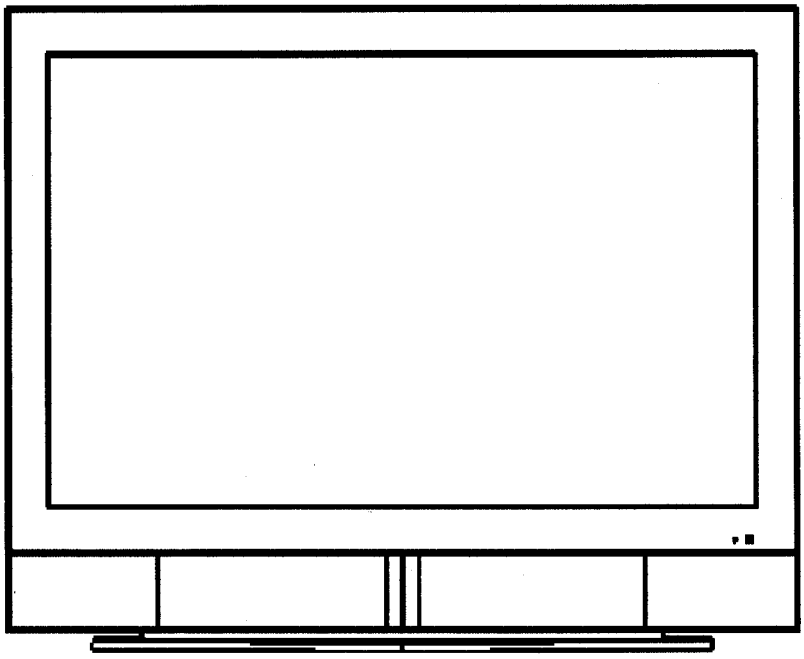
Service Manual



Model #: VIZIO P42HDTV10A

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Top Confidential

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FCC INFORMATION
This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause unacceptable interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures -- reorient or relocate the receiving antenna; increase the separation between equipment and receiver; or connect the into an outlet on a circuit different from that to which the receiver is connected.

FCC WARNING
To assure continued FCC compliance, the user must use a grounded power supply cord and the provided shielded video interface cable with bonded ferrite cores. Also, any unauthorized changes or modifications to Amtrak products will void the user's authority to operate this device. Thus VINC. Will not be held responsible for the product and its safety.

CE CERTIFICATION
This device complies with the requirements of the EEC directive 89/336/EEC with regard to "Electromagnetic compatibility."

SAFETY CAUTION
Use a power cable that is properly grounded. Always use the AC cords as follows – USA (UL); Canada (CSA); Germany (VDE); Switzerland (SEV); Britain (BASEC/BS); Japan (Electric Appliance Control Act); or an AC cord that meets the local safety standards.

Chapter 1 Features

- 1024 x 768 pixel resolution with 16:9 wide screen
- ATSC (Off-air)/QAM (Cable)/NTSC (Antenna/Cable)
- All TV formats supported (480i, 480p, 720p & 1080i)
- PC compatible (RGB) up to 1280 x 1024 WXGA
- High definition digital interface - HDMI
- Multiple-screen display (picture-on-picture/picture-in-picture)
- Selectable picture mode
- Supporting DVI converted to HDMI
- Closed caption
- Gloss front bezel
- Wall-mountable

Chapter 2 Specification

1. General specification

Native Resolution	1024 (H)X768 (V) pixels,
Effective Display Size	921.6 (H) x 519.2 (V) mm
Aspect Ratio	16:9
Color	1,024 (R) x 1,024 (G) x 1,024 (B) colors
Brightness	1200 cd/m^2 (typical, panel spec)
(w/glass filter)	Min. 300 cd/ m^2
Contrast Ratio	10,000:1 (Typical, panel spec).
TV system	NTSC/ATSC/ QAM
PC Inputs	15pins D-sub, HDMI-DVI
Video Inputs	1 x S-Video
	3 x AV inputs (CVBS; RCA type)
	2 x Component (Y Pb/Pr Cb/Cr)
	1 x HDMI
Audio Inputs	6 x Stereo RCA (R/L), 1 x PC Mini-Jack
Audio Outputs	Analog - 1 x stereo RCA (R/L)
	1 x headphone
	Digital – 1 x SPDIF Optical
Audio	10W 6Ω X 2
Power Input	100 to 240 Vac
Power Consumption	380W Max
Preset Modes	Primary 1024 x 768 @ 60Hz.

2. Optical characteristics

Item	Specification	Remarks
Display Pixels	1,024 (H) x 768 (V) pixels	
Display Cells	3,072 (H) x 768 (V) cells	
Pixel Pitch	0.9 (H) x0.676 (V) mm	
Pixel Type	Non-stripe	
Color Depth	1,024 (R) x 1,024 (G) x 1,024 (B) colors	
Active Display Area	921.6 (H) x 519.2 (V) ±0.5 mm	
Brightness	Min. 300 cd/ m^2	
Color coordinates	9300K: x=0.283±0.02, y=0.297±0.02	RGB
	6500K: x=0.313±0.02, y=0.329±0.02	RGB /VIDEO
	5000K: x=0.346±0.02, y=0.359±0.02	RGB

3. Power Supply

a. Input voltage 100-240Vac, 50/60Hz

b. Input current 4.5A or less (at AC 100V/60Hz)

c. Inrush current 60A at Vac=120V

d. Power consumption 380 W Max

e. Standby/DPMS 3 watts max. (at 120 Vac)

4. Environment

Operating

a. Temperature: 0~40℃
b. Relative humidity: 20%~80% RH
c. Altitude: 0~6,560 ft

Non-operating

a. Temperature: -20~60℃
b. Relative humidity: 10%~90% RH
c. Altitude: 0~9,840 ft

5. Dimensions

Item	W/Stand	W/O stand
a. Height	780 mm	755 mm
b. Width	1072mm	1072mm
c. Depth	290 mm	109 mm

6. Weight

a. Net: 38.8 +/- 0.5 kgs

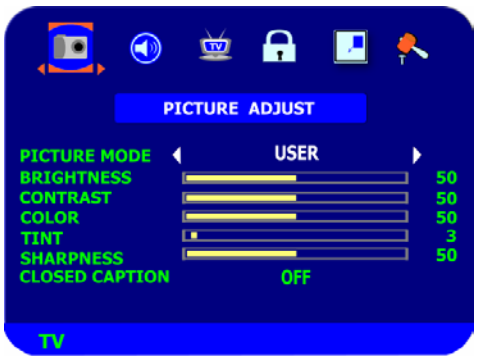
b. Gross: 47.5 +1.5 kgs /- 0.5 kgs

Chapter 3 On Screen Display

Input Menu

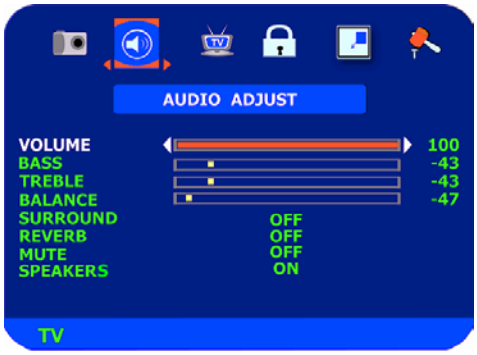
Operation Menu

TV Mode



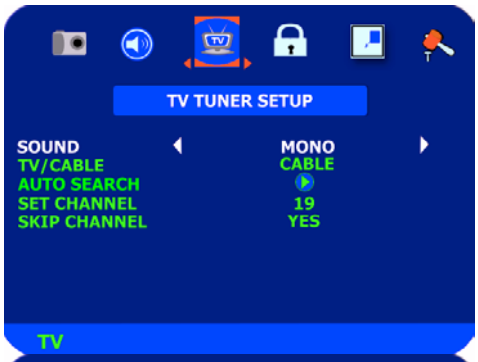
A. PICTURE ADJUST：

a. PICTURE MODE (USER/ VIVID1 / VIVID2 / VIVID3)
b. Adjust the BRIGHTNESS (0~100)
c. Adjust the CONTRAST (0~100)
d. Adjust the COLOR (saturation) (0~100)
e. Adjust the TINT (hue) (0~100)
f. Adjust the SHARPNESS (0~100)
g. CLOSED CAPTION (OFF/CC1/CC2/CC3/CC4/TT1/TT2/TT3/TT4)



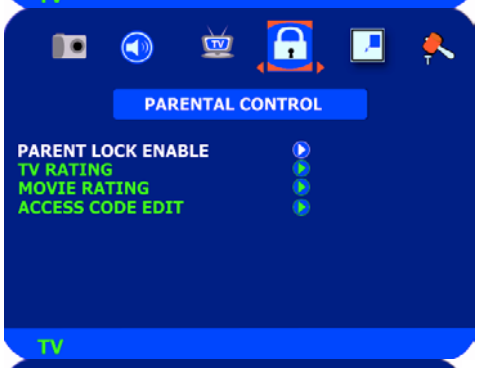
B. AUDIO ADJUST：

a. VOLUME (0~100)
b. BASS (-50~50)
c. TREBLE (-50~50)
d. BALANCE (-50~50)
e. SURROUND (ON/OFF)
f. REVERB (OFF, CONCERT, LIVING ROOM, HALL, ARENA)
g. MUTE (ON/OFF)
h. SPEAKERS (ON/OFF)



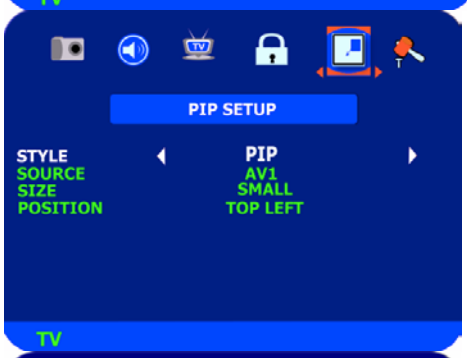
C. TV TUNER SETUP：

a. SOUND (SAP/MONO/STEREO)
b. TV/CABLE (TV/CABLE)
c. CHANNEL SEARCH (RUN)
d. SET CHANNEL
e. SKIP CHANNEL (YES/NO)



D. PARENTAL CONTROL：

a. PARENT LOCK ENABLE (ON/OFF)
b. TV RATING
c. MOVIE RATING
d. ACCESS CODE EDIT



E. PIP SETUP：

a. STYLE (OFF/PIP/POP)
b. Source (AV1、AV2、AV3、ANALOG HD1、ANALOG HD2、DIGITAL HD、RGB)
c. SIZE (SMALL/MEDIUM/LARGE)
d. POSITION (TOP LEFT/TOP CENTER/TOP RIGHT/MIDDLE LEFT/MIDDLE RIGHT/BOTTOM LEFT/BOTTOM CENTER/BOTTOM RIGHT)

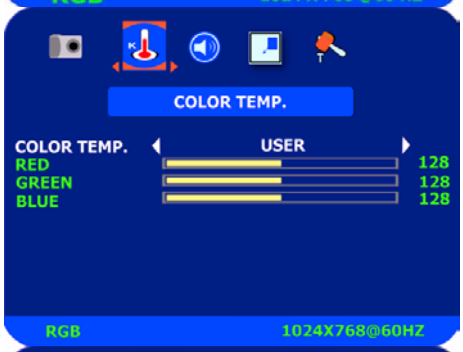
F. SPECIAL FEATURES：

a. LANGUAGE (ENGLISH/FRANÇAIS/ESPAÑOL)
b. SLEEP TIMER (OFF/30 MIN /60 MIN /90 MIN /120 MIN)
c. WIDE FORMAT (NORMAL/WIDE/ZOOM、PANORAMIC)
d. RESET ALL SETTING
e. IMAGE CLEANER

RGB Mode

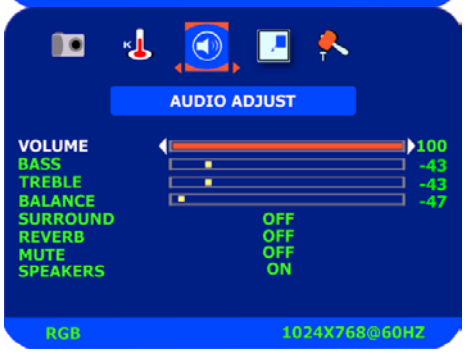
A. PICTURE ADJUST：

a. AUTO ADJUST
b. Adjust the BRIGHTNESS (0~100)
c. Adjust the CONTRAST (0~100
d. Adjust the H-SIZE (0~100)
e. Adjust the H-POSITION (0~100)
f. Adjust the V-POSITION (0~100)
g. Adjust the FINETUNE (0~100)



B. COLOR TEMP：

a. COLOR TEMP. (User, 5000K, 6500K, 9300K)
b. RED (0~255)
c. GREEN (0~255)
d. BLUE (0~255)



C. AUDIO ADJUST：

a. VOLUME (0~100)
b. BASS (-50~50)
c. TREBLE (-50~50)
d. BALANCE (-50~50)
e. SURROUND (ON/OFF)
f. REVERB (OFF, CONCERT, LIVING ROOM, HALL, ARENA)
g. MUTE (ON/OFF)
h. SPEAKERS (ON/OFF)

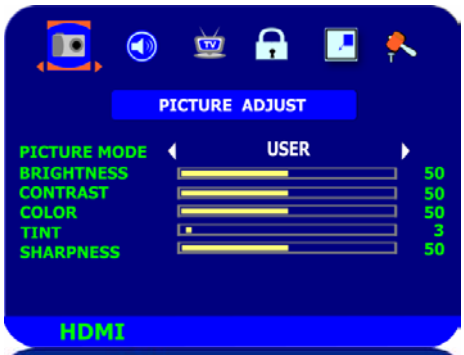
D. PIP SETUP：

a. STYLE (OFF/PIP/POP)
b. SOURCE (AV1、AV2、AV3、TV)
c. SIZE (SMALL/MEDIUM /LARGE)
d. POSITION (TOP LEFT/TOP CENTER/TOP RIGHT/MIDDLE LEFT/MIDDLE RIGHT/BOTTOM LEFT/BOTTOM CENTER/BOTTOM RIGHT)

E. SPECIAL FEATURES：

a. LANGUAGE (ENGLISH/FRANÇAIS/ ESPAÑOL)
b. SLEEP TIMER (OFF/30/60/90/120)
c. WIDE FORMAT (WIDE/NORMAL)
d. RESET ALL SETTING
e. IMAGE CLEANER

HDMI Mode



A. PICTURE ADJUST：

a. PICTURE MODE (USER/ VIVID1 / VIVID2 / VIVID3)
b. Adjust the BRIGHTNESS (0~100)
c. Adjust the CONTRAST (0~100)
d. Adjust the COLOR (saturation) (0~100)
e. Adjust the TINT (hue) (0~100)
f. Adjust the SHARPNESS (0~100)

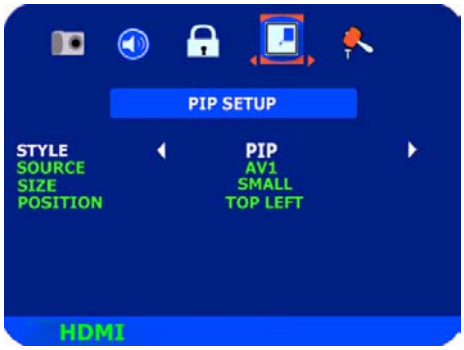
B. AUDIO ADJUST：

a. VOLUME (0~100)
b. BASS (-50~50)
c. TREBLE (-50~50)
d. BALANCE (-50~50)
e. SURROUND (ON/OFF)
f. REVERB (OFF, CONCERT, LIVING ROOM, HALL, ARENA)
g. MUTE (ON/OFF)
h. SPEAKERS (ON/OFF)
i. AUDIO SOURCE (HDMI/DVII)

NOTE: While main or pip exists HDMI source, audio option will add an AUDIO SOURCE item.

C. PARENTAL CONTROL：

a. PARENT LOCK ENABLE (ON/OFF)
b. TV RATING
c. MOVIE RATING
d. ACCESS CODE EDIT



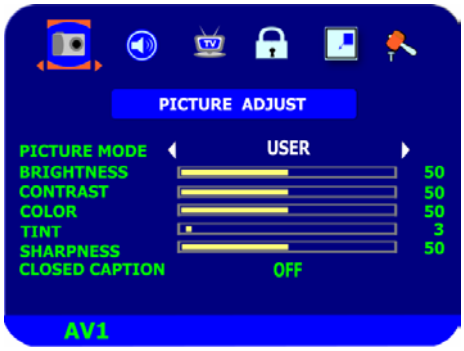
D. PIP SETUP：

a. STYLE (OFF/PIP/POP)
b. SOURCE (AV1、AV2、AV3、TV)
c. SIZE (SMALL /MEDIUM/LARGE)
d. POSITION (TOP LEFT/TOP CENTER/TOP RIGHT/MIDDLE LEFT/MIDDLE RIGHT/BOTTOM LEFT/BOTTOM CENTER/BOTTOM RIGHT)

E. SPECIAL FEATURES：

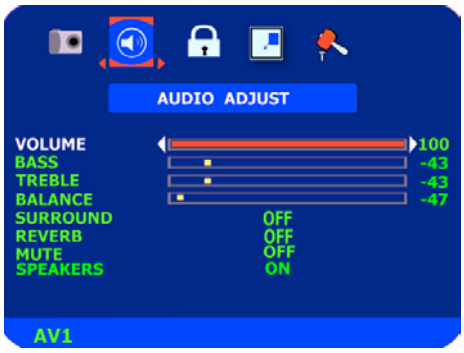
a. LANGUAGE (ENGLISH/FRANÇAIS/ ESPAÑOL)
b. SLEEP TIMER (OFF/30/60/90/120)
c. WIDE FORMAT (NORMAL/WIDE/ZOOM)
d. RESET ALL SETTING
e. IMAGE CLEANER

Video Mode -AV1、AV2、AV3、COMPONENT 1、COMPONENT 2



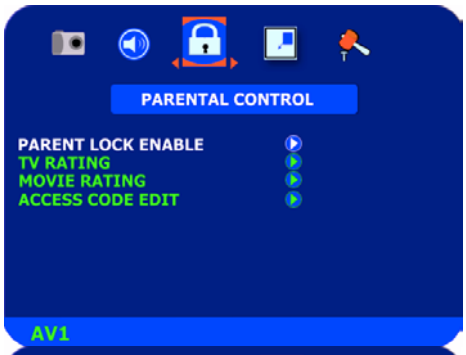
A. PICTURE ADJUST：

a. PICTURE MODE (USER/ VIVID1 / VIVID2 / VIVID3)
b. Adjust the BRIGHTNESS (0~100)
c. Adjust the CONTRAST (0~100)
d. Adjust the COLOR (saturation) (0~100)
e. Adjust the TINT (hue) (0~100)
f. Adjust the SHARPNESS (0~100)
g. CLOSED CAPTION (OFF/CC1/CC2/CC3/CC4/TT1/TT2/TT3/TT4)



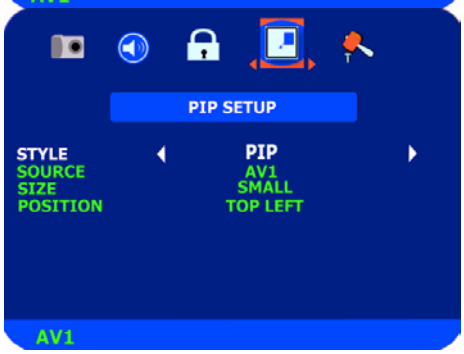
B. AUDIO ADJUST：

a. VOLUME (0~100)
b. BASS (-50~50)
c. TREBLE (-50~50)
d. BALANCE (-50~50)
e. SURROUND (ON/OFF)
f. REVERB (OFF, CONCERT, LIVING ROOM, HALL, ARENA)
g. MUTE (ON/OFF)
h. SPEAKERS (ON/OFF)



C. PARENTAL CONTROL：

a. PARENT LOCK ENABLE (ON/OFF)
b. TV RATING
c. MOVIE RATING
d. ACCESS CODE EDIT



D. PIP SETUP：

a. STYLE (OFF/PIP/POP)
b. SOURCE (AV2, AV3, COMPONENT 1, COMPONENT 2, HDMI, RGB, TV, DTV)
c. SIZE (SMALL/MEDIUM/LARGE)
d. POSITION (TOP LEFT/TOP CENTER/TOP RIGHT/MIDDLE LEFT/MIDDLE RIGHT/BOTTOM LEFT/BOTTOM CENTER/BOTTOM RIGHT)

E. SPECIAL FEATURES：

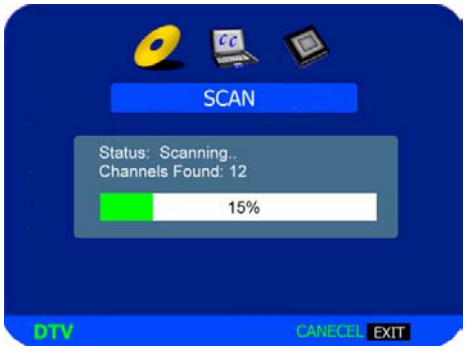
a. LANGUAGE (ENGLISH/FRANÇAIS/ ESPAÑOL)
b. SLEEP TIMER (OFF/30 MIN/60 MIN /90 MIN/120 MIN)
c. WIDE FORMAT (NORMAL/WIDE/ZOOM)
d. RESET ALL SETTING
e. IMAGE CLEANER

DTV Mode

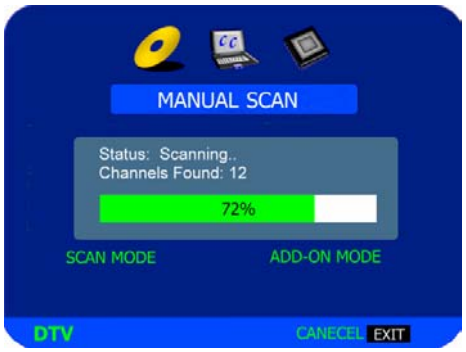
A. DTV TUNER SETUP

a. TIME ZONE:
1.HAWALL
2.EASTTERN TIME
3.INDIANA
4.CENTRAL TIME
5.MOUNTAIN TIME
6.ARIZONA
7.PACIFIC TIME
8.ALASKA

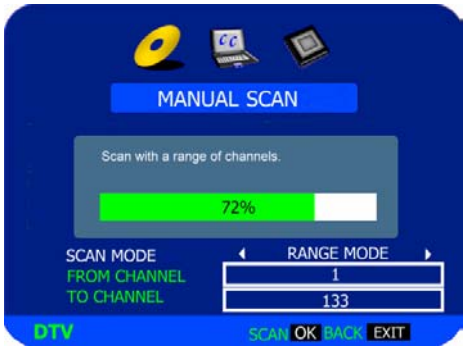
b. CABLE/AIR/AUTO



c. SCAN

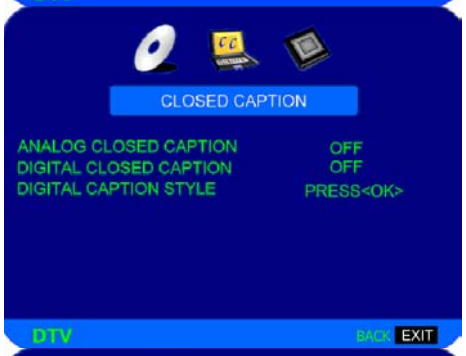


d. MANUAL SCAN
SCAN MODE:
1. ADD-ON MODE
2. RANGE MODE
(1)FROM CHANNEL
(2)TO CHANNEL



e. CHANNEL SKIP

f. DIGITAL AUDIO OUT
1. PCM
2. DOLBY DIGITAL
3. OFF



B.CLOSED CAPTION:
a. ANALOG CLOSED CAPTION (OFF/YES)
b. DIGITAL CLOSED CAPTION (OFF/YES)

c. DIGITAL CAPTION STYLE
1.AS BROADCASTER
2.CUSTOM
(1) FONT SIZE
α.LARGE
β.SMALL
γ.MEDIUM
(2) FONT COLOR
α .BLACK

β .WHITE
γ .GREEN
δ .BLUE
ε .RED
ζ .CYAN
η .YELLOW
θ .MAGENTA

(3) FONT OPACITY
α .SOLID
β .TRANSLUCENT
γ .TRANSPARENT

(4)BLACKGROUND COLOR
α .BLACK
β .WHITE
γ .GREEN
δ .BLUE
ε .RED
ζ .CYAN
η .YELLOW
θ .MAGENTA

(5) BLACKGROUND OPACITY
α .SOLID
β .TRANSLUCENT
γ .TRANSPARENT

(6) WINDOW COLOR
α .BLACK
β .WHITE
γ .GREEN
δ .BLUE
ε .RED
ζ .CYAN
η .YELLOW
θ .MAGENTA

(7) WINDOW OPACITY
α .SOLID
β .TRANSLUCENT
γ .TRANSPARENT

C. PASSWORD
- PRESS<OK> , enter 0000
- get to “CHANNEL BLOCK”, then press <OK>

PIP table

Sub / MAIN	AV1	AV2	AV3	COMPONENT 1	COMPONENT 2	HDMI*	RGB	TV	DTV
AV1	*N*	Y	Y	Y	Y	Y	Y	Y	Y
AV2	Y	*N*	Y	Y	Y	Y	Y	Y	Y
AV3	Y	Y	*N*	Y	Y	Y	Y	Y	Y
COMPONENT 1	Y	Y	Y	*N*	*N*	*N*	*N*	Y	*N*
COMPONENT 2	Y	Y	Y	*N*	*N*	*N*	*N*	Y	*N*
HDMI	Y	Y	Y	*N*	*N*	*N*	*N*	Y	*N*
RGB	Y	Y	Y	*N*	*N*	*N*	*N*	Y	*N*
TV	Y	Y	Y	Y	Y	Y	Y	*N*	Y
DTV	Y	Y	Y	*N*	*N*	*N*	*N*	Y	*N*

* Sub/HDMI doesn’t support 1080i.

Chapter4 Factory preset timings

This timing chart is already preset for the analog & digital displays..

1. RGB PC preset modes

Mode No.	Resolution	Refresh Rate (Hz)	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Horizontal Sync Polarity (TTL)	Vertical Sync Polarity (TTL)	Pixel Rate (MHz)	Remark
1	640x480	60	31.5	59.94	N	N	25.175	Windows
2	640x480	75	37.5	75.00	N	N	31.500	Windows
3	720 x 400	70	31.46	70.08	N	P	28.320	DOS
4	800x600	60	37.9	60.317	P	P	40.000	Windows
5	800x600	75	46.9	75	P	P	49.500	Windows
6	800x600	85	53.7	85.06	P	P	56.250	Windows
7	⦿1024x768	60	48.4	60.01	N	N	65.000	Windows
8	1024x768	70	56.5	70.07	N	N	75.000	Windows
9	1024x768	75	60.0	75.03	P	P	78.750	Windows
10	1280X1024	60	63.98	60.02	P	P	108.000	Windows

Remark: P: positive, N: negative ⦿1024x768 @60 Hz: Primary

2. HDMI video digital preset modes

Mode No.	Resolution
1	480i
2	480p
3	720p
4	1080i

3. HDMI-DVI video preset modes

Mode No.	Resolution
1	480i
2	480p
3	720p
4	1080i

4. HDMI-DVI PC preset modes

Mode No.	Resolution	Refresh Rate (Hz)	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Horizontal Sync Polarity (TTL)	Vertical Sync Polarity (TTL)	Pixel Rate (MHz)	Remark
1	640x480	60	31.5	59.94	N	N	25.175	Windows

Chapter 5 Pin Assignment

There are analog and digital connectors as video input source in this model.

A. Input signal

1. RGB PC Connector

a. Type: Analog

b. Frequency: H: 30-80KHzV: 60-85Hz

c. Signal level: 0.7Vp-p

d. Impedance: 75Ω

e. Synchronization H/V separate sync:

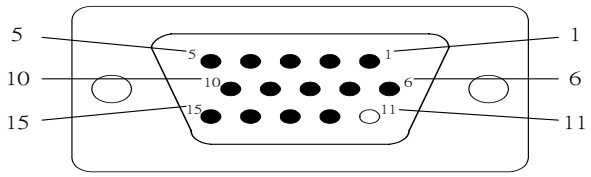
H/V composite sync: Sync on Green

TTL

TTL

f. Video bandwidth: 135MHz

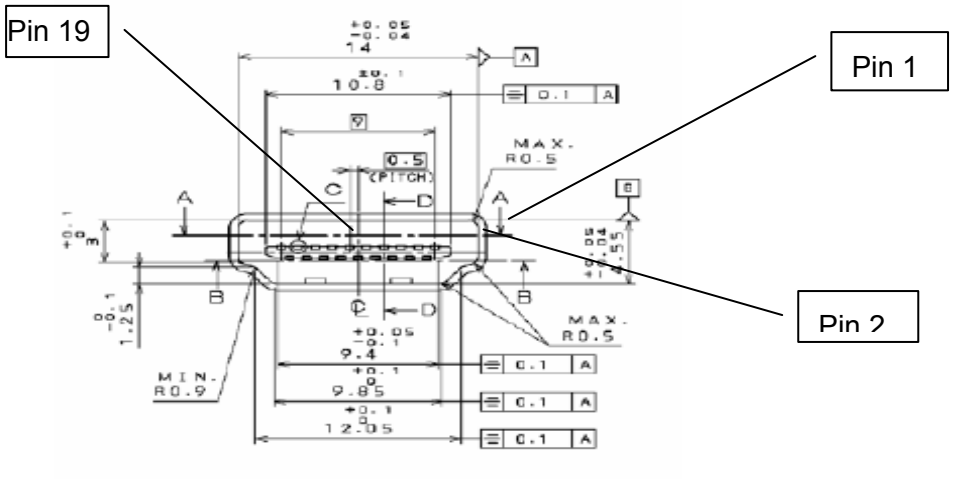
g. Connector type: 15-pin D-Sub, female



Pin Number	Pin Assignment	Pin Number	Pin Assignment
1	Red video input	9	+5V
2	Green video input	10	Ground
3	Blue video input	11	No connection
4	Ground	12	(SDA)
5	Ground	13	Horizontal sync (Composite sync)
6	Red video ground	14	Vertical sync
7	Green video ground	15	(SCL)
8	Blue video ground		

2. HDMI Connector

a. Frequency:	H: 15.734KHz	V: 60Hz
	H: 31KHz	V: 60Hz
	H: 45KHz	V: 60Hz
	H: 33KHz	V: 60Hz
b. Polarity:	Positive or Negative	
c. Type:	Type A	
d. Pin Assignment:	Please see below	



Pin	Signal Assignment	Pin	Signal Assignment
1	TMDS Data2+	2	TMDS Data2 Shield
3	TMDS Data2-	4	TMDS Data1+
5	TMDS Data1 Shield	6	TMDS Data1-
7	TMDS Data0+	8	TMDS Data0 Shield
9	TMDS Data0-	10	TMDS Clock+
11	TMDS Clock Shield	12	TMDS Clock-
13	CEC	14	Reserved (N.C. on device)
15	SCL	16	SDA
17	DDC/CEC Ground	18	+5V Power
19	Hot Plug Detect		

3. AV/Composite Video (CVBS) Connector

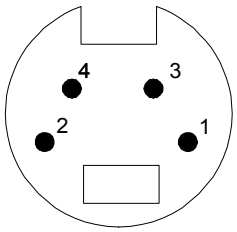
   a. Frequency: H: 15.734KHz V: 60Hz (NTSC)

   b. Signal level: 1Vp-p Sync (H+V):0.3V below Video (Y+C)

   c. Impedance: 75Ω

   d. Connector type: RCA jack

4. AV/S-Video Connector



1, 2 = GND
3 = Luminance (Y)
4 = Chrominance(C)

   a. Frequency: H: 15.734KHz V: 60Hz (NTSC)

   b. Signal level: Y: 1Vp-p C: 0.286Vp-p

   c. Impedance: 75Ω

   d. Connector type: 4-pin mini DIN

5. Component video Connector

   a. Frequency: H: 15.734KHz V: 60Hz (NTSC-480i)

   H: 31KHz V: 60Hz (NTSC-480p)

   H: 45KHz V: 60Hz (NTSC-720p)

   H: 33KHz V: 60Hz (NTSC-1080i)

   b. Signal level: Y: 1Vp-p

   Pb: ±0.350Vp-p Pr: ±0.350Vp-p

   c. Impedance: 75Ω

   d. Connector type: RCA jack

6. F-type TV RF connector

   NTSC system

   a. Signal level Analog 1Vp-p typical (45tdB~90dB)

   b. Frequency 55~801 MHz

   ATSC system

   a. IF-output level 1Vp-p minimum

   b. Frequency 57~803 MHz

   QAM system (supporting clear QAM)

   a. IF-output level 1Vp-p minimum

   b. Frequency 57~849 MHz

7. PC Stereo audio

   a. Signal level: 1Vrms

   b. Impedance: 47KΩ

   c. Connector type: 3.5 ϕ mini jack

8. Video Stereo audio

   a. Signal level: 0.7Vrms

   b. Impedance: 47KΩ

   c. Frequency Response: 250Hz-20KHz

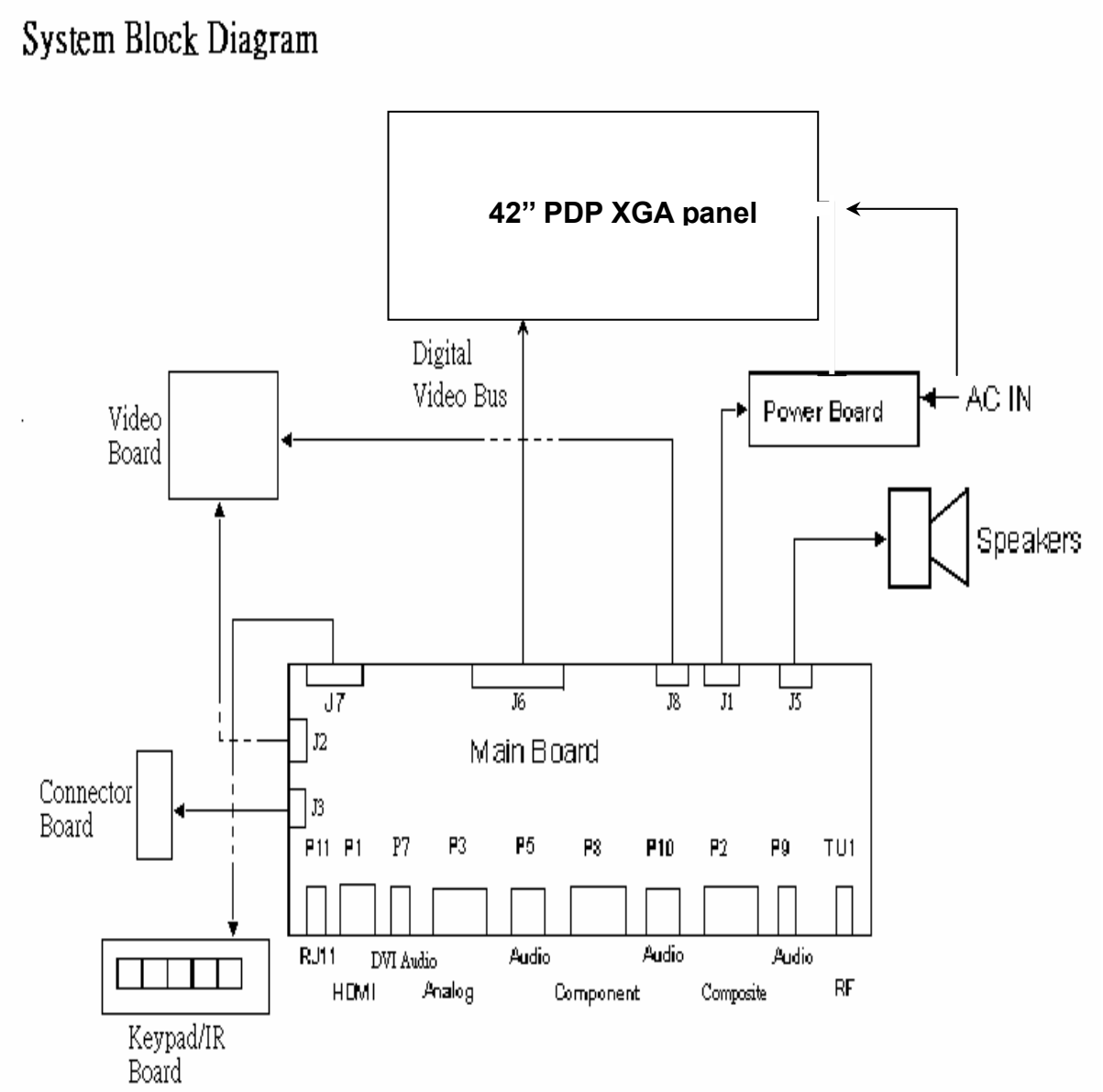
   d. Connector type: RCA L/R:

B. Output Signal

Output	Connector Type
ANALOG AUDIO OUT	Stereo RCA Jack x 2
DIGITAL AUDIO OUT	Optical x 1
Headphone	Mini jack x 1

1. Analog Audio out
   a. Signal level: 0.7Vrms
   b. Impedance: 47KΩ
   c. Frequency Response: 250Hz-20KHz
   d. Connector type:RCA L/R
2. Digital audio out
   a. Peak emission wave length: 630 – 690 μm
   b. Transmission Speed: 13.2M pbs
   c. Connector type: Optical fiber transmitter
3. Headphone
   a. Signal level: 1Vrms (max.)
   b. Impedance: 32Ω
   c. Output: 50 mW
   d. Connector type: Earphone mini jack

Chapter 6 Block Diagram



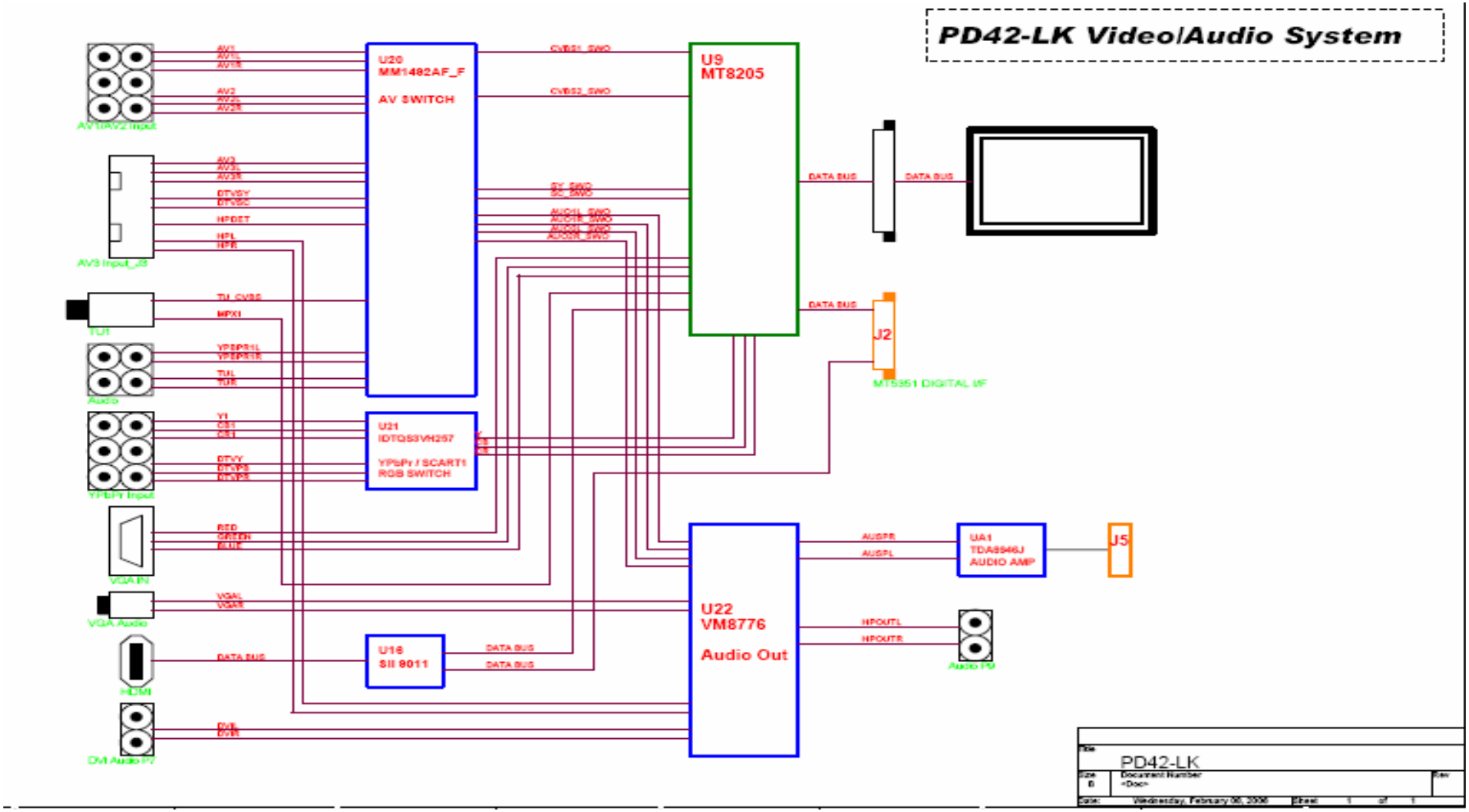
The TV system block diagram is powered by power board that transforms AC source of 100V~240V AC +/- 10% @ 50/60 HZ into system request power source. The main board receives different types of video signal into the MTK8205 Ic. Afterward, the MTK8205 Ic process the signals control the various functions of the monitor and outputs control signal, video signal and power to the 42"PDP XGA panel to be displayed.

The analog video signals of S-video, YPbPr, TV, PC and A/V all video signals are translated from analog signals into MTK8205 generates the vertical and horizontal timing signals for display device.

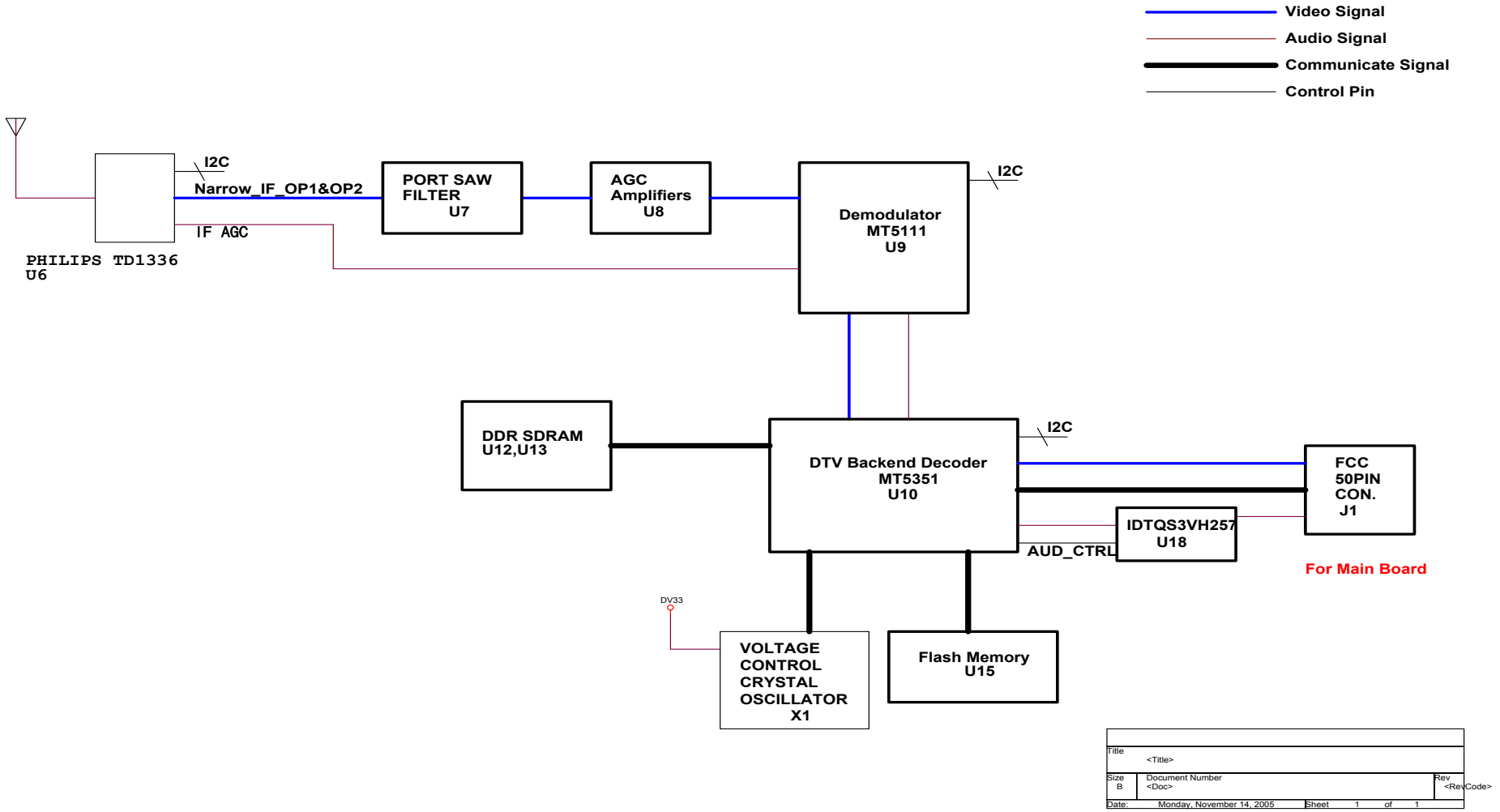
The analog audio of s-video, YPbPr, TV, PC and A/V is transmitting to the WM8776 processed. The purpose is process the input audio signal to control volume, bass, treble, surround, and balance. The HDMI video and audio is must transmitting to sil9011 processed then TMDS signal to the MTK8205 generates the vertical and horizontal timing signals for display device.

The DTV signal is processes to the tuner and output to MT5111 who handle ATSC input to match MPEG-2 package, then transfer to MT5351. After passing through decoder, the signal will be with the digital signal tri-dtate from HDMI transfer to digital port of MT8205 . All functions are controllable by the main board. Plus, all functions in the IC boards are programmable using I2C Bus.

Main Board Block Diagram



Video Board Block Diagram



Chapter7 Main Board I/o Connections

J7 CONNECTION (TOP→BOTTOM)

Pin	Description
1	“Auto”
2	“Left”
3	“Right”
4	“Down”
5	“Gnd”
6	“Up”
7	“Menu”
8	“Source”
9	“Power”
10	“LED”
11	“IR”
12	“+5V”

J1 CONNECTION (TOP→BOTTOM)

Pin	Description
1	“POWRSW”
2	“+12V”
3	“+12V”
4	“+12V”
5	“GND”
6	“GND”
7	“GND”
8	“GND”
9	“+5V”
10	“+5V”
11	“+5V”
12	“RLY_ON”
13	“VS_ON”

J3 CONNECTION (TOP→BOTTOM)

Pin	Description
1	“SVDET2#”
2	“S1C_GND”
3	“S1C_IN”
4	“S1Y_GND”
5	“S1Y_IN”
6	“AGND”
7	“AV3R”
8	“AV3R GND”
9	“AV3L”
10	“AV3_GND”
11	“AV3_IN”
12	“AV3L GND”
13	“HPL”
14	“HPDET#”
15	“HPR”
16	“GNDV”

J2 CONNECTION (TOP→BOTTOM)

Pin	Description	Pin	Description
1	“GND”	26	“GND”
2	“I2C_SW”	27	“VOG3”
3	“OREQUEST#”	28	“VOG2”
4	“OREADY#”	29	“VOG1”
5	“ORESET#”	30	“VOG0”
6	“GND”	31	“GND”
7	“VOPCLK”	32	“VOB7”
8	“VODE”	33	“VOB6”
9	“VOVSYNC”	34	“VOB5”
10	“VOHSYNC”	35	“VOB4”
11	“GND”	36	“GND”
12	“VOR7”	37	“VOB3”
13	“VOR6”	38	“VOB2”
14	“VOR5”	39	“VOB1”
15	“VOR4”	40	“VOB0”
16	“GND”	41	“GND”
17	“VOR3”	42	“AO1SDATA0”
18	“VOR2”	43	“AO1LRCK”
19	“VOR1”	44	“AO1BCK”
20	“VOR0”	45	“AO1MCLK”
21	“GND”	46	“GND”
22	“VOG7”	47	“U2RX”
23	“VOG6”	48	“U2TX”
24	“VOG5”	49	“U0RX”
25	“VOG4”	50	“U0TX”

J8 CONNECTION (TOP→BOTTOM)

Pin	Description
1	“+5V”
2	“GND”
3	“GND”
4	“+12V”
5	“+12V”

Chapter 8 Theory of Circuit Operation

The operation of D-SUB 15pin route

The D-SUB 15pin is input analog signal to the MTK8205 transfer A/D converter then generates the vertical and horizontal timing signals for display device.

The operation of HDMII CON route

The HDMI CON is input digital signal the signal is process to the sil9011. Then transfer to the MTK8205, the MTK8205 generates the vertical and horizontal timing signals for display device.

The operation of HDTV & Component route

HDTV & Component signal is input to switch IDTQS3VH257 (Select Component1 or 2). Then transfer to the MTK8205 the MTK8205 generates the vertical and horizontal timing signals for display device.

The operation of Video 1,2,3 & S-Video route

The Video 1,2,3 and S-Video signal is transmission signal to main board MM1492 (Switch) and output to MTK8205 the MTK8205 generates the vertical and horizontal timing signals for display device.

The operation of TV route

TV signal is processes to the tuner and output to MM1492 (switch) then transfer to MTK8205 the MTK8205 generates the vertical and horizontal timing signals for display device. Audio is processes to the tuner output to SIF circuit and output to MTK8205.Then MTK8205 process to wm8776 and output to TDA8946J transfer to speaker

The operation of DTV route

DTV signal is processes to the tuner and output to MT5111 who handle ATSC input to match MPEG-2 package, then transfer to MT5351. After passing through decoder, the signal will be with the digital signal tri-dtate from HDMI transfer to digital port of MT8205

The operation of keypad

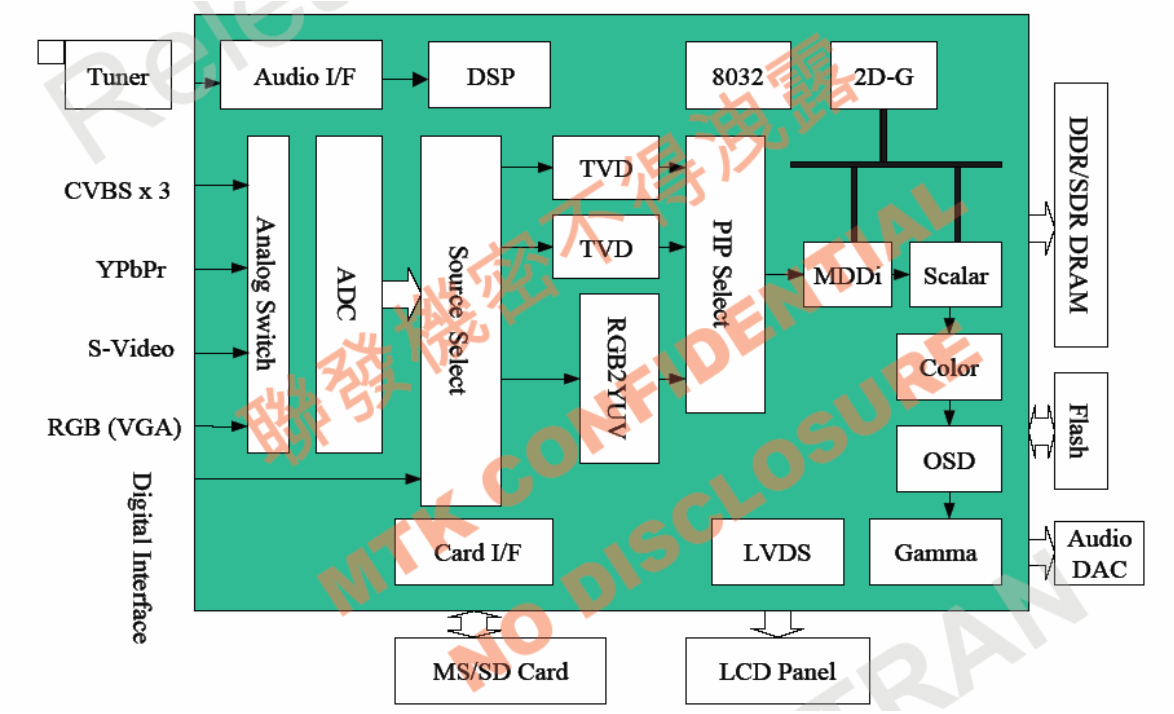
There are 7 keys to control and select the function of P42 and also has one LED to indicate the status of operation. They are “Power, Menu, CH+,CH-, VOL+ ,VOL -, Input”.

1. The power key through POW and GND to control MTK8205, MTK8205 will receive a low signal to turn on or off system while press the power key.
2. The other key the same as power key .
3. The LED is constructed with two separate LED which color is green and orange. The MTK8205 direct control the LED's when MTK8205 (OGO5) is low the LED is orange (Close power) when MTK8205 (OGO5) is high the LED is green (Open power).

MT8205 Application

MT8205 is a highly integrated single chip for PDP TV supporting video input and output format up to HDTV. It includes 3D comb filter TV Decoder to retrieve the best image from popular composite signals. On-chip advanced motion adaptive de-interlacer converts accordingly the interlace video into progressive one with overlay of a 2D Graphic processor. Optional 2nd HDTV or SDTV inputs allows user to see multi-programs on same screen. Flexible scalar provides wide adoption to various PDP panel for different video sources. Its on-chip audio processor decodes analog signals from Tuner with lip sync control, delivering high quality post-processed sound effect to customers. On-chip microprocessor reduces the system BOM and shortens the schedule of UI design by high level C program. MT8205 is a cost-effective and high performance HDTV-ready solution to TV manufactures.

BOLOCK DIAGRAM



1. Video input

a. Input Multiplexing

1.component X2

2.composite X3

3.s-videoX1

4.HDMI X1

5.VGA X1

6.RF X2

b. Input formats:

1.support HDTV 480i/480p/720p/1080i

2.support Y/C signal 1VP-P/75Ω

3.support Y/C signal 1VP-P/75Ω

4.support 480i/408p/720p/1080i

5.support VGA input up to 1280x1024@60HZ

6.support NTSC system Frequency 55~801MHZ

7. support ATSC system Frequency 57~863MHZ

2. TV Decoder

For pip/pop:

Dual identical TVD on chip

3D-comb for both path

Dual VBI decoders for the application of V-chip

3. Support Formats:

Support NTSC, NTSC-4.43

Support ATSC

Automatic Luma / Chroma gain control

Automatic TV standard detection

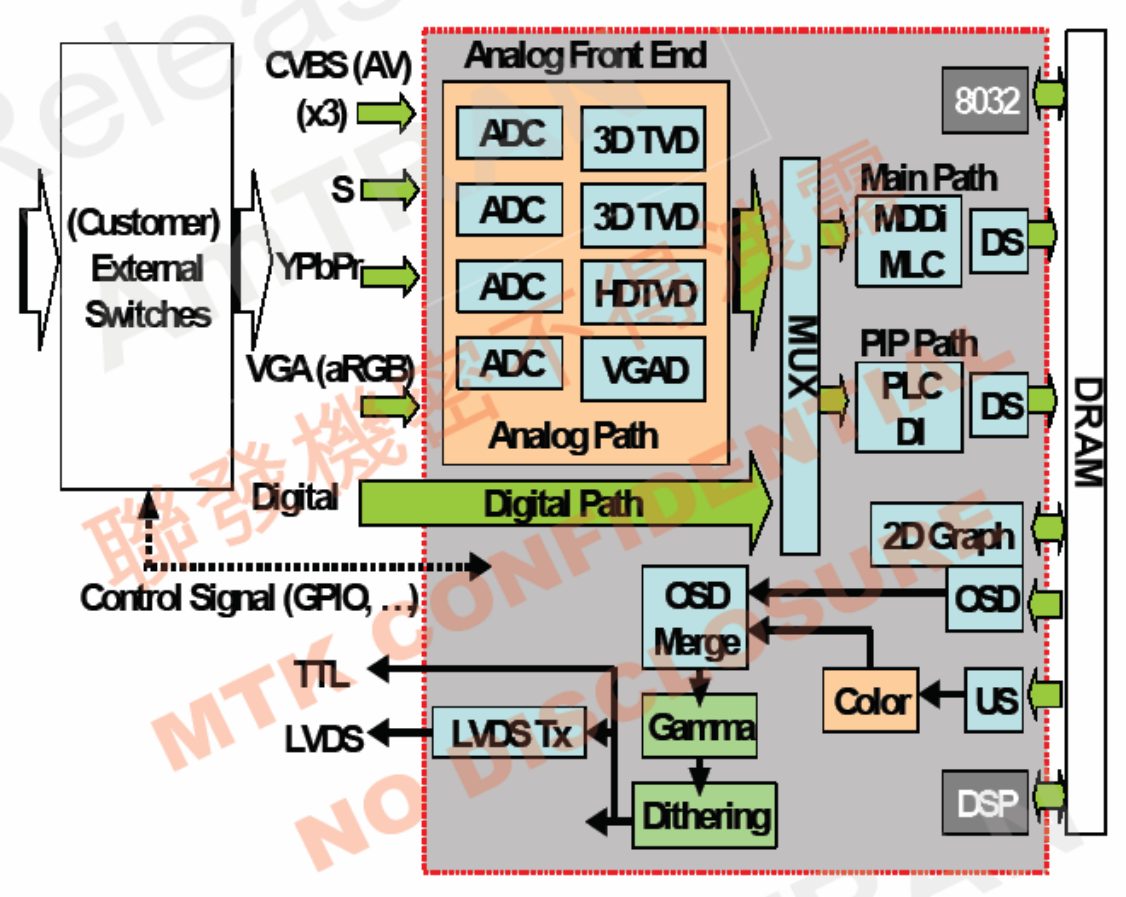
NTSC Motion Adaptive 3D comb filter

Motion adaptive 3D Noise Reduction

VBI decoder for closed-caption/XDS/Teletext/WSS/VPS

Macro vision detection

BOLOCK DIAGRAM



4. 2D-Graphic/OSD processor

Two OSD planes.

Support alpha blending among these two planes and video

Support text/bitmap decoder

Support line/rectangle/gradient fill

Support bitblt

Support color key function

Support clip mask

65535/256/16/4/2-color bitmap format OSD

Automatic vertical scrolling of OSD image

Support OSD mirror and upside down

5. Microprocessor interface

When power is supplied and power key is pressed then the rest circuit lets Reset to low state that will reset the MTK8205 to initial state. After that the Reset will transits to high state and the MTK8205 start to work that microprocessor executes the programs and configures the internal registers. The execution speed of CPU is 133 MHz.

a. The I/O ports are configured as follows：

Pin name	Function	Type	Description
AF26	VGASCL	Input / Output	
AE26	VGASDA	Input / Output	
AB23	REQUEST#	Input / Output	
AB24	READY#	Input / Output	
AD22	SCL	Input / Output	
AC22	SDA	Input / Output	
OBO0	SOURCE	Input	Key detection
OBO1	MENU	Input	Key detection
OBO2	UP	Input	Key detection
OBO3	DOWN	Input	Key detection
OBO4	RIGHT	Input	Key detection
OBO5	LEFT	Input	Key detection
OBO6	AUTO	Input	Key detection
OBO7	POWER	Input	Key detection
OGO5	LED	Output	
AF24	IR	Input / Output	
AE23	GPIO	Output	Power on of TV board and panel
AD23	PWM0	Output	Backlight Adjustmance
AC23	PWM1	Output	Select mute
AF6	ORO6	Output	RCA out mute
AE20	UP1_4	Input	S-video Detect
AF20	UP1_3	Output	HDMI SCDT
AE19`	UP1_2	Output	YCBCRSEL
AE21	UP3_0	Output	Backlight ON/OFF
AD21	UP3_1	Output	HDMI CAB

b. PIP/POP HARDWARE LIMITION:

		Secondary Window Source								
Primary Window Source		***A***	***B***	***C***	***D***	***E***	***F***	***G***	***H***	***I***
ATSC Tuner	**A**	X	✓	✓	✓	✓	X	X	X	X
NTSC Tuner	**B**	✓	X	✓	✓	✓	✓	✓	✓	✓
A/V1	**C**	✓	✓	X	✓	✓	✓	✓	✓	✓
A/V2	**D**	✓	✓	✓	X	✓	✓	✓	✓	✓
A/V3 (Side)	**E**	✓	✓	✓	✓	X	✓	✓	✓	✓
Analog HD1 (480i~1080i)	**F**	X	✓	✓	✓	✓	X	X	X	X
Analog HD2 (480i~1080i)	**G**	X	✓	✓	✓	✓	X	X	X	X
Digital HD1 (HDMI)	**H**	X	✓	✓	✓	✓	X	X	X	X
RGB	**I**	X	✓	✓	✓	✓	X	X	X	X

Input Matrix for Windowing Functionality

6. Video processor

a. Color management

Flesh tone and multiple-color enhancement

Gamma/anti-Gamma correction

Color Transient Improvement (CTI)

Saturation/hue adjustment

Contrast/Brightness/Sharpness Management

Sharpness and DLTI/DCTI

Brightness and contrast adjustment

Black level extender

White peak level limiter

Adaptive Luma/Chroma Management

b. De-interlacing

Automatic detect film or video source

3:2/2:2 pull down source detection

Advanced Motion adaptive de-interlacing

c. Scaling

Arbitrary ratio vertical/horizontal scaling of video, from1/32X to 32X

Advanced linear and non-linear Panorama scaling

Programmable Zoom viewer

Picture in picture (PIP)

Picture in picture

d. Display

12/10 10/8 8/6 Dithering processing for PDP display

10bit gamma correction

Support Alpha blending for Video and two OSD panel

Frame rate conversion

7. DRAM Usage

8205,2pcs of 8X16 DDR166 is necessary

Here is a comparison chart between (2XDDR)and(1XDDR)

	DDR*1(16Mb)	DDR*2(32Mb)
NR	Y	Y
3D-Comb	Y	Y
MDDi	480i/576i	1080i
PIP	*Y	Y
POP	*Y	Y
Display	1024x768	1920x1080

MTK8205 8MX16 DDRAM test report

Item	Brand	IC Number	Speed	Voltage	Package	Result
1	ESMT	M13S128168A-6T	6T	2.5V	TSOP66	Pass
2	elixir	N2DS12H16CT-6K	6T	2.5V	TSOP66	Pass
3	Hynix	HY5DU281622AT-6	6T	2.5V	TSOP66	Pass
4	ProMos	V58C2128164SBT6	6T	2.5V	TSOP66	Pass

8. Flash Usage

Flash is used to store FW code, fonts, bitmaps, and big tables for VGA, Video, and Gamma

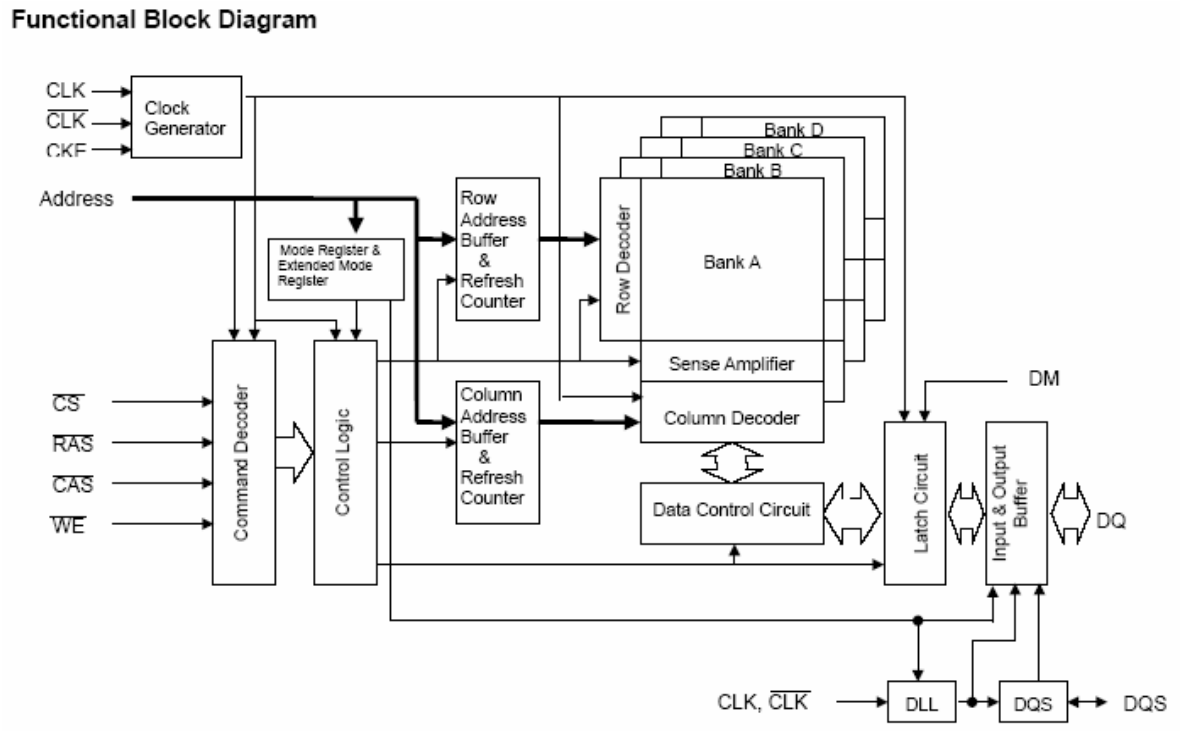
2Mbyte is recommended to build a general TV model

MTK8205 Flash ROM support test report

Item	Brand	IC Number	Speed	Size	Voltage	Package	Result
1	MXIC	29LV800ABTC-70	70ns	8Mb	3.3V	TSOP48	Pass
2	MXIC	29LV800ATTC-70	70ns	8Mb	3.3V	TSOP48	Pass
3	MXIC	29LV800ATTI-70	70ns	8Mb	3.3V	TSOP48	Pass
4	MXIC	29LV800BTC-55	55ns	8Mb	3.3V	TSOP48	Pass
5	MXIC	29LV800TTC-70	70ns	8Mb	3.3V	TSOP48	Pass
6	MXIC	29LV160BBTC-70	70ns	16Mb	3.3V	TSOP48	Pass
7	MXIC	29LV160BTTC-70	70ns	16Mb	3.3V	TSOP48	Pass
8	MXIC	26LV160BTC-70	70ns	16Mb	3.3V	TSOP48	Pass
9	Fujitsu	29LV800BA-70PFTN	70ns	8Mb	3.3V	TSOP48	Pass
10	Fujitsu	29LV800TA-70PFTN	70ns	8Mb	3.3V	TSOP48	Pass
11	Fujitsu	29LV800TA-90PFTN	90ns	8Mb	3.3V	TSOP48	Pass
12	Fujitsu	29LV160BE-70PFTN	70ns	16Mb	3.3V	TSOP48	Pass
13	Fujitsu	29LV160TE-70PFTN	70ns	16Mb	3.3V	TSOP48	Pass
14	ST	M29W800AT-90N1	90ns	8Mb	3.3V	TSOP48	Pass
15	ST	M29W800AT-90N6	90ns	8Mb	3.3V	TSOP48	Pass
16	ST	M29W800DT-70N1	70ns	8Mb	3.3V	TSOP48	Pass
17	ST	M29W160EB-70N6	70ns	16Mb	3.3V	TSOP48	Pass
18	ST	M29W160ET-70N6	70ns	16Mb	3.3V	TSOP48	Pass
20	SST	39VF088-70-4C-EK	70ns	8Mb	3.3V	TSOP48	Pass
23	AMD	AM29LV160DT-70EC	70ns	16Mb	3.3V	TSOP48	Pass
24	ATMEL	AT49BV162A-70TI	70ns	16Mb	3.3V	TSOP48	Pass

DDR SDRAM (M13S128168A-6T) Application

Functional Block Diagram



Pin description

Pin Name	Function	Pin Name	Function
A0~A11, BA0,BA1	Address inputs - Row address A0~A11 - Column address A0~A8 A10/AP : AUTO Precharge BA0, BA1 : Bank selects (4 Banks)	LDM, UDM	DM is an input mask signal for write data. LDM corresponds to the data on DQ0~DQ7; UDM correspond to the data on DQ8~DQ15.
DQ0~DQ15	Data-in/Data-out	CLK, $\overline{CLK}$	Clock input
$\overline{RAS}$	Row address strobe	CKE	Clock enable
$\overline{CAS}$	Column address strobe	$\overline{CS}$	Chip select
$\overline{WE}$	Write enable	V_{DDQ}	Supply Voltage for GDQ
V_{SS}	Ground	V_{SSQ}	Ground for DQ
V_{DD}	Power	V_{REF}	Reference Voltage for SSTL-2
LDQS, UDQS	Bi-directional Data Strobe. LDQS corresponds to the data on DQ0~DQ7; UDQS correspond to the data on DQ8~DQ15.	NC	No connection

Command Truth Table

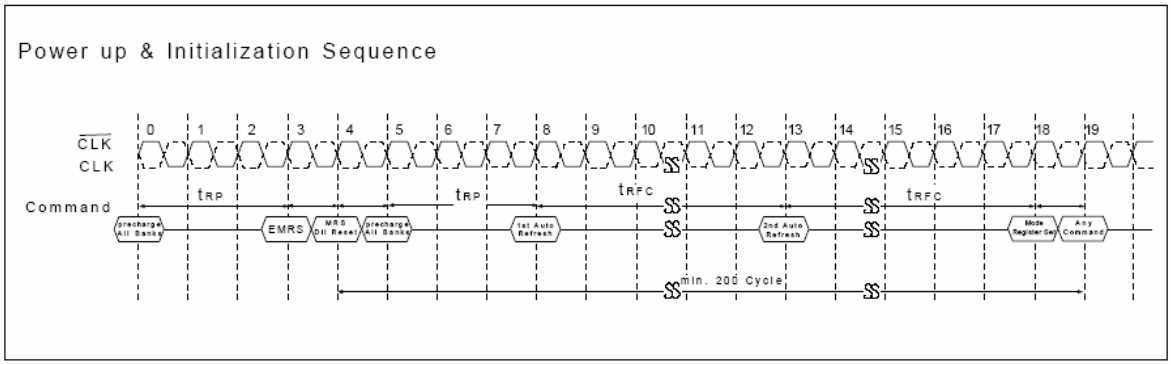
COMMAND			CKEn-1	CKEn	$\overline{CS}$	$\overline{RAS}$	$\overline{CAS}$	$\overline{WE}$	DM	BA0,1	A10/AP	A11, A9~A0	Note
Register	Extended MRS		H	X	L	L	L	L	X	OP CODE			1,2
Register	Mode Register Set		H	X	L	L	L	L	X	OP CODE			1,2
Refresh	Auto Refresh		H	H	L	L	L	H	X	X			3
	Self Refresh	Entry		L									3
		Exit	L	H	L	H	H	H	X	X			3
					H	X	X	X					3
Bank Active & Row Addr.			H	X	L	L	H	H	X	V	Row Address		
Read & Column Address	Auto Precharge Disable		H	X	L	H	L	H	X	V	L	Column Address	4
	Auto Precharge Enable										H		4
Write & Column Address	Auto Precharge Disable		H	X	L	H	L	L	X	V	L	Column Address	4
	Auto Precharge Enable										H		4,6
Burst Stop			H	X	L	H	H	L	X	X			7
Precharge	Bank Selection		H	X	L	L	H	L	X	V	L	X	
	All Banks									X	H		5
Active Power Down		Entry	H	L	H	X	X	X	X	X			
					L	V	V	V					
		Exit	L	H	X	X	X	X	X				
Precharge Power Down Mode		Entry	H	L	H	X	X	X	X	X			
					L	H	H	H					
		Exit	L	H	H	X	X	X	X				
					L	V	V	V					
DM			H	X					V	X			8
No Operation Command			H	X	H	X	X	X	X	X			
					L	H	H	H					

1. Power-Up and Initialization Sequence

The following sequence is required for POWER UP and Initialization.

