Self Diagnosis Supported model

SERVICE MANUAL

AE-6B CHASSIS

MODEL	COMMANDER	DEST	CHASSIS NO.	MODEL	COMMANDER	DEST	CHASSIS NO.
KV-29FX66E	RM-934	ESP	SCC-Q81B-A	KV-29FX66K	RM-934	OIRT	SCC-Q82A-A

FD Trinitron

KV-29FX66

RM-934

TRINITRON ® COLOR TV

SONY ®

TABLE OF CONTENTS

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR THE CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP.

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD DUE TO LIVE CHASSIS, THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE'LANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÈ LORS DE TOUT DÈPANNAGE LE CHÁSSIS DE CE RÈCEPTEUR EST DIRECTMENT RACCORDÈ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS Á LA SECURITÈ!!

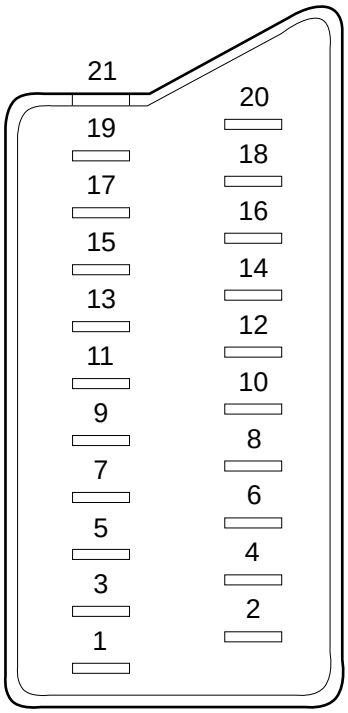
LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES SCHÈMAS DE PRINCIPE, LES VUES EXPLOSÈES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÈCURITÈ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPSANTS SONY DONT LE NUMÈRO DE PIÈCE EST INDIQUÈ DANS LE PRÈSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÈS PAR SONY.

ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
E	B/G/H	GERMAN/NICAM Stereo	VHF : E2-E12 UHF : E21-E69 CABLE TV : S01-S03, S1-S20	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
K	B/G/H, D/K	GERMAN/NICAM Stereo	VHF : E2-E12, R01-R12 UHF : E21-E69, R21-R69 CABLE TV : S01-S03, S1-S20	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)

Picture Tube	FD Trinitron Approx 72 cm (29 inches) (Approx 68 cm picture measured diagonally) 104 degree deflection	**Sound Output**	
		Right and Left speaker	2x20W (Music Power) 2x10W (RMS)
		Subwoofer	1x30W (Music Power) 1x15W (RMS)
Input/Output Terminals [REAR]		**General Specifications**	
1: 21-pin Euro connector (CENELEC standard)	Inputs for Audio and Video signals. Inputs for RGB. Outputs of TV Video and Audio signals.	Power Requirements	220 - 240V
		Power Consumption	130W
2: 21-pin Euro connector	Inputs for Audio and Video signals. Inputs for S Video. Outputs of TV Video and Audio signals. (selectable)	Dimensions	Approx 771x585x506mm
		Weight	Approx 50kg
3: 21-pin Euro connector	Inputs for Audio and Video signals. Inputs for S Video. Outputs for Video and Audio signals (monitor out)	Supplied Accessories	RM-934 Remote Commander (1) IEC designated R6 battery (2)
Phono Jacks	Output Connectors variable for Audio Signals	Other Features	100 Hz picture, TV system Autodetection, Teletext, Smartlink, BBE, PIP, Virtual Dolby
Input/Output Terminals [SIDE]		**Remote control system : Infrared control**	
Headphone jack	stereo mini jack	Power requirements	3V dc 2 batteries IEC designation R6 (size AA)
Audio inputs	phono jacks		
Video inputs	phono jacks		
S Video input	4 pin DIN		
Design and specifications are subject to change without notice.			

Model Name Item	KV-29FX66E	KV-29FX66K
Pal Comb	OFF	OFF
PIP	ON	ON
RGB Priority	ON	ON
Woofer Box	ON	ON
Scart 1	ON	ON
Scart 2	ON	ON
Scart 3	ON	ON
Front in (4)	ON	ON
Projector	OFF	OFF
AKB in 16:9 mode	ON	ON
Norm B/G	ON	ON
Norm I	OFF	OFF
Norm D/K	OFF	ON
Norm AUS	OFF	OFF
Norm L	OFF	OFF
Norm SAT	OFF	OFF
Norm M	OFF	OFF
Teletext	ON	ON
Nicam Stereo	ON	ON

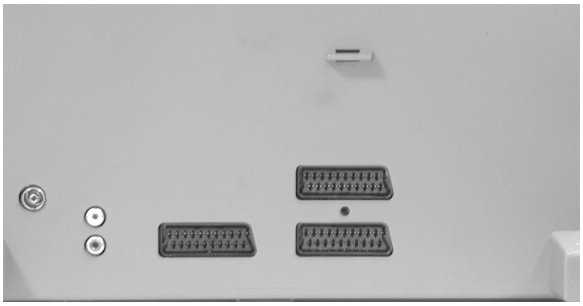
21 pin connector



Pin No	1	2	3	Signal	Signal level
1	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedence : Less than 1kohm*
2	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedence : More than 10kohm*
3	○	○	○	Audio output A (left)	Standard level : 0.5V rms Output impedence : Less than 1kohm*
4	○	○	○	Ground (audio)	
5	○	○	○	Ground (blue)	
6	○	○	○	Audio input A (left)	Standard level : 0.5V rms Output impedence : More than 10kohm*
7	○	●	●	Blue input	0.7 +/- 3dB, 75 ohms positive
8	○	○	○	Function select (AV control)	High state (9.5-12V) : Part mode Low state (0-2V) : TV mode Input impedence : More than 10K ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (green)	
10	○	○	○	Open	
11	○	●	●	Green	Green signal : 0.7 +/- 3dB, 75 ohms, positive
12	○	○	○	Open	
13	○	○	○	Ground (red)	
14	○	○	○	Ground (blanking)	
15	○	–	–	Red input	0.7 +/- 3dB, 75 ohms, positive
	–	○	○	(S signal Chroma input)	0.3 +/- 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1-3V) Low state (0-0.4V) Input impedence : 75 ohms
17	○	○	○	Ground (video output)	
18	○	○	○	Ground (video input)	
19	○	○	○	Video output	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
20	○	–	–	Video input	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
	–	○	○	Video input Y (S signal)	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

Rear Connection Panel



Front Connection Panel

S-Video socket

S Video socket pin configuration		
Pin No	**Signal**	**Signal Level**
1	Ground	-
2	Ground	-
3	Y (S signal) input	1V+/- 3dB 75ohm, positive Sync. 0.3V -3 +10dB
4	C (S signal) input	0.3V+/- 3dB 75ohm, positive Sync.

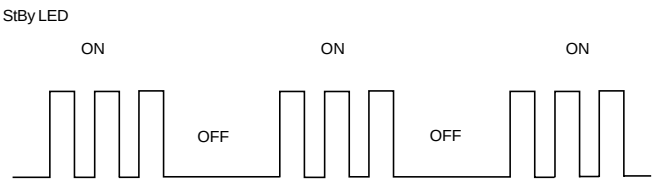
AE-6B SELF DIAGNOSTIC SOFTWARE

The identification of errors within the AE-6B chassis is triggered in one of two ways :- 1: Busy or 2: Device failure to respond to IIC. In the event of one of these situations arising the software will first try to release the bus if busy (Failure to do so will report with a continuous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the LED (Series of flashes which must be counted) See table 1., non fatal errors are reported using this method.
Each time the software detects an error it is stored within the NVM. See Table 2.

Table 1

Error Message	LED Code
No error	00
Reserved	01
OCP (Over Current Protection)	02
Over Voltage Protection	03
No Vertical Sync	04
IKR Error at power on	05
IIC bus clock and/or data lines low at power on	06
NVM no IIC bus acknowledge at power on	07
Horizontal Protection	08
Tuner no acknowledge at power on	09
Sound Processor Error	10
Reserved	11
Scanrate Error	12
DAC Error	13
Backend Error	14
Dynamic Convergence Error	15
PIP Error	16

Flash Timing Example : e.g. error number 3



How to enter into Table 2

1. Turn on the main power switch of the TV set.
2. Program Remote Commander for Operation in Service Mode. [See Page 20].
2. Press 'VIDEO' 'VIDEO' > 'MENU' > ERROR MENU on the Remote Commander.
3. The following table will be displayed indicating the error count.

Table 2

ERROR MENU

E02	OCP	(0, 255)	0
E03	OVP	(0, 255)	0
E04	VSYNC	(0, 255)	0
E05	IKR	(0, 255)	0
E06	IIC	(0, 255)	0
E07	NVM	(0, 255)	0
E08	HPROT	(0, 255)	0
E09	TUNER	(0, 255)	0
E10	SOUNDP	(0, 255)	0
E11	-	(0, 255)	0
E12	SCANRATE	(0, 255)	0
E13	DAC	(0, 255)	0
E14	BACKEND	(0, 255)	0
E15	DYN CON	(0, 255)	0
E16	PIP	(0, 255)	0

WORKING TIME

HOURS	14
MINUTES	7

Note: To clear the error count data press '80' on the Remote commander.

SECTION 4 CIRCUIT ADJUSTMENTS

4-1. Electrical Adjustments

Service adjustments to this model can be performed using the supplied remote Commander RM-934.

Programming the Remote Commander for Operation in Service Mode

1. Press the VCR/TV/DVD button until the TV LED lights.
2. Press and hold the yellow button for approx. 5 seconds until the TV LED flashes quickly.
3. Press 99999. All three LED's should light.
   The remote commander is now set to Service Mode.
4. To return the remote commander to normal operation mode repeat steps 1. and 2. then press 00000. All three LED's should light.
   The remote commander is now set to normal mode.

Setting the TV into Service Mode

1. Program the remote commander for operation in Service Mode as described above.
2. Turn on the TV main power switch.
3. Press the video standby button  on the remote commander twice.
   'TT __' will appear in the upper right corner of the screen.
   Other status information will also be displayed.
4. Press 'MENU' on the remote commander to obtain the following menu on the screen.

```
Geometry
Service
Scanrate
DAC
Dyn. Conv.
PiP
Sound
IF adjust
Error Menu

AE6B v0.14 (Jun 2001)
Factory data FFh  FFh
MSP Device : MSP3411G
```

5. Move to the corresponding adjustment item using the up or down arrow buttons on the Remote Commander.
6. Press the right arrow button to enter into the required menu item.
7. Press the 'Menu' button on the Remote Commander to quit the Service Mode when all adjustments have been completed.

- **Note :**
  · After carrying out the service adjustments, to prevent the customer accessing the 'Service Menu' switch the TV set OFF and then ON.

