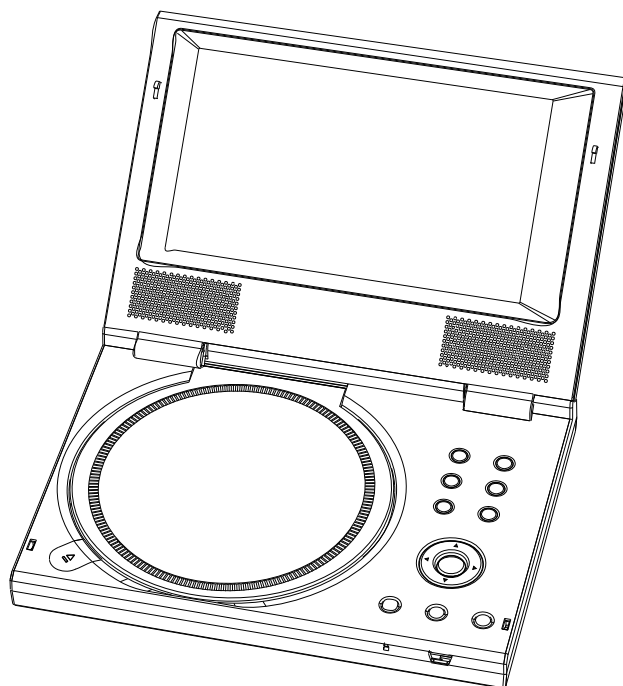


SERVICE MANUAL

DL371D



CONTENTS

1.	SAFETY PRECAUTIONS	1
2.	PREVENTION OF ELECTRO STATIC DISCHARGE(ESD)TO ELECTROSTATICALLY SENSITIVE(ES)DEVICES	1
3.	CONTROL BUTTON LOCATIONS AND EXPLANATIONS	2
4.	PREVERTION OF STATIC ELECTRICITY DISCHARGE	4
5.	ELECTRICAL CONFIRMATION	5
5.1	VIDEO OUTPUT (LUMINANCE SIGNAL) CONFIRMATION	5
5.2	VIDEO OUTPUT(CHROMINANCE SIGNAL) CONFIRMATION	6
6.	MPEG BOARD CHECK WAVEFORM	7
7.2	MT1389	8
7.3	HY29LV160	11
7.4	HY57V641620HG	14
8.	SCHEMATIC & PCB WIRING DIAGRAM	17
9.	SPARE PARTS LIST	34

1. SAFETY PRECAUTIONS

1.1 GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barrier, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

2. PREVENTION OF ELECTROSTATIC DISCHARGE(ESD) TO ELECTROSTATICALLY SENSITIVE(ES) DEVICES

Some semiconductor(solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive(ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor chip components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge(ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as anti-static (ESD protected) can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