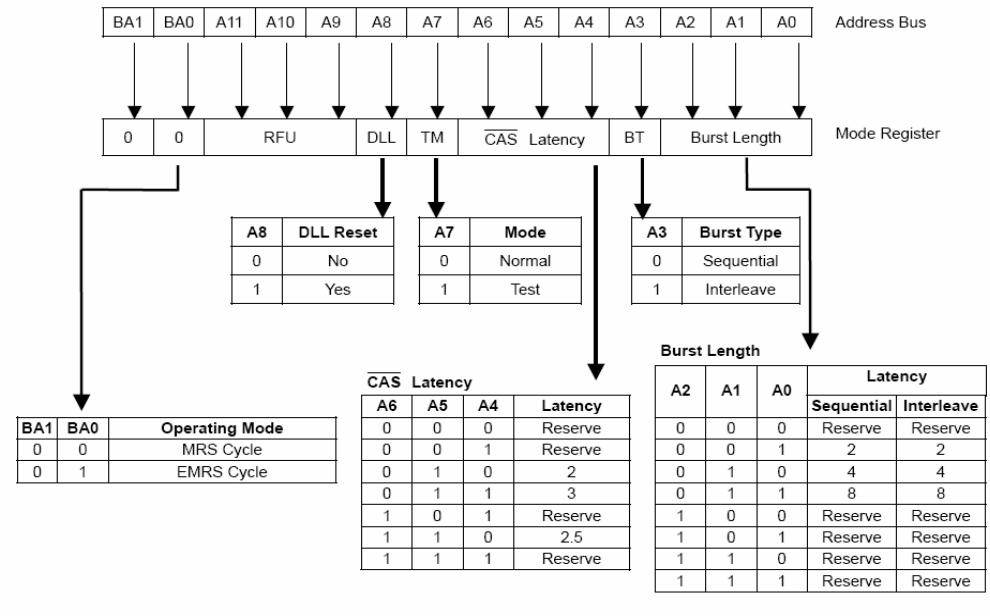
1. Apply power and attempt to maintain CKE at a low state (all other inputs may be undefined.)
   - Apply VDD before or at the same time as VDDQ.
   - Apply VDDQ before or at the same time as VTT & VREF).
2. Start clock and maintain stable condition for a minimum of 200us.
3. The minimum of 200us after stable power and clock (CLK, CLK), apply NOP & take CKE high.
4. Issue precharge commands for all banks of the device.
5. Issue EMRS to enable DLL. (To issue “DLL Enable” command, provide “Low” to A0, “High” to BA0 and “Low” to all of the rest address pins, A1~A11 and BA1)

6. Issue a mode register set command for “DLL reset”. The additional 200 cycles of clock input is required to lock the DLL.(To issue DLL reset command, provide “High” to A8 and “Low” to BA0)
7. Issue precharge commands for all banks of the device.
8. Issue 2 or more auto-refresh commands.
9. Issue a mode register set command with low to A8 to initialize device operation.



2. Mode Register Set (MRS)

The mode register stores the data for controlling the various operating modes of DDR SDRAM. It programs CAS latency, addressing mode, burst length, test mode, DLL reset and various vendor specific options to make DDR SDRAM useful for variety of different applications. The default value of the register is not defined, therefore the mode register must be written after EMRS setting for proper DDR SDRAM operation. The mode register is written by asserting low on CS , RAS , CAS , WE and BA0 (The DDR SDRAM should be in all bank recharge with CKE already high prior to writing into the mode register). The state of address pins A0~A11 in the same cycle as CS , RAS , CAS , WE and BA0 going low is written in the mode register. Two clock cycles are requested to complete the write operation in the mode register. The mode register contents can be changed using the same command and clock cycle requirements during operation as long as all banks are in the idle state. The mode register is divided into various fields depending on functionality. The burst length uses A0~A2, addressing mode uses A3, CAS latency (read latency from column address) uses A4~A6. A7 is used for test mode. A8 is used for DLL reset. A7 must be set to low for normal MRS operation. Refer to the table for specific codes for various burst length, addressing modes and CAS latencies.



3. Precharge

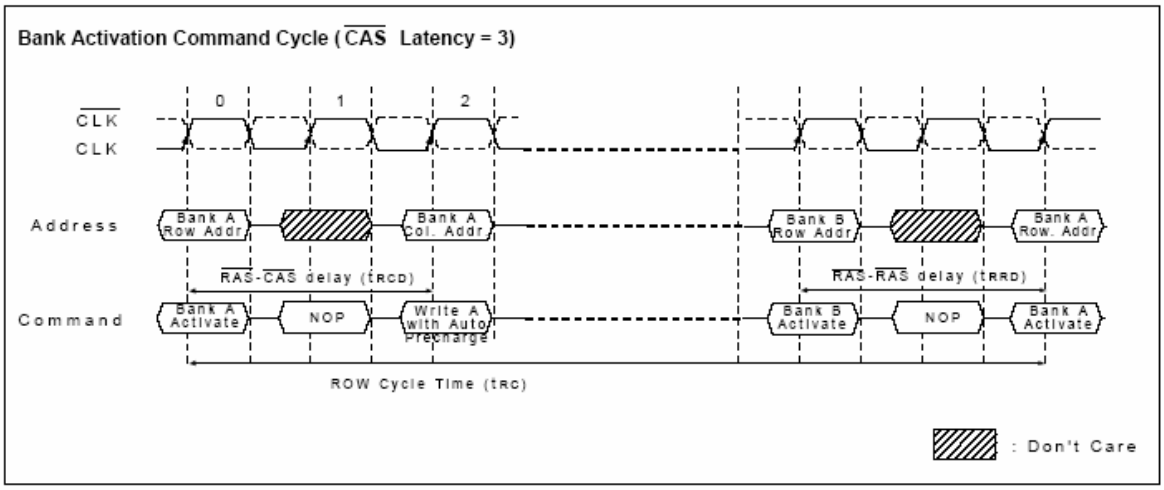
The precharge command is used to precharge or close a bank that has activated. The precharge command is issued when CS, RAS and WE are low and CAS is high at the rising edge of the clock. The precharge command can be used to precharge each bank respectively or all banks simultaneously. The bank select addresses (BA0, BA1) are used to define which bank is precharged when the command is initiated. For write cycle, tWR(min.) must be satisfied until the precharge command can be issued. After tRP from the precharge, an active command to the same bank can be initiated.

Burst Selection for Precharge by Bank address bits

A10/AP	BA1	BA0	Precharge
0	0	0	Bank A Only
0	0	1	Bank B Only
0	1	0	Bank C Only
0	1	1	Bank D Only
1	X	X	All Banks

4. Row Active

The Bank Activation command is issued by holding CAS and WE high with CS and RAS low at the rising edge of the clock (CLK). The DDR SDRAM has four independent banks; so two Bank Select addresses (BA0, BA1) are required. The Bank Activation command to the first read or write command must meet or exceed the minimum of RAS to CAS delay time (tRCD min). Once a bank has been activated, it must be precharged before another Bank Activation command can be applied to the same bank. The minimum time interval between interleaved Bank Activation command (Bank A to Bank B and vice versa) is the Bank-to-Bank delay time (tRRD min).



5. Read Bank

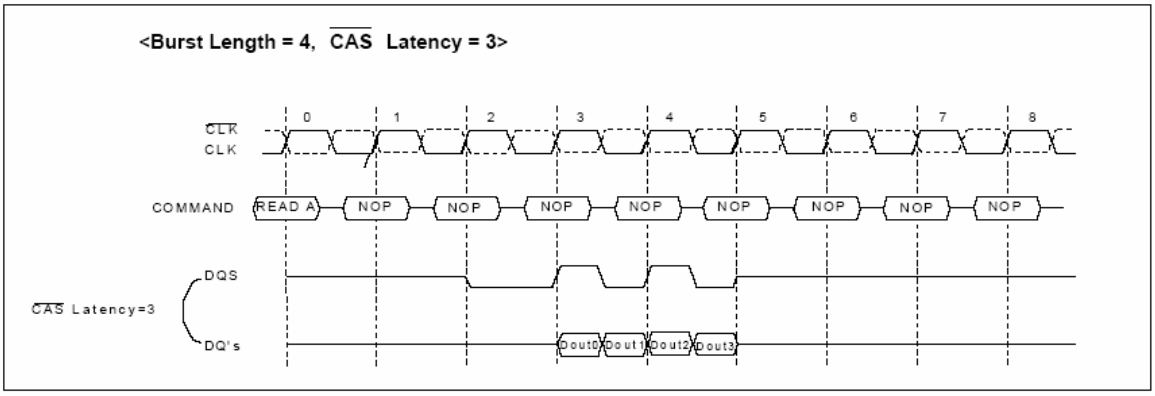
This command is used after the row activates command to initiate the burst read of data. The read command is initiated by activating CS, CAS , and deasserting WE at the same clock sampling (rising) edge as described in the command truth table. The length of the burst and the CAS latency time will be determined by the values programmed during the MRS command.

6. Write Bank

This command is used after the row activates command to initiate the burst write of data. The write command is initiated by activating CS, CAS, and WE at the same clock sampling (rising) edge as describe in the command truth table. The length of the burst will be determined by the values programmed during the MRS command.

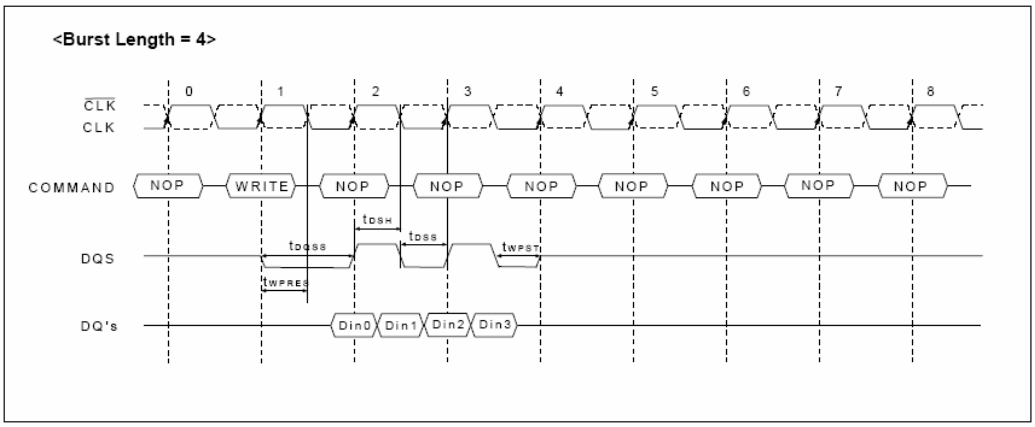
7. Burst Read Operation

Burst Read operation in DDR SDRAM is in the same manner as the current SDRAM such that the Burst read command is issued by asserting CS and CAS low while holding RAS and WE high at the rising edge of the clock (CLK) after tRCD from the bank activation. The address inputs determine the starting address for the Burst, The Mode Register sets type of burst. (Sequential or interleave) and burst length (2, 4, 8). The first output data is available after the CAS Latency from the READ command, and the consecutive data are presented on the falling and rising edge of Data Strobe (DQS) adopted by DDR SDRAM until the burst length is completed.



8. Burst Write Operation

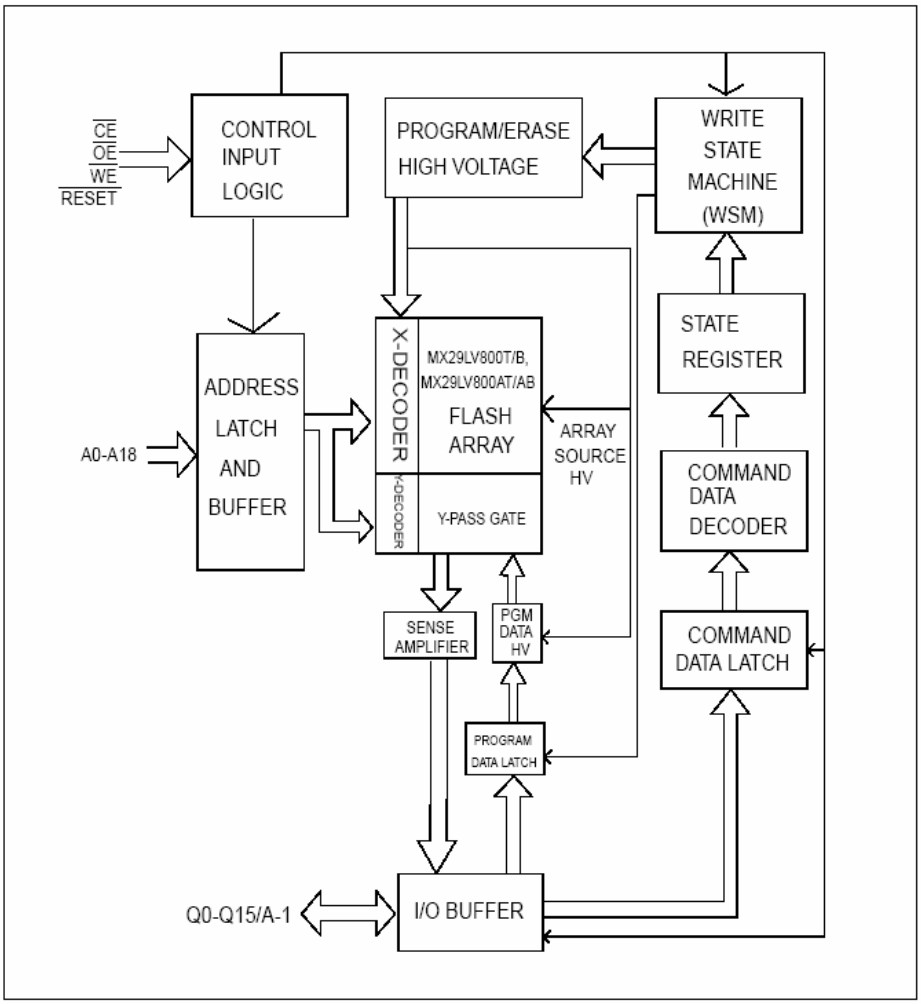
The Burst Write command is issued by having CS , CAS and WE low while holding RAS high at the rising edge of the clock (CLK). The address inputs determine the starting column address. There is no write latency relative to DQS required for burst write cycle. The first data of a burst write cycle must be applied on the DQ pins tDS (Data-in setup time) prior to data strobe edge enabled after tDQSS from the rising edge of the clock (CLK) that the write command is issued. The remaining data inputs must be supplied on each subsequent falling and rising edge of Data Strobe until the burst length is completed. When the burst has been finished, any additional data supplied to the DQ pins will be ignored.



MX29LV160BTTC (Flash) Application

The MX29LV800T/B & MX29LV800AT/AB is a 8-mega bit Flash memory organized as 1M bytes of 8 bits or 512K words of 16 bits. MXIC's Flash memories offer the most cost-effective and reliable read/write non-volatile random access memory. The MX29LV800T/B & MX29LV800AT/AB is packaged in 44-pin SOP, 48-pin TSOP, and 48-ball CSP. It is designed to be reprogrammed and erased in system or in standard EPROM programmers.

BLOCK DIAGRAM



1. COMMAND DEFINITIONS

Device operations are selected by writing specific address and data sequences into the command register. Writing incorrect address and data values or writing them in the improper sequence will reset the device to the read mode. Table 5 defines the valid register command sequences. Note that the Erase Suspend (B0H) and Erase Resume (30H) commands are valid only while the Sector Erase operation is in progress.

TABLE 6. MX29LV800T/B & MX29LV800AT/AB BUS OPERATION

DESCRIPTION	$\overline{CE}$	$\overline{OE}$	$\overline{WE}$	ADDRESS								Q0~Q7	Q8~Q15	
				A18 | A12	A10 | A11	A9	A8 | A7	A6	A5 | A2	A1	A0		BYTE =VIH	BYTE =VIL
Read	L	L	H	AIN								Dout	Dout	=High Z DQ15=A-1
Write	L	H	L	AIN								DIN(3)	DIN	
Reset	X	X	X	X								High Z	High Z	High Z
Temporary sector unlock	X	X	X	AIN								DIN	DIN	High Z
Output Disable	L	H	H	X								High Z	High Z	High Z
Standby	Vcc ± 0.3V	X	X	X								High Z	High Z	High Z
Sector Protect	L	H	L	SA	X	X	X	L	X	H	L	DIN	X	X
Sector Unprotected	L	H	L	X	X	X	X	H	X	H	L	DIN	X	X
Sector Protection Verify	L	L	H	SA	X	VID	X	L	X	H	L	CODE(5)	X	X

NOTES:
1. Manufacturer and device codes may also be accessed via a command register write sequence. Refer to Table 5.
2. VID is the Silicon-ID-Read high voltage, 11.5V to 12.5V.
3. Refer to Table 5 for valid Data-In during a write operation.
4. X can be VIL or VIH.
5. Code=00H/XX00H means unprotected.
   Code=01H/XX01H means protected.
6. A18~A12=Sector address for sector protect.
7. The sector protect and chip unprotected functions may also be implemented via programming equipment.

2. WRITE COMMANDS/COMMAND SEQUENCES

To program data to the device or erase sectors of memory, the system must drive WE and CE to VIL, and OE to VIH. The device features an Unlock Bypass mode to facilitate faster programming. Once the device enters the Unlock Bypass mode, only two write cycles are required to program a byte, instead of four. The "byte Program Command Sequence" section has details on programming data to the device using both standard and Unlock Bypass command sequences. An erase operation can erase one sector, multiple sectors, or the entire device. Table indicates the address space that each sector occupies. A "sector address" consists of the address bits required to uniquely select a sector. The "Writing specific address and data commands or sequences into the command register initiates device operations. Figure 1 defines the valid register command sequences. Writing incorrect address and data values or writing them in the improper sequence resets the device to reading array data. Section has details on erasing a sector or the entire chip, or suspending/resuming the erase operation.

After the system writes the auto select command sequence, the device enters the auto select mode. The system can then read auto select codes from the internal register (which is separate from the memory array) on Q7-Q0. Standard read cycle timings apply in this mode. Refer to the Auto select Mode and Auto select Command Sequence section for more information. ICC2 in the DC Characteristics table represents the active current specification for the write mode. The "AC Characteristics" section contains timing specification table and timing diagrams for write operations.

Figure 1

Sector	Sector Size		Address range		Sector Address						
	Byte Mode	Word Mode	Byte Mode (x8)	Word Mode (x16)	A18	A17	A16	A15	A14	A13	A12
SA0	64Kbytes	32Kwords	00000h-0FFFFh	00000h-07FFFh	0	0	0	0	X	X	X
SA1	64Kbytes	32Kwords	10000h-1FFFFh	08000h-0FFFFh	0	0	0	1	X	X	X
SA2	64Kbytes	32Kwords	20000h-2FFFFh	10000h-17FFFh	0	0	1	0	X	X	X
SA3	64Kbytes	32Kwords	30000h-3FFFFh	18000h-1FFFFh	0	0	1	1	X	X	X
SA4	64Kbytes	32Kwords	40000h-4FFFFh	20000h-27FFFh	0	1	0	0	X	X	X
SA5	64Kbytes	32Kwords	50000h-5FFFFh	28000h-2FFFFh	0	1	0	1	X	X	X
SA6	64Kbytes	32Kwords	60000h-6FFFFh	30000h-37FFFh	0	1	1	0	X	X	X
SA7	64Kbytes	32Kwords	70000h-7FFFFh	38000h-3FFFFh	0	1	1	1	X	X	X
SA8	64Kbytes	32Kwords	80000h-8FFFFh	40000h-47FFFh	1	0	0	0	X	X	X
SA9	64Kbytes	32Kwords	90000h-9FFFFh	48000h-4FFFFh	1	0	0	1	X	X	X
SA10	64Kbytes	32Kwords	A0000h-AFFFFh	50000h-57FFFh	1	0	1	0	X	X	X
SA11	64Kbytes	32Kwords	B0000h-BFFFFh	58000h-5FFFFh	1	0	1	1	X	X	X
SA12	64Kbytes	32Kwords	C0000h-CFFFFh	60000h-67FFFh	1	1	0	0	X	X	X
SA13	64Kbytes	32Kwords	D0000h-DFFFFh	68000h-6FFFFh	1	1	0	1	X	X	X
SA14	64Kbytes	32Kwords	E0000h-EFFFFh	70000h-77FFFh	1	1	1	0	X	X	X
SA15	32Kbytes	16Kwords	F0000h-F7FFFh	78000h-7BFFFh	1	1	1	1	0	X	X
SA16	8Kbytes	4Kwords	F8000h-F9FFFh	7C000h-7CFFFh	1	1	1	1	1	0	0
SA17	8Kbytes	4Kwords	FA000h-FBFFFh	7D000h-7DFFFh	1	1	1	1	1	0	1
SA18	16Kbytes	8Kwords	FC000h-FFFFFh	7E000h-7FFFFh	1	1	1	1	1	1	X

3. READ/RESET COMMAND

The read or reset operation is initiated by writing the read/reset command sequence into the command register. Microprocessor read cycles retrieve array data. The device remains enabled for reads until the command register contents are altered. If program-fail or erase-fail happen, the write of F0H will reset the device to abort the operation. A valid command must then be written to place the device in the desired state.

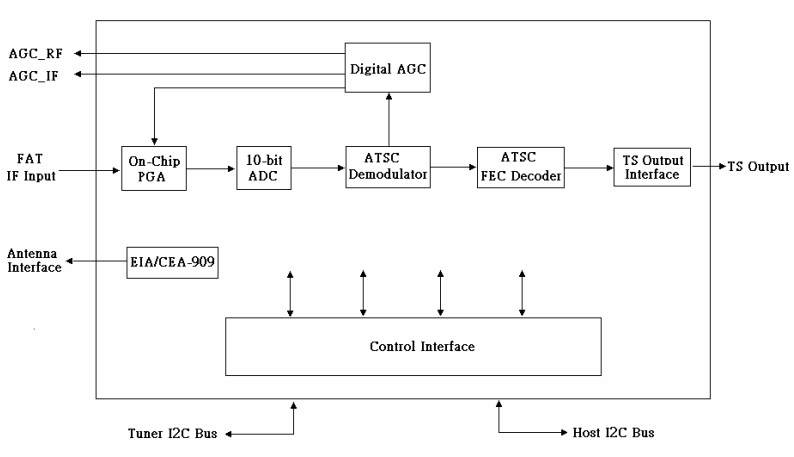
4. READING ARRAY DATA

The device is automatically set to reading array data after device power-up. No commands are required to retrieve data. The device is also ready to read array data after completing an Automatic Program or Automatic Erase algorithm. After the device accepts an Erase Suspend command, the device enters the Erase Suspend mode. The system can read array data using the standard read timings, except that if it reads at an address within erase suspended sectors, the device outputs status data. After completing a programming operation in the Erase Suspend mode, the system may once again read array data with the same exception. See Erase Suspend/Erase Resume Commands” for more information on this mode. The system must issue the reset command to re-enable the device for reading array data if Q5 goes high, or while in the auto select mode. See the "Reset Command" section, next.

5. RESET COMMAND

Writing the reset command to the device resets the device to reading array data. Addresses bits are don't care for this command. The reset command may be written between the sequence cycles in an erase command sequence before erasing begins. This resets the device to reading array data. Once erasure begins, however, the device ignores reset commands until the operation is complete. The reset command may be written between the sequence cycles in a program command sequence before programming begins. This resets the device to reading array data (also applies to programming in Erase Suspend mode). Once programming begins, however, the device ignores reset commands until the operation is complete. The reset command may be written between the sequence cycles in an SILICON ID READ command sequence. Once in the SILICON ID READ mode, the reset command must be written to return to reading array data (also applies to SILICON ID READ during Erase Suspend). If Q5 goes high during a program or erase operation, writing the reset command returns the device to reading array data (also applies during Erase Suspend).

MT5111 Application:



MT5111 Functional Block Diagram

MT5111 is fully integrated single-chip 8-VSB , designed specifically for the digital terrestrial. HDTV receivers . The chip is fully compliant with the ATSC A/53 digital TV standard.
MT5111 includes a 10-bit A/D converter , 8-VSB demodulator , TCM(Trellis-Coded Modulation).

Decoder . and Reed-Solomon Forward Error Correction decoder . Moreover , an internal controller handles the acquisition and tracking to ensure the best receiving performance . The internal controller communicates with the external host controller via the I2C-compatible interface , and also provides direct control to the RF tuner via the second I2C-compatible interface.

MT5111 accepts either the direct IF signals centered at 44MHZ or 43.75MHZ , or the low IF signal Centered at 5.38MHZ . The center frequency of the incoming IF signal can also be programmed to other frequencies for Various applications . An On-chip programmable gain-controlled amplifier is designed to provide sufficient signal amplitude when the received RF signal is weak . The If signal is first sampled by a 10-bit A/D converter . Afterward , the digitized samples are further processed for adjacent channel interference rejection.

MT5111 measures the power level of the digitized sequence , and feeds the control voltages back to the RF tuner and the IF amplifier respectively . The control voltages are converted to analog signals through the on-chip 1-bit sigma-delta D/A converters plus the off-chip R-C low-pass filters . The automatic gain control keeps the received power level at a desired level and maximizes the received SNR .

The carrier frequency offset and symbol timing offset are both estimated and compensated by a fully digital synchronizer . The synchronizer also controls the rate conversion in the digital re-sampling device by estimating the sampling frequency offset . All synchronization in MT5111 are integrated in digital circuits , no external VCXO is required.

The equalizer is adopted to cancel the effect of multi-path fading channel during signal propagation in the air . The equalizer is not only capable of acquiring correct coefficients combination by specified adaptive algorithms , but also programmable to different configurations for various channel conditions.

The following FEC decoder corrects most of the errors by the concatenation of TCM and Reed-Solomon decoders . The on-chip error rate estimator can simultaneously monitor the receiving qualities at the three stages: equalizer output , TCM decoder , and transport stream packets . The chip finally outputs the decoded MPEG-2 packets in either the serial or parallel transport stream format.

In addition to the demodulation of HDTV signal , MT5111 also provides the capability to remove the NTSC co-channel interference.To achieve the best reception condition , an antenna interface compliant with EIA/CEA-909 is designed to control the antenna parameters.

MT5111 is designed with efficient mechanisms of power saving . When configured to enter the sleep mode by the system host , it can immediately turn off almost all embedded hardware except the on-chip controller to reduce the power consumption . Resuming form sleep mode is also triggered by the system host . Upon returning to the operation mode , the chip will try to re-acquire the DTV signal automatically.

MT5111 Key Features:

1. ATSC compliant 8-VSB demodulator
2. Accepts dirtect IF (44 MHZ or 43.75 MHZ) and low IF (5.38 MHZ)
3. Differential IF input with programmable input signal level : 0.5 Vpp to 2 Vpp
4. NTSC interference rejection capability
5. Compensate echo up to –5 to +47 us range
6. On-chip 10-bit ADC for HDTV demodulator
7. On-chip programmable gain amplifier

8. 25MHZ crystal for clock generation
9. Full-digital timing recovery , no VCXO is required
10. Full-digital frequency offset recovery with wide acquisition range –1MHZ~+1MHZ
11. Dual digital AGC control for IF and RF respectively
12. MPEG-2 transport stream output in parallel or serial format
13. On-chip error rate estimators for TS packets , TCM decoder , and equalizer
14. EIA/CEA-909 antenna interface
15. Controlled by I2C interface
16. Supports sleep mode to save power consumption
17. Core power supply : 1.8V , peripheral power supply : 3.3V
18.100-LQFP package

MT5351 Application :

MediaTek MT5351 is a DTV Backend Decoder SOC which support flexible transport demux , HD MPEG-2 video decoder , JPEG decoder , MPEG1,2,MP3,AC3 audio decoder , HDTV encoder . The MT5351 enables consumer electronics manufactures to build high quality , feature-rich DTV , STB or other home entertainment audio/video device.

World-Leading Technology : HW support worldwide major broadcast network and CA standards , include ATSC , DVB , OpenCable , DirectTV , MHP.

Rich Feature for high value product : To enrich the feature of DTV , the MT5351 support 1394-5C component to external DVHS . Dual display , PIP/POP and quad pictures provide user a whole new viewing experience.

Credible Audio/Video Quality : The MT5351 use advanced motion-adaptive de-interlace algorithm to achieve the best movie/video playback , The embedded 4X over-sample video DAC could generate very fine display quality . Also , the audio 3D surround and equalizer provide professional entertainment.

General Feature List :

A . Host CPU:

1. ARM 926EJ
2. 16K I-Cache and 16K D-Cache
3. 8K Data TCM and 8K instruction
4. JTAG ICE interface
5. Watch Dog timers

B . Transport Demuxer :

1. Support 3 independent transport stream inputs
2. Support serial/parallel interface for each transport stream input
3. Support ATSC , DVB , and MPEG2 transport stream inputs.
4. Programmable sync detection.
5. Support DES/3-DES De-scramble.
6. 96 PID filter and 128 section filters.
7. Support TS recording via IEEE1394 interface.

C . MPEG2 Decoder :

1. Support dual MPEG-2 HD decoder or up to 8 SD decoder.
2. Complaint to MP@ML , MP@HL and MPEG-1 video standards.

D . JPEG Decoder :

1. Decode Base-line or progressive JPEG file.

E . 2D Graphics :

1. Support multiple color modes.
2. Point , horizontal/vertical line primitive drawing.
3. Rectangle fill and gradient fill functions.
4. Bitblt with transparent , alpha blending , alpha composition and stretch.
5. Font rendering by color expansion.
6. Support clip masks.
7. YCrCb to RGB color space transfer.

F . OSD Display :

1. 3 linking list OSDs with multiple color mode.
2. OSD scaling with arbitary ratio from 1/2x to 2x.
3. Square size , 32x32 or 64x64 pixel , hardware cursor.

G . Video Processing :

1. Advanced Motion adaptive de-interlace on SDTV resolution.
2. Support clip
3. 3:2/2:2 pull down source detection.
4. Arbitrary ratio vertical/horizontal scaling of video , from 1/15X to 16X.
5. Support Edge preserve.
6. Support horizontal edge enhancement.
7. Support Quad-Picture.

H . Main Display :

1. Mixing two video and three OSD and hardware cursor.
2. Contrast/Brightness adjustment.
3. Gamma correction.
4. Picture-in-Picture(PIP).
5. Picture-Out-Picture(POP).
6. 480i/576i/480p/576p/720p/1080i output

I . Auxiliary Display :

1. Mixing one video and one OSD.
2. 480i/576i output.

J . TV Encoder :

1. Support NTSC M/N , PAL M/N/B/D/G/H/I
2. Macrovision Rev 7.1.L1
3. CGMS/WSS.
4. Closed Captioning.
5. Six 12-bit video DACs for CVBS , S-video or RGB/YPbPr output.

K . Digital Video Interface :

1. Support SAV/EAV.
2. Support 8/16 for SD/HD digital video input.
3. Support 8/16/24 bits digital output for main display.
4. Support 8 bits digital output for aux display.

L . DRAM Controller :

1. Support 64Mb to 1Gb DDR DRAM devices.
2. Configurable 32/64 bit data bus interface.
3. Support DDR266 , DDR333 , DDR400 , JEDEC specification compliant SDRAM.

M . Peripheral Bus Interface :

1. Support NOR/NAND flash.
2. Support CableCard host control bus.

N . Audio :

1. Support Dolby Digital AC-3 decoding.
2. MPEG-1 layer I/II , MP3 decoding.
3. Dolby prologic II.
4. Main audio output : 5.1ch + 2ch (down mix)
5. Auxiliary audio output : 2ch.
6. Pink noise and white noise generator.
7. Equalizer.
8. Bass management.
9. 3D surround processing include virtual surround.
10. Audio and video lip synchronization.
11. Support reverberation.
12. SPDIF out.
13. I2S I/F.

O . Peripherals :

1. Three UARTs with Tx and Rx FIFO , two of them have hardware flow control.
2. Two serial interfaces , one is master only the other can be set to master mode or slave mode.
3. Two PWMs.
4. IR blaster and receiver.
5. IEEE1394 link controller.
6. IDE bus : ATA/ATAPI7 UDMA mode 5 , 100MB/s.
7. Real-time clock and watchdog controller.
8. Memory card I/F : MS/MS-pro ,SD ,CF ,and MMC
9. PCMCIA/POD/CI interface

P . IC Outline :

1. 471 Pin BGA Package.
2. 3.3V/1.2V dual Voltage.

MX29LV320BTTC (Flash) Application :

The MX29LV320AT/B is a 32-mega bit Flash memory organized as 4M bytes of 8 bits and 2M words of 16 bits. MXIC's Flash memories offer the most cost-effective and reliable read/write non-volatile random access memory.

The MX29LV320AT/B is packaged in 48-pin TSOP and 48-ball CSP. It is designed to be reprogrammed and erased in system or in standard EPROM programmers. The standard MX29LV320AT/B offers access time as fast as 70ns, allowing operation of high-speed microprocessors without wait states. To eliminate bus contention, the MX29LV320AT/B has separate chip enable (CE) and output enable (OE) controls.

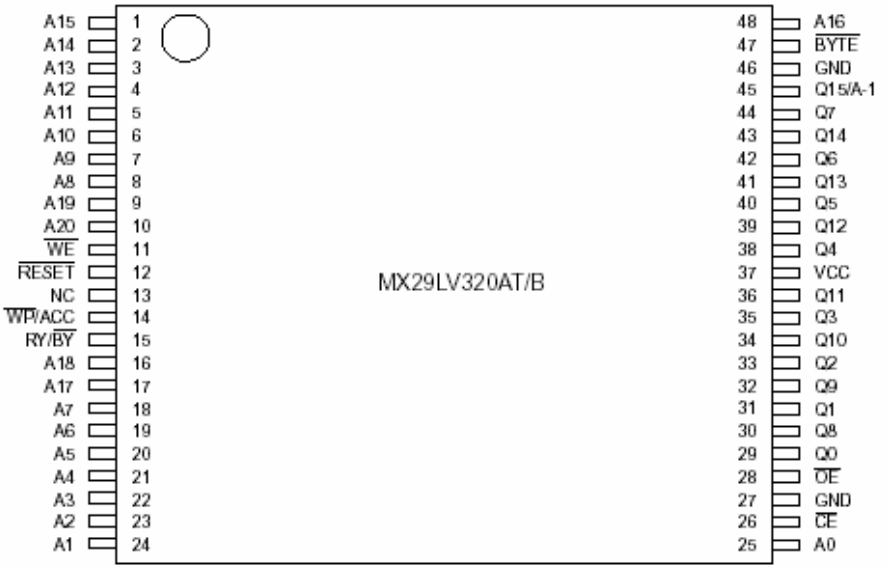
MXIC's Flash memories augment EPROM functionality with in-circuit electrical erasure and programming. The MX29LV320AT/B uses a command register to manage this functionality. MXIC Flash technology reliably stores memory contents even after 100,000 erase and program cycles. The MXIC cell is designed to optimize the erase and program mechanisms. In addition, the combination of advanced tunnel oxide processing and low internal electric fields for erase and programming operations produces reliable cycling.

The MX29LV320AT/B uses a 2.7V to 3.6V VCC supply to perform the High Reliability Erase and auto Program/Erase algorithms.

The highest degree of latch-up protection is achieved with MXIC's proprietary non-epi process. Latch-up protection is proved for stresses up to 100 milliamperes on address and data pin from -1V to VCC + 1V.

PIN CONFIGURATION

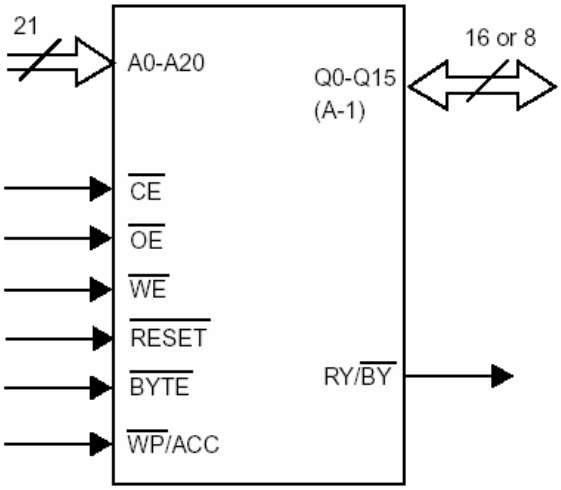
48 TSOP



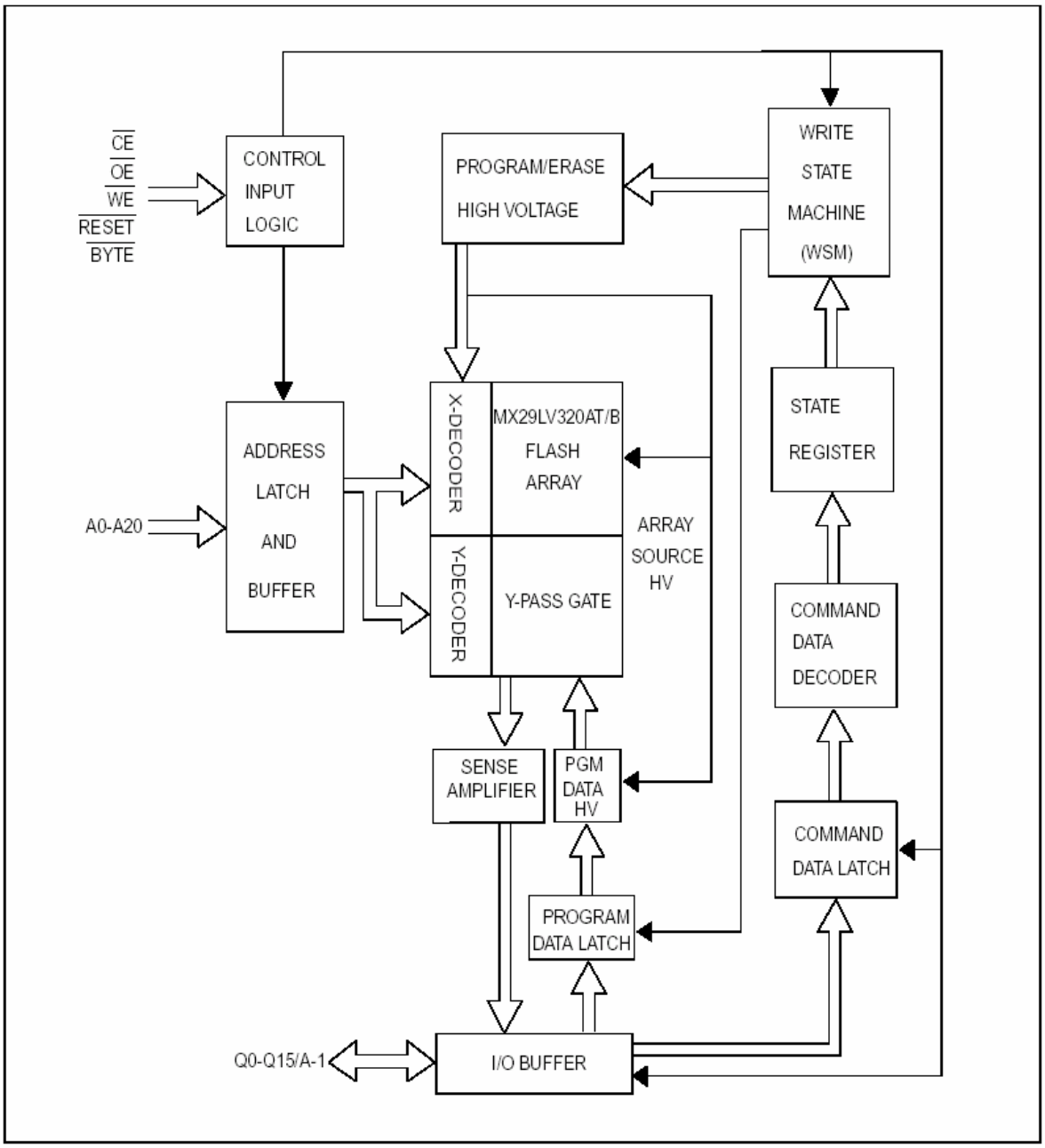
PIN DESCRIPTION

SYMBOL	PIN NAME
A0~A20	Address Input
Q0~Q14	15 Data Inputs/Outputs
Q15/A-1	Q15(Data Input/Output, word mode) A-1(LSB Address Input, byte mode)
$\overline{CE}$	Chip Enable Input
$\overline{WE}$	Write Enable Input
$\overline{OE}$	Output Enable Input
$\overline{BYTE}$	Word/Byte Selection Input
$\overline{RESET}$	Hardware Reset Pin, Active Low
RY/$\overline{BY}$	Read/Busy Output
VCC	3.0 volt-only single power supply
$\overline{WP}$/ACC	Hardware Write Protect/Acceleration Pin
GND	Device Ground
NC	Pin Not Connected Internally

LOGIC SYMBOL



BLOCK DIAGRAM



BUS OPERATION--1

Operation	$\overline{CE}$	$\overline{OE}$	$\overline{WE}$	$\overline{RESET}$	$\overline{WP}$/ACC	Addresses (Note 2)	Q0~Q7	Q8 ~ Q15	
								$\overline{Byte}$=VIH	$\overline{Byte}$=VIL
Read	L	L	H	H	L/H	A_{IN}	D_{OUT}	D_{OUT}	Q8-A14 =High-Z Q15=A-1
Write (Note 1)	L	H	L	H	Note 3	A_{IN}	D_{IN}	D_{IN}	
Accelerate Program	L	H	L	H	V_{HH}	A_{IN}	D_{IN}	D_{IN}	
Standby	VCC ± 0.3V	X	X	VCC ± 0.3V	H	X	High-Z	High-Z	High-Z
Output Disable	L	H	H	H	L/H	X	High-Z	High-Z	High-Z
Reset	X	X	X	L	L/H	X	High-Z	High-Z	High-Z
Sector Group Protect (Note 2)	L	H	L	V_{ID}	L/H	Sector Addresses, A6=L, A1=H, A0=L	D_{IN}, D_{OUT}	X	X
Chip Unprotect (Note 2)	L	H	L	V_{ID}	Note 3	Sector Addresses, A6=H, A1=H, A0=L	D_{IN}, D_{OUT}	X	X
Temporary Sector Group Unprotect	X	X	X	V_{ID}	Note 3	A_{IN}	D_{IN}	D_{IN}	High-Z

Legend:

L=Logic LOW=VIL, H=Logic High=VIH, VID=12.0 0.5V, VHH=11.5-12.5V, X=Don't Care, AIN=Address IN, DIN=Data IN,DOUT=Data OUT

Notes:

1. When the WP/ACC pin is at VHH, the device enters the accelerated program mode. See "Accelerated Program Operations" for more information.

2. The sector group protect and chip unprotect functions may also be implemented via programming equipment. See the "Sector Group Protection and Chip Unprotection" section.

3. If WP/ACC=VIL, the two outermost boot sectors remain protected. If WP/ACC=VIH, the two outermost boot sector protection depends on whether they were last protected or unprotected using the method described in "Sector/Sector Block Protection and Unprotection". If WP/ACC=VHH, all sectors will be unprotected.

4. DIN or Dout as required by command sequence, data polling, or sector protection algorithm.

5. Address are A20:A0 in word mode (BYTE=VIH), A20:A-1 in byte mode (BYTE=VIL).

BUS OPERATION--2

Operation	$\overline{CE}$	$\overline{OE}$	$\overline{WE}$	A20 to A12	A11 to A10	A9	A8 to A7	A6	A5 to A2	A1	A0	Q0-Q7	Q8-Q15
Read Silicon ID Manufacturer Code	L	L	H	X	X	V_{ID}	X	L	X	L	L	C2H	X
Read Silicon ID MX29LV320AT	L	L	H	X	X	V_{ID}	X	L	X	L	H	A7H	22h(word)
													X (byte)
Read Silicon ID MX29LV320AB	L	L	H	X	X	V_{ID}	X	L	X	L	H	A8H	22h(word)
													X (byte)
Sector Protect Verification	L	L	H	SA	X	V_{ID}	X	L	X	H	L	01h(1), or 00h	X
Security Sector Indicater Bit (Q7)	L	L	H	X	X	V_{ID}	X	L	X	H	H	99h(2), or 19h	X

Notes:

1.Code=00h means unprotected, or code=01h protected.

2.Code=99 means factory locked, or code=19h not factory locked.

WRITE COMMANDS/COMMAND SEQUENCES

To program data to the device or erase sectors of memory , the system must drive WE and CE to VIL, and OE to VIH.

An erase operation can erase one sector, multiple sectors , or the entire device. A "sector address" consists of the address bits required to uniquely select a sector. Writing specific address and data commands or sequences into the command register initiates device operations. Table A defines the valid register command sequences. Writing incorrect address and data values or writing them in the improper sequence resets the device to reading array data. Section has details on erasing a sector or the entire chip, or suspending/resuming the erase operation.

After the system writes the Automatic Select command sequence, the device enters the Automatic Select mode. The system can then read Automatic Select codes from the internal register (which is separate from the memory array) on Q7-Q0. Standard read cycle timings apply in this mode. Refer to the Automatic Select Mode and Automatic Select Command Sequence section for more information.

ICC2 in the DC Characteristics table represents the active current specification for the write mode. The "AC Characteristics" section contains timing specification table and timing diagrams for write operations.

TABLE A. MX29LV320AT/B COMMAND DEFINITIONS

Command		Bus Cycles	First Bus Cycle		Second Bus Cycle		Third Bus Cycle		Fourth Bus Cycle		Fifth Bus Cycle		Sixth Bus Cycle	
			Addr	Data	Addr	Data	Addr	Data	Addr	Data	Addr	Data	Addr	Data
Read(Note 5)		1	RA	RD										
Reset(Note 4)		1	XXX	F0										
Automatic Select(Note 5)														
Manufacturer ID	Word	4	555	AA	2AA	55	555	90	X00	C2H				
	Byte	4	AAA	AA	555	55	AAA	90	X00	C2H				
Device ID	Word	4	555	AA	2AA	55	555	90	X01	ID				
	Byte	4	AAA	AA	555	55	AAA	90	X02					
Security Sector Factory	Word	4	555	AA	2AA	55	555	90	X03	99/19				
Protect Verify (Note 6)	Byte	4	AAA	AA	555	55	AAA	90	X06					
Sector Protect Verify	Word	4	555	AA	2AA	55	555	90	(SA)X02	00/01				
(Note 7)	Byte	4	AAA	AA	555	55	AAA	90	(SA)X04					
Enter Security Sector	Word	3	555	AA	2AA	55	555	88						
Region	Byte	3	AAA	AA	555	55	AAA	88						
Exit Security Sector	Word	4	555	AA	2AA	55	555	90	XXX	00				
	Byte	4	AAA	AA	555	55	AAA	90	XXX	00				
Program	Word	4	555	AA	2AA	55	555	A0	PA	PD				
	Byte	4	AAA	AA	555	55	AAA	A0	PA	PD				
Chip Erase	Word	6	555	AA	2AA	55	555	80	555	AA	2AA	55	555	10
	Byte	6	AAA	AA	555	55	AAA	80	AAA	AA	555	55	AAA	10
Sector Erase	Word	6	555	AA	2AA	55	555	80	555	AA	2AA	55	SA	30
	Byte	6	AAA	AA	555	55	AAA	80	AAA	AA	555	55	SA	30
CFI Query (Note 8)	Word	1	55	98										
	Byte	1	AA	98										
Erase Suspend(Note 9)		1	SA	B0										
Erase Resume(Note 10)		1	SA	30										

Legend:

X=Don't care
RA=Address of the memory location to be read.
RD=Data read from location RA during read operation.
PA=Address of the memory location to be programmed.
Addresses are latched on the falling edge of the WE or CE pulse.
PD=Data to be programmed at location PA. Data is latched on the rising edge of WE or CE pulse.
SA=Address of the sector to be erased or verified. Address bits A20-A12 uniquely select any sector.
ID=22A7h(Top), 22A8h(Bottom)

Notes:

1.All values are in hexadecimal.
2.Except when reading array or Automatic Select data, all bus cycles are write operation.
3.The Reset command is required to return to the read mode when the device is in the Automatic Select mode or if Q5 goes high.
4.The fourth cycle of the Automatic Select command sequence is a read cycle.
5.The data is 99h for factory locked and 19h for not factory locked.
6.The data is 00h for an unprotected sector/sector block and 01h for a protected sector/sector block. In the third cycle of the command sequence, address bit A20=0 to verify sectors 0~31, A20=1 to verify sectors 32~70 for Top Boot device.
7.Command is valid when device is ready to read array data or when device is in Automatic Select mode.
8.The system may read and program functions in non-erasing sectors, or enter the Automatic Select mode, when in the erase Suspend mode. The Erase Suspend command is valid only during a sector erase operation.
9.The Erase Resume command is valid only during the Erase Suspend mode.

STANDBY MODE

MX29LV320AT/B can be set into Standby mode with two different approaches. One is using both CE and RESET pins and the other one is using RESET pin only.

When using both pins of CE and RESET, a CMOS Standby mode is achieved with both pins held at Vcc ±0.3V. Under this condition, the current consumed is less than 0.2uA (typ.). If both of the CE and RESET are held at VIH, but not within the range of VCC ± 0.3V, the device will still be in the standby mode, but the standby current will be larger. During Auto Algorithm operation, Vcc active current (ICC2) is required even CE = "H" until the operation is completed. The device can be read with standard access time (tCE) from either of these standby modes.

When using only RESET, a CMOS standby mode is achieved with RESET input held at Vss ± 0.3V, Under this condition the current is consumed less than 1uA (typ.). Once the RESET pin is taken high, the device is back to active without recovery delay.

In the standby mode the outputs are in the high impedance state, independent of the OE input.

MX29LV320AT/B is capable to provide the Automatic Standby Mode to restrain power consumption during readout of data. This mode can be used effectively with an application requested low power consumption such as handy terminals.

To active this mode, MX29LV320AT/B automatically switch themselves to low power mode when MX29LV320AT/B addresses remain stable during access time of tACC+30ns. It is not necessary to control CE, WE, and OE on the mode. Under the mode, the current consumed is typically 0.2uA (CMOS level).

RESET OPERATION

01The RESET pin provides a hardware method of resetting the device to reading array data. When the RESET pin is driven low for at least a period of tRP, the device immediately terminates any operation in progress, tristates all output pins, and ignores all read/write commands for the duration of the RESET pulse. The device also resets the internal state machine to reading array data. The operation that was interrupted should be reinitiated once the device is ready to accept another command sequence, to ensure data integrity.

Current is reduced for the duration of the RESET pulse. When RESET is held at VSS 0.3V, the device draws CMOS standby current (ICC4). If RESET is held at VIL but not within VSS 0.3V, the standby current will be greater.

The RESET pin may be tied to system reset circuitry. A system reset would that also reset the Flash memory, enabling the system to read the boot-up firm-ware from the Flash memory.

If RESET is asserted during a program or erase operation, the RY/BY pin remains a "0" (busy) until the internal reset operation is complete, which requires a time of tREADY (during Embedded Algorithms).

The system can thus monitor RY/BY to determine whether the reset operation is complete. If RESET is asserted when a program or erase operation is not executing (RY/BY pin is "1"), the reset operation is completed within a time of tREADY (not during Embedded Algorithms). The system can read data tRH after the RESET pin returns to VIH. Refer to the AC Characteristics tables for RESET parameters and to Figure 14 for the timing diagram.

WRITE PROTECT (WP)

The write protect function provides a hardware method to protect boot sectors without using VID. If the system asserts VIL on the WP/ACC pin, the device disables program and erase functions in the two "outermost" 8 Kbyte boot sectors independently of whether those sectors were protected or unprotected using the method described in Sector/Sector Group Protection and Chip Unprotection". The two outermost 8 Kbyte boot sectors are the two sectors containing the lowest addresses in a bottom-boot-configured device, or the two sectors containing the highest addresses in a top-boot-configured device.

If the system asserts VIH on the WP/ACC pin, the device reverts to whether the two outermost 8K Byte boot sectors were last set to be protected or unprotected. That is, sector protection or unprotection for these two sectors depends on whether they were last protected or unprotected using the method described in "Sector/Sector Group Protection and Chip Unprotection".

Note that the WP/ACC pin must not be left floating or unconnected; inconsistent behavior of the device may result.

SOFTWARE COMMAND DEFINITIONS :

Device operations are selected by writing specific address and data sequences into the command register. Writing incorrect address and data values or writing them in the improper sequence will reset the device to the read mode. Table 3 defines the valid register command sequences. Note that the Erase Suspend (B0H) and Erase Resume (30H) commands are valid only while the Sector Erase operation is in progress. Either of the two reset command sequences will reset the device (whenapplicable).

All addresses are latched on the falling edge of WE or CE, whichever happens later. All data are latched on rising edge of WE or CE, whichever happens first.

WRITE OPERATION STATUS

The device provides several bits to determine the status of a write operation: Q2, Q3, Q5, Q6, Q7, and RY/BY.Table B and the following subsections describe the functions of these bits. Q7, RY/BY, and Q6 each offer a method for determining whether a program or erase operation is complete or in progress. These three bits are discussed first.

Table B. Write Operation Status

	Status		Q7 Note1	Q6	Q5 Note2	Q3	Q2	RY/$\overline{BY}$
In Progress	Byte/Word Program in Auto Program Algorithm		$\overline{Q7}$	Toggle	0	N/A	No Toggle	0
	Auto Erase Algorithm		0	Toggle	0	1	Toggle	0
	Erase Suspended Mode	Erase Suspend Read (Erase Suspended Sector)	1	No Toggle	0	N/A	Toggle	1
		Erase Suspend Read (Non-Erase Suspended Sector)	Data	Data	Data	Data	Data	1
		Erase Suspend Program	$\overline{Q7}$	Toggle	0	N/A	N/A	0
Exceeded Time Limits	Byte/Word Program in Auto Program Algorithm		$\overline{Q7}$	Toggle	1	N/A	No Toggle	0
	Auto Erase Algorithm		0	Toggle	1	1	Toggle	0
	Erase Suspend Program		$\overline{Q7}$	Toggle	1	N/A	N/A	0

Notes:

1.Performing successive read operations from the erase-suspended sector will cause Q2 to toggle.
2.Performing successive read operations from any address will cause Q6 to toggle.
3.Reading the byte/word address being programmed while in the erase-suspend program mode will indicate logic "1" at the Q2 bit.
However, successive reads from the erase-suspended sector will cause Q2 to toggle.

Fig C. COMMAND WRITE OPERATION

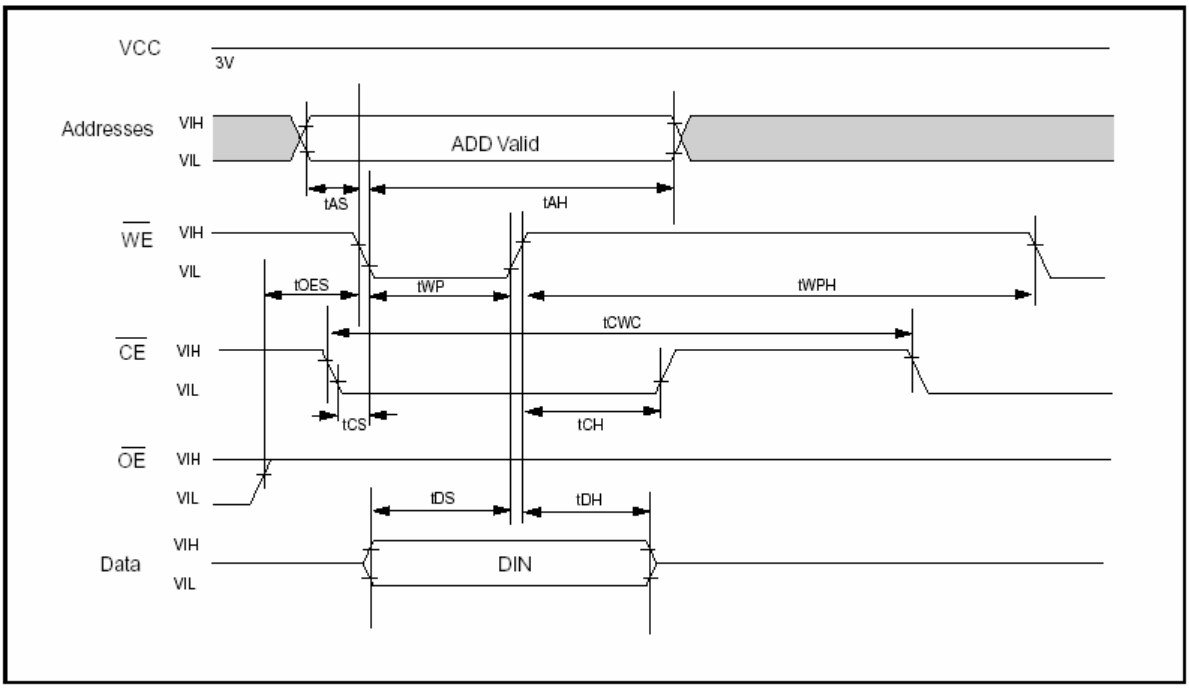
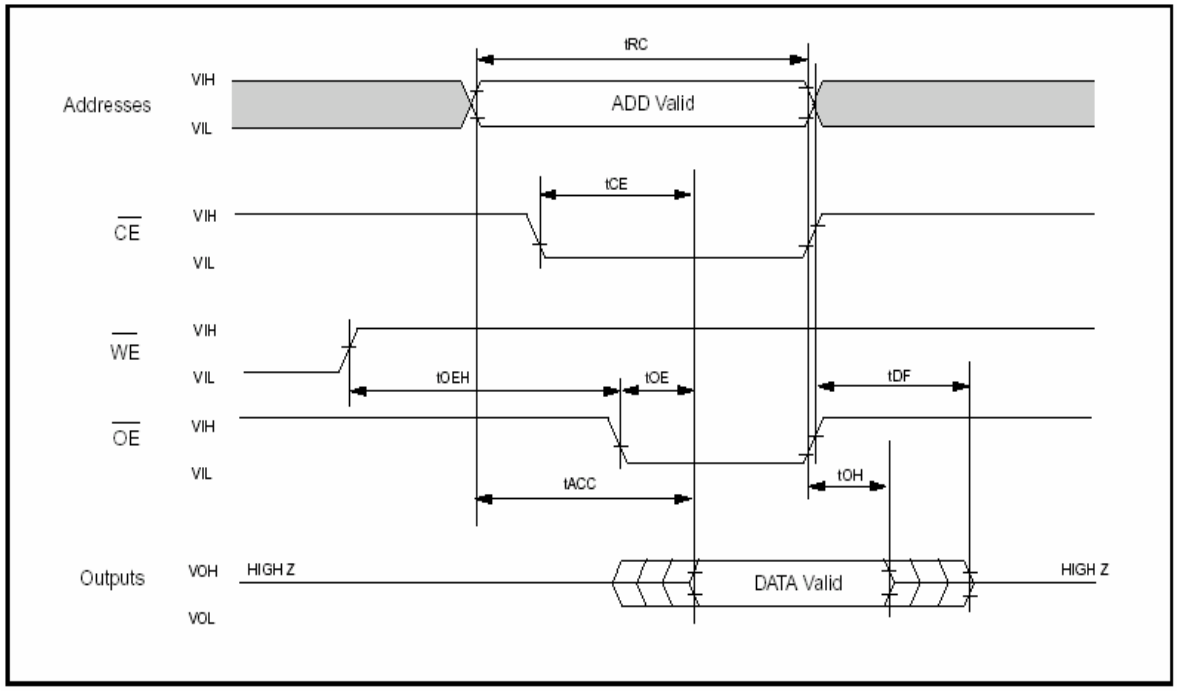


Fig D. READ TIMING WAVEFORMS

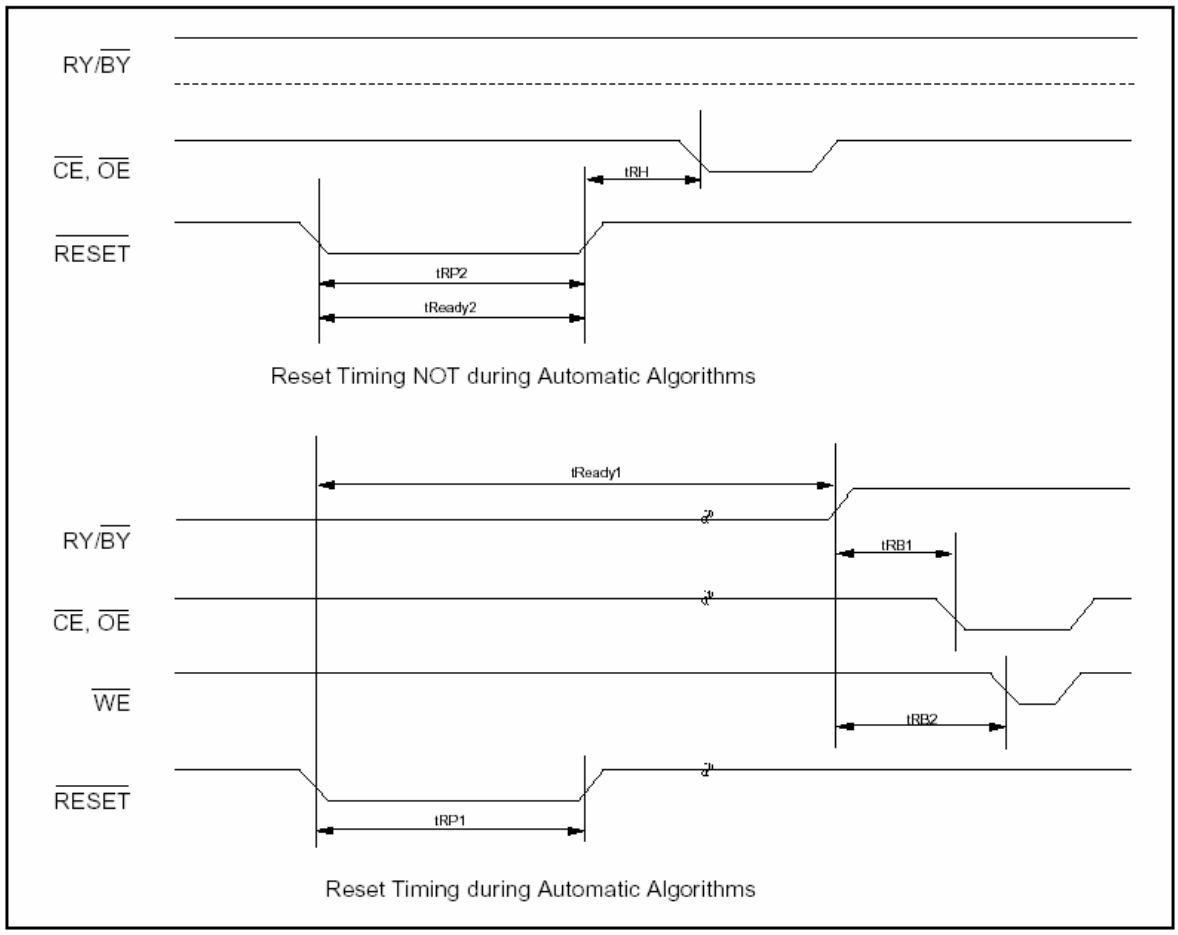


AC CHARACTERISTICS

Parameter	Description	Test Setup	All Speed Options	Unit
tREADY1	$\overline{\text{RESET}}$ PIN Low (During Automatic Algorithms) to Read or Write (See Note)	MAX	20	us
tREADY2	$\overline{\text{RESET}}$ PIN Low (NOT During Automatic Algorithms) to Read or Write (See Note)	MAX	500	ns
tRP1	$\overline{\text{RESET}}$ Pulse Width (During Automatic Algorithms)	MIN	10	us
tRP2	$\overline{\text{RESET}}$ Pulse Width (NOT During Automatic Algorithms)	MIN	500	ns
tRH	$\overline{\text{RESET}}$ High Time Before Read(See Note)	MIN	70	ns
tRB1	RY/$\overline{\text{BY}}$ Recovery Time(to $\overline{\text{CE}}$, $\overline{\text{OE}}$ go low)	MIN	0	ns
tRB2	RY/$\overline{\text{BY}}$ Recovery Time(to $\overline{\text{WE}}$ go low)	MIN	50	ns

Note:Not 100% tested

Fig E. RESET TIMING WAVEFORM



DDR SDRAM (NT5DS16M16CS-5T) Application : Functional Description

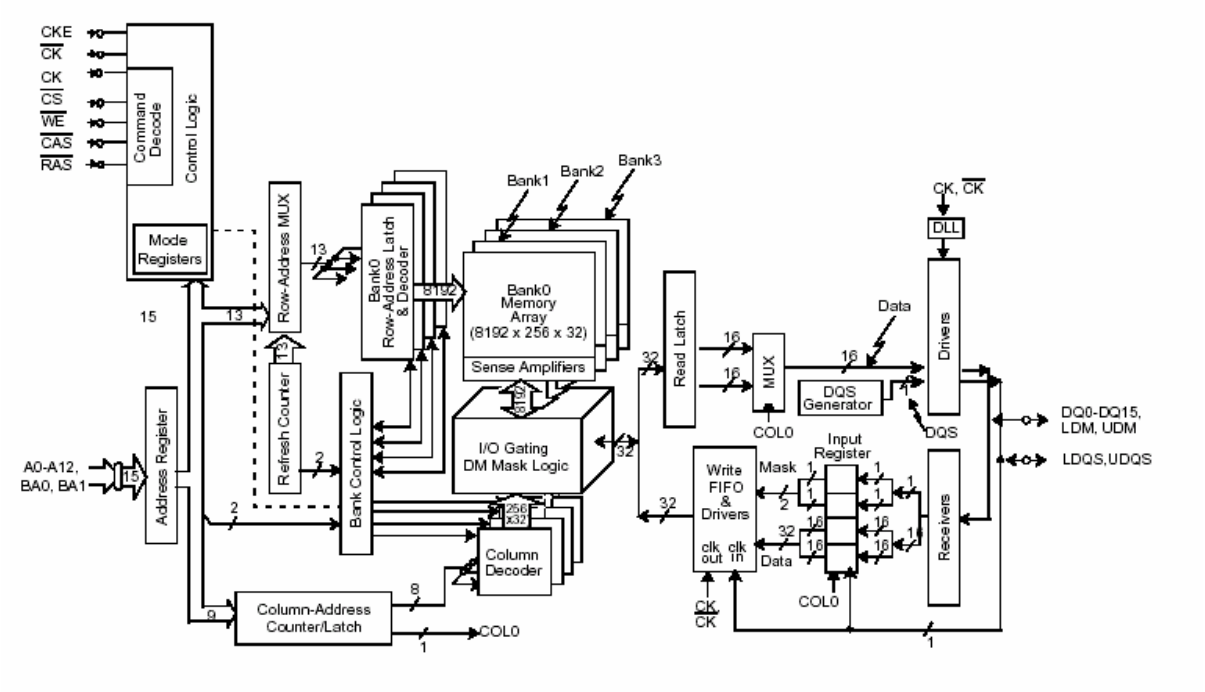
The 256Mb DDR SDRAM is a high-speed CMOS, dynamic random-access memory containing 268, 435, 456 bits. The 256Mb DDR SDRAM is internally configured as a quad-bank DRAM.