GEOMETRY

ABL TH	(0, 3)	0
ABL MODE	(0, 3)	0
P ABL	(0, 15)	15
V SIZE	(0, 63)	35
V POSITION	(0, 63)	33
V COMP	(0, 3)	1
V LIN	(0, 15)	7
S CORRECTION	(0, 15)	7
H SIZE	(0, 63)	44
PIN AMP	(0, 63)	32
UP CORNERPIN	(0, 63)	29
M PIN	(0, 3)	2
LO CORNERPIN	(0, 63)	29
TRAPEZIUM	(0, 15)	2
H POSITION	(0, 63)	40
AFC BOW	(0, 15)	8
AFC ANGLE	(0, 15)	9
LEFT BLK	(0, 63)	34
RIGHT BLK	(0, 63)	17
V ASPECT	(0, 63)	47
AKBTIM1	(0, 3)	2
AKBTIM2	(0, 1)	0
IKR		*1*
HNG		*0*
VNG		*0*

DYN. CONV.

RANGE	(0, 63)	63
YupL	(0, 1)	0
VAL	(0, 63)	30
YlowL	(0, 1)	0
VAL	(0, 63)	31
MBOWupL	(0, 1)	0
VAL	(0, 63)	31
MBOWlowL	(0, 1)	0
VAL	(0, 63)	32
HAMPL	(0, 1)	0
VAL	(0, 63)	37
YupR	(0, 1)	0
VAL	(0, 63)	30
YlowR	(0, 1)	0
VAL	(0, 63)	30
MBOWupR	(0, 1)	0
VAL	(0, 63)	32
MBOWlowR	(0, 1)	0
VAL	(0, 63)	32
HAMPR	(0, 1)	0
VAL	(0, 63)	36
UP Y	(0, 1)	0
VAL	(0, 63)	31
LOW Y	(0, 1)	0
VAL	(0, 63)	33
H STAT	(0, 1)	0
VAL	(0, 63)	33
UP CORR	(0, 1)	0
VAL	(0, 63)	34
LOW CORR	(0, 1)	0
VAL	(0, 63)	19

IF ADJUST	
Automute	1
Audio Gain	0
L Gating	0

SERVICE		
SUB COL	(0, 63)	Adj
SUB HUE	(0, 63)	31
SUB SHARP	(0, 63)	30
SUB BRIGHT	(0, 63)	13
SUB CONT	(0, 15)	12
R-DRIVE	(0, 63)	50
G-DRIVE	(0, 63)	Adj
B-DRIVE	(0, 63)	Adj
R CUTOFF	(0, 63)	28
G CUTOFF	(0, 63)	24
B CUTOFF	(0, 63)	46
Br TXT	(0, 15)	7
Br OSD	(0, 15)	10

DAC		
CONFIG	*00000000*	
MPIN CONT	(0, 255)	96
HLIN	(0, 255)	83
HTRAP	(0, 255)	127
ROT. COIL	(0, 255)	130
PHOCUS PH	(0, 255)	90

SOUND		
M-N	(0, 511)	200
M-D	(-128, -1)	-20
M-S	(+0, +127)	+20
S-M	(+0, +127)	+10
D-M	(-128, -1)	-10
N-M	(0, 1023)	496
BBE	(+0, +68)	+28
B1	(-96, +96)	+0
B2	(-96, +96)	+0
B3	(-96, +96)	+0
B4	(-96, +96)	+0
B5	(-96, +96)	+0
SW L	(-128, +0)	+0
SW F	(+5, +40)	+30
NICAM C AD	10001	
NICAM Error	(0, 2047)	0
Stereo	(-128, +127)	+0
Status	0000000110	

ERROR MENU			
E02	OCP	(0, 255)	0
E03	OVP	(0, 255)	0
E04	VSYNC	(0, 255)	0
E05	IKR	(0, 255)	0
E06	IIC	(0, 255)	0
E07	NVM	(0, 255)	0
E08	HPROT	(0, 255)	0
E09	TUNER	(0, 255)	0
E10	SOUNDP	(0, 255)	0
E11	-	(0, 255)	0
E12	SCANRATE	(0, 255)	0
E13	DAC	(0, 255)	0
E14	BACKEND	(0, 255)	0
E15	DYN CON	(0, 255)	0
E16	PIP	(0, 255)	0

WORKING TIME	
HOURS	14
MINUTES	7

Sub Brightness Adjustment

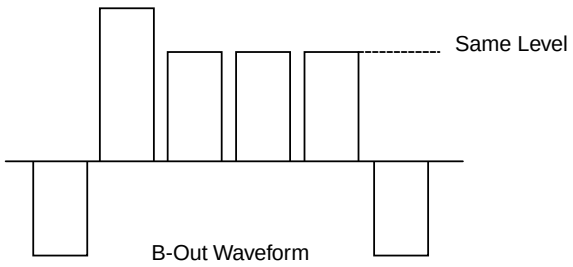
1. Input a Monoscope pattern.
2. Program the Remote Commander for operation in Service Mode. [See Page 20].
3. Press ‘VIDEO’ ‘VIDEO’ 13 on the Remote Commander.
4. Adjust the ‘Sub-Brightness’ data so that there is barely a difference between the 0 IRE and 10 IRE signal levels.

Sub Contrast Adjustment

1. Input a video signal that contains a small 100% white area on a black background.
2. Connect an digital voltmeter to Pin 10 of J7378 [C Board].
3. Program the Remote Commander for operation in Service Mode. [See Page 20].
4. Adjust the Sub-Contrast [Using ‘VIDEO’ ‘VIDEO’ ‘11’] to obtain a voltage of 105 +/- 5V.

Sub Colour Adjustment

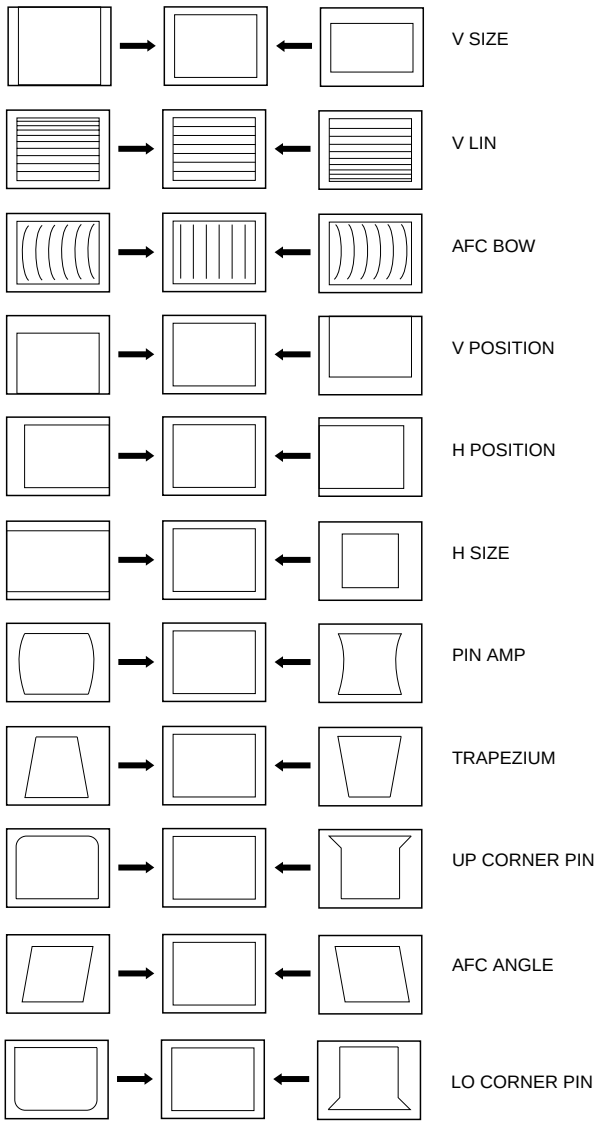
1. Receive a PAL colour bar signal.
2. Connect an oscilloscope to Pin 6 of CN7001 [A Board].
3. Program the Remote Commander for operation in Service Mode. [See Page 20].
4. Adjust the ‘Sub Colour’ [Using ‘VIDEO’ ‘VIDEO’ ‘12’] so that the Cyan, Magenta and Blue colour bars are of equal levels as indicated below.



B-Out Waveform

Deflection System Adjustment

1. Program the Remote Commander for operation in Service Mode. [See Page 20] and enter into the 'Geometry' service menu.
2. Select and adjust each item in order to obtain the optimum image.



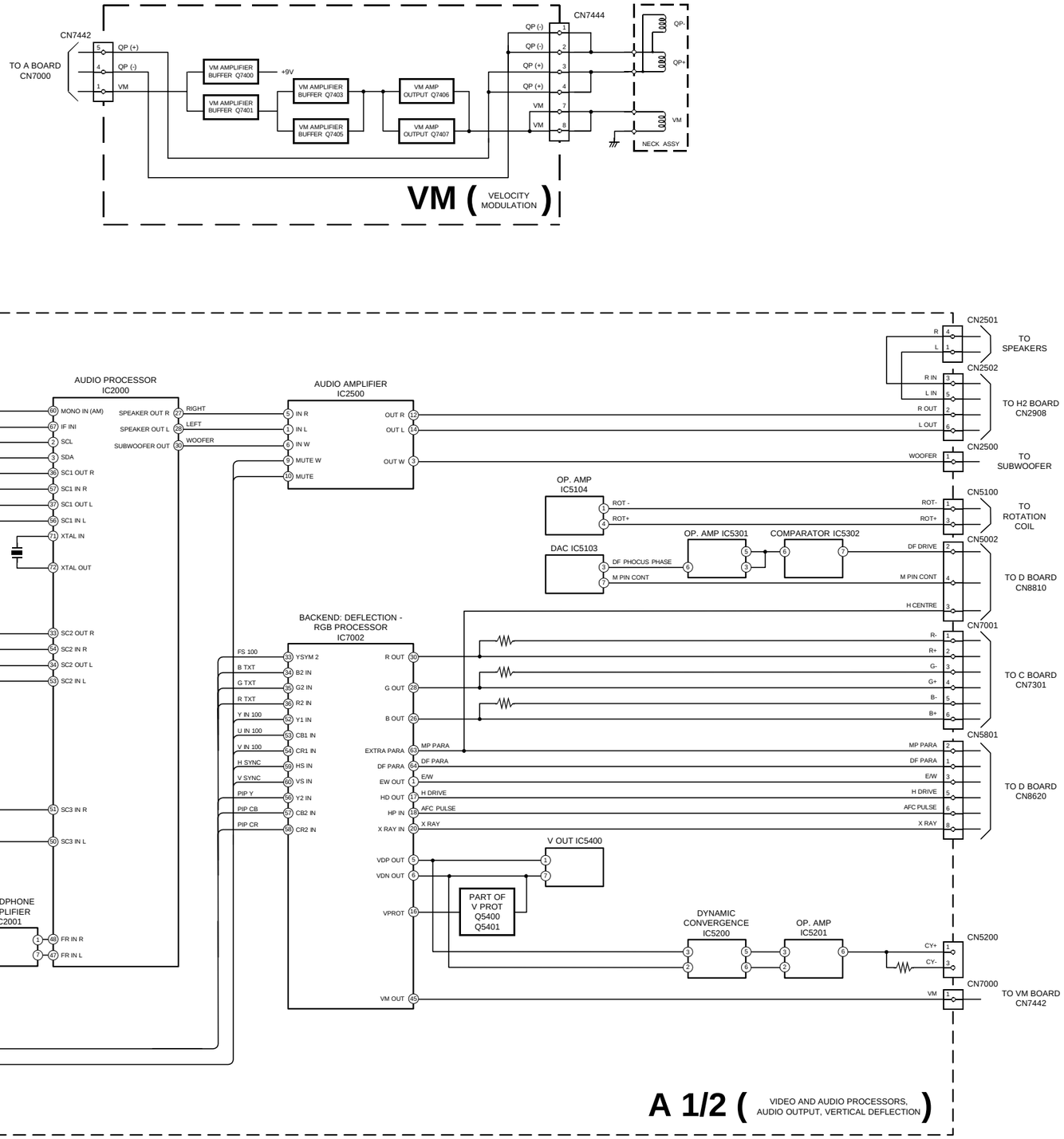
GEOMETRY		
ABL TH	(0, 3)	0
ABL MODE	(0, 3)	0
P ABL	(0, 15)	15
V SIZE	(0, 63)	35
V POSITION	(0, 63)	33
V COMP	(0, 3)	1
V LIN	(0, 15)	7
S CORRECTION	(0, 15)	7
H SIZE	(0, 63)	44
PIN AMP	(0, 63)	32
UP CORNERPIN	(0, 63)	29
M PIN	(0, 3)	2
LO CORNERPIN	(0, 63)	29
TRAPEZIUM	(0, 15)	2
H POSITION	(0, 63)	40
AFC BOW	(0, 15)	8
AFC ANGLE	(0, 15)	9
LEFT BLK	(0, 63)	34
RIGHT BLK	(0, 63)	17
V ASPECT	(0, 63)	47
AKBTIM1	(0, 3)	2
AKBTIM2	(0, 1)	0
IKR		*1*
HNG		*0*
VNG		*0*