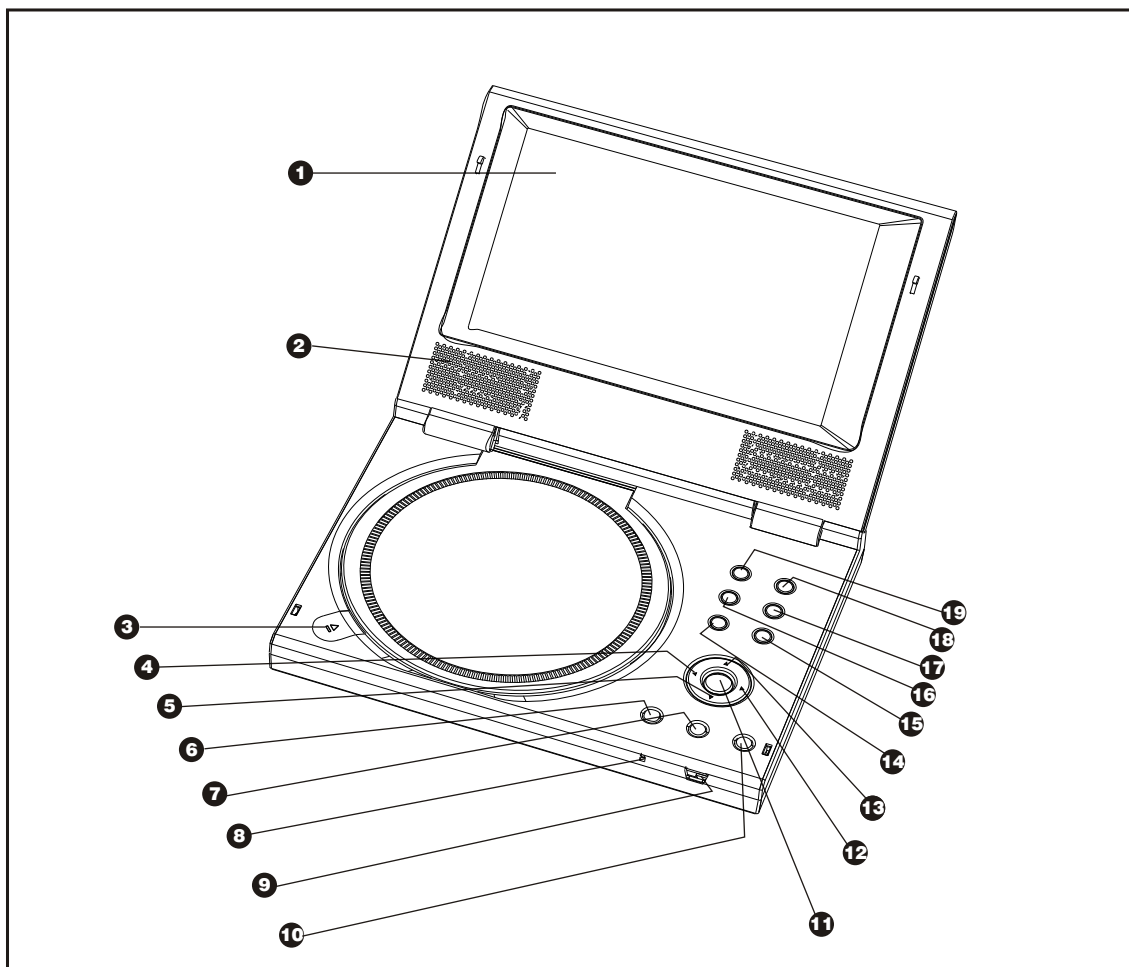
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity(ESD).

notice (1885x323x2 tiff)

IMPORTANT SAFETY NOTICE

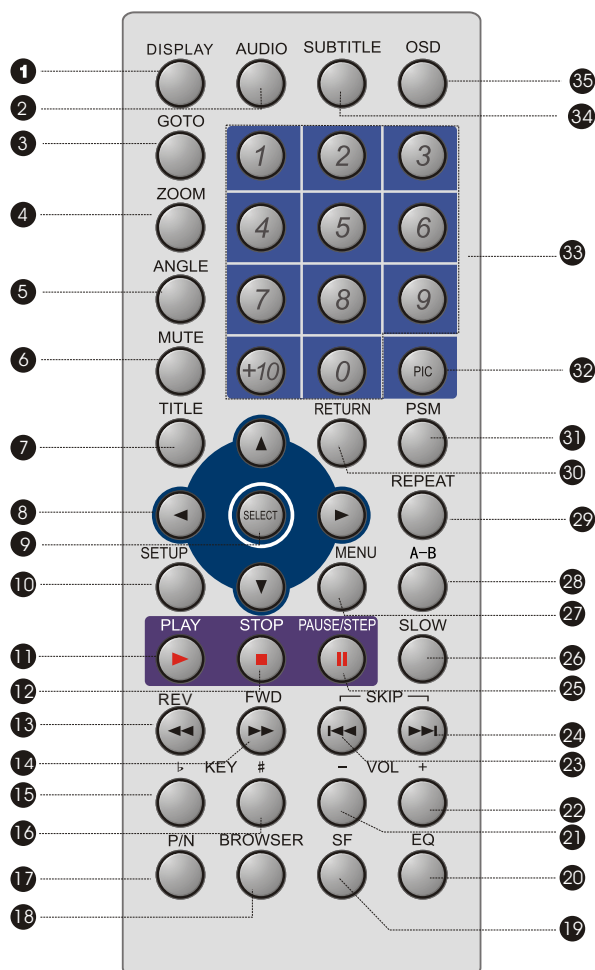
There are special components used in this equipment which are important for safety. These parts are marked by Δ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

