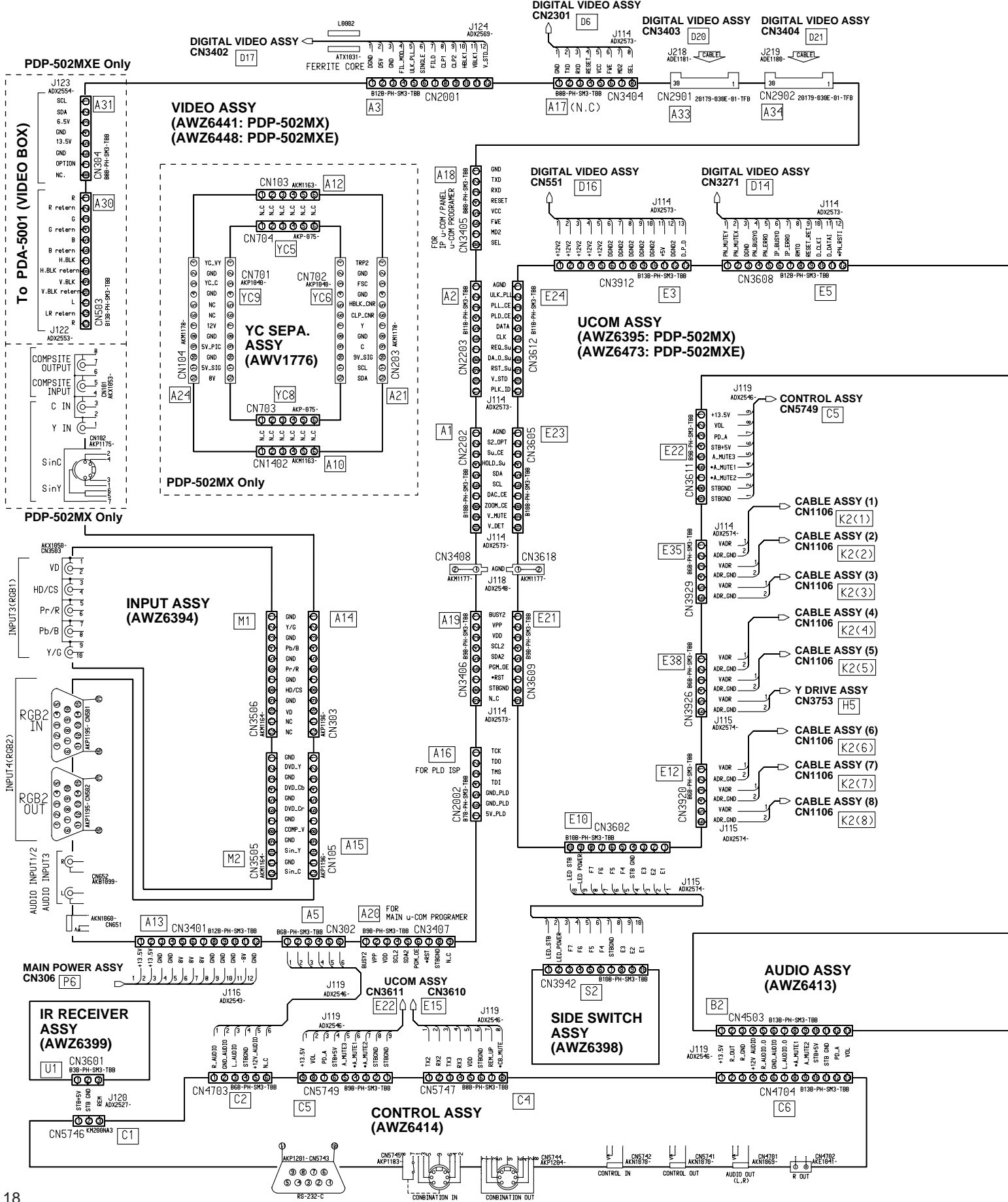


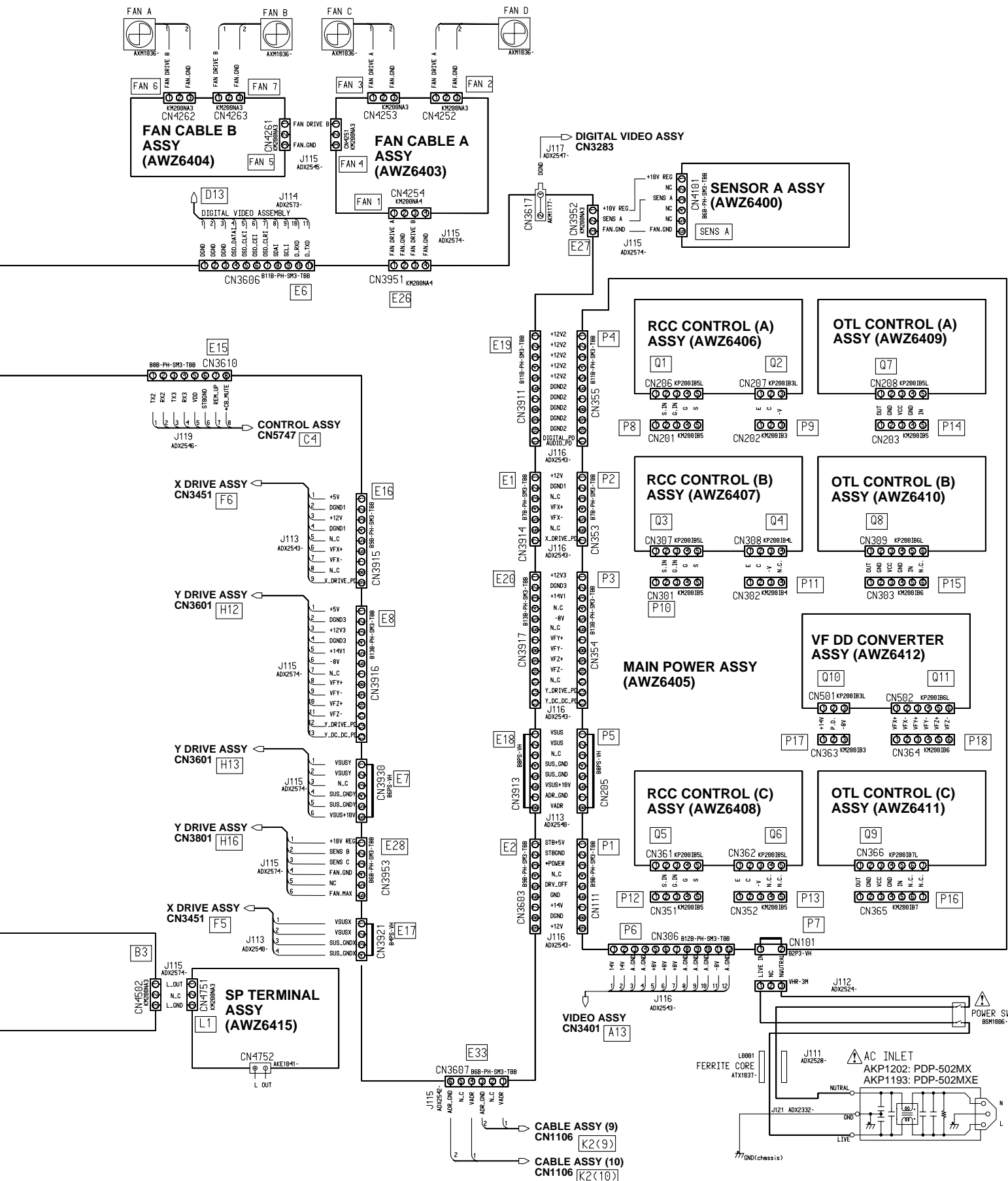
# 3. OVERALL CONNECTION DIAGRAM AND BLOCK DIAGRAM

## 3.1 OVERALL CONNECTION DIAGRAM (1/2)



# PDP-502MX, PDP-502MXE

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "PCB PARTS LIST".



