pin Function
1	TEST1/AP	I	Action pin for testing to be connected to Vss
2	TEST2/SP	I	Shift pin for testing to be connected to Vss
3	RE1	O	Read enable to FM1
4	VSS 1	G	Ground 1
5	VDD 1	S	Supply voltage 1
6	YUV C7	O	Y bit 7 to FM2
7	YUV C6	O	Y bit 6 to FM2
8	YUV C5	O	Y bit 5 to FM2
9	YUV C4	O	Y bit 4 to FM2
10	YUV C3	O	Y bit 3 to FM2
11	VSS 2	G	Ground 2
12	VDD 2	S	Supply voltage 2
13	YUV C2	O	Y bit 2 to FM2
14	YUV C1	O	Y bit 1 to FM2
15	YUV C0	O	Y bit 0 to FM2
16	YUV C11	O	UV bit 3 to FM2
17	YUV C10	O	UV bit 2 to FM2
18	YUV C9	O	UV bit 1 to FM2
19	YUV C8	O	UV bit 0 to FM2
20	CK	I	Master clock,nominal 27 or 32 MHz
21	VSS 3	G	Ground 3
22	VDD 3	S	Supply voltage 3
23	WE2	O	Write enable to FM2
24	RE2	O	Read enable to FM2
25	YUV B8	I	UV bit 0 from FM2
26	YUV B9	I	UV bit 1 from FM2
27	YUV B10	I	UV bit 2 from FM2
28	YUV B11	I	UV bit 3 from FM2
29	YUV B0	I	Y bit 0 from FM2
30	YUV B1	I	Y bit 1 from FM2
31	YUV B2	I	Y bit 2 from FM2
32	YUV B3	I	Y bit 3 from FM2
33	VDD 4	S	Supply voltage 4
34	VSS 4	G	Ground 4
35	YUV B4	I	Y bit 4 from FM2
36	YUV B5	I	Y bit 5 from FM2
37	YUV B6	I	Y bit 6 from FM2
38	YUV B7	I	Y bit 7 from FM2
39	RE	I	Master read enable
40	VD	I	Field frequent reset, vertical display
41	HD	I	Horizontal reference signal
42	YUV D8	O	UV bit 0
43	YUV D9	O	UV bit 1
44	YUV D10	O	UV bit 2
45	VDD 5	S	Supply voltage 5
46	VSS 5	G	Ground 5
47	YUV D11	O	UV bit 3
48	YUV D0	O	Y bit 0
49	YUV D1	O	Y bit 1
50	YUV D2	O	Y bit 2

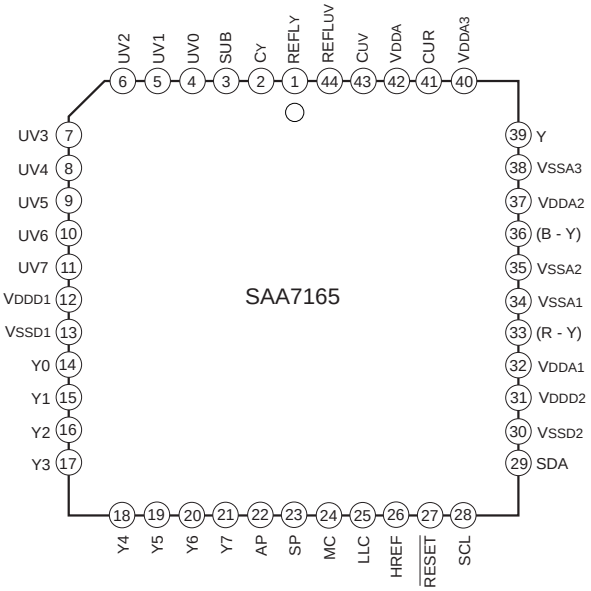
Pin No.	Pin Name	TYPE	Pin Function
51	VDD 6	S	Supply voltage 6
52	VSS 6	G	Ground 6
53	YUV D3	O	Y bit 3
54	YUV D4	O	Y bit 4
55	YUV D5	O	Y bit 5
56	YUV D6	O	Y bit 6
57	YUV D7	O	Y bit 7
58	VDD 7	S	Supply voltage 7
59	VSS 7	G	Ground 7
60	SNRST	I	Field frequent reset from microcontroller;reset for SNERT interface
61	SNDA	I/O	Data for SNERT interface
62	SNCL	I	Clock for SNERT interface
63	AUX	O	Spre output form line-sequencer
64	Ho	O	Output hold to e.g.LC.display
65	NC	-	Not connected
66	NC	-	Not connected
67	YUV A7	I	Y bit 7 from FM1
68	YUV A6	I	Y bit 6 from FM1
69	YUV A5	I	Y bit 5 from FM1
70	YUV A4	I	Y bit 4 from FM1
71	YUV A3	I	Y bit 3 from FM1
72	YUV A2	I	Y bit 2 from FM1
73	VSS 8	G	Ground 8
74	VDD 8	S	Supply voltage 8
75	YUV A1	I	Y bit 1 from FM1
76	YUV A0	I	Y bit 0 from FM1
77	YUV A11	I	UV bit 3 from FM1
78	YUV A10	I	UV bit 2 from FM1
79	YUV A9	I	UV bit 1 from FM1
80	YUV A8	I	UV bit 0 from FM1

■ ASAA7165WP

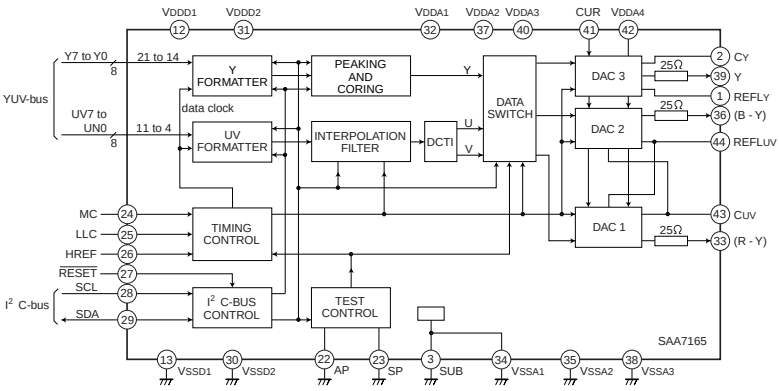
(PROGRESSIVE BLOCK : IC4702)

VIDEO ENHANCEMENT D/A

● **Pin Assignment**



● **Block Diagram**



● Pin Function

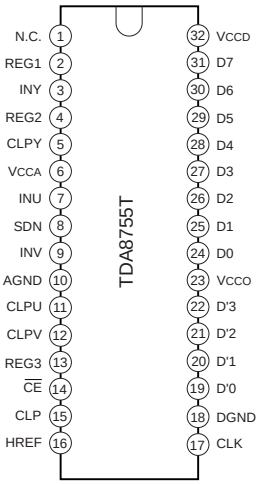
PIN NO.	PIN NAME	PIN FUNCTION
1	REFL Y	Low reference of luminance DAC (connected to VSS A1)
2	CY	Capacitor for luminance DAC (high reference)
3	SUB	Substrate (connected to VSS A1)
4	UV0	UV signal input bit UV7 (digital colour-difference signal)
5	UV1	UV signal input bit UV6 (digital colour-difference signal)
6	UV2	UV signal input bit UV5 (digital colour-difference signal)
7	UV3	UV signal input bit UV4 (digital colour-difference signal)
8	UV4	UV signal input bit UV3 (digital colour-difference signal)
9	UV5	UV signal input bit UV2 (digital colour-difference signal)
10	UV6	UV signal input bit UV1 (digital colour-difference signal)
11	UV7	UV signal input bit UV0 (digital colour-difference signal)
12	VDD D1	+5V digital supply voltage 1
13	VSS D1	Digital ground 1(0 V)
14	Y0	Y signal input bit Y7 (digital luminance signal)
15	Y1	Y signal input bit Y6 (digital luminance signal)
16	Y2	Y signal input bit Y5 (digital luminance signal)
17	Y3	Y signal input bit Y4 (digital luminance signal)
18	Y4	Y signal input bit Y3 (digital luminance signal)
19	Y5	Y signal input bit Y2 (digital luminance signal)
20	Y6	Y signal input bit Y1 (digital luminance signal)
21	Y7	Y signal input bit Y0 (digital luminance signal)
22	AP	Connected to ground (action pin for testing)
23	SP	Connected to ground (shift pin for testing)
24	MC	Data cloack CREF(e.g.13.5MHz);at MC=HIGH,the LLC driver-by-two is inactive
25	LLC	Line-locked clock signal(LL27=27MHz)
26	HREF	Data clock for YUV data inputs (for active line 768Y or 640Y long)
27	$\overline{\text{RESET}}$	Reset input (active LOW)
28	SCL	I^2C-bus clock line
29	SDA	I^2c-bus data line
30	VSS D2	Digital ground 2(0V)
31	VDD D2	+5V digital supply voltage 2
32	VDD A1	+5V analog supply voltage for buffer of DAC 1
33	(R-Y)	±(R-Y)output signal (analog signal)
34	VSS A1	Analog ground 1(0V)
35	VSS A2	Analog ground 2(0V)
36	(B-Y)	±(B-Y)output signal (analog colour-difference signal)
37	VDD A2	+5V analog supply voltage for buffer of DAC 2
38	VSS A2	Analog ground 3 (0V)
39	Y	Y output signal(analog luminance signal)
40	VDD A3	+5V analog supply voltage for buffer of DAC 3
41	CUR	Current input for analog output buffers
42	VDD A4	Supply and reference voltage for the three DAC S
43	C UV	Capacitor for chrominance DAC S(high reference)
44	REF L UV	Low reference of chrominance DAC S(connected to VSS A1)

■ TDA8755T

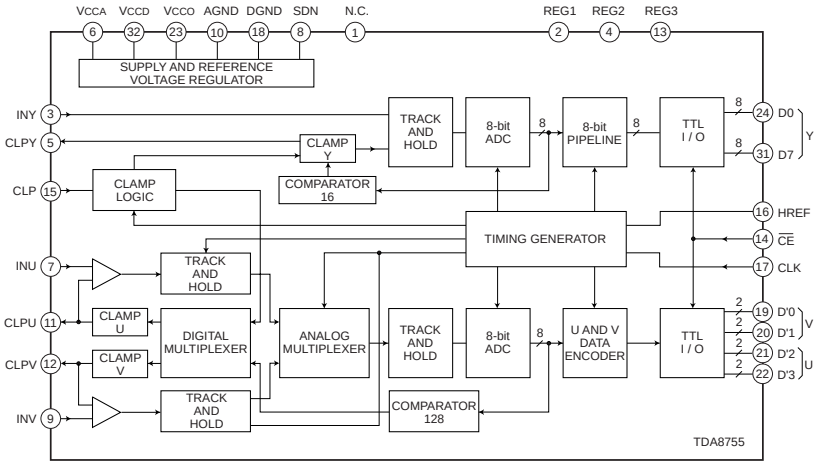
(PROGRESSIVE BLOCK : IC4703)

VIDEO A/D CONVERTER

● Pin Assignment



● Block Diagram



● Pin Function

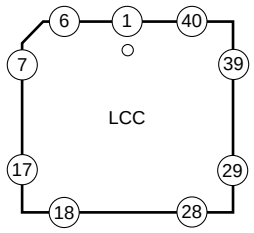
PIN NO.	PIN NAME	PIN FUNCTION
1	NC	Not connected
2	REG1	Decoupling input (internal stabilization loop decoupling)
3	INY	Y analog voltage input
4	REG2	Decoupling input (internal stabilization loop decoupling)
5	CLPY	Y clamp capacitor connection
6	VCC A	Analog positive supply voltage (+5V)
7	INU	U analog voltage input
8	SDN	Stabilizer decoupling node and analog reference voltage (+3.35 V)
9	INV	V analog voltage input
10	AGND	Analog ground
11	CLPU	U clamp capacitor connection
12	CLPV	V clamp capacitor connection
13	REG3	Decoupling input (internal stabilization loop decoupling)
14	$\overline{CE}$	Chip enable input(TTL level input active LOW)
15	CLP	Clamp control input
16	HREF	Horizontal reference signal
17	CLK	Clock input
18	DGND	Digital ground
19	D`0	V data output; bit 0(n-1)
20	D`1	V data output; bit 1(n)
21	D`2	U data output; bit 0(n-1)
22	D`3	U data output; bit 1(n)
23	VCC O	Positive supply voltage for output stages (+5V)
24	D0	Y data output; blt 0(LSB)
25	D1	Y data output; blt 1
26	D2	Y data output; blt 2
27	D3	Y data output; blt 3
28	D4	Y data output; blt 4
29	D5	Y data output; blt 5
30	D6	Y data output; blt 6
31	D7	Y data output; blt 7(MSB)
32	VCC D	Digital positive supply voltage (+5V)

■ PE6001A9

(PROGRESSIVE BLOCK : IC4720)

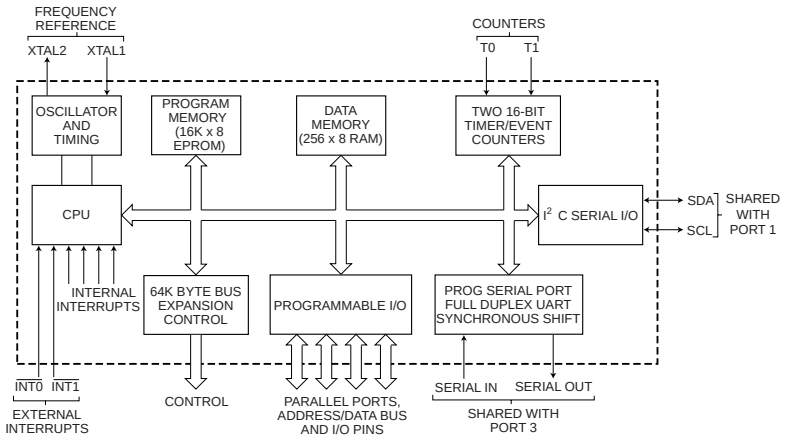
PROGRESSIVE ONE TIME µ-COM

● Pin Assignment

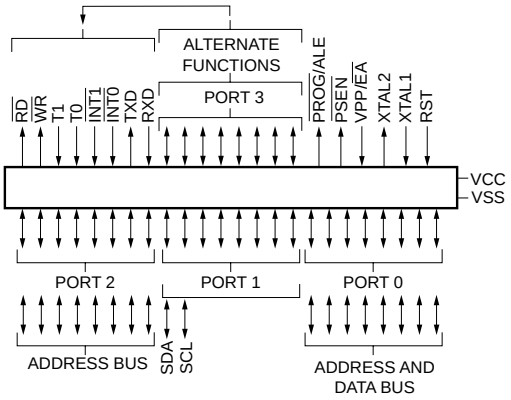


Pin	Function	Pin	Function
1	N.C.	23	NC8
2	P1.0	24	P2.0/A8
3	P1.1	25	P2.1/A9
4	P1.2	26	P2.2/A10
5	P1.3	27	P2.3/A11
6	P1.4	28	P2.4/A12
7	P1.5	29	P2.5/A13
8	P1.6/SCL	30	P2.6/A14
9	P1.7/SDA	31	P2.7/A15
10	RST	32	$\overline{\text{PSEN}}$
11	P3.0/RxD	33	ALE/$\overline{\text{PROG}}$
12	NC8	34	NC8
13	P3.1/TxD	35	$\overline{\text{EA}}$/VPP
14	P3.2/$\overline{\text{INT0}}$	36	P0.7/AD7
15	P3.3/$\overline{\text{INT1}}$	37	P0.6/AD6
16	P3.4/T0	38	P0.5/AD5
17	P3.5/T1	39	P0.4/AD4
18	P3.6/$\overline{\text{WR}}$	40	P0.3/AD3
19	P3.7/$\overline{\text{RD}}$	41	P0.2/AD2
20	XTAL2	42	P0.1/AD1
21	XTAL1	43	P0.0/AD0
22	VSS	44	VCC