The 256Mb DDR SDRAM uses a double-data-rate architecture to achieve high-speed operation. The double-data-rate architecture is essentially a *2n* prefetch architecture, with an interface designed to transfer two data words per clock cycle at the I/O pins. A single read or write access for the 256Mb DDR SDRAM consists of a single *2n*-bit wide, one clock cycle data transfer at the internal DRAM core and two corresponding n-bit wide, one-half clock cycle data transfers at the I/O pins.

Read and write accesses to the DDR SDRAM are burst oriented; accesses start at a selected location and continue for a programmed number of locations in a programmed sequence. Accesses begin with the registration of an Active command, which is then followed by a Read or Write command. The address bits registered coincident with the Active command are used to select the bank and row to be accessed (BA0, BA1 select the bank; A0-A12 select the row). The address bits registered coincident with the Read or Write command are used to select the starting column location for the burst access.

Prior to normal operation, the DDR SDRAM must be initialized. The following sections provide detailed information covering device initialization, register definition, command descriptions and device operation.

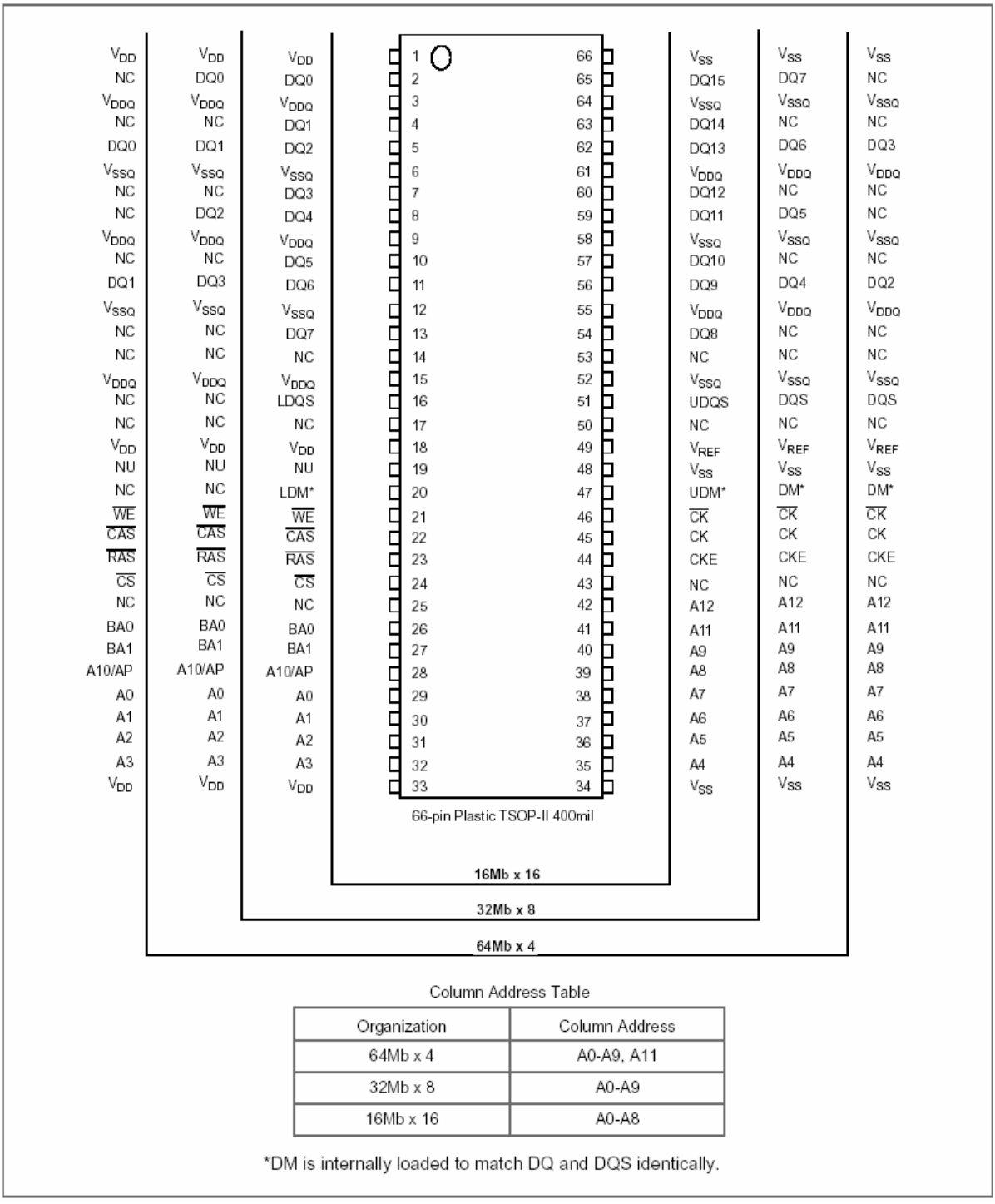
Block Diagram (16Mb x 16)



Note: This Functional Block Diagram is intended to facilitate user understanding of the operation of the device; it does not represent an actual circuit implementation.

Note: DM is a unidirectional signal (input only), but is internally loaded to match the load of the bidirectional DQ and DQS signals.

Pin Configuration - 400mil TSOP II (x4 / x8 / x16)

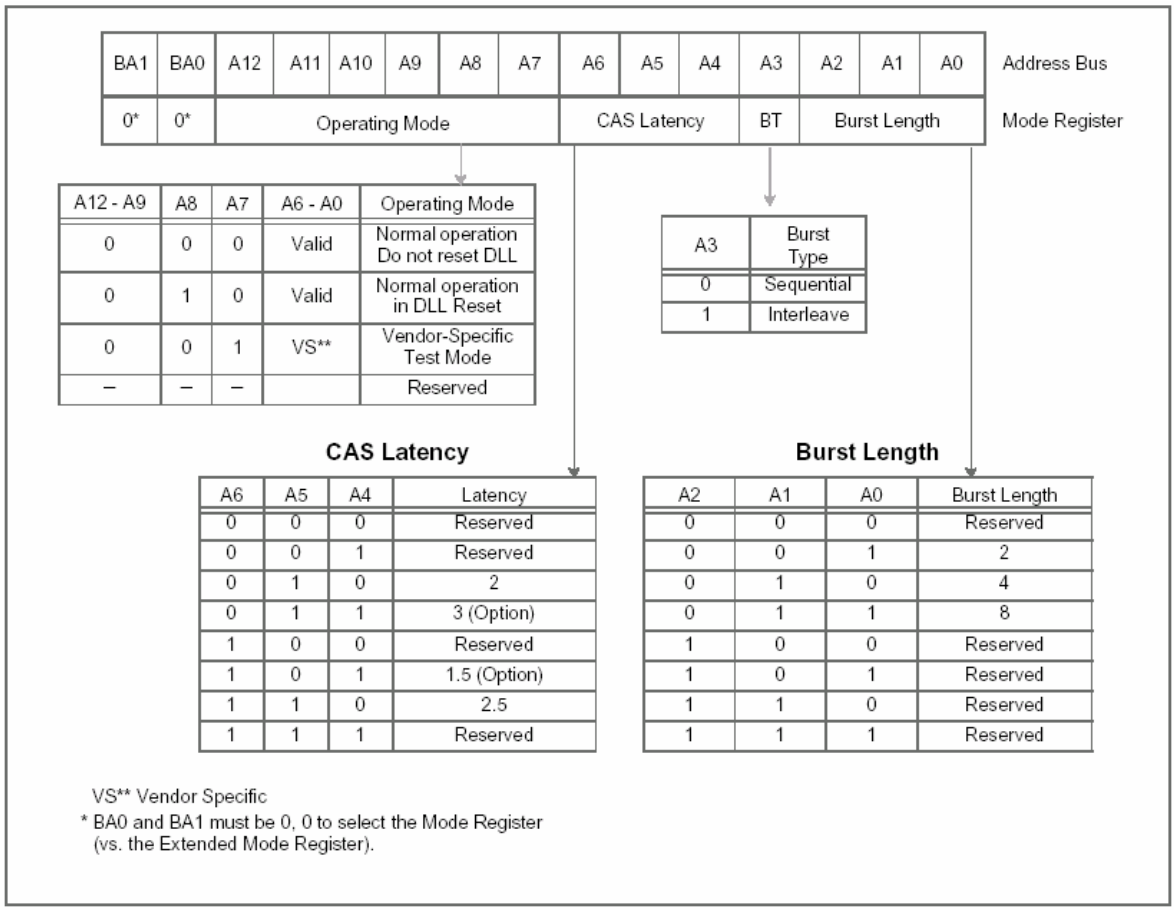


Column Address Table

Organization	Column Address
64Mb x 4	A0-A9, A11
32Mb x 8	A0-A9
16Mb x 16	A0-A8

*DM is internally loaded to match DQ and DQS identically.

Mode Register Operation



BA1	BA0	A12	A11	A10	A9	A8	A7	A6	A5	A4	A3	A2	A1	A0	
0*	0*	Operating Mode						CAS Latency			BT	Burst Length			Mode Register

A12 - A9	A8	A7	A6 - A0	Operating Mode
0	0	0	Valid	Normal operation Do not reset DLL
0	1	0	Valid	Normal operation in DLL Reset
0	0	1	VS**	Vendor-Specific Test Mode
–	–	–		Reserved

A3	Burst Type
0	Sequential
1	Interleave

CAS Latency

A6	A5	A4	Latency
0	0	0	Reserved
0	0	1	Reserved
0	1	0	2
0	1	1	3 (Option)
1	0	0	Reserved
1	0	1	1.5 (Option)
1	1	0	2.5
1	1	1	Reserved

Burst Length

A2	A1	A0	Burst Length
0	0	0	Reserved
0	0	1	2
0	1	0	4
0	1	1	8
1	0	0	Reserved
1	0	1	Reserved
1	1	0	Reserved
1	1	1	Reserved

VS** Vendor Specific
* BA0 and BA1 must be 0, 0 to select the Mode Register (vs. the Extended Mode Register).

Operating Mode

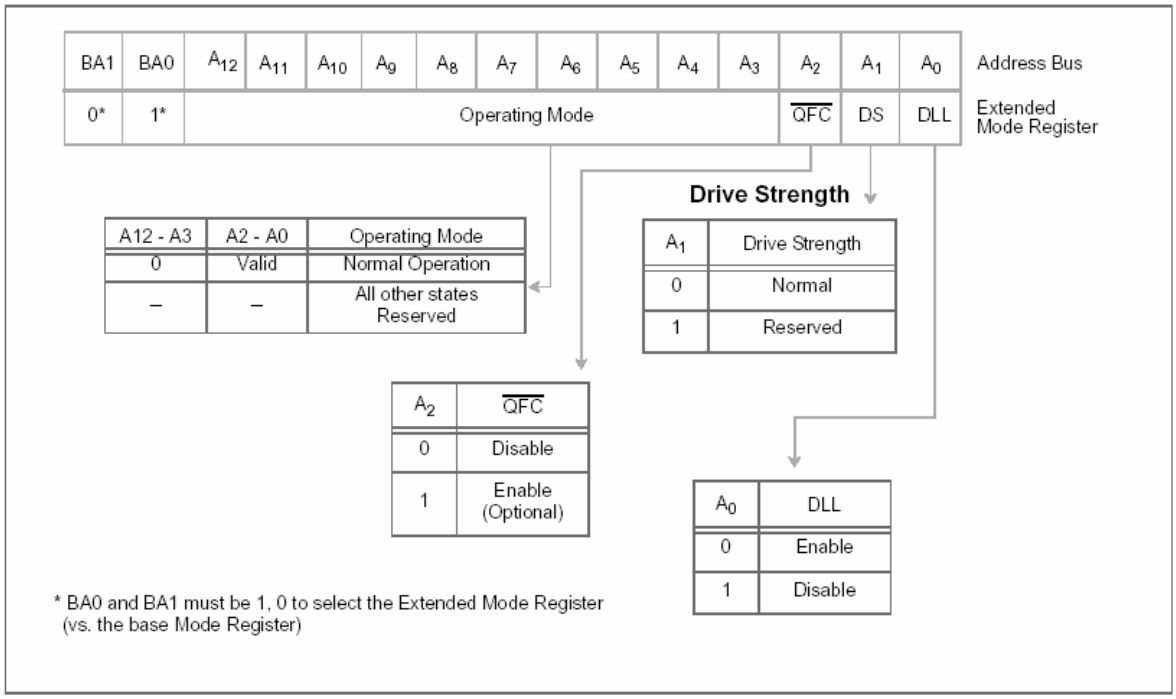
The normal operating mode is selected by issuing a Mode Register Set Command with bits A7-A12 to zero, and bits A0-A6 set to the desired values. A DLL reset is initiated by issuing a Mode Register Set command with bits A7 and A9-A12 each set to zero, bit A8 set to one, and bits A0-A6 set to the desired values. A Mode Register Set command issued to reset the DLL should always be followed by a Mode Register Set command to select normal operating mode.

All other combinations of values for A7-A12 are reserved for future use and/or test modes. Test modes and reserved states should not be used as unknown operation or incompatibility with future versions may result.

Extended Mode Register

The Extended Mode Register controls functions beyond those controlled by the Mode Register; these additional functions include DLL enable/disable, bit A0; output drive strength selection, bit A1; and QFC output enable/disable, bit A2 (NTC optional). These functions are controlled via the bit settings shown in the Extended Mode Register Definition. The Extended Mode Register is programmed via the Mode Register Set command (with BA0 = 1 and BA1 = 0) and retains the stored information until it is programmed again or the device loses power. The Extended Mode Register must be loaded when all banks are idle, and the controller must wait the specified time before initiating any subsequent operation. Violating either of these requirements result in unspecified operation.

Extended Mode Register Definition



Truth Table a: Commands

Name (Function)	$\overline{CS}$	$\overline{RAS}$	$\overline{CAS}$	$\overline{WE}$	Address	MNE	Notes
Deselect (Nop)	H	X	X	X	X	NOP	1, 9
No Operation (Nop)	L	H	H	H	X	NOP	1, 9
Active (Select Bank And Activate Row)	L	L	H	H	Bank/Row	ACT	1, 3
Read (Select Bank And Column, And Start Read Burst)	L	H	L	H	Bank/Col	Read	1, 4
Write (Select Bank And Column, And Start Write Burst)	L	H	L	L	Bank/Col	Write	1, 4
Burst Terminate	L	H	H	L	X	BST	1, 8
Precharge (Deactivate Row In Bank Or Banks)	L	L	H	L	Code	PRE	1, 5
Auto Refresh Or Self Refresh (Enter Self Refresh Mode)	L	L	L	H	X	AR / SR	1, 6, 7
Mode Register Set	L	L	L	L	Op-Code	MRS	1, 2

1. CKE is high for all commands shown except Self Refresh.
2. BA0, BA1 select either the Base or the Extended Mode Register (BA0 = 0, BA1 = 0 selects Mode Register; BA0 = 1, BA1 = 0 selects ,Extended Mode Register; other combinations of BA0-BA1 are reserved; A0-A12 provide the op-code to be written to the selected Mode Register.)
3. BA0-BA1 provide bank address and A0-A12 provide row address.
4. BA0, BA1 provide bank address; A0-A*i* provide column address (where *i* = 9 for x8 and 9, 11 for x4); A10 high enables the Auto Precharge feature (non-persistent), A10 low disables the Auto Precharge feature.
5. A10 LOW: BA0, BA1 determine which bank is precharged.A10 HIGH: all banks are precharged and BA0, BA1 are “Don’t Care.”
6. This command is auto refresh if CKE is high; Self Refresh if CKE is low.
7. Internal refresh counter controls row and bank addressing; all inputs and I/Os are “Don’t Care” except for CKE.
8. Applies only to read bursts with Auto Precharge disabled; this command is undefined (and should not be used) for read bursts with Auto Precharge enabled or for write bursts
9. Deselect and NOP are functionally interchangeable.

Active

The Active command is used to open (or activate) a row in a particular bank for a subsequent access. The value on the BA0,BA1 inputs selects the bank, and the address provided on inputs A0-A12 selects the row. This row remains active (or open) for accesses until a Precharge (or Read or Write with Auto Precharge) is issued to that bank. A Precharge (or Read or Write with Auto Precharge) command must be issued and completed before opening a different row in the same bank.

Read

The Read command is used to initiate a burst read access to an active (open) row. The value on the BA0, BA1 inputs selects the bank, and the address provided on inputs A0-Ai, Aj (where [i = 9, j = don’t care] for x8; where [i = 9, j = 11] for x4) selects the starting column location. The value on input A10 determines whether or not Auto Precharge is used. If Auto Precharge is selected, the row being accessed is precharged at the end of the Read burst; if Auto Precharge is not selected, the row remains open for subsequent accesses.

Write

The Write command is used to initiate a burst write access to an active (open) row. The value on the BA0, BA1 inputs selects the bank, and the address provided on inputs A0-Ai, Aj (where [i = 9, j = don't care] for x8; where [i = 9, j = 11] for x4) selects the starting column location. The value on input A10 determines whether or not Auto Precharge is used. If Auto Precharge is selected, the row being accessed is precharged at the end of the Write burst; if Auto Precharge is not selected, the row remains open for subsequent accesses. Input data appearing on the DQs is written to the memory array subject to the DM input logic level appearing coincident with the data. If a given DM signal is registered low, the corresponding data is written to memory; if the DM signal is registered high, the corresponding data inputs are ignored, and a Write is not executed to that byte/column location.

Auto Refresh

Auto Refresh is used during normal operation of the DDR SDRAM and is analogous to CAS Before RAS (CBR) Refresh in previous DRAM types. This command is nonpersistent, so it must be issued each time a refresh is required.

The refresh addressing is generated by the internal refresh controller. This makes the address bits "Don't Care" during an Auto Refresh command. The 256Mb DDR SDRAM requires Auto Refresh cycles at an average periodic interval of 7.8 μs (maximum).

Self Refresh

The Self Refresh command can be used to retain data in the DDR SDRAM, even if the rest of the system is powered down.When in the self refresh mode, the DDR SDRAM retains data without external clocking. The Self Refresh command is initiated as an Auto Refresh command coincident with CKE transitioning low. The DLL is automatically disabled upon entering Self Refresh, and is automatically enabled upon exiting Self Refresh (200 clock cycles must then occur before a Read command can be issued). Input signals except CKE (low) are "Don't Care" during Self Refresh operation.

The procedure for exiting self refresh requires a sequence of commands. CK (and CK) must be stable prior to CKE returning high. Once CKE is high, the SDRAM must have NOP commands issued for tXSNR because time is required for the completion of any internal refresh in progress. A simple algorithm for meeting both refresh and DLL requirements is to apply NOPs for 200 clock cycles before applying any other command.

Operations :

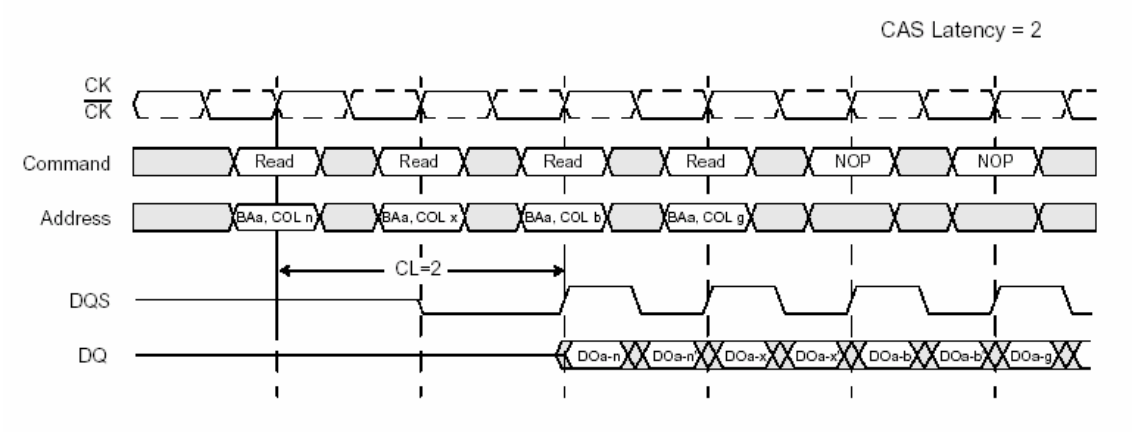
Reads

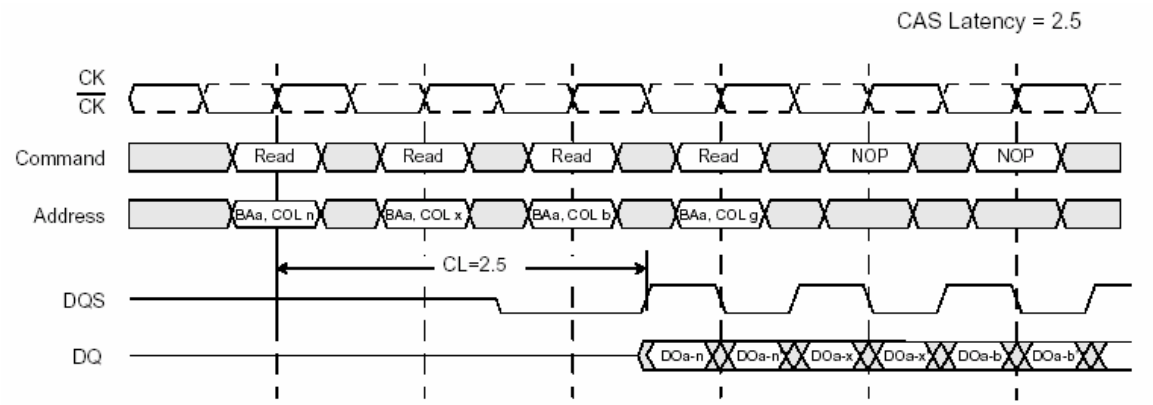
Subsequent to programming the mode register with CAS latency, burst type, and burst length, Read bursts are initiated with a Read command.

The starting column and bank addresses are provided with the Read command and Auto Precharge is either enabled or disabled for that burst access. If Auto Precharge is enabled, the row that is accessed starts precharge at the completion of the burst, provided tRAS has been satisfied. For the generic Read commands used in the following illustrations, Auto Precharge is disabled.

During Read bursts, the valid data-out element from the starting column address is available following the CAS latency after the Read command. Each subsequent data-out element is valid nominally at the next positive or negative clock edge (i.e. at the next crossing of CK and CK). The following timing figure entitled “Read Burst: CAS Latencies (Burst Length=4)” illustrates the general timing for each supported CAS latency setting. DQS is driven by the DDR SDRAM along with output data. The initial low state on DQS is known as the read preamble; the low state coincident with the last data-out element is known as the read postamble . Upon completion of a burst, assuming no other commands have been initiated, the DQs and DQS goes High-Z. Data from any Read burst may be concatenated with or truncated with data from a subsequent Read command. In either case, a continuous flow of data can be maintained. The first data element from the new burst follows either the last element of a completed burst or the last desired data element of a longer burst which is being truncated. The new Read command should be issued x cycles after the first Read command, where x equals the number of desired data element pairs (pairs are required by the 2n prefetch architecture). This is shown in timing figure entitled “Consecutive Read Bursts: CAS Latencies (Burst Length =4 or 8)”.A Read command can be initiated on any positive clock cycle following a previous Read command. Nonconsecutive Read data is shown in timing figure entitled “Non-Consecutive Read Bursts: CAS Latencies (Burst Length = 4)”. Full-speed Random Read Accesses: CAS Latencies (Burst Length = 2, 4 or 8) within a page (or pages) can be performed as shown on following:

Random Read Accesses: CAS Latencies (Burst Length = 2, 4 or 8)

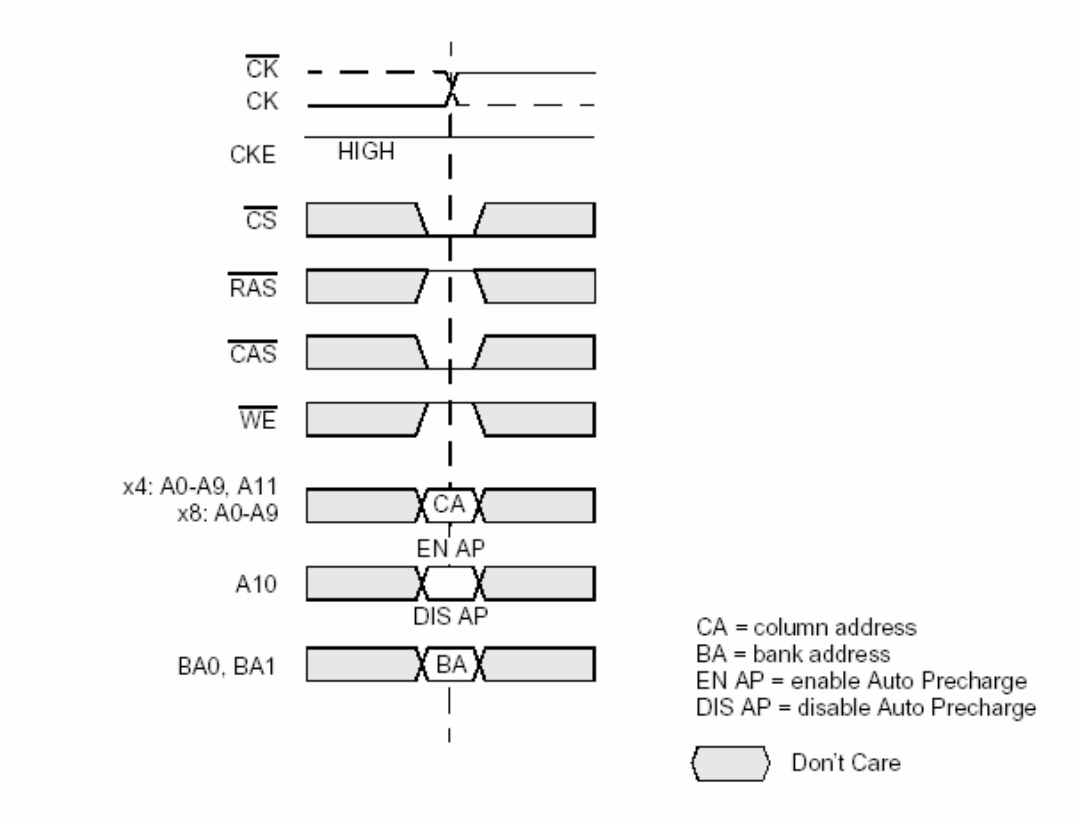




DO a-n, etc. = data out from bank a, column n etc.
n' etc. = odd or even complement of n, etc. (i.e., column address LSB inverted).
Reads are to active rows in any banks.
Shown with nominal t_{AC}, t_{DQSCK}, and t_{DQSQ}.

Don't Care

Read Command



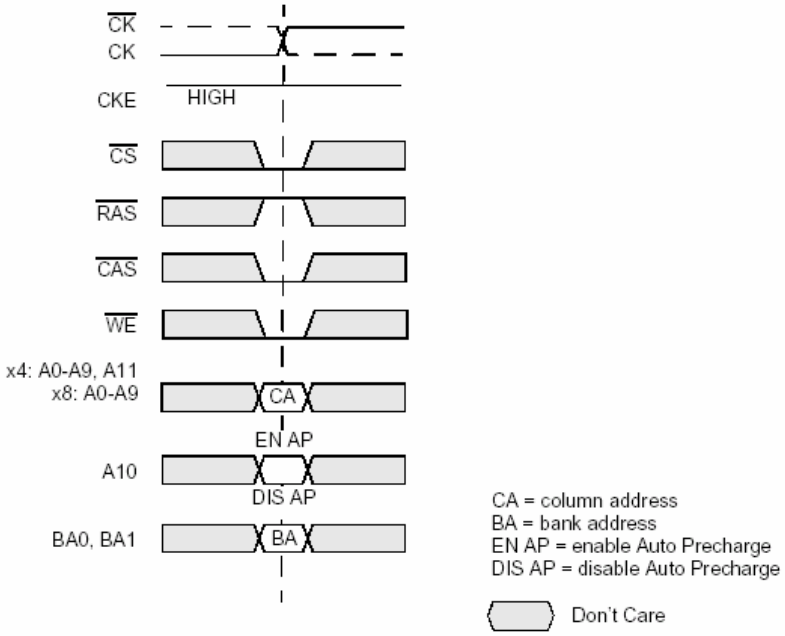
Writes

Write bursts are initiated with a Write command, as shown in timing figure *Write Command* on following: The starting column and bank addresses are provided with the Write command, and Auto Precharge is either enabled or disabled for that access. If Auto Precharge is enabled, the row being accessed is precharged at the completion of the burst. For the generic Write commands used in the following illustrations, Auto Precharge is disabled.

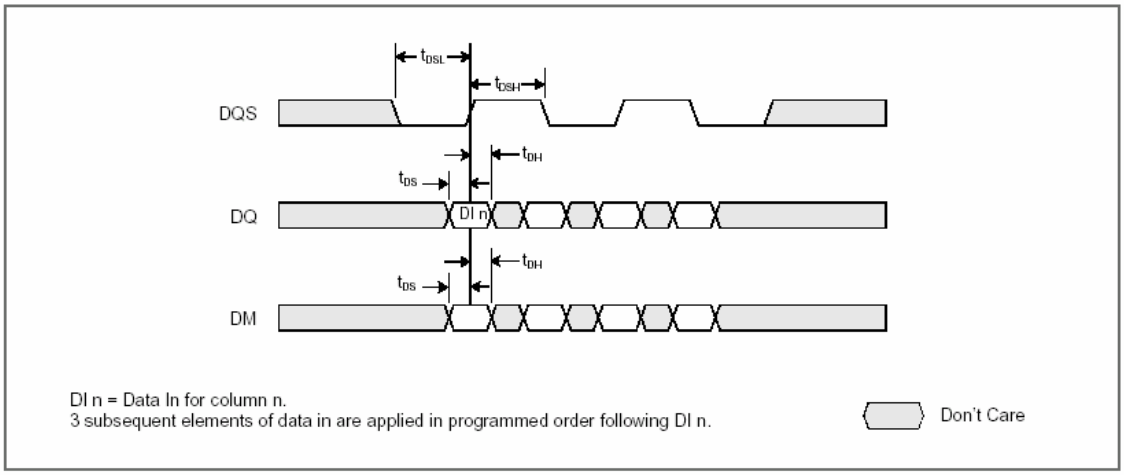
During Write bursts, the first valid data-in element is registered on the first rising edge of DQS following the write command, and subsequent data elements are registered on successive edges of DQS. The Low state on DQS between the Write command and the first rising edge is known as the write preamble; the Low state on DQS following the last data-in element is known as the write postamble. The time between the Write command and the first corresponding rising edge of DQS (tDQSS) is specified with a relatively wide range (from 75% to 125% of one clock cycle), so most of the Write diagrams that follow are drawn for the two extreme cases (i.e. tDQSS(min) and tDQSS(max)). Timing figure *Write Burst (Burst Length = 4)* on page 33 shows the two extremes of tDQSS for a burst of four. Upon completion of a burst, assuming no other commands have been initiated, the DQs and DQS enters High-Z and any additional input data is ignored.

Data for any Write burst may be concatenated with or truncated with a subsequent Write command. In either case, a continuous flow of input data can be maintained. The new Write command can be issued on any positive edge of clock following the previous Write command. The first data element from the new burst is applied after either the last element of a completed burst or the last desired data element of a longer burst which is being truncated. The new Write command should be issued x cycles after the first Write command, where x equals the number of desired data element pairs (pairs are required by the 2n prefetch architecture).

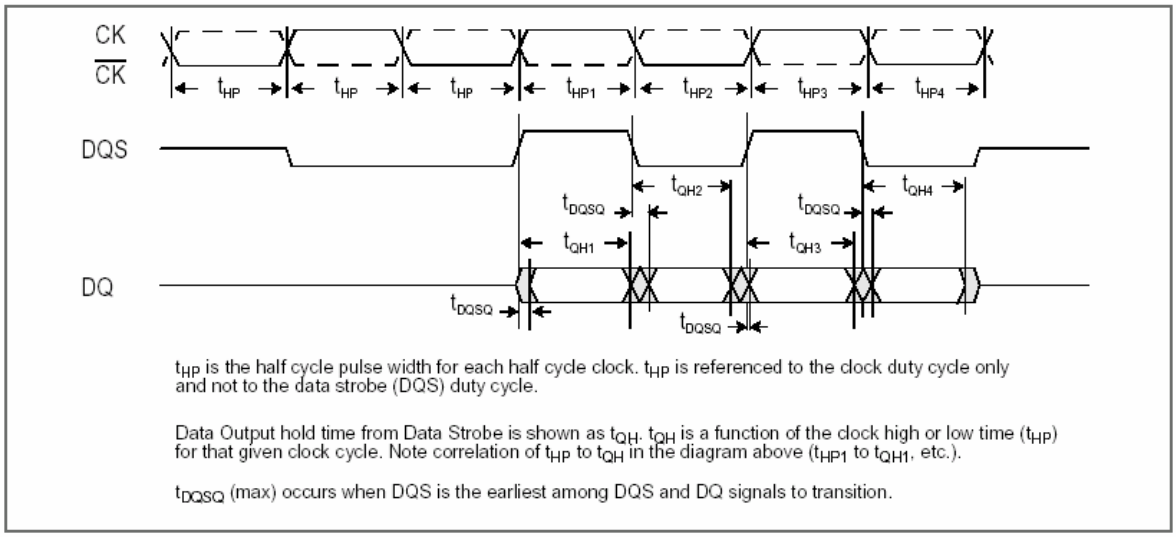
Write Command



Data Input (Write)



Data Output (Read)

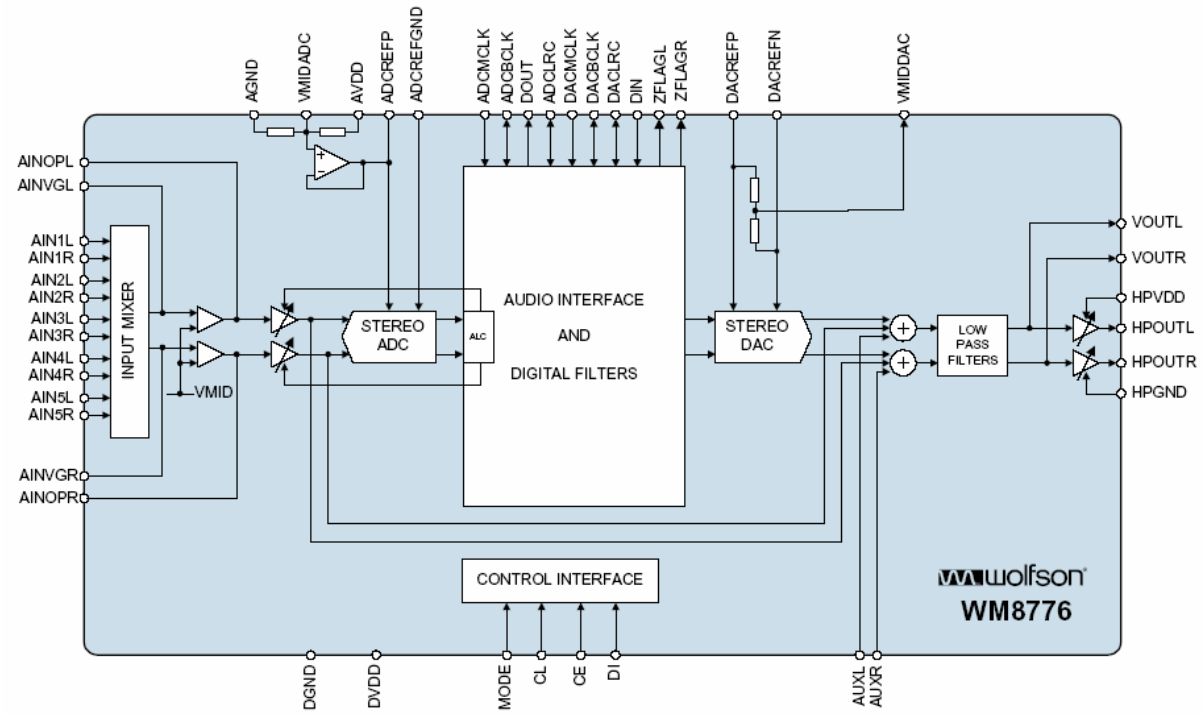


WM8776 Application

The WM8776 is a high performance, stereo audio codec with five channel input selector. The WM8776 is ideal for surround sound processing applications for home hi-fi, DVD-RW and other audiovisual equipment. Etch ADC channel has programmable gain control with automatic level control. Digital audio output word lengths from 16-32 bits and sampling rates from 32kHZ to 96KHZ are supported. The DAC has an input mixer allowing an external analogue signal to be mixed with the DAC signal. There are also Headphone and line outputs, with control for the headphone

The WM8776 supports fully independent sample rates for the ADC and DAC. The audio data interface supports I2S, left justified, right justified and DSP formats.

BLOCK DIAGRAM



1. Audio sample rate

The master clock forWM8776 supports DAC and ADC audio sampling rates 256fs to 768fs, where fs is the audio sample frequency (DACLRC or ADCLRC) typically 32KHZ, 44.1KHZ, 48KHZ or 96KHZ (the DAC also supports operation at 128fs and 192fs and 192KHZ sample rate). The master clock is used to operate the digital filters and the noise shaping circuits.

In slave mode the WM8776 has a master detection circuit that automatically determines the relationship between the master clock frequency and the sampling rate (to within +/- 32 system clocks) If there is a greater than 32 clocks error the interface is disabled and ADCLRC/DACLRC for optical performance, although the WM8776 is tolerant of phase variations or jitter on this clock.

Table shows the typical master clock frequency inputs for the WM8776.

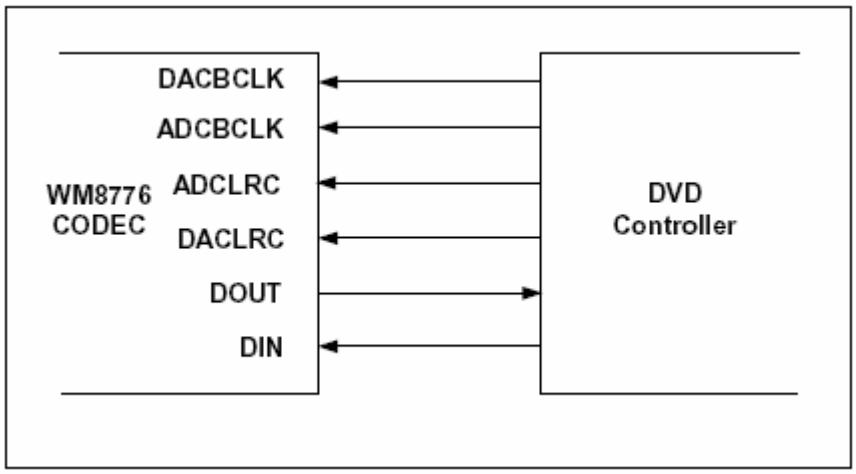
SAMPLING RATE (DACLRC/ ADCLRC)	System Clock Frequency (MHz)					
	128fs	192fs	256fs	384fs	512fs	768fs
	DAC ONLY					
32kHz	4.096	6.144	8.192	12.288	16.384	24.576
44.1kHz	5.6448	8.467	11.2896	16.9340	22.5792	33.8688
48kHz	6.144	9.216	12.288	18.432	24.576	36.864
96kHz	12.288	18.432	24.576	36.864	Unavailable	Unavailable
192kHz	24.576	36.864	Unavailable	Unavailable	Unavailable	Unavailable

2. DIGITAL AUDIO INTERFACE

a. Slave mode

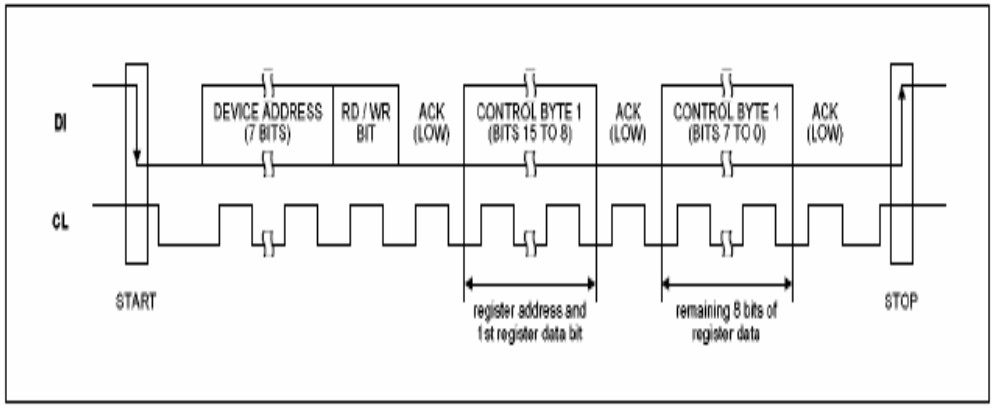
The audio interfaces operations in either slave mode selectable using the MS control bit. In slave mode DIN is always an input to the WM8776 and DOUT is always an output. The default is Slave mode. In slave mode (ms=0) ADCLRC, DACLRC, ADCBCLK, DACBCLK are input to the WM8776 .

DIN and DACLRC are sampled by the WM8776 on the rising edge of DACBCLK; ADCLRC is sampled on the rising edge of ADCBCLK. ADC data is output on DOUT and changes on the falling edge of ADCBCLK. By setting control bit BCLKINV the polarity of ADCBCLK and DACBCLK may be reversed so that DIN and DACLRC are sample on the falling edge of DACBCLK, ADCLRC is sampled on the falling edge of ADCBCLK and DOUT changes on the rising of ADCBCLK Slave mode as shown in the following figure.



b. 2 Wire serial control mode

The wm8776 supports software control via a 2-wire serial bus. Many devices can be controlled by the same bus, and each device has a uni ue 7-bit address (this is not the same as the 7-bit address of each register in the wm8776). The wm8776 operates as a slave device only.
2-wire serial interface as shown in the following figure.



The wm8776 has two possible device addresses, which can be selected using the CE pin
In the L37 LCD TV CE pin is LOW (device address is 34h).

CE STATE	DEVICE ADDRESS
Low	0011010 (0 x 34h)
High	0011011 (0 x 36h)

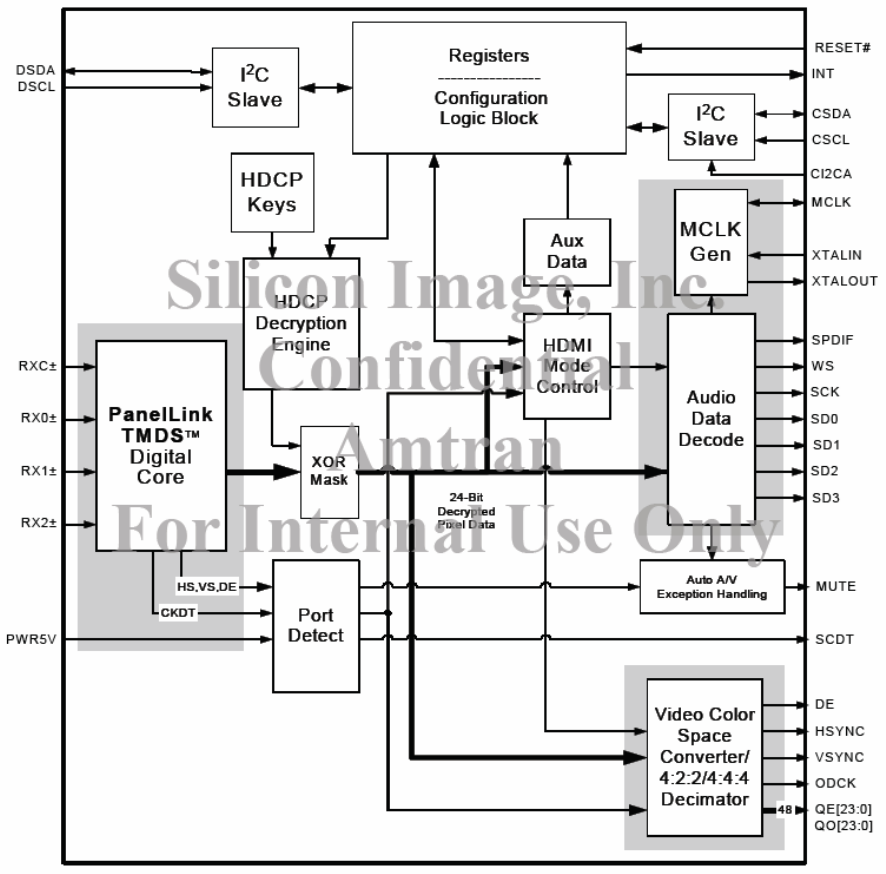
In the L37 wm8776 has 2-wire interface

MODE	Control Mode
0	2 wire interface
1	3 wire interface

Sil9011 Application

The sil9011 provides a complete solution for receiving HDMI compliant digital audio and video. Specialized audio and video processing is available within the sil9011 to easily and cost effectively adds HDMI capability to consumer electronics devices such as digital TVs, plasma displays, LCD TVs and projectors.

BLOCK DIAGRAM



1. TMDS Digital Core

The core performs 10-to-8-bit TMDS decoding on the audio and video received from the three TMDS differential data lines along with a TMDS differential clock. The TMDS core supports link clock rates to 165MHZ, including CE modes to 720P/1080I/1080P.

2. Active port detection

The Pane Link core detects an active TMDS clock and actively toggling DE signal. These states are accessible in register bits, useful for monitoring the status of the HDMI input or for automatically powering down the receiver. The 5V supply from the HDMI connector is used as a cable detect indicator. The sil9011 can monitor the presence of this+5V supply and, if and when necessary, provide a fast audio mute without pops when it senses the HDMI cable pulled. The microcontroller can also poll registers in the sil9011 to check whether an HDMI cable is connected.

3. HDCP Decryption engine

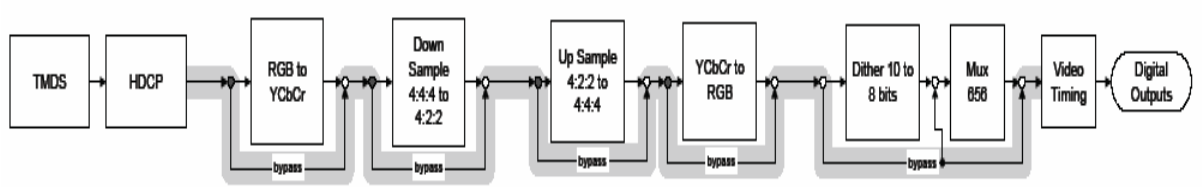
The HDCP decryption engine contains all necessary logic to decrypt the incoming audio and video data. The decryption process is entirely controlled by the host microprocessor through a set sequence of register reads and wires through the DDC channel. Pre-programmed HDCP keys and key Selection Vector are used in the decryption process. A resulting calculated to an XOR mask during each clock cycle to decrypt the audio/video data in sync with the host.

4. Video Data Conversion and Video Output

The Sil9011 can output video in many different formats as shown in the following figure.

Color Space	Video Format	Bus Width	HSYNC / VSYNC	Output Clock (MHz)[3]							Notes
				480i	480p	XGA	720p	1080i	1080p	UXGA	
RGB	4:4:4	24	Separate	13.25 / 27	27	65	74.25	74.25	148.5	162	
YCbCr	4:4:4	24	Separate	13.25 / 27	27	65	74.25	74.25	148.5	162	
YCbCr	4:2:2	16/20/24	Sep, Emb.	13.25 / 27	27	—	74.25	74.25	148.5	162	1,2
YCbCr	4:2:2	8/10/12	Sep, Emb.	27	54	135	148.5	148.5	—	—	1,4
RGB	4:4:4	48	Separate	6.73/13.5	13.5	32.25	37.13	37.13	74.25	81	5
YCbCr	4:4:4	48	Separate	6.73/13.5	13.5	32.25	37.13	37.13	74.25	81	5
RGB	4:4:4	12	Separate	13.25 / 27	27	65	74.25	74.25	—	—	6
YCbCr	4:4:4	12	Separate	13.25 / 27	27	65	74.25	74.25	—	—	6
YCbCr	4:2:2	8/10/12	Sep, Emb.	13.25/27	27	65	74.25	74.25	—	81	1,4

The receiver can also process the video data before it is output as show below figure



5. I²c Interface to Display Controller

The Controller I²c interface (CSDA, CSCL) on the sil9011 is a slave interface capable of running up to 400KHZ. This bus is used to configure the SIL9011 by reading/writing to the appropriate registers. The SIL9011 is accessible on the local I²c bits at two-device address. The logic state of the CI2CA pin is latched on the rising edge of REST# providing a choice of two pairs of device address.

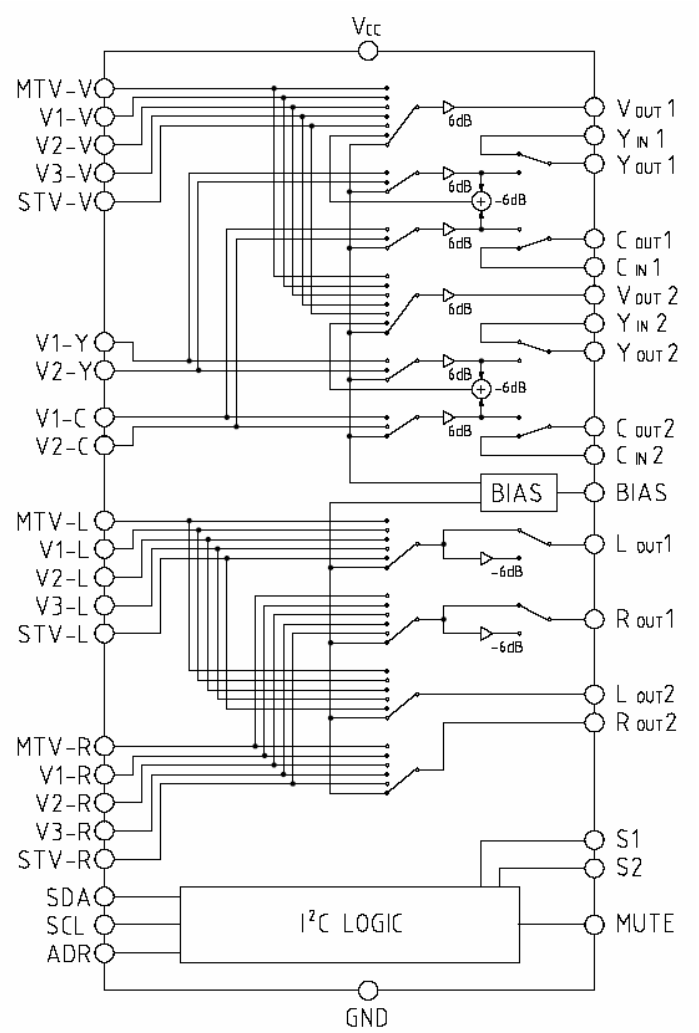
Control of local I²c address with CI2CA pin

	CI2CA = Pull Down	CI2CA = Pull Up
First Device Addr	0x60	0x62
Second Device Addr	0x68	0x6A

MM1942 Application

The MM1942 IC is a 5-input 2-output AV switch controlled by the I2C BUS developed for use in television.

BLOCK DIAGRAM



1. I²c Bus

I2C BUS is interring bus system controlled by 2 lines (SDA, SCL). Data are transmitted and received in the units of byte and Acknowledge. It is transmitted by MSB first from the Start conditions.

The data format is set as shown in the following figure.

S	Slave address							R/W	A	Control register 1								A	Control register 2								A	P
	1	0	0	1	0	0	0/1	0		b7	b6	b5	b4	b3	b2	b1	b0		b7	b6	b5	b4	b3	b2	b1	b0		
	Address byte																		Control data									

In the L32 TV MM1492 slave address, ADR terminal is L, and 90H is selected.

The following figure indicates the control contents of control registers and switches.

Register	b7	b6	b5	b4	b3	b2	b1	b0
1	Audio Gain 1	S/Comp select 1	Video out1 select			Audio out1 select		
2	Audio Gain 2	S/Comp select 2	Video out2 select			Audio out2 select		

2. Switch control table

a. Video output 1

b6	b5	b4	b3	VOUT1	YOUT1	COUT1
0	0	0	0	Mute	Mute	Mute
0	0	0	1	MTV–V	YIN1	CIN1
0	0	1	0	V1–V	YIN1	CIN1
0	0	1	1	V2–V	YIN1	CIN1
0	1	0	0	V3–V	YIN1	CIN1
0	1	0	1	STV–V	YIN1	CIN1
0	1	1	0	Mute	Mute	Mute
0	1	1	1			
1	0	0	0	Mute	Mute	Mute
1	0	0	1	MTV–V	YIN1	CIN1
1	0	1	0	V1–(Y+C)	V1–Y	V1–C
1	0	1	1	V2–(Y+C)	V2–Y	V2–C
1	1	0	0	V3–V	YIN1	CIN1
1	1	0	1	STV–V	YIN1	CIN1
1	1	1	0	Mute	Mute	Mute
1	1	1	1			

b. Audio output 1

Mute terminal	b2	b1	b0	LOUT1	ROUT1
≦1.5V (OPEN)	0	0	0	Mute	Mute
	0	0	1	MTV–L	MTV–R
	0	1	0	V1–L	V1–R
	0	1	1	V2–L	V2–R
	1	0	0	V3–L	V3–R
	1	0	1	STV–L	STV–R
	1	1	0	Mute	Mute
	1	1	1		
≧3.0V				Mute	Mute

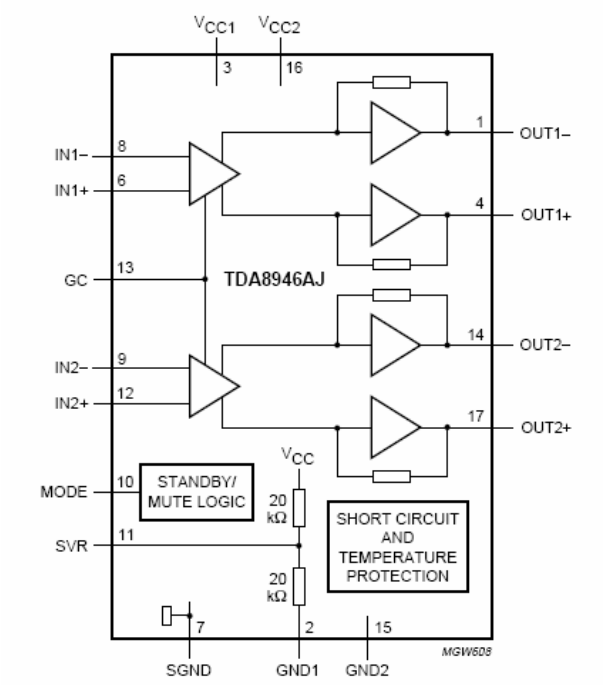
c. Audio gain

b7	LOUT1	ROUT1
0	–6dB	–6dB
1	0dB	0dB

TDA8946 Application

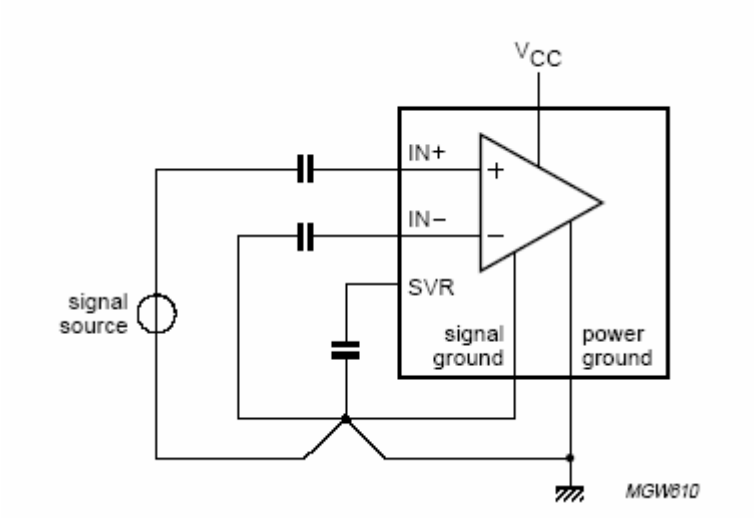
In L32 TV the TDA8946AJ is a dual-channel audio power amplifier with DC gain control. It has an output power of 2 ．10 W at an 8 ．load and a 12 V supply.

Block diagram



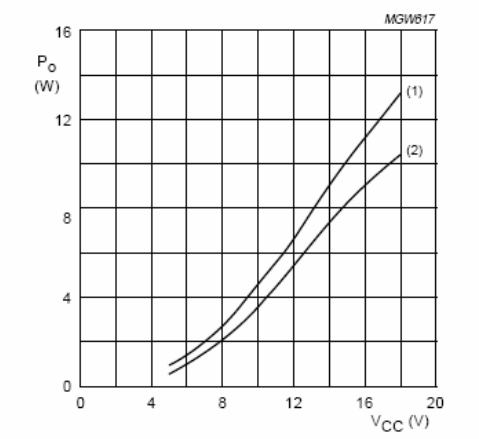
1. Input configuration

The TDA8946AJ inputs can be driven symmetrical (floating) as well as asymmetrical. In the asymmetrical mode one input pin is connected via a capacitor to the signal source and the other input is connected to the signal ground. The signal ground should be as close as possible to the SVR (electrolytic) capacitor ground. Note that the DC level of the input pins is half of the supply voltage VCC, so coupling capacitors for both pins are necessary.



2. Output power measurement

The output power as a function of the supply voltage is measured on the output pins at THD = 10%,in the L32 LCD TV Vcc=12V so we can see as shown in the following figure output about 7W.



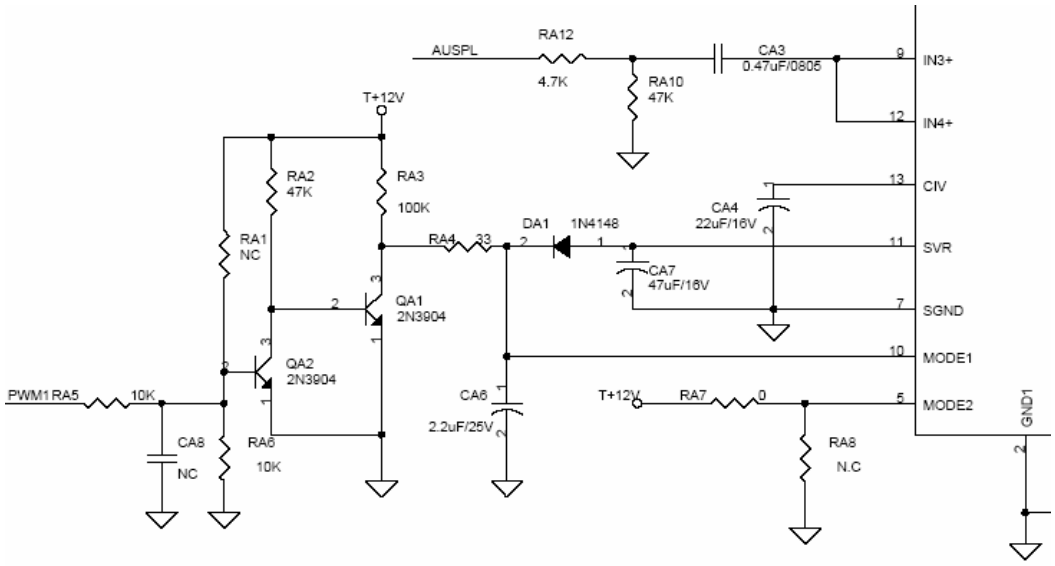
R_L = 8 Ω
(1) THD = 10%
(2) THD = 1%

3. Mode selection

In the L32 LCD TV TDA8946AJ has two functional modes, which can be selected by applying the proper DC voltage to pin MODE.

a. Mute — In this mode the amplifier is DC-biased but not operational (no audio output). This allows the input coupling capacitors to be charged to avoid pop-noise. The device is in mute mode when 3.5 V < VMODE < (VCC˜ 1.5 V).

b. Operating — In this mode the amplifier is operating normally. The operating mode is activated at VMODE<1.0V.