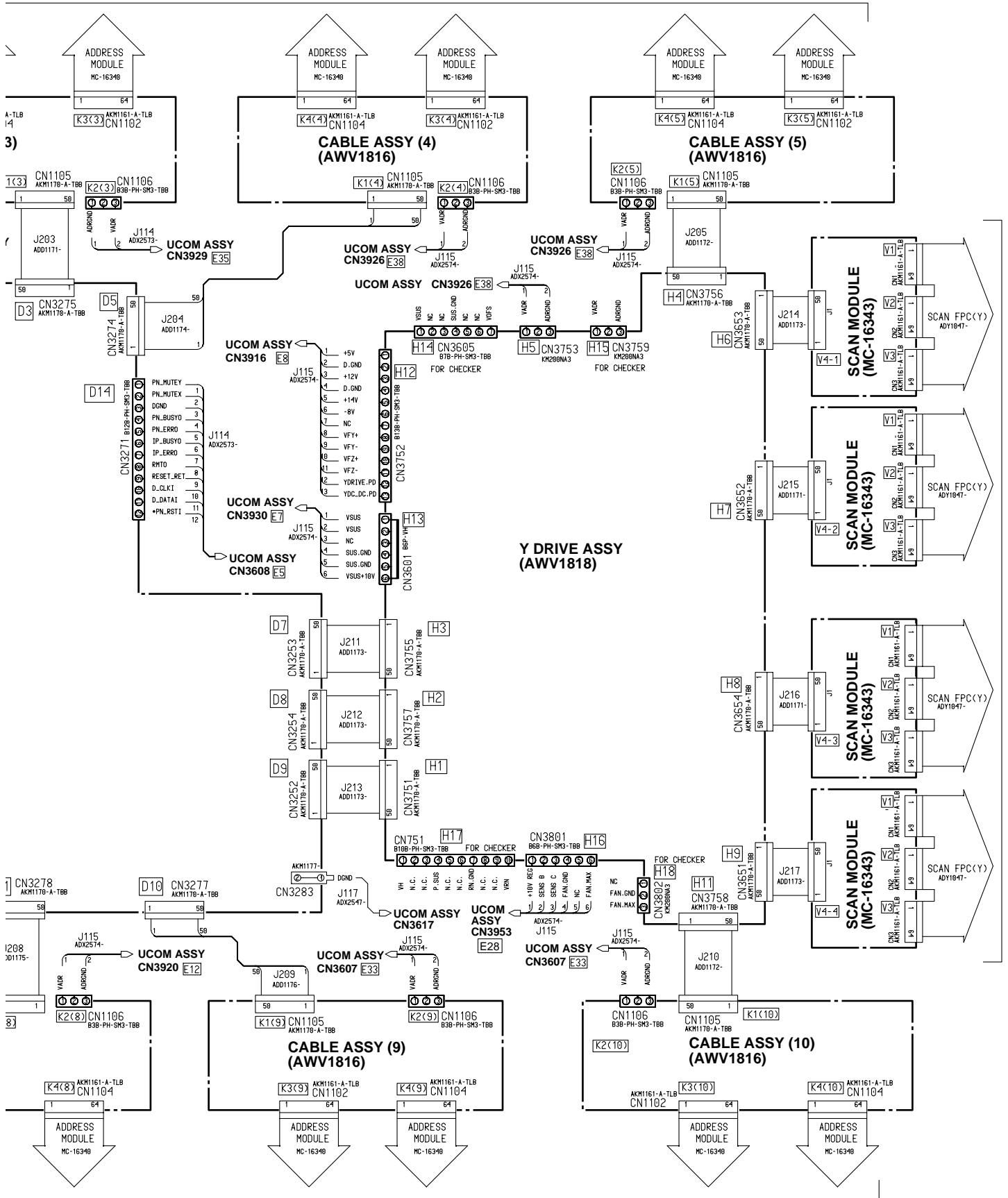
A

B

C

D





A

B

C

D

## Each Flexible Flat Cable Terminal Name

64P FFC	CABLE	PANEL	CABLE	PANEL
1	V ADR_OUT	64	33 V ADR_OUT	32
2	V ADR_OUT	63	34	31
3	V ADR_OUT	62	35 ADRGND	30
4		61	36 DATA_R_A2	29
5		60	37 DATA_G_A2	28
6	ADRGND	59	38 DATA_B_A2	27
7	ADRGND	58	39 CLR_A	26
8	DATA_R_A4	57	40 CLK_A	25
9	DATA_G_A4	56	41 +5V	24
10	DATA_B_A4	55	42 DGND	23
11	CLR_A	54	43 LE A	22
12	CLK_A	53	44 HBLK_A	21
13	+5V	52	45 LBLK_A	20
14	DGND	51	46 HZ A	19
15	LE A	50	47 DATA_R_A1	18
16	HBLK_A	49	48 DATA_G_A1	17
17	LBLK_A	48	49 DATA_B_A1	16
18	HZ A	47	50 CLR A	15
19	DATA_R_A3	46	51 CLKB_A	14
20	DATA_G_A3	45	52 +5V	13
21	DATA_B_A3	44	53 DGND	12
22	CLR A	43	54 LEB_A	11
23	CLKB_A	42	55 HBLK_A	10
24	+5V	41	56 LBLK_A	9
25	DGND	40	57 HZ_A	8
26	LEB A	39	58 ADRGND	7
27	HBLK_A	38	59 ADRGND	6
28	LBLK_A	37	60	5
29	HZ_A	36	61	4
30	ADRGND	35	62 V ADR_OUT	3
31		34	63 V ADR_OUT	2
32	V ADR_OUT	33	64 V ADR_OUT	1

K3  
CN102

PANEL

64P FFC	CABLE	PANEL	CABLE	PANEL
1	V ADR_OUT	64	33 V ADR_OUT	32
2	V ADR_OUT	63	34	31
3	V ADR_OUT	62	35 ADRGND	30
4		61	36 DATA_R_B2	29
5		60	37 DATA_G_B2	28
6	ADRGND	59	38 DATA_B_B2	27
7	ADRGND	58	39 CLR_B	26
8	DATA_R_B4	57	40 CLK_B	25
9	DATA_G_B4	56	41 +5V	24
10	DATA_B_B4	55	42 DGND	23
11	CLR_B	54	43 LE B	22
12	CLK_B	53	44 HBLK_B	21
13	+5V	52	45 LBLK_B	20
14	DGND	51	46 HZ B	19
15	LE B	50	47 DATA_R_B1	18
16	HBLK_B	49	48 DATA_G_B1	17
17	LBLK_B	48	49 DATA_B_B1	16
18	HZ B	47	50 CLR B	15
19	DATA_R_B3	46	51 CLKB_B	14
20	DATA_G_B3	45	52 +5V	13
21	DATA_B_B3	44	53 DGND	12
22	CLR B	43	54 LEB_B	11
23	CLKB_B	42	55 HBLK_B	10
24	+5V	41	56 LBLK_B	9
25	DGND	40	57 HZ_B	8
26	LEB B	39	58 ADRGND	7
27	HBLK_B	38	59 ADRGND	6
28	LBLK_B	37	60	5
29	HZ_B	36	61	4
30	ADRGND	35	62 V ADR_OUT	3
31		34	63 V ADR_OUT	2
32	V ADR_OUT	33	64 V ADR_OUT	1

K4  
CN104

PANEL

50P FFC	SCANMOD	YDRIVE	SCANMOD	YDRIVE	
J214 ADD1173	1	VH	50	26 CLK	25
V4-1	2	VH	49	27 GNGH	24
CN12	3	VH	48	28 GNGH	23
↕	4	VH	47	29 LE	22
H6 CN3653	5	NC	46	30 GNGH	21
↕	6	NC	45	31 GNGH	20
J215 ADD1171	7	IC5V	44	32 CLR	19
V4-2	8	IC5V	43	33 GNDH	18
CN22	9	NC	42	34 GNDH	17
↕	10	NC	41	35 LBLK	16
H7 CN3652	11	OE2-a	40	36 GNDH	15
↕	12	NC	39	37 GNDH	14
13	NC	38	38 HBLK	13	
J216 ADD1171	14	OE2-b	37	39 NC	12
V4-3	15	NC	36	40 NC	11
CN32	16	NC	35	41 OE1-a	10
↕	17	OE2-c	34	42 NC	9
H8 CN3654	18	NC	33	43 NC	8
↕	19	NC	32	44 OE1-b	7
J217 ADD1173	20	SI	31	45 NC	6
V4-4	21	GNGH	30	46 NC	5
CN32	22	GNGH	29	47 OE1-c	4
↕	23	R/L	28	48 NC	3
H9 CN3651	24	GNGH	27	49 NC	2
↕	25	GNGH	26	50 SO	1

64P FFC	SCANMOD	PANEL	SCANMOD	PANEL
1	a1	64	33 a33	32
2	a2	63	34 a34	31
3	a3	62	35 a35	30
4	a4	61	36 a36	29
5	a5	60	37 a37	28
6	a6	59	38 a38	27
7	a7	58	39 a39	26
8	a8	57	40 a40	25
9	a9	56	41 a41	24
10	a10	55	42 a42	23
11	a11	54	43 a43	22
12	a12	53	44 a44	21
13	a13	52	45 a45	20
14	a14	51	46 a46	19
15	a15	50	47 a47	18
16	a16	49	48 a48	17
17	a17	48	49 a49	16
18	a18	47	50 a50	15
19	a19	46	51 a51	14
20	a20	45	52 a52	13
21	a21	44	53 a53	12
22	a22	43	54 a54	11
23	a23	42	55 a55	10
24	a24	41	56 a56	9
25	a25	40	57 a57	8
26	a26	39	58 a58	7
27	a27	38	59 a59	6
28	a28	37	60 a60	5
29	a29	36	61 a61	4
30	a30	35	62 a62	3
31	a31	34	63 a63	2
32	a32	33	64 a64	1

V1  
CN1

PANEL

64P FFC	SCANMOD	PANEL	SCANMOD	PANEL
1	a65	64	33 a97	32
2	a66	63	34 a98	31
3	a67	62	35 a99	30
4	a68	61	36 a100	29
5	a69	60	37 a101	28
6	a70	59	38 a102	27
7	a71	58	39 a103	26
8	a72	57	40 a104	25
9	a73	56	41 a105	24
10	a74	55	42 a106	23
11	a75	54	43 a107	22
12	a76	53	44 a108	21
13	a77	52	45 a109	20
14	a78	51	46 a110	19
15	a79	50	47 a111	18
16	a80	49	48 a112	17
17	a81	48	49 a113	16
18	a82	47	50 a114	15
19	a83	46	51 a115	14
20	a84	45	52 a116	13
21	a85	44	53 a117	12
22	a86	43	54 a118	11
23	a87	42	55 a119	10
24	a88	41	56 a120	9
25	a89	40	57 a121	8
26	a90	39	58 a122	7
27	a91	38	59 a123	6
28	a92	37	60 a124	5
29	a93	36	61 a125	4
30	a94	35	62 a126	3
31	a95	34	63 a127	2
32	a96	33	64 a128	1

V2  
CN2

PANEL

64P FFC	SCANMOD	PANEL	SCANMOD	PANEL
1	a129	64	33 a161	32
2	a130	63	34 a162	31
3	a131	62	35 a163	30
4	a132	61	36 a164	29
5	a133	60	37 a165	28
6	a134	59	38 a166	27
7	a135	58	39 a167	26
8	a136	57	40 a168	25
9	a137	56	41 a169	24
10	a138	55	42 a170	23
11	a139	54	43 a171	22
12	a140	53	44 a172	21
13	a141	52	45 a173	20
14	a142	51	46 a174	19
15	a143	50	47 a175	18
16	a144	49	48 a176	17
17	a145	48	49 a177	16
18	a146	47	50 a178	15
19	a147	46	51 a179	14
20	a148	45	52 a180	13
21	a149	44	53 a181	12
22	a150	43	54 a182	11
23	a151	42	55 a183	10
24	a152	41	56 a184	9
25	a153	40	57 a185	8
26	a154	39	58 a186	7
27	a155	38	59 a187	6
28	a156	37	60 a188	5
29	a157	36	61 a189	4
30	a158	35	62 a190	3
31	a159	34	63 a191	2
32	a160	33	64 a192	1

V3  
CN3

PANEL

25P FFC	XDRIVE _____ PANEL			XDRIVE _____ PANEL		
	X CABLE	U _____	PANEL	X CABLE	U _____	PANEL
	X CABLE	D _____	PANEL	X CABLE	D _____	PANEL
F10 F11 CN3431 CN3432	1	PSUS	25	14	PSUS	12
F12 F13 CN3433 CN3434	2	PSUS	24	15	PSUS	11
F14 F15 CN5651 CN5652	3	PSUS	23	16	PSUS	10
F16 F17 CN5671 CN5672	4	PSUS	22	17	PSUS	9
	5	PSUS	21	18	PSUS	8
	6	PSUS	20	19	PSUS	7
	7	PSUS	19	20	PSUS	6
	8	PSUS	18	21	PSUS	5
	9	PSUS	17	22	PSUS	4
	10	PSUS	16	23	PSUS	3
	11	PSUS	15	24	PSUS	2
	12	PSUS	14	25	PSUS	1
	13	PSUS	13			

30P CABLE	VIDEO	DIGITAL	VIDEO	DIGITAL
J218	1	BB0	30	16
A33 CN2901	2	BB1	29	17
	3	BB2	28	18
	4	BB3	27	19
	5	BB4	26	20
	6	BB5	25	21
	7	BB6	24	22
	8	BB7	23	23
	9	GB0	22	24
	10	GB1	21	25
D20 CN3483	11	GB2	20	26
	12	GB3	19	27
	13	GB4	18	28
	14	GB5	17	29
	15	GB6	16	30