● Block Diagram



● LOGIC

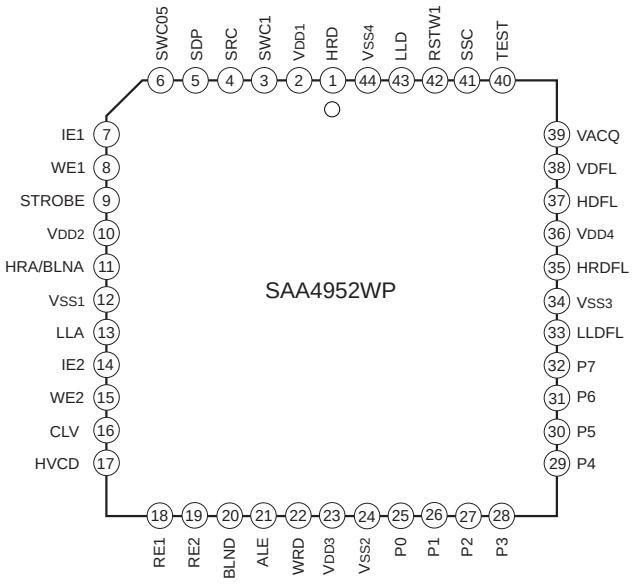


■ SAA4952WP

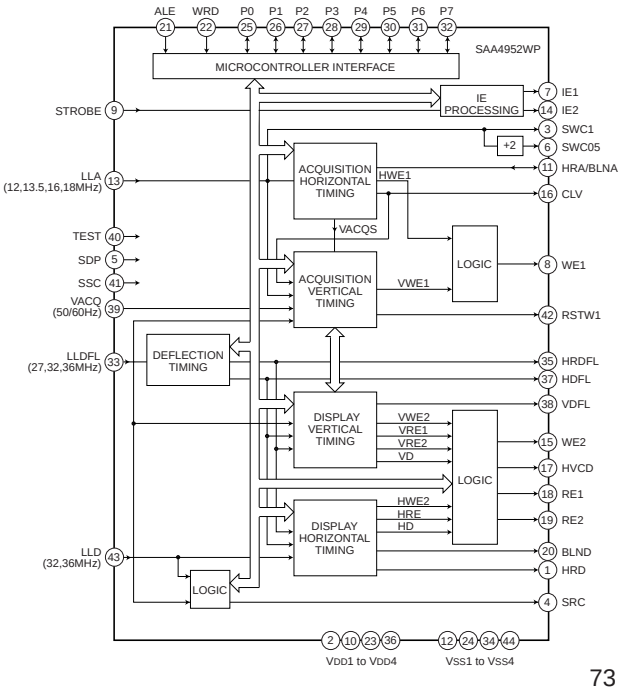
(PROGRESSIVE BLOCK : IC4704)

MEMORY OCONTROLER

● Pin Assignment



● Block Diagram



● Pin Function

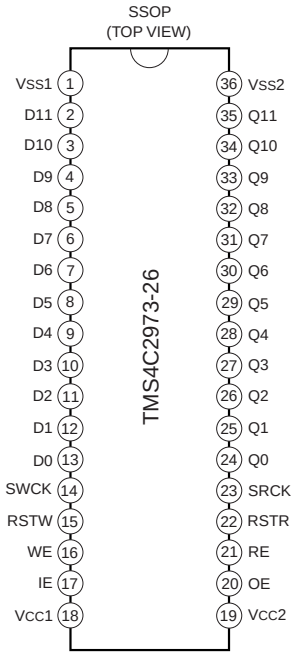
Pin No.	Pin Name	TYPE	Pin Function
1	HRD	O	Horizontal reference signal output (display PLL)
2	VDD 1	S	Supply voltage 1
3	SWC1	O	Serial write clock output for memory 1
4	SRC	O	Serial read clock output
5	SDP	I	Select deflection processor input
6	SWC05	O	Serial write clock output,SWC1 divided-by-2
7	IE1	O	Input enable signal output (memory 1)
8	WE1	O	Write enable signal output (memory 1)
9	STROBE	I	Strobe signal input
10	VCC 2	S	Supply voltage 2
11	HRA/BLNA	I/O	Horizontal reference signal output (acquisition part)/horizontal blanking signal input,reset for horizontal acquisition counters(acquisition part)
12	VSS 1	-	Ground 1
13	LLA	I	Line- locked cloack signal input (acquisition part)
14	IE2	O	Input enable signal output (memory 2)
15	WE2	O	Write enable signal output (memory 2)
16	CLV	O	Horizontal signal output (acquisition part)
17	HVCD	O	Horizontal,vertical or composite blanking signal output (display part)
18	RE1	O	Read enable signal output (memory 1)
19	RE2	O	Read enable signal output (memory 2)
20	BLND	O	Horizontal branking signal output (display part)
21	ALE	I	Address latch enable signal input
22	WRD	I	Wrirw/read data signal input
23	VCC 2	S	Supply voltage 3
24	VSS 2	-	Ground 2
25	P0	I/O	Data input/output signal bit 0
26	P1	I/O	Data input/output signal bit 1
27	P2	I/O	Data input/output signal bit 2
28	P3	I/O	Data input/output signal bit 3
29	P4	I/O	Data input/output signal bit 4
30	P5	I/O	Data input/output signal bit 5
31	P6	I/O	Data input/output signal bit 6
32	P7	I/O	Data input/output signal bit 7(MSB = Most Significant Bit)
33	LLDFL	I	Line-locked clock signal input (deflection part)
34	VSS 3	-	Ground 3
35	HRDFL	O	Horizontal reference signal output (deflection part)
36	VDD 4	S	Supply voltage 4
37	HDFL	O	Horizontal synchronization signal output (deflection part)
38	VDFL	O	Vertical synchronization signal output (deflection part)
39	VACQ	I	Vertical synchronization signal input (deflection part)
40	TEST	I	Test input
41	SSC	I	Select signal clock system input
42	RSTW1	O	Reset write signal output (memory 1)
43	LLD	I	Line-locked clock signal input (display part)
44	VSS 4	-	Ground 4

■ TMS4C2973-26

(PROGRESSIVE BLOCK : IC4705)

2.9M Field Memory

● Pin Assignment



● Pin Function

Pin Name	Pin Function
IE	Input enable
WE	Line enable
SWCK	Serial write clock
RSTW	Reset write
D 0-11	Data input
OE	Output enable
RE	Read enable
SRCK	Serial read clock
RSTR	Reset read
Q 0-11	Data output
Vcc 1, 2	3.3V power supply voltage
Vss 1, 2	Ground

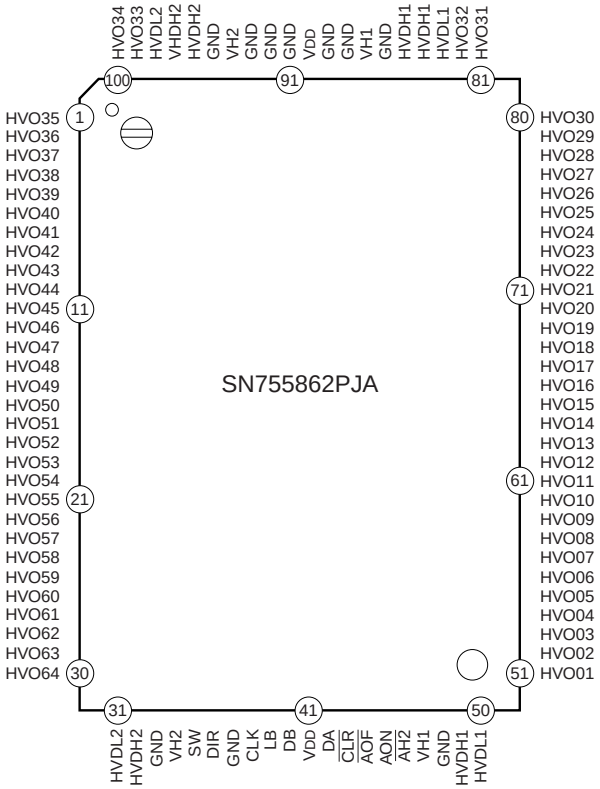
■ SN755862PJA

(SCAN A ASS'Y : IC7709)

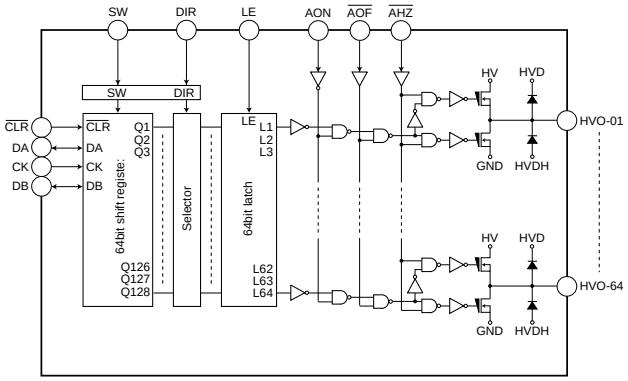
SCAN IC

● Pin Assignment

TOP VIEW



● Block Diagram



7.2 Diagnosis

7.2.1 Disassembly

1. Removing the Front Case

1) Set the unit on the stand in the secured upright position.
2) Remove the screws ① at the outermost circumference of the rear case. Ignore the marks and remove all 23 screws (Note 2) on the outermost circumference. (Fig. 1)
3) With screws ① removed, only the front case can be detached from the unit by pulling out the front case forward.

Note 1) Do not remove screws other than the screws ① on the outermost circumference as they secure the rear case in place.
Note 2) In some models, BMZ40P120FMC screws will be used for screw ①' instead of BPZ40P160FZK which is used for screw ①.
Note 3) The front case may be difficult to remove at point Ⓐ at the center of the upper side of the rear case because the boss of the front case is passed through the plate hole as shown in Fig. 2 and joined to the rear case. In such cases, push the tip of the boss with a screwdriver to release the front case from the rear case.

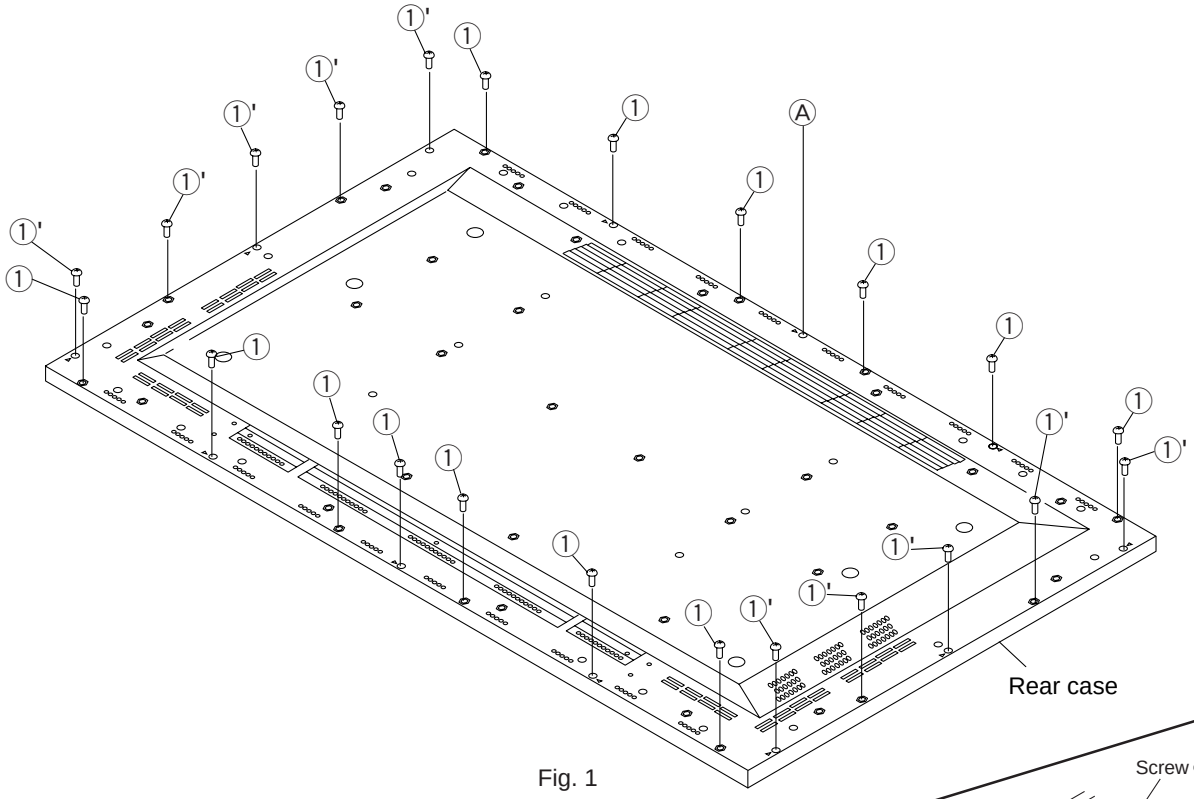


Fig. 1

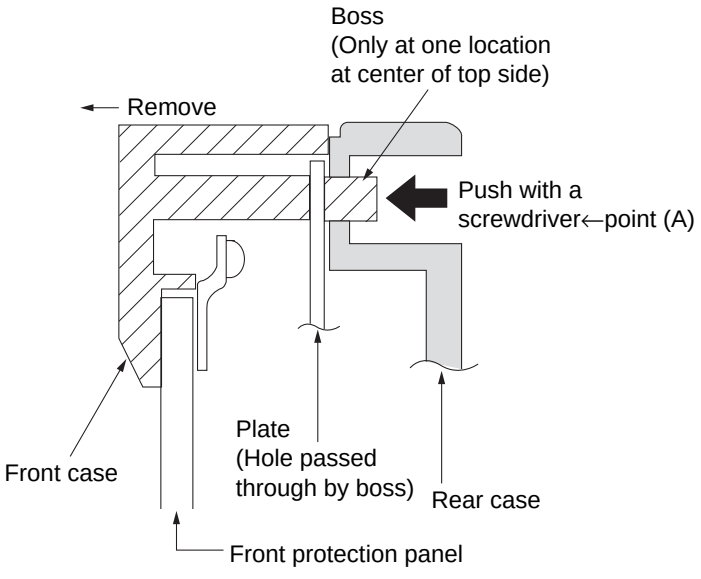
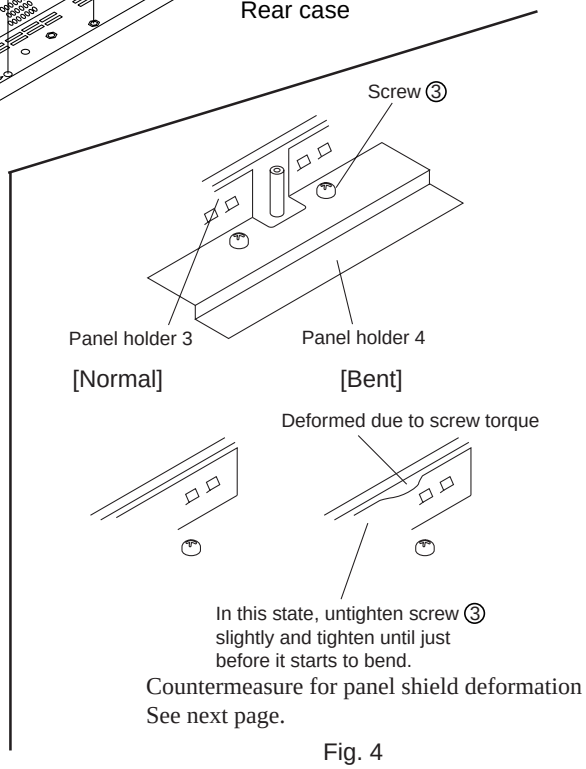


Fig. 2



Countermeasure for panel shield deformation
See next page.