4-3. TEST MODE 2:

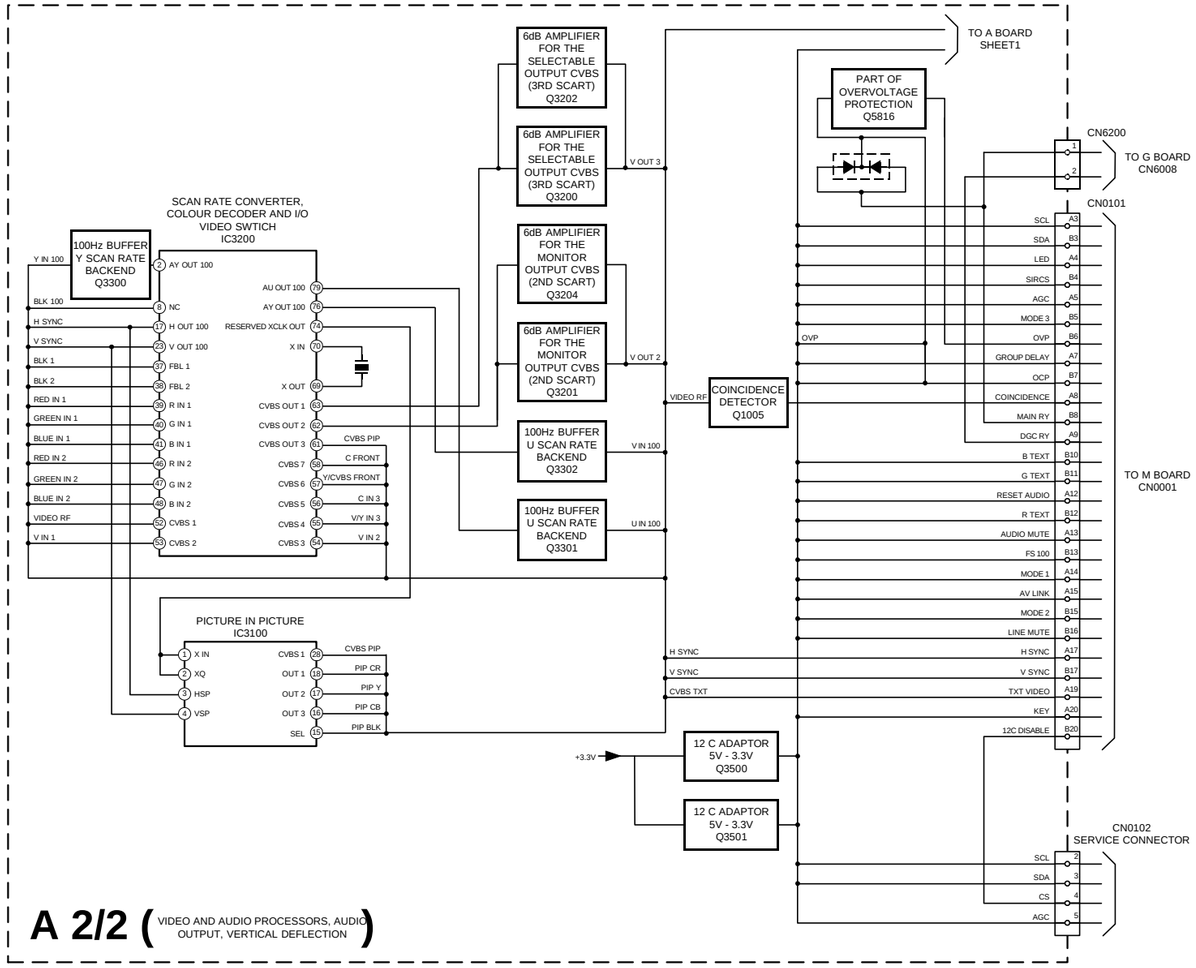
Test Mode 2 is available by rogramming the Remote Commander for operation in Service Mode [As shown on Page 20] then pressing the 'VIDEO' button twice, OSD 'TT' appears. The functions described below are available by selecting the two numbers. To release the 'Test mode 2', press 00, 10, 20 ... twice or switch the TV set into Stand-by mode. In 'TT Menu' mode, it is possible to remove the Menu from the screen by pressing the Speaker Off button once. Pressing the Speaker OFF button a second time will cause the Menu to reappear. The function is kept even when the menu is not displayed on screen !!.

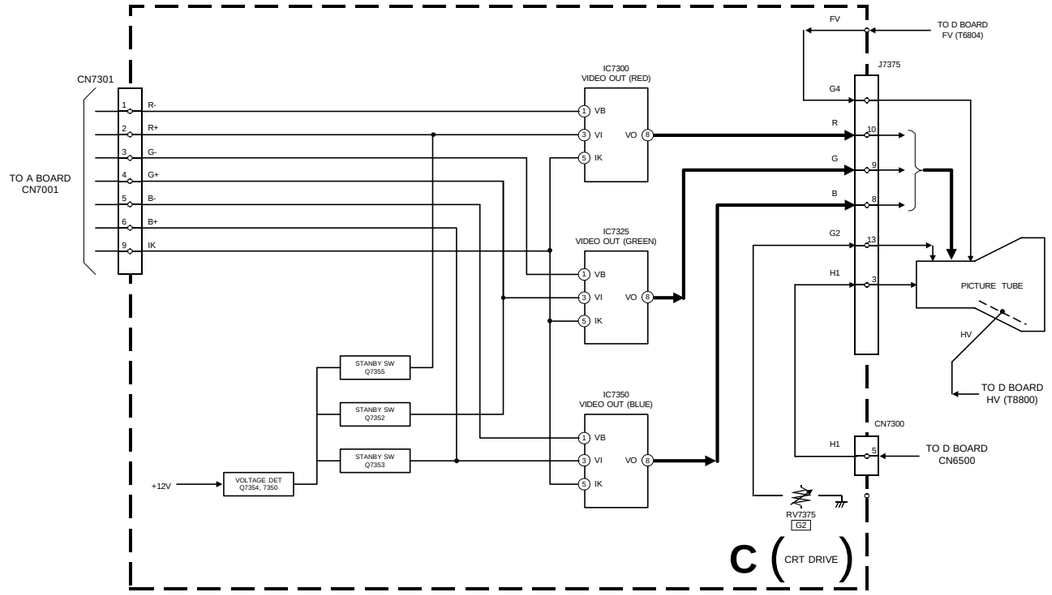
00	'TT' mode off
01	Picture maximum
02	Picture minimum
03	Set speaker/headphone Volume to 35%
04	Set speaker/headphone Volume to 50%
05	Set speaker/headphone Volume to 65%
06	Set speaker/headphone Volume to 80%
07	Ageing mode
08	Shipping Condition
11	Sub picture adjustment
12	Sub colour adjustment
13	Sub Brightness adjustment
14	Text H Position adjustment
15	Rotation Coil Test
16	Picture level 50%
19	Factory Mode Enable/Disable
21	Destination ADEKR
22	Destination BL
23	Destination ADEKR
24	Destination U
25	Destination ADEKR
26	Destination BL
27	Destination ADEKR
28	Destination ADEKR
31	Auto Shutoff Enable/Disable
36	Velocity Modulation (VM) OFF/ON test
41	Re-initialise NVM
43	Select Dual A sound
44	Select Dual B sound
45	Select Mono sound
46	Select Stereo sound
48	Set NVM as non virgin
49	Set NVM as virgin
53	FM Overmodulation Enable/Disable
55	Tuner selection (SONY/ALPS)
59	Select Model 3 Scarts + PIP or 2 Scarts
68	Enable/Disable X26 countermeasure (N problem)
73	Enable Zweiton D/K2 system (6.5/6.74)
74	Enable Zweiton D/K3 system (6.5/5.74)
78	Balance full right
79	Balance full left
87	Local keys test
99	Display Error and Working Time menu

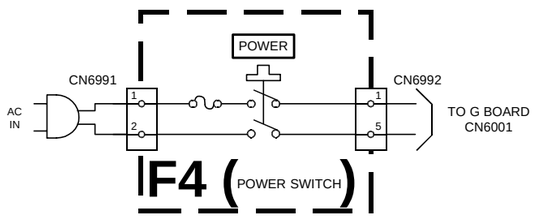
5-1. BLOCK DIAGRAMS (1)

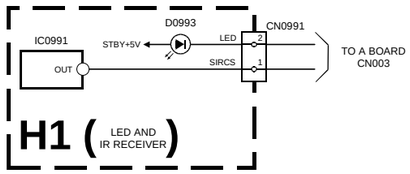


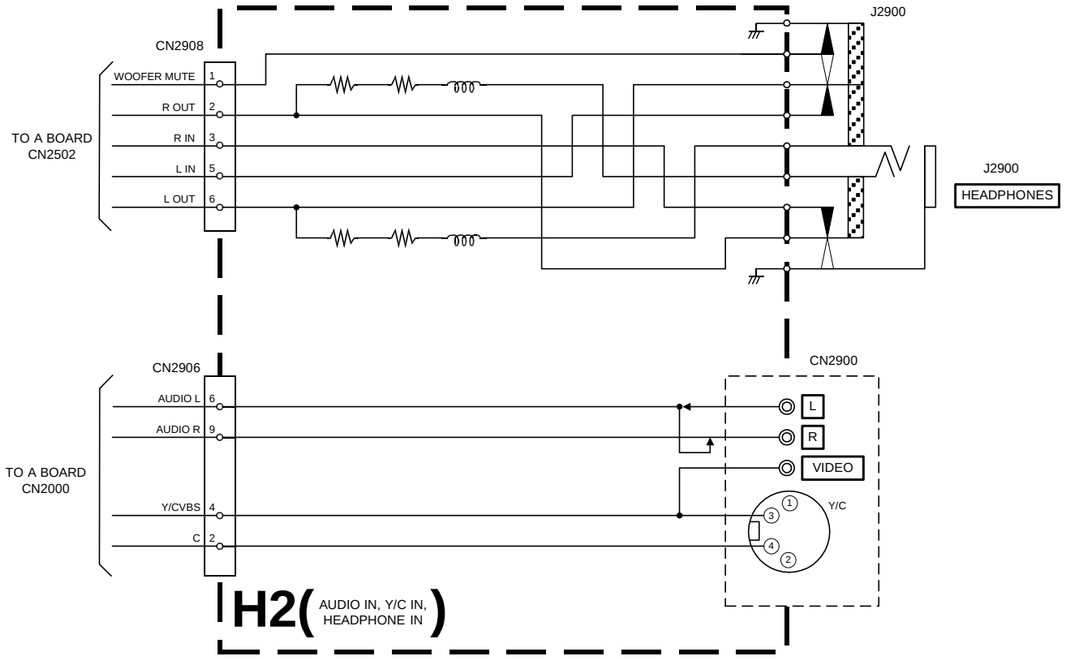
5-1. BLOCK DIAGRAMS (2)