30P CABLE	VIDEO	DIGITAL	VIDEO	DIGITAL
J219	1	VD	25	16
A34 CN2962	2	HD	24	17
	3	DE	23	18
	4	CLK	22	19
	5	CLK	21	20
	6	FLD	20	21
	7	BA0	19	22
	8	BA1	18	23
	9	BA2	17	24
	10	BA3	16	25
D21 CN3484	11	AB4	15	26
	12	BA5	14	27
	13	BA6	13	28
	14	BA7	12	29
	15	GA0	11	30

50P FFC	CABLE	DIGITAL	CABLE	DIGITAL
	CABLE	Y DRIVE	CABLE	Y DRIVE
	1	50	26	CLKB
	2	49	27	CLK
	3	48	28	CLR
	4	5VCC	29	LBLK
	5	5VCC	30	HBLK
	6	5VCC	31	HZ
	7	5VCC	32	19
J201 ADD1177	8	5VCC	33	ADR_G
K1(1) D19 CN1185 CN3276	9	5VCC	34	17
J202 ADD1174	10	DGND	35	ADR_D
K1(2) D1 CN1185 CN3255	11	12VCC	36	15
J203 ADD1171	12	12VCC	37	ADR_B
K1(3) D3 CN1185 CN3275	13	DGND	38	13
J204 ADD1174	14	3VCC	39	ADR_U
K1(4) D5 CN1185 CN3274	15	3VCC	40	11
J205 ADD1172	16	DGND	41	DATA_R_1
K1(5) H4 CN1185 CN3156	17	DATA_R_3	42	DATA_G_1
	18	DATA_G_3	43	DATA_B_1
	19	DATA_B_3	44	DGND
	20	DGND	45	DATA_R_0
	21	DATA_R_2	46	DATA_G_0
	22	DATA_G_2	47	DATA_B_0
	23	DATA_B_2	48	3
	24	DGND	49	2
	25	LE	50	1

50P FFC	CABLE	DIGITAL	CABLE	DIGITAL
	CABLE	Y DRIVE	CABLE	Y DRIVE
	1	50	26	CLKB
	2	49	27	CLK
	3	48	28	CLR
	4	5VCC	29	LBLK
	5	5VCC	30	HBLK
	6	5VCC	31	HZ
	7	5VCC	32	19
J206 ADD1177	8	5VCC	33	ADR_G
K1(6) D18 CN1185 CN3251	9	5VCC	34	17
J207 ADD1176	10	DGND	35	ADR_D
K1(7) D12 CN1185 CN3279	11	12VCC	36	15
J208 ADD1175	12	12VCC	37	ADR_B
K1(8) D11 CN1185 CN3278	13	DGND	38	13
J209 ADD1176	14	3VCC	39	ADR_U
K1(9) D10 CN1185 CN3277	15	3VCC	40	11
J210 ADD1172	16	DGND	41	DATA_B_3
K1(10) H11 CN1185 CN3158	17	DATA_B_1	42	DATA_G_3
	18	DATA_G_1	43	DATA_R_3
	19	DATA_R_1	44	DGND
	20	DGND	45	DATA_B_2
	21	DATA_B_0	46	DATA_G_2
	22	DATA_G_0	47	DATA_R_2
	23	DATA_R_0	48	3
	24	DGND	49	2
	25	LE	50	1

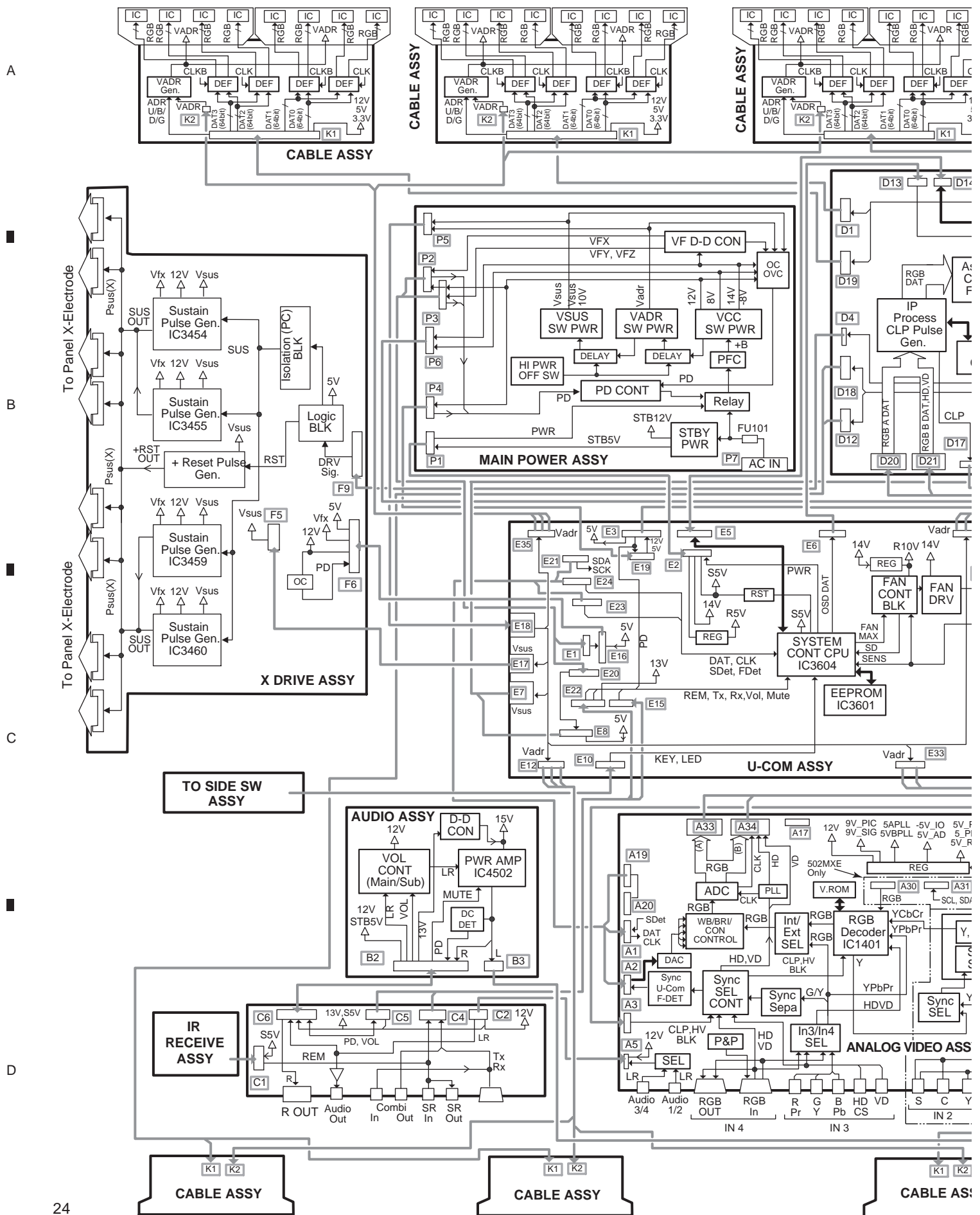
50P FFC	DIGITAL	Y DRIVE	DIGITAL	Y DRIVE
J211 ADD1173	1	NC	26	LE
D7 CN3253	2	NC	27	DGND
	3	NC	28	DATB2U
	4	DATB0U	29	DATG2U
	5	DATG0U	30	DATR2U
	6	DATR0U	31	DGND
	7	DGND	32	DATB3U
	8	DATB1U	33	DATG3U
	9	DATG1U	34	DATR3U
	10	DATR1U	35	DGND
	11	NC	36	+3.3V
	12	ADRU0U	37	+3.3V
	13	NC	38	DGND
	14	ADRB0U	39	+12V
	15	NC	40	+12V
	16	ADRD0U	41	DGND
	17	NC	42	+5V
	18	ADRG0U	43	+5V
	19	NC	44	+5V
	20	HZ	45	+5V
	21	HBLK	46	+5V
	22	LBLK	47	+5V
	23	CLR	48	NC
	24	CLK	49	NC
	25	CLKB	50	NC

50P FFC	DIGITAL	Y DRIVE	DIGITAL	Y DRIVE
J212 ADD1173	1	NC	26	LE
D8 CN3254	2	NC	27	DGND
	3	NC	28	DATR0L
	4	DATR2L	29	DATG0L
	5	DATG2L	30	DATB0L
	6	DATB2L	31	DGND
	7	DGND	32	DATR1L
	8	DATR3L	33	DATG1L
	9	DATG3L	34	DATB1L
	10	DATB3L	35	DGND
	11	NC	36	+3.3V
	12	ADRU0L	37	+3.3V
	13	NC	38	DGND
	14	ADRB0L	39	+12V
	15	NC	40	+12V
	16	ADRD0L	41	DGND
	17	NC	42	+5V
	18	ADRG0L	43	+5V
	19	NC	44	+5V
	20	HZ	45	+5V
	21	HBLK	46	+5V
	22	LBLK	47	+5V
	23	CLR	48	NC
	24	CLK	49	NC
	25	CLKB	50	NC