Fig. 4

2. Removing the Front Protection Panel (Fig. 3, Fig. 4)

1) Remove all screws ② and ④ inside the front case.
   Be careful not to remove screws Ⓑ (two at the bottom) and screws Ⓒ (three at the top) because they are used for securing the aluminum sash.
2) Remove all panel shields 1 and 3 and panel holders 2 and 4.
3) Remove and replace the front protection panel.
4) Attach the protection panel by attaching to the bottom left side first, and then attach the front case assembly in the reverse procedure of the above.

When securing the front case to the unit, attach the two bosses Ⓓ (one each on the two edges of the top) as a guide so that the boss at the center Ⓐ passes through the hole on the rear case.

Note)

When attaching the panel shield and panel holder after replacing the protection panel, the panel shield may deform when tightening the screws ③ as shown in Fig. 4. If it deforms, untighten screws ③ slightly and tighten until just before it starts to bend.

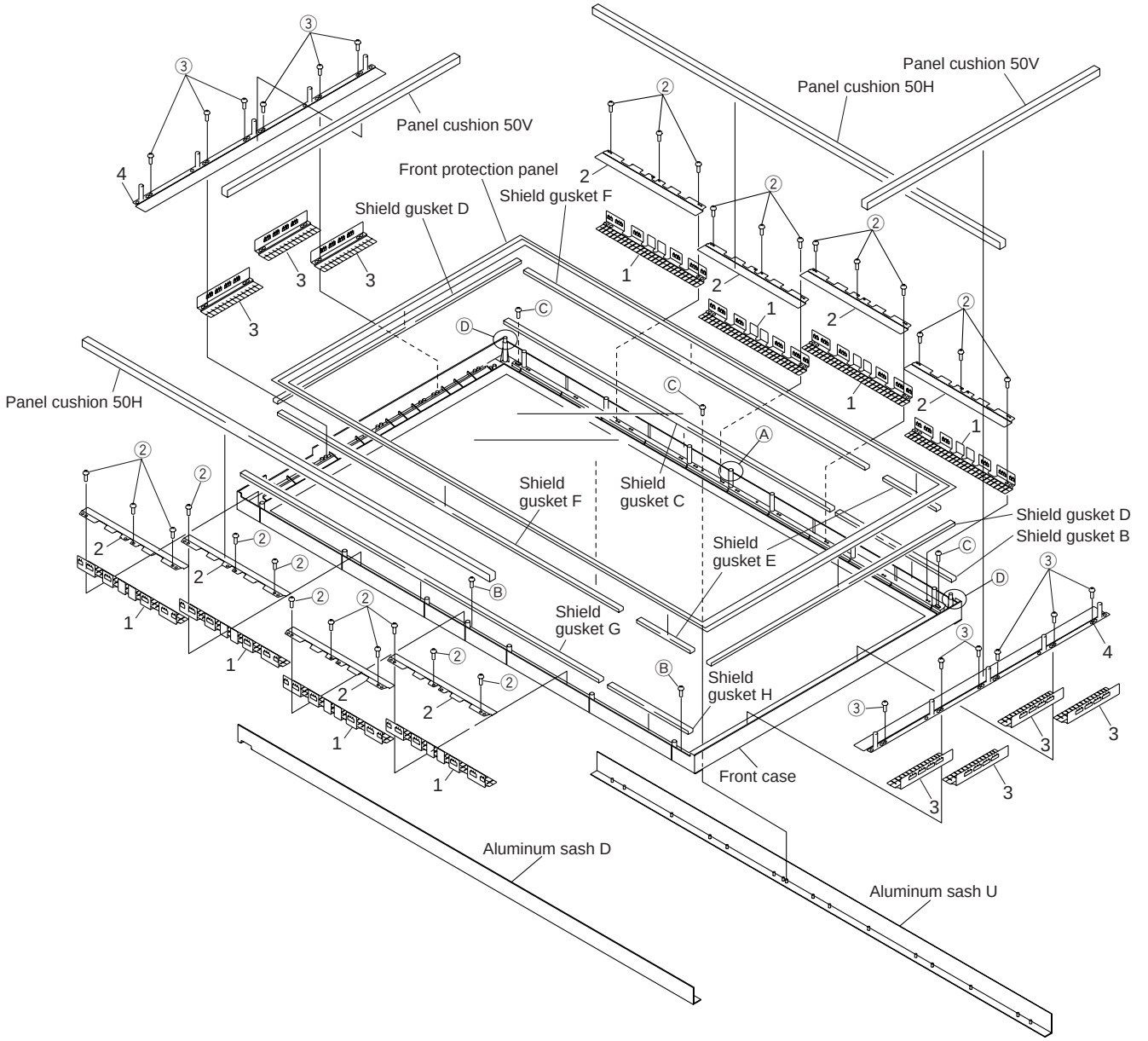
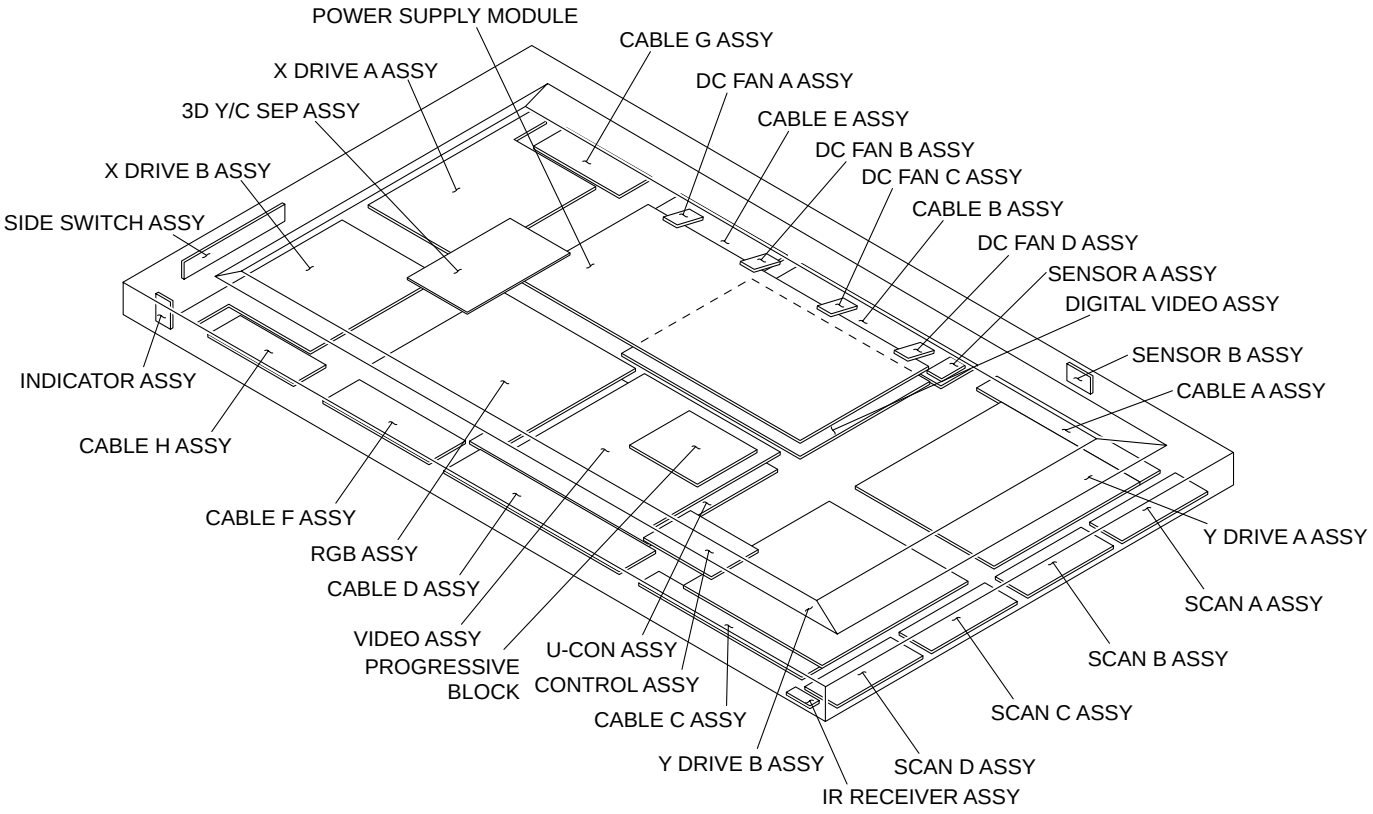
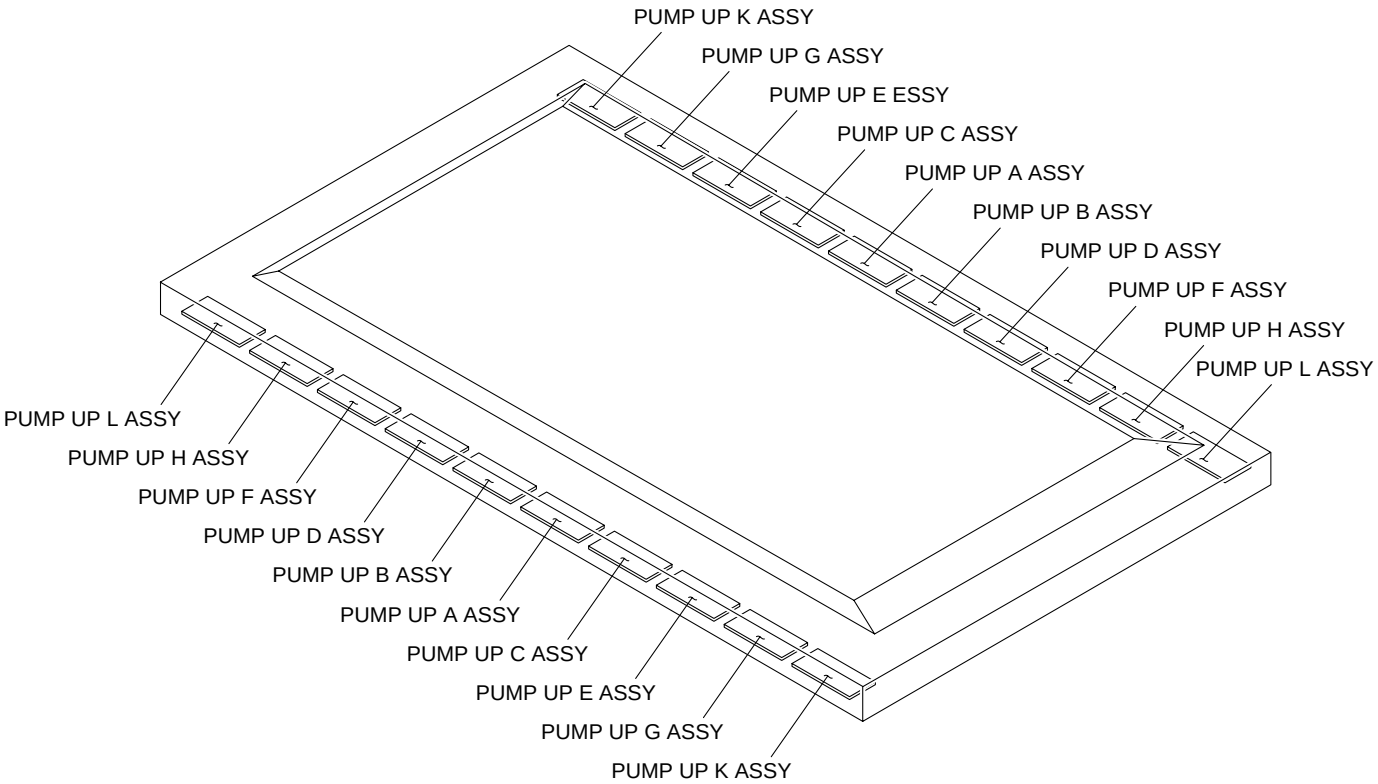


Fig. 3

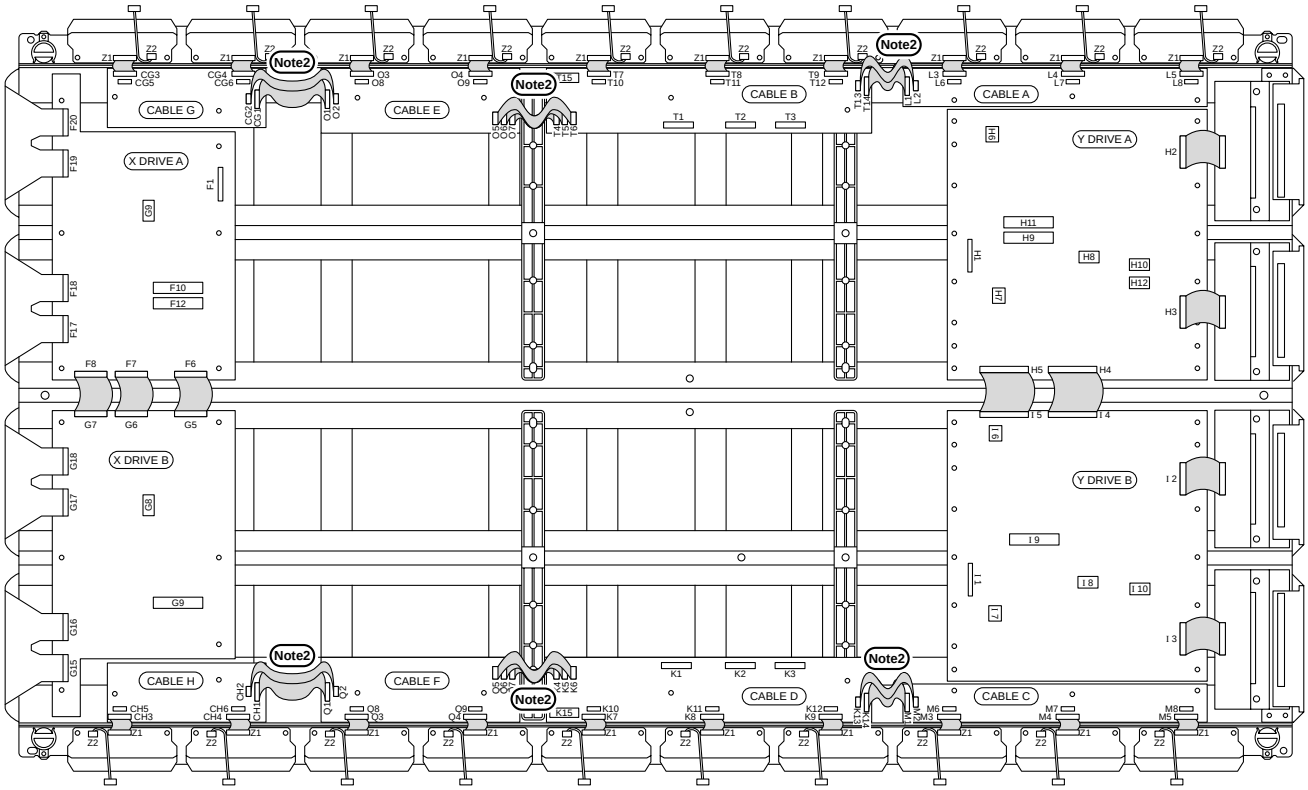
7.2.2 Circuit Boards Location



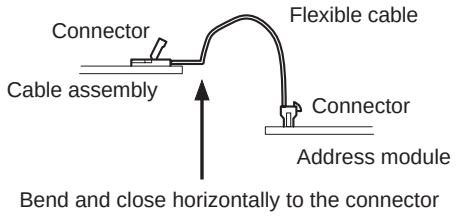


7.2.3 Wiring

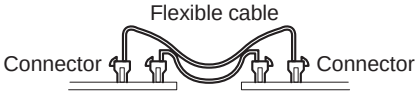
Note: When forming the wire cables, be careful not to exert excessive pressure on the cables as this will result in the disconnection of the connector.
Form the cables from the address module inside the module.



