



TFT-LCD TV

Chassis
GPU15KE
GPU20KE

Model
LE15S51BP
LE20S51BP
LE20S52BP

SERVICE Manual

TFT-LCD TV



Fashion Feature

- Easy-to-use remote control
- Easy-to-use on-screen menu system
- Automatic timer to turn the TV on and off
- Automatic channel tuning for up to 194 channels. (Air : 69 , STD : 125)
- A special filter to reduce or eliminate reception problems
- Fine tuning control for the sharpest picture possible
- Built-in, dual channel speakers
- Headphone jack for private listening

3-2 How to Access Service Mode

3-2-1 Entering Factory Mode

- To enter "Service Mode" Press the remote -control keys in this sequence :

- If you do not have Factory remote - control



- If you have Factory remote - control



3-3 Factory Data

Service		
PC Auto Color	↺"	
Video Auto Color	↺"	
Reset	↺"	
DLC/MWE Part	↺"	
SFR PART	↺"	
Sub Adjust	↺"	
UOC Adjust	↺"	
Option	↺"	
Checksum	↺"	
Panel Information	↺"	
Bus Stop : OFF	↺"	
2005/06/23		
T-pls25nus-0906		

-. OSD which the basic adjustment is added.

PC Auto Color

Video Auto Color

Reset

DLC/MWE Part

SFR PART

Sub Adjust

UOC Adjust

Option

Checksum

Panel Information

Bus Stop : OFF

*. 2005/06/23: MCU firmware date.

*. T-PLUS25NUS-0906: MCU firmware version information
(this information must be appended due to a compatibility problem report.)

1) Reset: Factory reset

2) Bus Stop: The communication Line ON / OFF

Move to the (-) / (+) key, select the 'Enter' key.

3) Auto adjustment

4) PC Auto Color/ Video Auto Color :in case that color of all screen is wrong, excute the PC Auto color at 16 gray pattern(refer to attach left 16gray pattern)

5) Checksum: MCU firmware checksum information
(this information must be appended due to a compatibility problem report.)

Service		
PC Auto Color	↺"	
Video Auto Color	↺"	
Reset	↺"	
DLC/MWE Part	↺"	
SFR PART	↺"	
Sub Adjust	↺"	
UOC Adjust	↺"	
Option	↺"	
Checksum	↺"	
Panel Information	↺"	
Bus Stop : OFF	↺"	
2005/04/20		
TM-BRHMS20WW-0714		



DLC/MWE Part		
NVRAM Reset		¢"
DLC-	0-10	0
MWE-	0-1	1
Demo	0-1	0
Brightness+	0-255	100
Contrast+	0-255	113
Sharpness+	-10-10	1
Hue+	0-100	50
Saturation+	0-255	125
R Offset		46
G Offset		50
B Offset		56
R Gain		58
G Gain		50
B Gain		51

6) Dynamic Luma Adjustment

" - " : RF, AV, S_Video -> all store

" + " : RF, AV, S_Video -> apart store

SFR Part		
DCXO Sel.		0
DCXO Tune		64
OVMAAPT	0-1	1
OVMTNR	0-3	2
IF Demod	0-63	38
F FI	0-1	0
R0:77	R1:71	R2:81
R3:18	R4:0	R5:1F

7) Special Function Register

Sub Adjust		
R Blk Lvl+	0-63	28
G Blk Lvl+	0-63	20
Peak Frq/DLY+0-3		0
Peak+	0-63	40
Soft Clp Lvl-	0-3	0
W Limit-	0-15	8
R White Pnt+	0-63	37
G White Pnt+	0-63	31
B White Pnt+	0-63	31
AGC T-O-	0-63	23

3 Alignments and Adjustments

UOC Adjust									
BKS-	0-1								1
WSx-	0-3								2
	0	0	0	0	0	20	20		2
0	20	20	20	20	20	20	20		2
0	20	20	20	19	26				

Adjust									
R Offset									20
G Offset									20
B Offset									20
R Gain									20
G Gain									20
B Gain									20
Sclr Coring+	0-255								35
	0	0	0	FF	DD	BD			

Service									
Suwon + America									
Samex + America									
.....									
.....									
.....									
Help Menu	:	On							
Auto-Auto	:	Off							

Service									
Monitor	:	3 Hr							
Panel Cycle	:	249							
		Time Ch. No							
Panel	:	3 Hr	0						
Upper Lamp	:	3 Hr	0						
Lower Lamp	:	3 Hr	0						