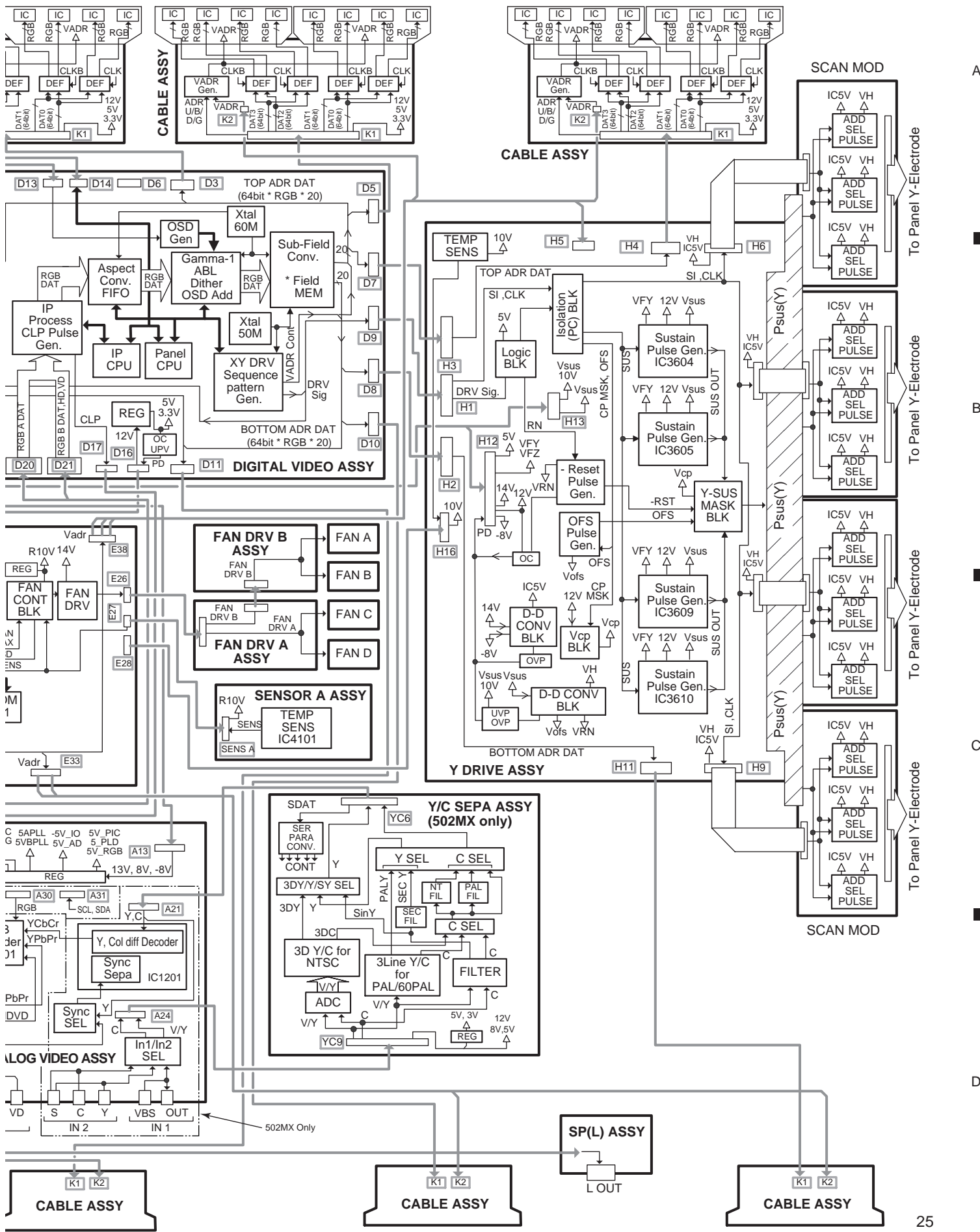
50P FFC	DIGITAL	Y DRIVE	DIGITAL	Y DRIVE
J213 ADD1173	1	YR0	26	DGND
D9 CN3252	2	NC	27	YSUS-G
	3	YR1	28	DGND
	4	NC	29	YNR-D
	5	YSUS_PD	30	DGND
	6	NC	31	YNR-U
	7	OE	32	DGND
	8	NC	33	YSUS-MSK
	9	S1	34	DGND
	10	DGND	35	YCP-MSK
	11	CLK	40	DGND
	12	DGND	39	OFS
	13	LE_S	38	DGND
	14	DGND	37	YR4
	15	CLR	36	DGND
	16	DGND	35	YR3
	17	LBLK	34	DGND
	18	DGND	33	YR5
	19	HBLK	32	DGND
	20	DGND	31	PN_MUTEY
	21	YSUS-B	30	DGND
	22	DGND	29	YR6
	23	YSUS-U	28	DGND
	24	DGND	27	YR7
	25	YSUS-D	26	DGND