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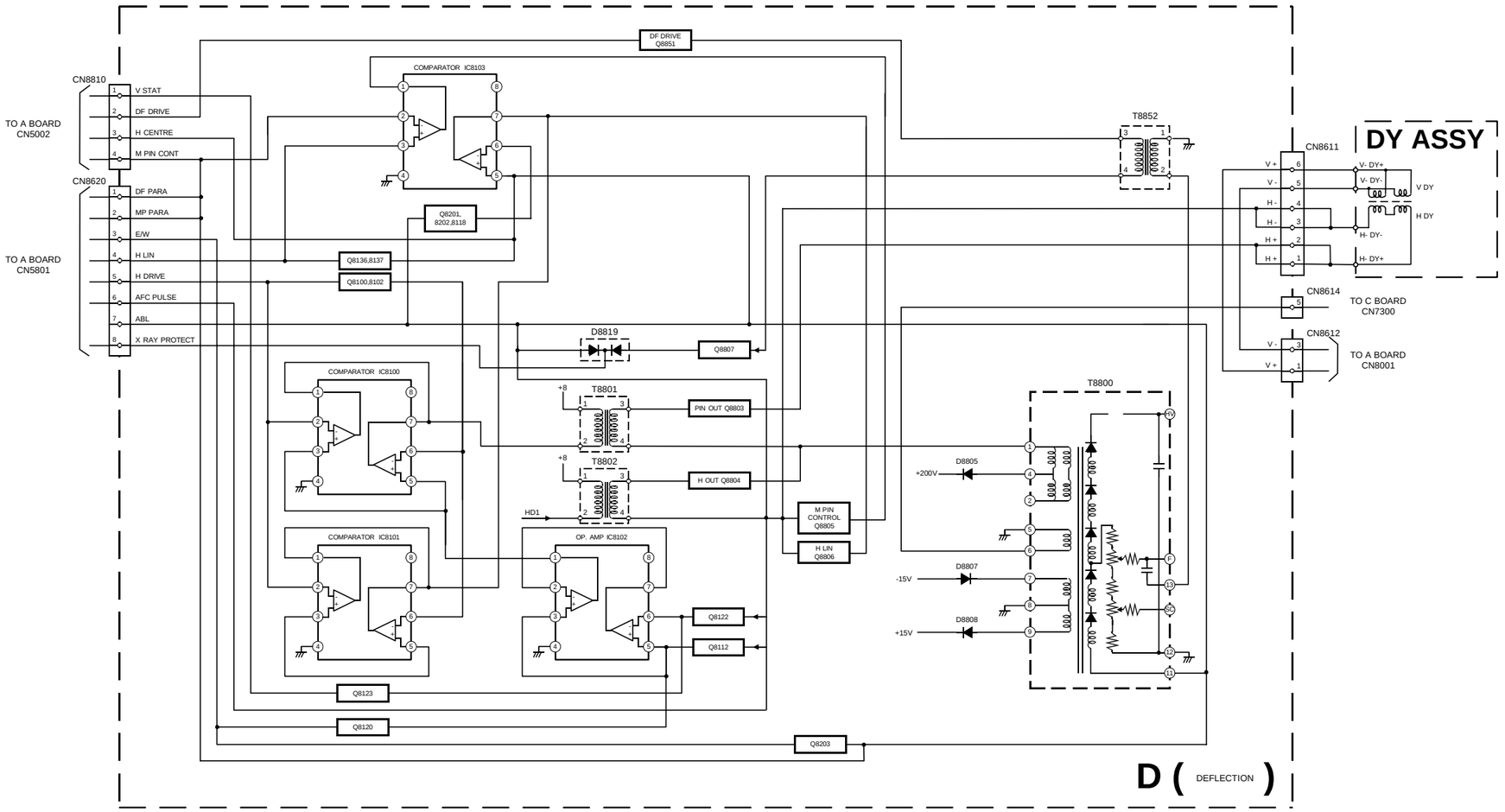
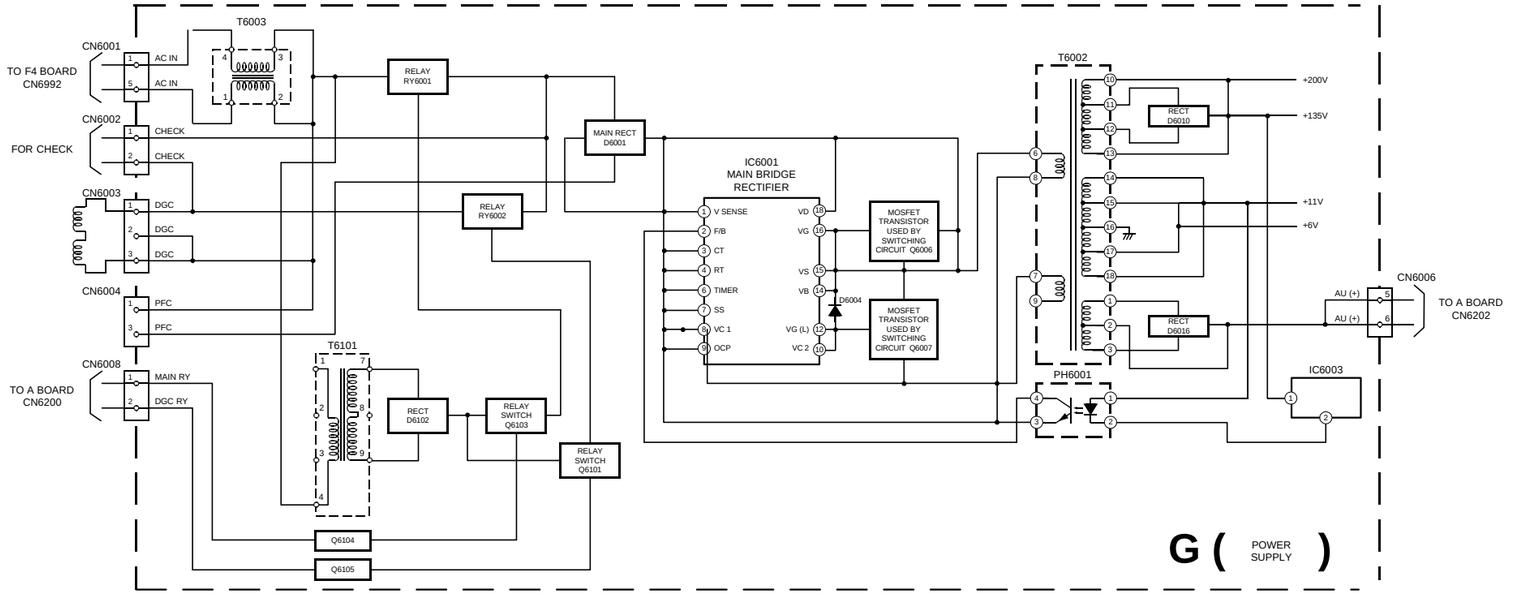
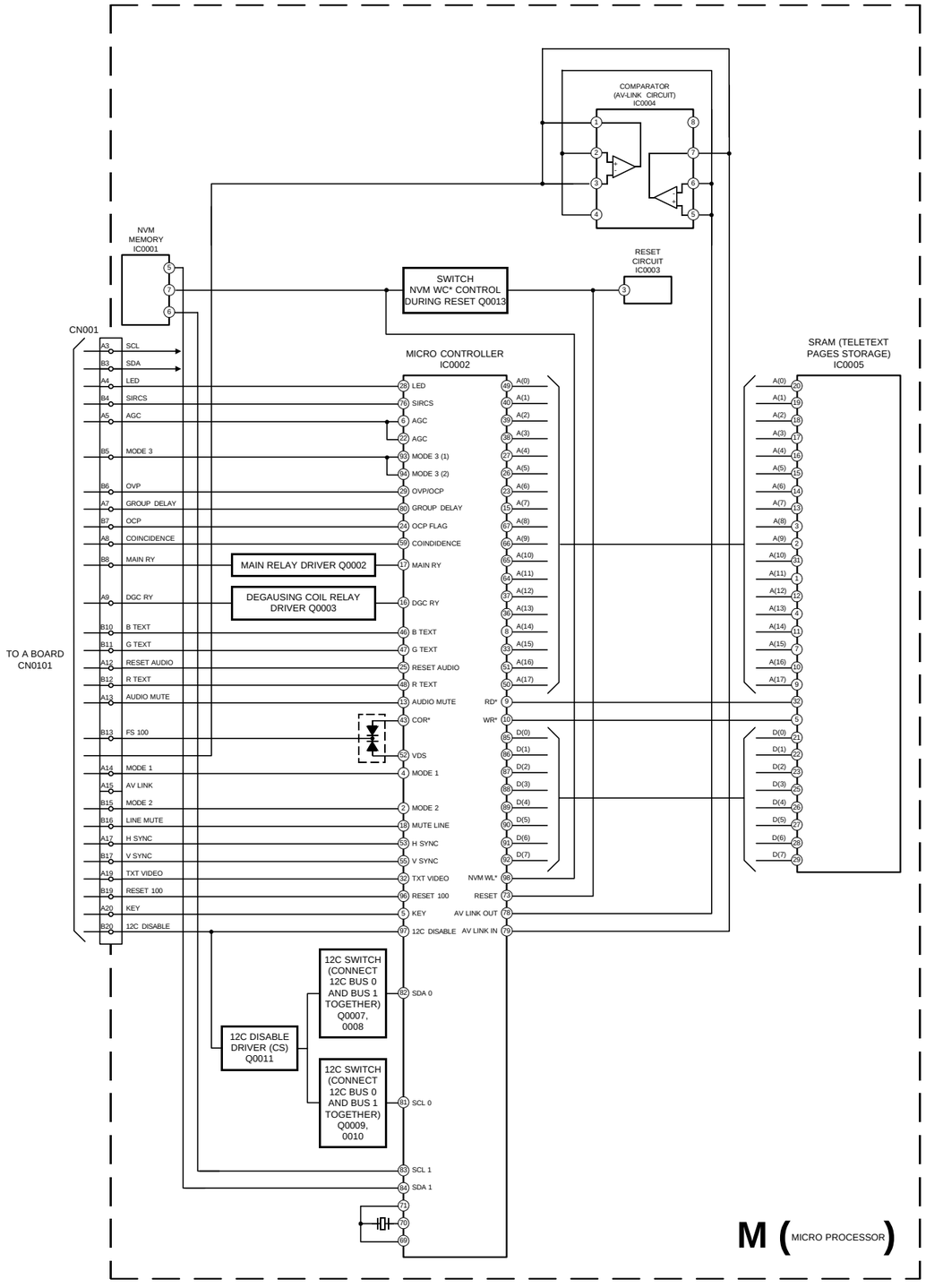
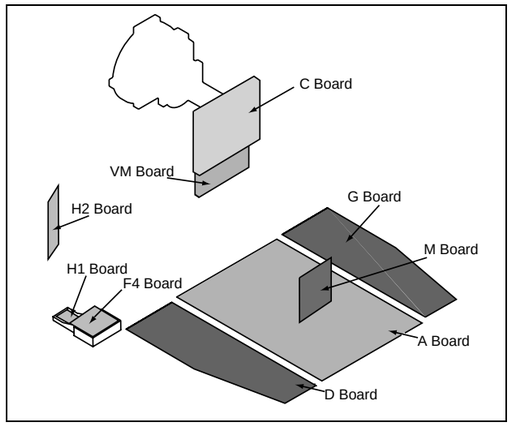