8) UOC Adjustment

BKS : Black stretch
Wsx : White stretch

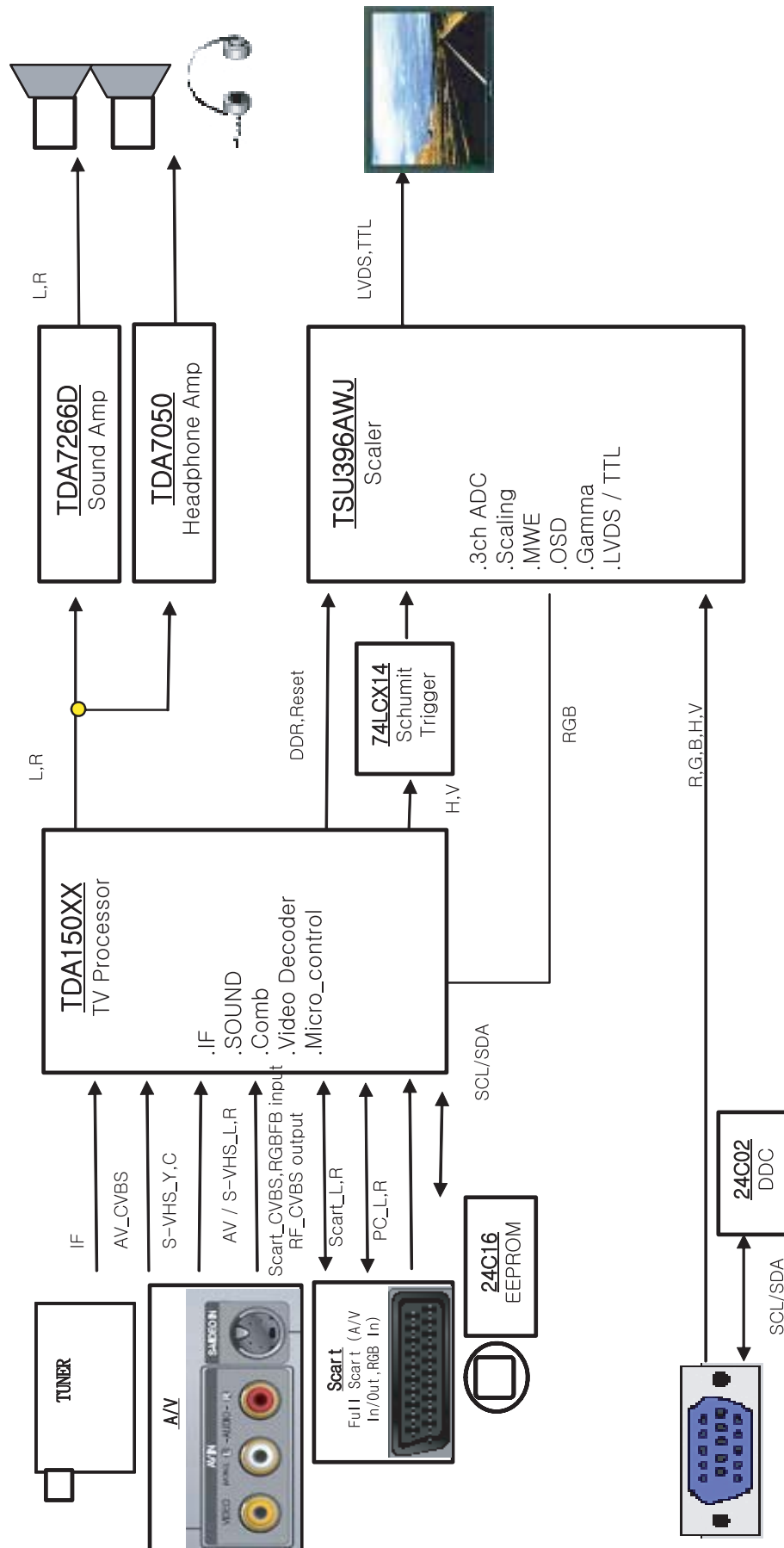
9) Option: Spread Step / Spread Span (for EMI test)

10) Panel Information

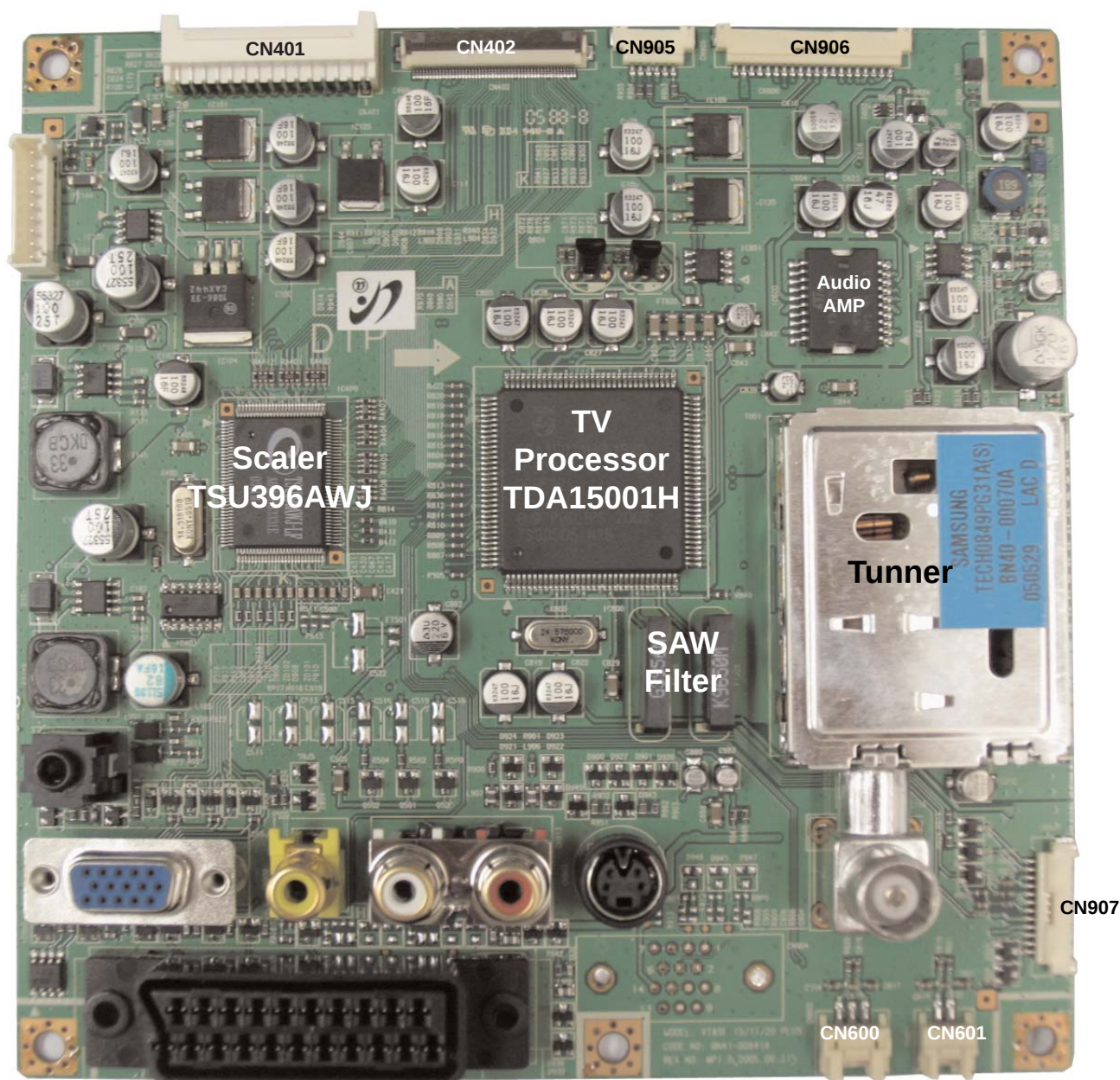
various function are included in information.