3.3 BLOCK DIAGRAM

3.3.1 OVERALL BLOCK DIAGRAM



# PDP-502MX, PDP-502MXE

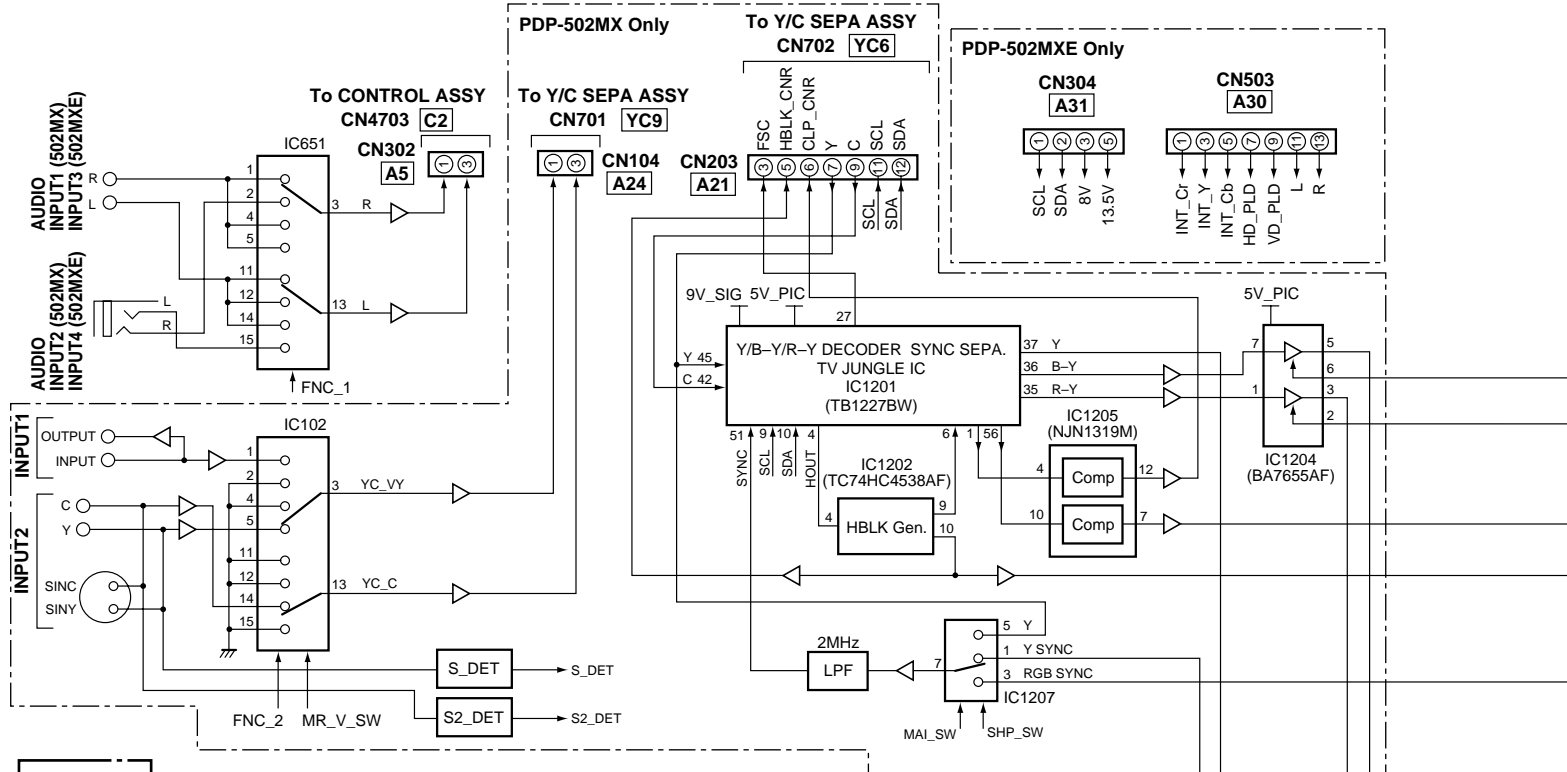




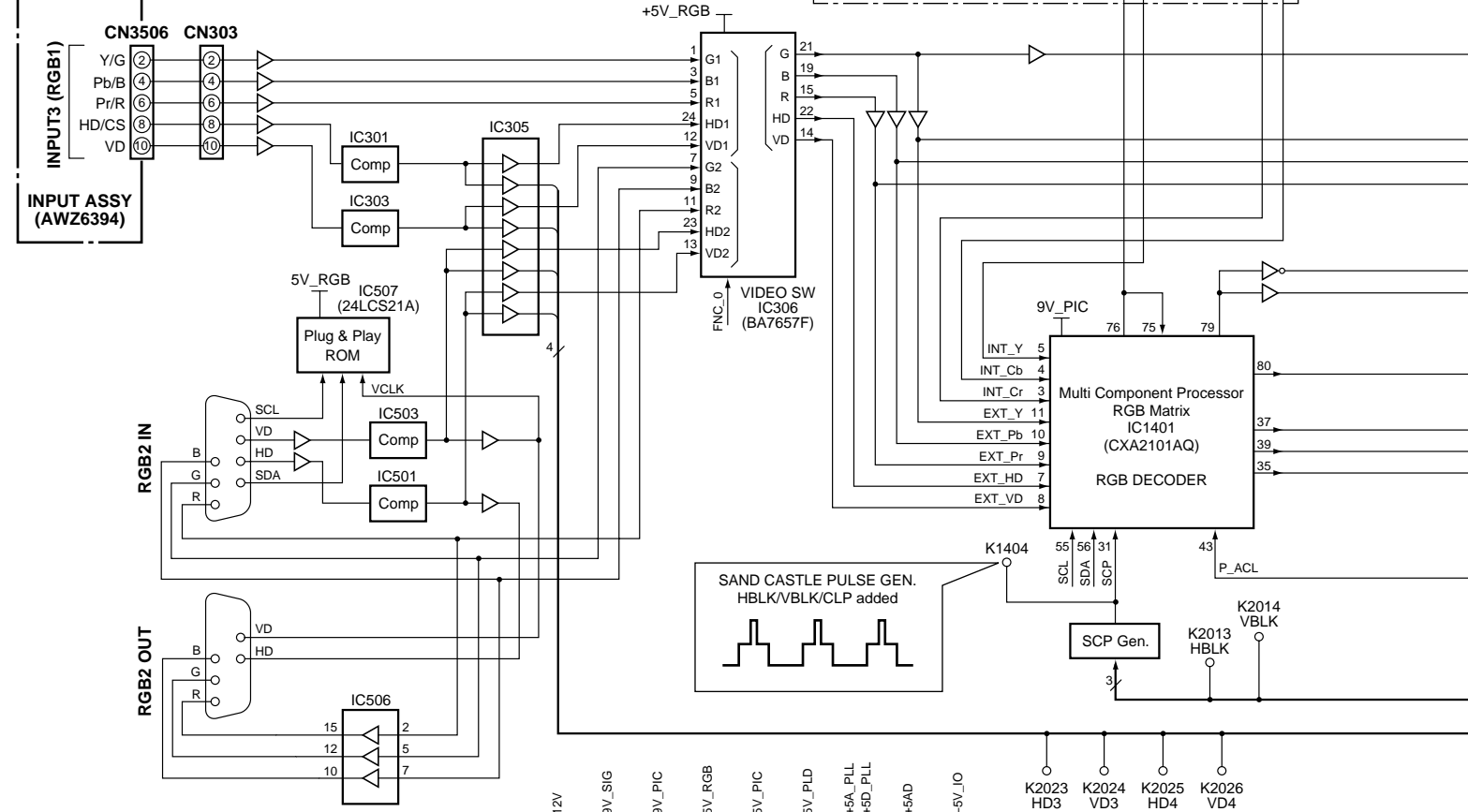
# PDP-502MX, PDP-502MXE

## 3.3.2 VIDEO ASSY SECTION

A



B

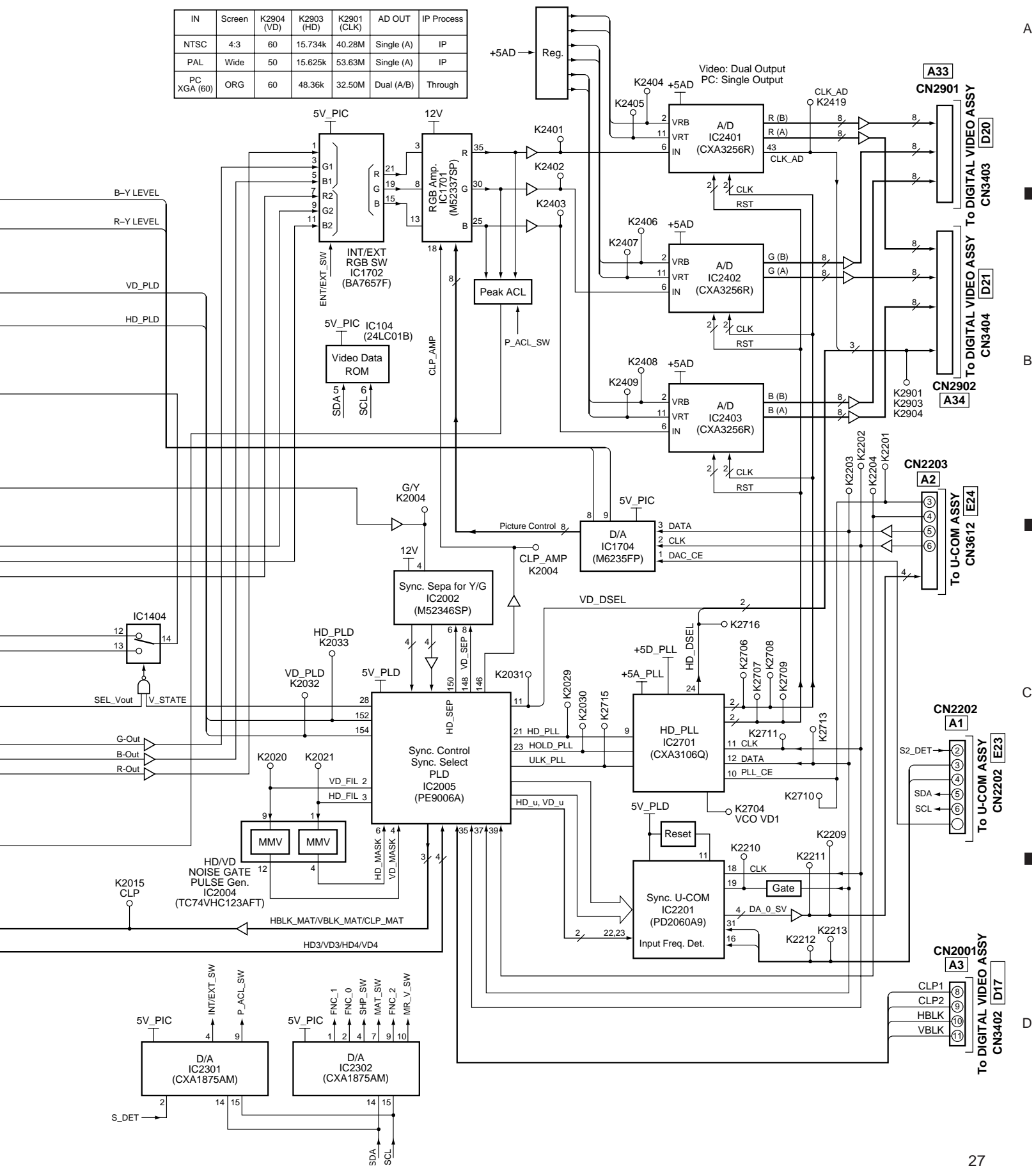


C

D

# PDP-502MX, PDP-502MXE

IN	Screen	K2904 (VD)	K2903 (HD)	K2901 (CLK)	AD OUT	IP Process
NTSC	4:3	60	15.734k	40.28M	Single (A)	IP
PAL	Wide	50	15.625k	53.63M	Single (A)	IP
PC XGA (60)	ORG	60	48.36k	32.50M	Dual (A/B)	Through