Control Button Locations and Explanations



- | | |
|--|--|
| 1 Color TFT LCD | Press once to switch to Direction Buttons function |
| 2 Speakers | Press twice to switch to Virtual Keyboard function |
| 3 OPEN/CLOSE button | 11 PLAY button / SELECT button |
| 4 PREV button / LEFT direction arrow | 12 NEXT button / RIGHT direction arrow |
| 5 PAUSE button / DOWN direction arrow | 13 STOP button / UP direction arrow |
| 6 Vol-
Adjust the volume of headphone and speaker. | 14 REV button |
| 7 Vol+
Adjust the volume of headphone and speaker. | 15 FWD button |
| 8 Power indicator/Battery charge indicator | 16 SETUP button |
| 9 IR sensor | 17 PICTURE button |
| 10 Panel/Switch Button | 18 MENU button |
| | 19 Browser button |

Remote Control Illustration



- 27 MENU Button**
Display DVD menu or open/close PBC
- 28 A-B Button**
Repeat the select.
- 29 REPEAT Button**
Repeat play.
- 30 RETURN Button**
Back to the previous menu/
Clearing input numbers.
- 31 PSM Button**
Power Spectrum Meter on/off.
- 32 PIC Button**
Set video.
- 33 NUMBER Buttons**
- 34 SUBTITLE Button**
Change subtitle languages/
Switch JPEG display modes.
- 35 OSD Button**
Display or hide disc information.

- 1 DISPLAY Button**
Display the electrical balance.
- 2 AUDIO Button**
Change the audio language or
audio channel.
- 3 GOTO button**
Play from the desired location.
- 4 ZOOM Button**
Zoom in/out the displayed frame.
- 5 ANGLE Button**
Change camera angles, MP3/JPEG
playback modes switch.
- 6 MUTE button**
Press once to mute, twice to unmute.
- 7 TITLE button**
DVD titles.
- 8 CURSOR Buttons**
- 9 SELECT Button**
- 10 SETUP Button**
Function setup.
- 11 PLAY Button**
Normal playback.
- 12 STOP Button**
Stop playback.
- 13 REV Button**
Fast backward play.
- 14 FWD Button**
Fast forward play.
- 15 KEY  Button**
Fall tone.
- 16 KEY  Button**
Rise tone.
- 17 P/N Button**
Switch the TV system between
PAL, NTSC and AUTO.
- 18 BROWSER**
Switch new user interface.
- 19 SF Button**
Adjusting sound field effects.
- 20 EQ Button**
Adjusting equalization effects.
- 21 VOLUME-**
Decrease volume.
- 22 VOLUME+**
Increase volume.
- 23 PREV Button**
Skip backward.
- 24 NEXT Button**
Skip forward.
- 25 PAUSE/STEP Button**
Pause or play frame by frame.
- 26 SLOW Button**
Slow play.

4. PREVENTION OF STATIC ELECTRICITY DISCHARGE

The laser diode in the traverse unit (optical pickup) may break down due to static electricity of clothes or human body. Use due caution to electrostatic breakdown when servicing and handling the laser diode.

4.1. Grounding for electrostatic breakdown prevention

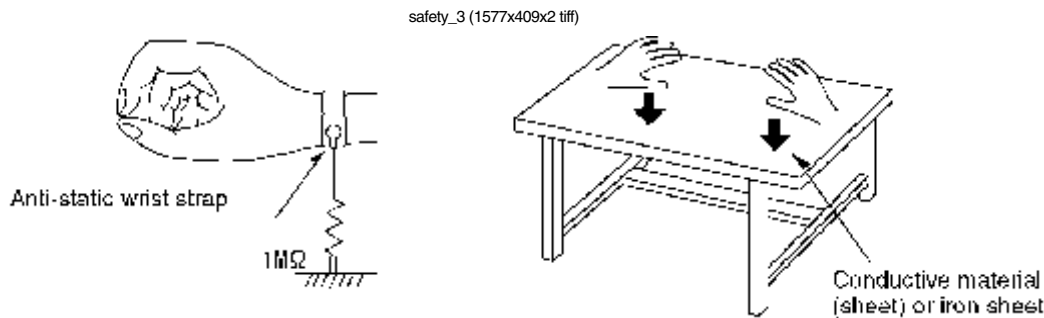
Some devices such as the DVD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