- Monitor On Time : Power On Time
- Panel Cycle : Panel On/off time (Power off, Mode change, DPMS on/off ...)
- Panel : Panel on Time
(when the panel is changed , select the Reset)
- Lower lamp : Lower lamp on time
(when the Lower lamp is changed , select the Reset)
- Upper lamp : Upper Lamp on time
(when the Upper Lamp is changed , select the Reset)

7 Block Diagram



8 Wiring Diagram

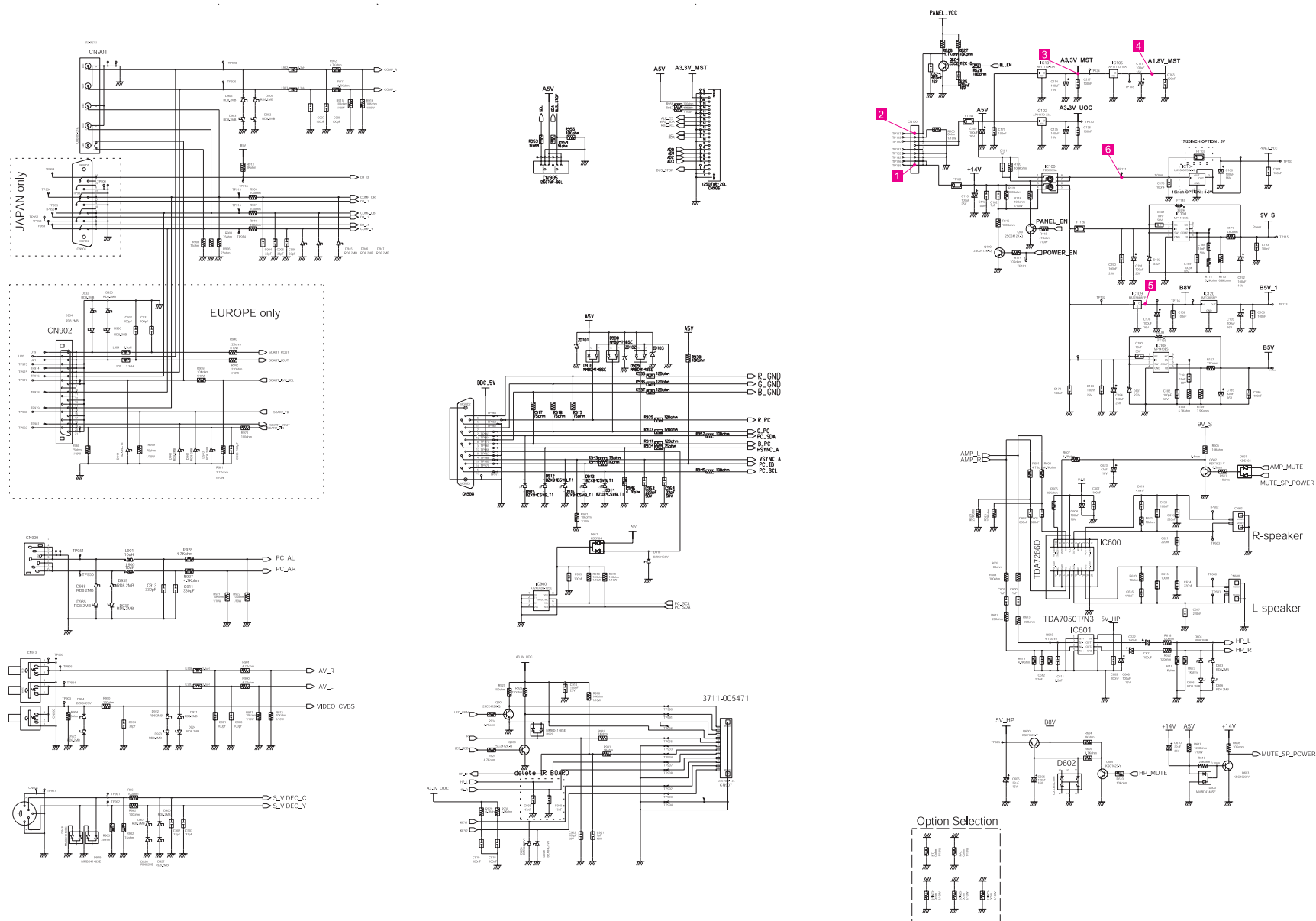


CN100(9P) : To IP Board
 CN401(30P) : To 15",17" Panel
 CN402(50P) : To 20" Panel
 CN905(5P) : To Program Download Jig
 CN906(20P) : To Scart
 CN600(3P) : To Left Speaker
 CN601(2P) : To Right Speaker
 CN907(12P) : To Function Board

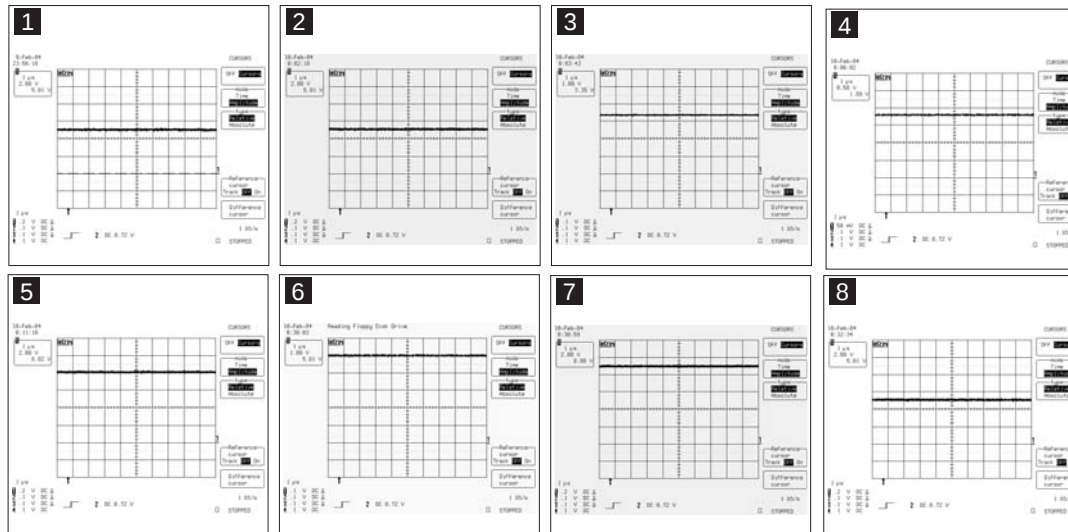
9 Schematic Diagrams

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9-1 Input Power Sound Schematic Diagram