5-1. BLOCK DIAGRAMS (4)



5-2. CIRCUIT BOARD LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in µF unless otherwise noted.
- pF : µµF 50WV or less are not indicated except for electrolytic types.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5mm
Electrical power rating : 1/4W

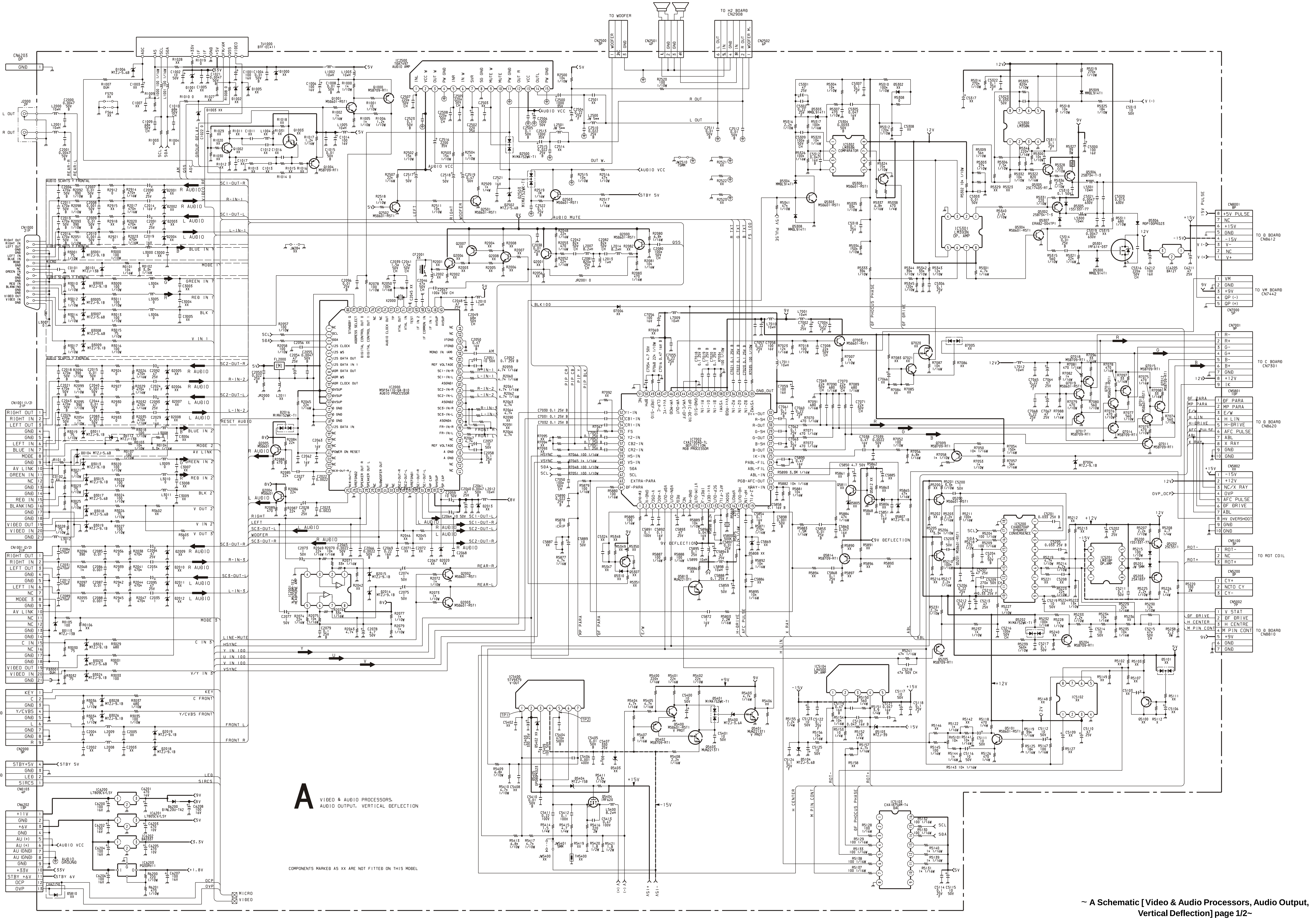
- Chip resistors are 1/10W
- All resistors are in ohms.
  k = 1000 ohms, M = 1000,000 ohms
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in Volts.
- Readings are taken with a 10Mohm digital mutimeter.
- Readings are taken with a color bar input signal.
- Voltage variations may be noted due to normal production tolerences.
- : B - bus.
- : RF signal path.
- : earth - ground.
- : earth - chassis.

Reference Information

RESISTOR	**RN**	: METAL FILM
	RC	: SOLID
	FPRD	: NON FLAMMABLE CARBON
	FUSE	: NON FLAMMABLE FUSIBLE
	RS	: NON FLAMMABLE METAL OXIDE
	RB	: NON FLAMMABLE CEMENT
	RW	: NON FLAMMABLE WIREWOUND
		: ADJUSTMENT RESISTOR
COIL	**LF-8L**	: MICRO INDUCTOR
CAPACITOR	**TA**	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

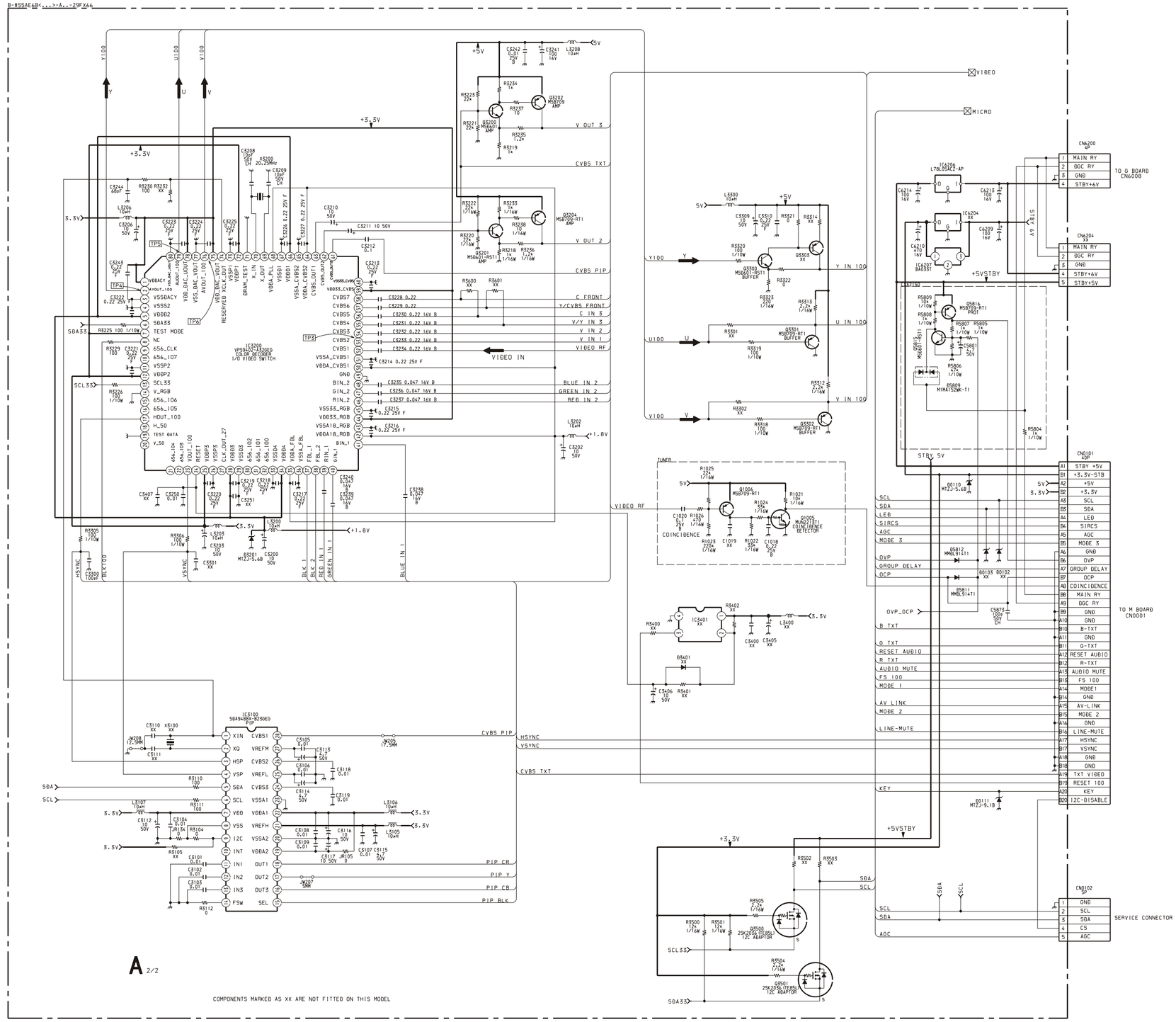
Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

Note : Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié. specified.