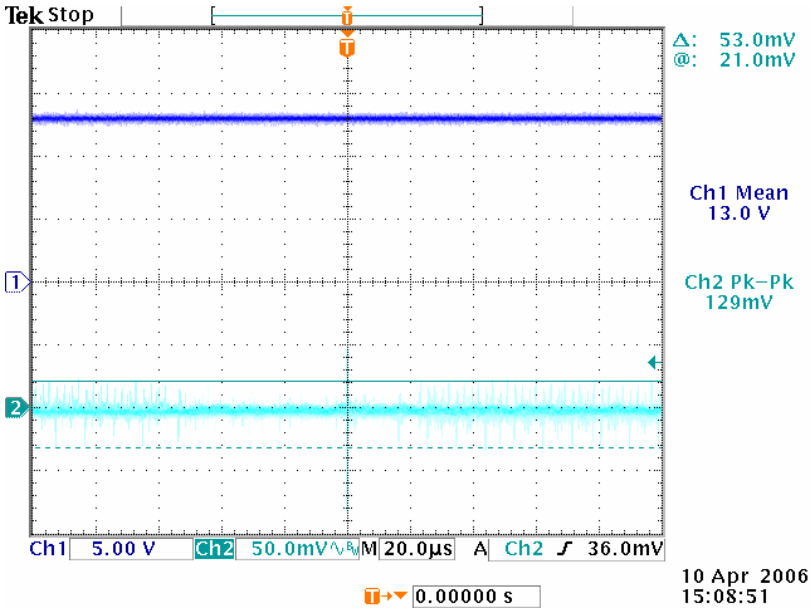


Chapter 9 Waveforms

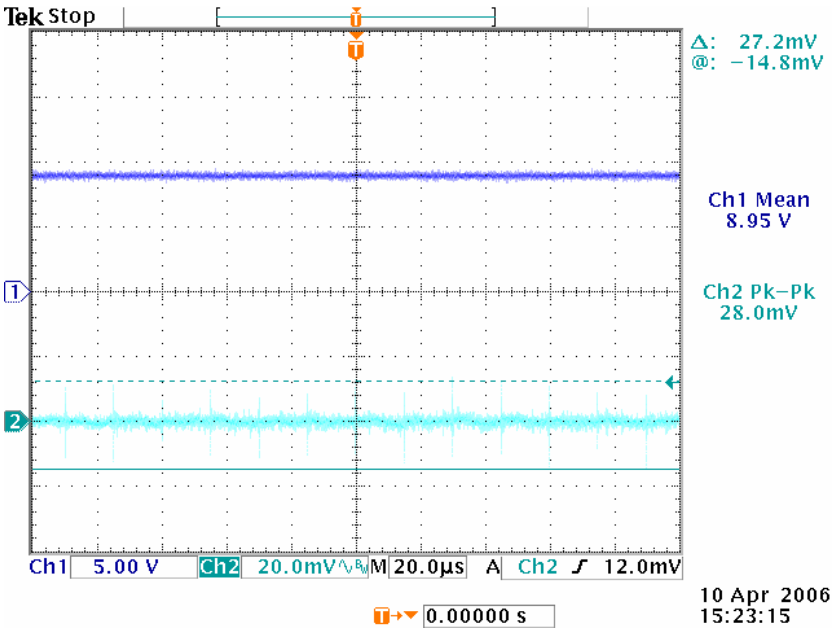
Main Board

1. Voltage Measurement

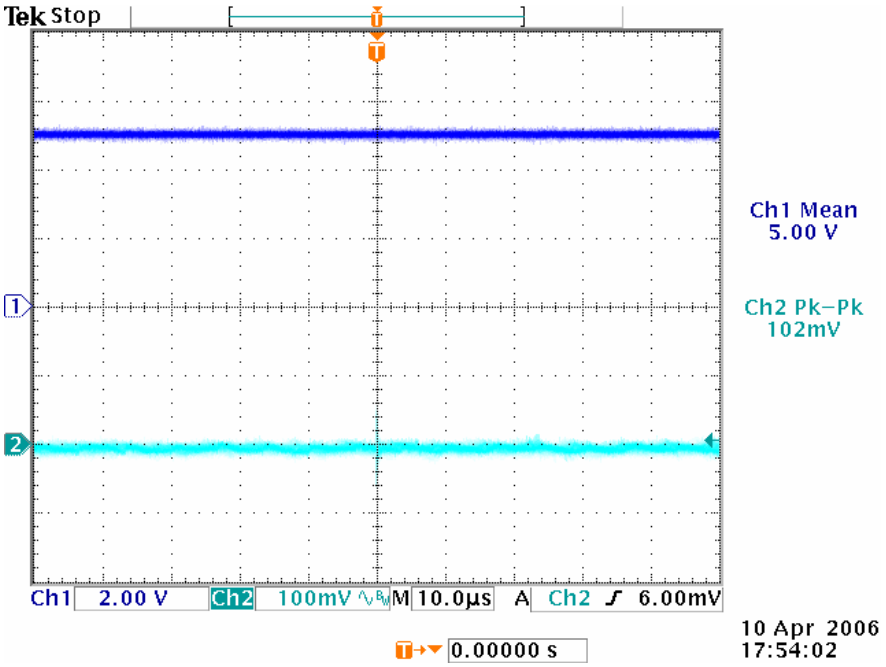
(1) 12V (DV120B, U6-1)



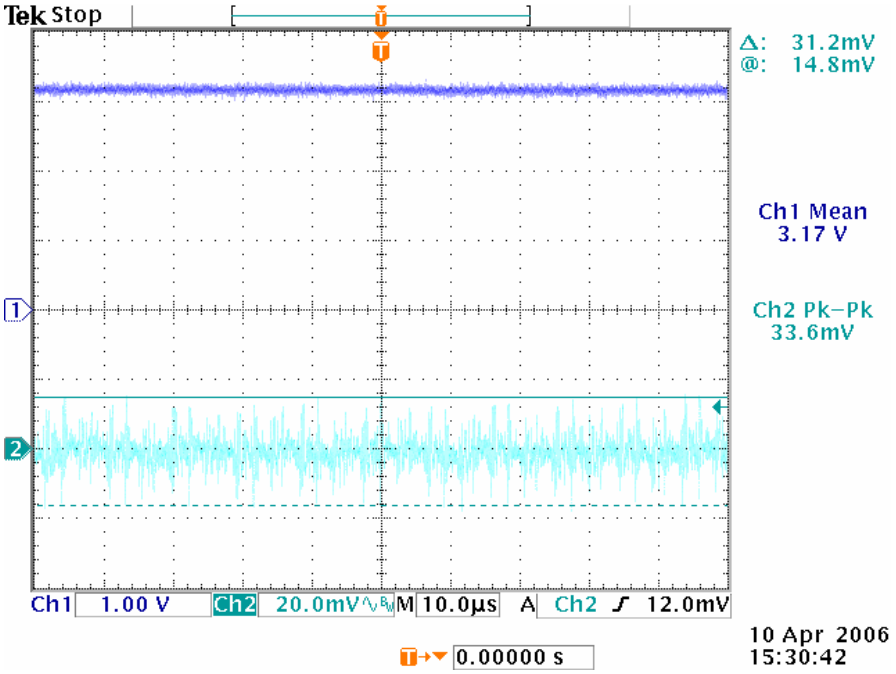
(2) 9V (AV_V90, U6-3)



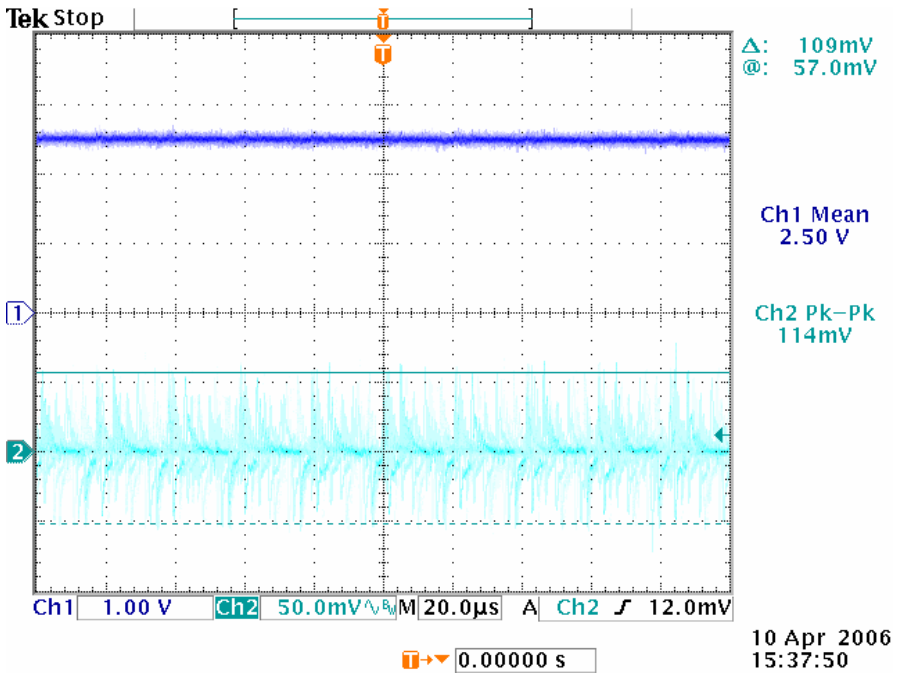
(3) 5V (DV50A, CB15)



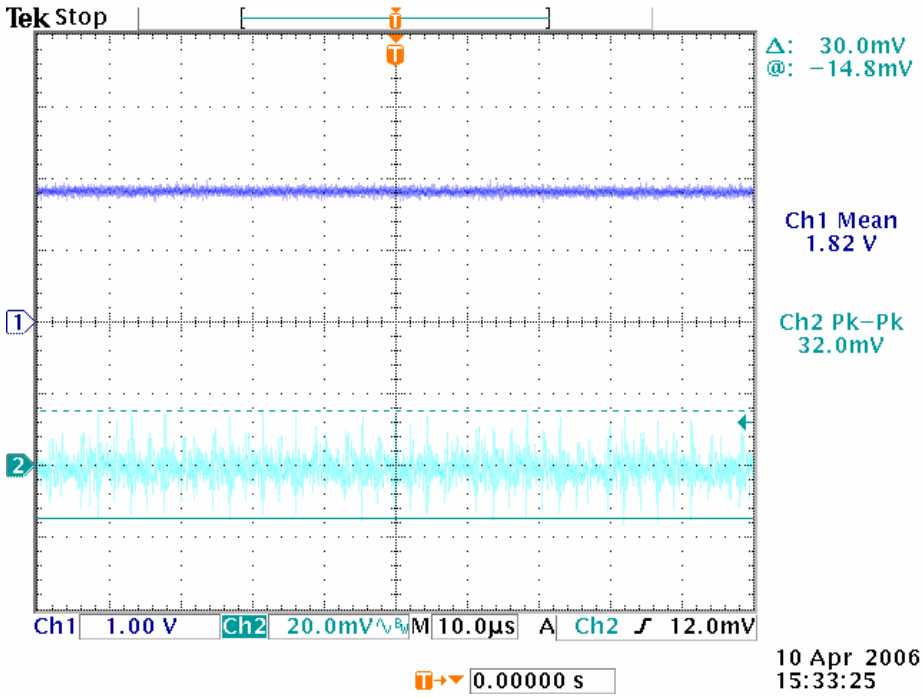
(4) 3.3V (DV33A, U5-3)



(5) 2.5V (DV25, CE42)

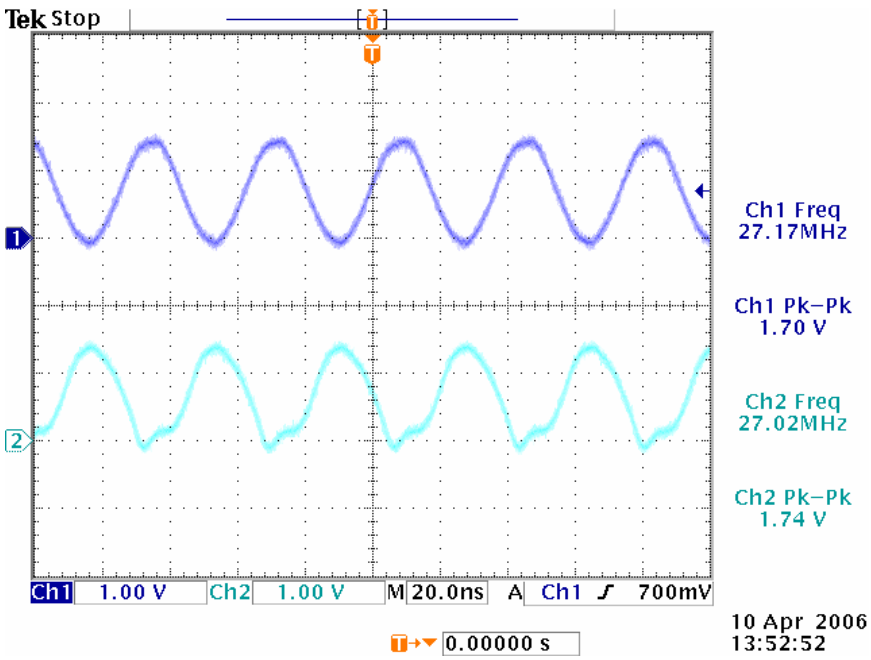


(6) 1.8V (DV18A, U5-2)

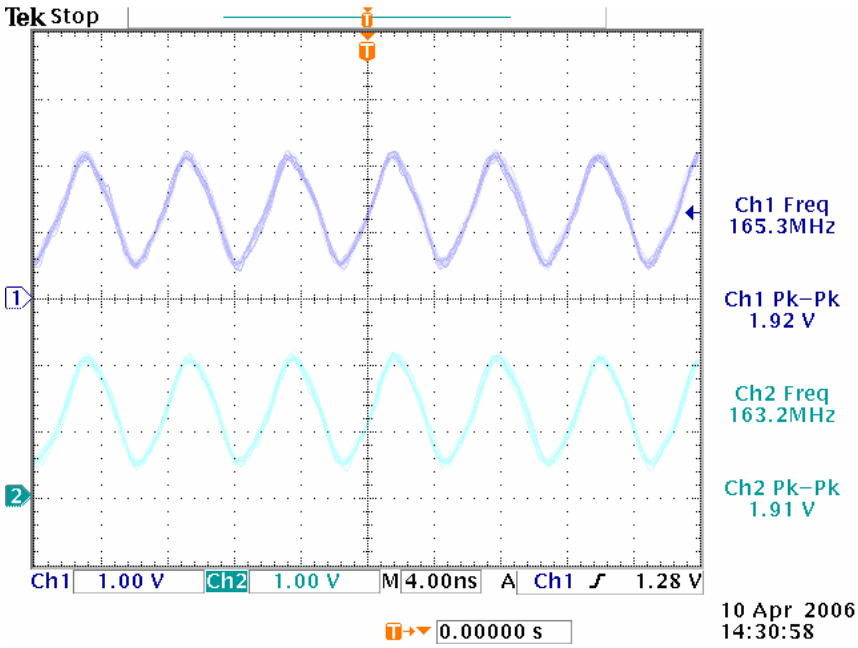


2. Clock Timing

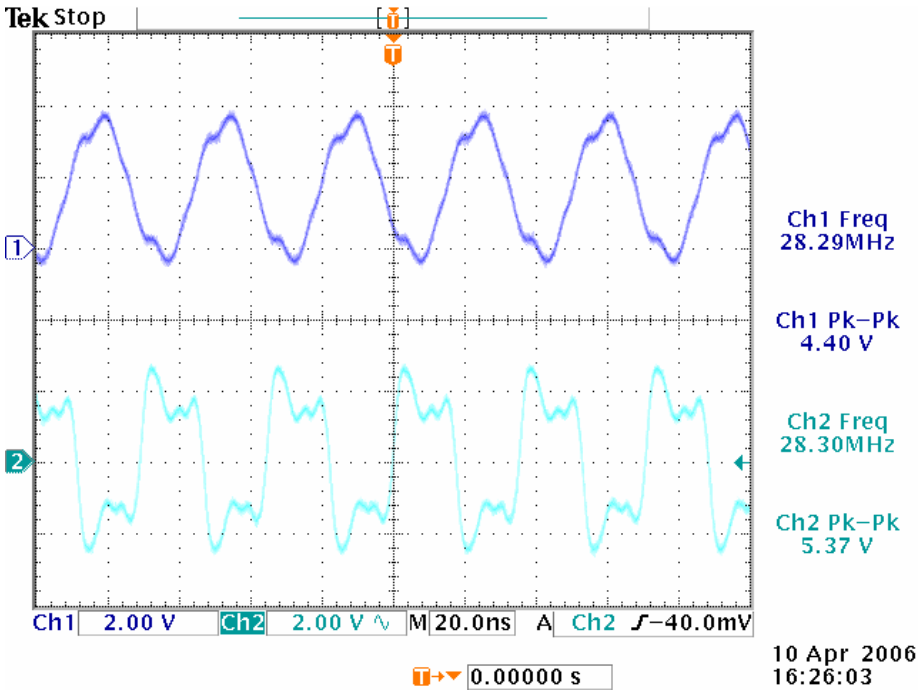
(1) MT8205 Clock (Ch1 U9-A15, XTALI / Ch2 U9-B15, XTALO)



(2) Memory Clock (Ch1 U11-45, D_CLK / Ch2 U12-45, D_CLK)



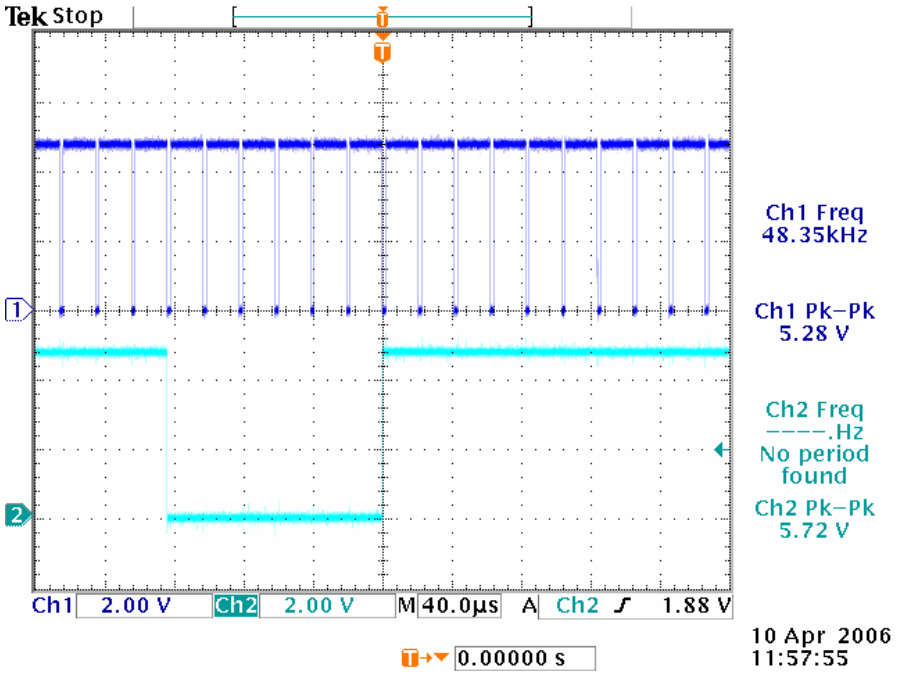
(3) Sil 9011 Clock (Ch1 U16-85, XTLI / Ch2 U16-84, XTLO)



3. H-sync & V-sync Timing

(1) PC Mode (1024 x 768 60Hz)

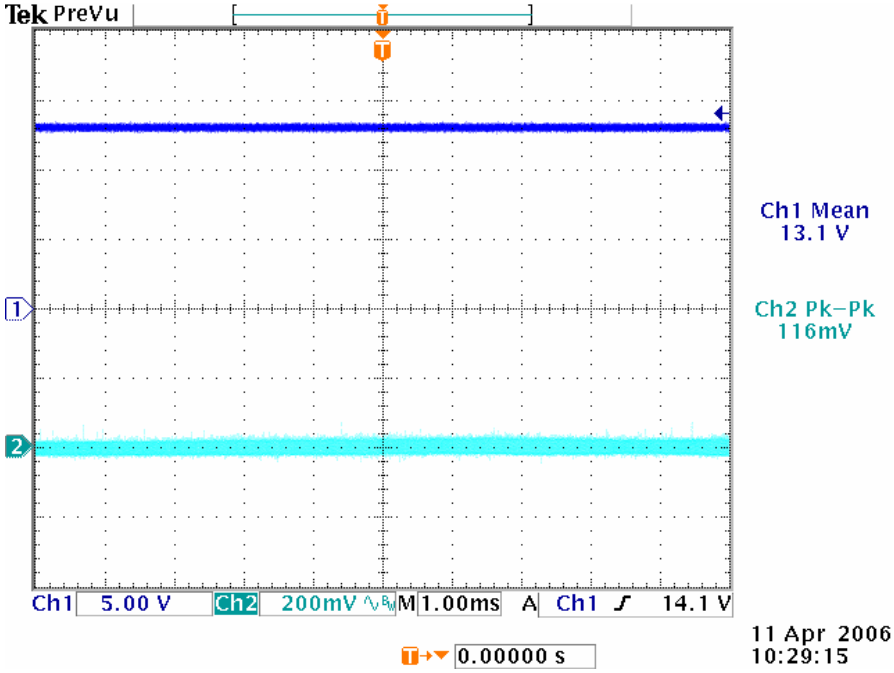
Ch1 H-sync (FB46) / Ch2 V-sync (FB45)



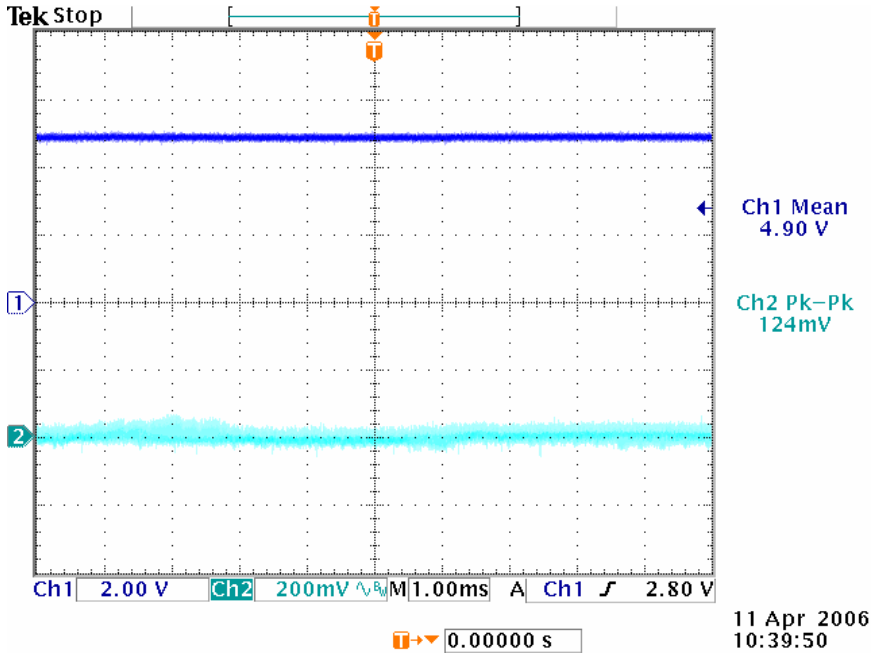
ATSC Board

1. Voltage Measurement

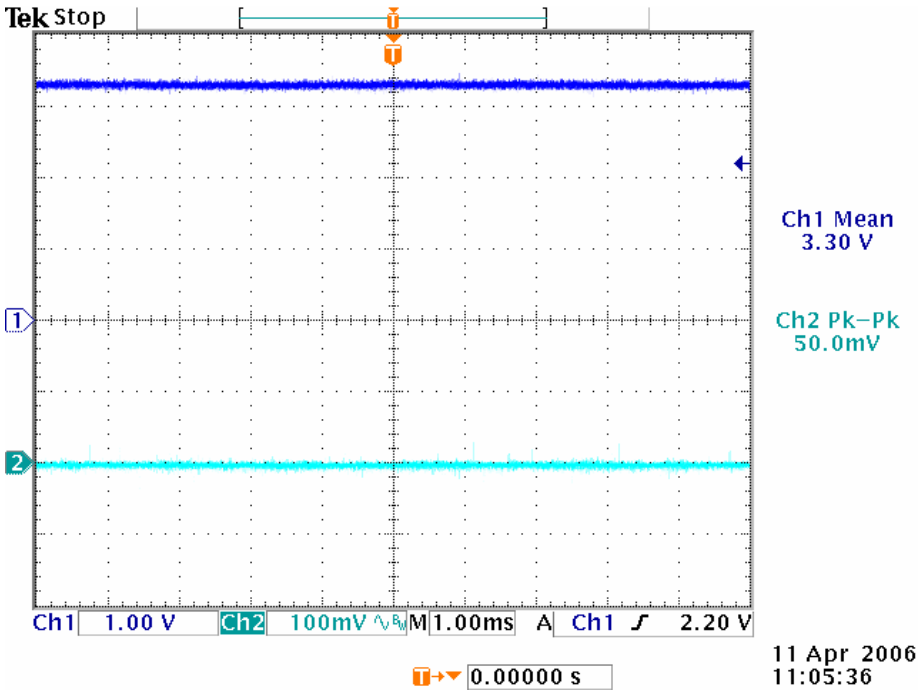
(1) 12V (+12V, C4)



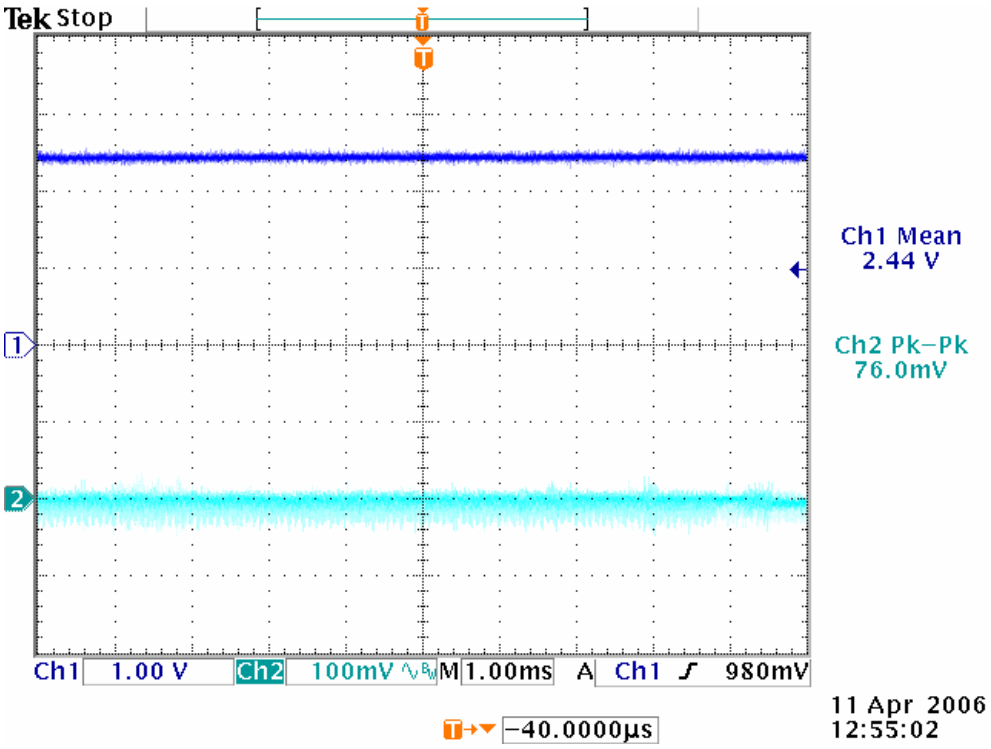
(2) 5V (+5V, C239)



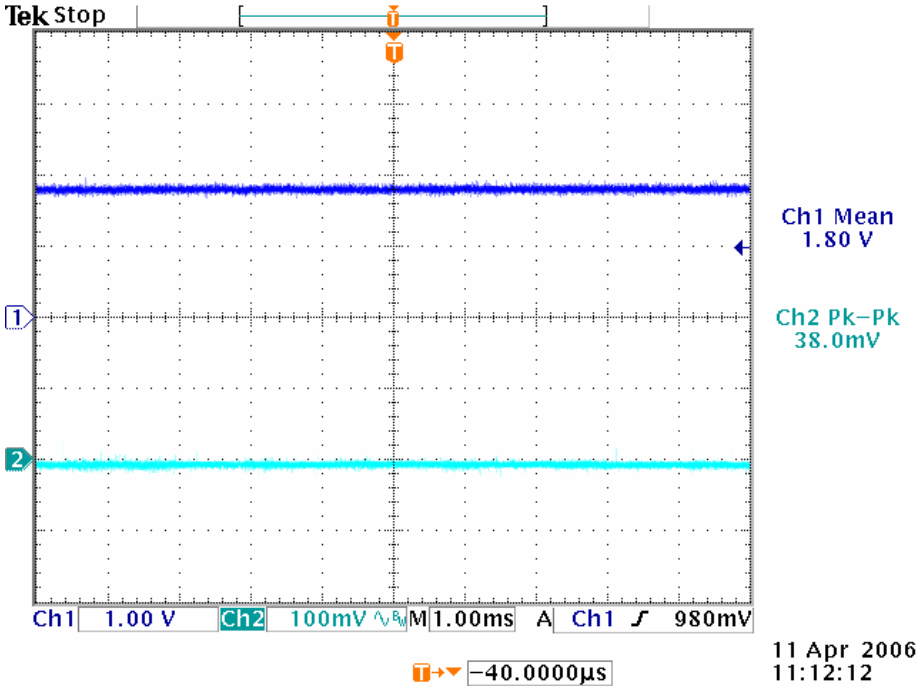
(3) 3.3V (DV33, C11)



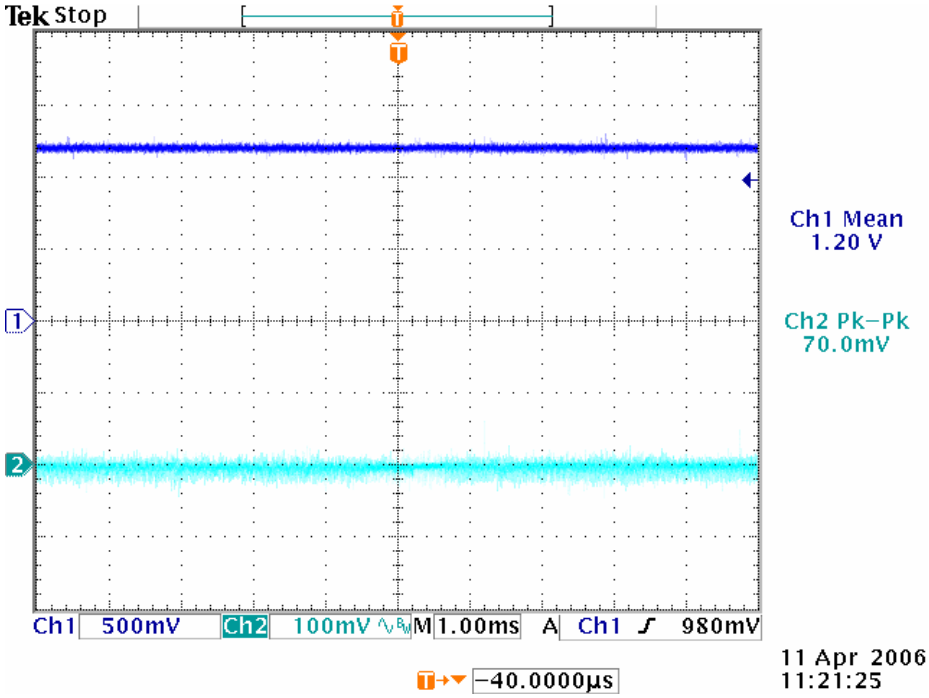
(4) 2.5V (DV25, C185)



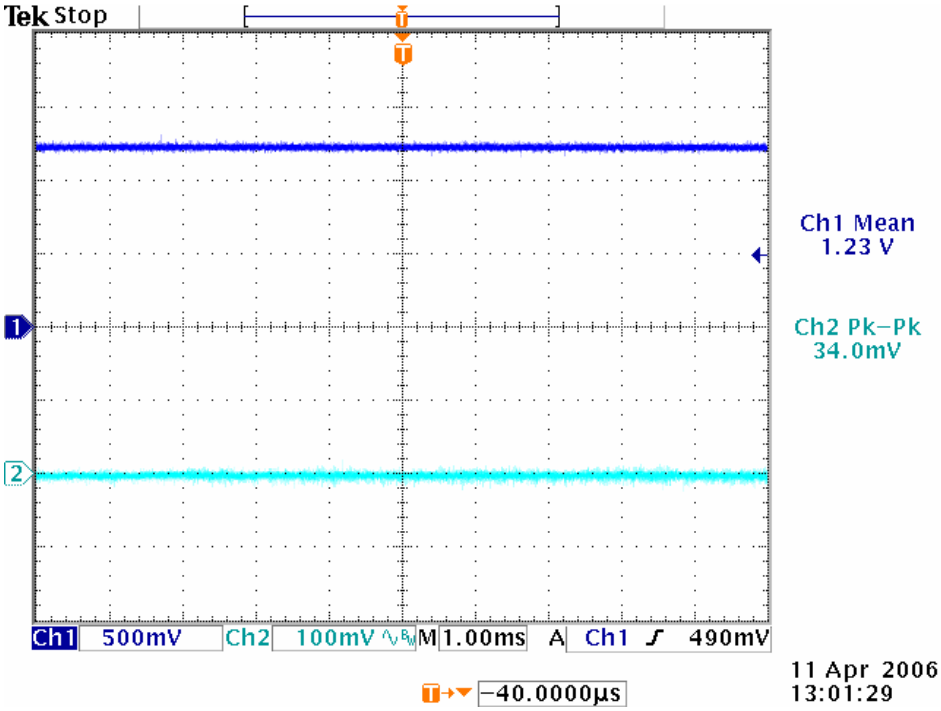
(5) 1.8V (DV18, C64)



(6) 1.25V (+1V25_DDR, C148)

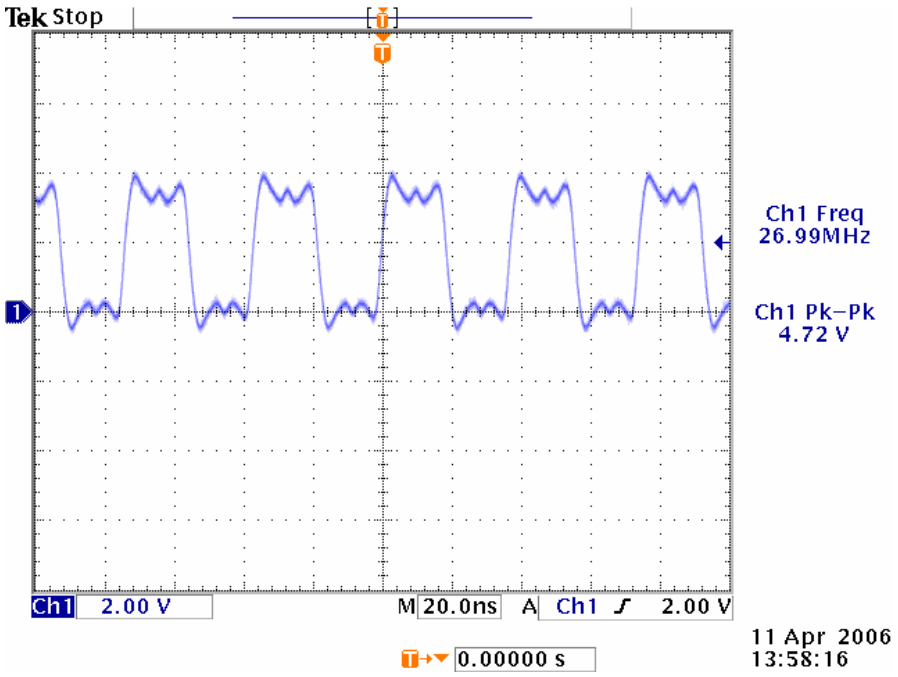


(7) 1.2V (DV12, C26)

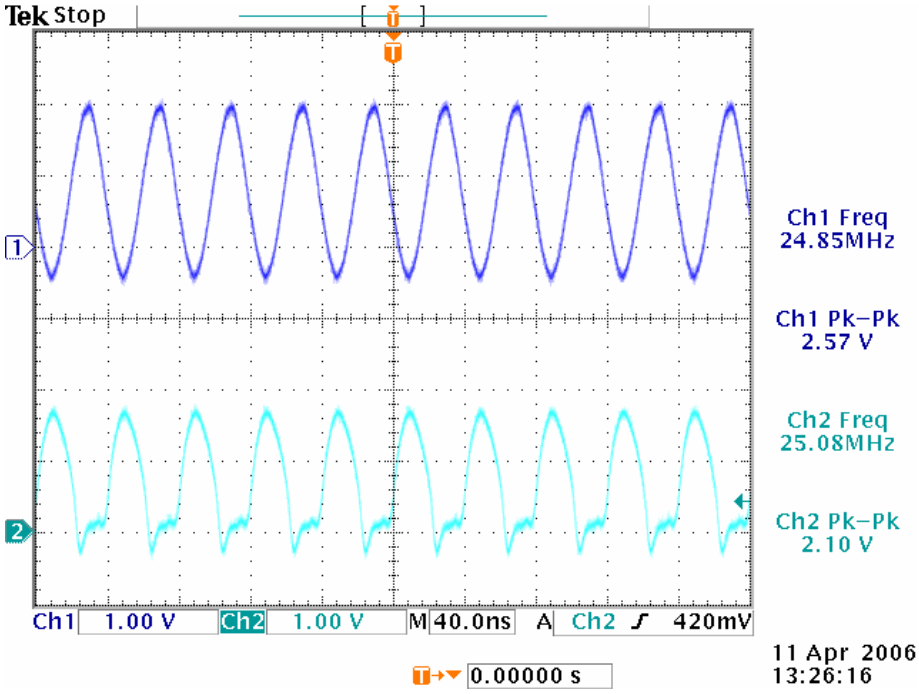


2. Clock Timing

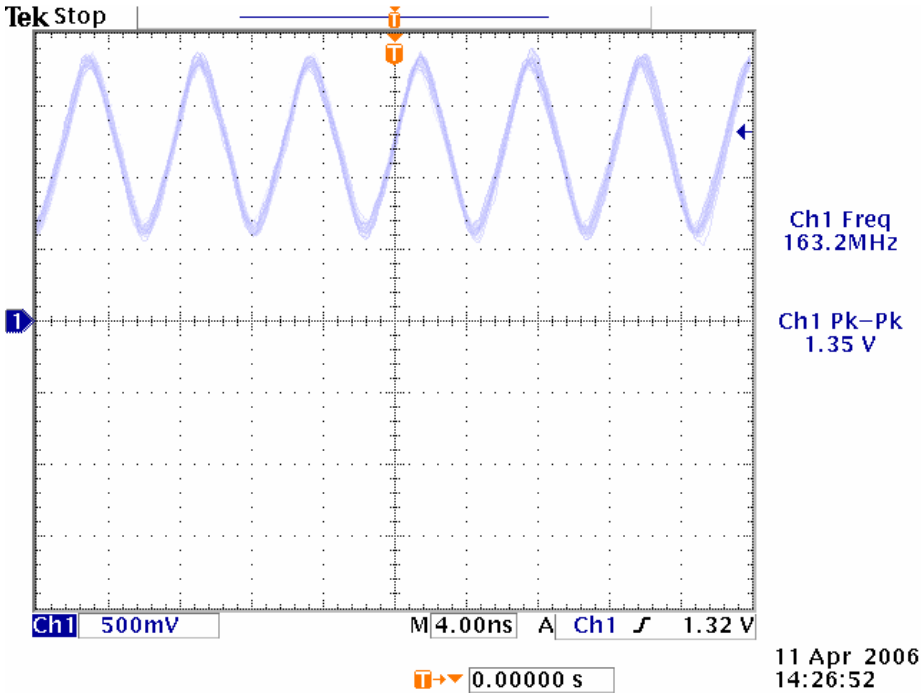
(1) MT5351 Clock Timing (U10 B2-OXTALI)



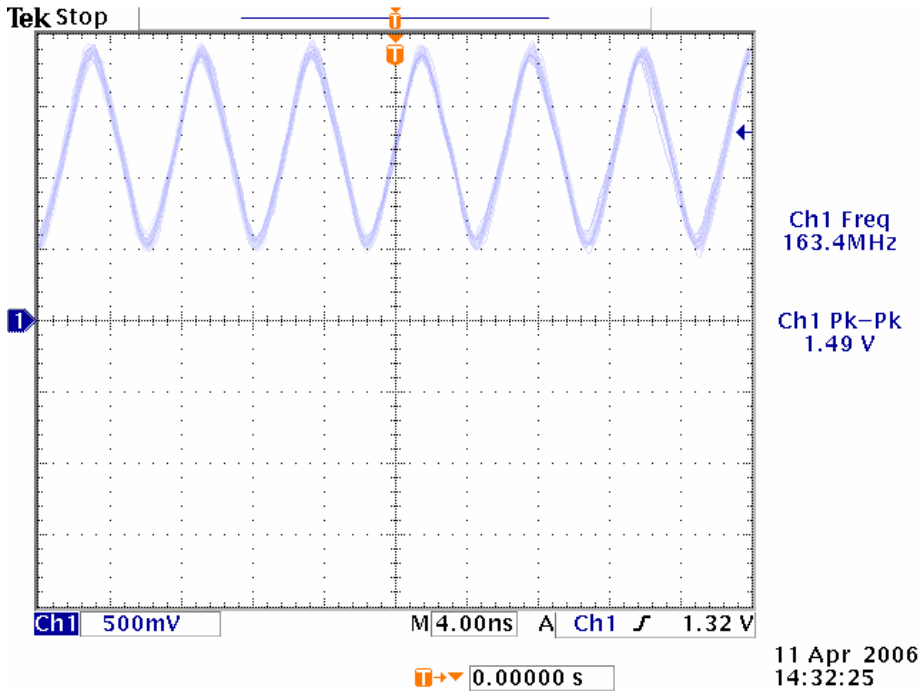
(2) MT5111 Clock Timing (U9 97-XTAL1 / 96-XTAL2) Ch1 – XTAL1 / Ch2 – XTAL2



(3) Memory Clock Timing (U13-45, MEM_CLKA)

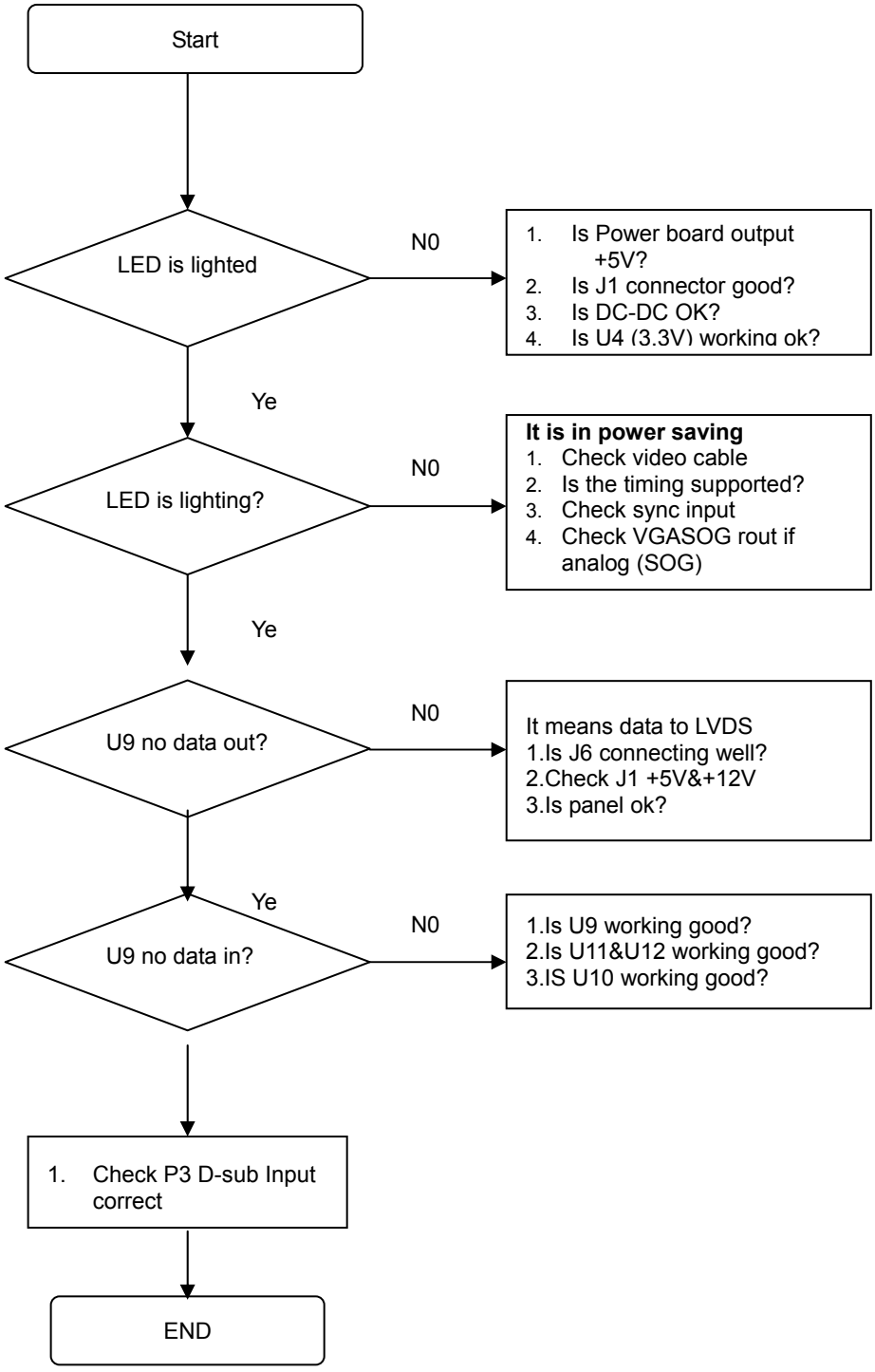


(4) Memory Clock Timing (U12-45, MEM_CLKA)

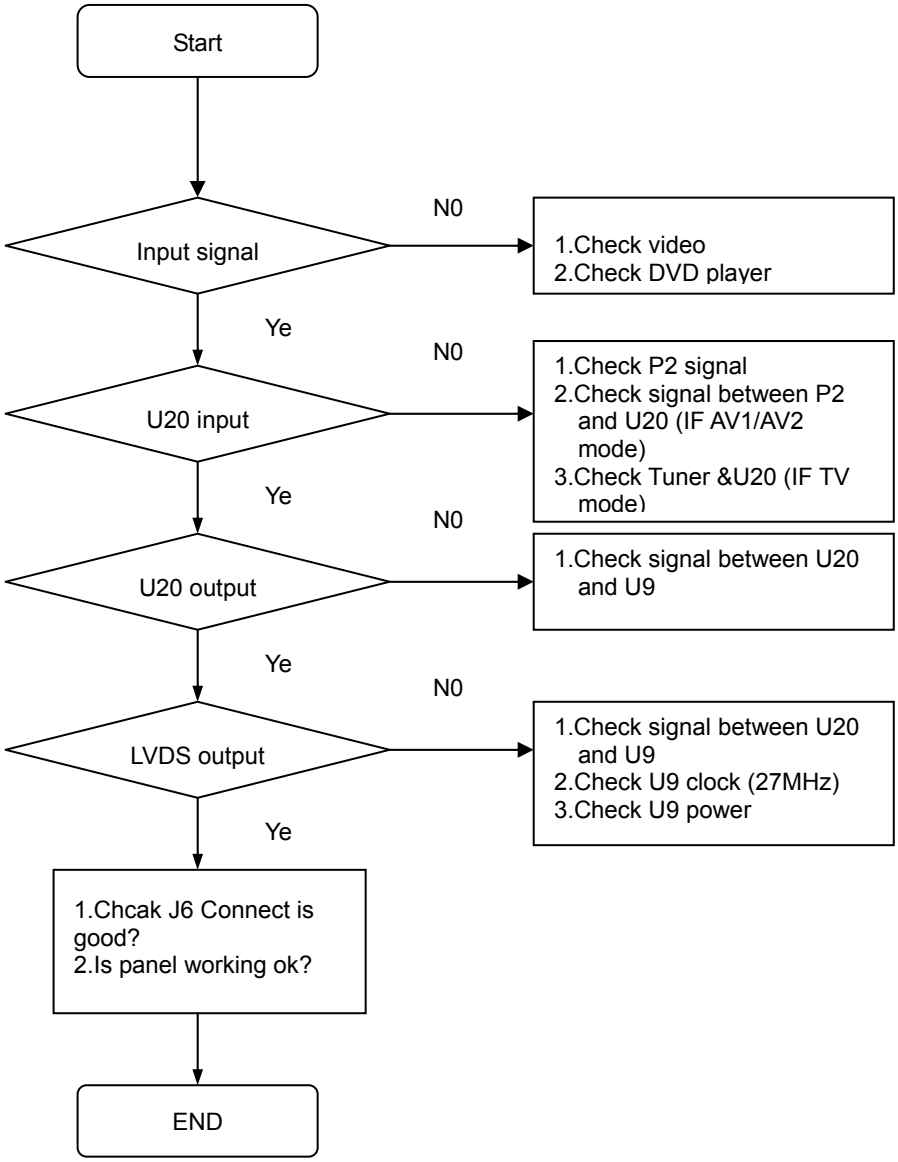


Chapter 10 Trouble shooting

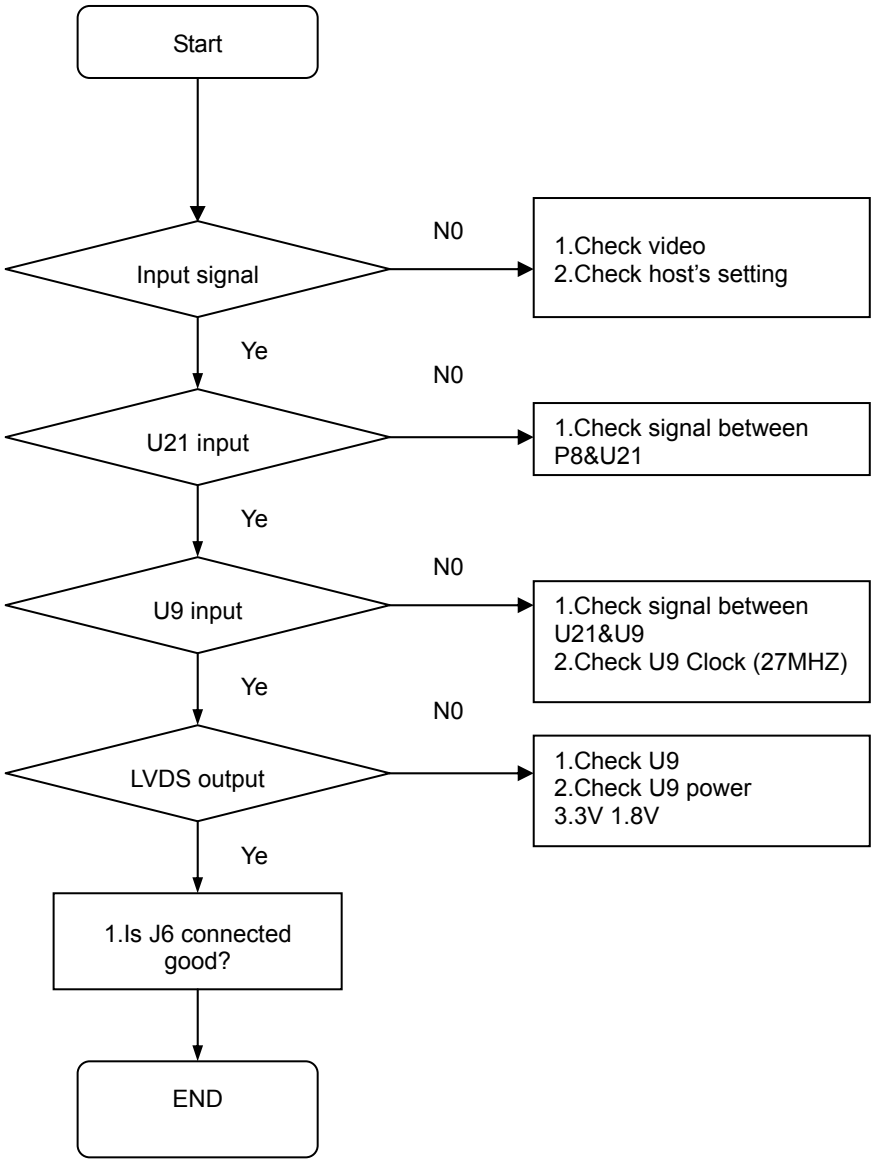
MONITOR DISPLAY NOTHING (PC MODE)



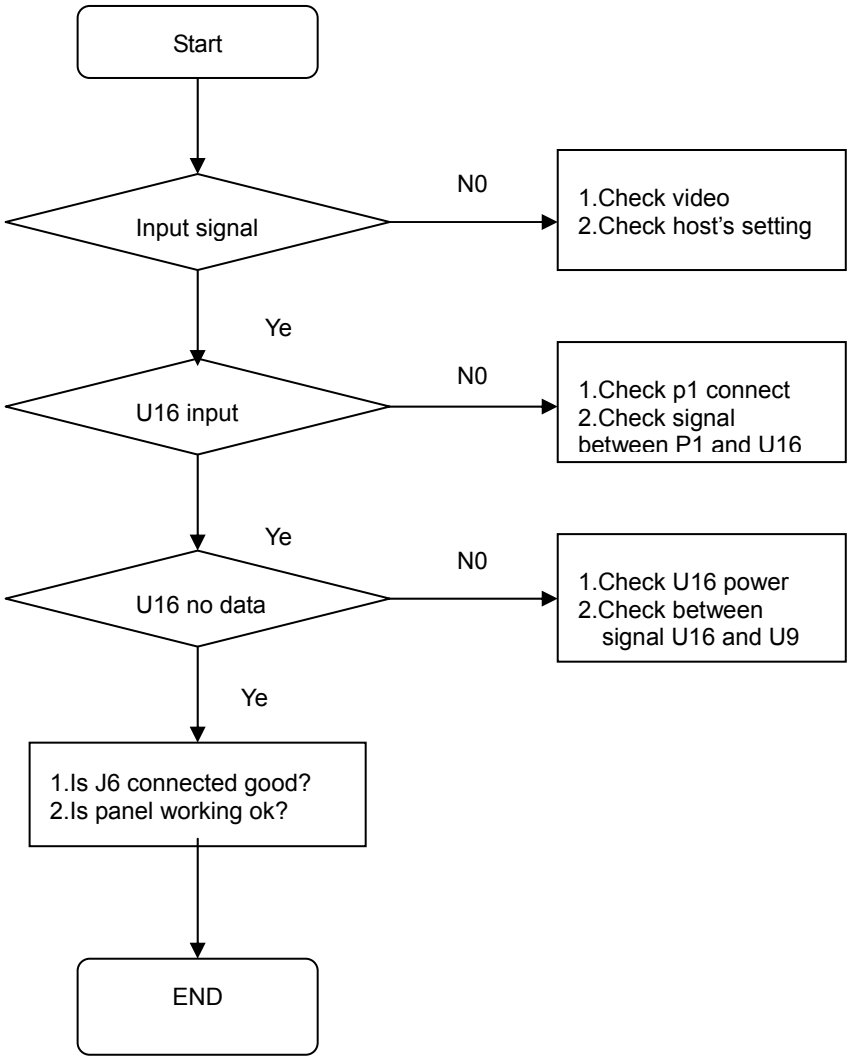
(TV, COMPOSITE VIDEO1, 2, 3, S-VIDEO) IS NOT DISPLAY CORRECTLY



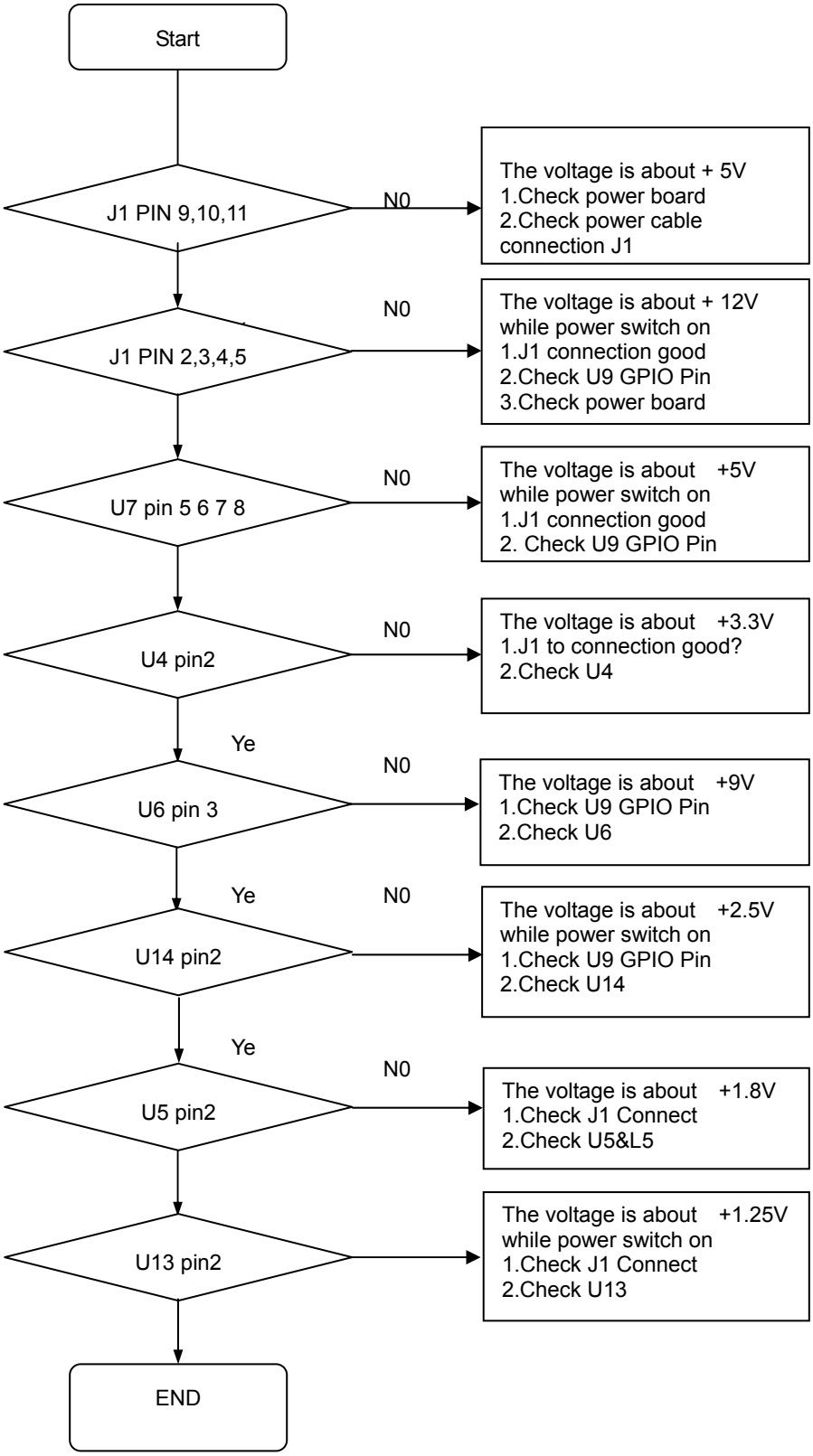
(COMPONENT1, 2) IS NOT DISPLAY CORRECTLY



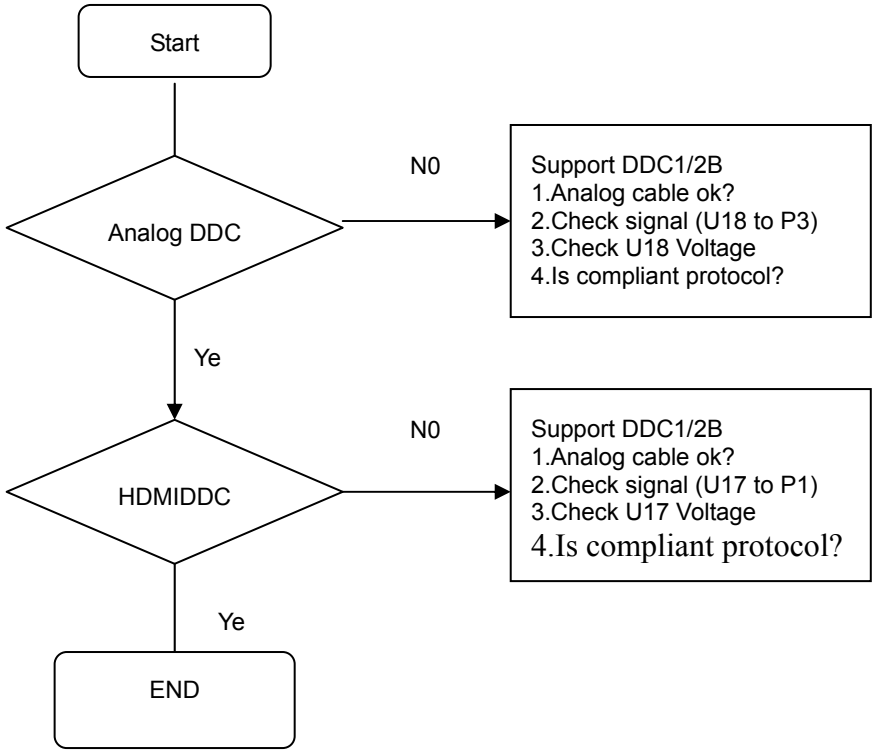
(HDMI) IS NOT DISPLAY CORRECTLY



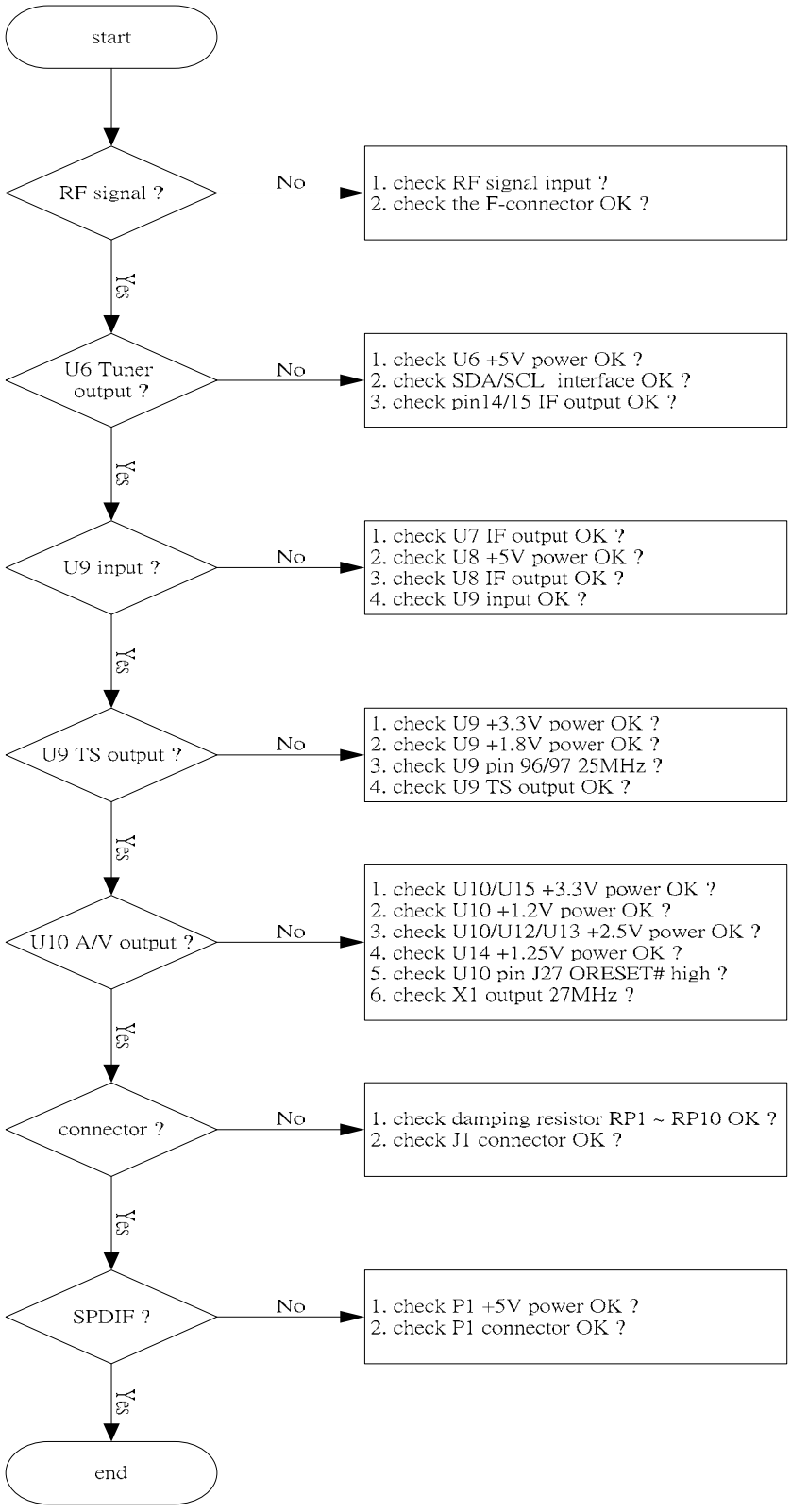
TROUBLE OF DC-DC CONVERTER



TROUBLE OF DDC READING



TROUBLE OF THE DTV



Chapter 11 Spare Parts List

PART NO	DESCRIPTION	LOC	QTY	REMARK
0185-1202-0073	FUSE 125V/2A SMD (R45102) L-F	F3	1	
0185-1302-0073	FUSE 125V/3A SMD (R451003) LF	F5	1	
0303-3000-0010	TV JACK 3/8-32UNEF (RF JACK)	TU1-1	1	
0304-1000-0110	CONN. HDMI 19P 90' SMD With Flange L-F	P1	1	
0320-4000-0142	POWER CORD 110V UL/CSA 1800mm BLK N.M. (VINC)		1	
0321-0000-0411	AV CABLE RCA(Y/W/R) 1800mm BLK (VINC)		1	
0420-1005-4601	POWER MOS IRF7316TRPBF SMD 8PIN LF	U2, U7	2	
0430-3006-0619	IC MM1492AF 44PIN SOP-44B	U20	1	
0430-6002-8079	IC AP1117E25LA SOT-223 L-F	U14	1	
0430-6002-8079	IC AP1117E25LA SOT-223 L-F	U4	1	
0430-6007-5075	IC AME1117CCGTZ 3PIN SOT-223 L-F	U19	1	
0430-6009-1051	IC AMC1117SKF-ADJ SMD 3PIN SOT-223 LF	U5	1	
0430-6009-7051	IC AMC1117-1.8SKFT SMD 3PIN (SOT-223)L-F	U15, U5	2	
0430-6009-7051	IC AMC1117-1.8SKFT SMD 3PIN (SOT-223)L-F	U3	1	
0430-6011-3207	IC L7805CV 3PIN TO-220 LF	U1	1	
0430-6013-4072	IC N2596SG-ADJ 3A 150KHZ TO-263-5L LF	U4	1	
0430-6013-4072	IC N2596SG-ADJ 3A 150KHZ TO-263-5L LF	U2	1	
0430-7027-4999	IC MT8205 388PIN BGA	U9	1	
0430-7035-0999	IC MT5111AE 100PIN LQFP LF	U9	1	
0430-7035-1999	IC MT5351 471PIN BGA LF	U10	1	
0420-2004-8622	MOSFET P-CH 7A 30V FDS4935 SO-8 8PIN L-F	U29	1	
0430-7033-3016	IC ASM809MEURF-T 4.38V SOT23 LF	U26	1	
3842-0042-0156	LCD DISPLAY BD ASS'Y		1	
3842-0072-0146	LCD CONNECTOR BD ASS'Y		1	
3842-0072-0189	LCD IR BD ASS'Y		1	
3842-0122-0150	LCD MAIN BD ASS'Y		1	
3842-0082-0187	VIDEO BOX BD ASS'Y		1	

Chapter 12 Complete Parts List

2842-8500-3053 Plasma TV 42" VIZIO P42HDTV10A_MTK(LG)(ABS,BLACK)

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			3842-0042-0301	PDP BASE ASS'Y PD-42L (HIPS, 877C)	1
2			3842-0082-0303	CHASSIS ASS'Y VIZIO P42	1
3			3842-0082-0312	PDP PACKING ASS'Y VIZIO P42 HDTV10A_MTK	1

3842-0042-0301 PDP BASE ASS'Y PD-42L (HIPS, 877C)

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			1701-0520-2010	BASE COVER (PD-42L)(HIPS, 877C)	1
2			1701-1000-0520	FOOT (PORON)(20mm*15mm*2.0mm)(PD-42L)	8
3			1712-0100-8980	BASE FRAME (PD-42L)(SPGC T=2.5mm)	2
4			1712-0100-8990	BASE PLATE (PD-42L)(SECC T=1.2mm)	1
5			1720-0004-0850	MAC. SCREW-MB M4.0*8.0L, BLK-Ni	16
6			1721-3003-0920	TAP. SCREW-MF M3.0*9.0L, Ni	15
7			1947-1200-3320	NON-WOVEV FABRICS (18mm*18mm*1mm)(PD-42L)	6

3842-0082-0303 CHASSIS ASS'Y VIZIO P42 HDTV10A_MTK(ABS,BLACK)(LG)

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			0213-0420-1161	PDP MODULE 42" PDP42X3 (LG.PHILIPS)	1
2			0335-1006-0350	SPEAKER ASS'Y 6OHM 10W BOX +Wire 670/890mm (P252B)	1
3			0460-1012-0191	WH PH12P-ZH9P+PH4P 20276 927/972mm CORE*2	1
4			0460-1013-0100	WH PH13P-A2543H10P+EI7P 1007#24 280/380mm CORE	1
5			0460-1016-0030	WH PHDR16VS-PHDR16VS 1061#26 100mm	1
6			0460-1105-0090	WH XH5P-PH5P 1007#24 400mm	1
7			0460-1207-0010	WH VHR6P+178125-2 1617#22 400/430mm	1
8			0460-2850-0100	FFC 50P(0.5mm) 105mm	1
9			0460-3430-0690	WH P240430/FI-W31S 300mm	1
10			0500-0502-0160	POWER BD ASS'Y LF	1
11			0950-0000-0010	License: Dolbly-AC3 Two-Channel Dolby Digital Deco	1
12			0950-0000-0020	License: MPEG-LA Consumer Products	1
13			1701-0416-0010	BUTTON (PD-50LM)(PC, BLACK)	1
14			1701-0800-1570	FILTER BRACKET SUPPORT-1 (PD-42L)(PC+ABS, GRAY)	2
15			1701-0800-1580	FILTER BRACKET SUPPORT-2 (PD-42L)(PC+ABS, GRAY)	2
16			1701-0900-1760	PDP Filter 42" FG422NAA-05 (FOR LG_PDP42X3)	1
17			1701-1500-0220	WIRE SADDLE (CH-02)	6
18			1701-1500-0450	WIRE SADDLE (CH-01B)	9
19			1701-1500-0690	WIRE SADDLE (CH-14)	1
20			1701-1500-1080	EDGE SADDLE DS-12 (NYLON)	4
21			1701-1926-1010	SPEAKER NET (PD-42L)(HIPS, 877C)	2
22			1701-1926-2010	SP REAR COVER-R (PD-42L)(HIPS, BLACK)	1
23			1701-1926-3010	SP REAR COVER-L (PD-42L)(HIPS, BLACK)	1
24			1712-0100-4590	HEAT SINK FIX MTEAL (TM-30A)	1
25			1712-0100-8970	REAR COVER (PD-42L)(SPGC T=0.8mm, BLACK)	1
26			1712-0200-0150	FILTER BRACKET HOR BOTTOM (PD-42L)(SPGC T=0.8mm)	1
27			1712-0200-0160	FILTER BRACKET-VER (PD-42L)(SPGC T=0.8mm)	2
28			1712-0200-0190	IO BRACKET (PD-42L)(SPGC T=0.8mm)	1
29			1712-0200-0200	PCB SUPPORT (SPGC T=0.8mm)(PD-42L)	1
30			1712-0200-0270	MAIN FRAME-R (PD-42L)(SPGC T=2.0mm)	1
31			1712-0200-0280	MAIN FRAME-L (PD-42L)(SPGC T=2.0mm)	1
32			1712-0200-0390	FILTER BRACKET HOR TOP (PD-42L)(SPGC T=0.8mm)	1
33			1712-0200-0440	POWER BRACKET(PD-42L)	1
34			1712-0400-0720	HEAT SINK (PD-42S)	1
35			1712-0500-1590	FILTER CLIP (PD-42L)(SPTE T=0.3mm)	6
36			1720-0003-0650	MAC. SCREW-MB M3.0*6.0L,BLK-Ni	15
37			1720-0004-0850	MAC. SCREW-MB M4.0*8.0L, BLK-Ni	20
38			1720-1204-0820	MAC. SCREW-MPGW M4.0*8.0L,Ni	1
39			1720-2003-0620	MAC.SCREW-MR M3.0*6.0L,Ni	64
40			1720-2505-1020	MAC. SCREW-MR M5.0*10L, Ni	4
41			1720-7344-0820	MAC. SCREW-MHSW #4-40*8.0L,Ni	2
42			1721-0003-0650	TAP. SCREW-TB #3.0*6.0L,BLK-Ni	11
43			1721-0003-1050	TAP. SCREW-TB #3*10.0L, BLK-Ni	20

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
44			1721-0004-1250	TAP. SCREW-TP #4.0*12.0L, BLK-Ni	22
45			1721-2103-1050	TAP. SCREW-TRFW #3.0*10.0L,BLK-NI	4
46			1721-2305-1220	SCREW BBC #5.0*12.0L, Ni	2
47			1721-4103-0820	TAP. SCREW-TRF #3.0*8.0L,Ni	6
48			1801-0120-8010	FRONT BEZEL (PD-42L)(ABS, BLACK) ASS'Y	1
49			1947-1200-0310	ACETATE CLOTH TAPE (醋酸布膠帶) 27*75mm	6
50			1947-1200-0400	ACETATE CLOTH TAPE (醋酸布膠帶) 20*45mm	3
51			1947-1500-2410	PANEL CUSHION (LENGTH = 950mm)(PD-42L)	2
52			1947-1500-2420	PANEL CUSHION (LENGTH = 550mm)(PD-42L)	2
53			1947-1800-0290	GASKET BLOCK (12L*10W*1.5Hmm) HOLE 6 φ	1
54			1947-1800-0320	GASKET BLOCK (2.0T*4.0W*22L)	1
55			1947-1800-0370	GASKET BLOCK (5.5H*10.0W*30.0Lmm)	1
56			1947-1800-0390	GASKET BLOCK (6W*1H*80Lmm)	3
57			1947-1800-0960	Conductive Fabric Tape L584*W39(PD42FB)	2
58			1947-1800-0970	Conductive Fabric Tape L982*W39(PD42FB)	2
59			1947-1800-0980	Gasket Block L50*W17*H25(PD42FB)	2
60			1947-1800-0990	Gasket Block L576*W8*H2mm(PD-42L)	1
61			1947-1800-1000	Gasket Block (35.0L*21.0W*17.0H)	1
62			1947-1900-0030	HEATPATH (25x14mm)	1
63			3842-0042-0156	DISPLAY BD ASS'Y d4237(PD-42FBU)	1
64			3842-0072-0146	CONNECTOR BD ASS'Y (PD-42LK)	1
65			3842-0072-0189	PDP IR BD ASS'Y (PD-42LK)	1
66			3842-0082-0187	VIDEO BOX BD ASS'Y (PD-42LK)	1
67			3842-0122-0150	PDP MAIN BD ASS'Y (PD-42LK)	1

3842-0082-0312 PDP PACKING ASS'Y VIZIO P42 HDTV10A_MTK

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			1701-0800-1820	REAR PLATE L VIZIO P42 HDTV10A(MTK)	1
2			1701-0800-1830	REAR PLATE_R VIZIO P42 HDTV10A(MTK)	1
3			1925-1000-2720	EPE FORM-R (PD-42L)	1
4			1925-1000-2730	EPE FORM-L (PD-42L)	1
5			1925-1000-2900	TOP CUSHION-L (PD-42L)	1
6			1925-1000-2910	TOP CUSHION-R (PD-42L)	1
7			1925-1100-2080	PE BAG (PD-42L)(1280*1200*0.5)	1
8			1925-1200-8270	CUSHION (PD-42L)	1
9			1925-1200-8310	CARTON BOTTOM (PD-42L)	1
10			1925-1200-8370	CARTON VIZIO P42 HDTV10A	1
11			1925-1900-0610	CARTON JOINT (TM-32V)	4
12			1936-1100-8110	B/C LBL VIZIO P42 HDTV10A	1
13			3842-0052-0393	PDP ACCESSORY ASS'Y VIZIO P42 HDTV10A	1

3842-0042-0156 DISPLAY BD ASS'Y d4237(PD-42FBU)