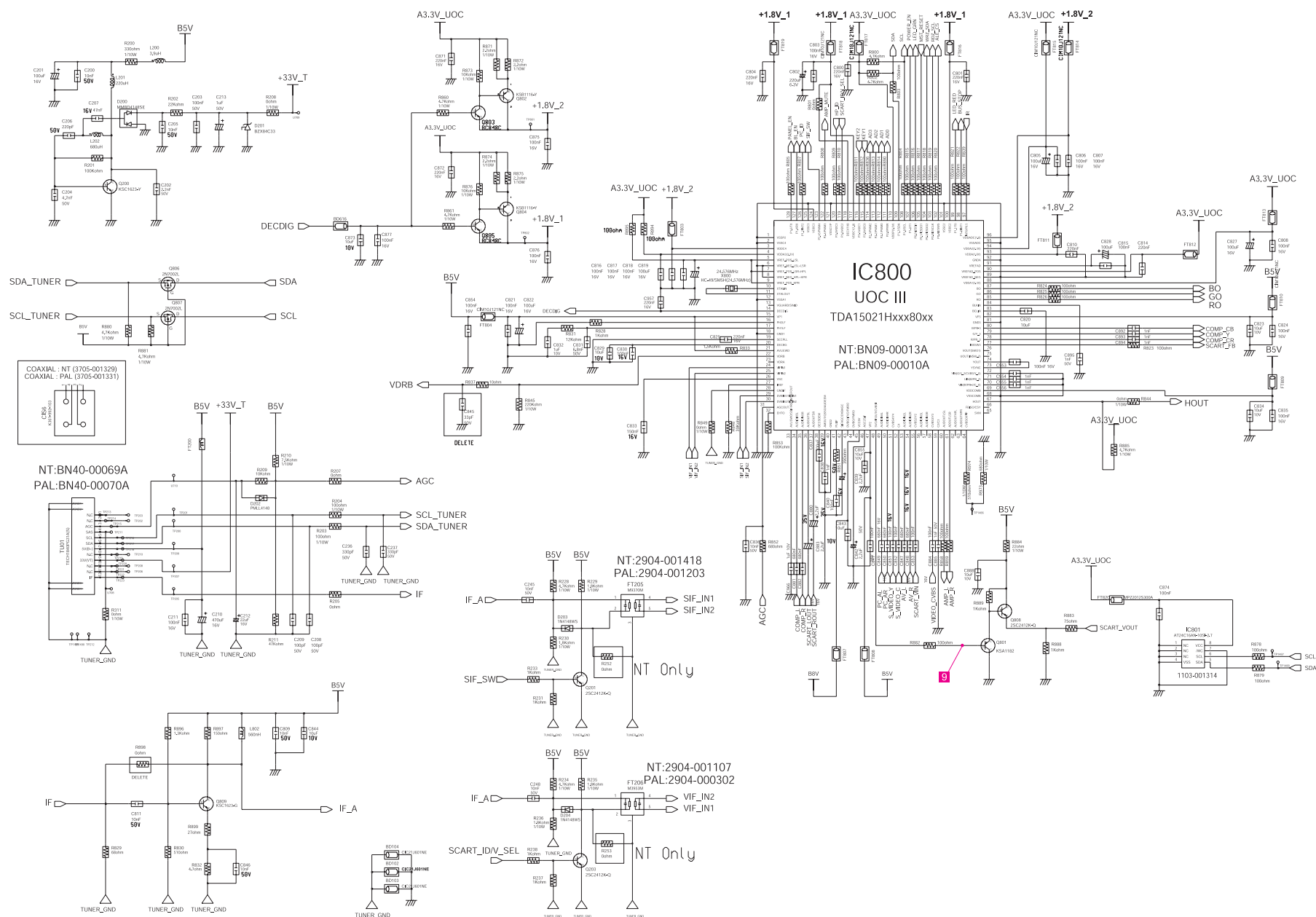


9 Schematic Diagrams

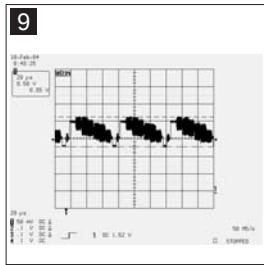


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9-2 