Note 1
Bend the flexible cable between the address module and the cable assembly at the cable assembly side, and close the cover.
(To prevent damage of cover.)

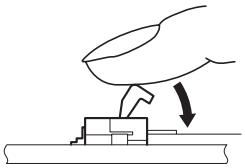


Note 2
Bend the base of the flexible cable to form into a M shape.
(To prevent contact with terminal panel and fan.)
(To prevent sub field noise.)

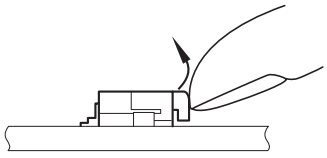


Press-down type lower contact connector

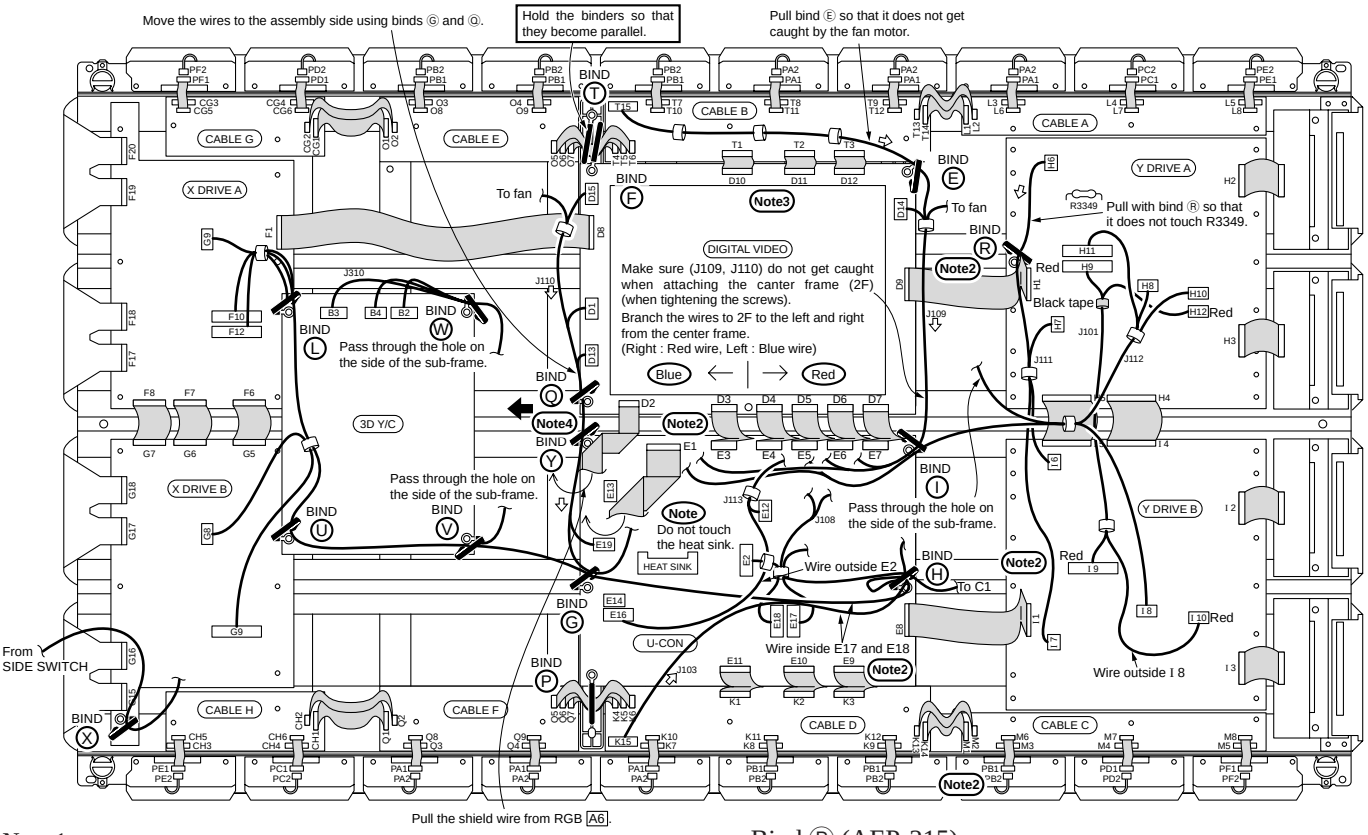
1. Locking
Lock applying force in the arrow direction so that the connector is pressed down inside.



2. Unlocking
Push up with your nail, or something soft.
Thin tools such as the tip of screwdrivers will damage the electrode, and are forbidden to use.



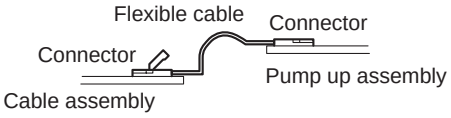
Note: Form the cables from the address module without touching the long leads of the pump up assembly as much as possible.



Note 1

Bend the flexible cables between the pump up assembly and the cable assembly side at the cable assembly side, and close the cover.

(To prevent the damage of the cover.)

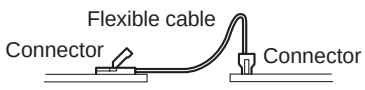


Bend to make parallel to the connector, and close.

Note 2

Bend the flexible cable.

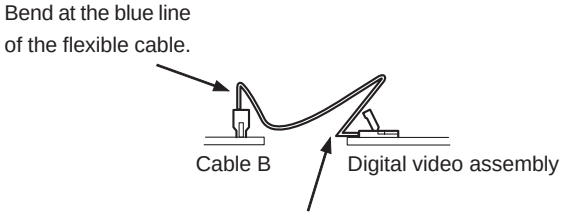
(To prevent touching the frame.)



Note 3

Bend the flexible cable.

(To prevent touching the fan.)

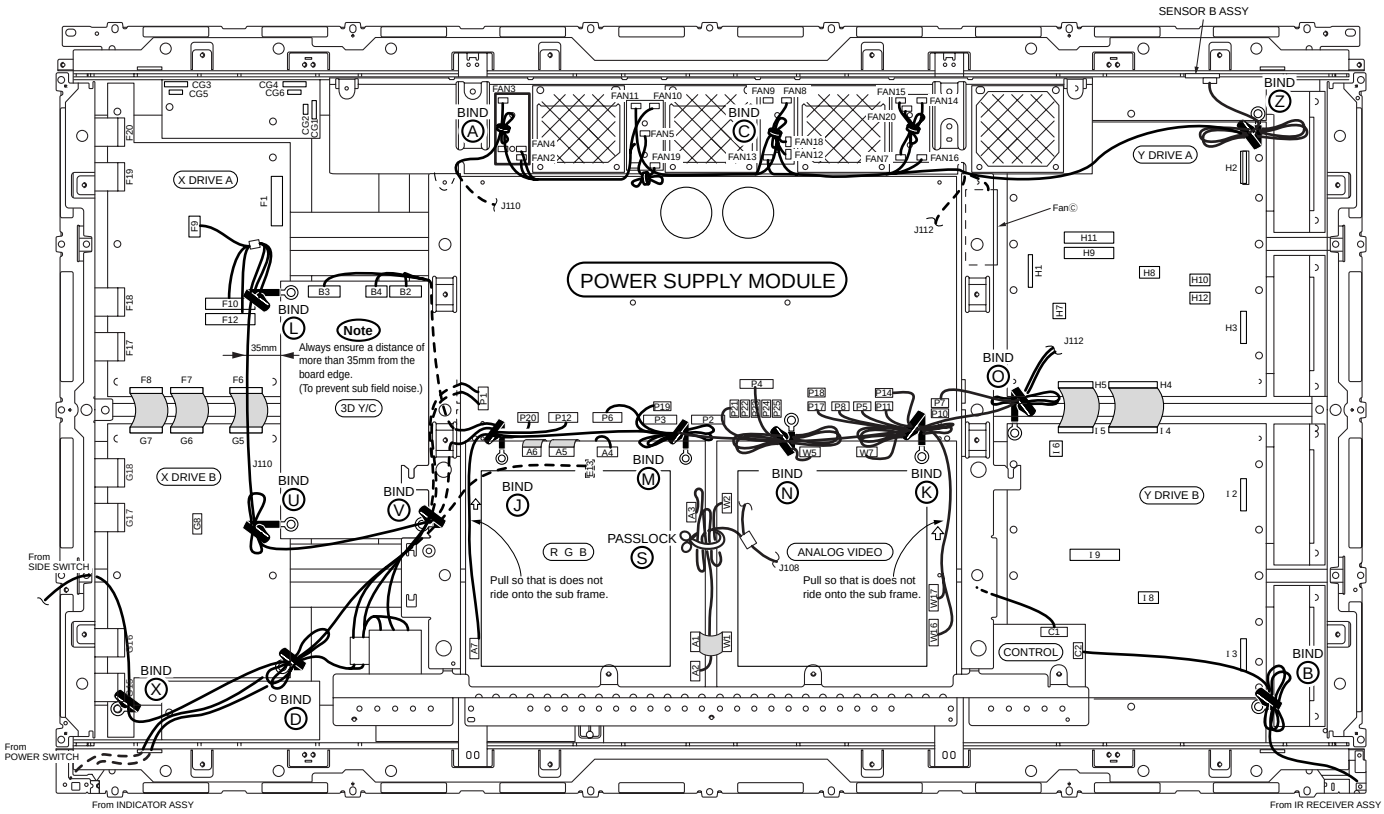


- Bind Ⓡ (AEP-215)
  Pull in the ⇨ direction so that J111 does not touch R3349, and bind.
- Bind Ⓘ (AEP-215)
  Pull J109 and J112 in the ⇨ direction, and bind.
- Bind Ⓦ (AEP-215)
  Bind the J310.
- Bind Ⓔ (AEP-215)
  Pull in the ⇨ direction so that the wire of J109 to T15 does not touch the fan, and bind.
- Bind Ⓖ, Ⓠ, Ⓛ (AEP-215)
  Pull J110 in the ⇨ direction, and bind.
- Bind Ⓗ (AEP-215)
  Pull J110 and J103 in the ⇨ direction, and bind.
- Bind Ⓕ (AEP-215)
  Bind Ⓣ (AEC-826)
  Secure the flexible cable so that it does not touch the fan.
- Bind Ⓟ (AEC-826)
  Secure the flexible cable to distance from the 2F assembly.
  (To prevent sub field noise.)
- Bind Ⓤ, Ⓥ (AEP-215)
  Pull J110 in the ⇨ direction and bind.
  Bind Ⓤ and Ⓥ is temporary secure.

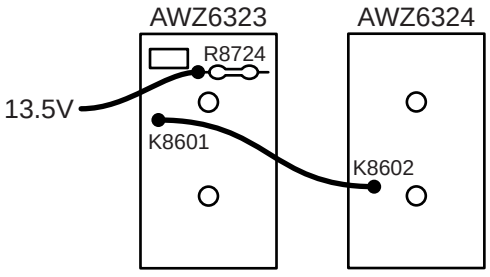
Note 4:

Pull the shield wires to D1 in the arrow direction (⬅) so that they are away from the panel shield and bind with binds Ⓖ and Ⓠ along the board as much as possible.

(To prevent sub field noise)



- Bind Ⓞ (AEP-215)
  Bind the extra length of the cable to P6 and P10.
- Bind Ⓜ (AEP-215)
  Bind the extra length of the cable to P3 and P19 and from the 3D Y/C ASSY.
  Form the cable to P6 away from the cable to A4 and bind (not bundle).
- Bind Ⓝ (AEP-215)
  Bind the extra length of the cable to P2, P21, P22, P4, P18, and B5.
  Also bind (not bundle) the cable from bind M.
- Bind Ⓚ (AEP-215)
  Bind the extra length of the cable to P17, P8, P5, P11, P14, and B7.
  Also bind (not bundle) the cable from bind N.
- Bind Ⓙ (AEP-215)
  Bind the cable to P12 and P20 and from the 3D Y/C ASSY away from the cable to A4.
- Bind Ⓓ (AEP-215)
  Bind the extra length of the cables from the power SW and INDICATOR assembly.
- Bind Ⓑ (AEP-215)
  Bind the extra length of the cable from the IR RECEIVER ASSY.
- Bind Ⓧ (AEP-215)
  Bind the cable from the SIDE SWITCH.
- Bind Ⓩ (AEP-215)
  Bind the extra length of the cable to SENSOR B ASSY.
- Bind Ⓤ (AEP-215)
  Bind the extra length of the wire of J110 to P12.
- Bind Ⓥ (AEP-215)
  Bind the POWER switch wire, J110, and the extra length of the ground wire.
- Bind Ⓐ (AEC-093)
  Bind the extra length of the J110 and J311 wires from 1F, and bind them to the other fan wires.
- Bind Ⓒ (AEC-093)
  Bind the extra length of the J112 wires from 1F and wire from fan Ⓒ. and bind them to the other fan wires.



7.2.4. Troubleshooting

1. Power indicator LED states

Problems can be easily diagnosed by the power indicator (LED) states of the display of the unit.

	Display LED State	State
1.	Lit in green	Normally power ON Display PD Note 1) (Not remote controlled)
2.	Off	Display AC OFF
3.	Lit in red	• Power off by remote control • Auto power OFF • When internal temperature is high
4.	Blinking in red 0.5/0.5 sec	Display PD
5.	Off	AC OFF of the display

Note 1) The LED may blink in green instead of red according to the PD timing or where PD occurs.

2. Abnormal Power Off Circuit

This unit comes equipped with various protection circuits.
When these protection circuit operates, P.D. (Power Down) operates to turn off the relay (RL1) inside the POWER SUPPLY MODULE. And turn off the power of the unit.