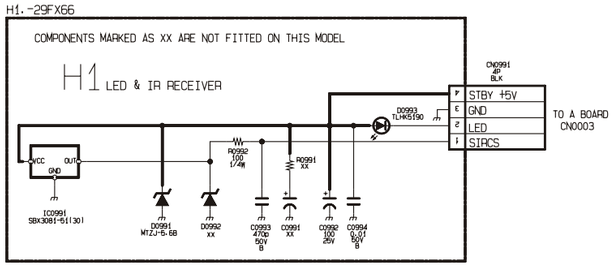
~ A Schematic [Video & Audio Processors, Audio Output, Vertical Deflection] page 1/2~

B-#SSAE&R<...>-A.-2SFX&6

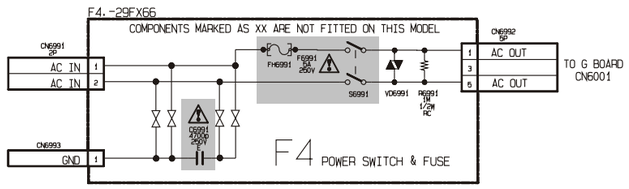


~ A Schematic [Video & Audio Processors, Audio Output, Vertical Deflection] page 2/2~

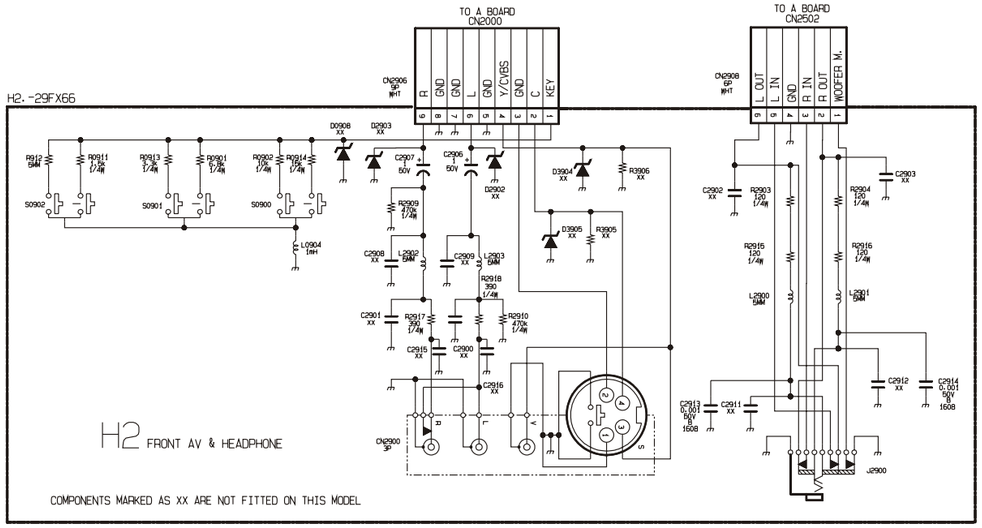
~ H1 Board Schematic Diagram ~



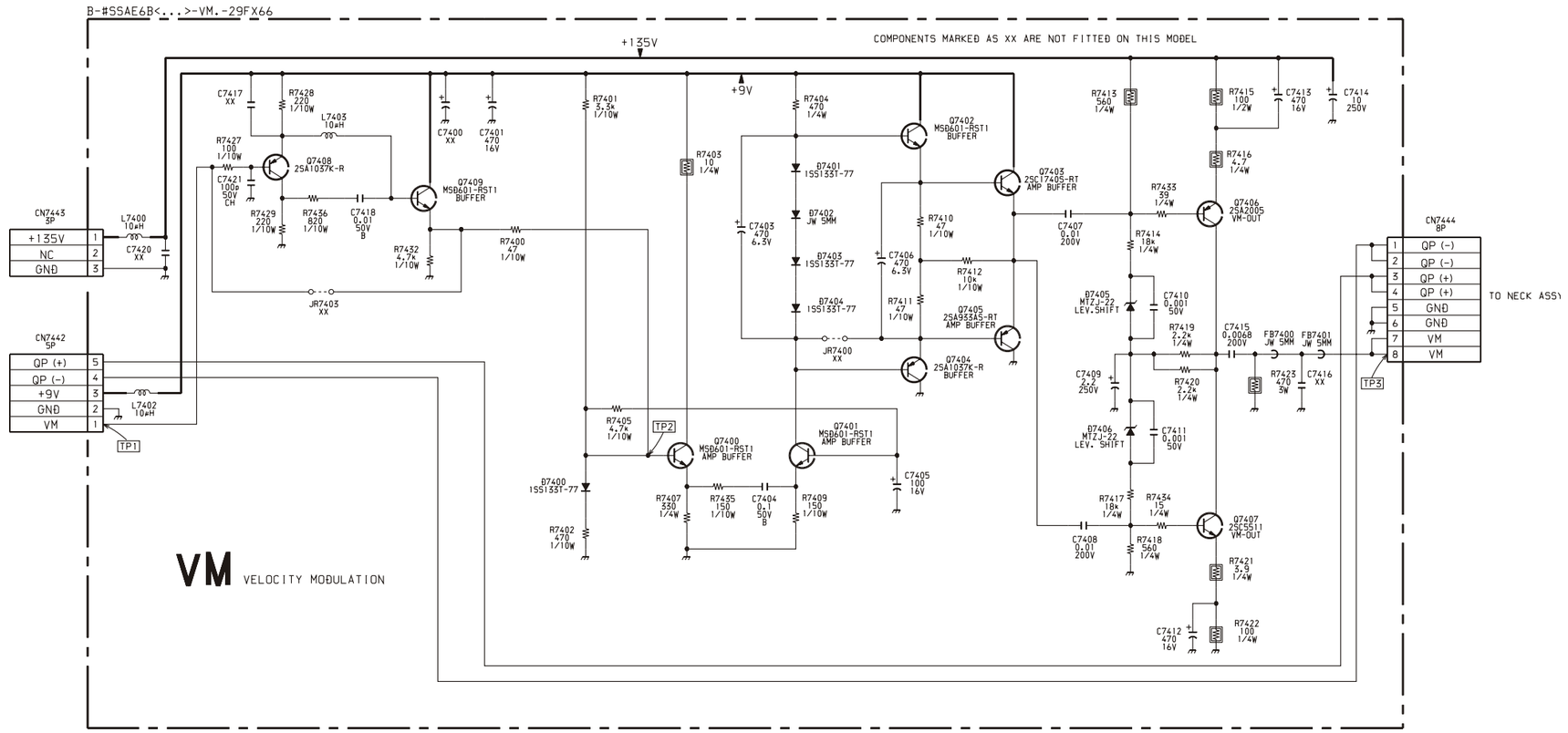
~ F4 Board Schematic Diagram ~



~ H2 Board Schematic Diagram ~



~ VM Board Schematic Diagram ~



B-#SSAE6B<...>-G..-29FX66

G POWER SUPPLY

CN6007 XX: AC OUT 1, AC OUT 2

CN6001 5P: AC IN 1, NC 2, NC 3, NC 4, AC IN 5 — TO F4 BOARD CN6992

CN6002 2P: CHECK 1, CHECK 2

CN6003 3P: ĐGC 1, ĐGC 2, ĐGC 3

CN6004 3P: PFC 1, NC 2, PFC 3

CN6008 4P: MAIN RY 1, ĐGC RY 2, GNĐ1 3, STBY+6V 4, STBY+5V 5 — TO A BOARĐ CN6200

CN6009 XX: R/C TRANS 1, NC 2, PRE AC 3, NC 4, CHARGE + 5, NC 6, CHARGE 7

CN6013 XX: RELAY KICK 1, GNĐ1 2, +6V STBY 3

CN6012 XX: GNĐ1 1, GNĐ1 2, MAIN RY 3, STBY +5V 4, STBY +6V 5

CN6011 XX: +135V 1, NC 2, GNĐ 3

CN6010 XX: +135V 1, +135V 2, NC 3, GNĐ 4, GNĐ 5, NC 6, +200V 7, +200V 8

CN6005 6P: +135V 1, +135V 2, NC 3, NC 4, GNĐ 5, GNĐ 6 — TO Đ BOARĐ CN8600

CN6006 15P: +11V 1, GNĐ 2, +6V 3, GNĐ 4, AU (+) 5, AU (+) 6, AU (GNĐ) 7, AU (GNĐ) 8, GNĐ 9, +33V 10, STBY +6V 11, OCP 12, OVP 13 — TO A BOARĐ CN6202

CN6014 XX: GNĐ 1

T6003, T6001 XX, T6002, T6101

RY6001, RY6002

TH6002

IC6001 MC75001D MAIN BRIDGE RECTIFIER

Q6006 SPA07N60C2 SWITCH, Q6007 SPA07N60C2 SWITCH

IC6002 XX, IC6003 SE135N-LF4

PH6001 TCET1103G

Q6003 MSD601-RST1, Q6102 MSD601-RST1, Q6104 MSD601-RST1, Q6105 MSD601-RST1

Q6101 DTA144ESA-TP, Q6103 DTA144ESA-TP, Q6005 DTA144ESA-TP, Q6010 2SC1740S-RT, Q6008 XX, Q6009 XX, Q6014 XX

D6104 MMDL914T1, D6105 MMDL914T1, D6101 MMDL914T1, D6103 MMDL914T1, D6107 MMDL914T1, D6106 MMDL914T1, D6009 MTZJ-15B, D6002 MTZJ-33

D6001 GSIB460/45, D6102 S1VB20-5, D6008 ĐINL20U-TA2, D6010 FBIU407M1-B, D6011 XX, D6012 XX, D6014 XX, D6015 XX, D6016 RBV-406B, D6022 XX, D6023 XX, D6030 XX, D6031 DZ5.4MTA1, D6032 DZ5.4MTA1, D6033 DZ5.4MTA1, D6034 DZ5.4MTA1, D6039 XX, D6040 XX, D6041 XX, D6042 XX, D6043 XX, D6044 XX, D6045 XX, D6046 XX, D6047 XX

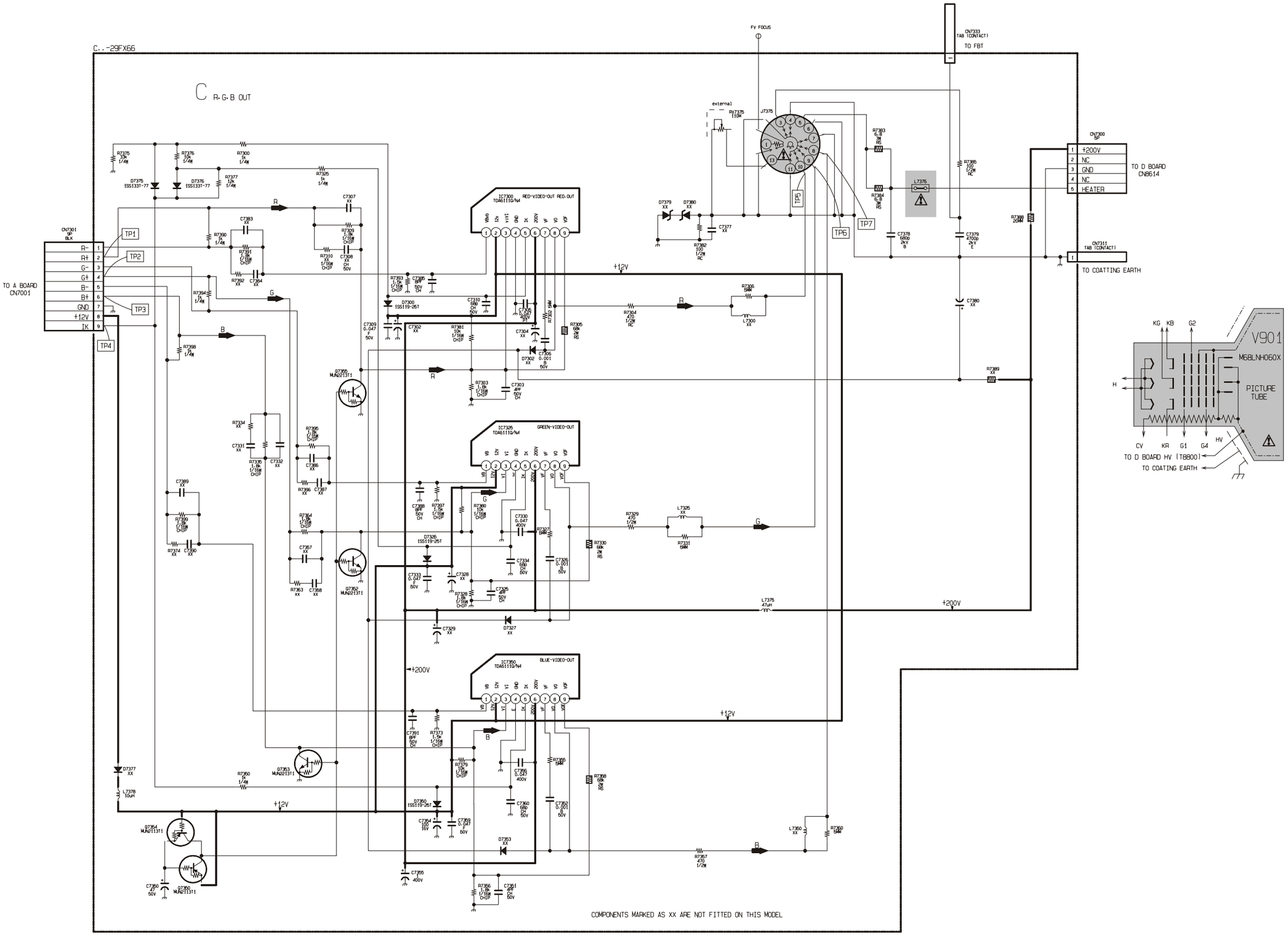
FB6001 XX, FB6002 1.1UH, FB6003 1.1UH, FB6004 XX