A

B

C

D

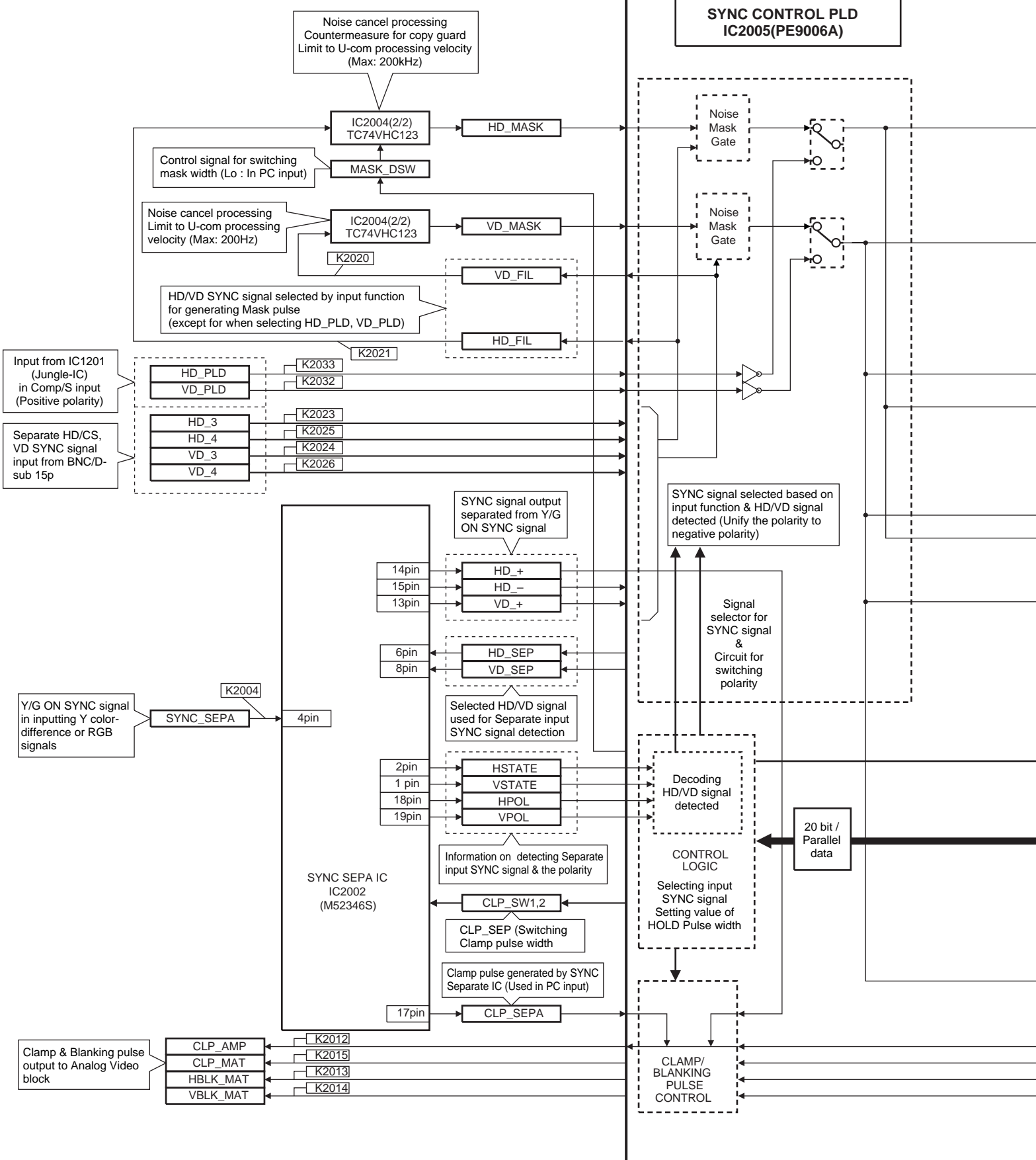
3.3.3 SYNC SIGNAL PROCESSING BLOCK

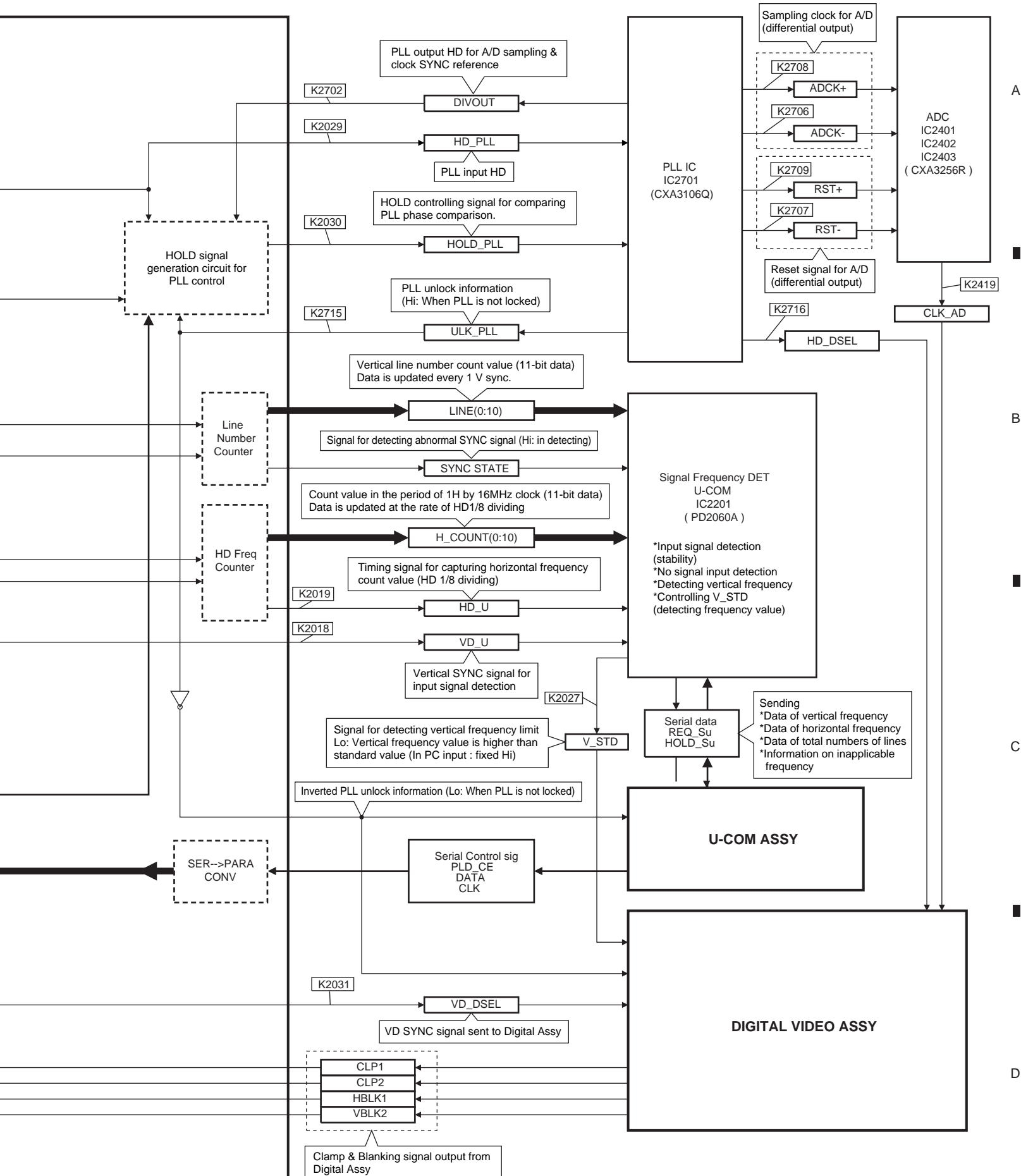
A

B

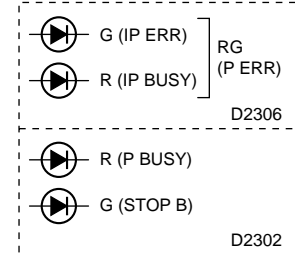
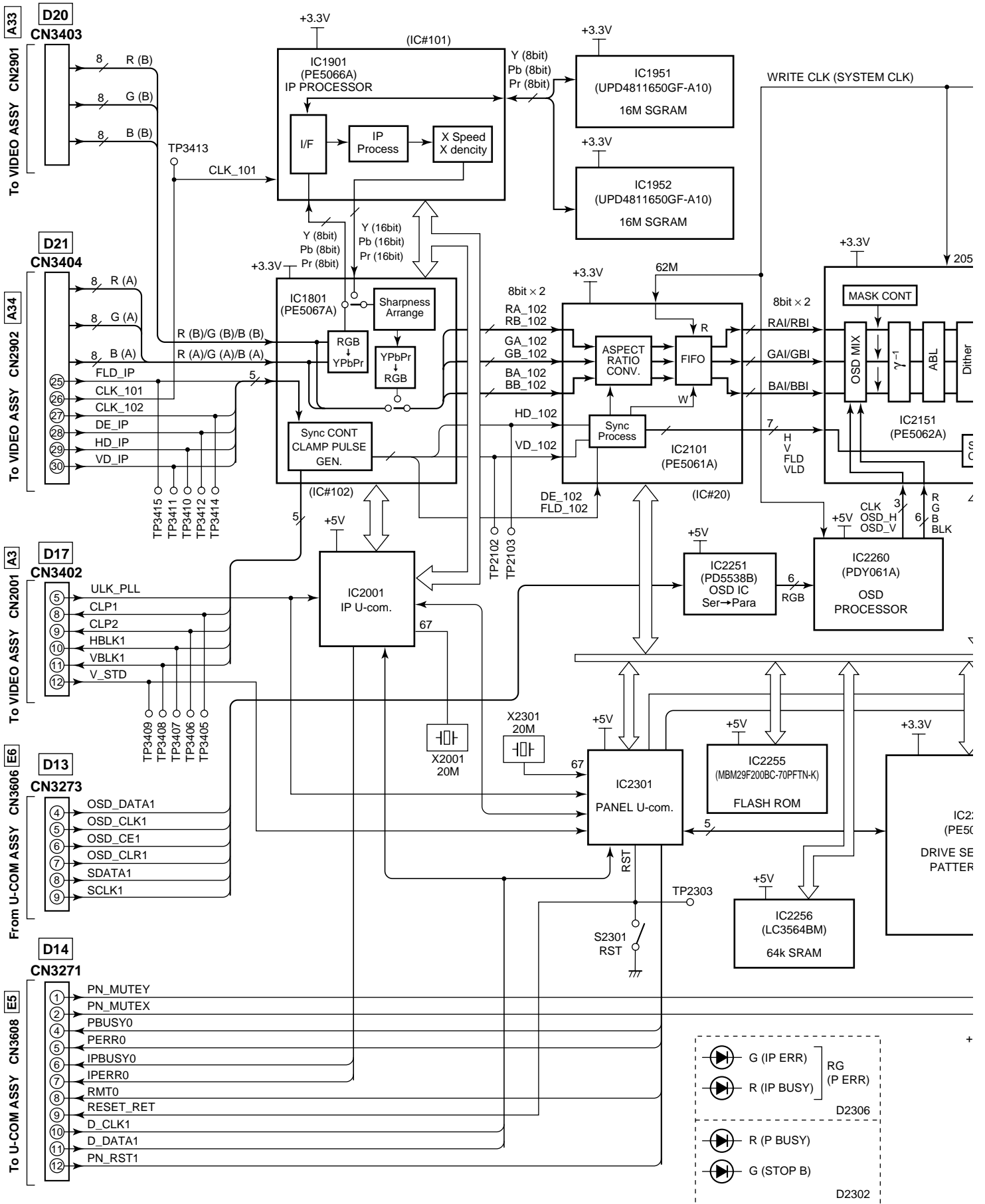
C