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			0171-1770-1590	PCB DISPLAY BD FR4 180*17*1.6t S (PD-42FBU)	1
2		J1	0451-1500-0963	WAFER 1.5mm 9P 90' KINK (A1501WR0-9P) L-F	1
3		SWD1	0220-7020-0965	SW TACT 6*6mm 180' 160g SFKHHAM2520	1
4	SS		0220-7020-0981	SW TACT 6*6mm 180' 160g TSAB-2	
5		SWD2	0220-7020-0965	SW TACT 6*6mm 180' 160g SFKHHAM2520	1
6	SS		0220-7020-0981	SW TACT 6*6mm 180' 160g TSAB-2	
7		SWD3	0220-7020-0965	SW TACT 6*6mm 180' 160g SFKHHAM2520	1
8	SS		0220-7020-0981	SW TACT 6*6mm 180' 160g TSAB-2	
9		SWD4	0220-7020-0965	SW TACT 6*6mm 180' 160g SFKHHAM2520	1
10	SS		0220-7020-0981	SW TACT 6*6mm 180' 160g TSAB-2	
11		SWD5	0220-7020-0965	SW TACT 6*6mm 180' 160g SFKHHAM2520	1
12	SS		0220-7020-0981	SW TACT 6*6mm 180' 160g TSAB-2	
13		SWD6	0220-7020-0965	SW TACT 6*6mm 180' 160g SFKHHAM2520	1
14	SS		0220-7020-0981	SW TACT 6*6mm 180' 160g TSAB-2	
15		SWD7	0220-7020-0965	SW TACT 6*6mm 180' 160g SFKHHAM2520	1
16	SS		0220-7020-0981	SW TACT 6*6mm 180' 160g TSAB-2	
17		ZD1	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
18		ZD2	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
19		ZD3	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
20		ZD4	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
21		ZD5	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
22		ZD6	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
23		ZD7	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1

3842-0052-0393 PDP ACCESSORY ASS'Y VIZIO P42 HDTV10A

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			0320-4000-0142	POWER CORD 110V UL/CSA 1800mm BLK N.M. (VINC)	1
2			0321-0000-0411	AV CABLE RCA(Y/W/R) 1800mm BLK (VINC)	1
3			0602-3000-0020	Battery Zn-Carbon 1.5V AA	2
4			0980-0303-5020	REMOTE CONTROL 66700BA0-010	1
5			1925-1100-0230	PE BAG 320*230*0.04T	1
6			1925-1100-0280	PE BAG (180W*290L*0.04t)(PE-LD)(ACC.-1)	1
7			1925-1300-7080	Brochure VIZIO Series	1
8			1925-1300-7190	MANUAL VIZIO P42 HDTV10A	1
9			1925-1300-7200	Quick Setup Guide VIZIO P42 HDTV10A	1
10			1925-1400-2710	Register CARD/VIZIO L15	1
11			1925-2000-0030	Polishing Cloth VIZIO P42 HDTV10A	1

3842-0072-0146 CONNECTOR BD ASS'Y (PD-42LK)

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			0171-3871-0092	PCB CONNECTOR BD FR4 82*27*1.6t D (PD-42FB)	1
2		C5	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
3		C6	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
4		D1	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
5		D2	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
6		D3	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
7		D4	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
8		D5	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
9		D6	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
10		D7	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
11		J1	0451-2006-1603	WAFER 2.0mm 2*8P 180' (A2006WV0-2x8P) L-F	1
12		J2	0300-3041-0090	S-VIDEO 4PIN 90' (2MJ-0602-005) L-F	1
13		J3	0302-0350-0011	PHONE JACK 3.5 φ 5PIN 90 ° +SHIELDING	1
14		J4	0302-9030-0014	RCA JACK 1ROW 3I/O (Y-W-R)	1
15		L2	0370-0000-8673	CHIP BEAD CORE 80ohm (MCB1608H800G)	1
16		L8	0370-0000-8673	CHIP BEAD CORE 80ohm (MCB1608H800G)	1
17		R1	0130-2208-1654	RES. CF 2.2 ohm 1/16W J 0402	1
18		R2	0130-2208-1654	RES. CF 2.2 ohm 1/16W J 0402	1

3842-0072-0189 PDP IR BD ASS'Y (PD-42LK)

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			384200720189M	PDP IR BD ASS'Y (PD-42LK) MI	1
2			384200720189S	PDP IR BD ASS'Y (PD-42LK) SMD	1

3842-0082-0187 VIDEO BOX BD ASS'Y (PD-42LK)

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			384200820187A	VIDEO BOX BD ASS'Y (PD-42LK) AI	1
2			384200820187M	VIDEO BOX BD ASS'Y (PD-42LK) MI	1
3			384200820187S	VIDEO BOX BD ASS'Y (PD-42LK) SMD	1

3842-0122-0150 PDP MAIN BD ASS'Y (PD-42LK)

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			384201220150A	PDP MAIN BD ASS'Y (PD-42LK) AI	1
2			384201220150M	PDP MAIN BD ASS'Y (PD-42LK) MI	1
3			384201220150S	PDP MAIN BD ASS'Y (PD-42LK) SMD	1

3842-0072-0189M PDP IR BD ASS'Y (PD-42LK) MI

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1		DR1	0440-5000-0150	LED L-3WYGW/T-F01 3 @ L-F	1
2		DR1H	1701-1500-0510	LED HOLDER 3PIN/LED QLE-6	1
3		UR1	0980-0200-2130	MODULE. IR RECEIVER (FM-6038LM-5AN)	1
4		UR1S	1701-1500-0360	IR HOLDER (TM-15A)	1
5		WR1	0451-2000-0466	WAFER 2.0mm 4P 90' DIP KINK (M24264R) L-F	1

3842-0072-0189S PDP IR BD ASS'Y (PD-42LK) SMD

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			0171-1671-0441	PCB IR BD FR4 120*190mm 1.6t D(P42FB)(1:20)	1
2		CR1	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
3		CR2	0111-3106-1614	C/M Multi. 10uF 16V X7R K 1206	1
4	SS		0112-3106-1614	C/M MULTI 10uF 16V X7R 1206	
5		CR3	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
6		LR1	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
7		QR1	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
8	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
9	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
10	SS		0410-5000-5612	TRANSISTOR SST3904FTE25 SOT-23 L-F	
11	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
12		QR2	0410-5000-5710	TRANSISTOR MMBT3906LT1G SOT-23 L-F	1
13	SS		0410-5000-5704	TRANSISTOR MMBT3906 SMD (SOT-23) LF	
14	SS		0410-5000-5711	TRANSISTOR PMBS3906 SMD LF	
15		RR1	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
16		RR2	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
17		RR4	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
18		RR5	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
19		RR6	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
20		RR7	0130-3301-1654	RES. CF 3.3Kohm 1/16W J 0402	1
21		RR8	0130-3301-1654	RES. CF 3.3Kohm 1/16W J 0402	1
22		RR9	0130-3301-1654	RES. CF 3.3Kohm 1/16W J 0402	1
23		ZDR1	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
24		ZDR2	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
25		ZDR3	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
26		ZDR4	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1

3842-0082187A VIDEO BOX BD ASS'Y (PD-42LK) AI

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1		C111	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
2		C122	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
3		C135	0103-1479-1511	E/C VT 4.7uF 50V 105'C F-T (5*11mm)	1
4		C140	0103-1479-1511	E/C VT 4.7uF 50V 105'C F-T (5*11mm)	1
5		C148	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
6		C150	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
7		C164	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
8		C17	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
9		C185	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
10		C19	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
11		C2	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
12		C20	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
13		C239	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
14		C26	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
15		C4	0103-6101-1311	E/C HF 100uF 25V 105'C F-T (6.3*11mm)	1
16	SS		0102-2101-1370	E/C L-L 100uF 25V 105'C NF-T 6.3*11 (KY LF)	
17		C5	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
18		C74	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
19		C8	0103-6101-1311	E/C HF 100uF 25V 105'C F-T (6.3*11mm)	1
20	SS		0102-2101-1370	E/C L-L 100uF 25V 105'C NF-T 6.3*11 (KY LF)	
21		C82	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
22		C99	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1

3842-0082-0187M VIDEO BOX BD ASS'Y (PD-42LK) MI

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1		C11	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
2		C12	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
3		C13	0103-6102-1212	E/C HF 1000uF 16V 105'C F (10*20)	1
4	SS		0103-6102-1210	E/C HF 1000uF 16V 105'C N-F (10*20)	
5		C18	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
6		C207	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
7		C25	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
8		C29	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
9		C34	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
10		C64	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
11		D1	0390-6006-6272	SCHOTTKY DIODE 5A 40V SB540 DIP T LF	1
12		J2	0451-2500-0543	WAFER 2.50mm 5P 90' KINK (A2501WR2-5P) L-F	1
13		L1	0370-0000-1011	FERRITE CORE RH 3.5X6X1.0(W)X2 L-F	1
14		L2	0370-0000-1011	FERRITE CORE RH 3.5X6X1.0(W)X2 L-F	1
15		L5	0360-1000-0151	COIL CHOKE 70uH 3A LF	1
16		P1	0300-6400-0030	OPTO CONN. Transmitter W/O Screw Hole L-F	1
17		U1	0430-6011-3207	IC L7805CV 3PIN TO-220 LF	1
18		U6	0980-0103-0010	MODULE TUNER TD1336O/FGHP L-F	1
19		U7	0370-0020-0510	BANDPASS FILTER 44MHZ (B39440-X6965-N201) 5PIN DIP	1
20		Y1	0280-2500-0012	X'TAL 25MHZ 49/US 30PPM 20PF LF	1

3842-0082-0187S VIDEO BOX BD ASS'Y (PD-42LK) SMD

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			3842008201878	VIDEO BOX BD ASS'Y (PD-42LK) SMD BOT	1
2			3842008201871	VIDEO BOX BD ASS'Y (PD-42LK) SMD TOP	1

3842-0122-0150A PDP MAIN BD ASS'Y (PD-42LK) AI

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1		CA4	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
2	SS		0103-1220-1511	E/C VT 22uF 50V 105'C F-T (5*11mm)	
3		CA6	0103-1471-1211	E/C VZ 470uF 16V 105'C F-T (8*11.5mm)	1
4		CA7	0103-1471-1211	E/C VZ 470uF 16V 105'C F-T (8*11.5mm)	1
5		CE1	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
6		CE11	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
7		CE110	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
8		CE111	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
9		CE12	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
10		CE13	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
11		CE17	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
12	SS		0103-1220-1511	E/C VT 22uF 50V 105'C F-T (5*11mm)	
13		CE18	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
14		CE2	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
15		CE20	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
16		CE21	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
17		CE22	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
18		CE23	0103-1471-1211	E/C VZ 470uF 16V 105'C F-T (8*11.5mm)	1
19		CE25	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
20		CE27	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
21	SS		0103-1220-1511	E/C VT 22uF 50V 105'C F-T (5*11mm)	
22		CE28	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
23		CE29	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
24	SS		0103-1220-1511	E/C VT 22uF 50V 105'C F-T (5*11mm)	
25		CE3	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
26		CE30	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
27		CE31	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
28		CE32	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
29		CE33	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
30		CE34	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
31		CE35	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
32		CE36	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
33		CE38	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
34		CE39	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
35		CE4	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
36		CE41	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
37		CE42	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
38		CE43	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
39		CE44	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
40		CE45	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
41		CE46	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
42		CE47	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
43		CE48	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
44		CE49	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
45		CE5	0103-1229-1511	E/C VT 2.2uF 50V 105'C F-T (5*11mm)	1
46		CE50	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
47		CE51	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
48		CE52	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
49		CE53	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
50		CE54	0103-1229-1511	E/C VT 2.2uF 50V 105'C F-T (5*11mm)	1
51		CE55	0103-1229-1511	E/C VT 2.2uF 50V 105'C F-T (5*11mm)	1
52		CE56	0103-1229-1511	E/C VT 2.2uF 50V 105'C F-T (5*11mm)	1
53		CE57	0103-1229-1511	E/C VT 2.2uF 50V 105'C F-T (5*11mm)	1
54		CE58	0103-1229-1511	E/C VT 2.2uF 50V 105'C F-T (5*11mm)	1
55		CE59	0103-1229-1511	E/C VT 2.2uF 50V 105'C F-T (5*11mm)	1
56		CE60	0103-1229-1511	E/C VT 2.2uF 50V 105'C F-T (5*11mm)	1
57		CE61	0103-1229-1511	E/C VT 2.2uF 50V 105'C F-T (5*11mm)	1
58		CE62	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
59	SS		0103-1220-1511	E/C VT 22uF 50V 105'C F-T (5*11mm)	
60		CE63	0103-1229-1511	E/C VT 2.2uF 50V 105'C F-T (5*11mm)	1
61		CE64	0103-1229-1511	E/C VT 2.2uF 50V 105'C F-T (5*11mm)	1
62		CE65	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
63	SS		0103-1220-1511	E/C VT 22uF 50V 105'C F-T (5*11mm)	
64		CE66	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
65	SS		0103-1220-1511	E/C VT 22uF 50V 105'C F-T (5*11mm)	
66		CE67	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
67	SS		0103-1220-1511	E/C VT 22uF 50V 105'C F-T (5*11mm)	
68		CE68	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
69	SS		0103-1220-1511	E/C VT 22uF 50V 105'C F-T (5*11mm)	
70		CE69	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
71	SS		0103-1220-1511	E/C VT 22uF 50V 105'C F-T (5*11mm)	
72		CE70	0103-1220-1211	E/C VT 22uF 16V 105'C F-T (5*11mm)	1
73	SS		0103-1220-1511	E/C VT 22uF 50V 105'C F-T (5*11mm)	
74		CE71	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
75		CE76	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
76		CE77	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
77		CE78	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
78		CE79	0103-1470-1211	E/C VT 47uF 16V 105'C F-T (5*11mm)	1
79		CE8	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
80		CE80	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
81		CE81	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
82		CE82	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
83		CE83	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
84		CE85	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
85		CE86	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
86		CE87	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
87		CE88	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
88		CE89	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
89		CE9	0103-6221-1311	E/C HF 220uF 25V 105'C F-T (8*11.5mm)	1
90		CE90	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
91		CE91	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
92		CE92	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
93		CE93	0103-1221-1211	E/C VZ 220uF 16V 105'C F-T (6.3*11mm)	1
94		CE94	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
95		CE95	0103-1100-1511	E/C VT 10uF 50V 105'C F-T (5*11mm)	1
96		CE97	0103-1101-1211	E/C VZ 100uF 16V 105'C F-T (5*11mm)	1
97		L15	0370-0000-1011	FERRITE CORE RH 3.5X6X1.0(W)X2 L-F	1
98		L19	0370-0000-1011	FERRITE CORE RH 3.5X6X1.0(W)X2 L-F	1
99		L20	0370-0000-1011	FERRITE CORE RH 3.5X6X1.0(W)X2 L-F	1
100		L22	0370-0000-1011	FERRITE CORE RH 3.5X6X1.0(W)X2 L-F	1
101		L23	0370-0000-1011	FERRITE CORE RH 3.5X6X1.0(W)X2 L-F	1

3842-0122-0150M PDP MAIN BD ASS'Y (PD-42LK) MI

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1		CA2	0103-1102-1216	E/C VZ 1000uF 16V 105'C F (10*12.5)	1
2		CE10	0103-6102-1212	E/C HF 1000uF 16V 105'C F (10*20)	1
3	SS		0103-6102-1210	E/C HF 1000uF 16V 105'C N-F (10*20)	
4		D2	0390-6006-6272	SCHOTTKY DIODE 5A 40V SB540 DIP T LF	1
5		J1	0451-2000-1366	WAFER 2.0mm 13P 90' DIP KINK (M242613R) L-F	1
6	SS		0451-2003-1363	WAFER 2.00mm 13P 90' KINK (A2001WR2-13P) L-F	
7		J3	0451-2006-1603	WAFER 2.0mm 2*8P 180' (A2006WV0-2x8P) L-F	1
8		J5	0451-2500-0446	WAFER 2.5mm 4P 90' DIP KINK (M241854R) L-F	1
9	SS		0451-2500-0443	WAFER 2.50mm 4P 90' KINK (A2501WR2-4P) L-F	
10		J7	0451-2000-1266	WAFER 2.0mm 12P 90' DIP KINK (M242612R) L-F	1
11	SS		0451-2003-1263	WAFER 2.00mm 12P 90' KINK (A2001WR2-12P) L-F	
12		J8	0451-2000-0566	WAFER 2.0mm 5P 90' DIP KINK (M24265R) L-F	1
13	SS		0451-2003-0563	WAFER 2.00mm 5P 90' KINK (A2001WR2-5P) L-F	
14		J9	0451-2000-0766	WAFER 2.0mm 7P 90' DIP KINK (M24267R) L-F	1
15	SS		0451-2003-0763	WAFER 2.00mm 7P 90' KINK (A2001WR2-7P) L-F	
16		L2	0361-2047-0020	COIL CHOKE 47UH 1.6A 11*14 DIP	1
17		L4	0360-1000-0151	COIL CHOKE 70uH 3A LF	1
18		P10	0302-9040-0010	RCA JACK 2ROW 4I/O 90' (W-R) L-F	1
19		P11	0202-6000-0003	RJ11 6P6C Gray UNDER CONTACT L-F	1
20		P2	0302-9030-0037	RCA JACK 2ROW 3I/O (Y-W-R)	1
21		P3	0300-1205-3150	D-SUB FEMALE 90' 15P 3ROW (DV11201-P33-4F) L-F	1
22		P5	0302-0350-0012	PHONE JACK 3.5 φ 5P 90' +SHIELD L-F	1
23		P7	0302-9020-0014	RCA JACK 2ROW 2I/O (W-R)	1
24		P8	0302-9060-0020	RCA JACK 2ROW 6I/O (G-B-R)	1
25		P9	0302-9020-0014	RCA JACK 2ROW 2I/O (W-R)	1
26		SW1	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1
27		TU1	0980-0102-3010	MODULE TUNER (FQ1236/PH-5)	1
28		TU1-1	0303-3000-0011	TV JACK RCA(MALE) TO F (FEMALE) 180' L-F	1
29		UA1	0430-4013-3109	IC TDA8946AJ 17PIN DIP LF	1
30		U6	0430-6011-2235	IC KA7809 TO-220 3PIN LF	1
31		Y1	0280-2700-0012	X'TAL 27MHZ 49/US 30PPM 20PF 40ohm	1
32		Y2	0280-2820-0112	X'TAL 28.224MHZ 49US 30PPM 12PF	1

3842-0122-0150S PDP MAIN BD ASS'Y (PD-42LK) SMD

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			384201220150B	PDP MAIN BD ASS'Y (PD-42LK) SMD BOT	1
2			384201220150T	PDP MAIN BD ASS'Y (PD-42LK) SMD TOP	1

3842-0082-0187B VIDEO BOX BD ASS'Y (PD-42LK) SMD BOT

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1		C100	0111-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	1
2	SS		0112-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	
3		C101	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
4	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
5		C102	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
6	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
7		C103	0111-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	1
8	SS		0112-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	
9		C104	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
10	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
11		C105	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
12	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
13		C106	0111-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	1
14	SS		0112-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	
15		C107	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
16	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
17		C108	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
18	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
19		C109	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
20	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
21		C110	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
22	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
23		C112	0111-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	1
24	SS		0112-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	
25		C113	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
26	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
27		C114	0111-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	1
28	SS		0112-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	
29		C115	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
30	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
31		C116	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
32	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
33		C117	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
34	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
35		C118	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
36	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
37		C119	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
38	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
39		C120	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
40	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
41		C121	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
42	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
43		C123	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
44	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
45		C124	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
46	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
47		C125	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
48	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
49		C126	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
50	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
51		C127	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
52	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
53		C128	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
54	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
55		C129	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
56	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
57		C130	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
58	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
59		C131	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
60	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
61		C132	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
62	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
63		C133	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
64	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
65		C134	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
66	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
67		C136	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
68	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
69		C137	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
70	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
71		C139	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
72	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
73		C14	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
74	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
75		C142	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
76	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
77		C143	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
78	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
79		C144	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
80	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
81		C145	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
82	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
83		C146	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
84	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
85		C147	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
86	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
87		C15	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
88	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
89		C158	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
90	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
91		C160	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
92	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
93		C161	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
94	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
95		C162	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
96	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
97		C163	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
98	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
99		C165	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
100	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
101		C166	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
102	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
103		C167	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
104	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
105		C168	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
106	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
107		C169	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
108	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
109		C170	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
110	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
111		C171	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
112	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
113		C172	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
114	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
115		C173	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
116	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
117		C174	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
118	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
119		C175	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
120	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
121		C176	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
122	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
123		C177	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
124	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
125		C178	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
126	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
127		C179	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
128	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
129		C180	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
130	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
131		C181	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
132	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
133		C182	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
134	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
135		C183	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
136	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
137		C184	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
138	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
139		C186	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
140	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
141		C187	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
142	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
143		C188	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
144	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
145		C189	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
146	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
147		C190	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
148	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
149		C191	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
150	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
151		C192	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
152	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
153		C193	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
154	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
155		C194	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
156	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
157		C195	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
158	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
159		C198	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
160	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
161		C199	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
162	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
163		C200	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
164	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
165		C201	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
166	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
167		C202	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
168	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
169		C203	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
170	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
171		C205	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
172	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
173		C208	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
174	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
175		C209	0111-3100-5107	C/M Multi. 10PF 50V NPO J 0402	1
176	SS		0112-3100-5107	C/M Multi. 10PF 50V NPO 0402	
177		C22	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
178	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
179		C237	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
180	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
181		C27	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
182	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
183		C30	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
184	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
185		C35	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
186	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
187		C57	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
188	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
189		C61	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
190	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
191		C65	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
192	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
193		C66	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
194	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
195		C67	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
196	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
197		C68	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
198	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
199		C69	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
200	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
201		C70	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
202	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
203		C71	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
204	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
205		C72	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
206	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
207		C73	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
208	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
209		C75	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
210	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
211		C76	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
212	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
213		C77	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
214	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
215		C78	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
216	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
217		C79	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
218	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
219		C80	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
220	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
221		C81	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
222	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
223		C83	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
224	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
225		C84	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
226	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
227		C85	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
228	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
229		C86	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
230	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
231		C87	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
232	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
233		C88	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
234	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
235		C89	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
236	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
237		C9	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
238	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
239		C90	0111-3562-5117	C/M Multi. 5600PF 50V X7R K 0402	1
240	SS		0112-3562-5117	C/M Multi. 5600PF 50V X7R K 0402	
241		C93	0111-3152-5117	C/M Multi. 1500PF 50V X7R 0402	1
242		C94	0111-3152-5117	C/M Multi. 1500PF 50V X7R 0402	1
243		FB3	0371-6880-0482	CHIP COIL 0.68uH 300mA 0805 (GL201209TR68KTM) LF	1
244		RP15	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
245		RP19	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
246		RP23	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
247		RP30	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
248		RP31	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
249		R115	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
250		R46	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
251		R48	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
252		R58	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
253		R60	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
254		R61	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
255		R62	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
256		R66	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
257		R75	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
258		R76	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
259		R77	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
260		R78	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
261		R79	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
262		R80	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
263		R85	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
264		R88	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
265		U18	0430-3009-6065	IC IDTQS3VH257QG 3.3V QSOP 16PIN (Green Parts)	1

3842-0082-0187T VIDEO BOX BD ASS'Y (PD-42LK) SMD TOP

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			0171-1472-0320	PCB VIDEO BOX BD FR4 140*140*1.6t 4M (L37 HDTV ATSC)	1
2		C138	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
3	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
4		C141	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
5	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
6		C149	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
7	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
8		C151	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
9	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
10		C152	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
11	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
12		C153	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
13	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
14		C154	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
15	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
16		C155	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
17	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
18		C156	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
19	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
20		C157	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
21	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
22		C159	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
23	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
24		C16	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
25	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
26		C196	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
27	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
28		C197	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
29	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
30		C204	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
31	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
32		C21	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
33	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
34		C23	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
35	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
36		C24	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
37	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
38		C241	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
39	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
40		C28	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
41	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
42		C3	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
43	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
44		C31	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
45		C32	0111-3102-2517	C/M Multi. 1000PF 25V X7R K 0402	1
46		C33	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
47	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
48		C36	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
49	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
50		C39	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
51	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
52		C40	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
53		C52	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
54	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
55		C53	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
56	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
57		C54	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
58	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
59		C56	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
60	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
61		C58	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
62	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
63		C59	0111-3106-6055	C/M MULTI 10UF 6.3V X5R 0805	1
64	SS		0112-3106-6055	C/M MULTI 10UF 6.3V X5R 0805	
65		C6	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
66	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
67		C60	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
68	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
69		C62	0111-3180-5107	C/M Multi. 18PF 50V NPO 0402	1
70	SS		0112-3180-5107	C/M Multi. 18PF 50V NPO 0402	
71		C63	0111-3180-5107	C/M Multi. 18PF 50V NPO 0402	1
72	SS		0112-3180-5107	C/M Multi. 18PF 50V NPO 0402	
73		C7	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
74	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
75		C95	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
76	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
77		C96	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
78		C97	0111-3102-2517	C/M Multi. 1000PF 25V X7R K 0402	1
79		C98	0111-3470-5107	C/M Multi. 47pF 50V NPO 0402	1
80	SS		0112-3470-5107	C/M Multi. 47PF 50V NPO J 0402	
81		FB1	0371-6880-0482	CHIP COIL 0.68uH 300mA 0805 (GL201209TR68KTM) LF	1
82		FB2	0371-6880-0482	CHIP COIL 0.68uH 300mA 0805 (GL201209TR68KTM) LF	1
83		FB4	0371-6880-0482	CHIP COIL 0.68uH 300mA 0805 (GL201209TR68KTM) LF	1
84		F1	0185-1302-0073	FUSE 125V/3A SMD (R451003) LF	1
85		J1	0303-1007-0504	CONN. B TO FPC FH12-50S-0.5SH(55) LF 50PIN	1
86	SS		0303-1007-0507	CONN. B TO FPC 0.5mm 50P 90' SMD (AF7501-N2G1Z) L-F	
87		L10	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
88		L11	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
89		L12	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
90		L20	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
91		L21	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
92		L22	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
93		L23	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
94		L24	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
95		L25	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
96		L26	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
97		L27	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
98		L35	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
99		L36	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
100		L4	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
101		L7	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
102		L8	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
103		L9	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
104		RP1	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
105		RP10	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
106		RP11	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
107		RP12	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
108		RP13	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
109		RP14	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
110		RP16	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
111		RP17	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
112		RP18	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
113		RP20	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
114		RP21	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
115		RP22	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
116		RP24	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
117		RP25	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
118		RP26	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
119		RP27	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
120		RP28	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
121		RP29	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
122		RP3	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
123		RP32	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
124		RP33	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
125		RP34	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
126		RP35	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
127		RP36	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
128		RP37	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
129		RP4	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
130		RP5	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
131		RP6	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
132		RP7	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
133		RP8	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
134		RP9	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
135		R1	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
136		R10	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
137		R100	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
138		R101	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
139		R11	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
140		R117	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
141		R12	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
142		R13	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
143		R14	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
144		R17	0131-5110-1614	RES. MF 511 ohm 1/16W F 0402	1
145		R18	0131-5110-1614	RES. MF 511 ohm 1/16W F 0402	1
146		R2	0130-5600-1654	RES. CF 560ohm 1/16W J 0402	1
147		R20	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
148		R29	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
149		R3	0130-3300-1654	RES. CF 330ohm 1/16W J 0402	1
150		R30	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
151		R31	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
152		R32	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
153		R35	0130-1004-1654	RES. CF 1Mohm 1/16W J 0402	1
154		R36	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
155		R37	0130-3300-1654	RES. CF 330ohm 1/16W J 0402	1
156		R38	0130-5600-1654	RES. CF 560ohm 1/16W J 0402	1
157		R42	0130-8201-1654	RES. CF 8.2Kohm 1/16W J 0402	1
158		R43	0130-1009-1654	RES. CF 10ohm 1/16W J 0402	1
159		R45	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
160		R47	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
161		R49	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
162		R50	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
163		R51	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
164		R52	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
165		R53	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
166		R54	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
167		R55	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
168		R56	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
169		R57	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
170		R59	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
171		R6	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
172		R63	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
173		R64	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
174		R65	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
175		R67	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
176		R68	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
177		R69	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
178		R7	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
179		R70	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
180		R71	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
181		R73	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
182		R74	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
183		R8	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
184		R81	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
185		R87	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
186		R89	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
187		R9	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
188		R90	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
189		R94	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
190		R95	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
191		U10	0430-7035-1999	IC MT5351AG 471PIN BGA LF	1
192		U12	0430-7031-9603	IC DDR 16Mx16 NT5DS16M16CS-5T 66PIN TSOPII LF	1
193		U13	0430-7031-9603	IC DDR 16Mx16 NT5DS16M16CS-5T 66PIN TSOPII LF	1
194		U14	0430-6010-9028	IC G2996F1Uf 8PIN SOP-8(FD) LF	1
195		U15	0430-3039-4645	IC MX29LV320CTTC-70G 48PIN TSOP LF	1
196		U19	0430-6007-5075	IC AME1117CCGTZ 3PIN SOT-223 L-F	1
197	SS		0430-6007-5079	IC AP1117E33LA LF SOT-223	
198		U2	0430-6013-4072	IC N2596SG-ADJ 3A 150KHZ TO-263-5L LF	1
199		U3	0430-6009-7051	IC AMC1117-1.8SKFT SMD 3PIN (SOT-223)L-F	1
200	SS		0430-6005-5079	IC AP1117E18LA LF SOT-223	
201	SS		0430-6009-7075	IC AME1117ECGTZ 1.8V 3PIN SOT-223 L-F	
202		U4	0430-6002-8079	IC AP1117E25LA SOT-223 L-F	1
203		U5	0430-6009-1051	IC AMC1117SKF-ADJ SMD 3PIN SOT-223 LF	1
204		U8	0430-4017-5621	IC uPC3218GV-E1-A 8PIN SSOP LF	1
205		U9	0430-7035-0999	IC MT5111CE 100PIN LQFP LF	1
206		X1	0286-2700-0024	OSC 27MHz 25ppm 3.3V SMD VCXO	1

3842-0122-0150B PDP MAIN BD ASS'Y (PD-42LK) SMD BOT

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1		CB1	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
2	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
3		CB100	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
4	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
5		CB101	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
6	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
7		CB102	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
8	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
9		CB103	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
10	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
11		CB104	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
12	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
13		CB105	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
14	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
15		CB106	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
16	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
17		CB107	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
18	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
19		CB108	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
20	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
21		CB109	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
22	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
23		CB110	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
24	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
25		CB111	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
26	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
27		CB112	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
28	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
29		CB113	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
30	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
31		CB114	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
32	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
33		CB115	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
34	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
35		CB118	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
36	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
37		CB119	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
38	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
39		CB122	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
40	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
41		CB123	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
42	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
43		CB124	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
44	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
45		CB125	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
46	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
47		CB126	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
48	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
49		CB131	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
50	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
51		CB132	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
52	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
53		CB140	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
54	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
55		CB141	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
56	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
57		CB142	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
58	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
59		CB147	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
60	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
61		CB148	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
62	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
63		CB149	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
64	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
65		CB151	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
66	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
67		CB152	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
68	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
69		CB154	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
70	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
71		CB155	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
72	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
73		CB156	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
74	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
75		CB157	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
76	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
77		CB158	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
78	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
79		CB159	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
80	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
81		CB160	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
82	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
83		CB161	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
84	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
85		CB162	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
86	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
87		CB163	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
88	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
89		CB2	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
90	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
91		CB23	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
92	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
93		CB24	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
94	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
95		CB25	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
96	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
97		CB26	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
98	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
99		CB29	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
100	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
101		CB30	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
102	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
103		CB31	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
104	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
105		CB32	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
106	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
107		CB35	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
108	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
109		CB36	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
110	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
111		CB37	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
112	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
113		CB38	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
114	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
115		CB43	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
116	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
117		CB44	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
118	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
119		CB45	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
120	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
121		CB46	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
122	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
123		CB47	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
124	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
125		CB53	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
126	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
127		CB57	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
128	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
129		CB61	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
130	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
131		CB62	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
132	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
133		CB72	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
134	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
135		CB73	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
136	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
137		CB74	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
138	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
139		CB75	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
140	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
141		CB76	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
142	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
143		CB77	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
144	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
145		CB78	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
146	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
147		CB79	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
148	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
149		CB80	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
150	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
151		CB81	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
152	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
153		CB82	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
154	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
155		CB83	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
156	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
157		CB84	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
158	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
159		CB85	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
160	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
161		CB86	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
162	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
163		CB87	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
164	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
165		CB88	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
166	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
167		CB89	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
168	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
169		CB90	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
170	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
171		CB91	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
172	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
173		CB99	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
174	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
175		C24	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
176		C8	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
177		D26	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
178		D27	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
179		D28	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
180		FB10	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
181		FB11	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
182		FB14	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
183		FB15	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
184		FB19	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
185		FB38	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
186		FB41	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
187		FB44	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
188		RN1	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
189		RN24	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
190		RN3	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
191		RN5	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
192		RV1	0272-0012-0970	ESD PROTECTOR 24V SMD 0603 (PGB1010603NR) LF	1
193		RV10	0272-0012-0970	ESD PROTECTOR 24V SMD 0603 (PGB1010603NR) LF	1
194		RV2	0272-0012-0970	ESD PROTECTOR 24V SMD 0603 (PGB1010603NR) LF	1
195		RV3	0272-0012-0970	ESD PROTECTOR 24V SMD 0603 (PGB1010603NR) LF	1
196		RV4	0272-0012-0970	ESD PROTECTOR 24V SMD 0603 (PGB1010603NR) LF	1
197		RV5	0272-0012-0970	ESD PROTECTOR 24V SMD 0603 (PGB1010603NR) LF	1
198		RV6	0272-0012-0970	ESD PROTECTOR 24V SMD 0603 (PGB1010603NR) LF	1
199		RV7	0272-0012-0970	ESD PROTECTOR 24V SMD 0603 (PGB1010603NR) LF	1
200		RV8	0272-0012-0970	ESD PROTECTOR 24V SMD 0603 (PGB1010603NR) LF	1
201		RV9	0272-0012-0970	ESD PROTECTOR 24V SMD 0603 (PGB1010603NR) LF	1
202		R230	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
203		R41	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
204		R49	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
205		R51	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
206		R63	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1

3842-0122-0150T PDP MAIN BD ASS'Y (PD-42LK) SMD TOP

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
1			0171-2272-2081	PCB MAIN BD FR4 275*155*1.6t 4M (PD-42FBU)	1
2		CA1	0111-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	1
3	SS		0112-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	
4		CA10	0111-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603	1
5		CA11	0111-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603	1
6		CA12	0111-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603	1
7		CA13	0111-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	1
8	SS		0112-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	
9		CA16	0112-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	1
10	SS		0111-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	
11		CA17	0112-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	1
12	SS		0111-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	
13		CA3	0111-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603	1
14		CA5	0112-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	1
15	SS		0111-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	
16		CA8	0111-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	1
17	SS		0112-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	
18		CA9	0112-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	1
19	SS		0111-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	
20		CB10	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
21	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
22		CB11	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
23	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
24		CB116	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
25	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
26		CB117	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
27	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
28		CB12	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
29	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
30		CB121	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
31	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
32		CB127	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
33	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
34		CB128	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
35	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
36		CB129	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
37	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
38		CB13	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
39	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
40		CB136	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
41	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
42		CB137	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
43	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
44		CB138	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
45	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
46		CB139	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
47	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
48		CB14	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
49	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
50		CB143	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
51	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
52		CB144	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
53	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
54		CB145	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
55	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
56		CB146	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
57	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
58		CB15	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
59	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
60		CB150	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
61	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
62		CB153	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
63	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
64		CB16	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
65	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
66		CB164	0111-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	1
67	SS		0112-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	
68		CB165	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
69	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
70		CB166	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
71	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
72		CB167	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
73	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
74		CB168	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
75	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
76		CB169	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
77	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
78		CB17	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
79	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
80		CB170	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
81	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
82		CB171	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
83	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
84		CB173	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
85	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
86		CB174	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
87	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
88		CB175	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
89	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
90		CB176	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
91	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
92		CB177	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
93	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
94		CB178	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
95	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
96		CB179	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
97	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
98		CB180	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
99	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
100		CB181	0111-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	1
101	SS		0112-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	
102		CB19	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
103	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
104		CB20	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
105	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
106		CB21	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
107	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
108		CB22	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
109	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
110		CB27	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
111	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
112		CB28	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
113	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
114		CB3	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
115	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
116		CB33	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
117	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
118		CB34	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
119	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
120		CB4	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
121	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
122		CB40	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
123	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
124		CB41	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
125	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
126		CB5	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
127	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
128		CB51	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
129	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
130		CB52	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
131	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
132		CB54	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
133	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
134		CB55	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
135	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
136		CB58	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
137	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
138		CB59	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
139	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
140		CB6	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
141	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
142		CB60	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
143	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
144		CB63	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
145	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
146		CB64	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
147	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
148		CB65	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
149	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
150		CB66	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
151	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
152		CB67	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
153	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
154		CB68	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
155	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
156		CB69	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
157	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
158		CB7	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
159	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
160		CB70	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
161	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
162		CB71	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
163	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
164		CB9	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
165	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
166		CB92	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
167	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
168		CB93	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
169	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
170		CB94	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
171	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
172		CB95	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
173	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
174		CE105	0111-3103-5116	C/M MULTI 0.01UF 50V X7R 0603	1
175	SS		0112-3103-5116	C/M Multi. 0.01uF 50V X7R 0603	
176		CE106	0111-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	1
177	SS		0112-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	
178		CE16	0111-3103-5116	C/M MULTI 0.01UF 50V X7R 0603	1
179	SS		0112-3103-5116	C/M Multi. 0.01uF 50V X7R 0603	
180		CE19	0111-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	1
181	SS		0112-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	
182		C1	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
183	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
184		C100	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
185	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
186		C101	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
187	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
188		C102	0111-3509-5107	C/M Multi. 5PF 50V NPO 0402	1
189		C103	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
190	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
191		C104	0111-3472-5117	C/M Multi. 4700PF 50V X7R K 0402	1
192		C105	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
193	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
194		C106	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
195	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
196		C108	0111-3509-5107	C/M Multi. 5PF 50V NPO 0402	1
197		C109	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
198	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
199		C11	0111-3270-5107	C/M MULTI 27PF 50V NPO 0402	1
200	SS		0112-3270-5107	C/M Multi. 27PF 50V NPO 5% 0402	
201		C110	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
202	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
203		C111	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
204	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
205		C112	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
206	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
207		C114	0111-3509-5107	C/M Multi. 5PF 50V NPO 0402	1
208		C115	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
209	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
210		C116	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
211	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
212		C117	0111-3509-5107	C/M Multi. 5PF 50V NPO 0402	1
213		C118	0111-3509-5107	C/M Multi. 5PF 50V NPO 0402	1
214		C119	0111-3472-5117	C/M Multi. 4700PF 50V X7R K 0402	1
215		C12	0111-3270-5107	C/M MULTI 27PF 50V NPO 0402	1
216	SS		0112-3270-5107	C/M Multi. 27PF 50V NPO 5% 0402	
217		C120	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
218	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
219		C121	0111-3330-5107	C/M Multi. 33PF 50V NPO 0402	1
220		C122	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
221	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
222		C123	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
223	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
224		C124	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
225	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
226		C125	0111-3330-5107	C/M Multi. 33PF 50V NPO 0402	1
227		C127	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
228		C128	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
229	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
230		C129	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
231	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
232		C13	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
233	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
234		C130	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
235	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
236		C131	0111-3330-5107	C/M Multi. 33PF 50V NPO 0402	1
237		C133	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
238	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
239		C134	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
240	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
241		C137	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
242	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
243		C140	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
244	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
245		C141	0111-3101-5107	C/M Multi. 100PF 50V NPO J 0402	1
246	SS		0112-3101-5107	C/M Multi. 100PF 50V NPO J 0402	
247		C142	0111-3101-5107	C/M Multi. 100PF 50V NPO J 0402	1
248	SS		0112-3101-5107	C/M Multi. 100PF 50V NPO J 0402	
249		C143	0111-3101-5107	C/M Multi. 100PF 50V NPO J 0402	1
250	SS		0112-3101-5107	C/M Multi. 100PF 50V NPO J 0402	
251		C144	0111-3101-5107	C/M Multi. 100PF 50V NPO J 0402	1
252	SS		0112-3101-5107	C/M Multi. 100PF 50V NPO J 0402	
253		C145	0111-3101-5107	C/M Multi. 100PF 50V NPO J 0402	1
254	SS		0112-3101-5107	C/M Multi. 100PF 50V NPO J 0402	
255		C146	0111-3101-5107	C/M Multi. 100PF 50V NPO J 0402	1
256	SS		0112-3101-5107	C/M Multi. 100PF 50V NPO J 0402	
257		C147	0111-3101-5107	C/M Multi. 100PF 50V NPO J 0402	1
258	SS		0112-3101-5107	C/M Multi. 100PF 50V NPO J 0402	
259		C148	0111-3101-5107	C/M Multi. 100PF 50V NPO J 0402	1
260	SS		0112-3101-5107	C/M Multi. 100PF 50V NPO J 0402	
261		C15	0111-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	1
262	SS		0112-3104-2516	C/M Multi. 0.1uF 25V X7R 0603	
263		C16	0111-3152-5117	C/M Multi. 1500PF 50V X7R 0402	1
264		C17	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
265	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
266		C18	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
267	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
268		C19	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
269	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
270		C2	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
271	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
272		C20	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
273	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
274		C21	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
275	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
276		C23	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
277	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
278		C25	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
279	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
280		C26	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
281	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
282		C27	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
283	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
284		C28	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
285	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
286		C29	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
287	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
288		C3	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
289	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
290		C30	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
291	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
292		C31	0111-3180-5107	C/M Multi. 18PF 50V NPO 0402	1
293	SS		0112-3180-5107	C/M Multi. 18PF 50V NPO 0402	
294		C32	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
295		C33	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
296		C35	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
297		C37	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
298		C38	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
299	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
300		C4	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
301	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
302		C40	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
303	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
304		C43	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
305	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
306		C44	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
307	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
308		C46	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
309		C47	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
310		C48	0111-3120-5107	C/M Multi. 12PF 50V NPO J 0402	1
311	SS		0112-3120-5107	C/M Multi. 12PF 50V NPO J 0402	
312		C49	0111-3120-5107	C/M Multi. 12PF 50V NPO J 0402	1
313	SS		0112-3120-5107	C/M Multi. 12PF 50V NPO J 0402	
314		C5	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
315		C50	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
316	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
317		C51	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
318	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
319		C52	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
320	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
321		C53	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
322	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
323		C54	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
324	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
325		C55	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
326	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
327		C56	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
328	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
329		C57	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
330	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
331		C58	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
332	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
333		C59	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
334	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
335		C6	0111-3821-5117	C/M Multi. 820pF 50V X7R K 0402	1
336		C61	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
337	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
338		C7	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
339	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	
340		C70	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
341	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
342		C71	0111-3331-5106	C/M Multi 330PF 50V NPO 0603	1
343	SS		0112-3331-5106	C/M Multi. 330PF 50V NPO 0603	
344		C72	0111-3331-5106	C/M Multi 330PF 50V NPO 0603	1
345	SS		0112-3331-5106	C/M Multi. 330PF 50V NPO 0603	
346		C73	0111-3331-5106	C/M Multi 330PF 50V NPO 0603	1
347	SS		0112-3331-5106	C/M Multi. 330PF 50V NPO 0603	
348		C74	0111-3331-5106	C/M Multi 330PF 50V NPO 0603	1
349	SS		0112-3331-5106	C/M Multi. 330PF 50V NPO 0603	
350		C79	0111-3331-5106	C/M Multi 330PF 50V NPO 0603	1
351	SS		0112-3331-5106	C/M Multi. 330PF 50V NPO 0603	
352		C80	0111-3331-5106	C/M Multi 330PF 50V NPO 0603	1
353	SS		0112-3331-5106	C/M Multi. 330PF 50V NPO 0603	
354		C81	0111-3103-5116	C/M MULTI 0.01UF 50V X7R 0603	1
355	SS		0112-3103-5116	C/M Multi. 0.01uF 50V X7R 0603	
356		C82	0111-3103-5116	C/M MULTI 0.01UF 50V X7R 0603	1
357	SS		0112-3103-5116	C/M Multi. 0.01uF 50V X7R 0603	
358		C85	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
359		C86	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
360		C88	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
361		C89	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
362		C90	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
363		C91	0111-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	1
364	SS		0112-3104-1637	C/M Multi. 0.1uF 16V Y5V 0402	
365		C92	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
366		C93	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
367		C94	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
368		C95	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
369		C96	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
370		C97	0111-3103-1637	C/M Multi. 0.01uF 16V Y5V 0402	1
371		C98	0111-3105-1636	C/M MULTI 1uF 16V Y5V 0603	1
372	SS		0112-3105-1636	C/M Multi. 1.0uF 16V Y5V 0603	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
373		C99	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
374	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
375		DA1	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
376	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
377	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
378		DA2	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
379	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
380	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
381		D10	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
382	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
383	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
384		D15	0390-5003-5273	DUAL SURFACE DIODE BAV99 SMD (SOT-23) L-F	1
385	SS		0390-5003-5293	DUAL SURFACE DIODES BAV99-7-F SOT-23 L-F	
386		D16	0390-5003-5273	DUAL SURFACE DIODE BAV99 SMD (SOT-23) L-F	1
387	SS		0390-5003-5293	DUAL SURFACE DIODES BAV99-7-F SOT-23 L-F	
388		D17	0390-5003-5273	DUAL SURFACE DIODE BAV99 SMD (SOT-23) L-F	1
389	SS		0390-5003-5293	DUAL SURFACE DIODES BAV99-7-F SOT-23 L-F	
390		D18	0390-5003-5273	DUAL SURFACE DIODE BAV99 SMD (SOT-23) L-F	1
391	SS		0390-5003-5293	DUAL SURFACE DIODES BAV99-7-F SOT-23 L-F	
392		D19	0390-5003-5273	DUAL SURFACE DIODE BAV99 SMD (SOT-23) L-F	1
393	SS		0390-5003-5293	DUAL SURFACE DIODES BAV99-7-F SOT-23 L-F	
394		D20	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
395		D21	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
396		D22	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
397		D23	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
398		D24	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
399		D25	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
400		D29	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
401		D30	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
402		D31	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
403		D32	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
404		D33	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
405		D34	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
406		D35	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
407		D36	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
408		D37	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
409		D38	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
410		D39	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
411		D40	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
412		D41	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
413		D42	0400-0881-5012	ZENER 8.85~9.23V UDZSTE-179.1B 1/5W SOD-323	1
414		D9	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
415	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
416	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
417		FB1	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
418		FB12	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
419		FB13	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
420		FB16	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
421		FB17	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
422		FB18	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
423		FB2	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
424		FB20	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
425		FB21	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
426		FB22	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
427		FB23	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
428		FB24	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
429		FB25	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
430		FB26	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
431		FB27	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
432		FB28	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
433		FB29	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
434		FB3	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
435		FB30	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
436		FB31	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
437		FB32	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
438		FB33	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
439		FB34	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
440		FB35	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
441		FB36	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
442		FB37	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
443		FB39	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
444		FB4	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
445		FB40	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
446		FB42	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
447		FB43	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
448		FB45	0130-4700-0055	RES. CF 470ohm 1/10W J 0603	1
449		FB46	0130-4700-0055	RES. CF 470ohm 1/10W J 0603	1
450		FB47	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
451		FB48	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
452		FB5	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
453		FB51	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
454		FB53	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
455		FB54	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
456		FB55	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
457		FB56	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
458		FB57	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
459		FB58	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
460		FB59	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
461		FB6	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
462		FB65	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
463		FB7	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
464		FB8	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
465		FB9	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
466		F3	0185-1202-0073	FUSE 125V/2A SMD (R45102) L-F	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
467		F4	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
468		F5	0185-1302-0073	FUSE 125V/3A SMD (R451003) LF	1
469		J2	0303-1007-0504	CONN. B TO FPC FH12-50S-0.5SH(55) LF 50PIN	1
470	SS		0303-1007-0507	CONN. B TO FPC 0.5mm 50P 90' SMD (AF7501-N2G1Z) L-F	
471		J6	0302-2000-1306	CONN MALE R/A 30P SMD (MS240430) L-F	1
472		L1	0370-0000-6952	CHIP BEAD CORE 1.5uH (MLI-201209-1R5K)	1
473		L11	0130-2208-0055	RES. CF 2.2ohm 1/10W J 0603	1
474		L12	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
475		L13	0370-2022-9620	CHIP COIL 2.2uH 15mA 0603 (MLF1608A2R2KT)	1
476		L14	0370-2022-9620	CHIP COIL 2.2uH 15mA 0603 (MLF1608A2R2KT)	1
477		L17	0370-2022-9620	CHIP COIL 2.2uH 15mA 0603 (MLF1608A2R2KT)	1
478		L21	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
479		L3	0370-0000-6952	CHIP BEAD CORE 1.5uH (MLI-201209-1R5K)	1
480		L5	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
481		L7	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
482		L8	0130-0000-0055	RES. CF 0.0ohm 1/10W J 0603	1
483		L9	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1
484		P1	0304-1000-0110	CONN. HDMI 19P 90' SMD With Flange L-F	1
485		QA1	0410-5000-5710	TRANSISTOR MMBT3906LT1G SOT-23 L-F	1
486	SS		0410-5000-5704	TRANSISTOR MMBT3906 SMD (SOT-23) LF	
487	SS		0410-5000-5711	TRANSISTOR PMBS3906 SMD LF	
488		QA2	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
489	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
490	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
491	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
492		QA3	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
493	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
494	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
495	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
496		QF1	0420-1004-9621	MOSFET N-CH 2N7002E-T1-E3 SMD (SOT-23) L-F	1
497		QF2	0420-1004-9621	MOSFET N-CH 2N7002E-T1-E3 SMD (SOT-23) L-F	1
498		QF3	0420-1004-9621	MOSFET N-CH 2N7002E-T1-E3 SMD (SOT-23) L-F	1
499		QF4	0420-1004-9621	MOSFET N-CH 2N7002E-T1-E3 SMD (SOT-23) L-F	1
500		Q10	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
501	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
502	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
503	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
504		Q12	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
505	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
506	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
507	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
508		Q13	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
509	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
510	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
511	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
512		Q14	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
513	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
514	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
515	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
516		Q15	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
517	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
518	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
519	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
520		Q16	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
521	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
522	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
523	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
524		Q17	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
525	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
526	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
527	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
528		Q2	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
529	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
530	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
531	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
532		Q25	0411-0000-5612	TR DIGITAL 100mA 50V DTC144TKA SMT3	1
533		Q3	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
534	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
535	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
536	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
537		Q4	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
538	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
539	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
540	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
541		Q5	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
542	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
543	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
544	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
545		Q6	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
546	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
547	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
548	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
549		Q7	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
550	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
551	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
552	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
553		Q8	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
554	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
555	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
556	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	
557		Q9	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
558	SS		0410-5000-5604	TRANSISTOR MMBT3904 SOT-23 L-F	
559	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
560	SS		0410-5000-5622	TRANSISTOR MMBT3904 NL SOT-23 L-F	

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
561		RA1	0130-4702-0055	RES. CF 47Kohm 1/10W J 0603	1
562		RA10	0111-3102-5116	C/M MULTI 1000PF 50V X7R 0603	1
563	SS		0112-3102-5116	C/M Multi. 1000PF 50V X7R 0603	
564		RA11	0130-4701-0055	RES. CF 4.7Kohm 1/10W J 0603	1
565		RA12	0130-4701-0055	RES. CF 4.7Kohm 1/10W J 0603	1
566		RA13	0130-3908-1858	RES. CF 3.9ohm 1/8W J 0805	1
567		RA14	0130-3908-1858	RES. CF 3.9ohm 1/8W J 0805	1
568		RA15	0130-4701-0055	RES. CF 4.7Kohm 1/10W J 0603	1
569		RA16	0130-1002-0055	RES. CF 10Kohm 1/10W J 0603	1
570		RA17	0130-1001-0055	RES. CF 1.0Kohm 1/10W J 0603	1
571		RA18	0130-1001-0055	RES. CF 1.0Kohm 1/10W J 0603	1
572		RA19	0130-4701-0055	RES. CF 4.7Kohm 1/10W J 0603	1
573		RA2	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
574		RA20	0130-4701-0055	RES. CF 4.7Kohm 1/10W J 0603	1
575		RA21	0130-3908-1858	RES. CF 3.9ohm 1/8W J 0805	1
576		RA22	0130-3908-1858	RES. CF 3.9ohm 1/8W J 0805	1
577		RA3	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
578		RA4	0130-1002-0055	RES. CF 10Kohm 1/10W J 0603	1
579		RA5	0130-1002-0055	RES. CF 10Kohm 1/10W J 0603	1
580		RA6	0130-1002-0055	RES. CF 10Kohm 1/10W J 0603	1
581		RA8	0130-1002-0055	RES. CF 10Kohm 1/10W J 0603	1
582		RA9	0111-3102-5116	C/M MULTI 1000PF 50V X7R 0603	1
583	SS		0112-3102-5116	C/M Multi. 1000PF 50V X7R 0603	
584		RN10	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
585		RN11	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
586		RN12	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
587		RN13	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
588		RN14	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
589		RN15	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
590		RN16	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
591		RN17	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
592		RN18	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
593		RN19	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
594		RN2	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
595		RN20	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
596		RN21	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
597		RN22	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
598		RN23	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
599		RN26	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
600		RN27	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
601		RN28	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
602		RN29	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
603		RN30	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
604		RN31	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
605		RN32	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
606		RN33	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
607		RN34	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
608		RN35	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
609		RN36	0141-4701-3851	ARRAY RES. A(X) 4.7Kohm 4R J 8P	1
610		RN37	0141-4701-3851	ARRAY RES. A(X) 4.7Kohm 4R J 8P	1
611		RN38	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
612		RN39	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
613		RN4	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
614		RN40	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
615		RN41	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
616		RN42	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P	1
617		RN6	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
618		RN7	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
619		RN8	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
620		RN9	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
621		R10	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
622		R100	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
623		R101	0130-1809-1654	RES. CF 18ohm 1/16W J 0402	1
624		R102	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
625		R103	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
626		R104	0130-5609-1654	RES. CF 56ohm 1/16W J 0402	1
627		R105	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
628		R106	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
629		R107	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
630		R108	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
631		R109	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
632		R110	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
633		R111	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
634		R112	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
635		R113	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
636		R115	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
637		R117	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
638		R12	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
639		R120	0130-5600-1654	RES. CF 560ohm 1/16W J 0402	1
640		R121	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
641		R122	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
642		R123	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
643		R124	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
644		R125	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
645		R126	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
646		R127	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
647		R128	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
648		R130	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
649		R131	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
650		R132	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
651		R133	0130-2200-1654	RES. CF 220ohm 1/16W J 0402	1
652		R134	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
653		R136	0130-2200-1654	RES. CF 220ohm 1/16W J 0402	1
654		R137	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
655		R138	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
656		R139	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
657		R14	0130-5600-1654	RES. CF 560ohm 1/16W J 0402	1
658		R140	0130-2200-1654	RES. CF 220ohm 1/16W J 0402	1
659		R141	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
660		R143	0130-2200-1654	RES. CF 220ohm 1/16W J 0402	1
661		R144	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
662		R145	0130-2200-1654	RES. CF 220ohm 1/16W J 0402	1
663		R146	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
664		R149	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
665		R150	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
666		R151	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
667		R152	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
668		R153	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
669		R154	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
670		R155	0130-2200-1654	RES. CF 220ohm 1/16W J 0402	1
671		R156	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
672		R159	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
673		R16	0130-3300-1654	RES. CF 330ohm 1/16W J 0402	1
674		R160	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
675		R161	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
676		R162	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
677		R163	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
678		R164	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
679		R165	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
680		R166	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
681		R168	0130-5601-1654	RES. CF 5.6Kohm 1/16W J 0402	1
682		R169	0130-5601-1654	RES. CF 5.6Kohm 1/16W J 0402	1
683		R17	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
684		R170	0130-5601-1654	RES. CF 5.6Kohm 1/16W J 0402	1
685		R171	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
686		R172	0130-1003-1654	RES. CF 100Kohm 1/16W J 0402	1
687		R173	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
688		R174	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
689		R175	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
690		R176	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
691		R178	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
692		R18	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
693		R180	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
694		R181	0130-5601-1654	RES. CF 5.6Kohm 1/16W J 0402	1
695		R182	0130-5601-1654	RES. CF 5.6Kohm 1/16W J 0402	1
696		R183	0130-5601-1654	RES. CF 5.6Kohm 1/16W J 0402	1
697		R185	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
698		R186	0130-3902-1654	RES. CF 39 Kohm 1/16W J 0402	1
699		R187	0130-3902-1654	RES. CF 39 Kohm 1/16W J 0402	1
700		R188	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
701		R189	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
702		R19	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
703		R190	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
704		R191	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
705		R192	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
706		R193	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
707		R194	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
708		R195	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
709		R196	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
710		R197	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
711		R198	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
712		R199	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
713		R2	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
714		R20	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
715		R200	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
716		R201	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
717		R202	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
718		R203	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
719		R204	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
720		R205	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
721		R206	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
722		R207	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
723		R208	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
724		R209	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
725		R21	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
726		R210	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
727		R211	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
728		R212	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
729		R213	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
730		R214	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
731		R215	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
732		R217	0130-2200-1654	RES. CF 220ohm 1/16W J 0402	1
733		R218	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
734		R219	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
735		R22	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
736		R220	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
737		R221	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
738		R222	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
739		R223	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
740		R224	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
741		R225	0130-2200-1654	RES. CF 220ohm 1/16W J 0402	1
742		R226	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
743		R227	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
744		R228	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
745		R229	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
746		R23	0130-5600-1654	RES. CF 560ohm 1/16W J 0402	1
747		R231	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
748		R232	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
749		R233	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
750		R234	0130-2202-1654	RES. CF 22Kohm 1/16W J 0402	1
751		R235	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
752		R236	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
753		R237	0130-2202-1654	RES. CF 22Kohm 1/16W J 0402	1
754		R238	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
755		R239	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
756		R24	0130-1003-1654	RES. CF 100Kohm 1/16W J 0402	1
757		R240	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
758		R241	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
759		R242	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
760		R243	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
761		R244	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402	1
762		R245	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
763		R246	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
764		R247	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
765		R248	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
766		R249	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
767		R250	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
768		R251	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
769		R252	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
770		R253	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
771		R254	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
772		R255	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
773		R256	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
774		R257	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
775		R258	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
776		R259	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
777		R260	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
778		R261	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
779		R262	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
780		R263	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
781		R264	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
782		R265	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
783		R266	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
784		R267	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
785		R268	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
786		R27	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
787		R271	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
788		R273	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
789		R274	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
790		R275	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
791		R279	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
792		R28	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
793		R280	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
794		R284	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
795		R285	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
796		R286	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
797		R287	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
798		R288	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
799		R289	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
800		R29	0130-3301-1654	RES. CF 3.3Kohm 1/16W J 0402	1
801		R292	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
802		R293	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
803		R294	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
804		R295	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
805		R296	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
806		R297	0130-3309-1654	RES. CF 33ohm 1/16W J 0402	1
807		R298	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
808		R299	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
809		R3	0130-5600-1654	RES. CF 560ohm 1/16W J 0402	1
810		R30	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
811		R304	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
812		R305	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
813		R306	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
814		R307	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
815		R308	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
816		R309	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
817		R31	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
818		R310	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
819		R311	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
820		R312	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
821		R313	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
822		R314	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
823		R316	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
824		R317	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
825		R318	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
826		R319	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
827		R320	0130-4700-1654	RES. CF 470ohm 1/16W J 0402	1
828		R321	0130-1009-1654	RES. CF 10ohm 1/16W J 0402	1
829		R322	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
830		R327	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
831		R328	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
832		R329	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
833		R33	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
834		R330	0130-8201-1654	RES. CF 8.2Kohm 1/16W J 0402	1
835		R331	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
836		R332	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
837		R333	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
838		R334	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
839		R335	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
840		R336	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
841		R34	0130-6802-1654	RES. CF 68Kohm 1/16W J 0402	1
842		R340	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
843		R341	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
844		R342	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
845		R343	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
846		R344	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
847		R345	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
848		R346	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
849		R347	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
850		R35	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
851		R36	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
852		R366	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
853		R367	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
854		R369	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
855		R37	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
856		R370	0130-2702-1654	RES. CF 27Kohm 1/16W J 0402	1
857		R371	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
858		R372	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
859		R373	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
860		R374	0130-2702-1654	RES. CF 27Kohm 1/16W J 0402	1
861		R375	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
862		R376	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
863		R378	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
864		R379	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
865		R38	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
866		R382	0130-5101-1654	RES. CF 5.1Kohm 1/16W J 0402	1
867		R383	0130-5101-1654	RES. CF 5.1Kohm 1/16W J 0402	1
868		R385	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402	1
869		R386	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
870		R387	0130-2002-1654	RES. CF 20Kohm 1/16W J 0402	1
871		R39	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
872		R397	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
873		R398	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
874		R399	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
875		R400	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
876		R401	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
877		R402	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
878		R403	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
879		R42	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
880		R43	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
881		R44	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
882		R45	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
883		R46	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
884		R47	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
885		R48	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
886		R50	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
887		R52	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
888		R53	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
889		R54	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
890		R55	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
891		R56	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
892		R57	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
893		R58	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
894		R59	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
895		R6	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
896		R60	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
897		R61	0130-7509-1654	RES. CF 75ohm 1/16W J 0402	1
898		R62	0130-2209-1654	RES. CF 22ohm 1/16W J 0402	1
899		R65	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
900		R67	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
901		R69	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
902		R7	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
903		R70	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
904		R71	0130-1004-1654	RES. CF 1Mohm 1/16W J 0402	1
905		R73	0130-2700-1654	RES. CF 270 ohm 1/16W J 0402	1
906		R74	0130-2700-1654	RES. CF 270 ohm 1/16W J 0402	1
907		R75	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
908		R76	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
909		R77	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
910		R78	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
911		R79	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
912		R8	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
913		R80	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
914		R81	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
915		R82	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
916		R86	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
917		R87	0130-1000-1654	RES. CF 100ohm 1/16W J 0402	1
918		R88	0130-1809-1654	RES. CF 18ohm 1/16W J 0402	1
919		R89	0130-5609-1654	RES. CF 56ohm 1/16W J 0402	1
920		R9	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
921		R90	0130-1809-1654	RES. CF 18ohm 1/16W J 0402	1
922		R91	0130-5609-1654	RES. CF 56ohm 1/16W J 0402	1
923		R99	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
924		U1	0430-3004-3011	IC AT24C16AN-10SU-2.7 SO-8 L-F	1
925		U10	0430-3039-3645	IC MX29LV160CTTC-70G 48PIN TSOP LF	1
926		U11	0430-8003-3663	IC DDR 8Mx16 M13S128168A-6TG 66PIN TSOPII LF	1
927		U12	0430-8003-3663	IC DDR 8Mx16 M13S128168A-6TG 66PIN TSOPII LF	1
928		U13	0430-6010-9028	IC G2996F1Uf 8PIN SOP-8(FD) LF	1
929		U14	0430-6002-8079	IC AP1117E25LA SOT-223 L-F	1
930		U15	0430-6009-7051	IC AMC1117-1.8SKFT SMD 3PIN (SOT-223)L-F	1
931	SS		0430-6005-5079	IC AP1117E18LA LF SOT-223	
932	SS		0430-6009-7075	IC AME1117ECGTZ 1.8V 3PIN SOT-223 L-F	
933		U16	0430-7027-3738	IC SiI9011CLU 128PIN LQFP LF	1
934		U17	0430-3039-6011	IC AT24C02BN-10SU-1.8 8Pin SOIC L-F	1
935		U18	0430-3039-6011	IC AT24C02BN-10SU-1.8 8Pin SOIC L-F	1
936		U2	0420-1005-4601	POWER MOS IRF7316TRPBF SMD 8PIN LF	1

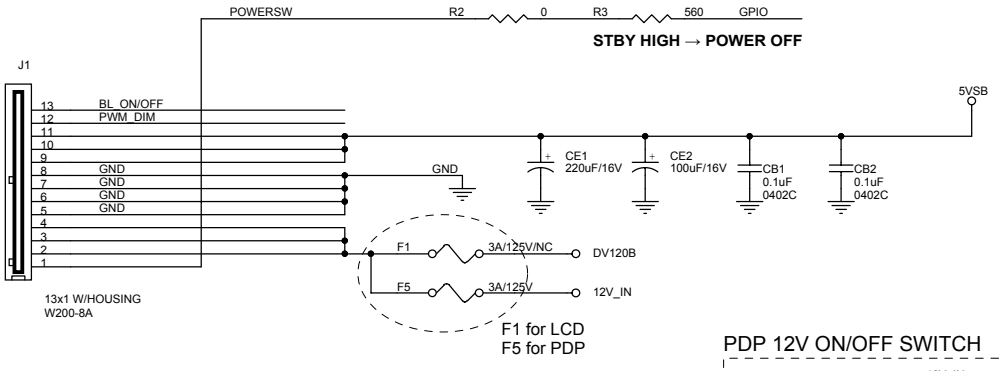
ITEM	M/S	LOCATION	PART NO.	DESCRPTION	QTY
937		U20	0430-3006-0619	IC MM1492AF 44PIN SOP-44B	1
938		U21	0430-3009-6065	IC IDTQS3VH257QG 3.3V QSOP 16PIN (Green Parts)	1
939		U22	0430-7027-3699	IC WM8776SEFT 48PIN TQFP L-F	1
940		U24	0430-3009-6065	IC IDTQS3VH257QG 3.3V QSOP 16PIN (Green Parts)	1
941		U26	0430-7033-3016	IC ASM809MEURF-T 4.38V SOT23 LF	1
942		U28	0430-1008-6088	IC NJM4558M-TE2_PB SO8(DMP8) L-F	1
943		U29	0420-2004-8622	MOSFET P-CH 7A 30V FDS4935 SO-8 8PIN L-F	1
944		U4	0430-6013-4072	IC N2596SG-ADJ 3A 150KHZ TO-263-5L LF	1
945		U5	0430-6009-7051	IC AMC1117-1.8SKFT SMD 3PIN (SOT-223)L-F	1
946	SS		0430-6005-5079	IC AP1117E18LA LF SOT-223	
947	SS		0430-6009-7075	IC AME1117ECGTZ 1.8V 3PIN SOT-223 L-F	
948		U7	0420-1005-4601	POWER MOS IRF7316TRPBF SMD 8PIN LF	1
949		U9	0430-7027-4999	IC MT8205 388PIN BGA	1
950		ZDA1	0400-0941-2012	ZENER RLZ-10B 9.41~9.90V 1/2W LL-34 L-F	1
951		ZDA2	0400-0601-5012	ZENER 6.06~6.33V UDZSTE-176.2BB 1/5W SOD-323	1

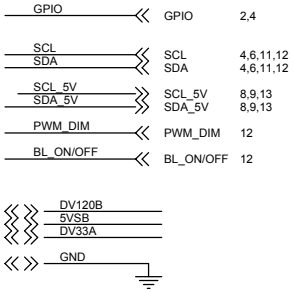
D-MT8205AMT1V1

MT8205E (PBGA388) LCDTV BOARD 4 LAYERS

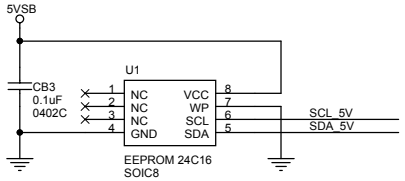
Rev	Date
PD_42FBU	2005/11/18

POWER IN



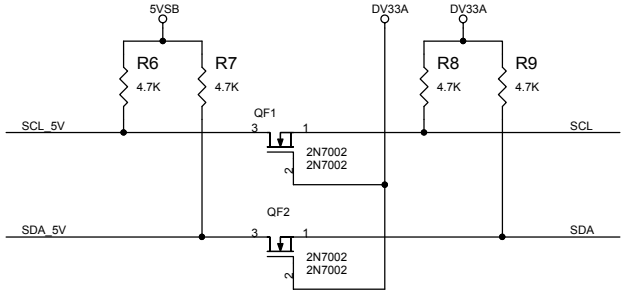


SYSTEM EEPROM

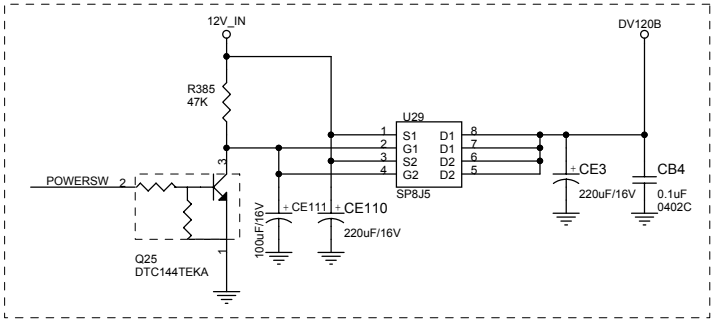


I2C Level Shifter

Change to 4.7K ohm



PDP 12V ON/OFF SWITCH



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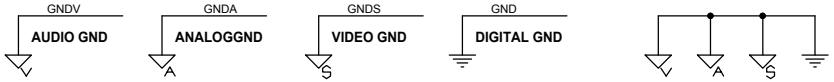
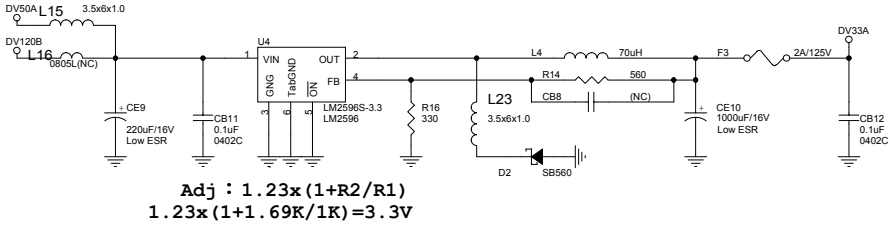
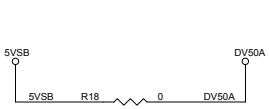
M= METAL 1%