UOC III Schematic Diagram

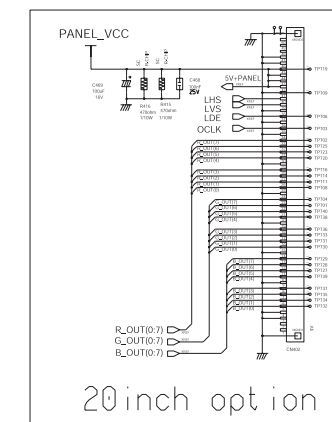
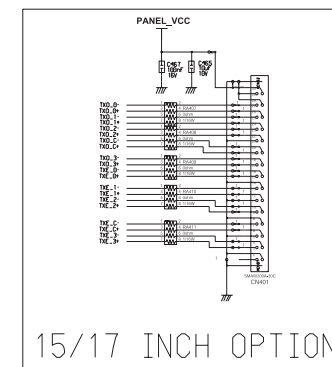
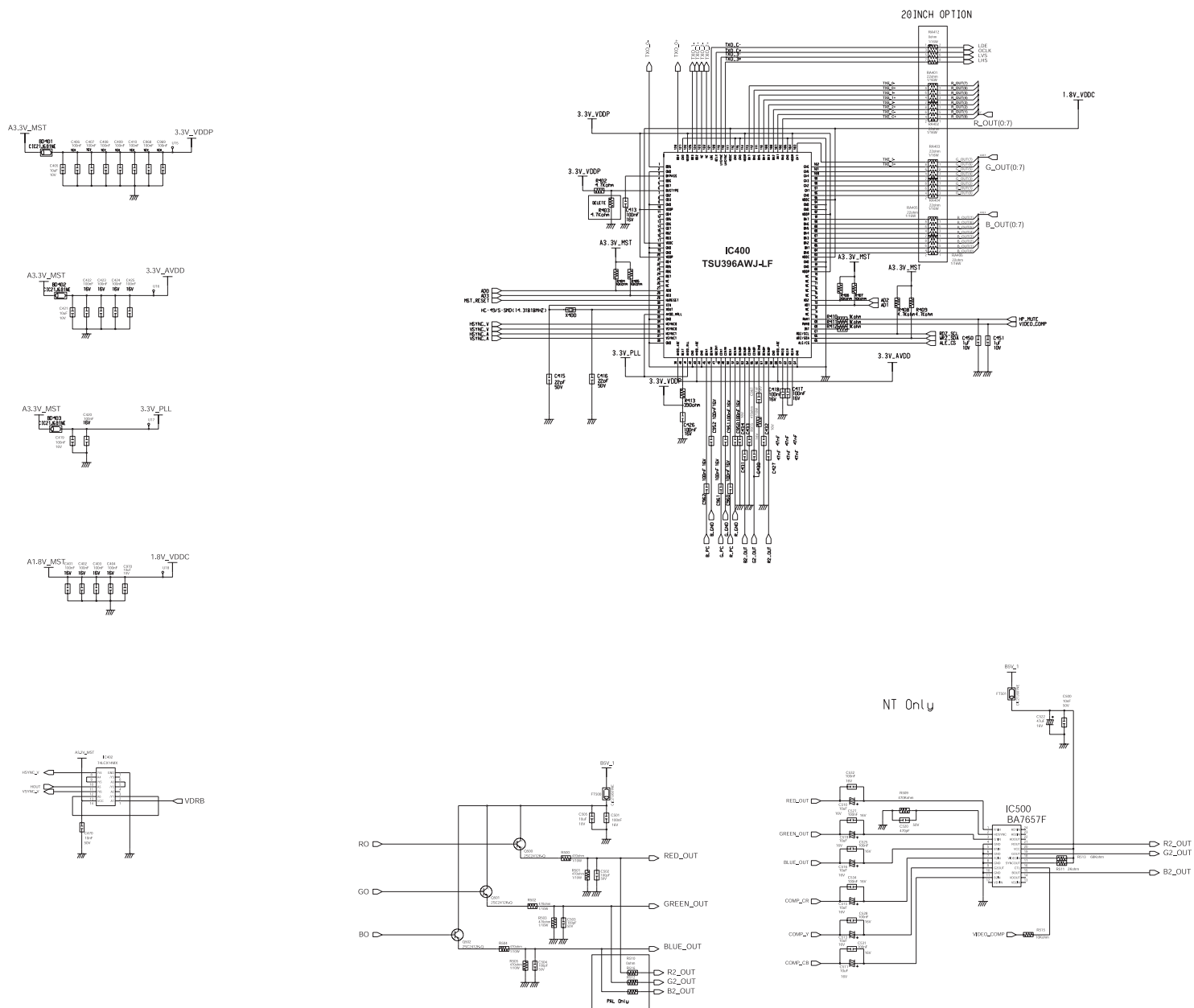