D

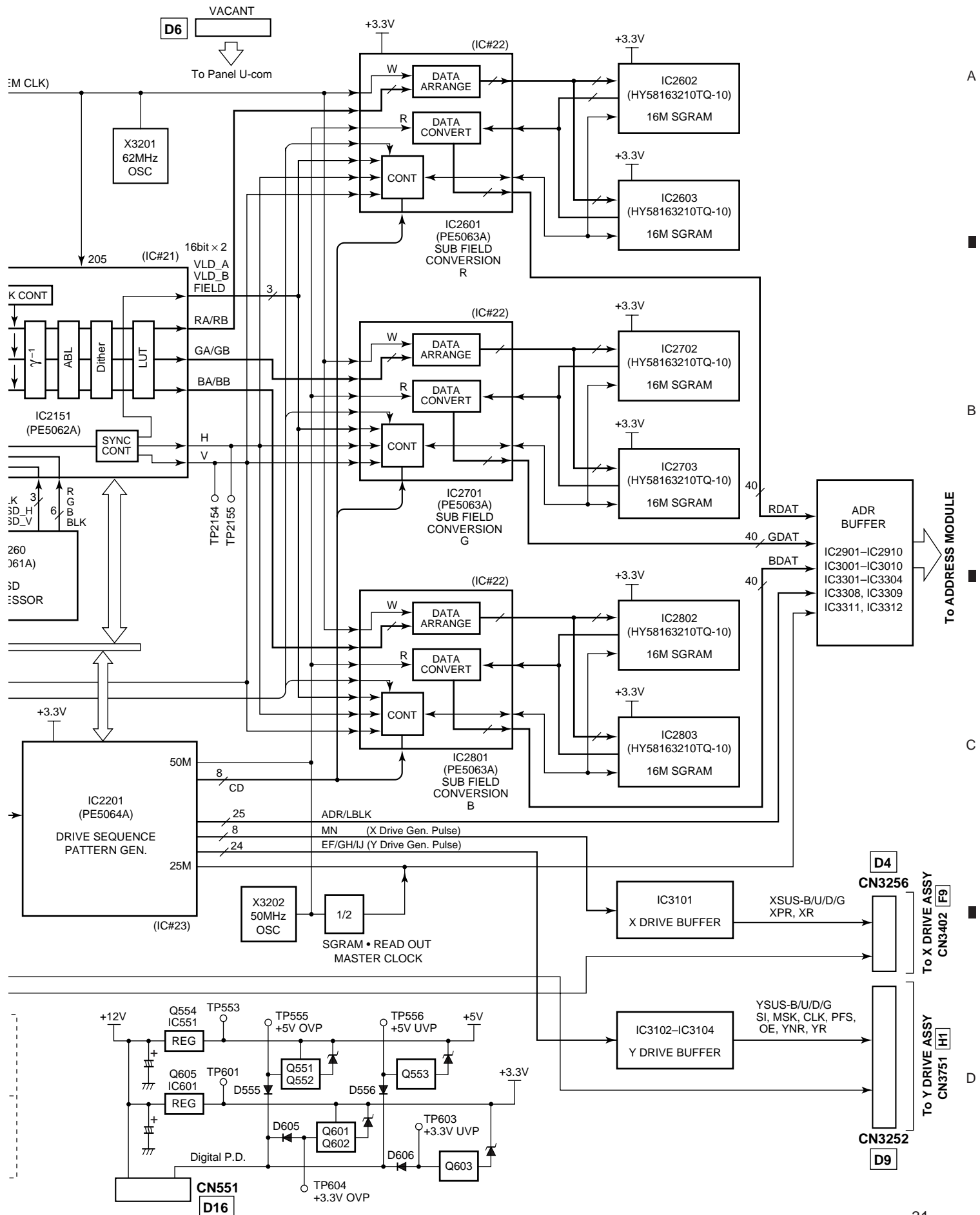




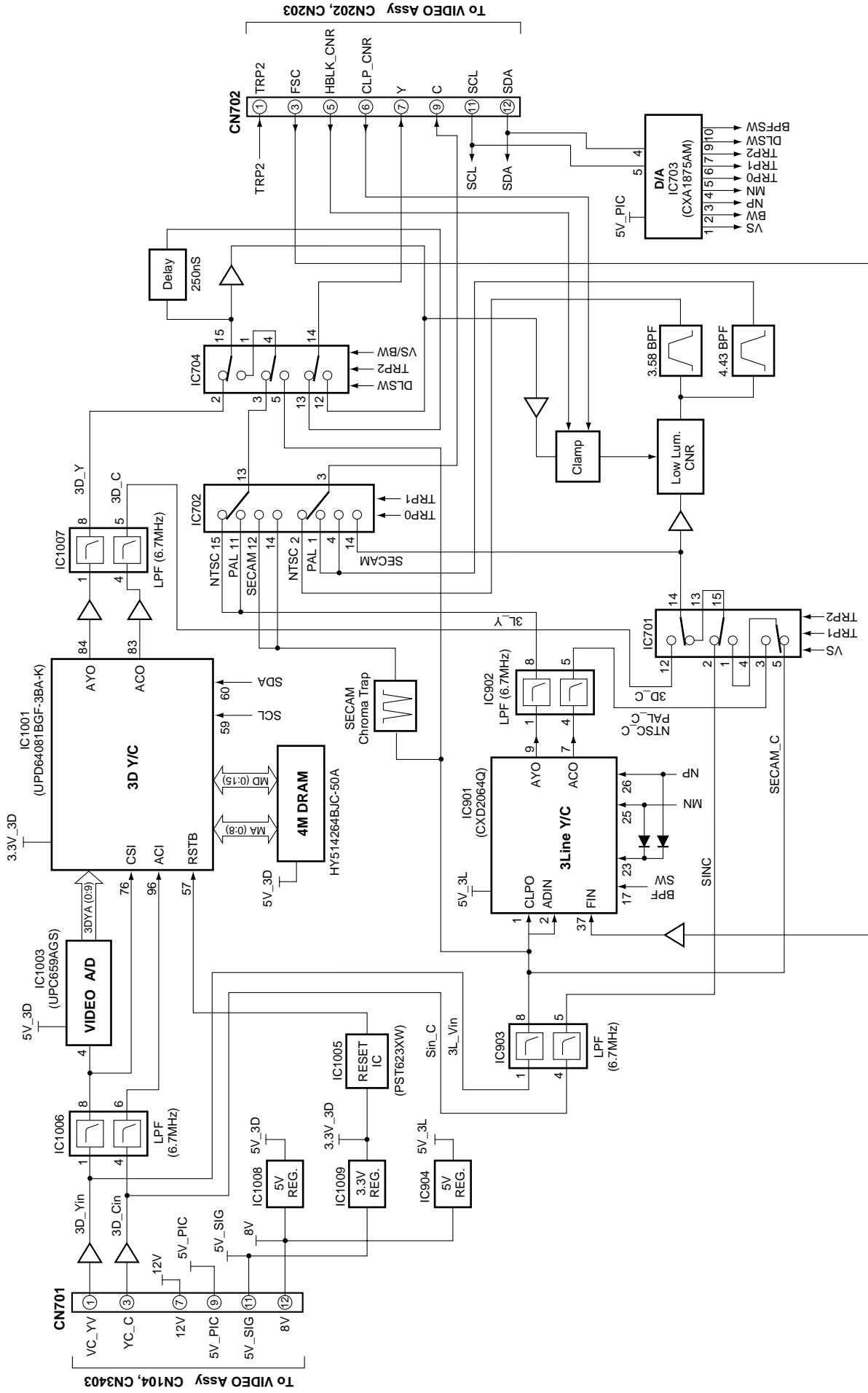
3.3.4 DIGITAL VIDEO ASSY SECTION



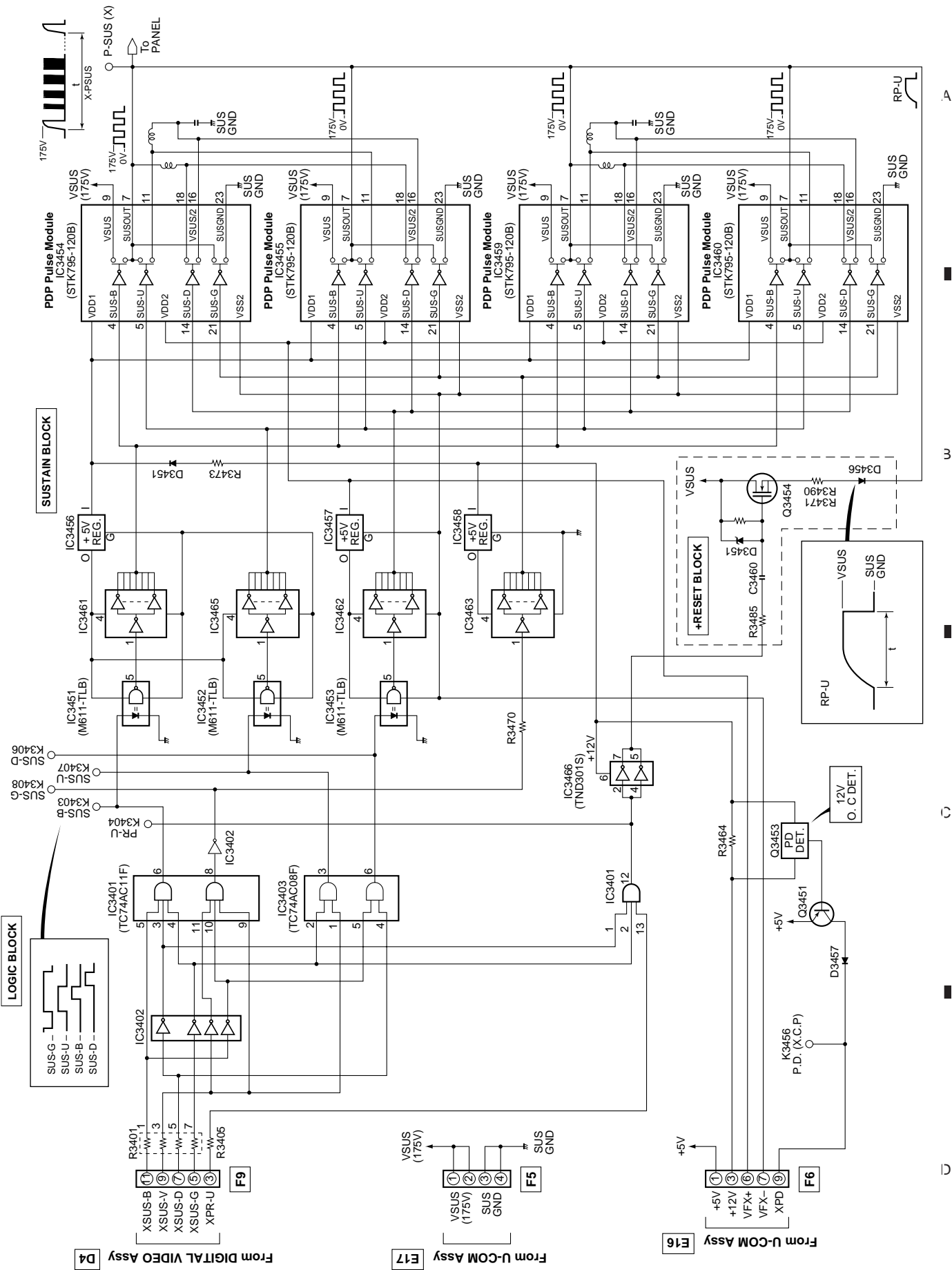
# PDP-502MX, PDP-502MXE



3.3.5 YC SEPA. ASSY SECTION (PDP-502MX Only)



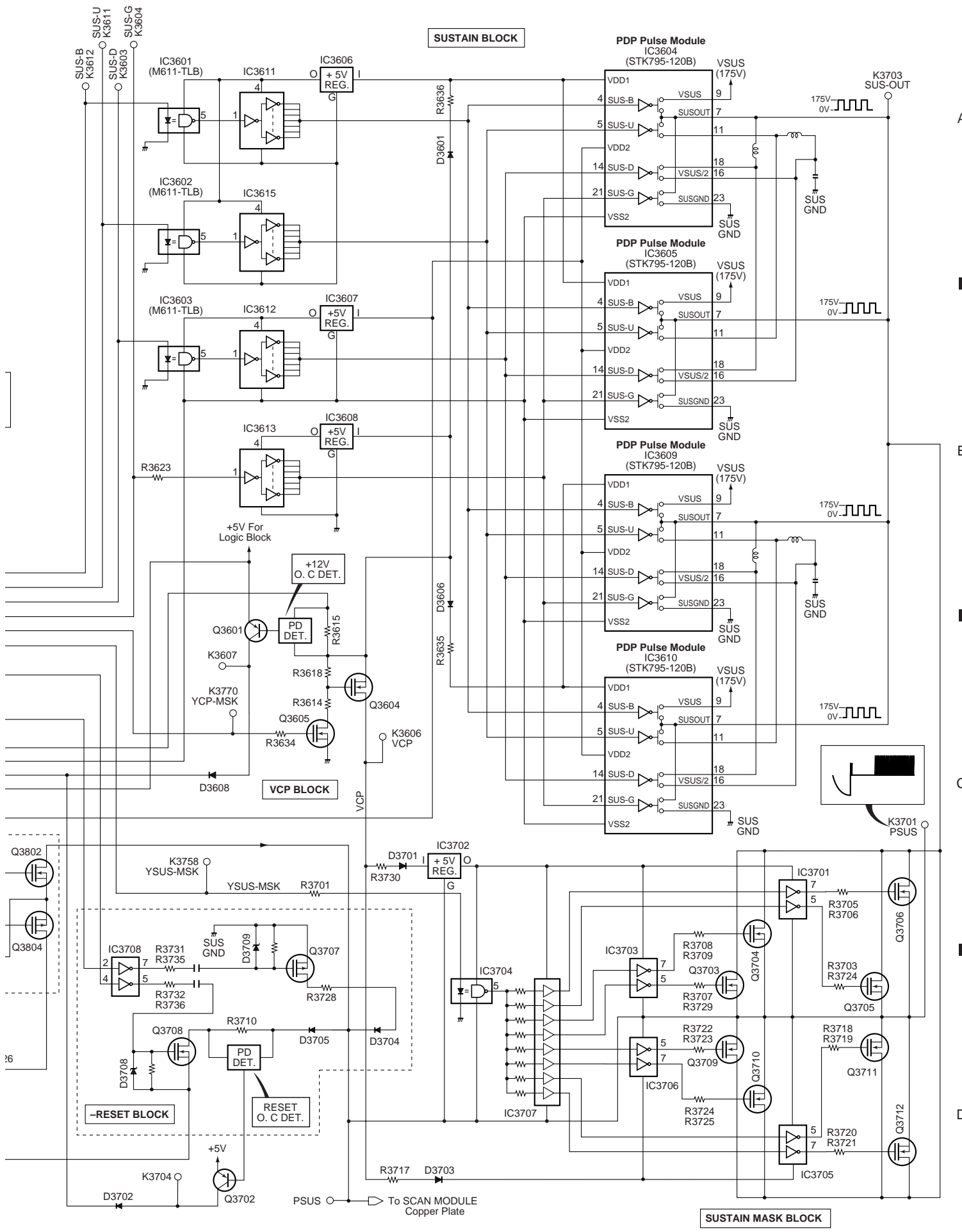
### 3.3.6 X DRIVE ASSY SECTION



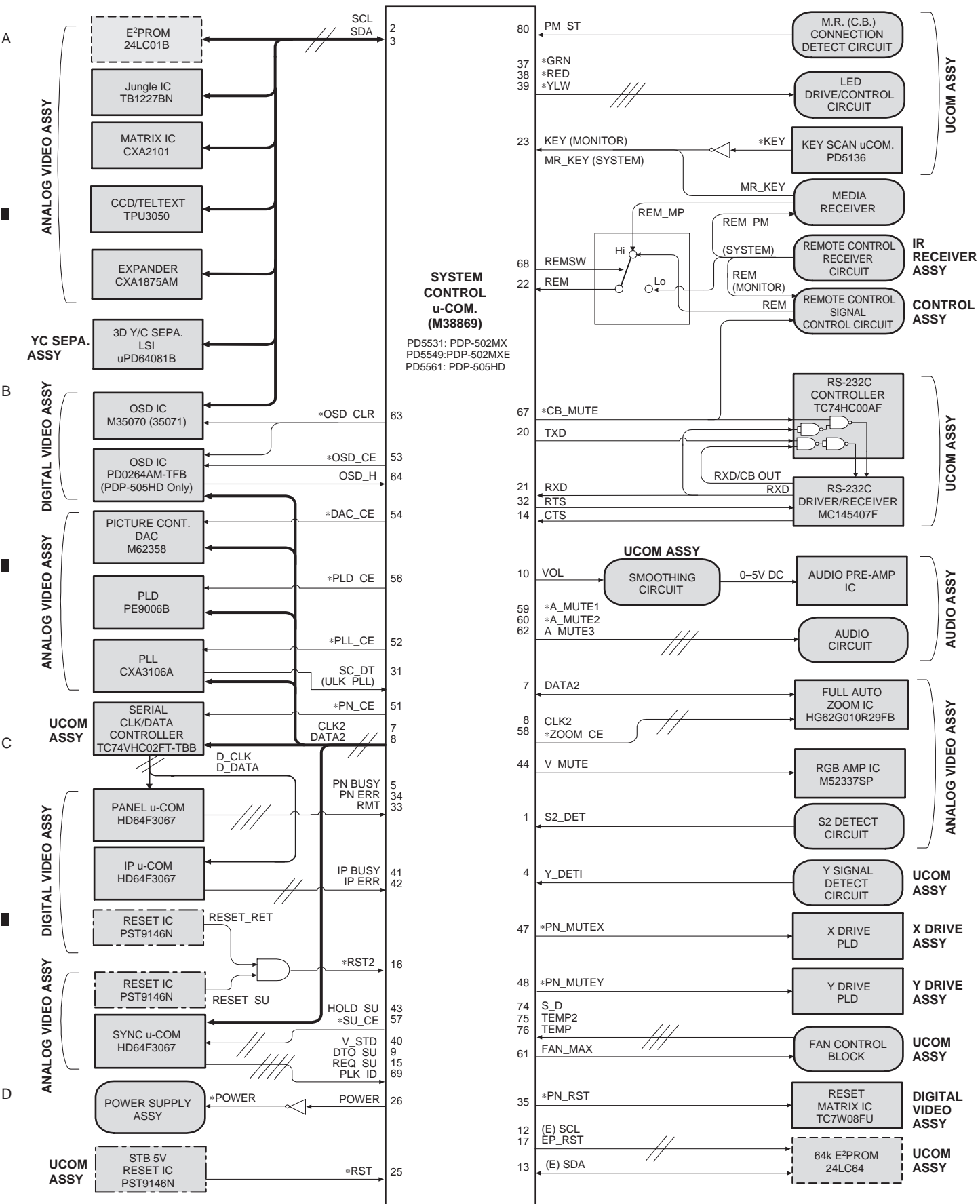




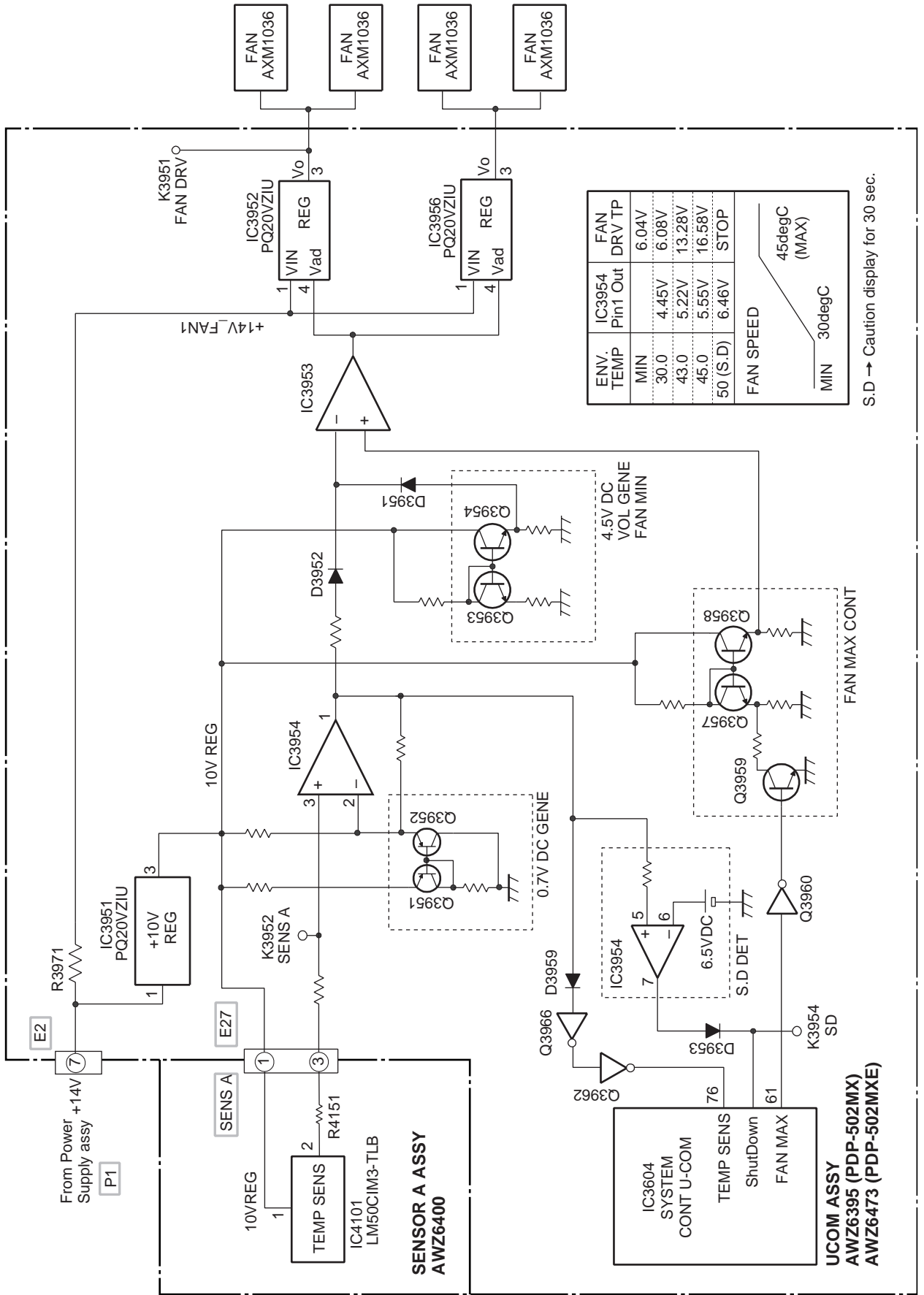