L6001 47uH, L6002 22uH, L6003 22uH, L6004 JW 5mm, L6005 JW 5mm, L6006 10uH, L6007 10uH, L6008 XX

JW6032 12.5MM, JW6033 12.5MM, JW6034 12.5MM, JW6035 12.5MM, JW6036 XX, JW6037 XX, JW6038 XX, JW6039 XX, JW6040 XX, JW6041 5MM, JW6045 5MM, JW6047 20MM, JW6051 5MM, JW6009 XX, JW6010 XX, JW6023 XX

+200V, +135V, +11V, +6V, STBY+6V, STBY+5V

COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL



~ C Board Schematic [R-G-B Out] ~

B-#SSAE6B<...>-D..-29FX66

CN8810 7P
- V STAT 1
- ĐF ĐRIVE 2
- H CENTRE 3
- M PIN CONT 4
- +9V 5
- GNĐ 6
- GNĐ 7

TO A BOARD CN5002

CN8620 10P
- ĐF PARA 1
- MP PARA 2
- E/W 3
- H LIN 4
- H ĐRIVE 5
- AFC PULSE 6
- ABL 7
- X RAY PROTECT 8
- GNĐ 9
- GNĐ 10

TO A BOARD CN5801

CN8600 6P
- +B (+135V) 1
- +B (+135V) 2
- NC 3
- NC 4
- GNĐ 5
- GNĐ 6

TO G BOARD CN6005

CN8601 3P
- +B 1
- NC 2
- GNĐ 3

TO VM BOARD CN7443

CN8611 6P
- 6 V+
- 5 V-
- 4 H-
- 3 H-
- 2 H+
- 1 H+

TO C BOARD CN7300

CN8612 8P S-MICRO
- 8 +15V PULSE
- 7 NC
- 6 +15V
- 5 GNĐ
- 4 -15V
- 3 V-
- 2 NC
- 1 V+

TO A BOARD CN8001

CN8614 5P S-MICRO
- 1 +200V
- 2 NC
- 3 GNĐ
- 4 NC
- 5 HEATER

CN8615 XX
- 1 GNĐ

CN8616
- 1 GNĐ

CN8617 XX
- 1 GNĐ

CN8618 XX
- 1 GNĐ

CN8619 XX
- 1 GNĐ

DY
- H.DY
- H.DY V.DY
- V.DY

D ĐEFLECTION

COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL

M MICRO PROCESSOR

COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL

CN0001 40P

+5V-STB	A1
+3.3V-STB	B1
+5V	A2
+3.3V	B2
SCL	A3
SDA	B3
LED	A4
SIRCS	B4
AGC	A5
MODE 3	B5
GND	A6
OVP	B6
GROUP DELAY	A7
OCP	B7
COINCIDENCE	A8
MAIN RY	B8
DGC RY	A9
GND	B9
GND	A10
B-TXT	B10
GND	A11
G-TXT	B11
RESET AUDIO	A12
R-TXT	B12
AUDIO MUTE	A13
FS 100	B13
MODE1	A14
GND	B14
AV-LINK	A15
MODE2	B15
GND	A16
LINE-MUTE	B16
HSYNC	A17
VSYNC	B17
GND	A18
GND	B18
TXT VIDEO	A19
RESET 100	B19
KEY	A20
I2C-DISABLE	B20

TO A BOARD CN0101

IC0001 M24C16-MN6T NVM MEMORY

IC0002 SAA5665HL/M1D/ 0358 MICRO CONTROLLER

IC0003 RS1573IMT RESET CIRCUIT

IC0004 LM393DT COMPARATOR

IC0005 K6T2008V2A SRAM

Q0001 RB705D

Q0002 MUN2111T1 MAIN DELAY DRIVER

Q0003 MUN2111T1 DEGAUSING COIL RELAY

Q0006 MSD601-RST1

Q0007 DTC114TKA I2C SWITCH

Q0008 DTC114TKA I2C SWITCH

Q0009 DTC114TKA I2C SWITCH

Q0010 DTC114TKA I2C SWITCH

Q0011 MSD601-RST1 DISABLE DRIVER

Q0012 MUN2111T1

Q0013 MUN2211T1 RESET

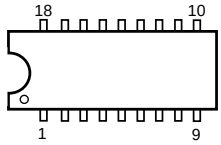
D0301 UDZS-6.2B

X0001 12MHz

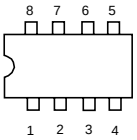
~ M Schematic [Micro Processor] ~

5-4. SEMICONDUCTORS

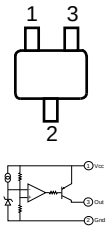
CXAB070AP
MCZ3001D



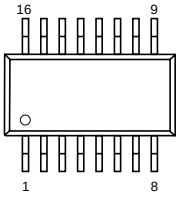
LM318P
LM358N
LM393DT
LM393N
M24C16-MN6T(A)



PST573IMT

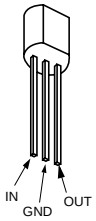


CXA1875AM-T4

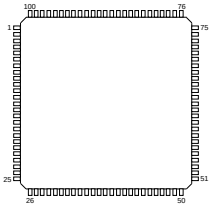


(TOP VIEW)

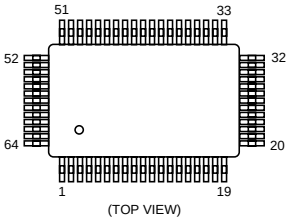
LM78L05ACZ



SAA5665HL/M1D/0358

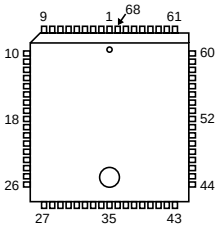


CXA2100AQ-TL



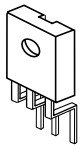
(TOP VIEW)

MSP3411G-QA-B10

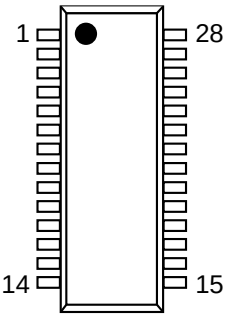


(TOP VIEW)

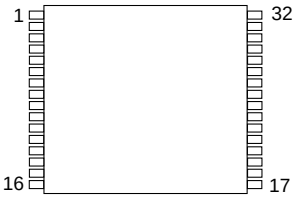
SBX3081-51(30)



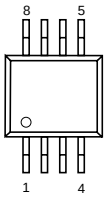
SDA9488X-B23GEG



K6T2008V2A-YF70T00

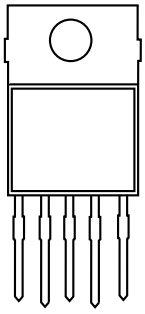


NJM3404AD-W
UPC4558G2

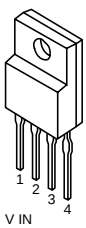


(TOP VIEW)

LA6500-FA

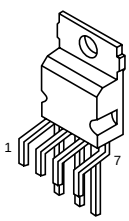


PQ30RV11

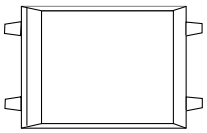


1 : V IN
2 : V OUT
3 : GND
4 : ON/OFF CONTROL

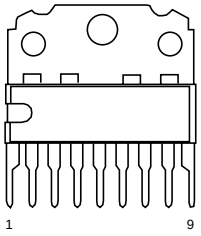
STV9379



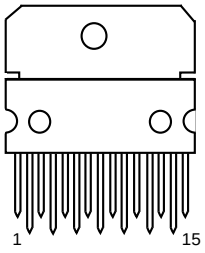
TCET1103G



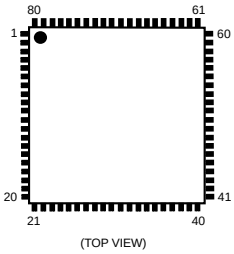
TDA6111Q/N4



TDA7497

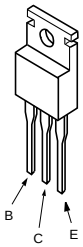


VPS9402-A32GEG

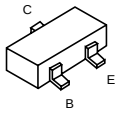


(TOP VIEW)

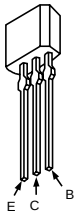
BA12T
BAO33T
IRF614-005
IRF620
SPA07N60C2
2SA2005
2SC5511



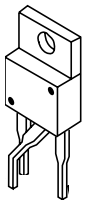
DTA144EK
DTC144TKA-T146
2SA1162-G



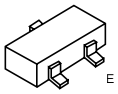
DTA144ESA
2SA933AS-QT
2SC2785-HFE



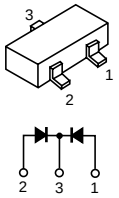
L7809CV/LSY
STP5NB40FP
STP5NB40(030Y)
2SC5698-CA
2S5696-SONY-CA



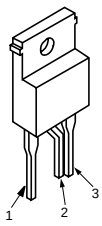
MSB709-RT1
MSD601-RST1
M1MA152WA-T1
UN2111
UN213
2SK2036(TE85L)



RB705D

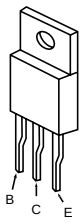


SE135N-LF4

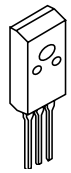


1 V OUT SENSE
2 COLLECTOR
3 GND

2SA1837(LBS2S0N)



2SB734-34



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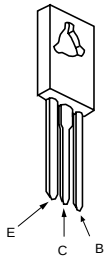

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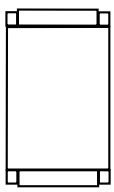

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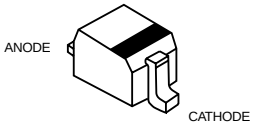

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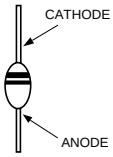

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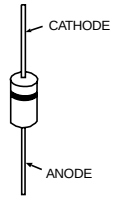

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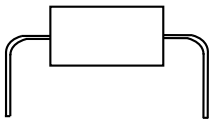