• X DRIVE (A) /(B) assembly
1) PD due to the over-current detection of the X drive power supply V_{CP}+12V
2) PD due to the over-current detection of the X drive (+) reset circuit

• Y DRIVE (A) /(B) assembly
1) PD due to the over-current detection of the Y drive power supply V_{CP}+12V
2) PD due to the over-current detection of the Y drive (–) reset circuit
3) PD due to the over-voltage detection of the Y drive D-D converter output V_H150V
4) PD due to the over-current detection of the Y drive D-D converter output V_H150V

• POWER SUPPLY MODULE
1) PD due to the over-current detection of the large power supply (V_{SUS}+175V, V_{OFS}+150V. V_{CSP}+40V, V_{RN}–190V, V_{ADR}+30V).
2) PD due to the over-voltage detection of the large power supply (V_{SUS}+175V, V_{CSP}+40V, V_{RN}–190V, V_{ADR}+30V)
3) PD due to the over-current detection of the small signal power supply (+12V, +5V, +3.3V)
4) PD due to the over-voltage detection of the small signal power supply (+12V, +5V, +3.3V)

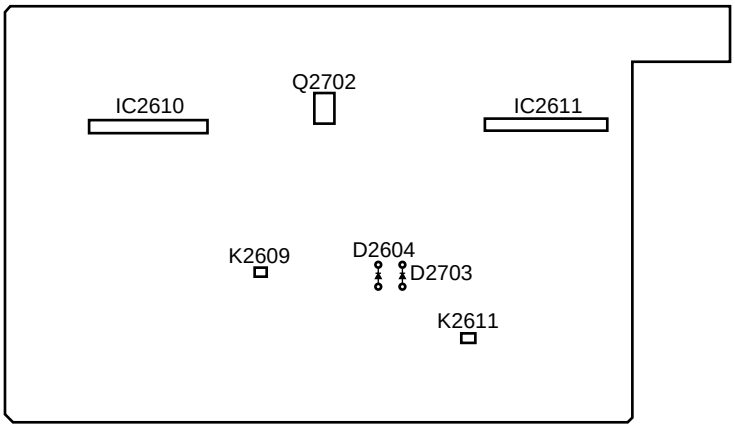
Note) +5V is supplied to K2609 and K3109 of the PD terminal of each drive assembly when drive assembly PD occurs.

3. Diagnosis of Malfunctions when Power Down (PD) Occurs

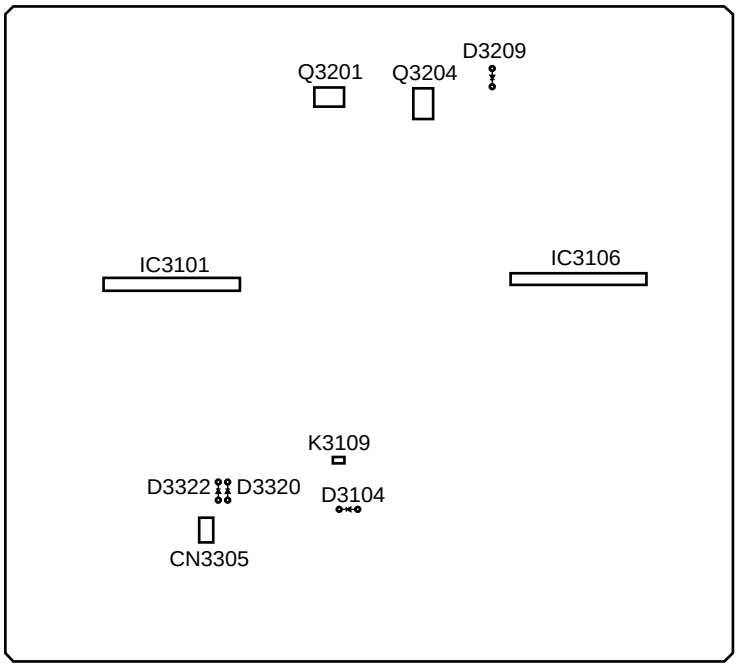
ASSY Name	TP NO.	+5V Generation Point	Operating PD	Faulty Point
X DRIVE(A)ASSY X DRIVE(B)ASSY	When K2609 is H	D2604 anode	VCP+12V over-current	• Pulse module IC2610, IC2611 peripheral circuit
		D2703 anode	(+) reset circuit over-current	• (+) reset circuit Q2702 peripheral circuit • Q2702G-S signal • X_{PR-U} signal terminal K2611 (5V amplitude)
Y DRIVE(A)ASSY Y DRIVE(B)ASSY	When K3109 is H	D3104 anode	VCP+12V over-current	• Pulse module IC3101, IC3106 peripheral circuit • Y_{SUS_MSK} FET-Q3206-Q3209 peripheral circuit • C_{SP_MSK} FET-Q3005-Q3006 peripheral circuit • Scan assembly internal bypass FET Q7701, Q7702 peripheral circuit
		D3209 anode	(–) reset circuit over-current	• Y_{NR_D} output FET Q3204 peripheral circuit • Y_{NR_U} output FET Q3201 peripheral circuit • Q3204 G-S control signal • Q3201 G-S control signal • Y_{NR_D} signal terminal K3117 • Y_{NR_U} signal terminal K3118
		D3320 anode (YA) D3310 anode (YB)	VH150V over-current	• D-D converter circuit mis-operations
		D3322 anode (YA) D3324 anode (YB)	VH150V over-current	• When short-circuited between VH150V and GND • Scan IC fault • D-D converter fault • When not short-circuited between VH150V and GND • VH over-current mode (BYPASS FET is always ON) • BYPASS output FET short-circuited • Digital section BYPASS control signal fault • Control signal stuck • VH over-current mode (Scan IC mis-operations) • Scan IC fault • Scan IC control signal fault • V_{SUS} 175V line fault
POWER SUPPLY MODULE	When the following are L P12 Pin ⑤ (PD.XA) Pin ⑦ (PD.XB) P6 Pin ⑧ (PD.YA) Pin ⑩ (PD YB)		PD only at small signal block (Large Power line off) Note)	• When small signal block power overload • Fault of small signal block power supply of assemblies • Fault of only the POWER SUPPLY MOD. • When not small signal block power overload • Fault of the POWER SUPPLY MOD. when PD occurs in the POWER SUPPLY MOD. alone • Fault of assembly when PD does not occur in the POWER SUPPLY MODULE alone
			PD at the large power block V_{CSP} +40V V_{SUS} +175V V_{OFS} +150V V_{RN} –190V	• When large power block overload • Fault of power supply of each drive assemblies • Fault of the POWER SUPPLY MOD. • When not large power block overload • Fault of the POWER SUPPLY MOD. when PD occurs in the POWER SUPPLU MOD. alone • Drive circuit mis-operations when PD occurs due to drive assembly operations • Drive control signal fault • Pulse module IC input signal fault Between SUS-B ④ and ⑥ of IC2610 (XA) Between SUS-U ⑤ and ⑥ of IC2611 (XB) Between SUS-D ⑭ and ⑮ of IC3101-1 (YA) Between SUS-G ㉑ and ㉒ of IC3106 (YA) • Fault between FET and G of each output

Note) If PD occurs without +5V supplied to the PD terminal of the drive assembly, overload of the power supply or malfunction of the POWER SUPPLY MOD. may be suspected. Turn OFF the large power ON/OFF switch SW1 of POWER SUPPLY MOD., and short-circuit Pins ① to ③ of CN3305 of each assembly of Y DRIVE (A)/(B) so that only the small signal block can be checked.