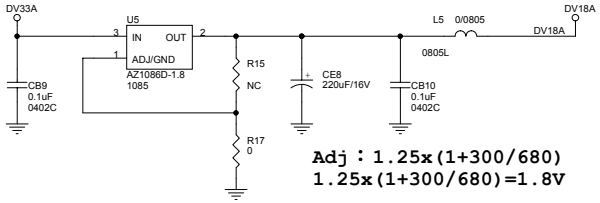


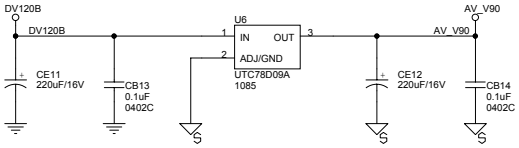
APPROVED BY:	AmTRAN TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0122-0150)	
CHECKED BY:	CIRCUITY	INDEX & POWER CONNECTOR	
	PCB P/ N: 0171-2272-2081	Sheet 1 of 13	
	ECN NO: AECN	REV: 00	
DESING BY:	SCH FILE : PD42LK-m0.DSN	PCB REV: 01	
	PCB FILE : PD42-M1.PCB	DATE: Monday, March 13, 2006	

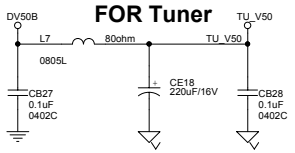
MT8205 DIGITAL POWER & DECOUPLING

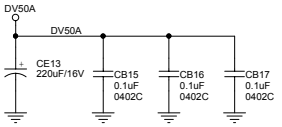


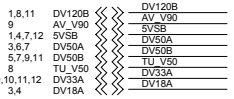


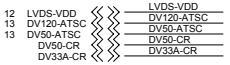


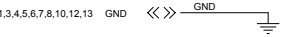


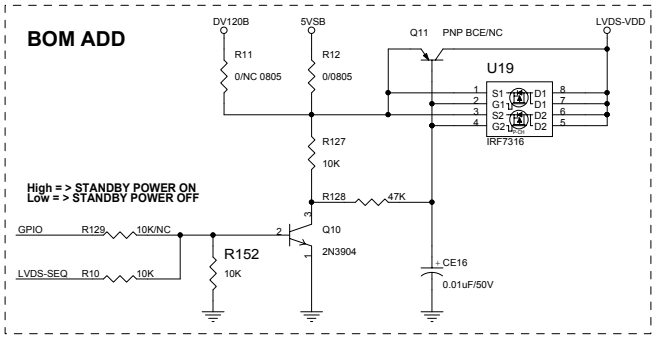


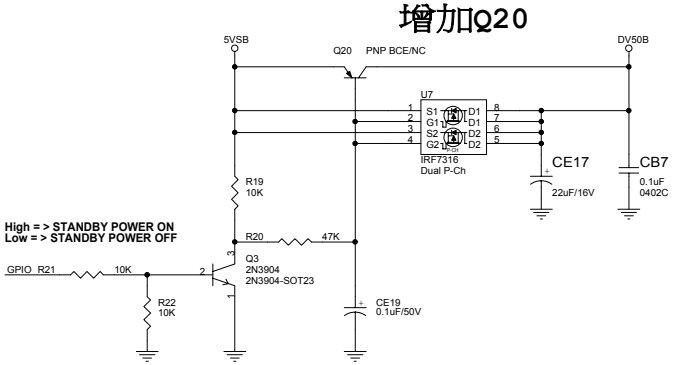


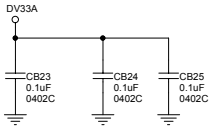


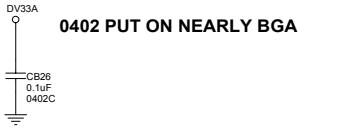


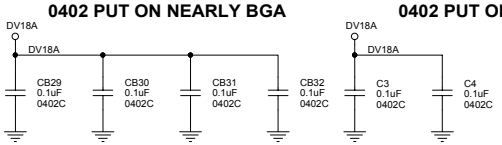


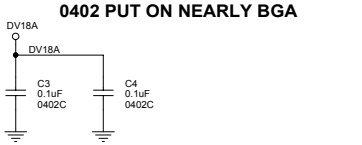




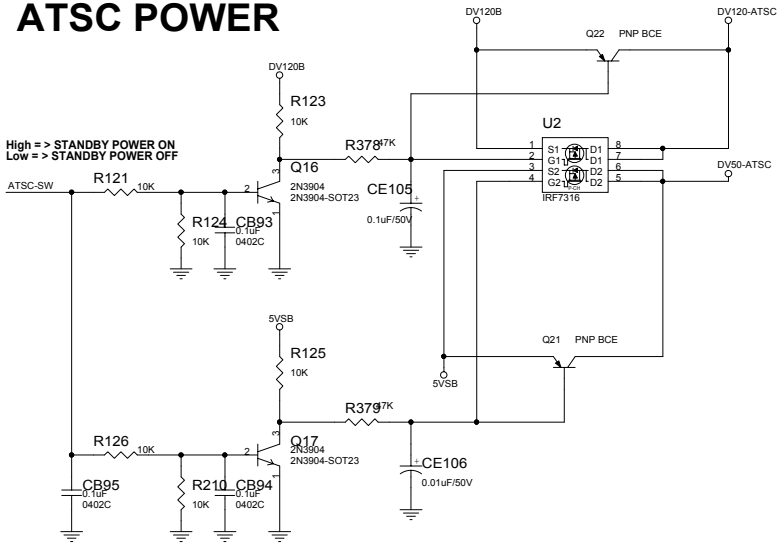




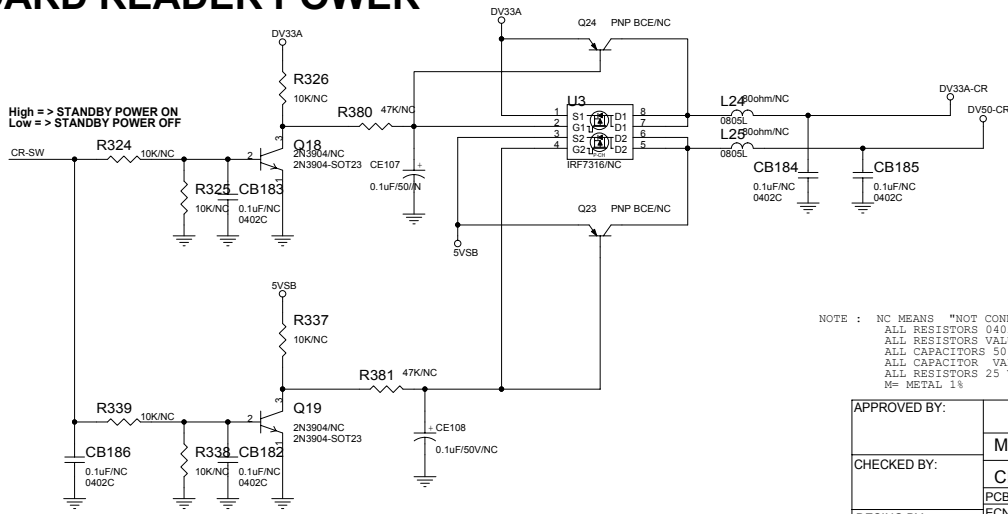




ATSC POWER



CARD READER POWER



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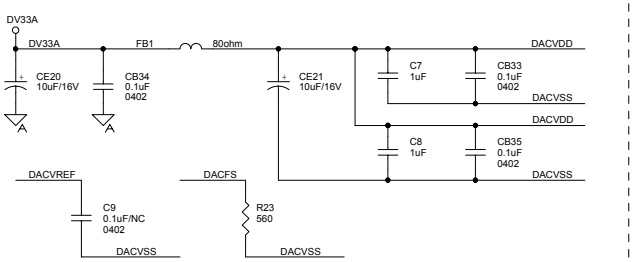
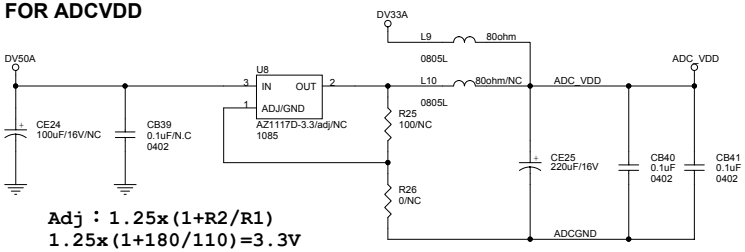
APPROVED BY:	AmTRAN TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0122-0150)	
CHECKED BY:	CIRCUITY	MT8205 DIGITAL POWER	
	PCB P/ N:	0171-2272-2081	Sheet 2 of 13
DESING BY:	ECN NO:	AECN	REV: 00
	SCH FILE :	PD42LK-m0.DSN	PCB REV: 01
	PCB FILE :	PD42-M1.PCB	DATE: Monday, March 13, 2006

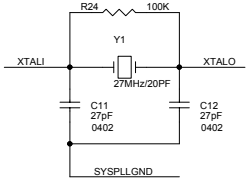
MT8205 ANALOG POWER AND DECOUPLING

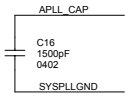
FOR DACVDD

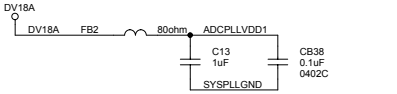


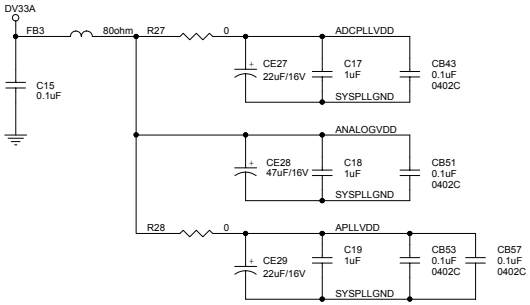
FOR ADCVDD

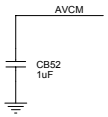


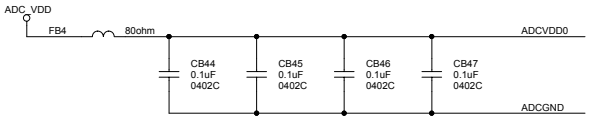


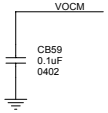


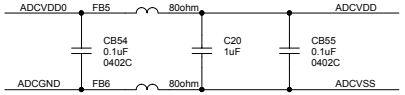


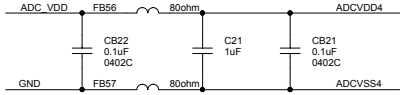


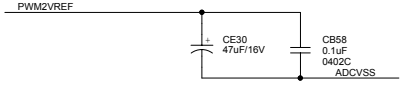


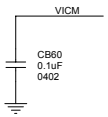


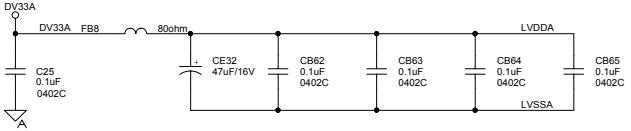


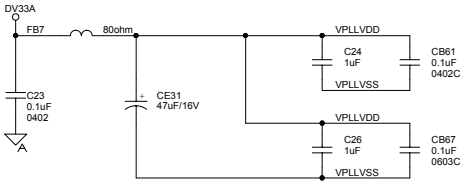


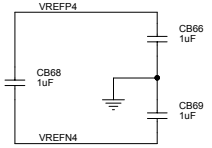


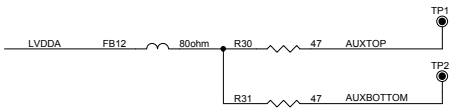


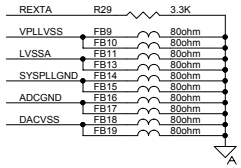












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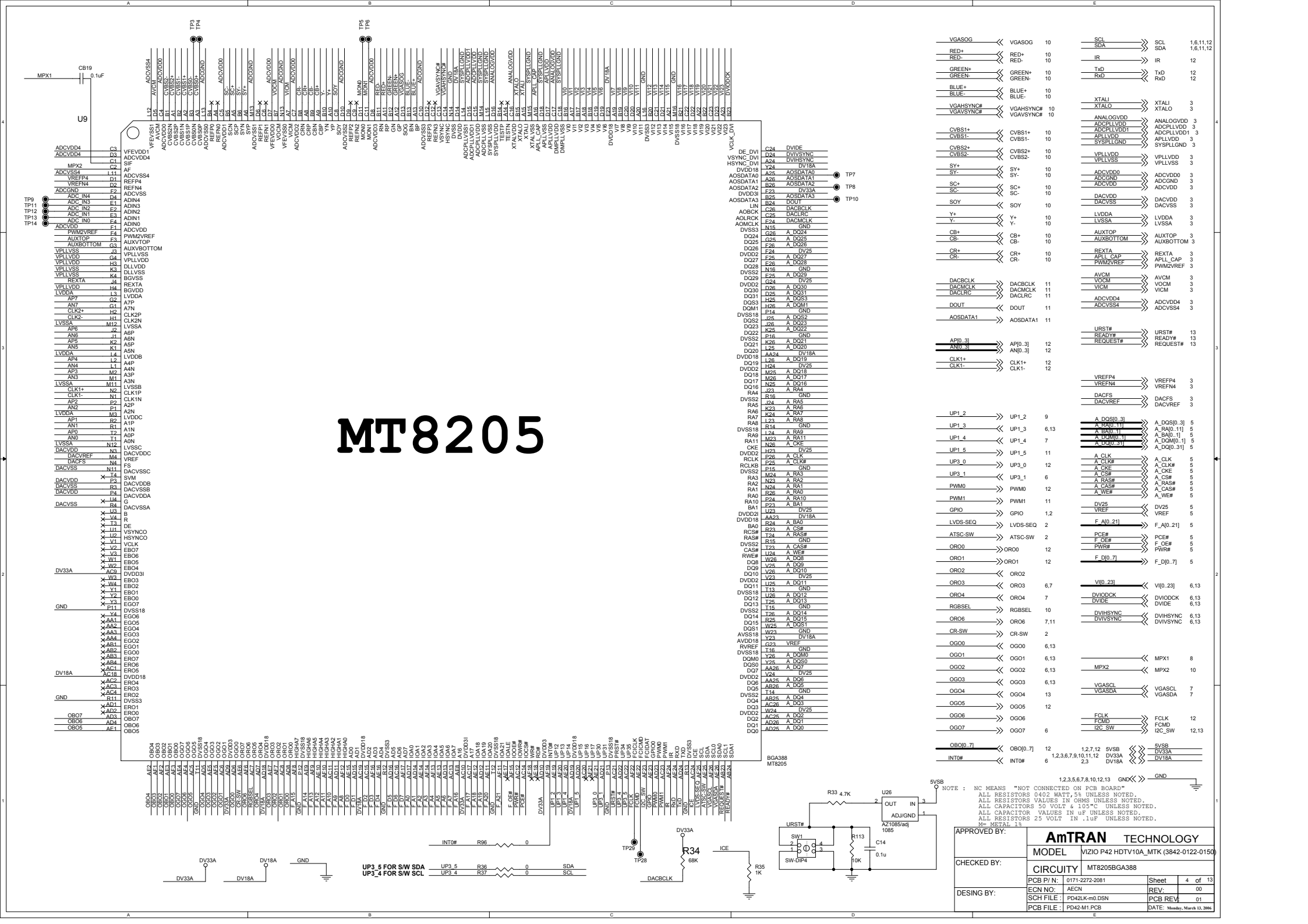
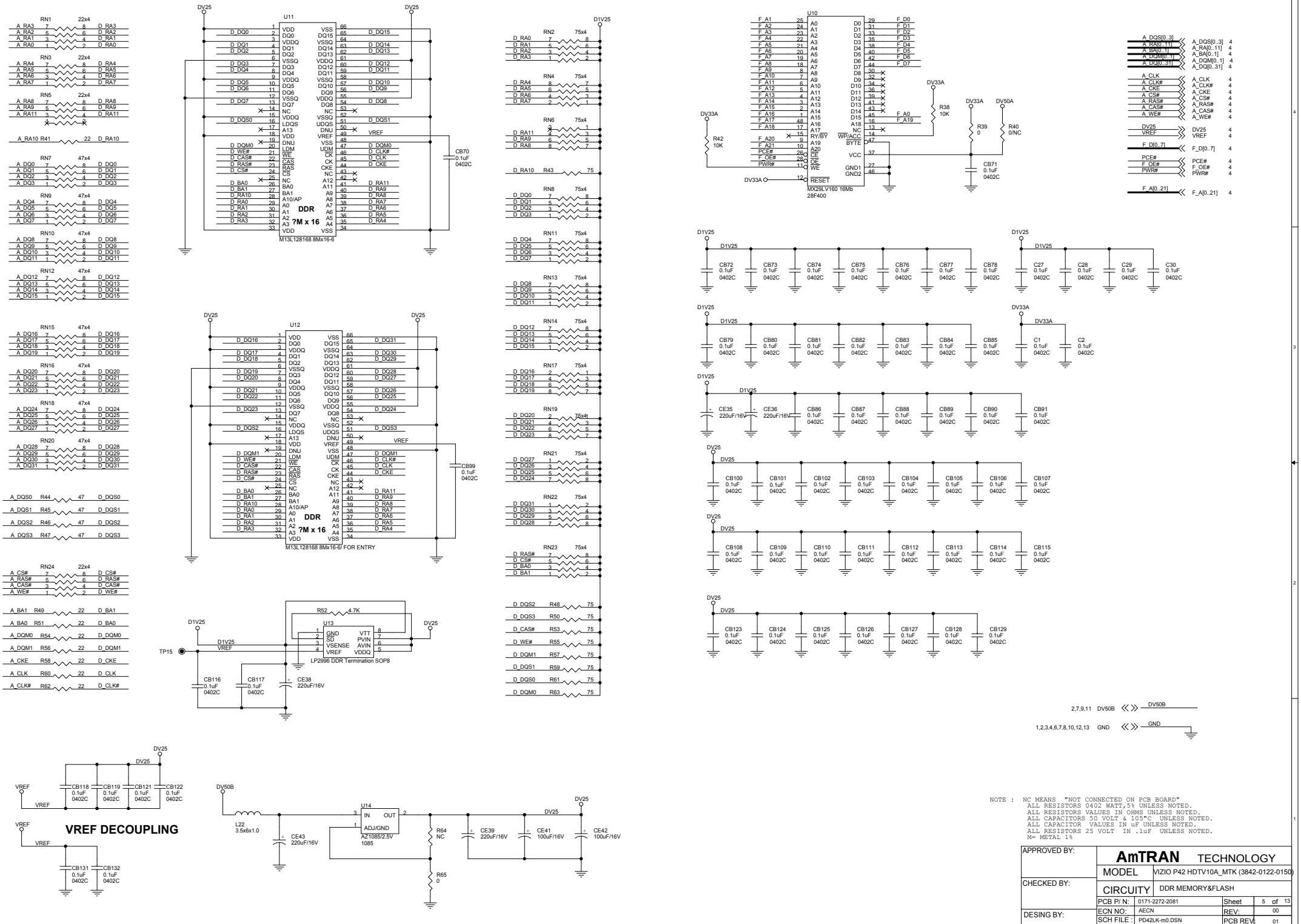
M= METAL 1%

DACVREF 4
DACFS 4
ADCPLLVDD1 4
ADCPLLVDD 4
APLLVDD 4
ANALOGVDD 4
VPLLVDD 4
LVDDA 4
ADCVDD 4
DACVDD 4
AVCM 4
VOCM 4
VICM 4
VREFP4 4
VREFN4 4
ADCVDD0 4
PWM2VREF 4
AUXTOP 4
AUXBOTTOM 4
REXTA 4
APLL_CAP 4
XTALI 4
XTALO 4
VPLLVSS 4
LVSSA 4
SYSPLLGND 4
ADCGND 4
DACVSS 4
ADCVDD4 4
ADCVSS4 4
2,6,7 DV50A
1,2,4,6,7,9,10,11,12 DV33A
2,4 DV18A
1,2,4,5,6,7,8,10,12,13 GND

APPROVED BY:	AmTRAN TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0122-0150)	
CHECKED BY:	CIRCUITY	MT8205 ANALOG POWER	
	PCB P/ N:	0171-2272-2081	Sheet 3 of 13
	ECN NO:	AECN	REV: 00
DESING BY:	SCH FILE :	PD42LK-m0.DSN	PCB REV: 01
	PCB FILE :	PD42-M1.PCB	DATE: Monday, March 13, 2006


MT8205
U9
MPX1
CB19
0.1uF
MPX2
BGA388
MT8205
U26
AZ1085/adj
1085
R33 4.7K
R34
68K
R35
1K
R113
10K
C14
0.1u
SW1
SW-DIP4
URST#
ICE
INT0#
R96
0
UP3_5 FOR S/W SDA
UP3_4 FOR S/W SCL
R36
R37
SDA
SCL
DV33A
DV18A
GND
DACBCLK
5VSB
NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 0402 WATT,5% UNLESS NOTED.
ALL RESISTORS VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105°C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%
APPROVED BY:
CHECKED BY:
DESING BY:
AmTRAN TECHNOLOGY
MODEL VIZIO P42 HDTV10A_MTK (3842-0122-0150)
CIRCUITY MT8205BGA388
PCB P/ N: 0171-2272-2081
Sheet 4 of 13
ECN NO: AECN
REV: 00
SCH FILE : PD42LK-m0.DSN
PCB REV: 01
PCB FILE : PD42-M1.PCB
DATE: Monday, March 13, 2006



NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
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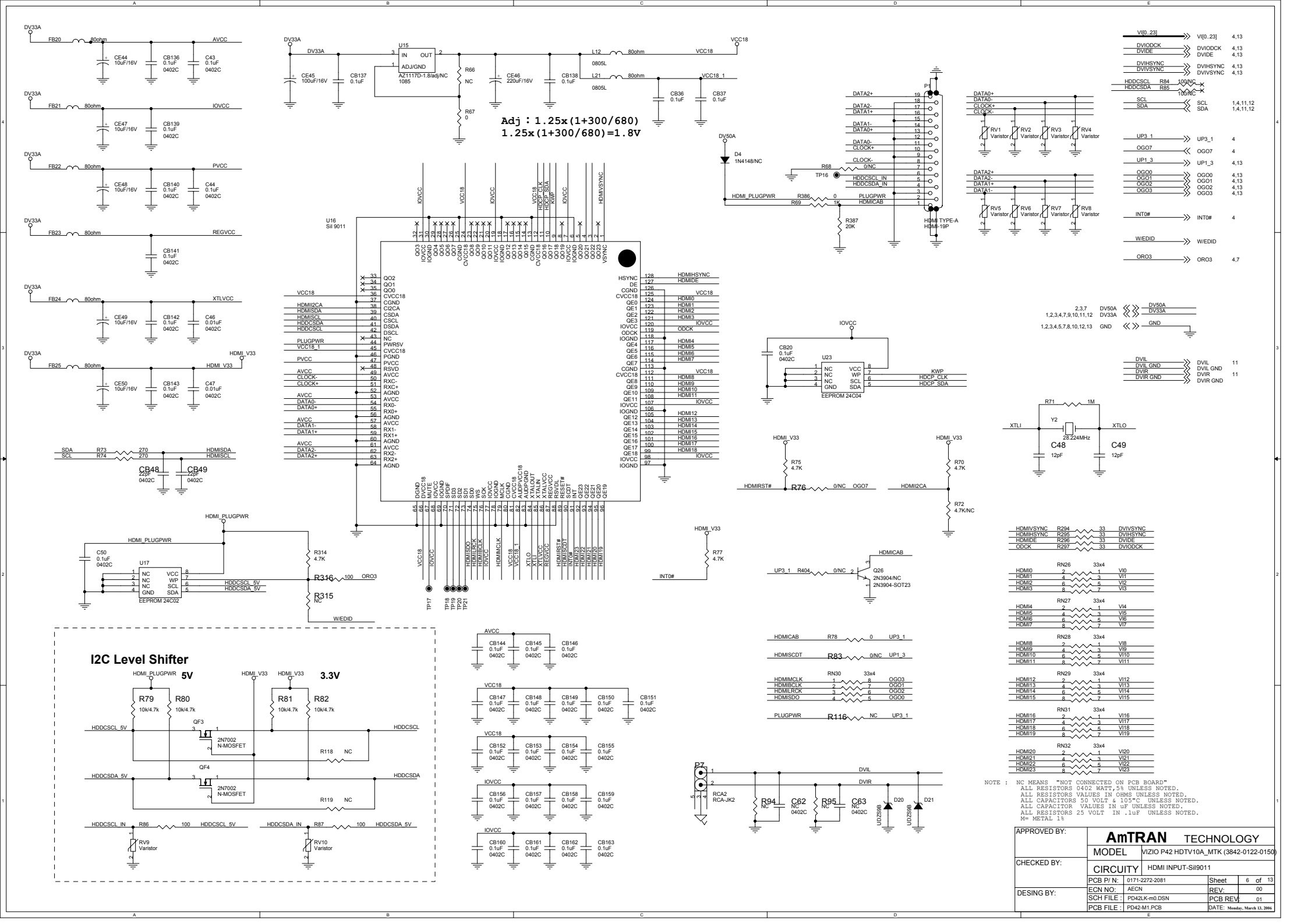
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

APPROVED BY:	AmTRAN TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0122-0150)	
CHECKED BY:	CIRCUITY	DDR MEMORY&FLASH	
	PCB P/ N:	0171-2272-2081	Sheet 5 of 13
DESING BY:	ECN NO:	AECN	REV: 00
	SCH FILE :	PD42LK-m0.DSN	PCB REV: 01
	PCB FILE :	PD42-M1.PCB	DATE: Monday, March 13, 2006



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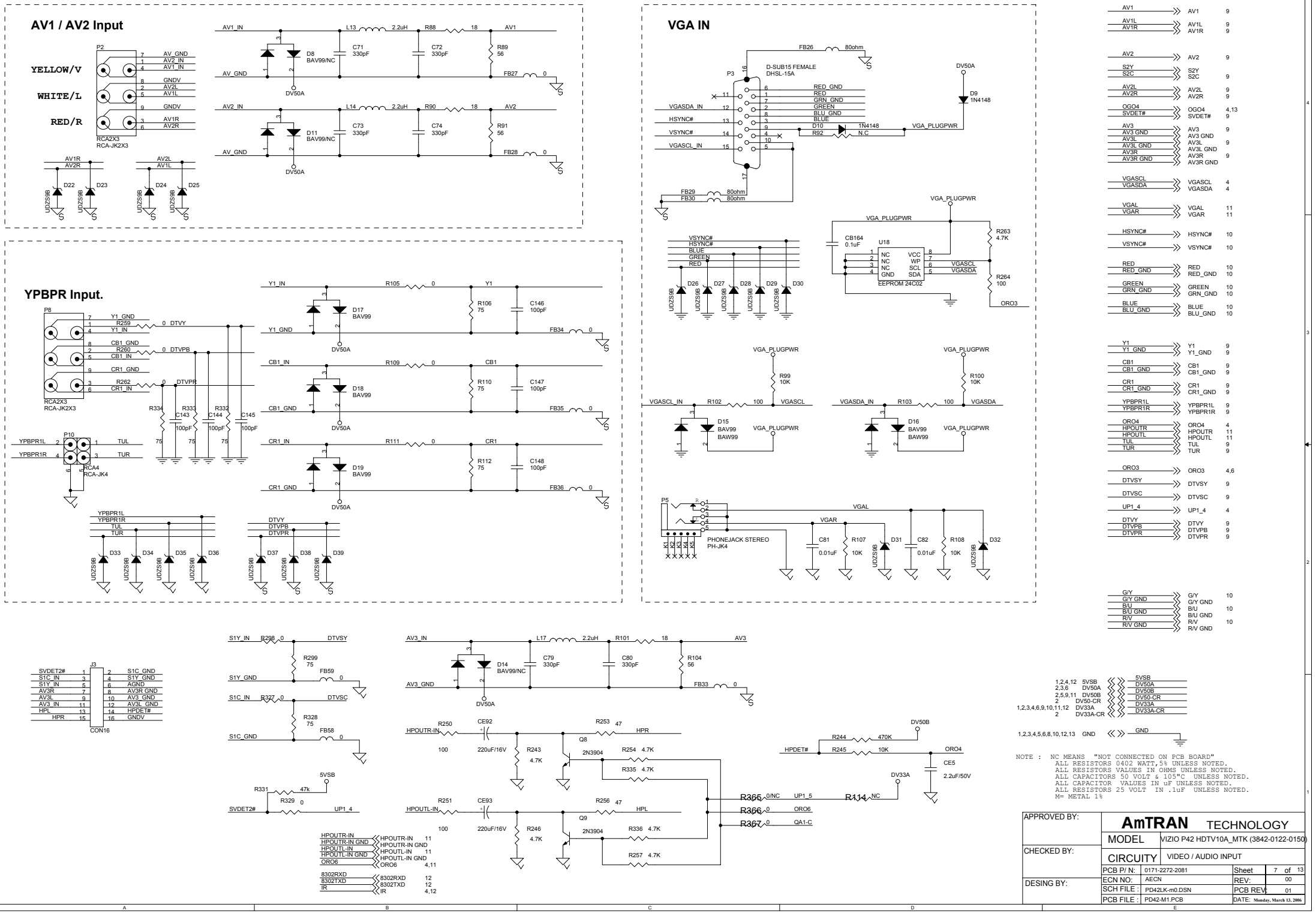
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

APPROVED BY:	AmTRAN TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0122-0150)	
CHECKED BY:	CIRCUITY	HDMI INPUT-Sil9011	
	PCB P/ N:	0171-2272-2081	Sheet 6 of 13
DESING BY:	ECN NO:	AECN	REV: 00
	SCH FILE :	PD42LK-m0.DSN	PCB REV: 01
	PCB FILE :	PD42-M1.PCB	DATE: Monday, March 13, 2006


AV1 / AV2 Input
YELLOW/V
WHITE/L
RED/R
P2
RCA2X3
RCA-JK2X3
AV_GND
AV1R
AV2R
AV2L
AV1L
D22
D23
D24
D25
UDZS9B
AV1_IN
L13
2.2uH
R88
18
AV1
D8
BAV99/NC
C71
330pF
C72
330pF
R89
56
FB27
0
DV50A
AV2_IN
L14
2.2uH
R90
18
AV2
D11
BAV99/NC
C73
330pF
C74
330pF
R91
56
FB28
0
YPBPR Input.
P8
RCA2X3
RCA-JK2X3
Y1_GND
R259
0 DTVY
Y1_IN
CB1_GND
R260
0 DTVPB
CB1_IN
CR1_GND
R262
0 DTVPR
CR1_IN
P10
RCA4
RCA-JK4
YPBPR1L
YPBPR1R
TUL
TUR
R334
R333
R332
C143
C144
C145
100pF
75
Y1_IN
R105
0
Y1
D17
BAV99
R106
75
C146
100pF
FB34
CB1_IN
R109
CB1
D18
R110
C147
FB35
CR1_IN
R111
CR1
D19
R112
C148
FB36
D33
D34
D35
D36
D37
D38
D39
DTVY
DTVPB
DTVPR
VGA IN
D-SUB15 FEMALE
DHSL-15A
P3
VGASDA_IN
HSYNC#
VSYNC#
VGASCL_IN
RED_GND
RED
GRN_GND
GREEN
BLU_GND
BLUE
FB26
80ohm
FB29
FB30
D10
1N4148
N.C
R92
VGA_PLUGPWR
D9
R263
4.7K
R264
100
ORO3
CB164
0.1uF
U18
EEPROM 24C02
NC
WP
SCL
SDA
VCC
VGASCL
VGASDA
R99
10K
R102
R100
R103
D15
D16
BAW99
P5
PHONEJACK STEREO
PH-JK4
VGAL
VGAR
C81
0.01uF
R107
10K
D31
C82
R108
D32
AV1
AV1L
AV1R
AV2
S2Y
S2C
AV2L
AV2R
OGO4
SVDET#
AV3
AV3 GND
AV3L
AV3L GND
AV3R
AV3R GND
VGASCL
VGASDA
VGAL
VGAR
HSYNC#
VSYNC#
RED
RED_GND
GREEN
GRN_GND
BLUE
BLU_GND
Y1
Y1_GND
CB1
CB1_GND
CR1
CR1_GND
YPBPR1L
YPBPR1R
HPOUTR
HPOUTL
TUL
TUR
ORO3
DTVSY
DTVSC
UP1_4
DTVY
DTVPB
DTVPR
G/Y
G/Y GND
B/U
B/U GND
R/V
R/V GND
J3
CON16
SVDET2#
S1C_IN
S1Y_IN
AV3R
AV3L
AV3_IN
HPL
HPR
S1C_GND
S1Y_GND
AGND
AV3R GND
AV3_GND
HPDET#
GNDV
S1Y_IN
R298
DTVSY
R299
75
FB59
S1C_IN
R327
DTVSC
R328
FB58
5VSB
R331
47k
R329
UP1_4
AV3_IN
L17
2.2uH
R101
AV3
D14
BAV99/NC
C79
330pF
C80
R104
56
FB33
HPOUTR-IN
HPOUTL-IN
R250
CE92
R253
HPR
Q8
2N3904
R254
4.7K
R335
R251
CE93
R256
HPL
Q9
R336
R257
100
220uF/16V
R243
R246
R365
R366
R367
0/NC
UP1_5
ORO6
QA1-C
R114
NC
DV50B
DV33A
R244
470K
R245
10K
CE5
2.2uF/50V
HPOUTR-IN GND
HPOUTL-IN GND
8302RXD
8302TXD
IR
NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
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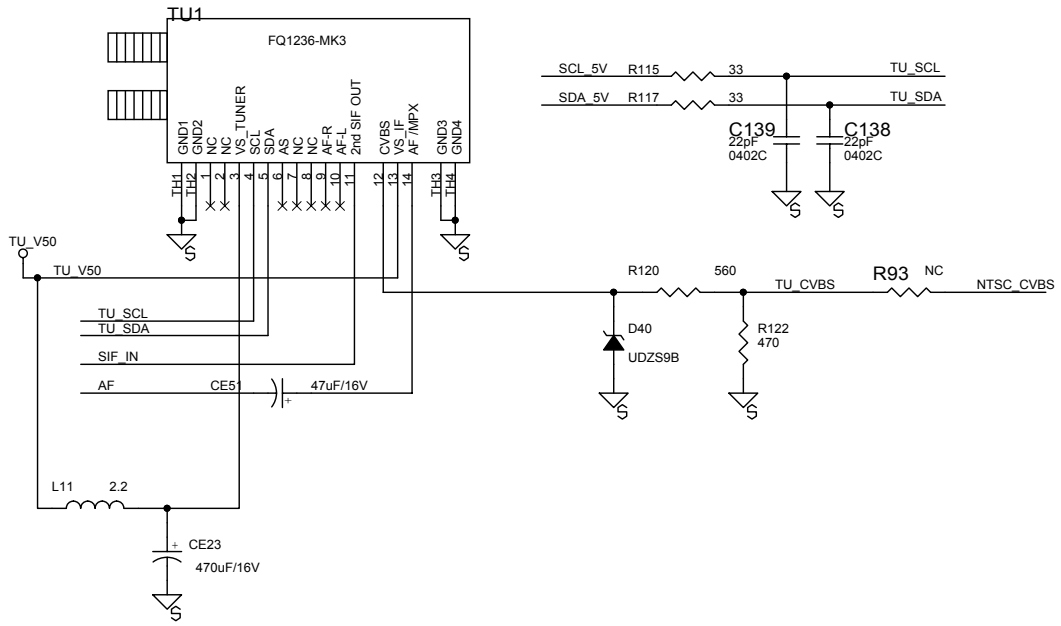
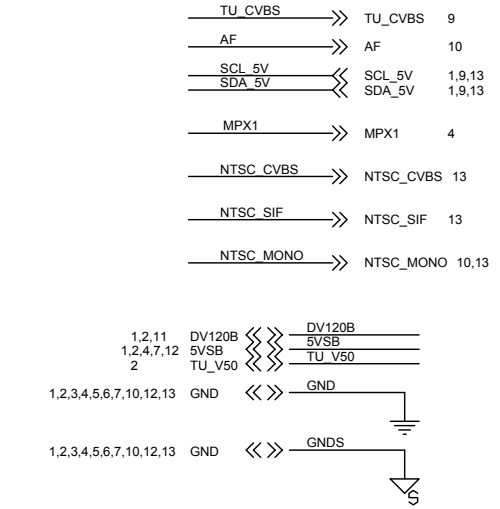
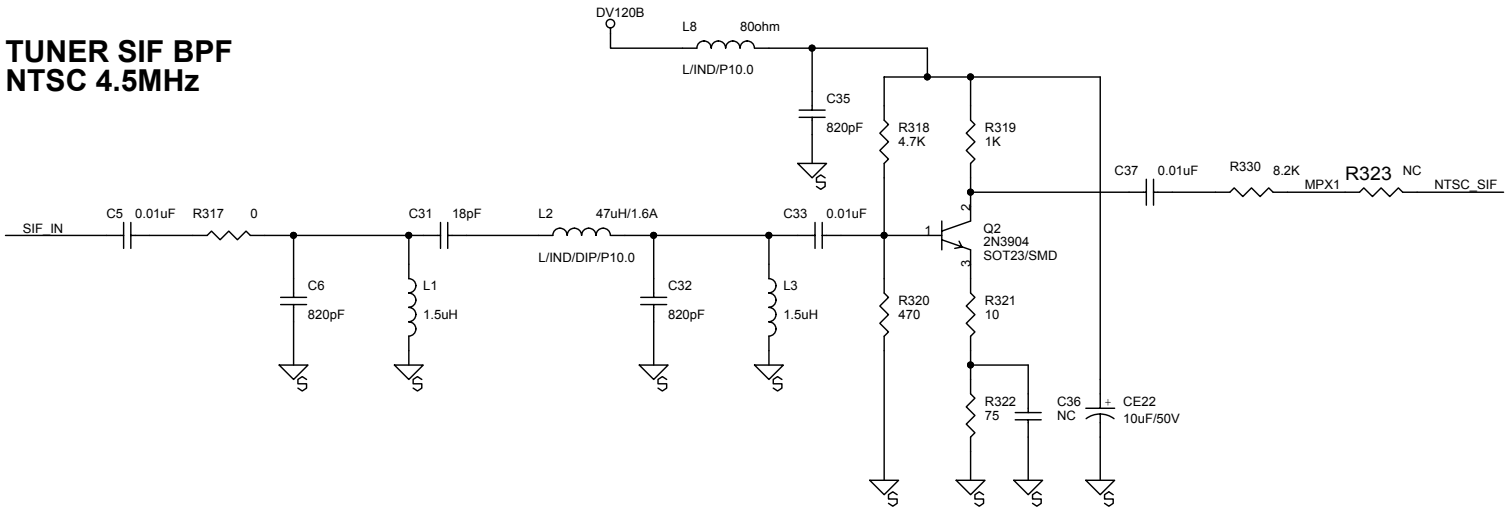
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%
APPROVED BY:
CHECKED BY:
DESING BY:
AmTRAN TECHNOLOGY
MODEL VIZIO P42 HDTV10A_MTK (3842-0122-0150)
CIRCUITY VIDEO / AUDIO INPUT
PCB P/ N: 0171-2272-2081
Sheet 7 of 13
ECN NO: AECN
REV: 00
SCH FILE : PD42LK-m0.DSN
PCB REV: 01
PCB FILE : PD42-M1.PCB
DATE: Monday, March 13, 2006

ADDRESS		
TUNER	IF	
FQ1236 : NTSC	C2	86





TUNER SIF BPF
NTSC 4.5MHz



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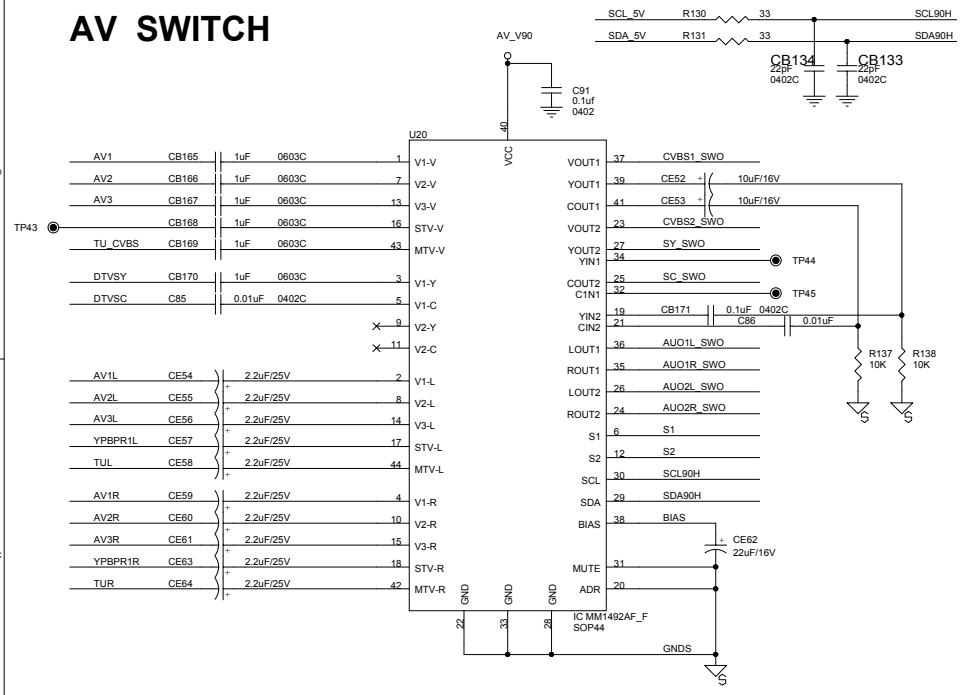
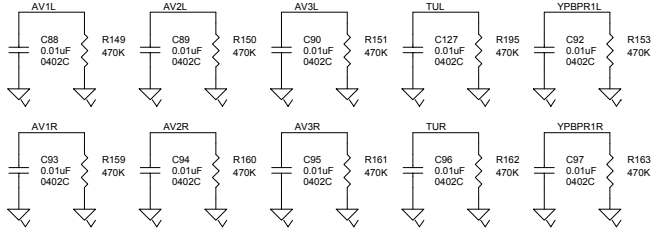
M= METAL 1%

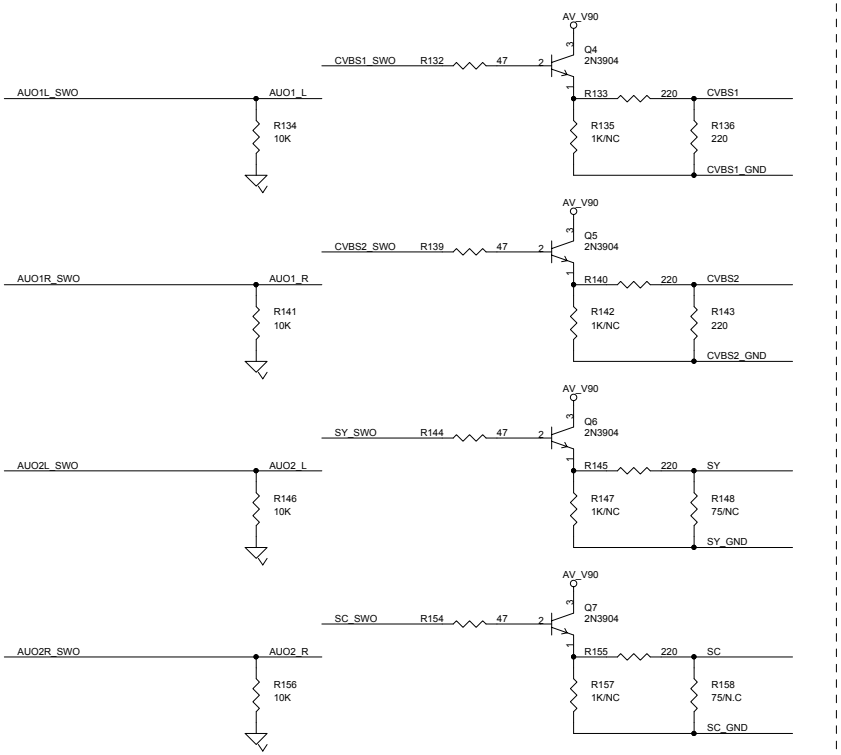
APPROVED BY:	AmTRAN TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0122-0150)	
CHECKED BY:	CIRCUITY	TV & DTV INPUT	
	PCB P/ N:	0171-2272-2081	Sheet 8 of 13
	ECN NO:	AECN	REV: 00
DESING BY:	SCH FILE :	PD42LK-m0.DSN	PCB REV: 01
	PCB FILE :	PD42-M1.PCB	DATE: Monday, March 13, 2006

AV SWITCH



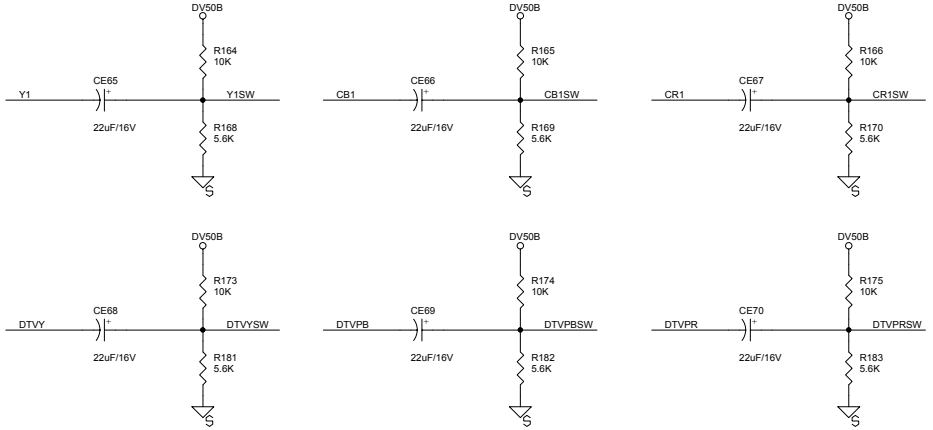


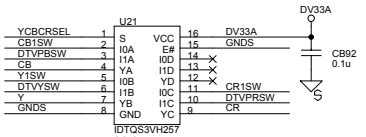
NEARLY U3 AVSW



SCL_5V SCL_5V 1,8,13
SDA_5V SDA_5V 1,8,13
AV1 AV1 7
AV1L AV1L 7
AV1R AV1R 7
AV2 AV2 7
S2Y S2Y
S2C S2C
AV2L AV2L 7
AV2R AV2R 7
AV3 AV3 7
AV3L AV3L 7
AV3R AV3R 7
TU_CVBS TU_CVBS 8
TUL TUL 7
TUR TUR 7
DTVSY DTVSY 7
DTVSC DTVSC 7
YPBPR1L YPBPR1L 7
YPBPR1R YPBPR1R 7
CVBS1 CVBS1 10
CVBS1_GND CVBS1_GND 10
CVBS2 CVBS2 10
CVBS2_GND CVBS2_GND 10
SY SY 10
SY_GND SY_GND 10
SC SC 10
SC_GND SC_GND 10
AUO1_L AUO1_L 11
AUO1_R AUO1_R 11
AUO2_L AUO2_L 11
AUO2_R AUO2_R 11
UP1_2 UP1_2 4
Y1 Y1 7
Y1_GND Y1_GND 7
CB1 CB1 7
CB1_GND CB1_GND 7
CR1 CR1 7
CR1_GND CR1_GND 7
DTVY DTVY 7
DTVPB DTVPB 7
DTVPR DTVPR 7
Y Y 10
Y_GND Y_GND 10
CB CB 10
CB_GND CB_GND 10
CR CR 10
CR_GND CR_GND 10
SVDET# SVDET#

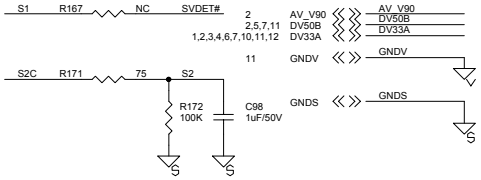
YPBPR / SCART1 RGB SWITCH





UP1_2 R176 0 YCBCRSEL

Y1	R177	0/NC	Y
Y1_GND	R178	0	Y_GND
CB1	R179	0/NC	CB
CB1_GND	R180	0	CB_GND
CR1	R184	0/NC	CR
CR1_GND	R185	0	CR_GND



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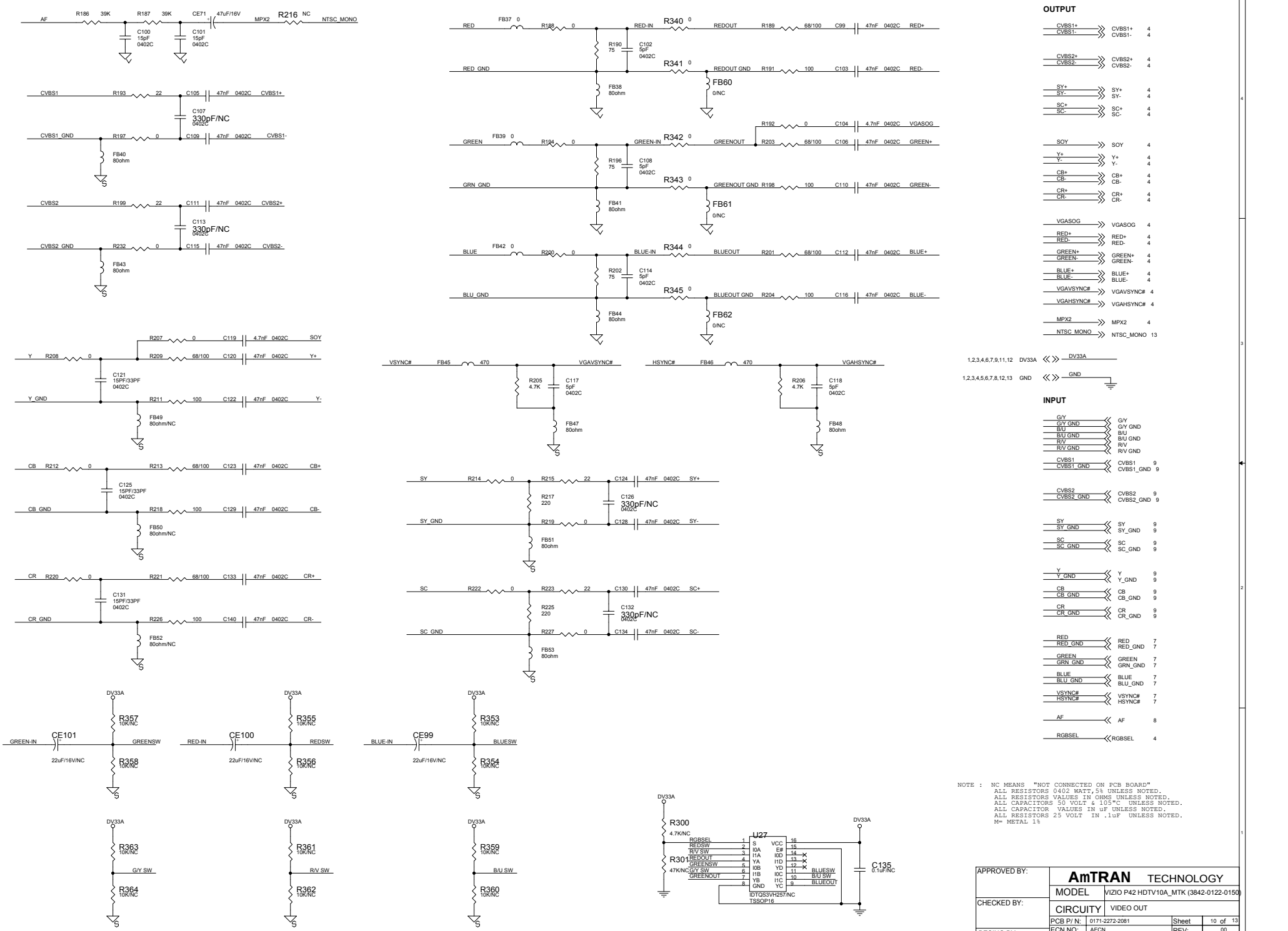
M= METAL 1%

APPROVED BY:	AmTRAN TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0122-0150)	
CHECKED BY:	CIRCUITY	AV SWITCH	
	PCB P/ N:	0171-2272-2081	Sheet 9 of 13
DESING BY:	ECN NO:	AECN	REV: 00
	SCH FILE :	PD42LK-m0.DSN	PCB REV: 01
	PCB FILE :	PD42-M1.PCB	DATE: Monday, March 13, 2006



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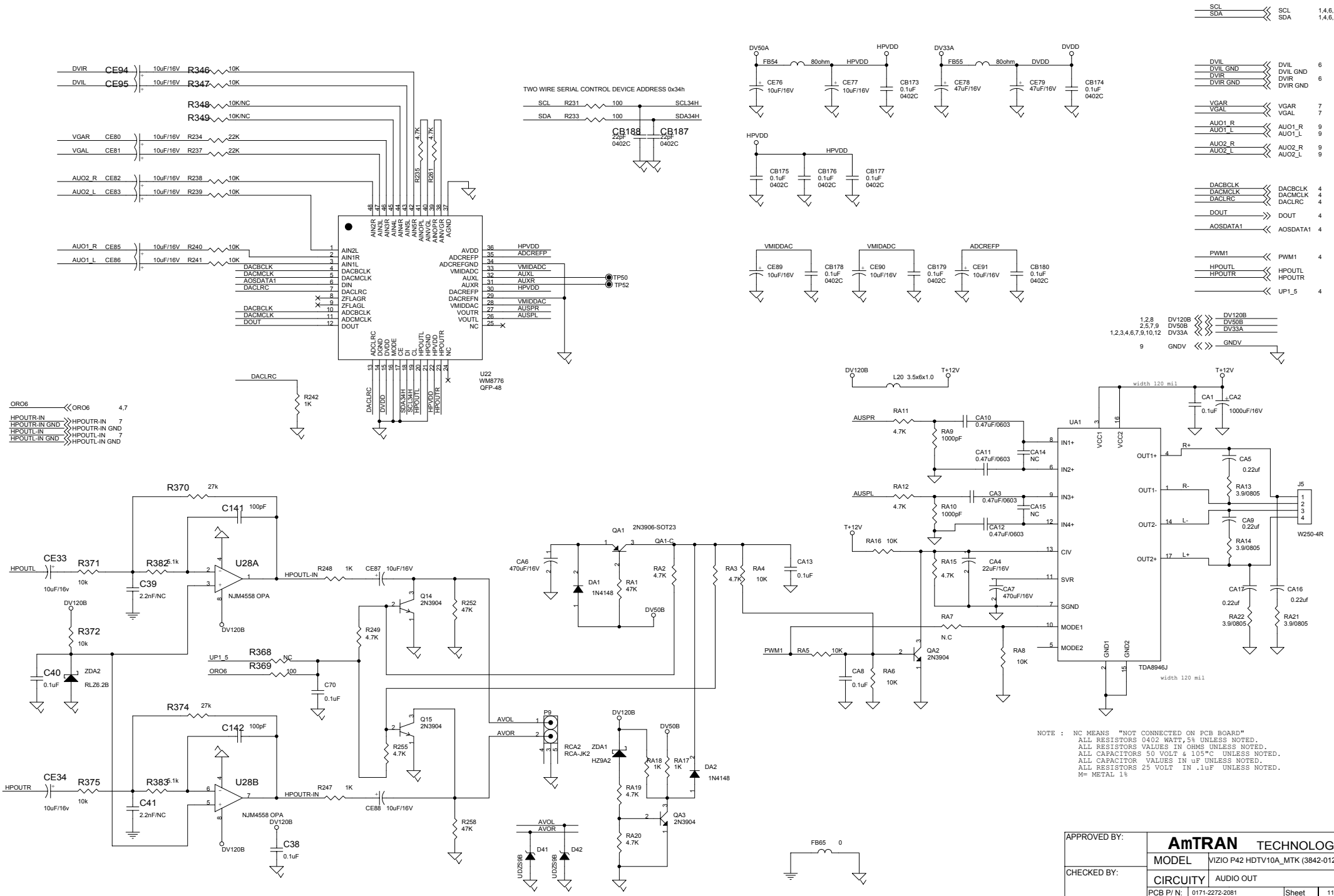
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

APPROVED BY:	**AmTRAN** TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0122-0150)	
CHECKED BY:	CIRCUITY	VIDEO OUT	
	PCB P/ N:	0171-2272-2081	Sheet 10 of 13
DESING BY:	ECN NO:	AECN	REV: 00
	SCH FILE :	PD42LK-m0.DSN	PCB REV: 01
	PCB FILE :	PD42-M1.PCB	DATE: Monday, March 13, 2006



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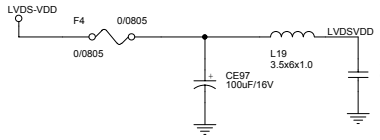
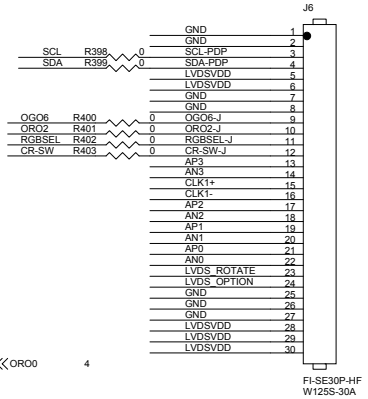
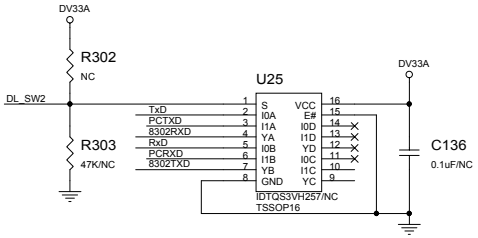
M= METAL 1%

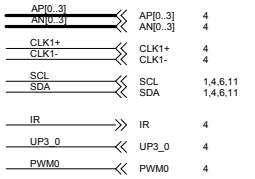
APPROVED BY:	AmTRAN TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0122-0150)	
CHECKED BY:	CIRCUITY	AUDIO OUT	
	PCB P/ N:	0171-2272-2081	Sheet 11 of 13
DESING BY:	ECN NO:	AECN	REV: 00
	SCH FILE :	PD42LK-m0.DSN	PCB REV: 01
	PCB FILE :	PD42-M1.PCB	DATE: Monday, March 13, 2006

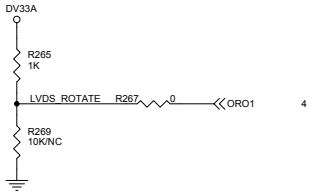
LVDS OUT

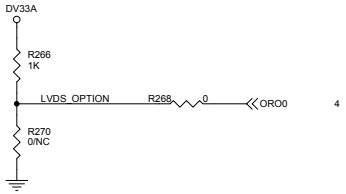




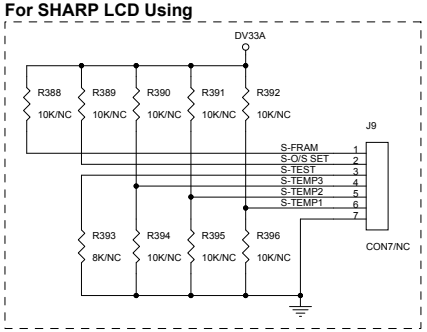


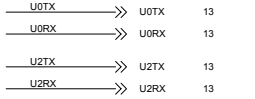


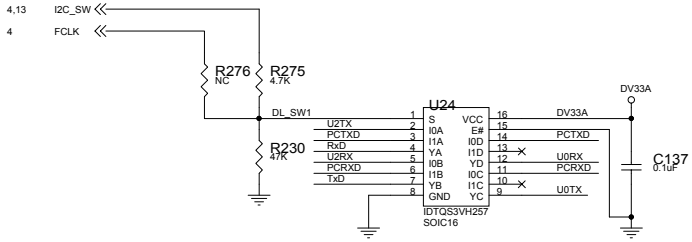


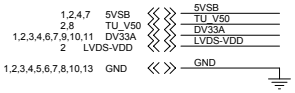


For SHARP LCD Using









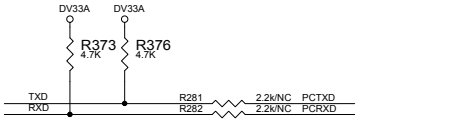
S	L	
		PC ==> MT5351UART0
	H	MT5351 UART2<==> MT8205<==>MT8302 PC ==> MT8205 PC TXD ==> MT5351UART0 RX

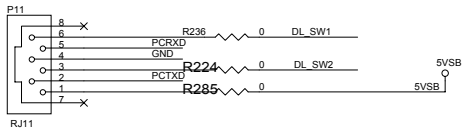
PCTXD--PC
PCRXD--PC

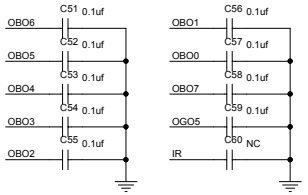
RXD--MT8205
TXD--MT8205

U0TX--MT5351/DOWNLOAD
U0RX--MT5351/DOWNLOAD

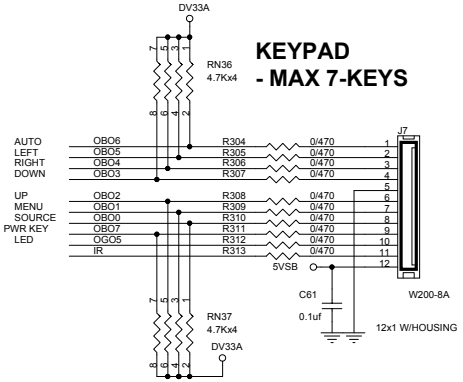
U2TX--MT5351/MT8205 COMMUNICIATE
U2RX--MT5351/MT8205 COMMUNICIATE

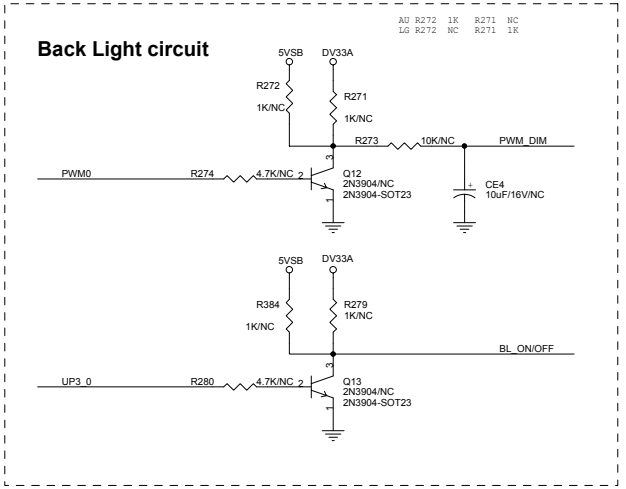






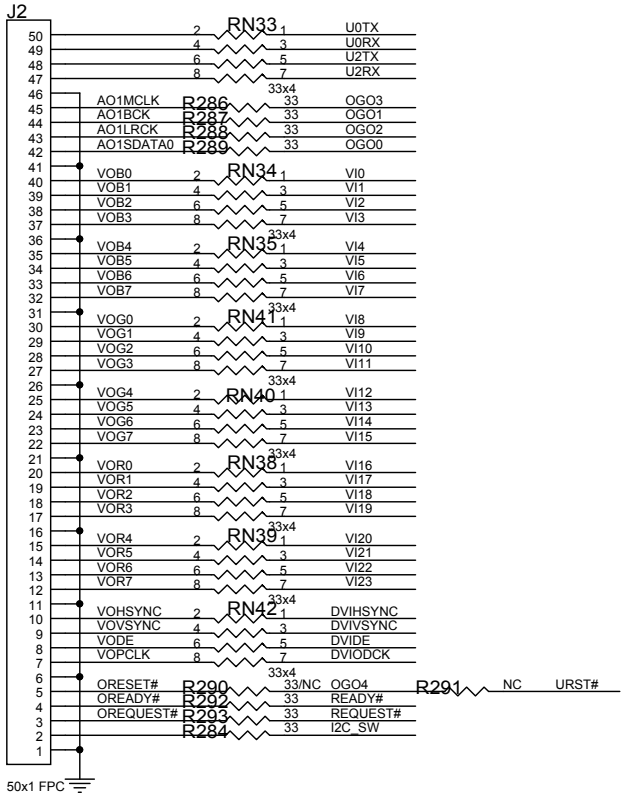
KEYPAD
- MAX 7-KEYS



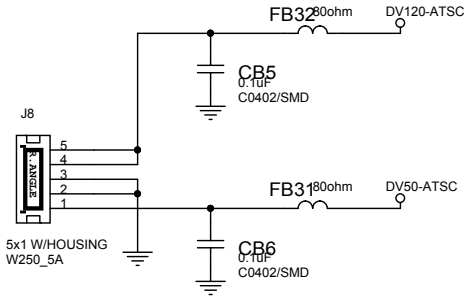


NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 0402 WATT,5% UNLESS NOTED.
ALL RESISTORS VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

APPROVED BY:	AmTRAN TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0122-0150)	
CHECKED BY:	CIRCUITY	LVDS OUT & KEYPAD	
	PCB P/ N:	0171-2272-2081	Sheet 12 of 13
DESING BY:	ECN NO:	AECN	REV: 00
	SCH FILE :	PD42LK-m0.DSN	PCB REV: 01
	PCB FILE :	PD42-M1.PCB	DATE: Monday, March 13, 2006



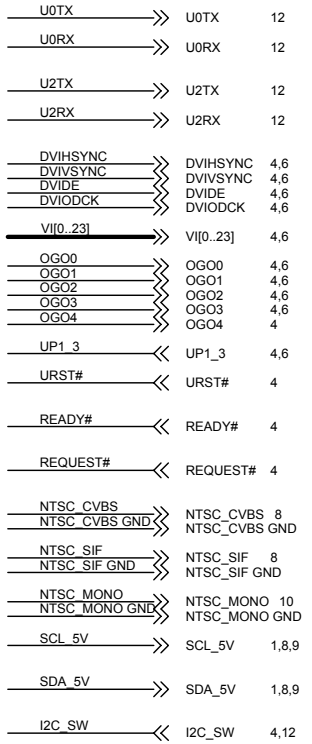
MT5351 DIGITAL I/F

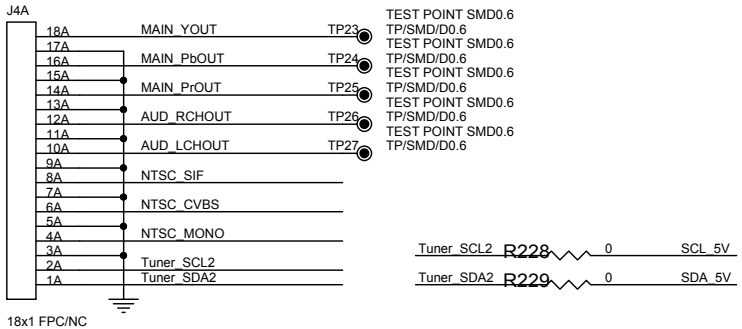


POWER OUTPUT TO MT5351

ORESET# R397 0 UP1_3

For ATSC Reset





Tuner_SCL2 R228 0 SCL_5V

Tuner_SDA2 R229 0 SDA_5V

MT5351 ANALOGY I/F

APPROVED BY:	**AmTRAN** TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0122-0150)	
CHECKED BY:	CIRCUITY	INDEX & POWER CONNECTOR	
	PCB P/ N:	0171-2272-2081	Sheet 13 of 13
DESING BY:	ECN NO:	AECN	REV: 00
	SCH FILE :	PD42LK-m0.DSN	PCB REV: 01
	PCB FILE :	PD42-M1.PCB	DATE: Monday, March 13, 2006

MT5351R6-V1

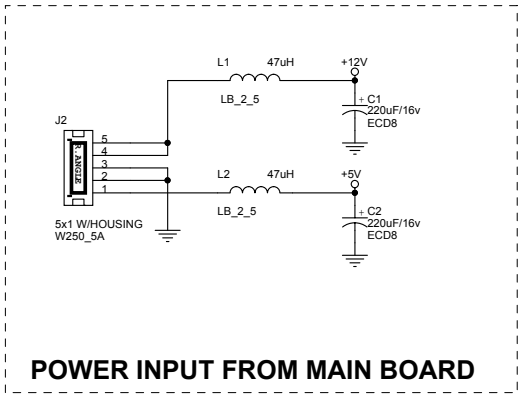
MT5111 / MT5351 REFERENCE DESIGN FOR AMTRAN - 4 LAYERS