9 Schematic Diagrams



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9-3 Output Scaler, LVDS Schematic Diagram



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9-4 IP Board Schematic Diagram(LE15S51BP)

PART SPEC

1.0 SCOPE

THIS DOCUMENT DEFINES FOR A AC ADAPTER & INVERTER INTERNAL TYPE, 13VDC/2.0A, 5.0VDC/2.0A

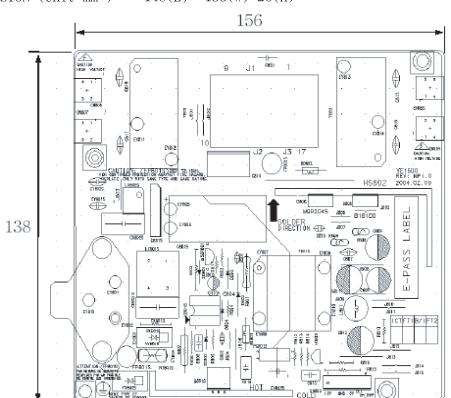
2.0 RELATED DOCUMENTS

3.0 REQUIREMENTS

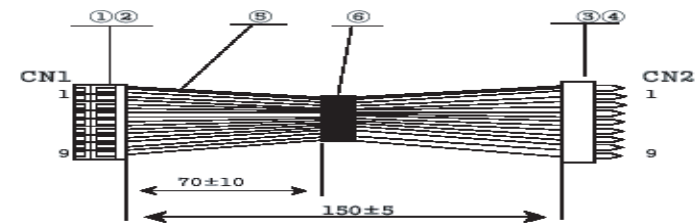
3.1 PHYSICAL CHARACTERISTICS

3.1.1 DIMENSION & APPEARANCE

1) DIMENSION (Unit:mm) 148(L) *135(W)*26(H)



3.1.2 WIRE SPEC



NO	NAME OF PARTS	SPECIFICATION	UNIT	Q'TY	REMARK
1	HOUSING	SMH200-09	EA	1	UL/CSA
2	TERMINAL	YST200	EA	9	UL/CSA
3	HOUSING	YBNH200-09	EA	1	YEON HO
4	TERMINAL	YBST200	EA	9	YEON HO
5	LEAD WIRE	UL1007 #24 GRAY,WHITE	EA	160*9	UL/CSA
6	AT TAPE	10mm, BLACK	EA	1	UL/CSA



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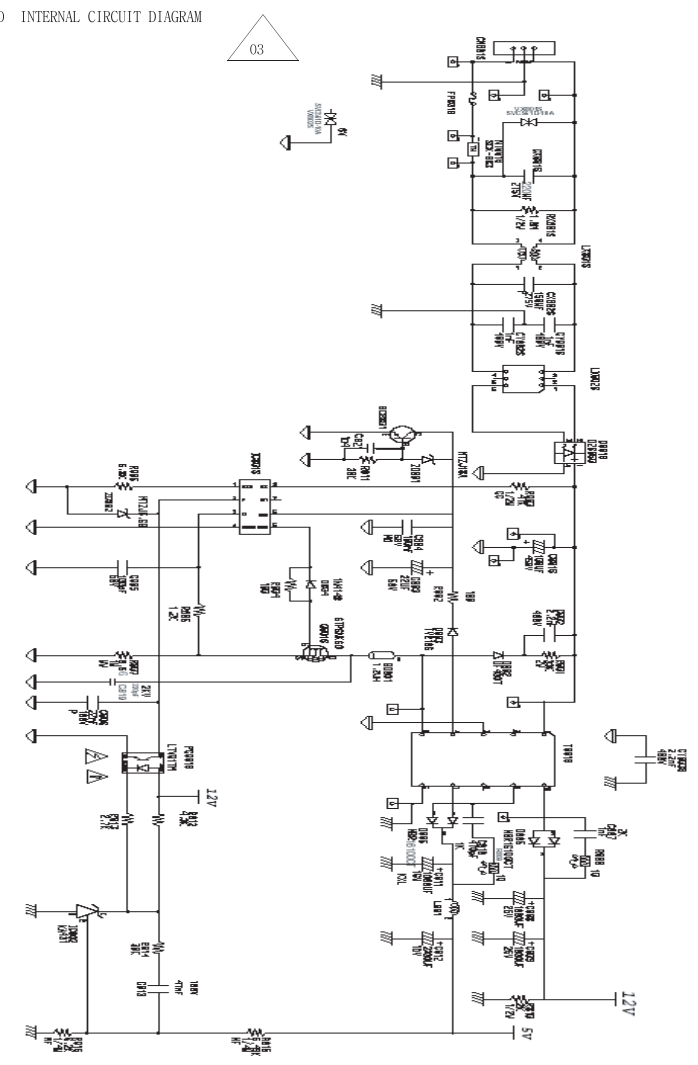
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PAGE: 3