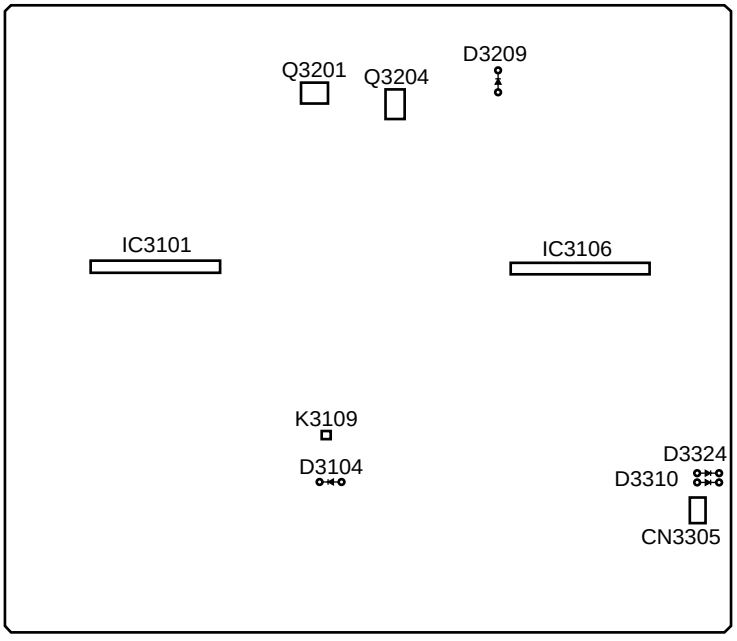
E X DRIVE A/B ASS'Y



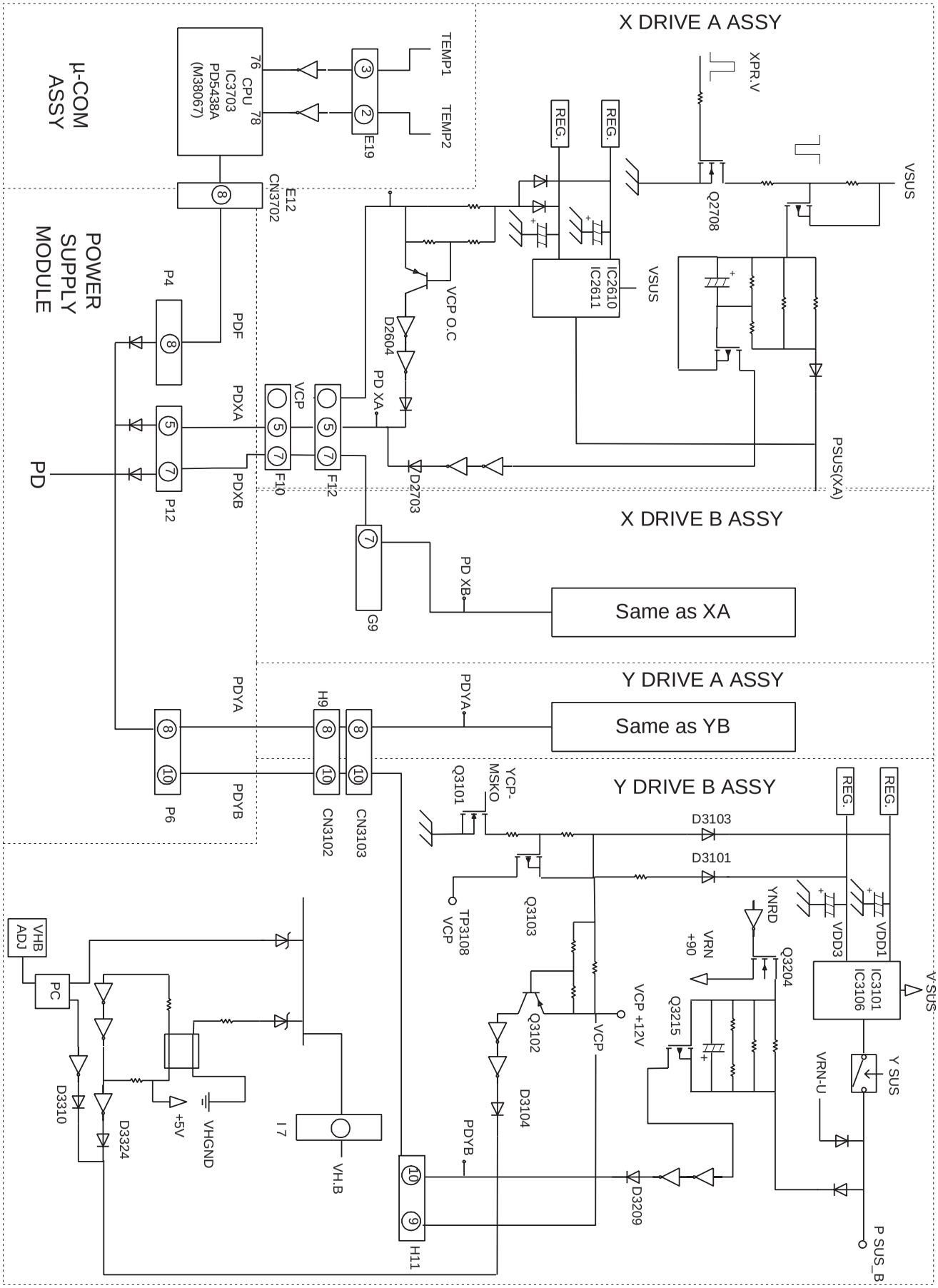
G Y DRIVE A ASS'Y



H Y DRIVE B ASS'Y

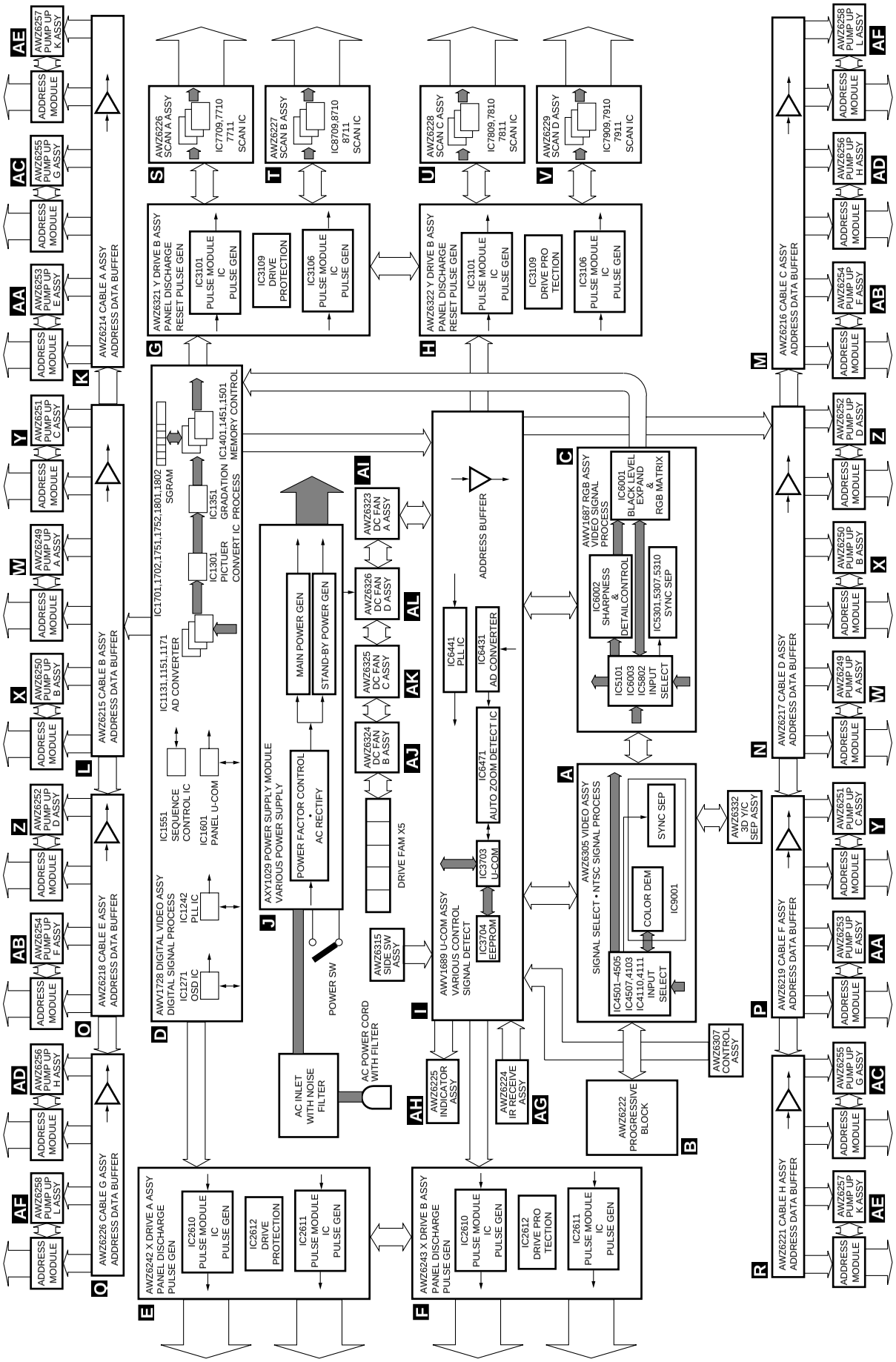


Power Down Circuit BLOCK DIAGRAM

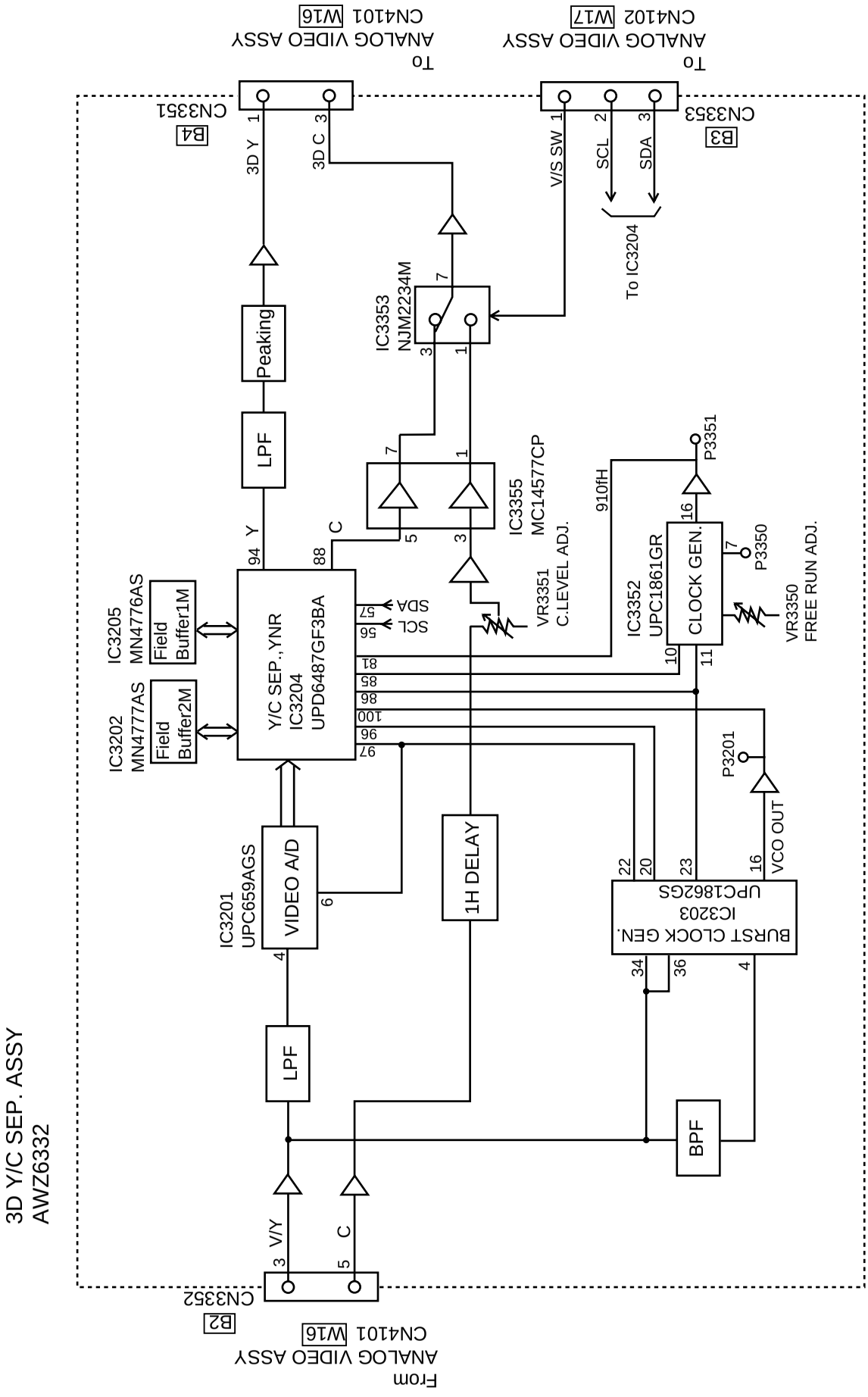


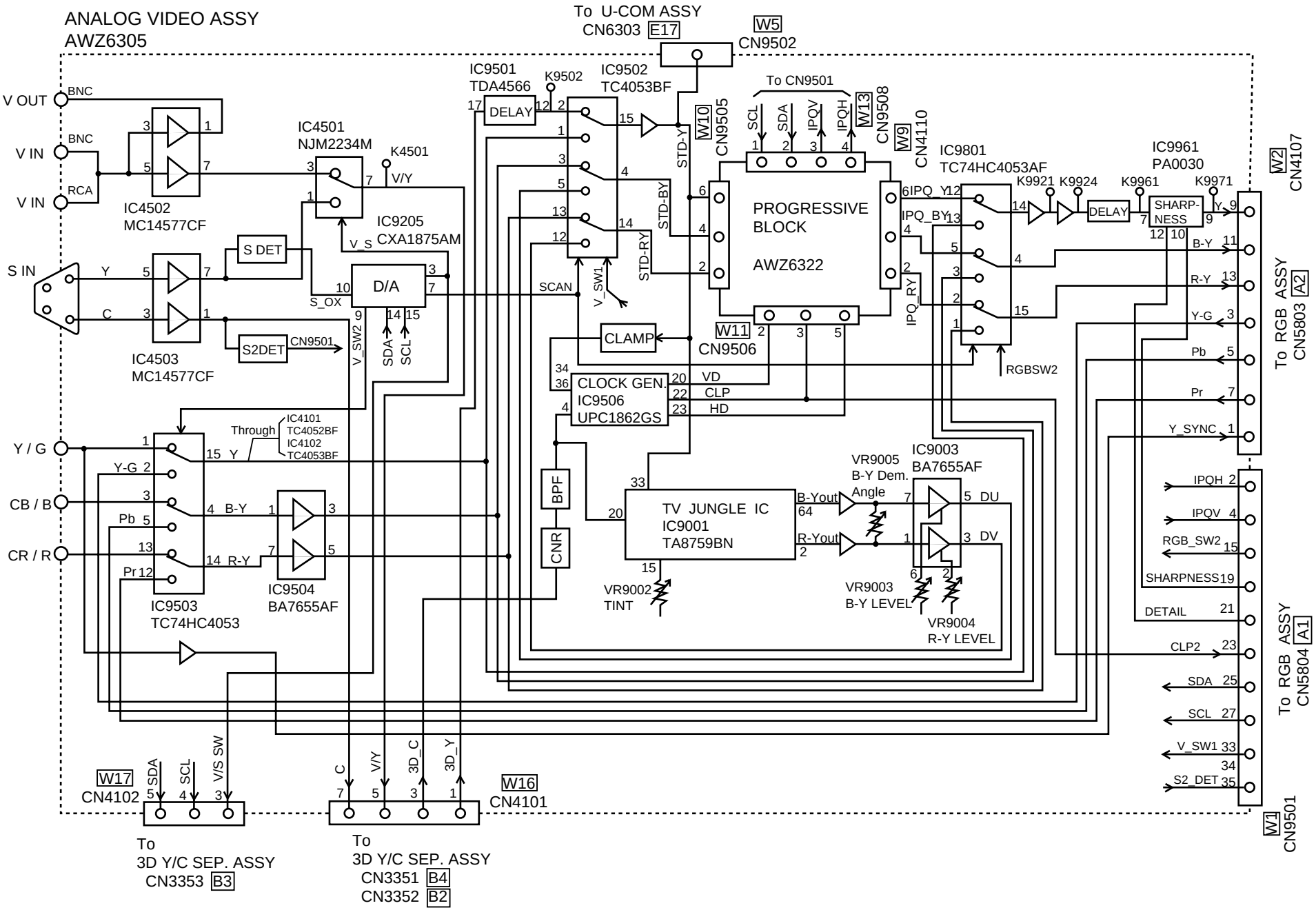
7.3 BLOCK DIAGRAM

7.3.1 Overall Block Diagram

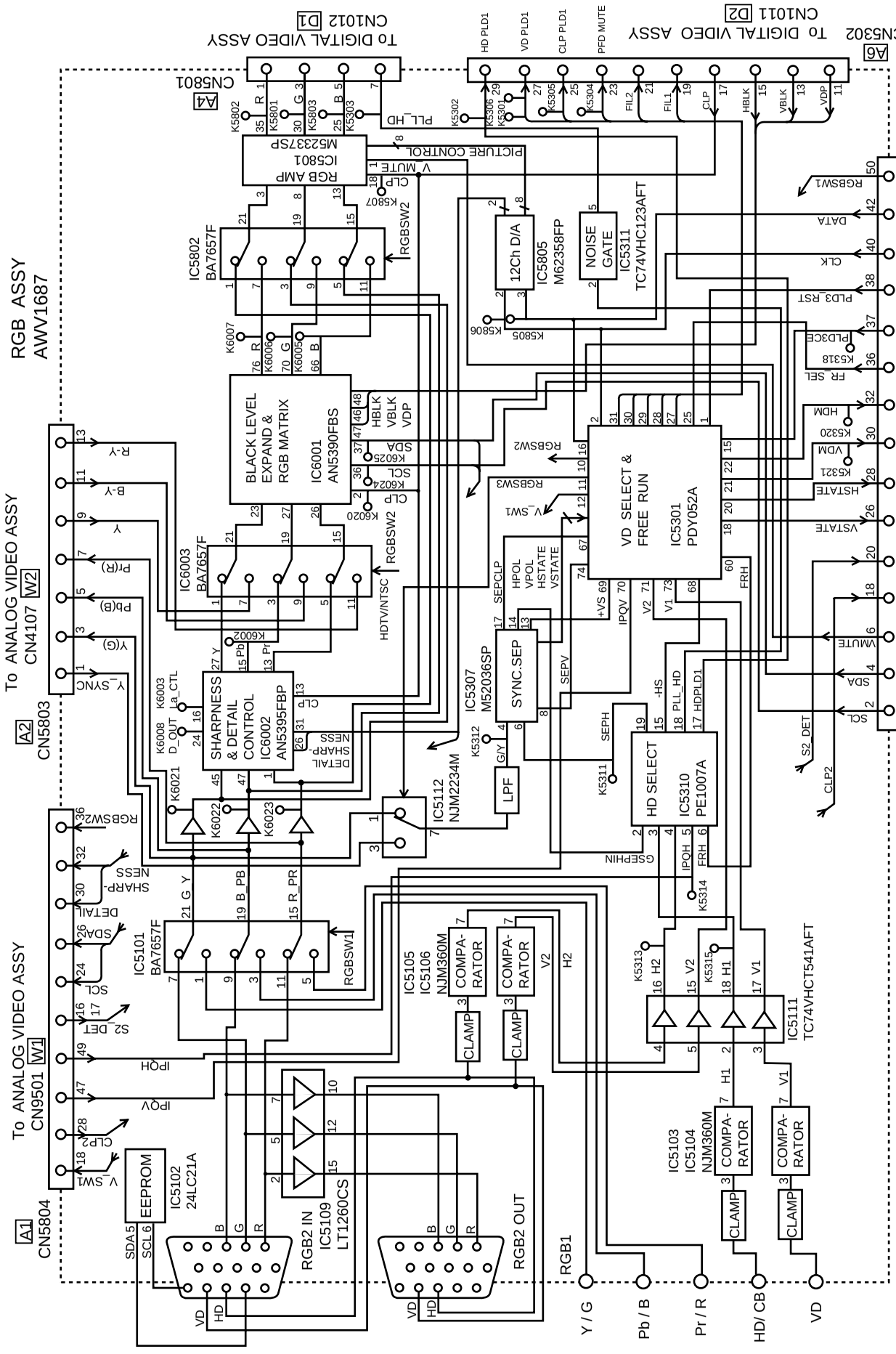


7.3.2 3D Y/C Sep. Assy

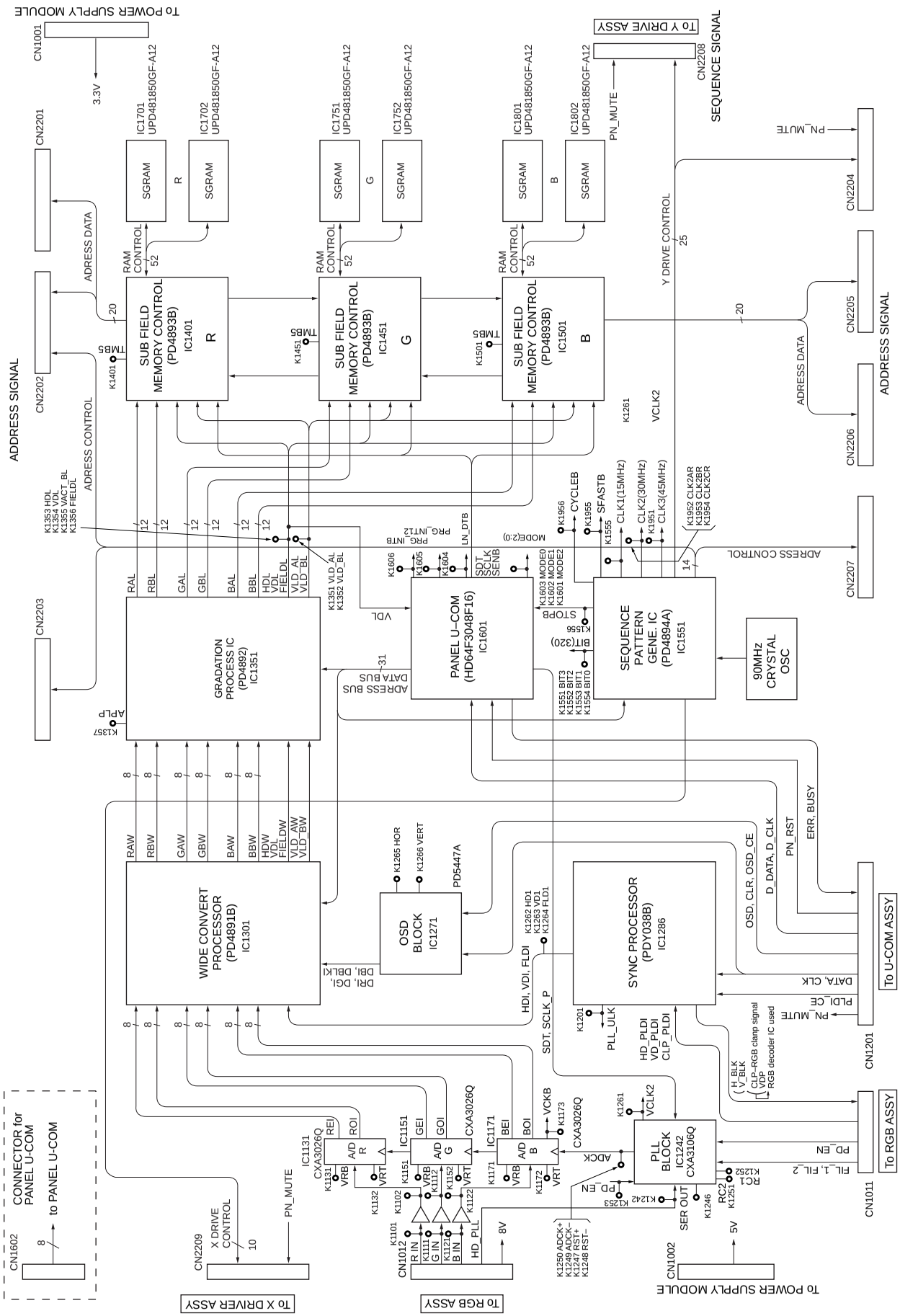



ANALOG VIDEO ASSY
AWZ6305
To U-COM ASSY
CN6303 E17
W5
CN9502
V OUT
V IN
V IN
S IN
BNC
RCA
IC4502
MC14577CF
IC4503
MC14577CF
IC4501
NJM2234M
K4501
V/Y
IC9205
CXA1875AM
S DET
S2DET
CN9501
D/A
S_OX
V_S
SDA
SCL
V_SW2
SCAN
V_SW1
IC9501
TDA4566
DELAY
K9502
IC9502
TC4053BF
STD-Y
STD-BY
STD-RY
W10
CN9505
W11
CN9506
CLAMP
PROGRESSIVE
BLOCK
AWZ6322
To CN9501
W13
CN9508
W9
CN4110
IC9801
TC74HC4053AF
IPQ_Y
IPQ_BY
IPQ_RY
K9921
K9924
K9961
K9971
IC9961
PA0030
SHARP-
NESS
RGBSW2
W2
CN4107
To RGB ASSY
CN5803 A2
B-Y
R-Y
Y-G
Pb
Pr
Y_SYNC
CLOCK GEN.
IC9506
UPC1862GS
VD
CLP
HD
Y / G
CB / B
CR / R
Y-G
Pb
Pr
Through
IC4101
TC4052BF
IC4102
TC4053BF
IC9503
TC74HC4053
IC9504
BA7655AF
BPF
CNR
TV JUNGLE IC
IC9001