Rev	History	P#	DATE
R6-V1	INITIAL VERSION		2005/05/11

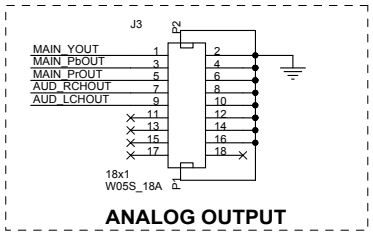
01. INDEX AND INTERFACE
02. POWER
03. TUNER
04. MT5111 ASIC
05. MT5351 ASIC
06. MT5351 PERIPHERAL
07. DDR MEMORY
08. NOR FLASH / JTAG / UART

NS : NON-STUFF

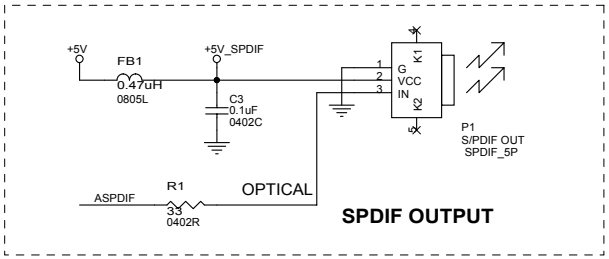
NAME	TYPE	DEVICE
+12V	POWER +12V	POWER SUPPLY
+5V	POWER +5V	POWER SUPPLY
+5V_tuner	POWER +5V	TUNER POWER
DV33_DM	POWER +3V3	MT5111 POWER
DV18	POWER +1V8	MT5111 POWER
DV33	POWER +3V3	MT5351 POWER
AV33	POWER +3V3	MT5351 ANALOG POWER
DV25	POWER +2V5	MT5351 DDR POWER
DV12	POWER +1V2	MT5351 POWER
GND	GROUND	GROUND



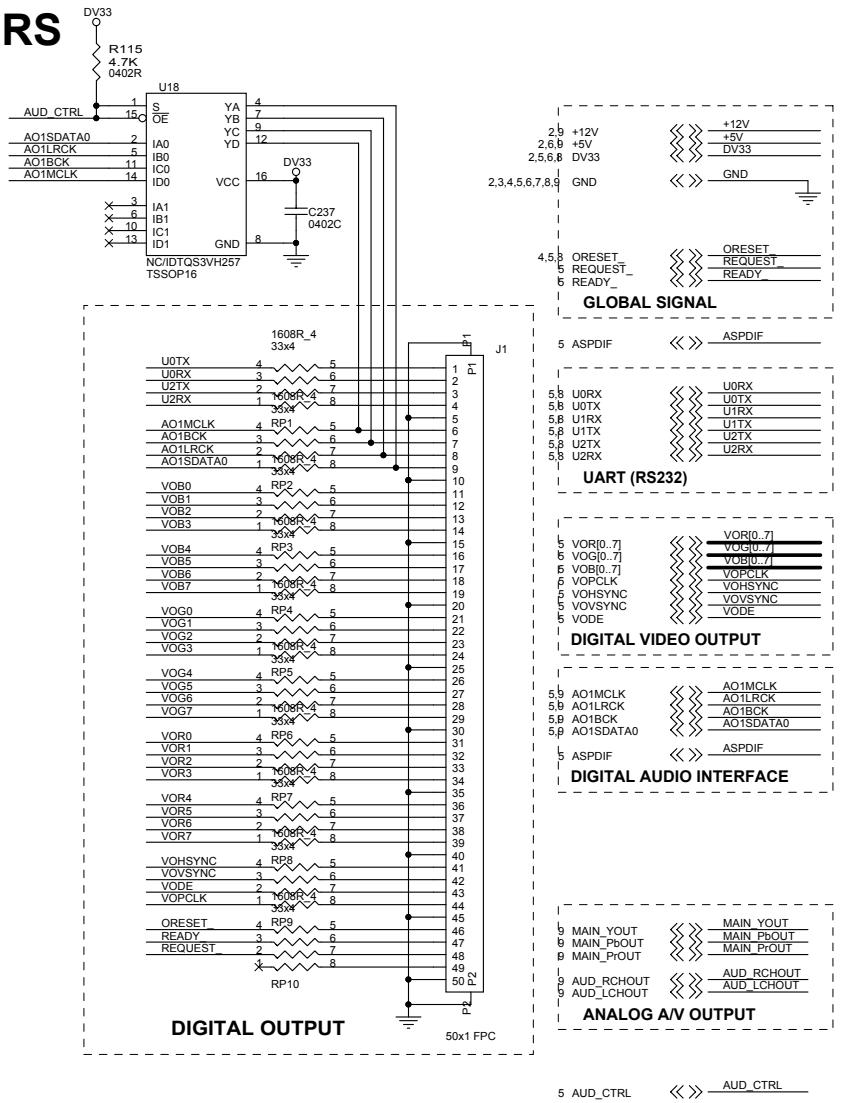
POWER INPUT FROM MAIN BOARD



ANALOG OUTPUT

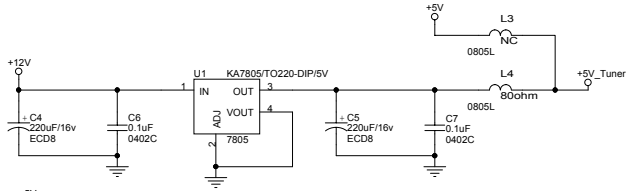


SPDIF OUTPUT

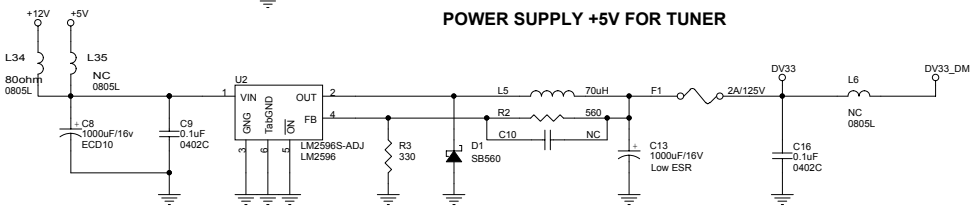


NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/10 WATT,5% UNLESS NOTED.
ALL RESISTORS VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

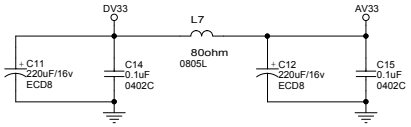
APPROVED BY:	**AmTRAN** TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0082-0187)	
CHECKED BY:	CIRCUITY	INDEX	
	PCB P/ N:	0171-1472-0320	Sheet 1 of 9
	ECN NO:	AECN	REV: 00
DESING BY:	SCH FILE :	PD42LK-ATSC0.DSN	PCB REV: 00
	PCB FILE :	37ATSC-M1.PCB	DATE: Monday, March 13, 2006



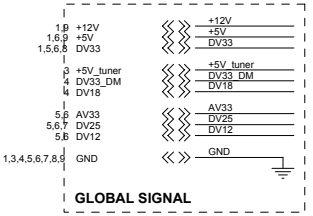
POWER SUPPLY +5V FOR TUNER



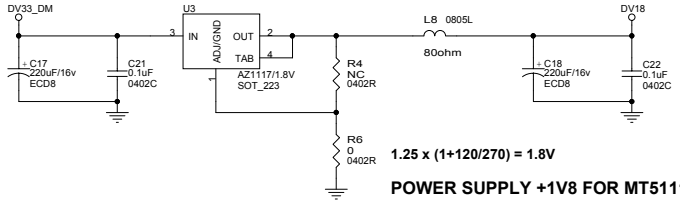
Adj：1.23x(1+R2/R1)
1.23x(1+1.69K/1K)=3.3V



POWER SUPPLY +3V3 FOR MT5351 (ANALOG)

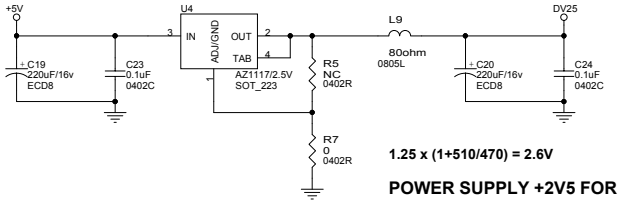


GLOBAL SIGNAL



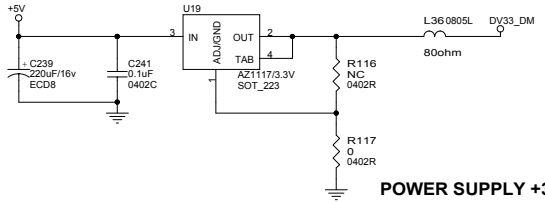
1.25 x (1+120/270) = 1.8V

POWER SUPPLY +1V8 FOR MT5111

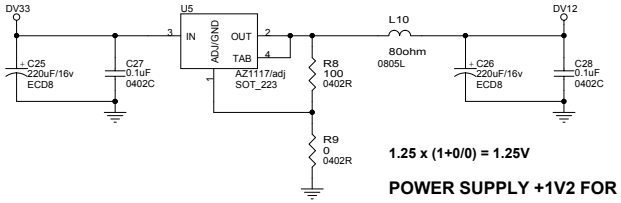


1.25 x (1+510/470) = 2.6V

POWER SUPPLY +2V5 FOR MT5351 AND DDR

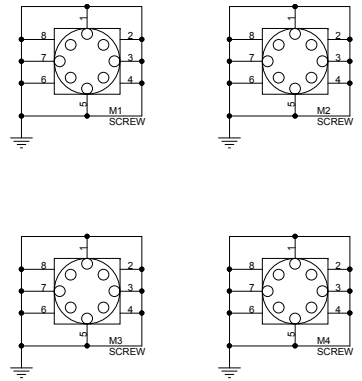


POWER SUPPLY +3.3V FOR MT5111



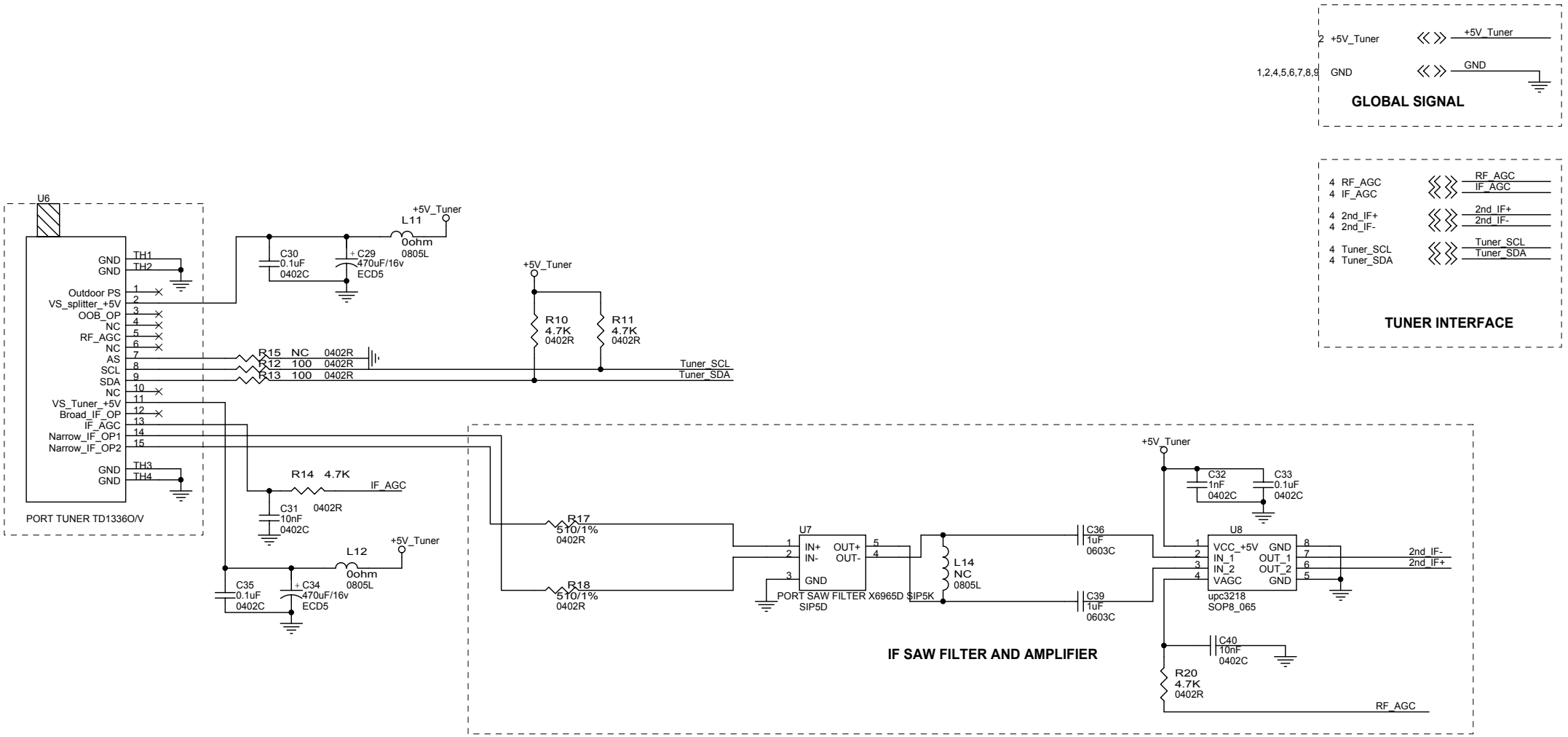
1.25 x (1+0/0) = 1.25V

POWER SUPPLY +1V2 FOR MT5351



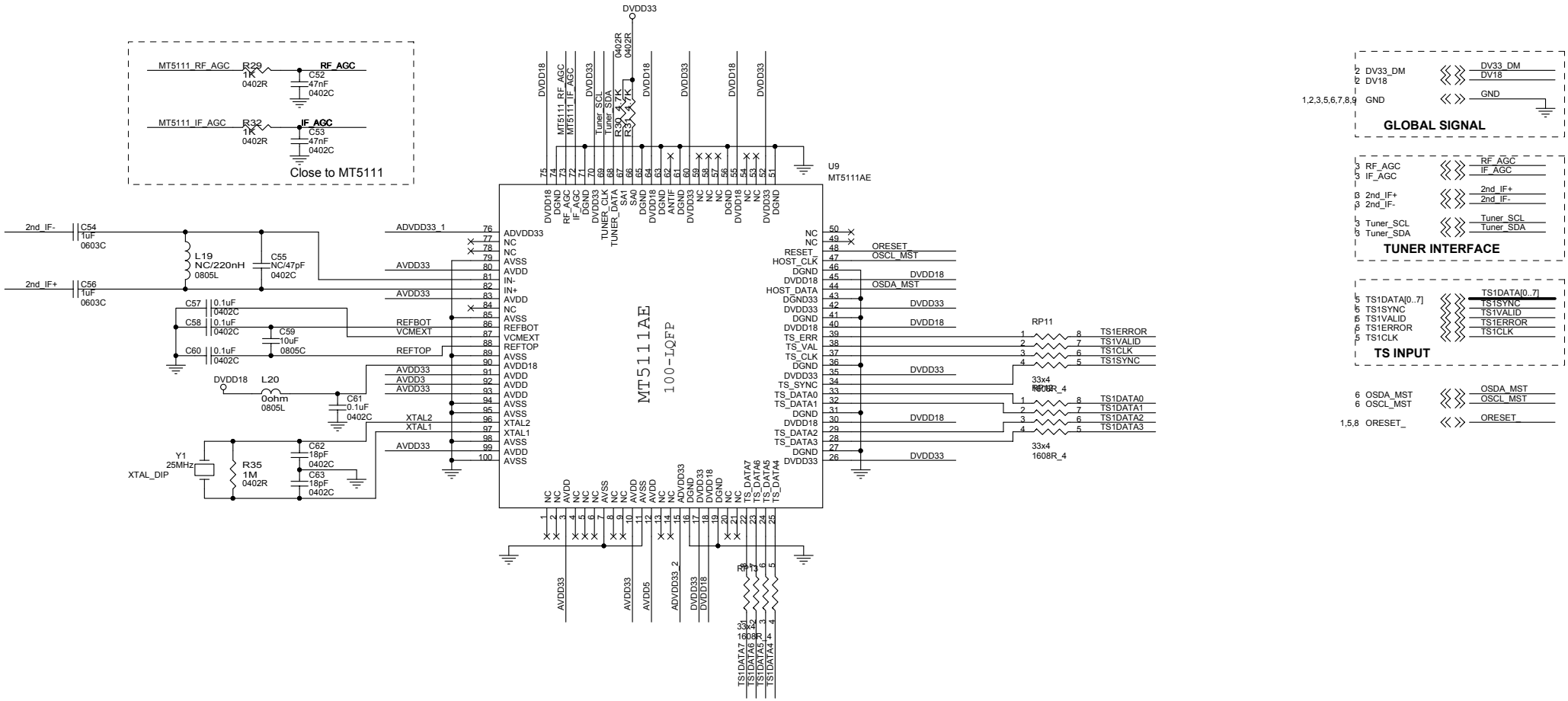
NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/10 WATT,5% UNLESS NOTED.
ALL RESISTORS VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105°C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

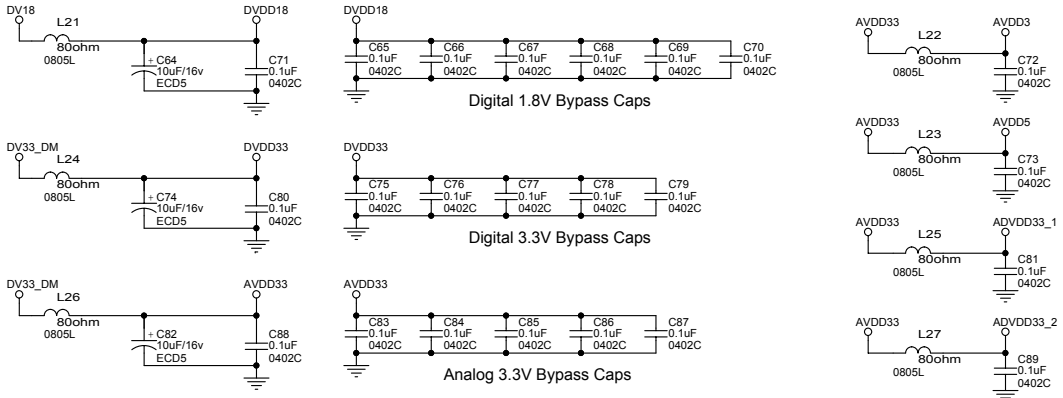
APPROVED BY:	**AmTRAN** TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0082-0187)	
CHECKED BY:	CIRCUITY	POWER	
	PCB P/ N:	0171-1472-0320	Sheet 2 of 9
	ECN NO:	AECN	REV: 00
DESING BY:	SCH FILE :	PD42LK-ATSC0.DSN	PCB REV: 00
	PCB FILE :	37ATSC-M1.PCB	DATE: Monday, March 13, 2006



NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/10 WATT,5% UNLESS NOTED.
ALL RESISTORS VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

APPROVED BY:	**AmTRAN** TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0082-0187)	
CHECKED BY:	CIRCUITY	TUNER	
	PCB P/ N:	0171-1472-0320	Sheet 3 of 9
	ECN NO:	AECN	REV: 00
DESING BY:	SCH FILE :	PD42LK-ATSC0.DSN	PCB REV: 00
	PCB FILE :	37ATSC-M1.PCB	DATE: Monday, March 13, 2006





NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/10 WATT,5% UNLESS NOTED.
ALL RESISTORS VALUES IN OHMS UNLESS NOTED.
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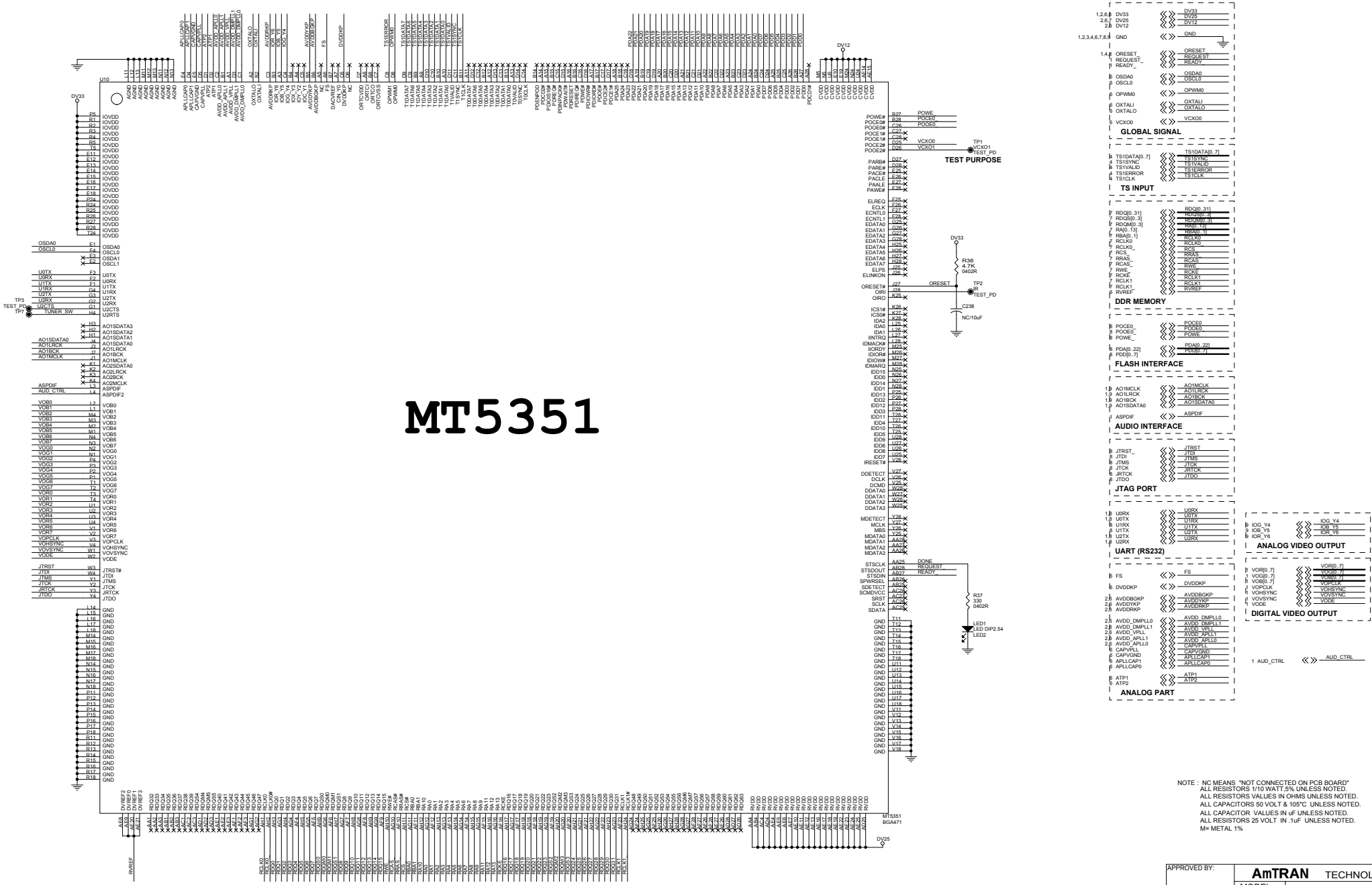
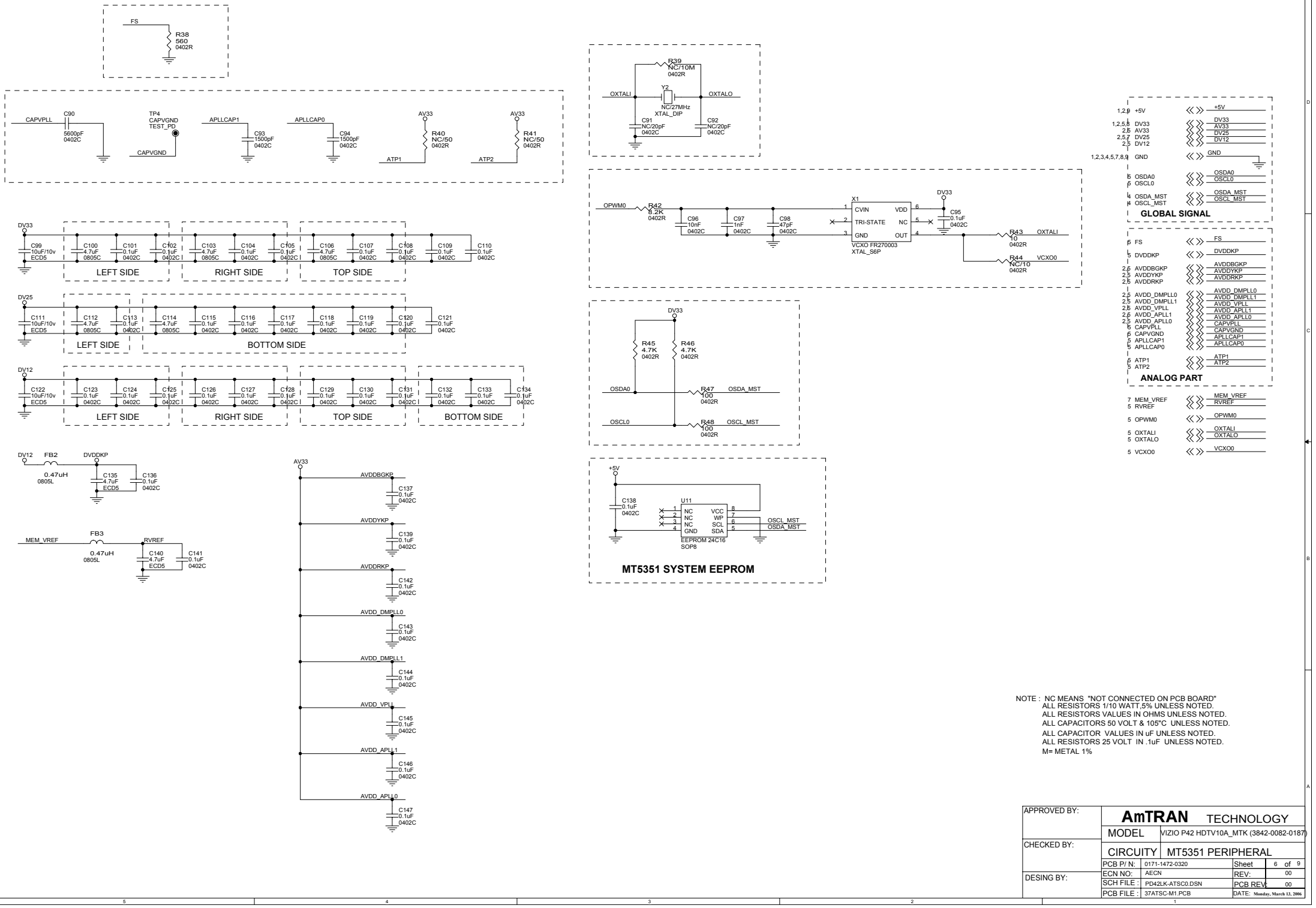
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

APPROVED BY:	**AmTRAN** TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0082-0187)	
CHECKED BY:	CIRCUITY	MT5111 ASIC	
	PCB P/ N:	0171-1472-0320	Sheet 4 of 9
DESING BY:	ECN NO:	AECN	REV: 00
	SCH FILE :	PD42LK-ATSC0.DSN	PCB REV: 00
	PCB FILE :	37ATSC-M1.PCB	DATE: Monday, March 13, 2006



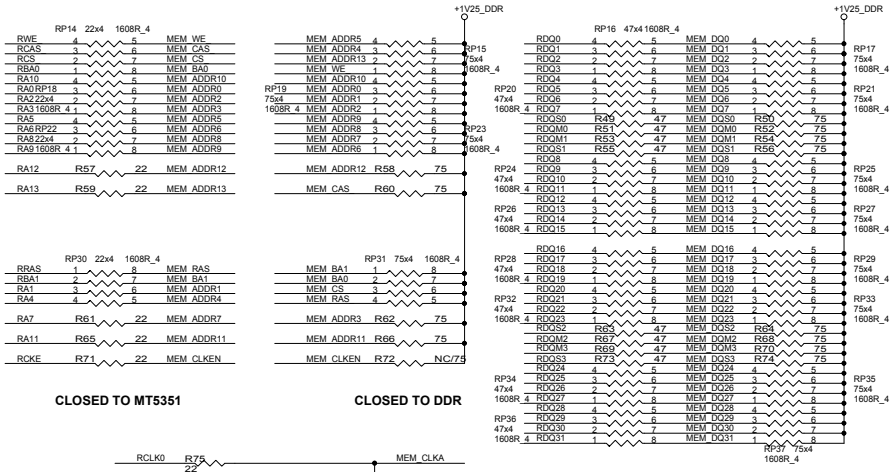
NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/10 WATT,5% UNLESS NOTED.
ALL RESISTORS VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105°C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

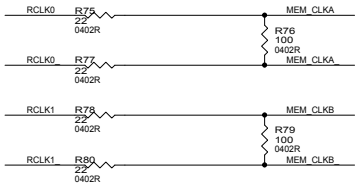
APPROVED BY:	**AmTRAN** TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0082-0187)	
CHECKED BY:	CIRCUITY	MT5111 ASIC	
	PCB P/ N:	0171-1472-0320	Sheet 5 of 9
DESING BY:	ECN NO:	AECN	REV: 00
	SCH FILE :	PD42LK-ATSC0.DSN	PCB REV: 00
	PCB FILE :	37ATSC-M1.PCB	DATE: Monday, March 13, 2006

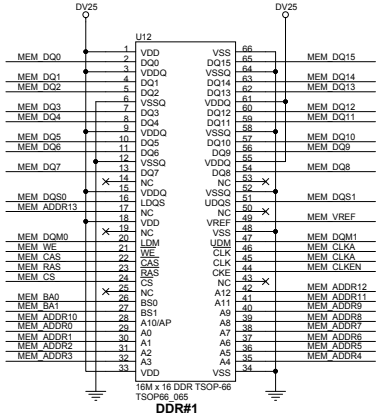


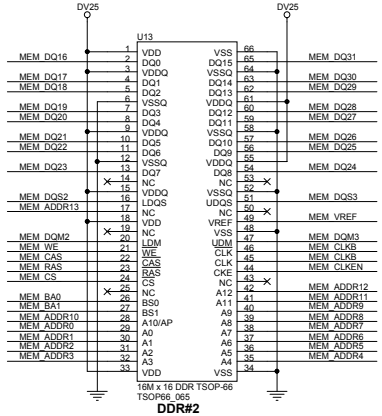
NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/10 WATT,5% UNLESS NOTED.
ALL RESISTORS VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

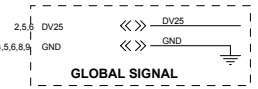
APPROVED BY:	AmTRAN TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0082-0187)	
CHECKED BY:	CIRCUITY	MT5351 PERIPHERAL	
	PCB P/ N:	0171-1472-0320	Sheet 6 of 9
	ECN NO:	AECN	REV: 00
DESING BY:	SCH FILE :	PD42LK-ATSC0.DSN	PCB REV: 00
	PCB FILE :	37ATSC-M1.PCB	DATE: Monday, March 13, 2006

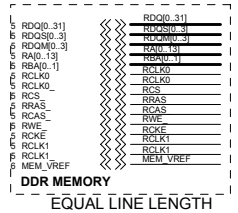


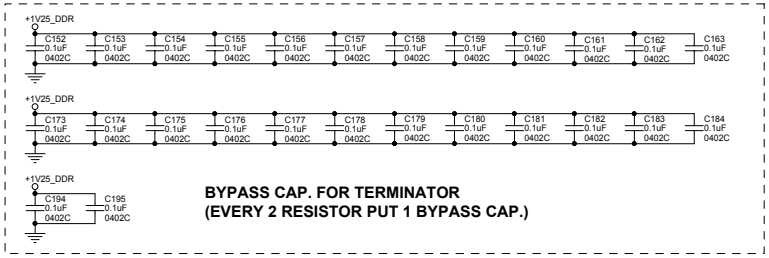


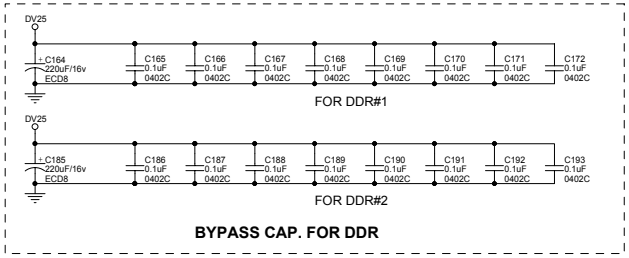


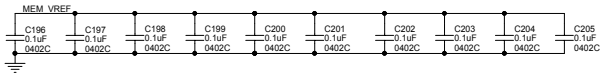


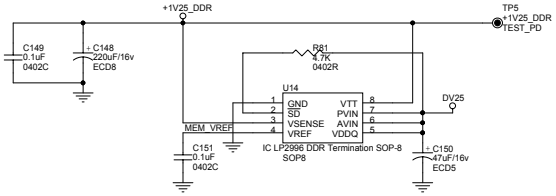












NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
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ALL RESISTORS VALUES IN OHMS UNLESS NOTED.
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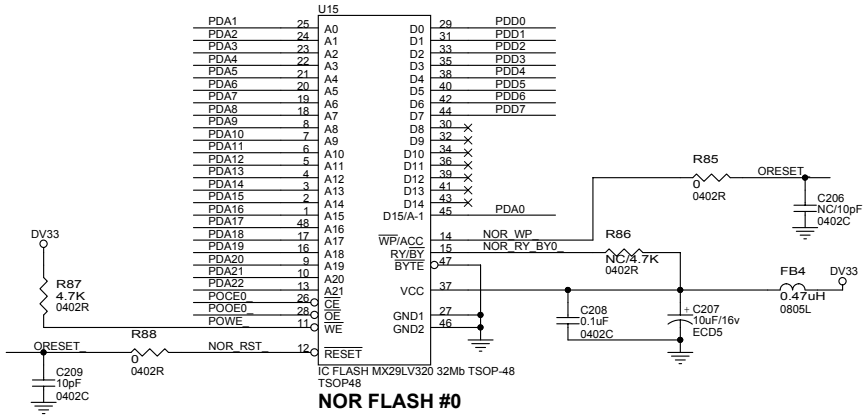
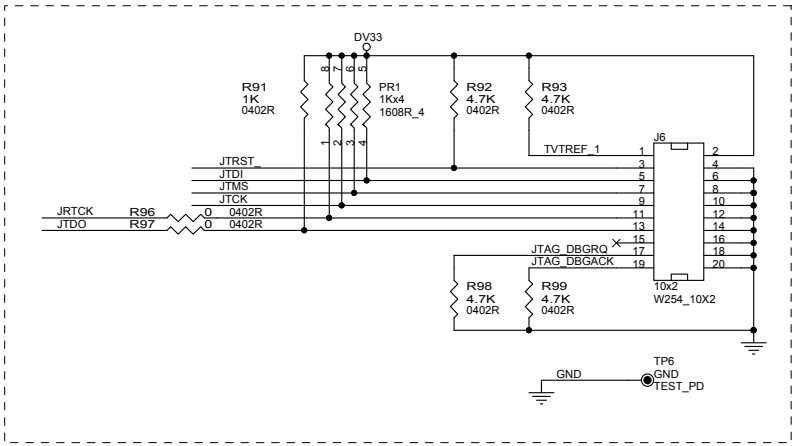
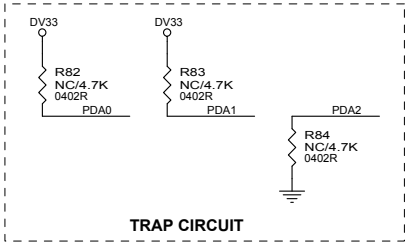
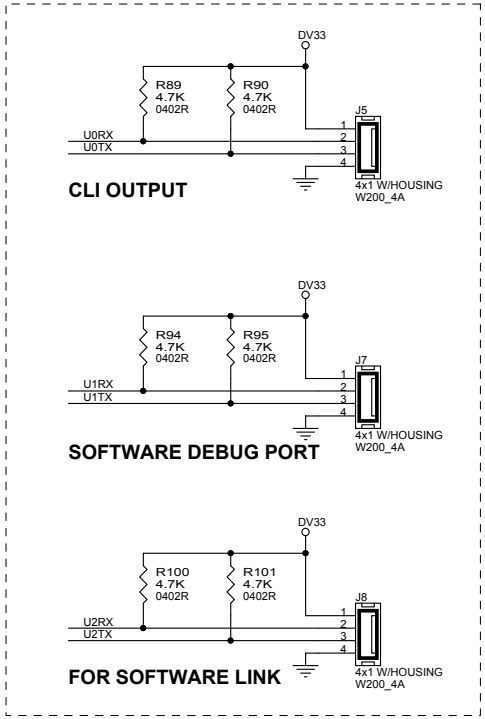
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

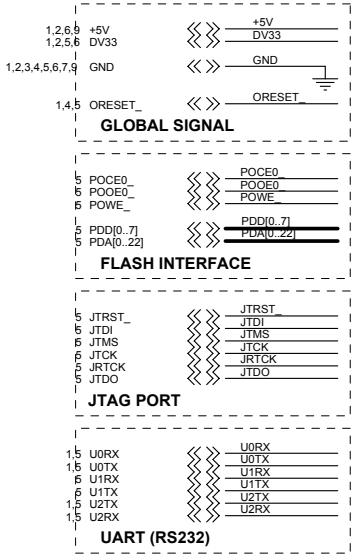
APPROVED BY:	AmTRAN TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0082-0187)	
CHECKED BY:	CIRCUITY	MT5351 PERIPHERAL	
	PCB P/ N:	0171-1472-0320	Sheet 7 of 9
DESING BY:	ECN NO:	AECN	REV: 00
	SCH FILE :	PD42LK-ATSC0.DSN	PCB REV: 00
	PCB FILE :	37ATSC-M1.PCB	DATE: Monday, March 13, 2006





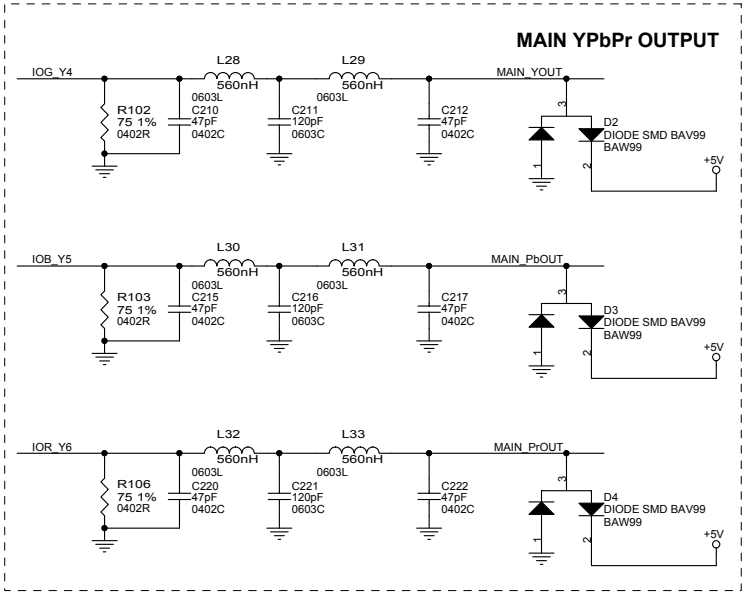


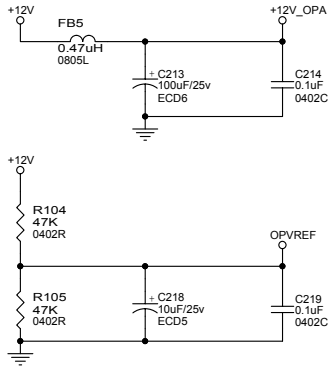


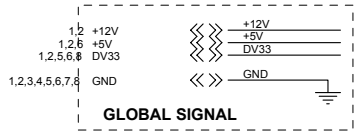


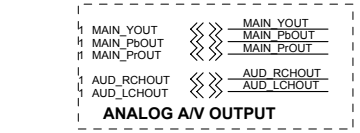
NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/10 WATT,5% UNLESS NOTED.
ALL RESISTORS VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

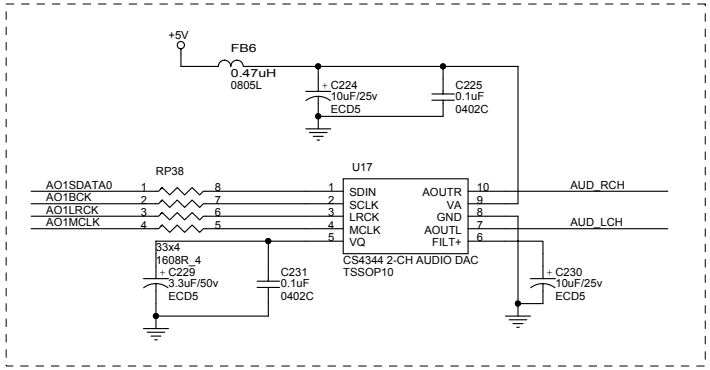
APPROVED BY:	**AmTRAN** TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0082-0187)	
CHECKED BY:	CIRCUITY	NOR FLASH/JTAG/UART	
	PCB P/ N:	0171-1472-0320	Sheet 8 of 9
DESING BY:	ECN NO:	AECN	REV: 00
	SCH FILE :	PD42LK-ATSC0.DSN	PCB REV: 00
	PCB FILE :	37ATSC-M1.PCB	DATE: Monday, March 13, 2006

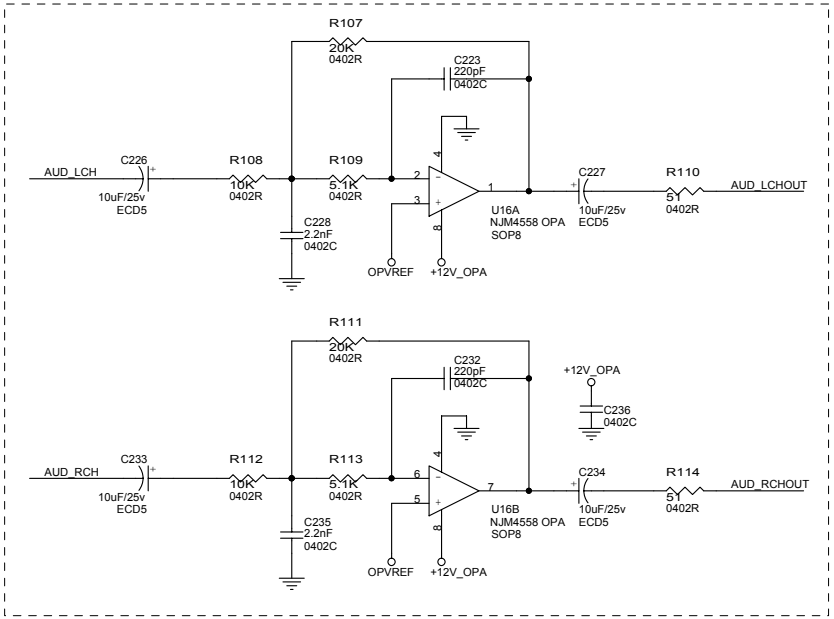






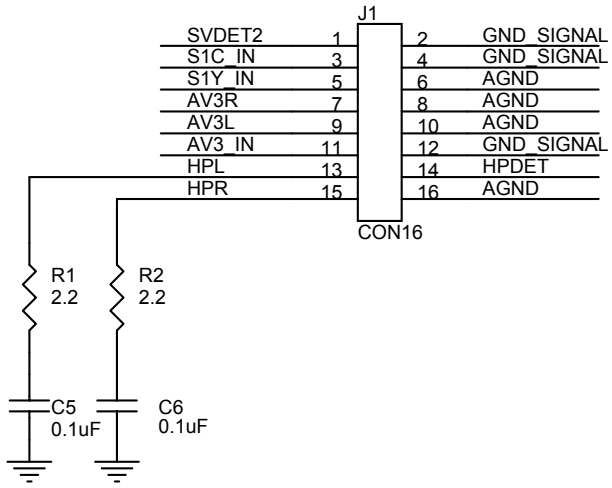


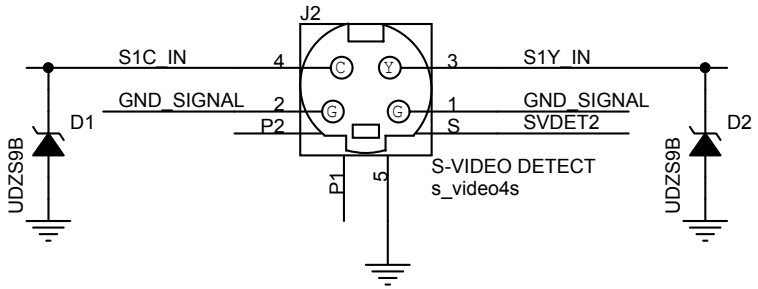


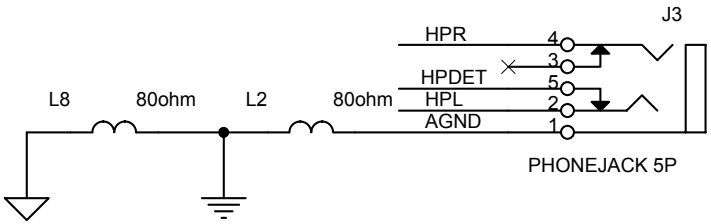


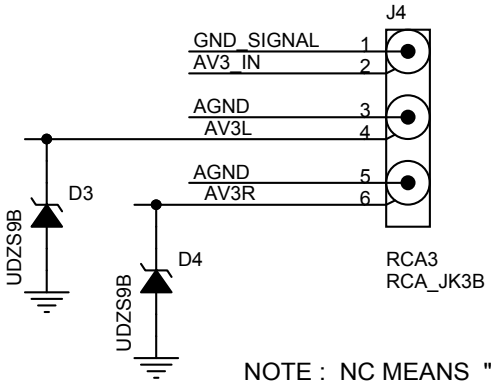
NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/10 WATT,5% UNLESS NOTED.
ALL RESISTORS VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

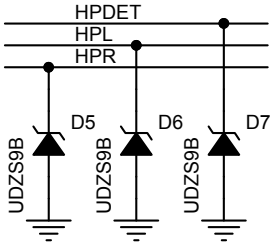
APPROVED BY:	**AmTRAN** TECHNOLOGY		
	MODEL	VIZIO P42 HDTV10A_MTK (3842-0082-0187)	
CHECKED BY:	CIRCUITY	ANALOG A/V OUTPUT	
	PCB P/ N:	0171-1472-0320	Sheet 9 of 9
DESING BY:	ECN NO:	AECN	REV: 00
	SCH FILE :	PD42LK-ATSC0.DSN	PCB REV: 00
	PCB FILE :	37ATSC-M1.PCB	DATE: Monday, March 13, 2006





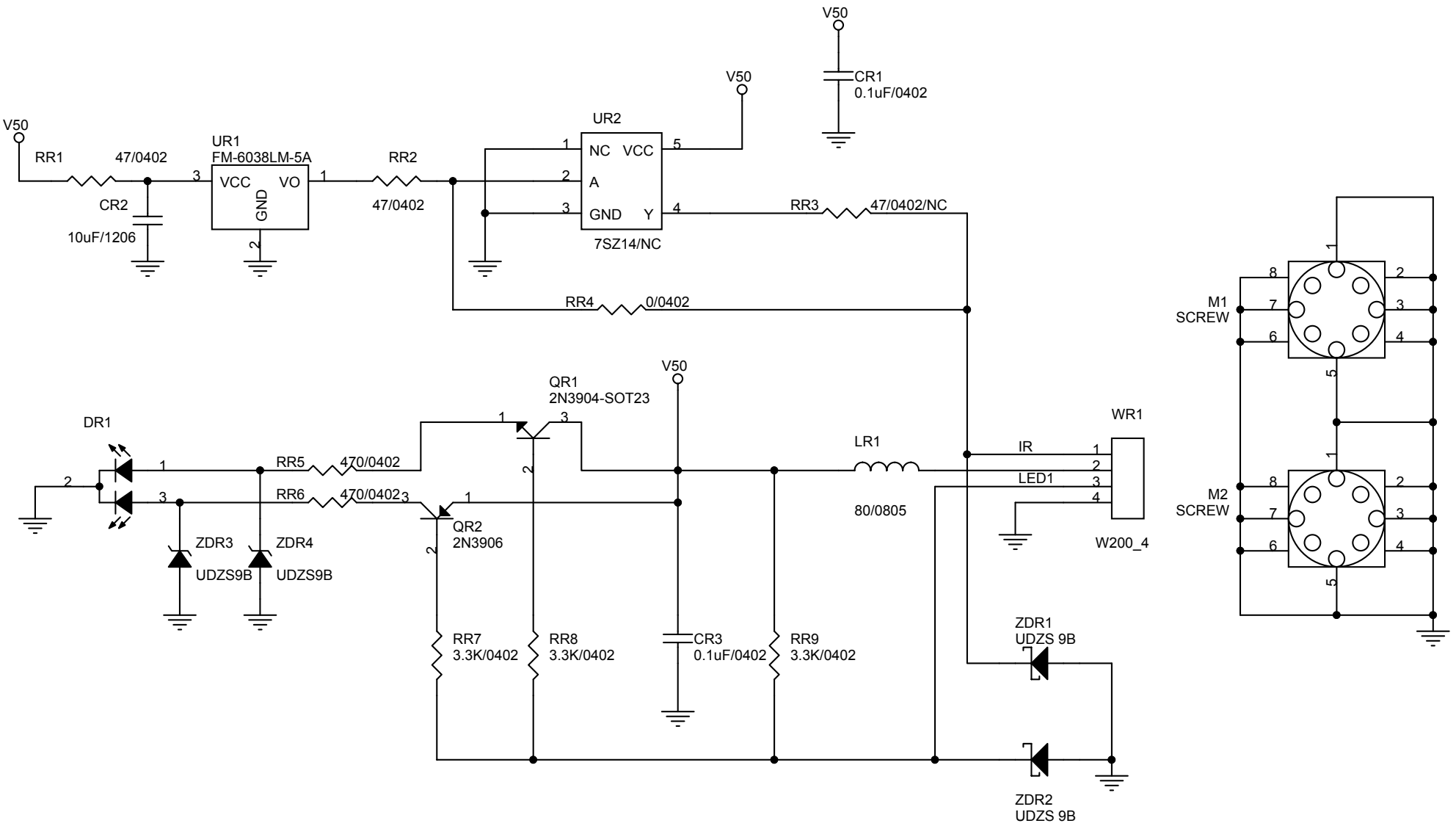






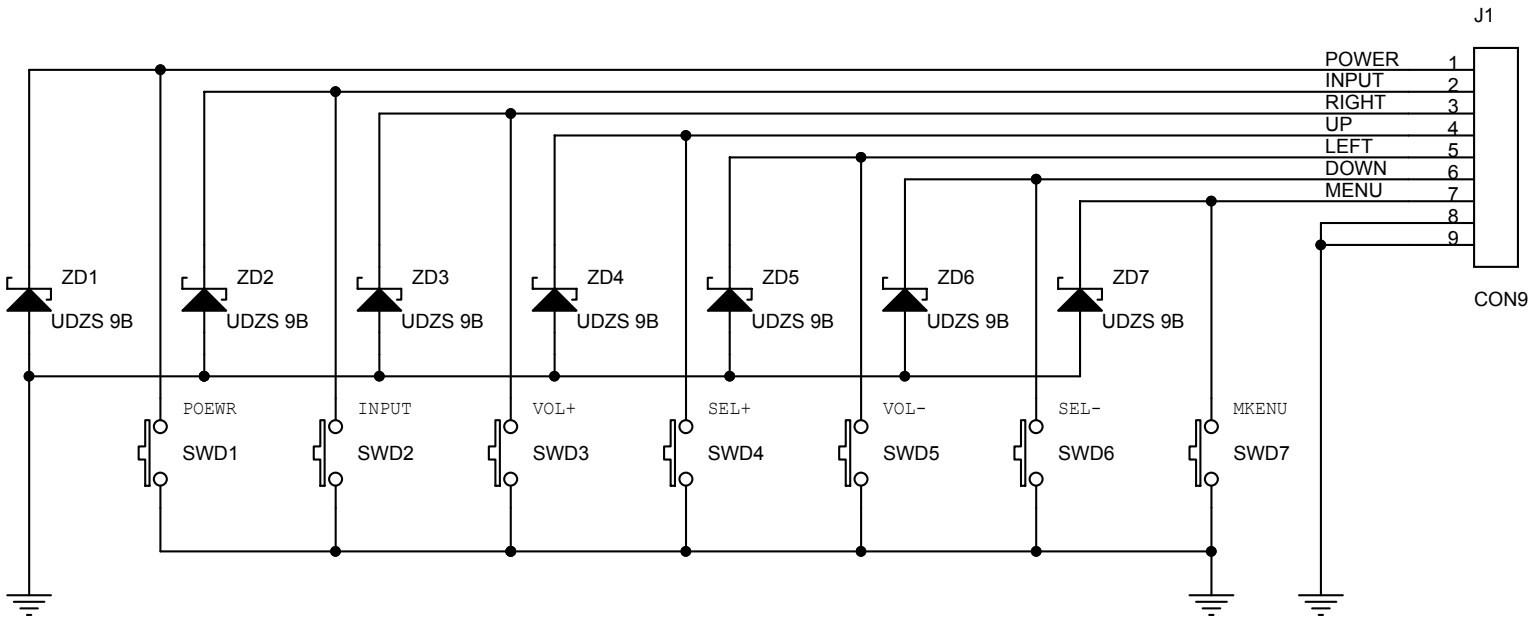
NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/10 WATT,5% UNLESS NOTED.
ALL RESISTORS VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

APPROVED BY:	**AmTRAN** TECHNOLOGY			
CHECKED BY:	MODEL	P42 HDTV10A_MTK(3842-0072-0146)		
	CIRCUITY	Video input&Audio output		
DESIGN BY:	PCB P/ N:	0171-3871-0092	Sheet	1 of 1
	ECN NO:	AECN	REV:	00
	SCH FILE:	PD42LK-COM0.DSN	PCB REV:	02
	PCB FILE:	PD42L-C2.BRD	DATE:	Monday, March 13, 2006



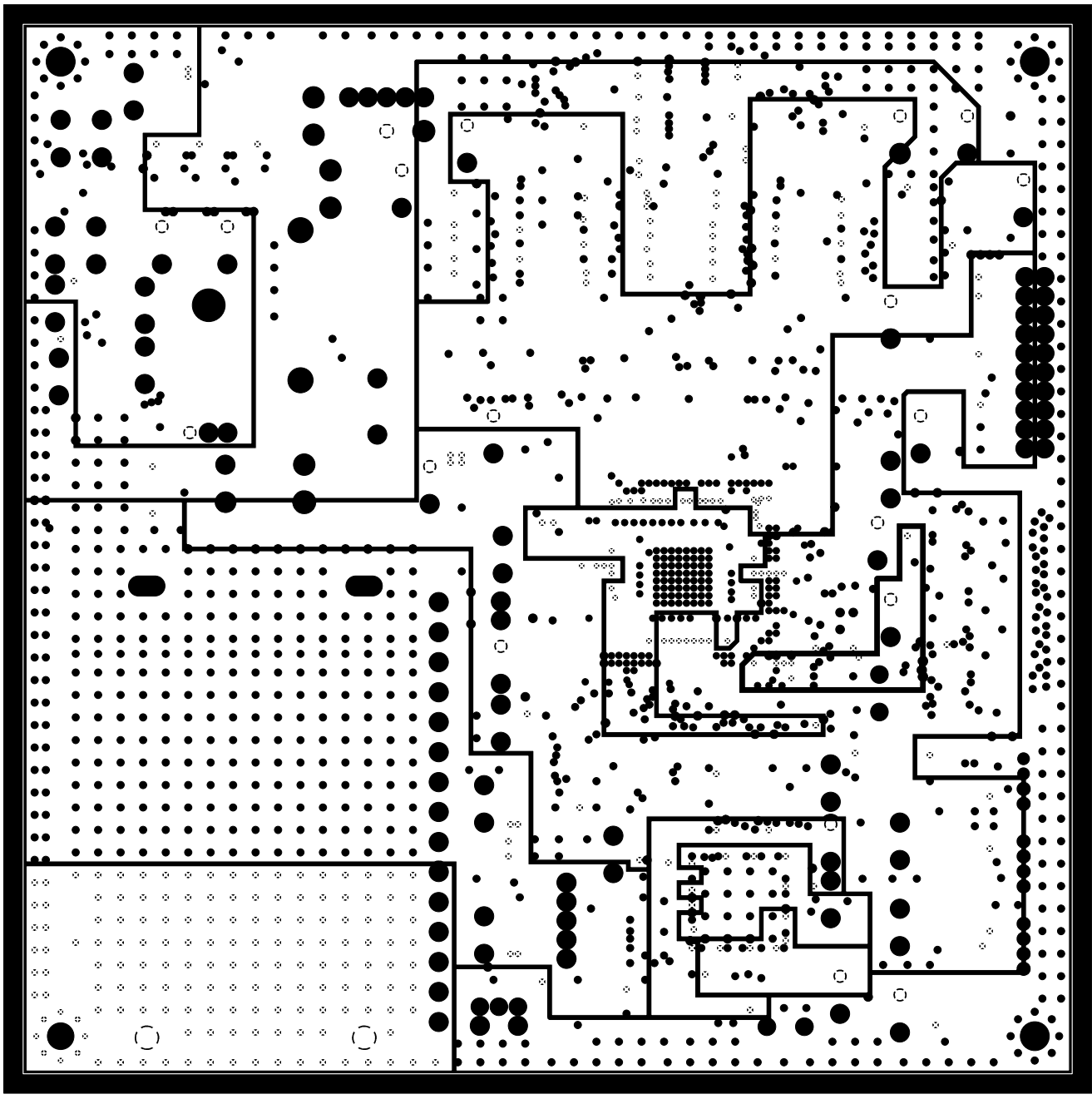
NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/10 WATT,5% UNLESS NOTED.
ALL RESISTORS VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

APPROVED BY:	**AmTRAN** TECHNOLOGY			
CHECKED BY:	MODEL	P42 HDTV10A_MTK(3842-0072-0189)		
	CIRCUITY	IR BOARD		
DESIGN BY:	PCB P/ N:	0171-1671-0441	Sheet	1 of 1
	ECN NO:	AECN	REV:	00
	SCH FILE:	PD42LK-IR0.DSN	PCB REV:	01
	PCB FILE:	PD42FB-IR0.BRD	DATE:	Monday, March 13, 2006

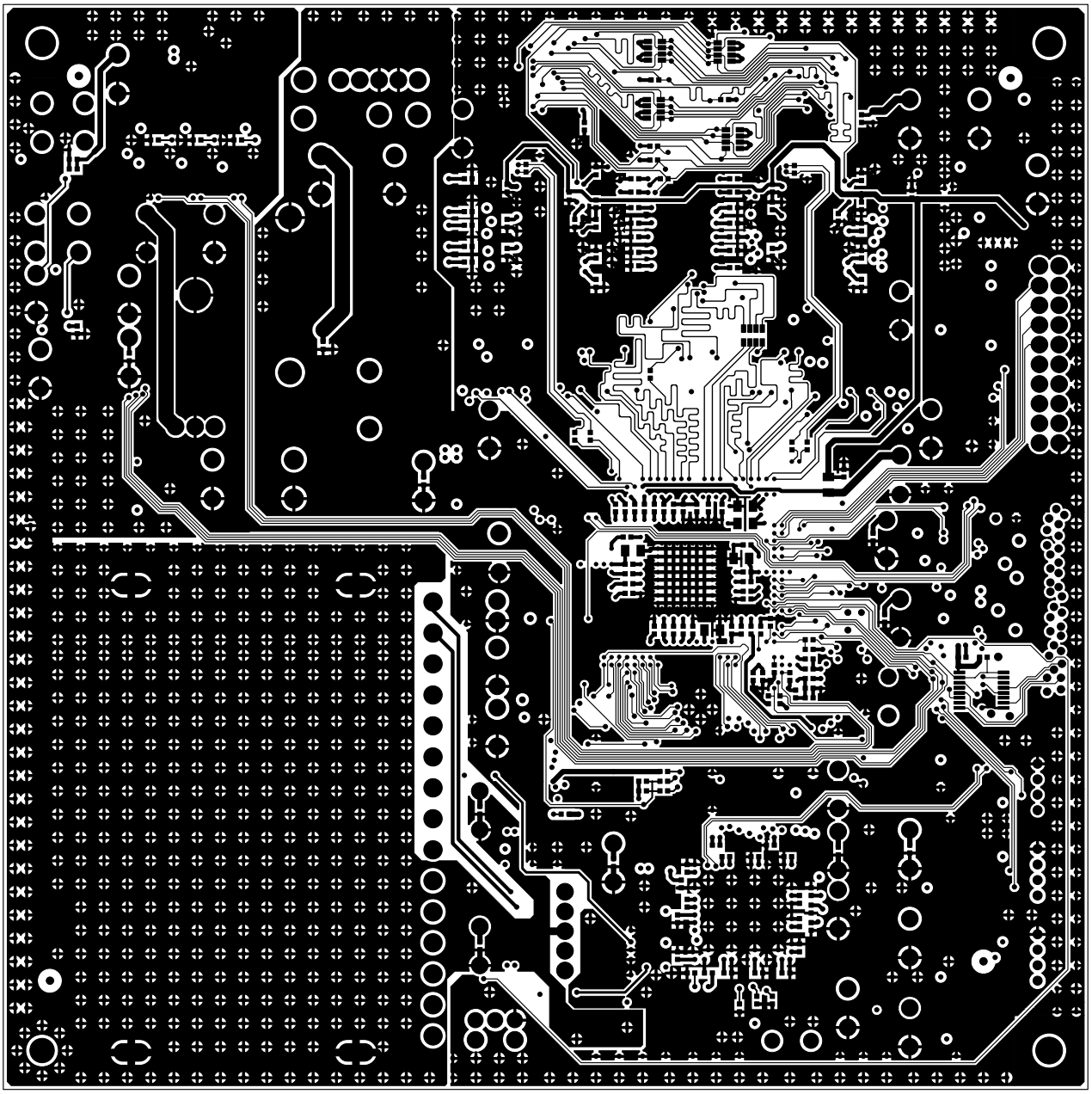


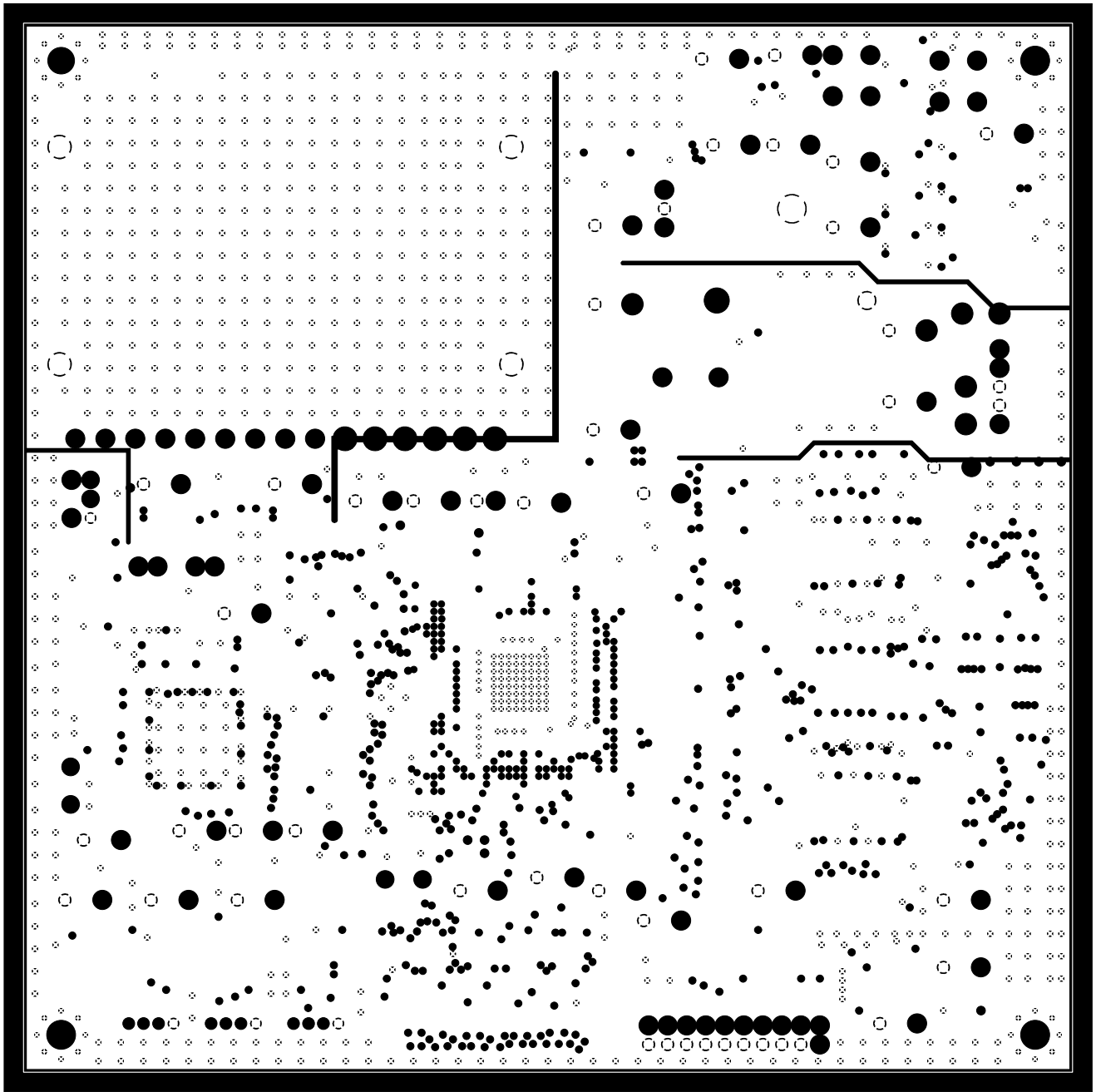
NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/10 WATT,5% UNLESS NOTED.
ALL RESISTORS VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
ALL RESISTORS 25 VOLT IN .1uF UNLESS NOTED.
M= METAL 1%

APPROVED BY:	**AmTRAN** TECHNOLOGY			
CHECKED BY:	MODEL	P42 HDTV10A_MTK(3842-0042-0156)		
	CIRCUITY	KEYPAD		
DESIGN BY:	PCB P/ N:	0171-1770-1590	Sheet	1 of 1
	ECN NO:	AECN	REV:	00
	SCH FILE:	PD42LK-D0.DSN	PCB REV:	00
	PCB FILE:	PD42L_D0.BRD	DATE:	Monday, March 13, 2006

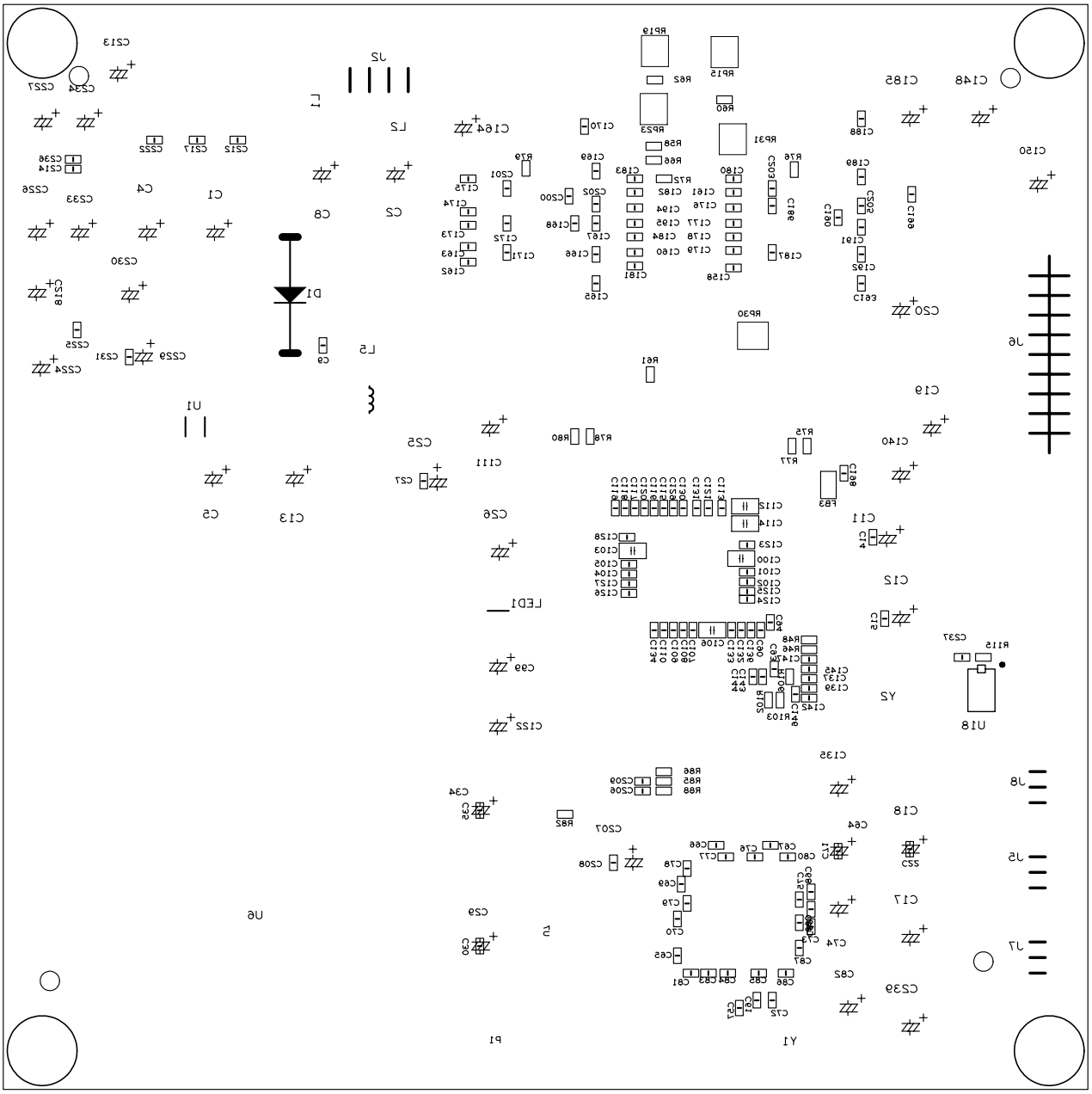


AmTRAN Co.,Ltd
0171-1472-0320
37atsc-m1.brd
fr4 4m 1.6t
SIZE:140x140mm
PNL.:285x155mm
Q'TY:90 PCS
REC.:07-28-2005'