KQA-2029F7R0(96.10.25)

PART SPEC

4.0 INTERNAL CIRCUIT DIAGRAM





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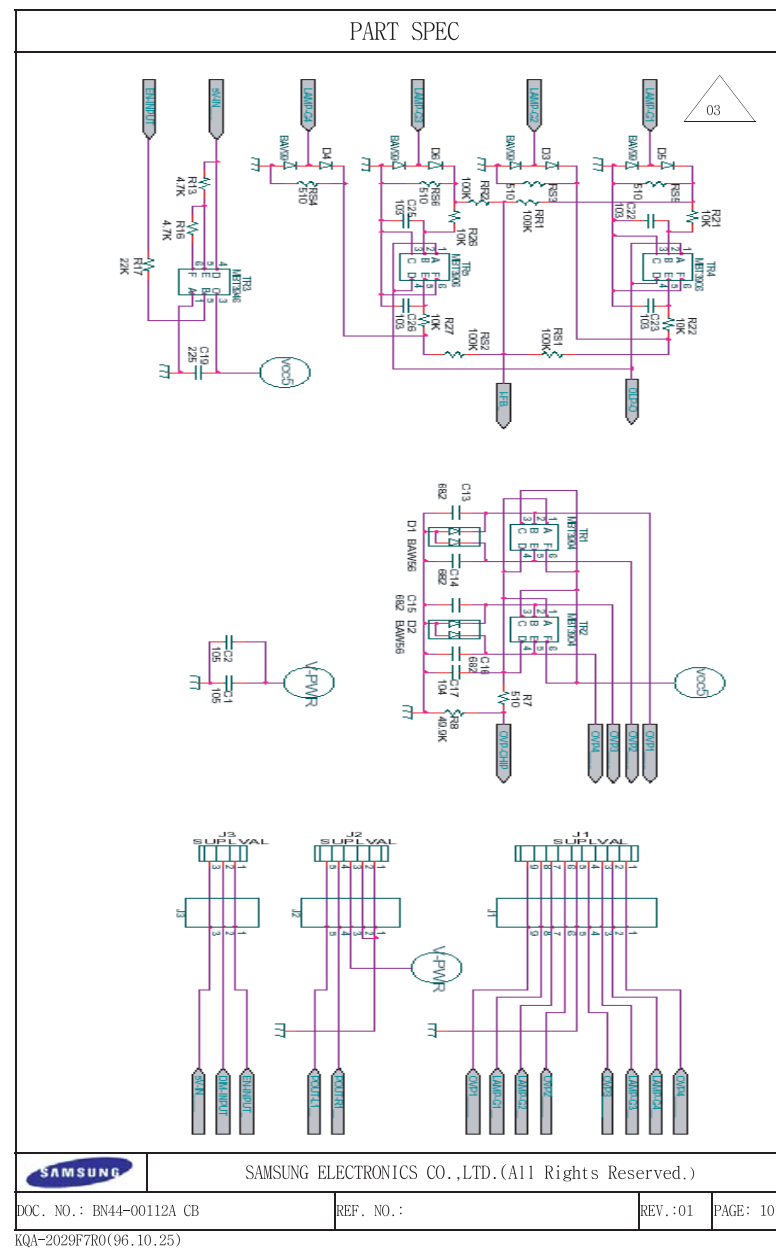
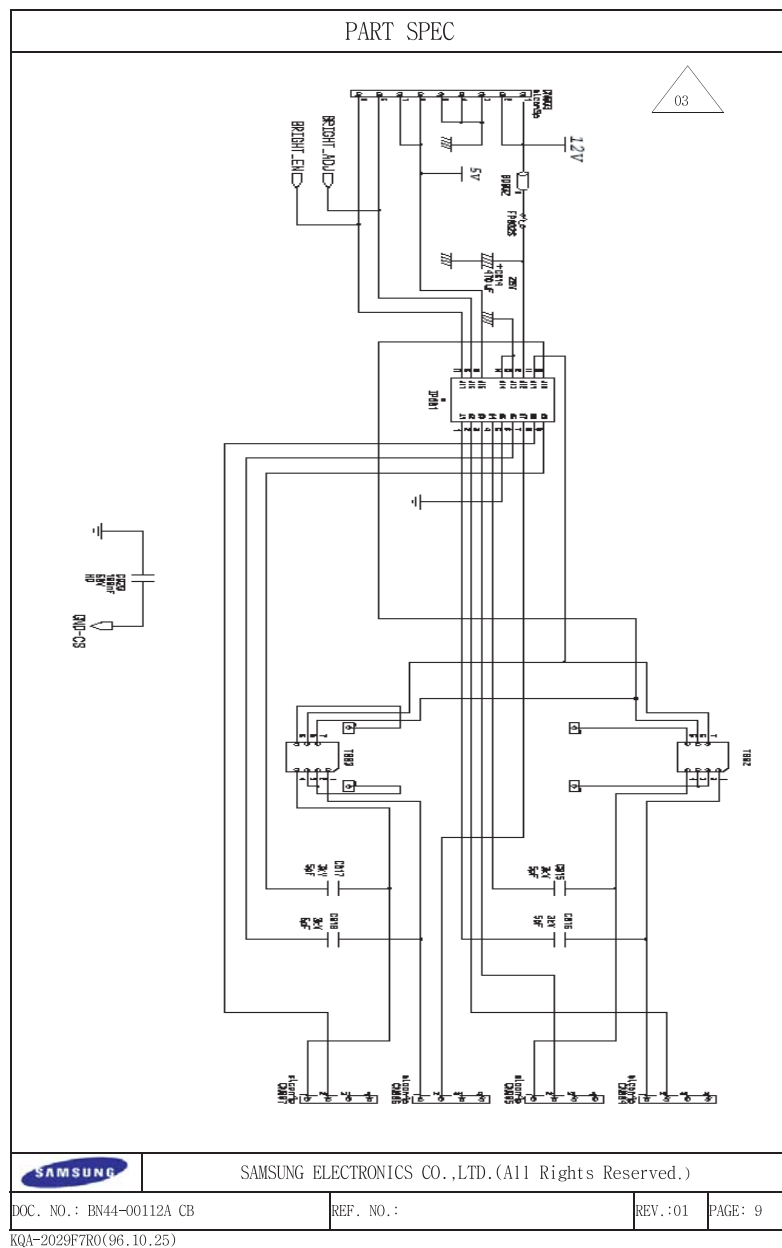