TA8759BN
B-Yout
R-Yout
IC9003
BA7655AF
VR9005
B-Y Dem.
Angle
VR9002
TINT
VR9003
B-Y LEVEL
VR9004
R-Y LEVEL
DU
DV
IPQH
IPQV
RGB_SW2
SHARPNESS
DETAIL
CLP2
SDA
SCL
V_SW1
S2_DET
To RGB ASSY
CN5804 A1
W1
CN9501
W17
CN4102
V/S SW
W16
CN4101
C
V/Y
3D_C
3D_Y
To
3D Y/C SEP. ASSY
CN3353 B3
To
3D Y/C SEP. ASSY
CN3351 B4
CN3352 B2

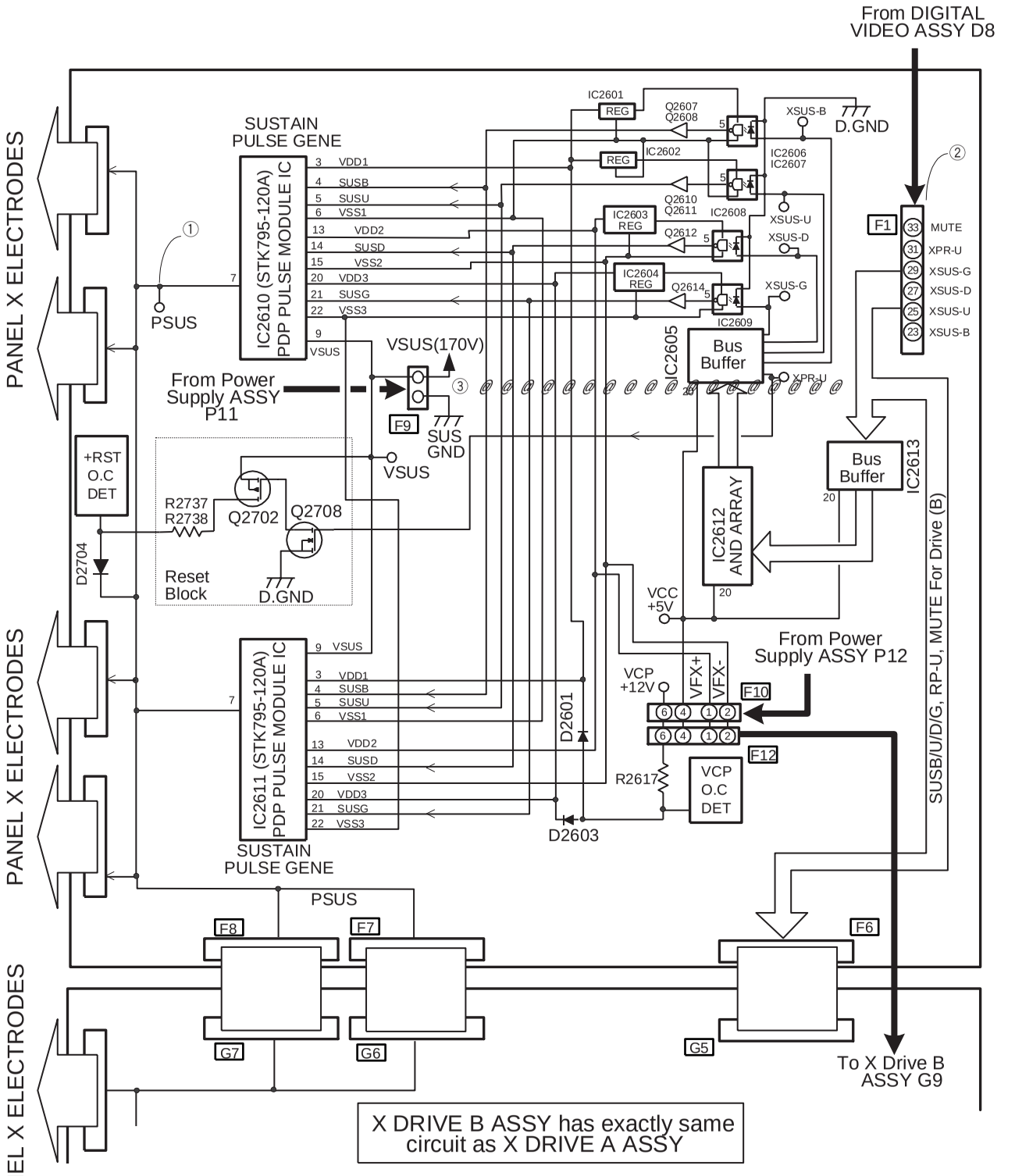
7.3.4 RGB Assy


RGB ASSY
AWV1687
To ANALOG VIDEO ASSY
CN4107 W2
To ANALOG VIDEO ASSY
CN9501 W1
A1
CN5804
A2
CN5803
To DIGITAL VIDEO ASSY
CN1012 D1
To DIGITAL VIDEO ASSY
CN1011 D2
CNS801
A4
CNS302
A6
To U-COM ASSY
CN3904 E1
A5
CN5301
IC6001 AN5390FBS
BLACK LEVEL EXPAND & RGB MATRIX
IC6002 AN5395FBP
SHARPNESS & DETAIL CONTROL
IC5802 BA7657F
IC6003 BA7657F
IC5101 BA7657F
IC5801 M52337SP
RGB AMP
IC5805 M62358FP
12Ch D/A
IC5311 TC74VHC123AFT
NOISE GATE
IC5301 PDY052A
VD SELECT & FREE RUN
IC5307 M52036SP
SYNC.SEP
IC5310 PE1007A
HD SELECT
IC5112 NJM2234M
LPF
IC5102 24LC21A
EEPROM
IC5109 LT1260CS
RGB2 IN
RGB2 OUT
IC5105 IC5106 NJM360M
IC5103 IC5104 NJM360M
COMPA-RATOR
CLAMP
IC5111 TC74VHCT541AFT
RGBSW1
RGBSW2
RGBSW3
PICTURE CONTROL
HD PLD1
VD PLD1
CLP PLD1
PFD MUTE
Y / G
Pb / B
Pr / R
HD/ CB
VD
RGB1