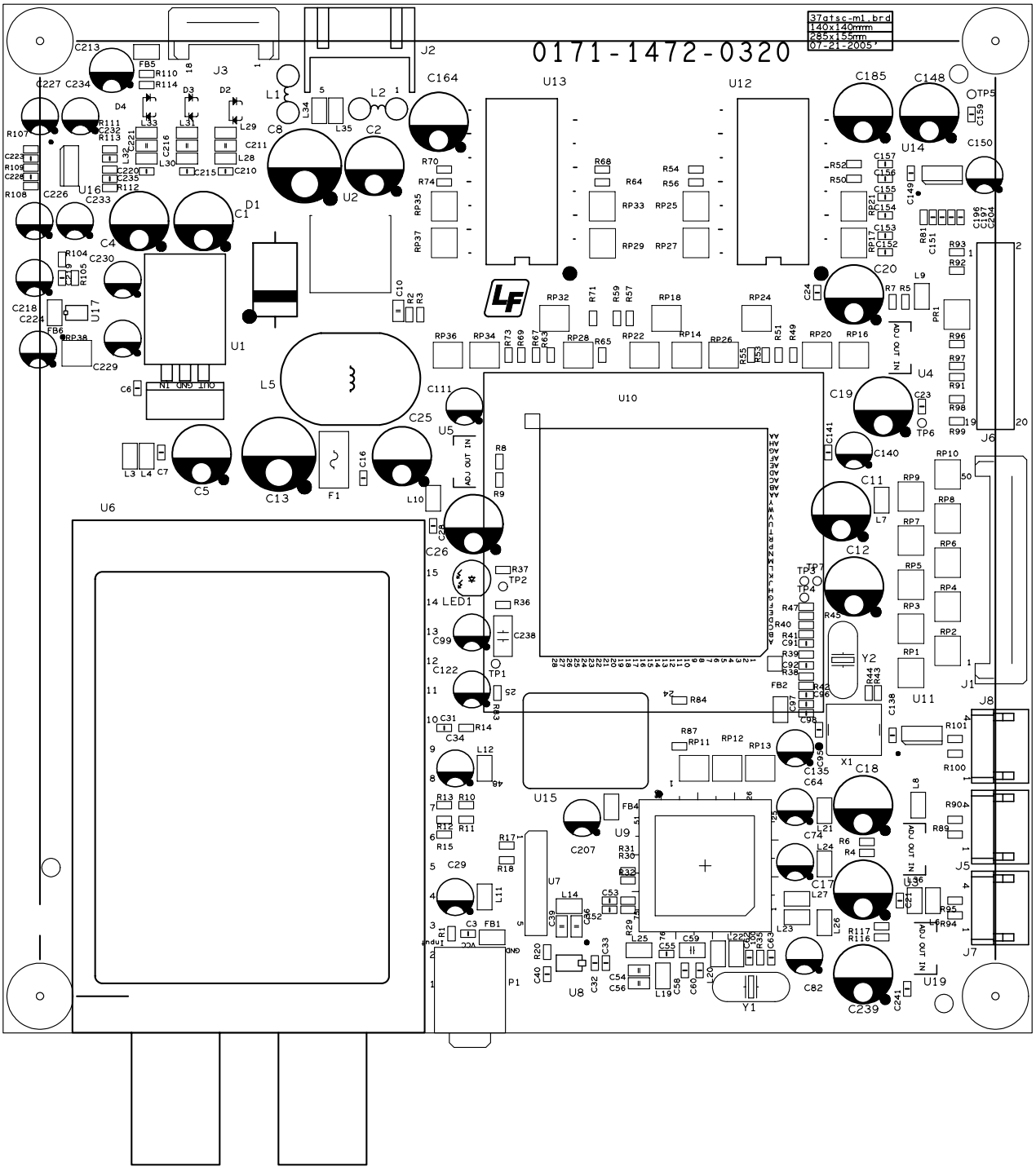




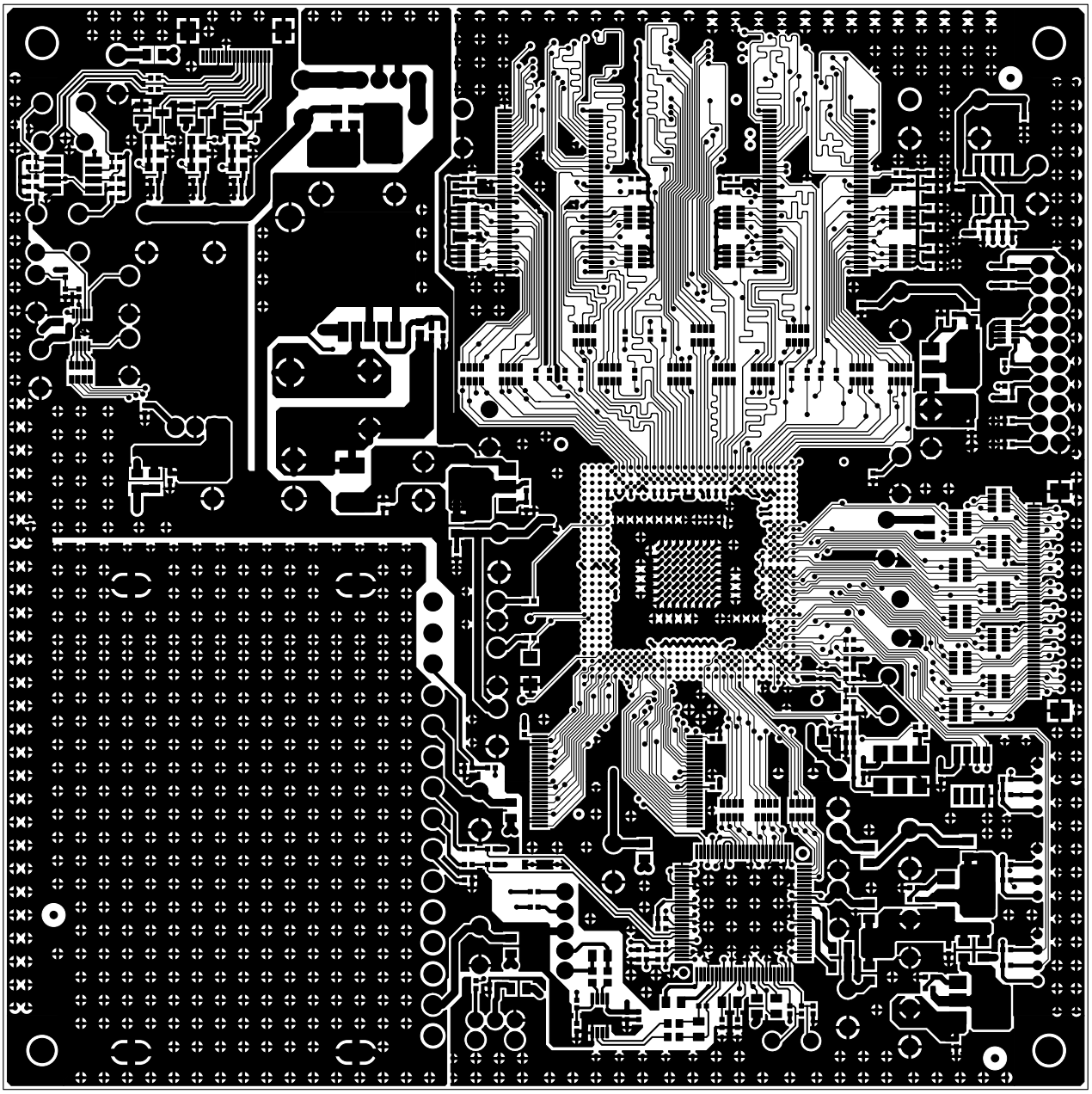
AmTRAN Co.,Ltd
0171-1472-0320
37atsc-m1.brd
fr4 4m 1.6t
SIZE:140x140mm
PNL.:285x155mm
Q'TY:90 PCS
REC.:07-28-2005'



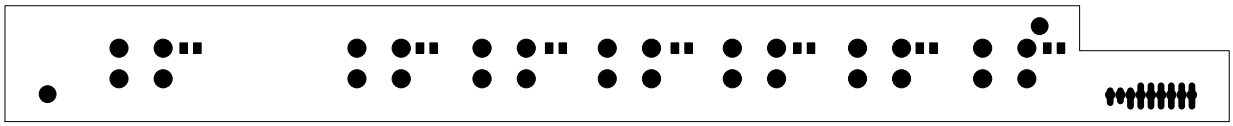
AmTRAN Co.,Ltd
0171-1472-0320
37atsc-m1.brd
fr4 4m 1.6t
SIZE:140x140mm
PNL.:285x155mm
Q'TY:90 PCS
REC.:07-28-2005'



AmTRAN Co.,Ltd
0171-1472-0320
37atsc-m1.brd
fr4 4m 1.6t
SIZE:140x140mm
PNL.:285x155mm
Q'TY:90 PCS
REC.:07-28-2005'



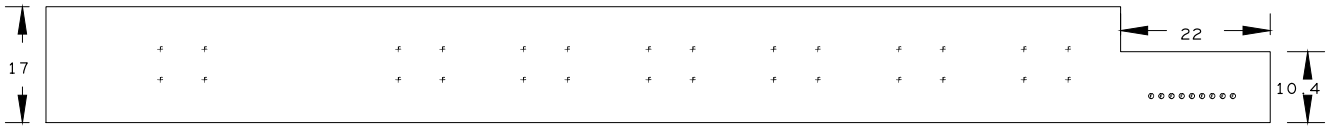
AmTRAN Co.,Ltd
0171-1770-1590
PD42L-D0.BRD
Lead Free
FR4 1L 1.6T
H.A.L. S/M:Green
SIZE:180x17mm
PNL.:190x190mm
Q'TY:4 PNL.
REC.:07-28-2005



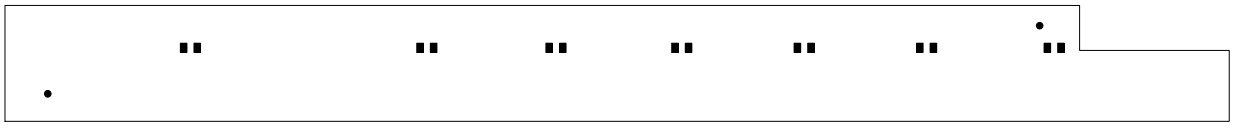
AmTRAN Co.,Ltd
0171-1770-1590
PD42L-D0.BRD
Lead Free
FR4 1L 1.6T
H.A.L. S/M:Green
SIZE:180x17mm
PNL.:190x190mm
Q'TY:4 PNL.
REC.:07-28-2005

DRILL CHART			
ALL UNITS ARE IN MILLIMETERS			
FIGURE	SIZE	PLATED	QTY
⊙	0.8	PLATED	9
+	1.2	PLATED	28

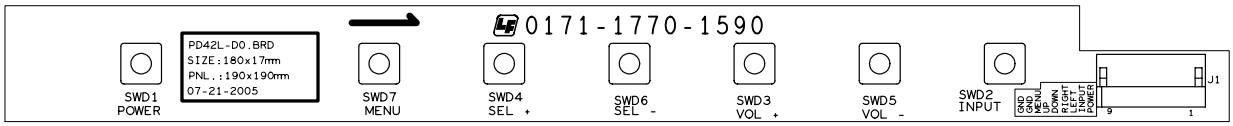
AmTRAN Co.,Ltd
0171-1770-1590
PD42L-D0.BRD
Lead Free
FR4 1L 1.6T
H.A.L. S/M:Green
SIZE:180x17mm
PNL.:190x190mm
Q'TY:4 PNL.
REC.:07-28-2005

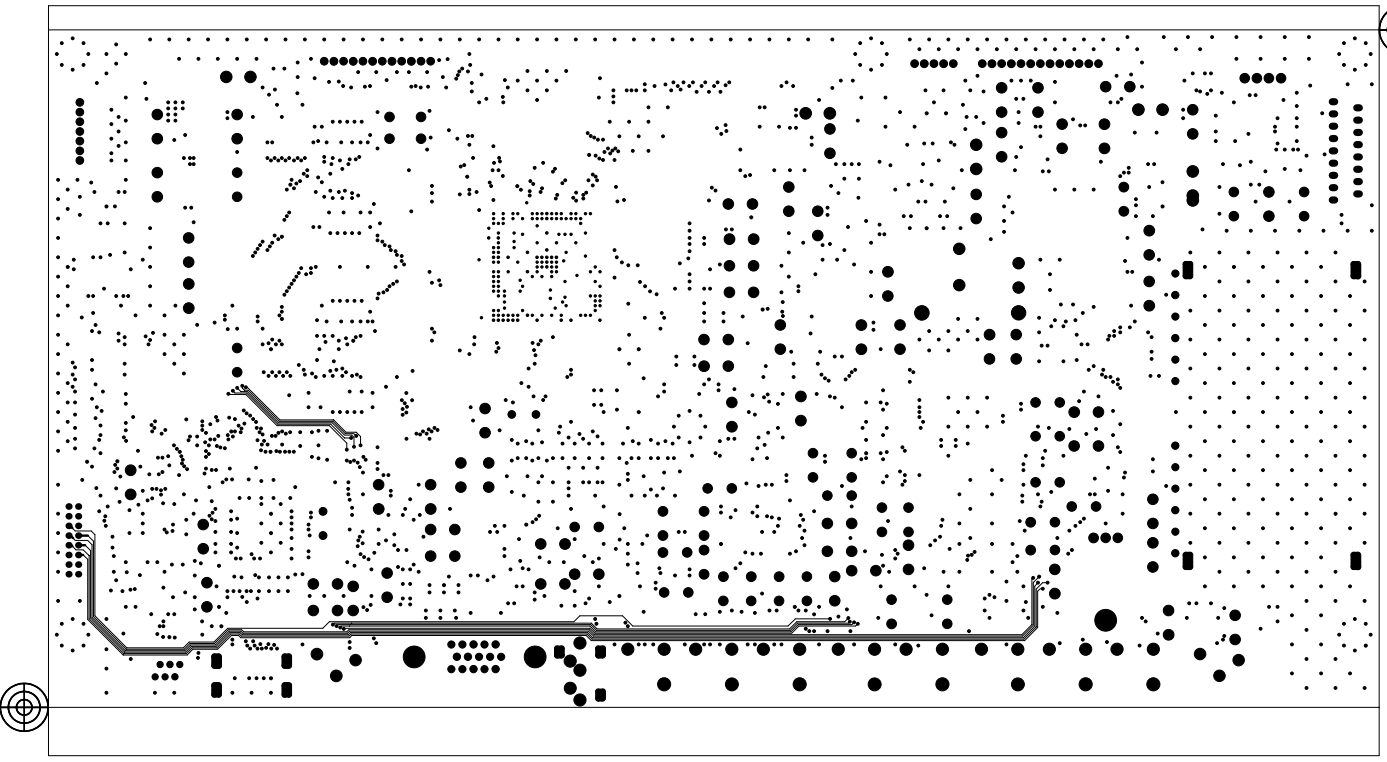


AmTRAN Co.,Ltd
0171-1770-1590
PD42L-D0.BRD
Lead Free
FR4 1L 1.6T
H.A.L. S/M:Green
SIZE:180x17mm
PNL.:190x190mm
Q'TY:4 PNL.
REC.:07-28-2005



AmTRAN Co.,Ltd
0171-1770-1590
PD42L-D0.BRD
Lead Free
FR4 1L 1.6T
H.A.L. S/M:Green
SIZE:180x17mm
PNL.:190x190mm
Q'TY:4 PNL.
REC.:07-28-2005

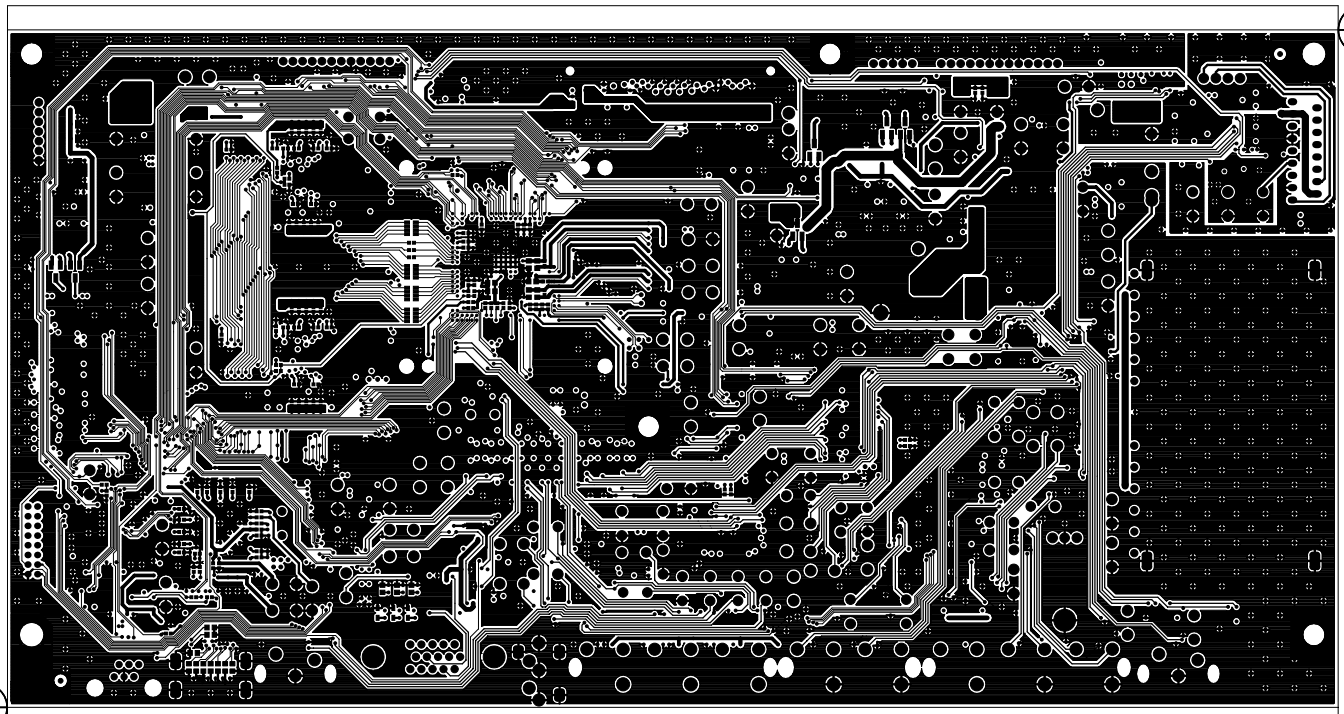




AmTRAN Co., Ltd.
0171-2272-2081
FR4 4M 1.6T
SIZE:275.0x140.0mm
PNL:275.0x155.0mm
Q'TY: 180 PCS
Rec.: 12-09-05'

Top
GND
VCC
VCC-SCH
Bottom

Layer StackUp

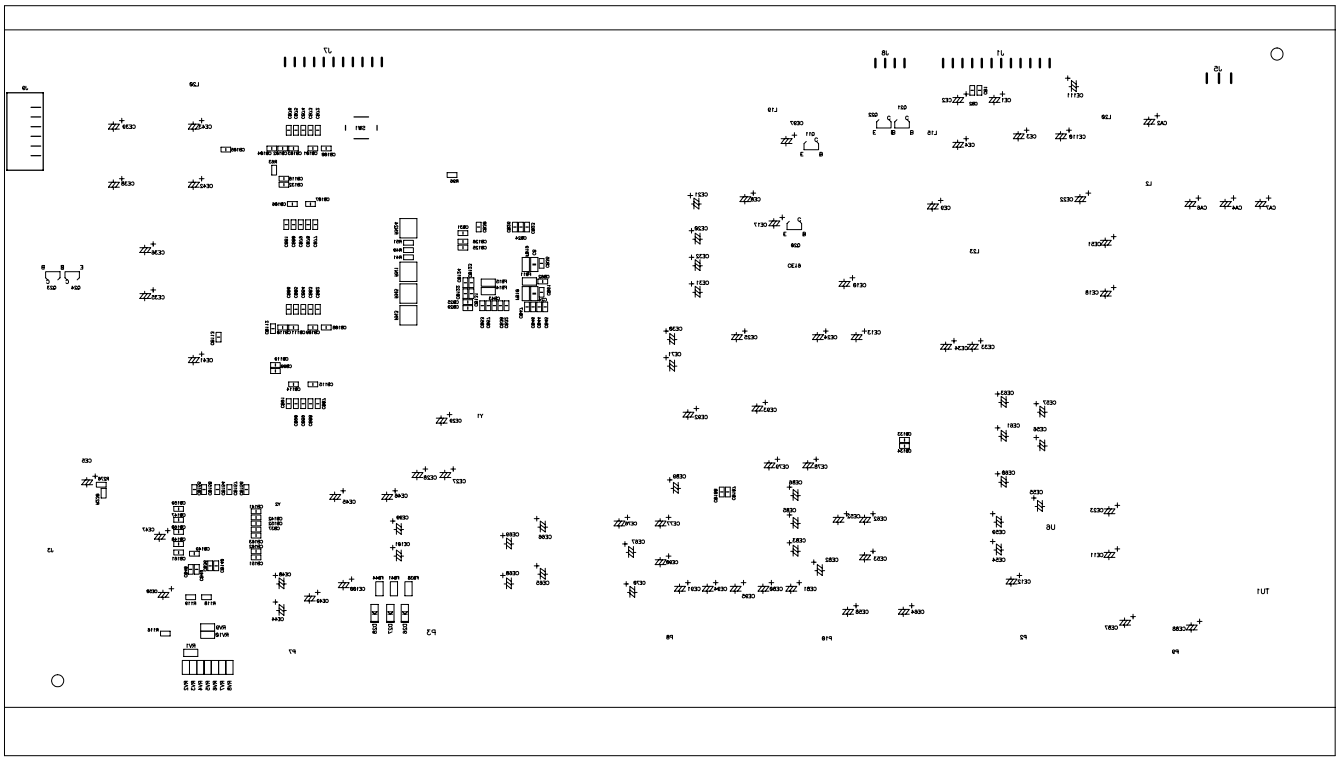


AmTRAN Co., Ltd.
0171-2272-2081
FR4 4M 1.6T
SIZE:275.0x140.0mm
PNL.:275.0x155.0mm
Q'TY: 180 PCS
Rec.: 12-09-05'

SOLDER TRACE

Top
GND
VCC
VCC-SCH
Bottom

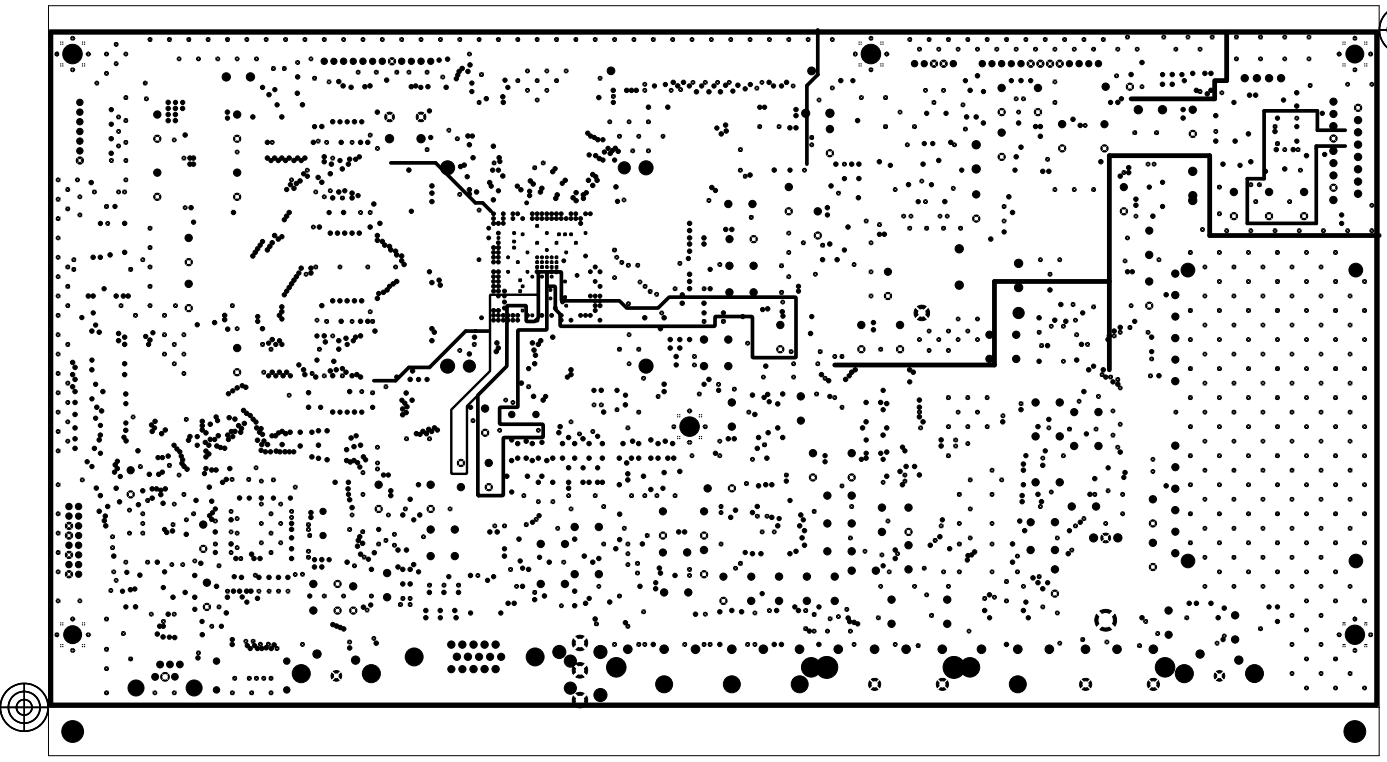
Layer StackUp



AmTRAN Co., Ltd.
0171-2272-2081
FR4 4M 1.6T
SIZE:275.0x140.0mm
PNL:275.0x155.0mm
Q'TY: 180 PCS
Rec.: 12-09-05'

Top
GND
VCC
VCC-SCH
Bottom

Layer StackUp

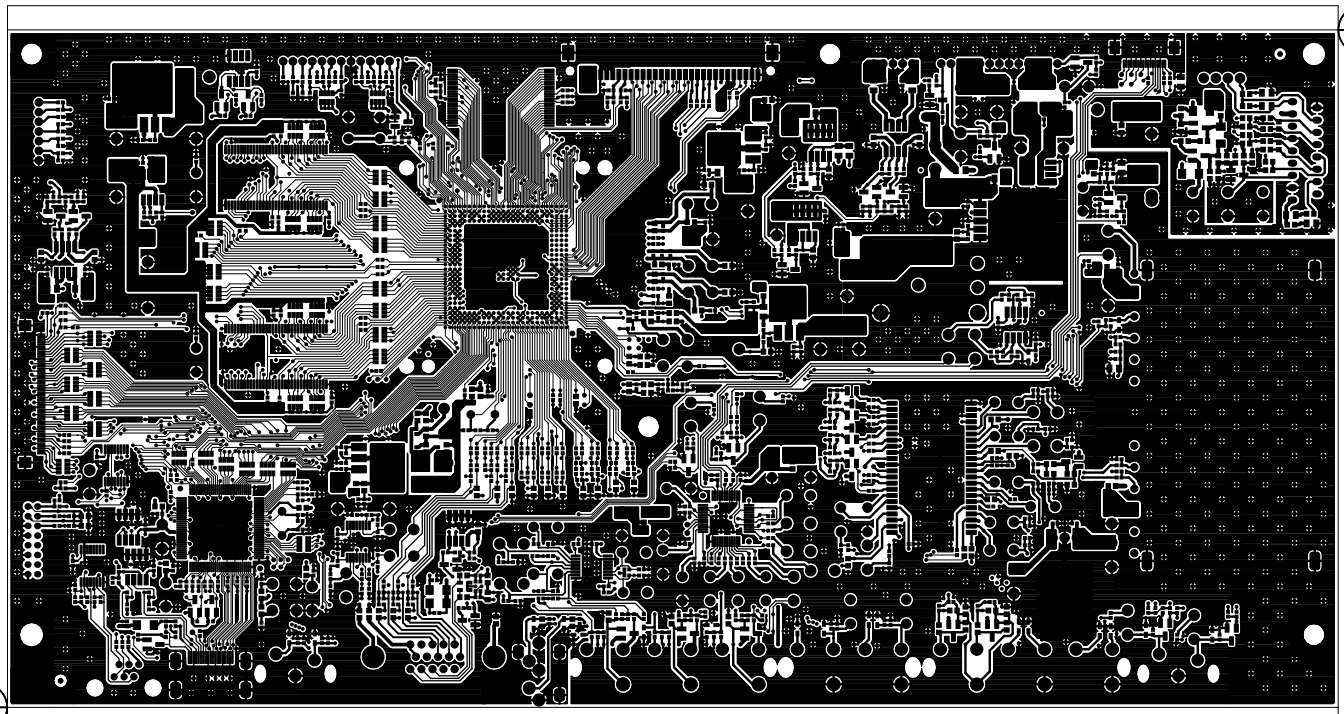


AmTRAN Co., Ltd.
0171-2272-2081
FR4 4M 1.6T
SIZE:275.0x140.0mm
PNL:275.0x155.0mm
Q'TY: 180 PCS
Rec.: 12-09-05'

GND

Top
GND
VCC
VCC-SCH
Bottom

Layer StackUp

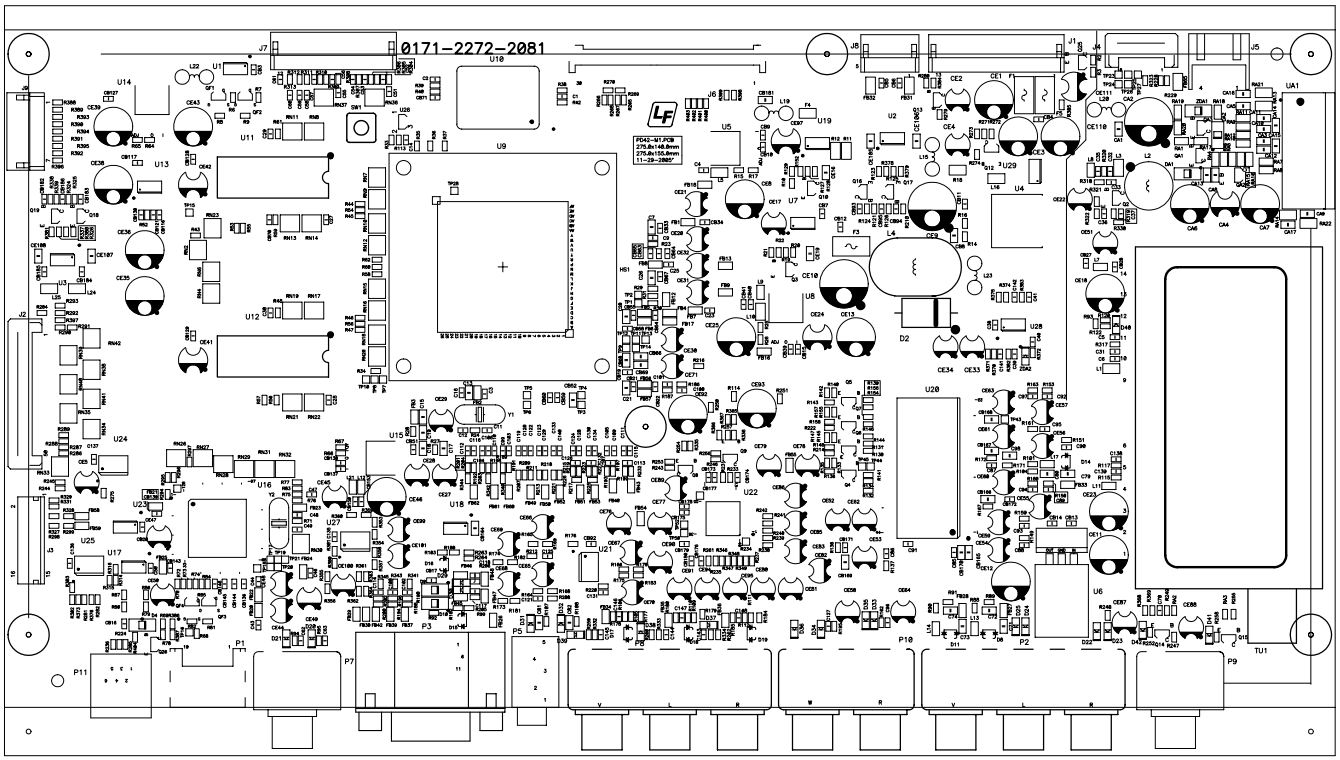


AmTRAN Co., Ltd.
0171-2272-2081
FR4 4M 1.6T
SIZE:275.0x140.0mm
PNL.:275.0x155.0mm
Q'TY: 180 PCS
Rec.: 12-09-05'

COMP TRACE

Top
GND
VCC
VCC-SCH
Bottom

Layer StackUp

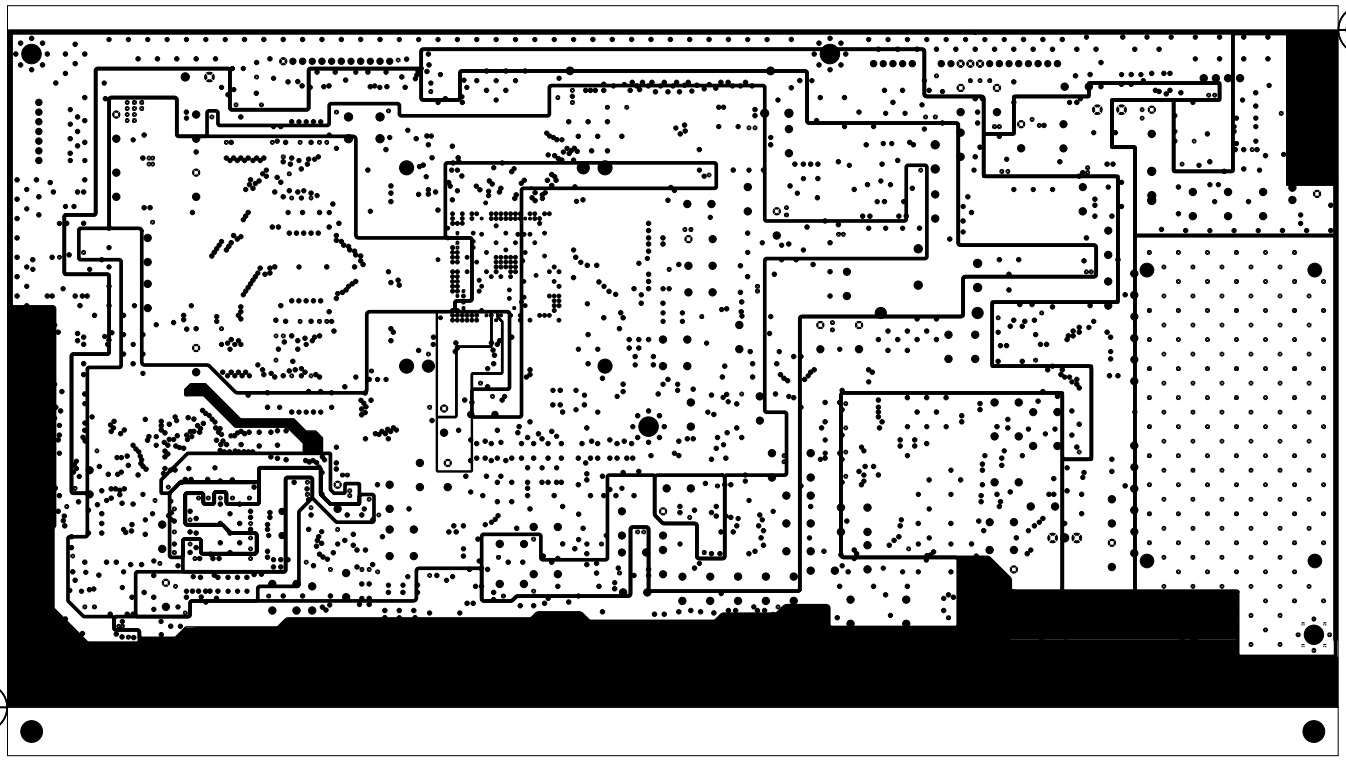


AmTRAN Co., Ltd.
0171-2272-2081
FR4 4M 1.6T
SIZE:275.0x140.0mm
PNL:275.0x155.0mm
Q'TY: 180 PCS
Rec.: 12-09-05'

COMP TEXT

Top
GND
VCC
VCC-SCH
Bottom

Layer StackUp



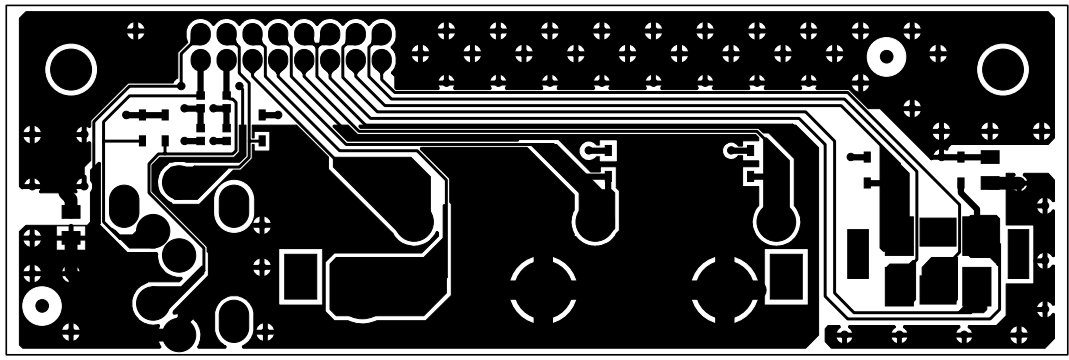
AmTRAN Co., Ltd.
0171-2272-2081
FR4 4M 1.6T
SIZE:275.0x140.0mm
PNL.:275.0x155.0mm
Q'TY: 180 PCS
Rec.: 12-09-05'

VCC

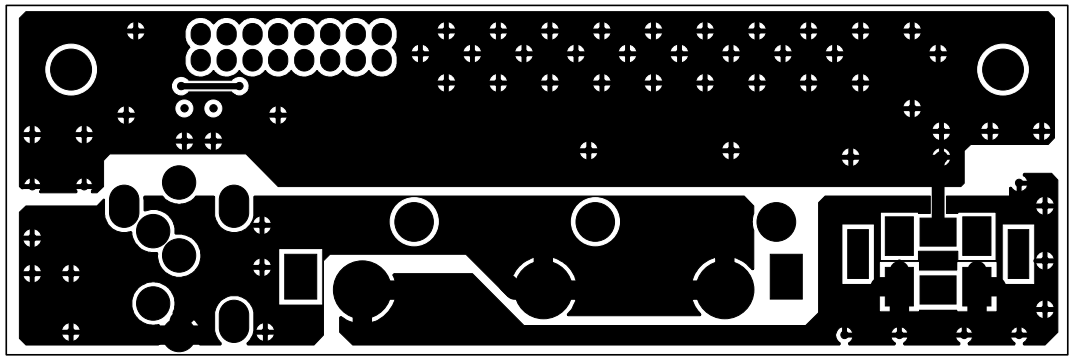
Top
GND
VCC
VCC-SCH
Bottom

Layer StackUp

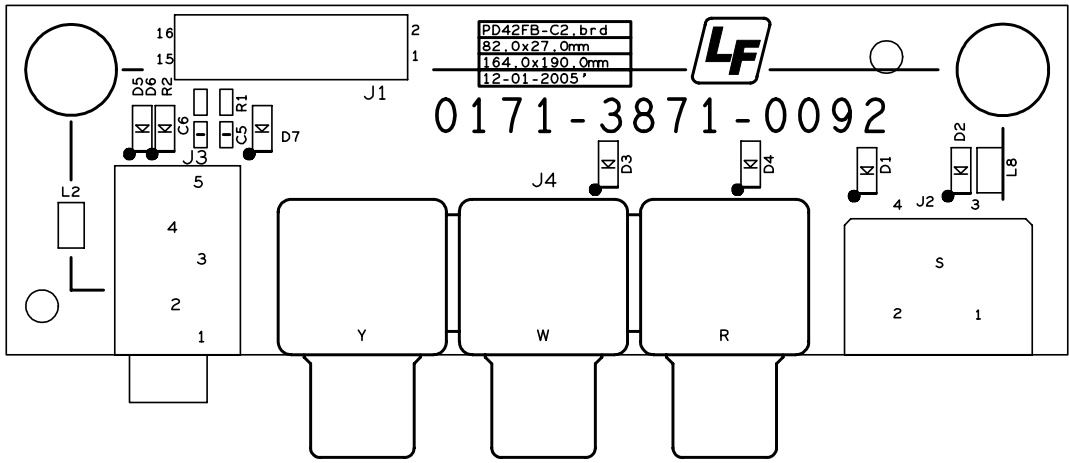
AmTRAN Co.,Ltd
0171-3871-0092
PD42FB-C2.brd
fr4 2m 1.6t
SIZE:82.0x27.0mm
PNL.:164.0x190.0mm
Q'TY:360pcs
REC.:12-09-2005'



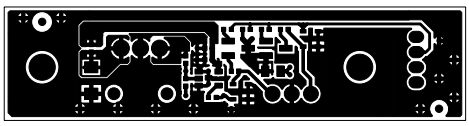
AmTRAN Co.,Ltd
0171-3871-0092
PD42FB-C2.brd
fr4 2m 1.6t
SIZE:82.0x27.0mm
PNL.:164.0x190.0mm
Q'TY:360pcs
REC.:12-09-2005'

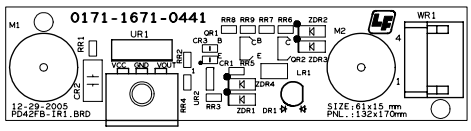


AmTRAN Co.,Ltd
0171-3871-0092
PD42FB-C2.brd
fr4 2m 1.6t
SIZE:82.0x27.0mm
PNL.:164.0x190.0mm
Q'TY:360pcs
REC.:12-09-2005'

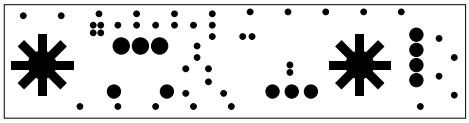


AmTRAN Co.,Ltd
0171-1671-0441
pd42fb-ir1.brd
FR4 2L 1.6T
SIZE: 61x15 mm
PNL.:132x170mm
Q'TY:07 PNL.
REC.:01-06'06
O.S.P.S/M:Green





AmTRAN Co.,Ltd
0171-1671-0441
pd42fb-ir1.brd
FR4 2L 1.6T
SIZE: 61x15 mm
PNL.:132x170mm
Q'TY:07 PNL.
REC.:01-06'06
O.S.P.S/M:Green



AmTRAN Co.,Ltd
0171-1671-0441
pd42fb-ir1.brd
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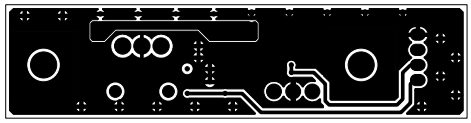

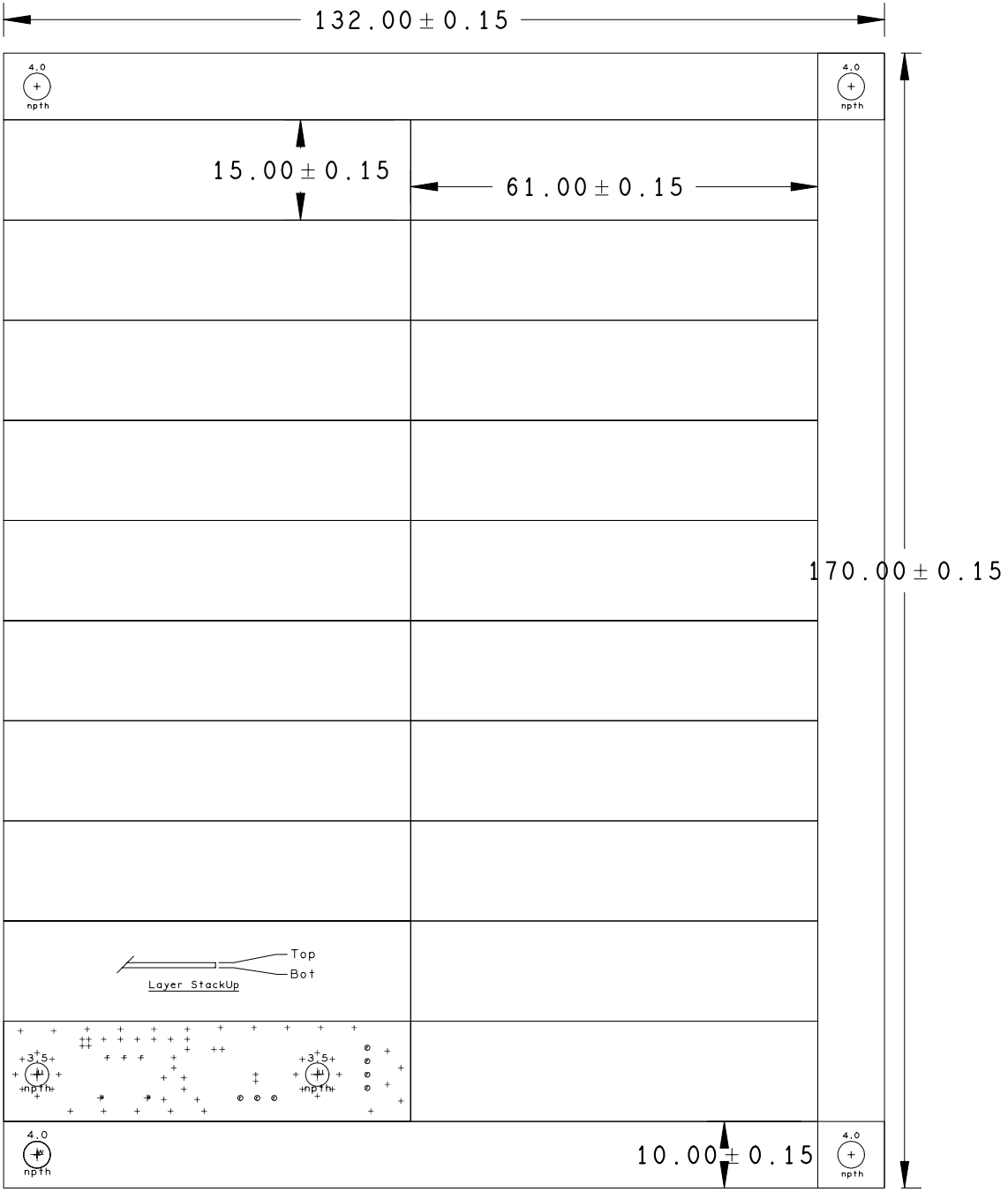

DRILL(pth:+-0.08 npth:+-0.05mm)			
ALL UNITS ARE IN MILLIMETERS			
FIGURE	SIZE	PLATED	QTY
+	0.4	PLATED	59
©	0.8	PLATED	7
+	1.2	PLATED	3
*	1.6	NON-PLATED	2
⊥μ	3.5	NON-PLATED	2
⊥M	4.0	NON-PLATED	1

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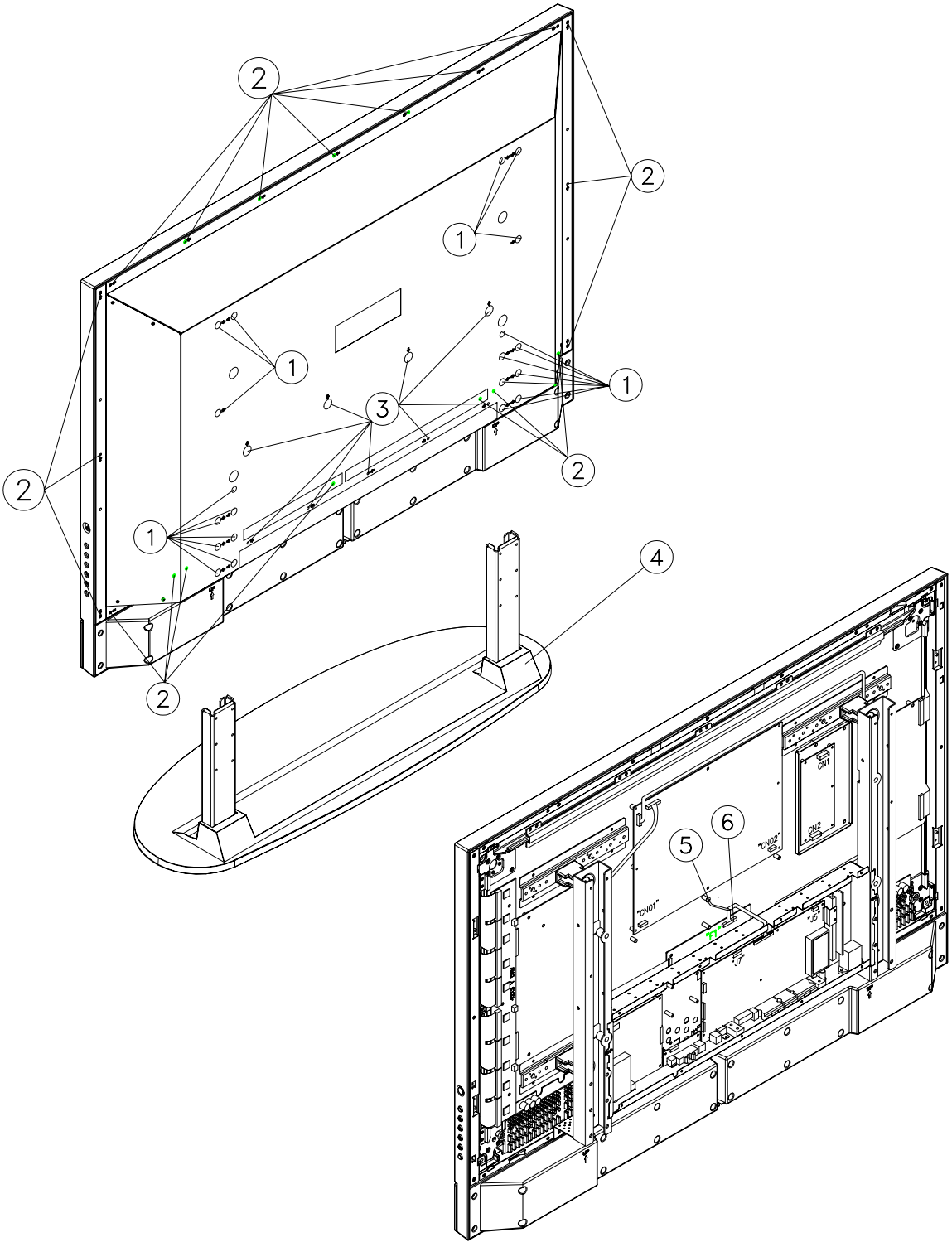
REC.:01-06'06
O.S.P.S/M:Green

1.REAR COVER ASS'Y REMOVAL

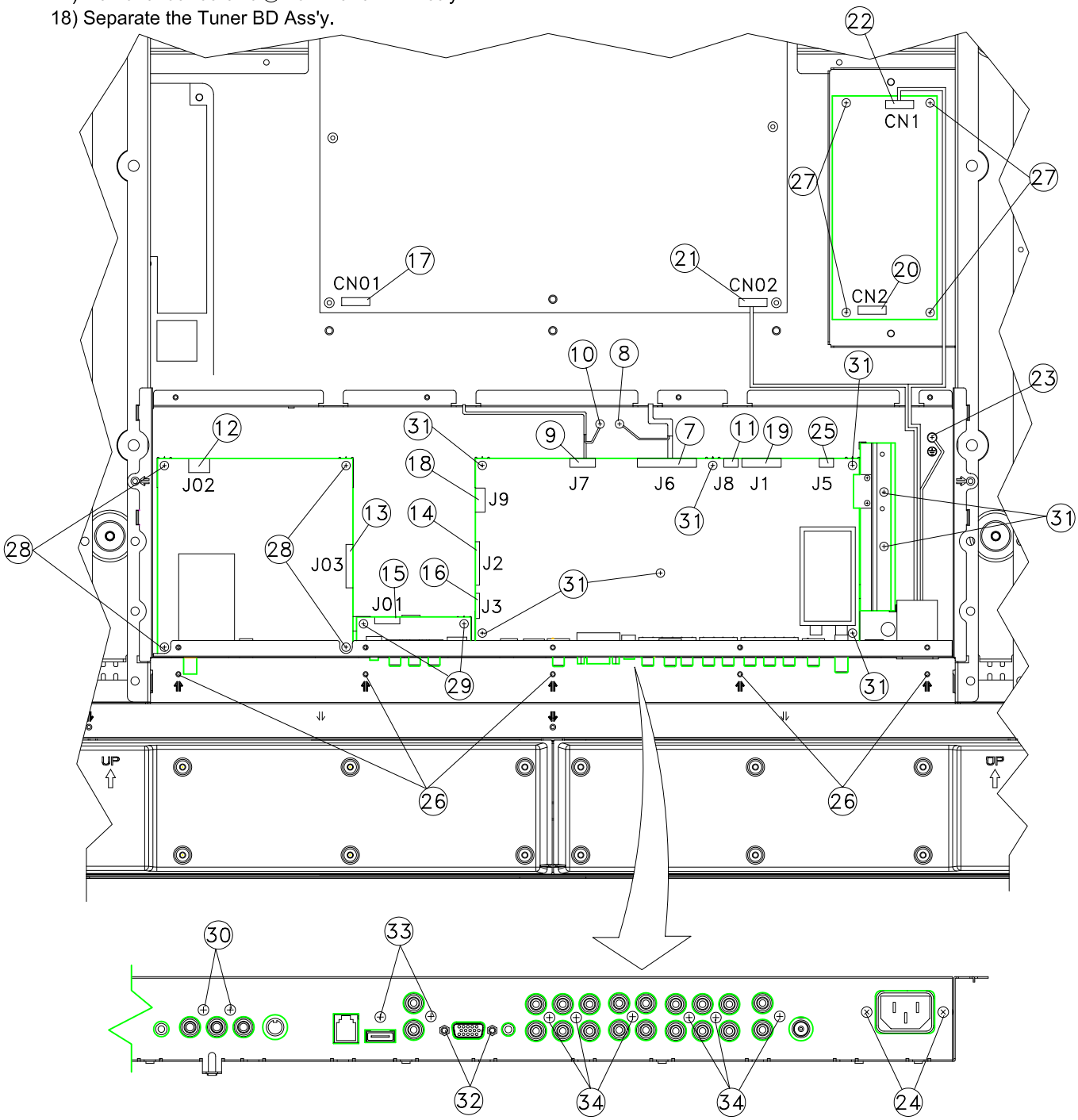
Note:Spread a mat underneath to avoid damaging the Plasma surface.

1) Remove twenty screws ① from rear cover.
2) Separate the Bass Ass'y ④ .
3) Remove twenty screws ② and nine screws ③ from rear cover.
4) Separate the rear cover.
5) Remove the connector ⑥ (F1) of the LVDS cable.
6) Remove one screw ⑤

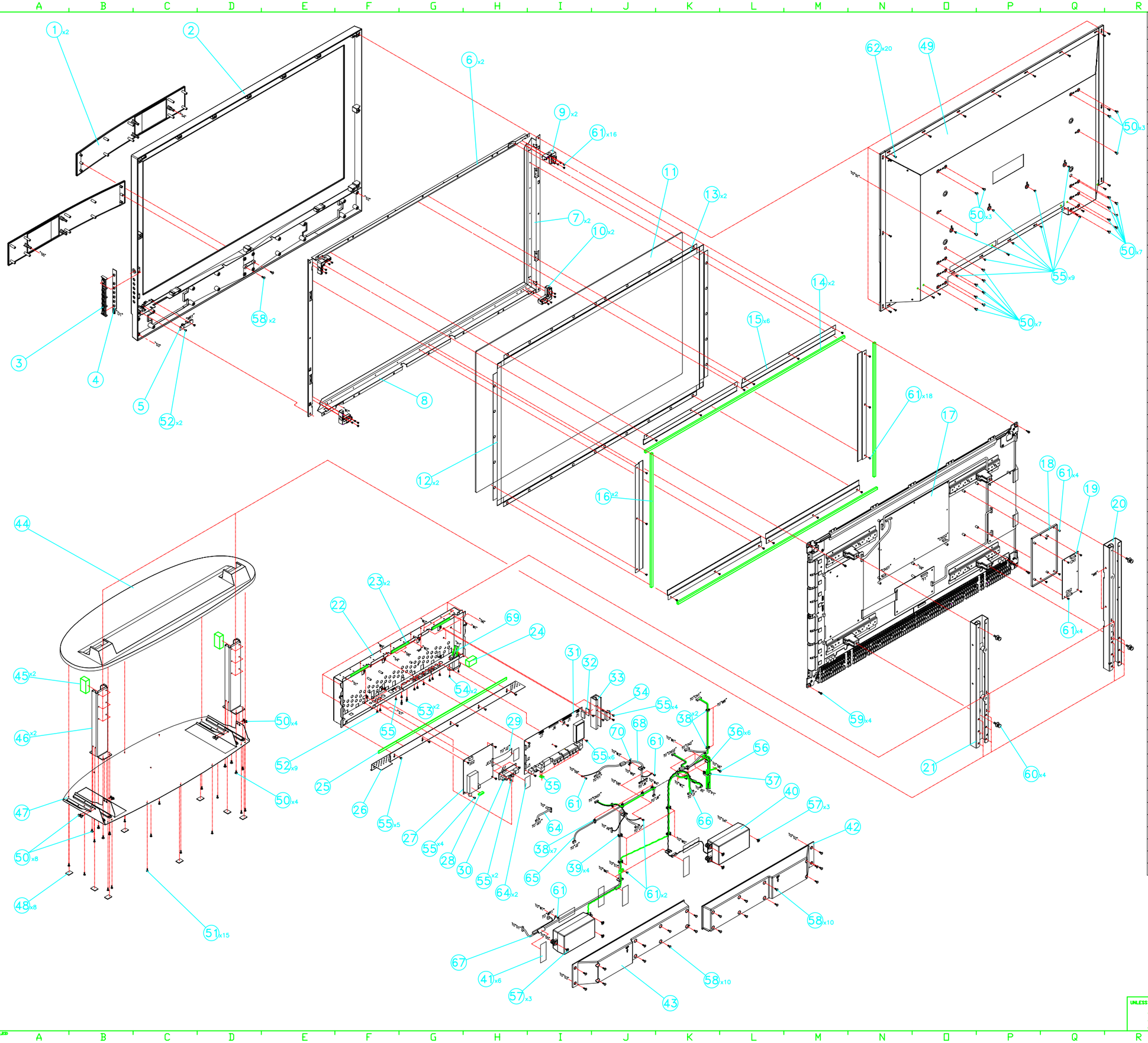


2. MAIN BD ASS'Y REMOVAL

1) Remove the connector ⑦ (J6) of the LVDS cable.
2) Remove two screws ⑧ ⑩ from PCB support.
3) Remove the connector ⑨ (J7) of the keypad +IR cable.
4) Remove the connector ⑪ (J8) ⑫ (J02) of the Tuner cable.
5) Remove the connector ⑬ (J03) ⑭ (J2) of the FFC cable.
6) Remove the connector ⑮ (J01) ⑯ (J3) of the connector cable.
7) Remove the connector ⑰ (CN01) ⑱ (J9) ⑲ (J1) ⑳ (CN2) of the Power BDcable1.
8) Remove the connector ㉑ (CN02) ㉒ (CN1) of the Power BD cable2.
9) Remove one screw ㉓.
10) Remove two screws ㉔ from power cable Ass'y.
12) Separate the power cable Ass'y.
13) Remove the connector ㉕ (J5) of the speaker cable.
14) Remove five screws ㉖ from IO BKT.
15) Remove four screws ㉗ from power BD 2 Ass'y.
16) Separate the power BD2 Ass'y
17) Remove four screws ㉘ from Tuner BD Ass'y.
18) Separate the Tuner BD Ass'y.
19) Separate the Tuner BD Ass'y.
20) Remove two screws ㉙ and two screws ㉚.
21) Separate the connector BD Ass'y.
22) Remove eight screws ㉛ from Main BD Ass'y.
23) Remove two screws ㉜ and eighr screws ㉝ from PCB support.
24) Separate the Main BD Ass'y.



D:/VIZIO-PD42LHDTV-REMOVAL.DWG



ITEM	PART NO.	DESCRIPTION	QTY
1	1701-1926-1010	SPEAKER NET(PD-42L)	2
2	1801-0120-8010	FRONT BEZEL(PD-42L)ASS'Y	1
3	1701-0416-0010	BUTTON(PD-50LM)(PC,BLACK)	1
4	3842-0042-0156	DISPLAY BD ASS'Y D4237	1
5	3842-0072-0189	PDP IR BD ASS'Y(PD-42L)	1
6	1701-0416-0010	FILTER BRACKET HOR TOP(PD-42L)(SPGC T=0.8mm)	1
7	1712-0200-0160	FILTER BRACKET-VER(PD-42I)(SPGC T=0.8)	2
8	1712-0200-0150	FILTER BRACKET HOR BOTTOM(PD-42L)(SPGC T=0.8mm)	1
9	1701-0800-1580	FILTER BRACKET SUPPORT-2(PD-42L)	2
10	1701-0800-1570	FILTER BRACKET SUPPORT-1(PD-42L)	2
11	1701-0900-1760	PDP Filter 42" FG422NAA-05(FPR LG_PDP42X3)	1
12	1947-1800-0960	CONDUCTIVE FABRIC TAPE L584*W39	2
13	1947-1800-0970	CONDUCTIVE FABRIC TAPE L982*W39	2
14	1947-1500-2410	PANEL CUSHION(LENGTH=950mm)(PD-42L)	2
15	1712-0500-1590	FILTER CLIP(SPTE=0.3mm)(PD-42L)	6
16	1947-1500-2420	PANEL CUSHION(LENGTH=550mm)(PD-42L)	2
17	0213-0420-1161	PDP MODULE 42"PDP42X3(LG.PHILIPS)	1
18	1712-0200-0440	POWER BRACKET(PD-42L)	1
19	0500-0502-0160	POWER BD ASS'Y LF	1
20	1712-0200-0270	MAIN FRAME-R(PD-42L)(SPGC T=2.0mm)	1
21	1712-0200-0280	MAIN FRAME-L(PD-42L)(SPGC T=2.0mm)	1
22	1712-0200-0200	PCB SUPPORT(SPGC T=0.8mm)	1
23	1947-1800-0390	GASKET BLOCK (6W*1H*80Lmm)	3
24	1947-1800-1000	GASKET BLOCK(35.0L*21.0W*17.0H)	1
25	1947-1800-0990	IGASKET BLOCK L576*W8*H2mm(PD-42L)	1
26	1712-0200-0190	IO BRACKET(PD-42L)(SPGC T=0.8mm)	1
27	3842-0022-0190	PDP TUNER BD ASS'Y(PD-42L)	1
28	1947-1800-0370	GASKET BLOCK(5.5H*10.0W*30.0Lmm)	1
29	0460-2850-0100	FFC 50P(0.5mm) 105mm	1
30	3842-0072-0146	CONNECTOR BD ASS'Y(PD-42L)	1
31	3842-0122-0150	PDP MAIN BD ASS'Y(PD-42L)	1
32	1947-1900-0030	HEATPATH (25X14mm)	1
33	1712-0400-0720	HEAK SINK(PD-42L)	1
34	1712-0100-4590	HEAT SINK FIX MTEAL(TM-30A)	1
35	1947-1800-0290	GASKET BLOCK(12L*10W*15.Hmm)Hole ø6	1
36	1701-1500-1080	WIRE SADDLE DS-12(NYLON)	6
37	1701-1500-0690	WIRE SADDLE(CH-14)	1
38	1701-1500-0450	WIRE SADDLE(CH-01B)	7
39	1701-1500-0220	WIRE SADDLE(CH-02)	4
40	0355-1006-0350	SPEAKER ASS'Y 6OHN 10W BOX+WIER670/890mm	6
41	1947-1200-0310	ACETATE CLOTH TAPE(27*75mm)	1
42	1701-1926-2010	SP REAR COVER-R (PD-42L)	1
43	1701-1926-3010	SP REAR COVER-L (PD-42L)	1
44	1701-0520-2010	BASE COVER (PD-42L)(HIPS,877C)	1
45	1947-1800-0980	GASKET BLOCK L50*W17*H25	2
46	1712-0100-8980	BASE FRAME (PD-42L)(SPGC T=2.5mm)	2
47	1712-0100-8990	BASE-PLATE(PD-42L)(SECC T=1.2mm)	1
48	1701-1000-0520	FOOT(PORON)(20mm*15mm*2.0mm)	8
49	1712-0100-8970	REAR COVER(PD-42L)(SPGC T=0.8,BLACK)	1
50	1720-0004-0850	MAC.SCREW-MB M4.0*8.0L,BLK-Ni	–
51	1721-3003-0920	TAP.SCREW-MF M3.0*9.0L,Ni	15
52	1721-0003-0650	TAP.SCREW-TB#3.0*6.0L,BLK-Ni	9
53	1720-7344-0820	MAC.SCREW-MHSW #4-40*8.0L,Ni	2
54	1723-0047-1050	TAP.SCREW-TB#4.7*10.0L,BLK-Ni	2
55	1720-0003-0650	MAC. SCREW-MB M3.0*6.0L,BLK-Ni	–
56	1720-1204-0820	MAC.SCREW-MPGM M4.0*8.0L,Ni	1
57	1721-4103-0820	TAP.SCREW-TRF#3.0*8.0L,Ni	6
58	1721-0004-1250	TAP.SCREW-TP#4.0*12.0L,BLK-Ni	22
59	1721-2103-1050	TAP.SCREW-TRFW#3.0*10.0L,BLK-Ni	4
60	1720-2505-1020	MAC.SCREW-MR M5.0*10.0L,Ni	4
61	1720-2003-0620	MAC.SCREW-MR M3.0*6.0L,Ni	–
62	1721-0003-1050	TAP.SCREW-TB#3.0*10.0L,BLK-Ni	20
63	1947-1200-0400	ACETATE CLOTH (20*45mm)	2
64	0460-1016-0030	WH PHDR16VS-PHDR16VS 1061#26 100mm	1
65	0460-1105-0090	WH XH5P-PH5P 1007#24 400mm	1
66	0460-1013-0100	WH PH13P-A2543H10P+EI7P 1007#24 280/380mm CORE	1
67	0460-1012-0191	WH PH12P-ZH9P+PH4P 20276 927/972mmCORE*2	1
68	0460-3430-0690	WH P240430/FI-W31S 300mm	1
69	0460-1207-0010	WH VHR6P+178125-2 1617#22 400/430mm	1
70	1701-1500-1350	WIRE CLIP(TDY8-1A)	1

DESCRIPTION: VIZIO P42HDTV10A			PART NO.: 2842-8500-3053
AmTRAN TECHNOLOGY Co., LTD.	THIRD ANGLE PROJECTION		MODEL No.: VIZIO P42HDTV10A
UNLESS OTHERWISE NOTED .XX = ±0.10 .X = ±0.2 ANG. = ±1/2°	DSN: JESSIE Yu 03/27/06	MATERIAL: ●●●●●●	DWG. NAME: 42" CASE ASS'Y
	CHK:	QTY: 1 SIZE: A1	
		SCALE: Full UNIT: MM	DWG. No.: VIZIO-P42HDTV-LC-CA.DWG REV. 0 SHEET: 1 of 1