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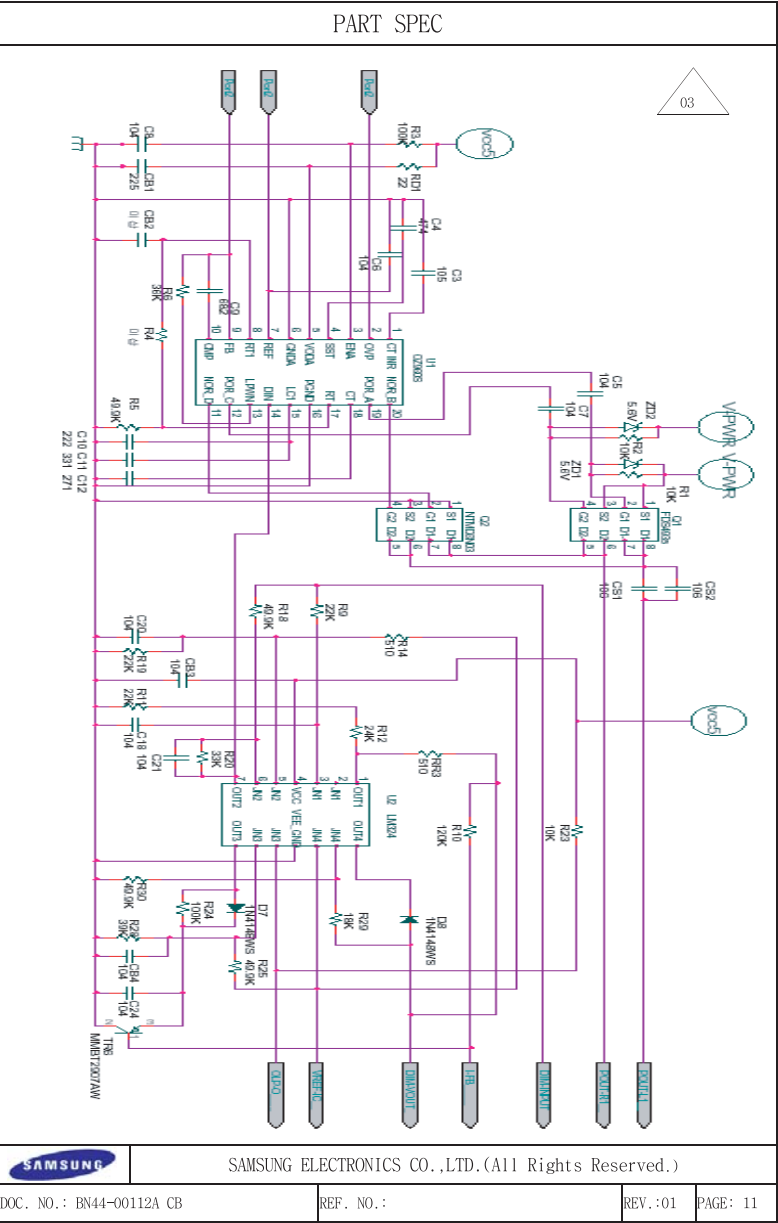
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9-6





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9-5 IP Board Schematic Diagram(LE20S51BP)