# PDP-502MX, PDP-502MXE



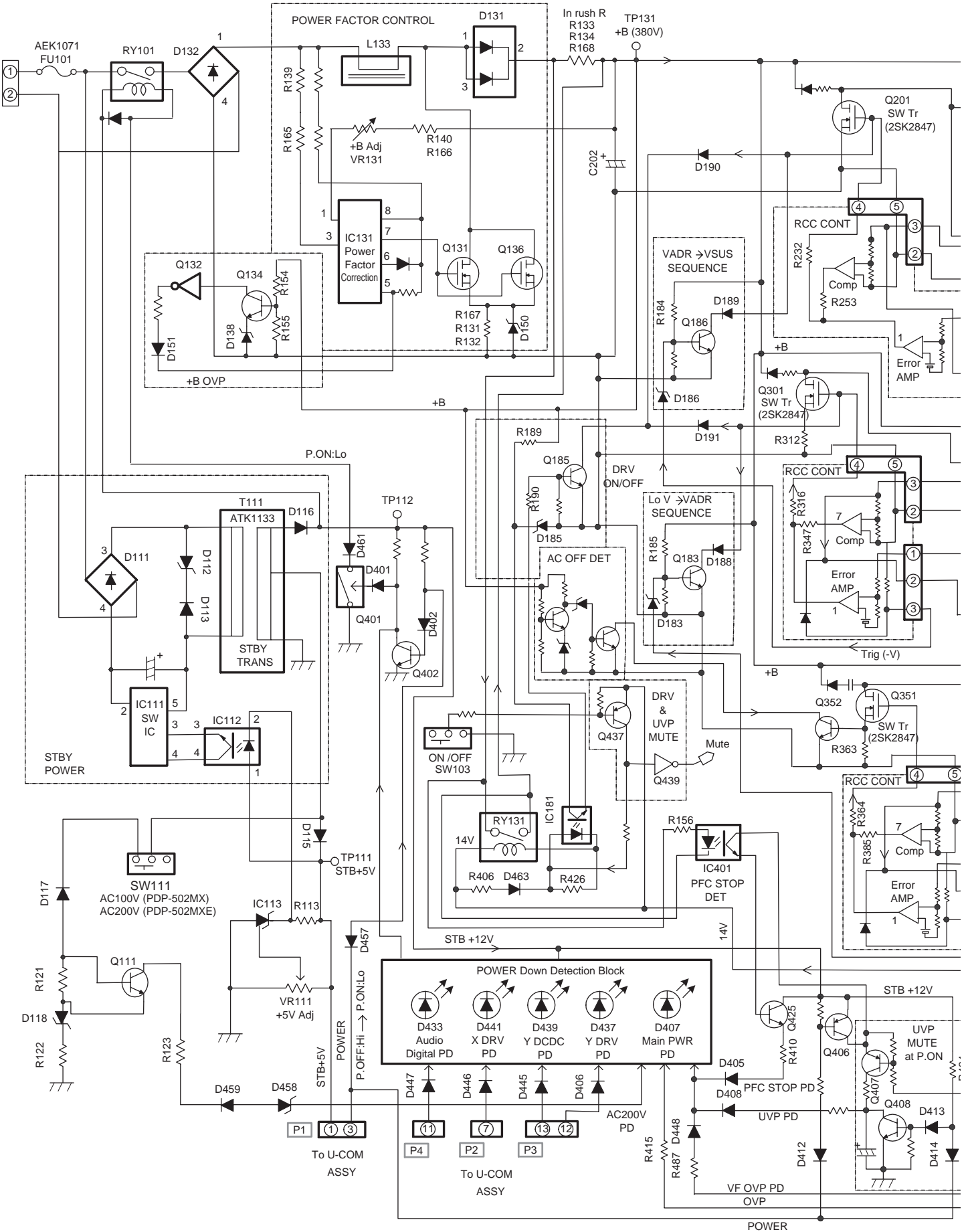
3.3.8 UCOM ASSY SECTION



### 3.3.9 FAN CONTROL SECTION



3.3.10 MAIN POWER ASSY SECTION



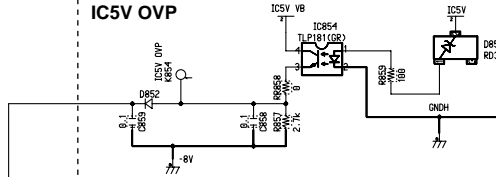




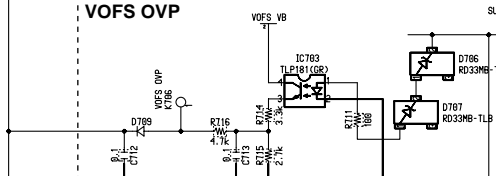
Y DRIVE ASSY

Y DC/DC BLOCK

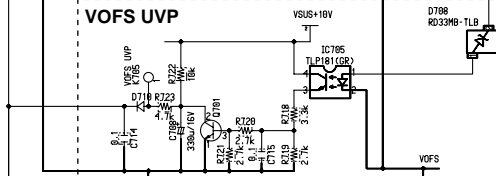
IC5V OVP



VOFS OVP



VOFS UVP



Y DRIVE BLOCK

RESET OCP