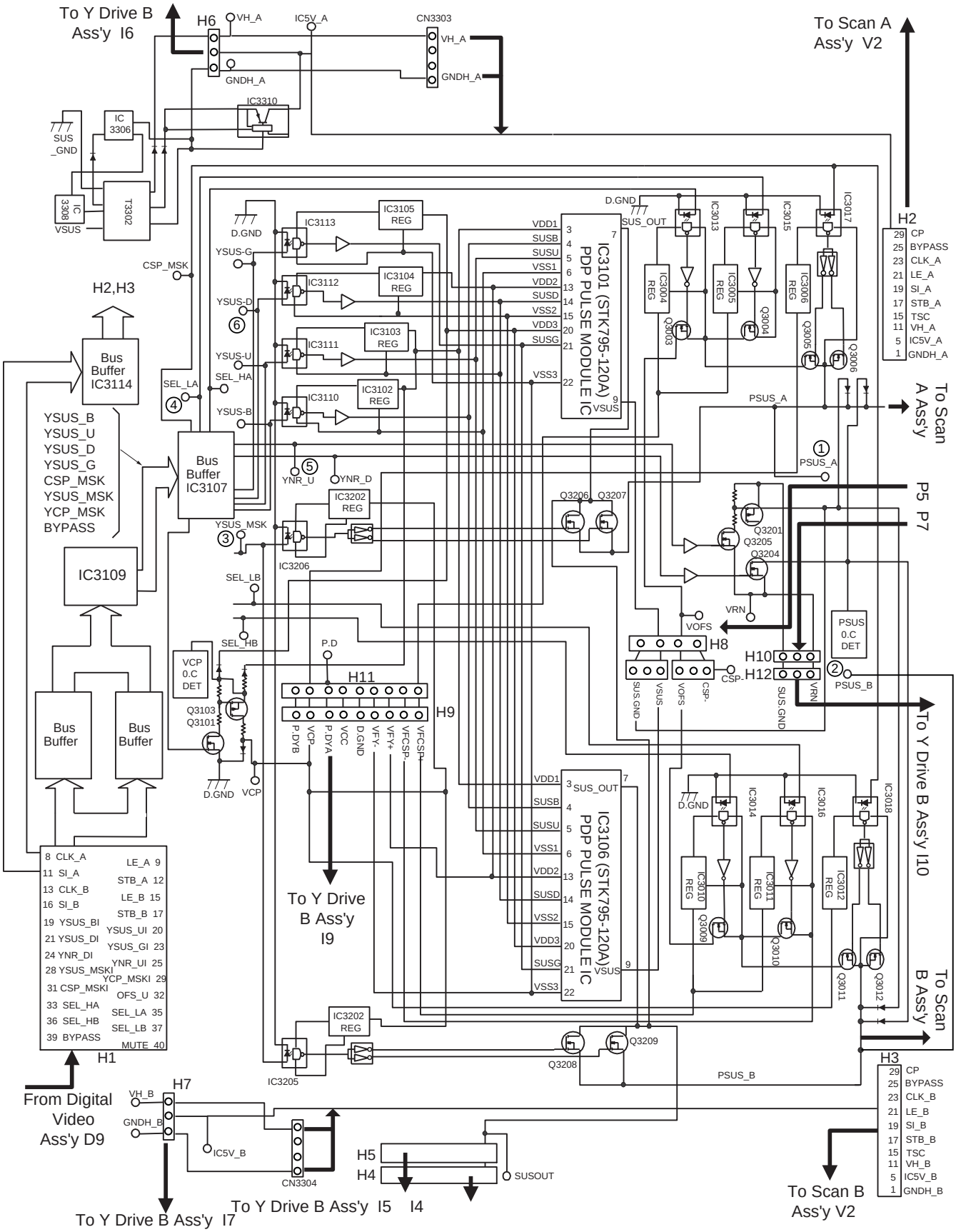
7.3.5 Digital Video Assy



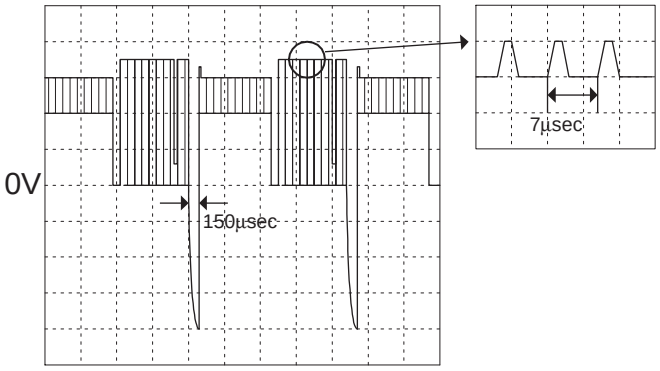
7.3.6 X Drive (A) Assy



7.3.7 Y Drive (A) Assy

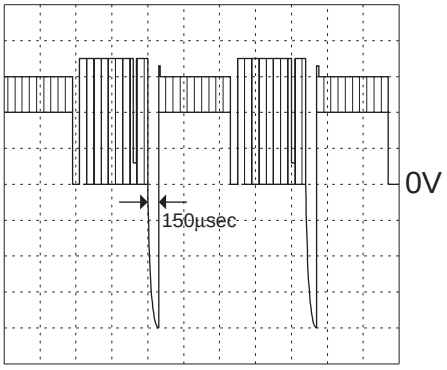


① PSUS_A : SUS.GND



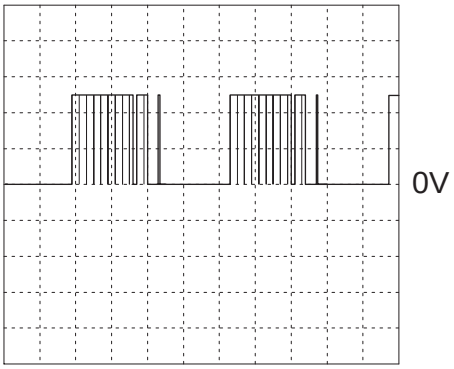
V:50v/div H:500µsec

② PSUS_B : SUS.GND



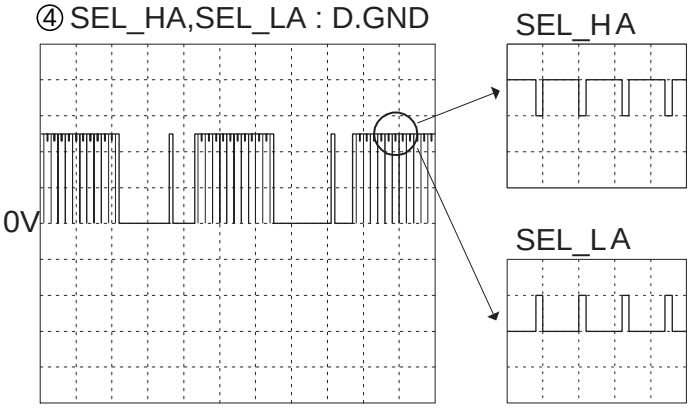
V:50v/div H:500µsec

③ YSUS_MSK : D.GND



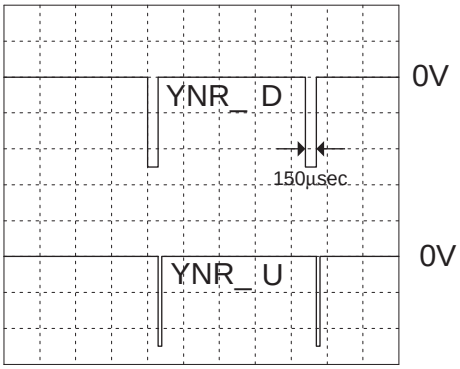
V:5v/div H:500µsec

④ SEL_HA,SEL_LA : D.GND



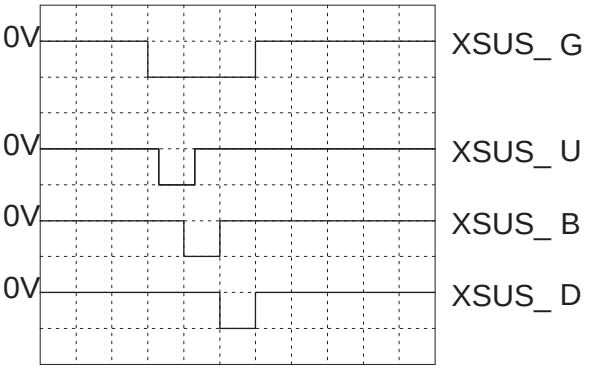
V:2v/div H:500µsec

⑤ YNR_D,YNR_U : D.GND



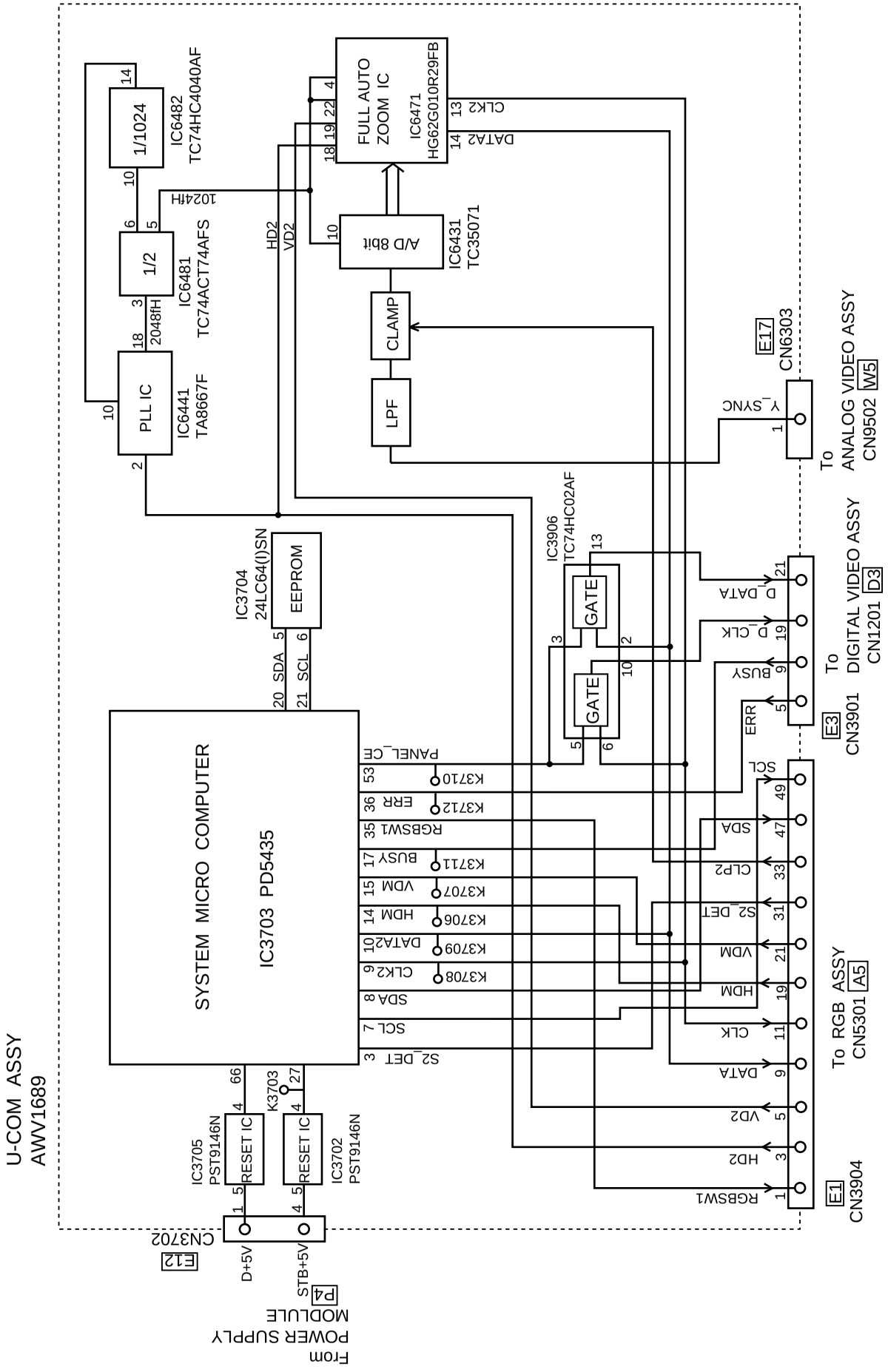
V:2v/div H:500µsec

⑥ XSUS_G,U,B,D : D.GND

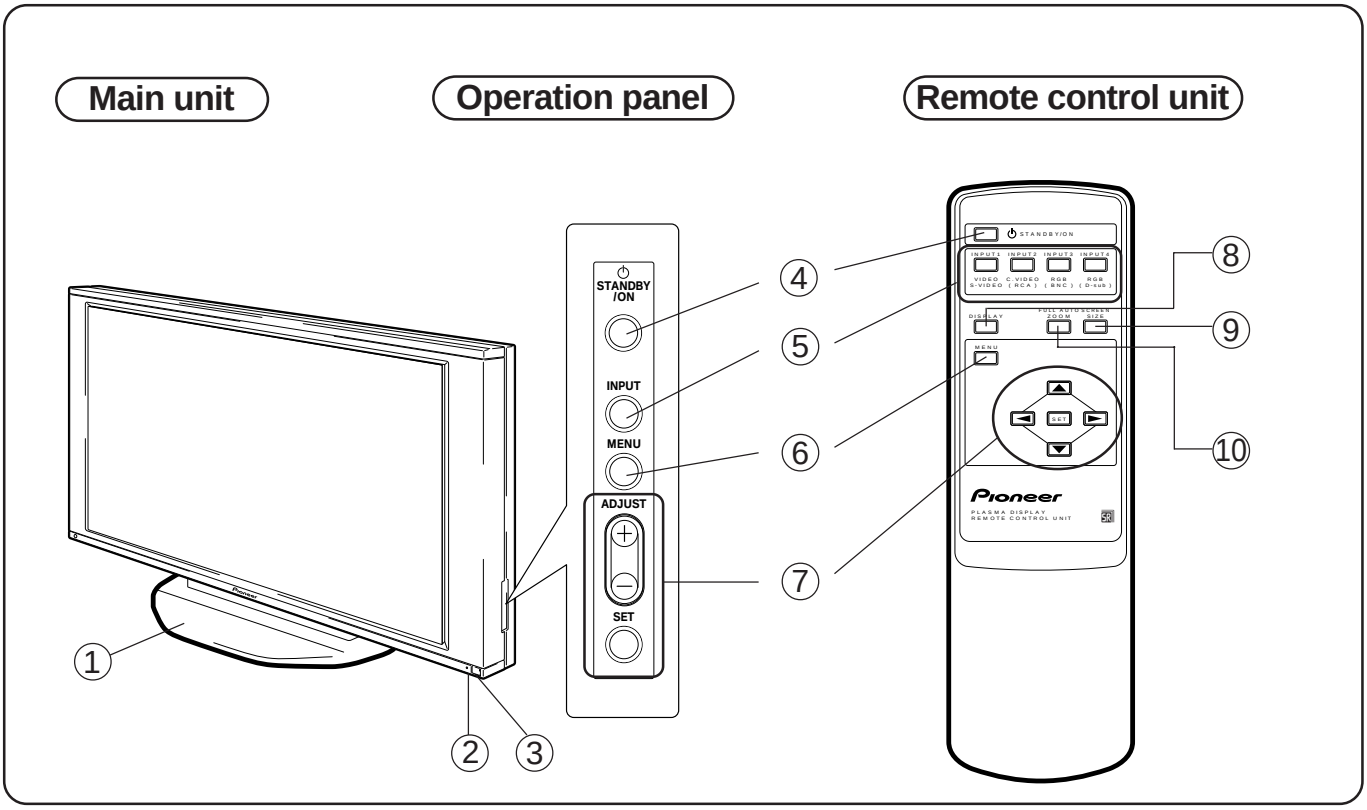


V:5v/div H:1µsec

6.3.8 U-COM Assy



8. PANEL FACILITIES AND SPECIFICATIONS



① Table top stand PDK-5001 (optional)

② Standby indicator

This indicator is red during standby mode, and turns to green when the unit is in the operation mode.

③ Main power button of display

Turns the display's power ON/OFF.

④ Power button

Turns the power ON/OFF (Standby).

⑤ INPUT selection button

Used to select input.

⑥ MENU button

Used to switch between menu screens and the regular picture.

⑦ ADJUST button

Used to adjust various settings on the unit.

⑧ DISPLAY (Display call) button

Used to view the unit's input and setup mode conditions.

⑨ SCREEN SIZE selection button

Used for manual selection of screen size.

⑩ FULL AUTO ZOOM button

Used for automatic selection of screen size.

■ Specifications

PDP-501MX Plasma display

Light emission panel ..... 50 inch plasma display panel
Number of pixels ..... 1280 x 768 (XGA)
Power supply ..... AC 120 V, 60 Hz
Power consumption ..... 555 W
Standby power consumption ..... 3 W
External dimensions ..... 1218 (W) x 714 (H) x 98 (D) mm
47-31/32 (W) x 28-1/8 (H) x 3-7/8 (D) inch.
..... 1218 (W) x 764 (H) x 400 (D) mm
47-31/32 (W) x 30-1/8 (H) x 15-3/4 (D) inch.
(when using table top stand)
Weight ..... 43 kg (94 lbs. 13 oz)
..... 47 kg (103 lbs. 10 oz) (incld. Table top stand)
Operating temperature range ..... 0 to 40 °C (32 to 104 °F)
Operating atmospheric pressure range
..... 0.9 to 1.1 atmospheric pressure

INPUT 1
Jack type: (Note 1, 2)
RCA pin jack (composite video signal, 1 Vp-p/75 Ω input)
BNC pin jack (composite video signal, 1 Vp-p/75 Ω input)
Mini DIN 4 pin/S terminal (S2 video signal, Y:1 Vp-p, C:0.286 Vp-p/75 Ω input)
Compatible input signal:
NTSC video signal
With output jack (BNC jack-75 Ω output) (Note 3. 4)

INPUT 2
Jack type:
RCA pin jack x 3 (Y:1 Vp-p, color difference: 0.7 Vp-p/75 Ω input)
Compatible input signal:
Component video signal (15.7 KHz horizontal x 60 Hz vertical)
Component video signal (31.5 KHz horizontal x 60 Hz vertical)

INPUT 3
Jack type:
BNC jack x 5 (G, B, R: 0.7 Vp-p, Sync section: 0.3 Vp-p/75 Ω input)
(HD/CS, VD:TTL level/75 Ω or 2.2 kΩ input conversion possible)
Compatible input signal:
Component video signal, RGB signal (G ON SYNC compatible)
Refer to next page for input compatible frequency

INPUT 4
Jack type:
Mini D-Sub 15 pin (G, B, R: video section: 0.7 Vp-p, Sync section: 0.3 Vp-p/75 Ω input) (HD/CS, VD:TTL level/2.2 kΩ input)
Compatible input signal:
Component video signal, RGB signal (G ON SYNC compatible)
Refer to next page for input compatible frequency
With output jack (Mini D-Sub 15 pin - 75 Ω output) (Note: 4)
Compatible with Microsoft's Plug & Play (VESA DDC1/2B)

Accessories

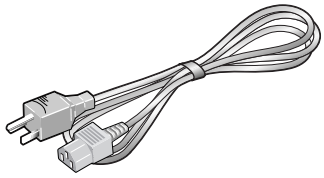
AC Power cord 1
BNC conversion connector 3
Remote control unit 1
AA R6 UM-3 batteries 2
Cleaning cloth 1
Speed clamp 2
Bead band 2
Warranty 1
Operations Instructions 1

- For improvement purposes, specifications and design subject to change without notice.

(Note 1) The RCA jack and BNC jack are connected electronically within the unit and one or the other can be used (for connection of another component). Please do not use both jacks at the same time (for connection of other components) as this could damage the unit.
(Note 2) When the RCA jack or BNC jack is used at the same time as the S Video jack (for connection of other components), the S video jack will have signal input priority.
(Note 3) The signal input from the RCA jack or BNC jack will be output. Input signals will not be output from the S video jack.
(Note 4) There will be no output during power off or the standby mode.

VESA is a registered trademark of the Video Electronics Standards Association.

• AC Power cord

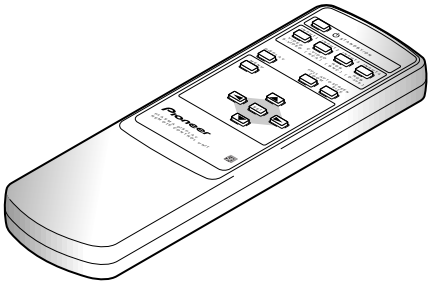


ADG1178

• BNC conversion connection (501MX) x 3

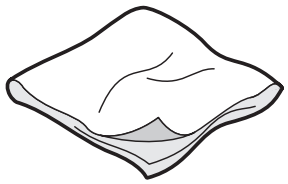
AKX1052

• Remote control unit



AXD1437

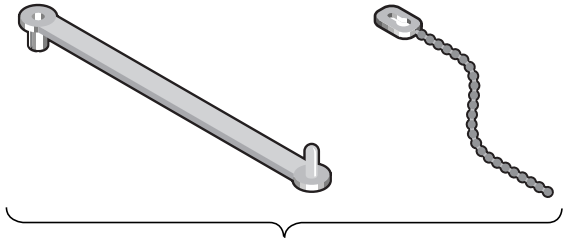
• Cleaning cloth x 1



AED1174

• Speed clamp x 2

• Bead band x 2



Binder Assy AEC1758