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MTZJ-3.6A
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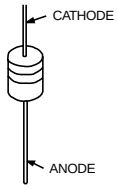

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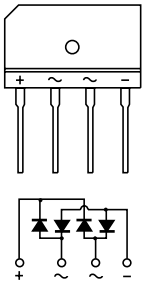

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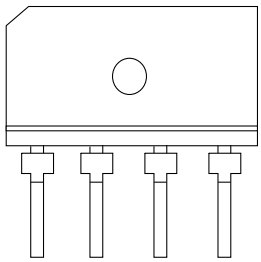

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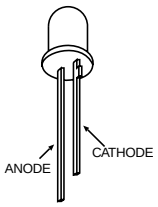

5-5 IC BLOCK DIAGRAMS

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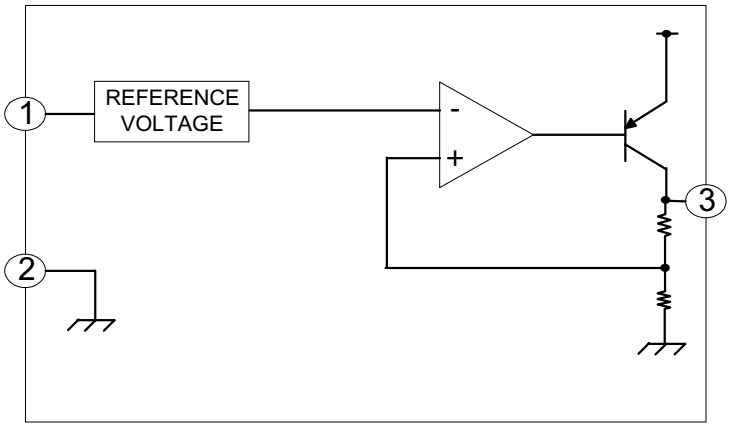

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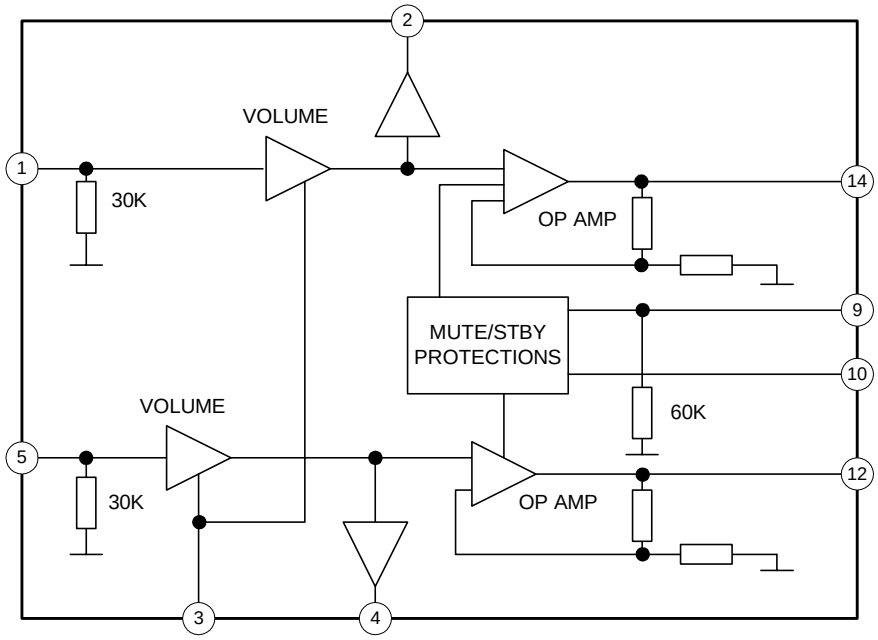

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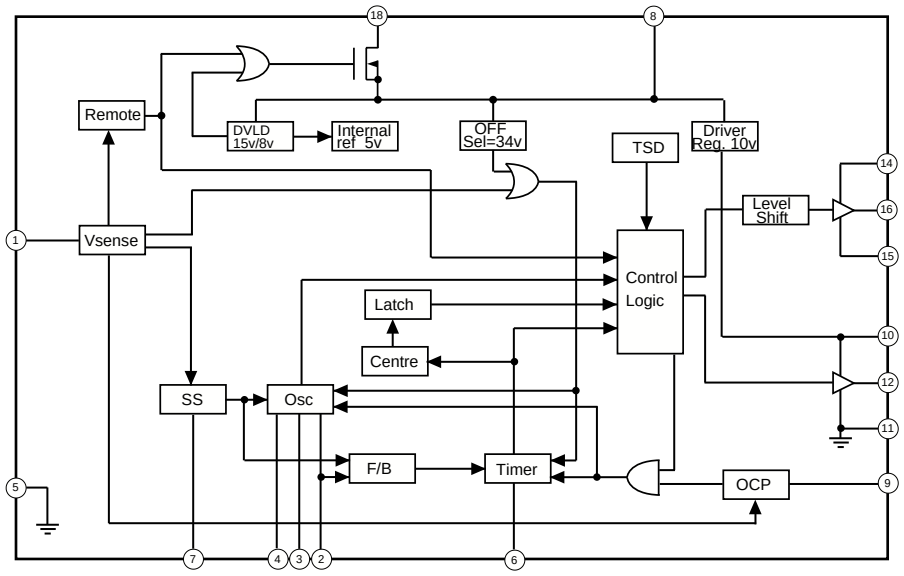

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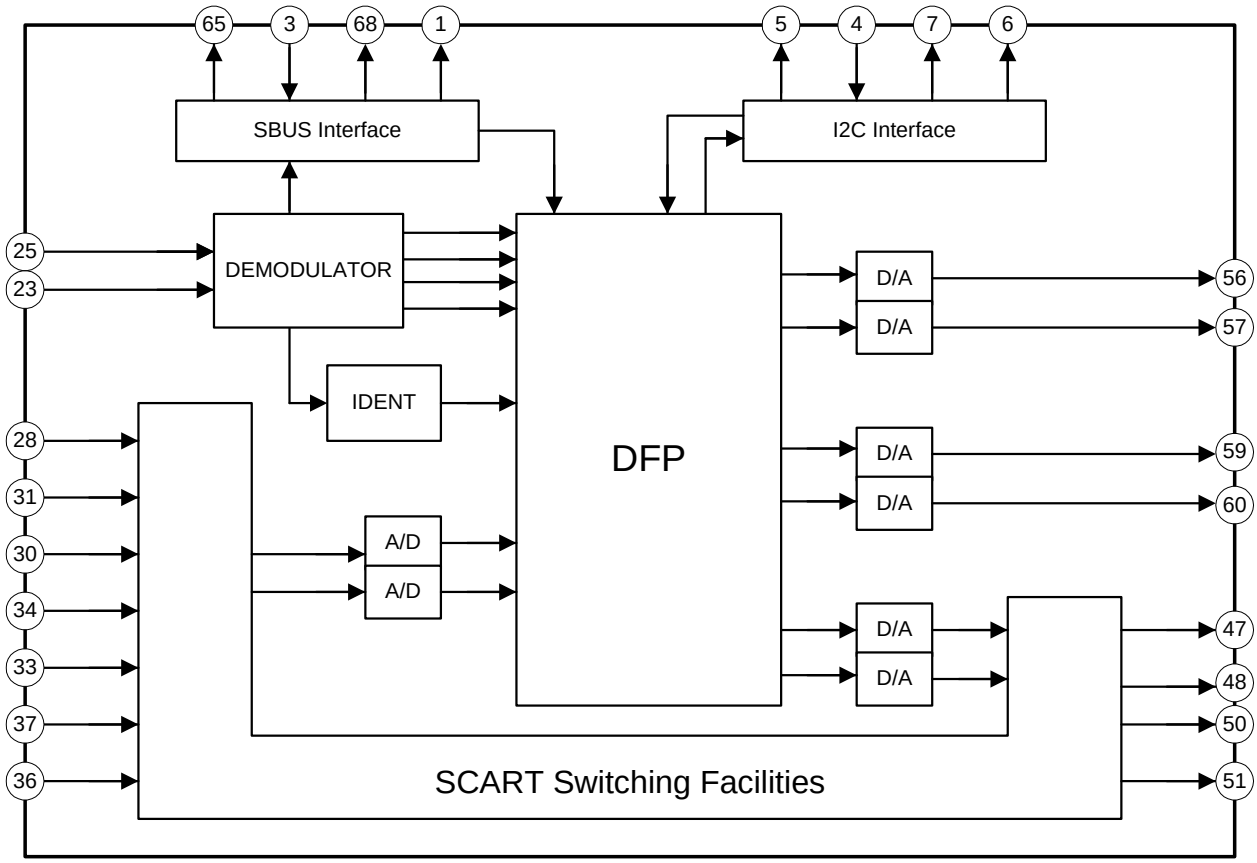

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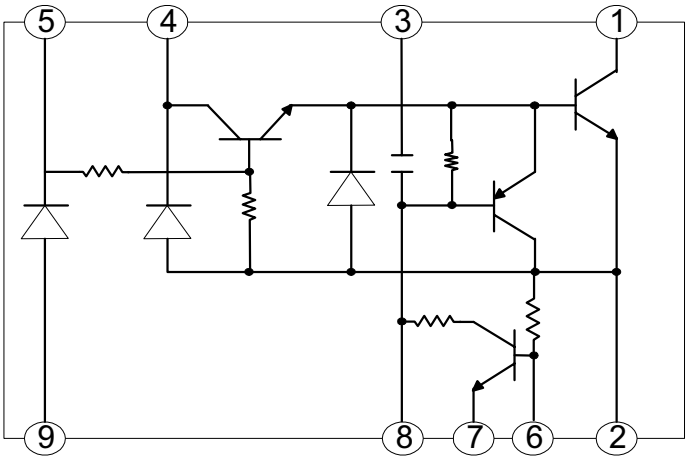

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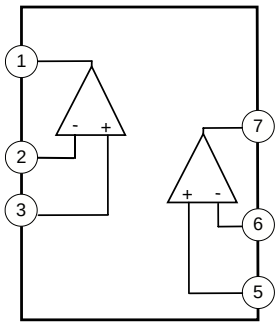

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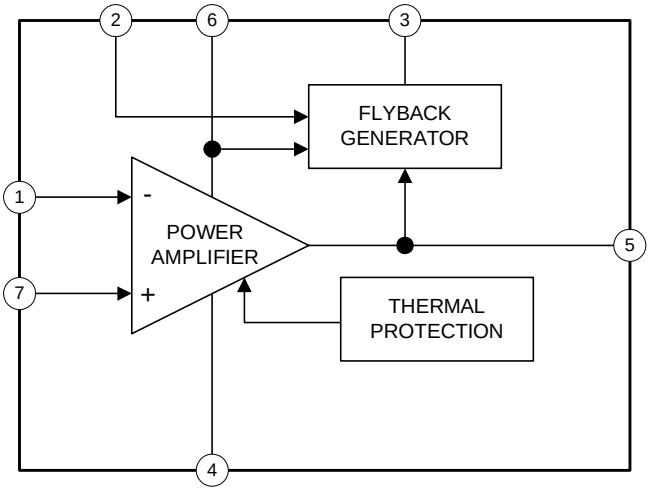

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