4.1.1. Worktable grounding

1. Put a conductive material (sheet) or iron sheet on the area where the optical pickup is placed, and ground the sheet.

4.1.2. Human body grounding

- 1 Use the anti-static wrist strap to discharge the static electricity from your body.



4.1.3. Handling of optical pickup

1. To keep the good quality of the optical pickup maintenance parts during transportation and before installation, the both ends of the laser diode are short-circuited. After replacing the parts with new ones, remove the short circuit according to the correct procedure. (See this Technical Guide).
2. Do not use a tester to check the laser diode for the optical pickup. Failure to do so will damage the laser diode due to the power supply in the tester.

4.2. Handling precautions for Traverse Unit (Optical Pickup)

1. Do not give a considerable shock to the traverse unit (optical pickup) as it has an extremely high-precision structure.
2. When replacing the optical pickup, install the flexible cable and cut its short lead with a nipper. See the optical pickup replacement procedure in this Technical Guide. Before replacing the traverse unit, remove the short pin for preventing static electricity and install a new unit. Connect the connector as short times as possible.
3. The flexible cable may be cut off if an excessive force is applied to it. Use caution when handling the cable.
4. The half-fixed resistor for laser power adjustment cannot be adjusted. Do not turn the resistor.

5.Electrical Confirmation

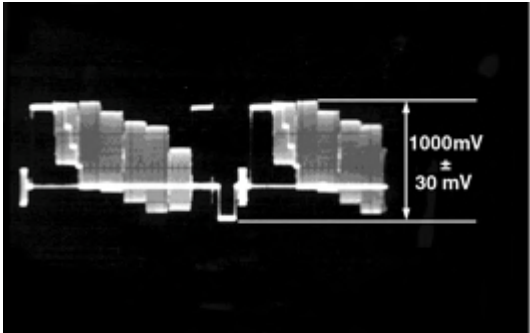
5.1. Video Output (Luminance Signal) Confirmation

DO this confirmation after replacing a P.C.B.

Measurement point	Mode	Disc
Video output terminal	Color bar 75% PLAY(Title 46):DVDT-S15 PLAY(Title 12):DVDT-S01	DVDT-S15 or DVDT-S01
Measuring equipment,tools	Confirmation value	
200mV/dir,10 μ sec/dir	1000mVp-p±30mV	

Purpose:To maintain video signal output compatibility.

- 1.Connect the oscilloscope to the video output terminal and terminate at 75 ohms.
- 2.Confirm that luminance signal(Y+S)level is 1000mVp-p±30mV



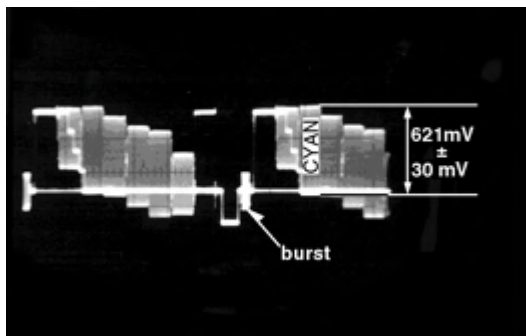
5.2 Video Output(Chrominance Signal) Confirmation

Do the confirmation after replacing P.C.B.

Measurement point	Mode	Disc
Video output terminal	Color bar 75% PLAY(Title 46):DVDT-S15 PLAY(Title 12):DVDT-S01	DVDT-S15 or DVDT-S01
Measuring equipment,tools	Confirmation value	
Screwdriver,Oscilloscope 200mV/dir,10 μ sec/dir	621mVp-p $\pm$ 30mV	

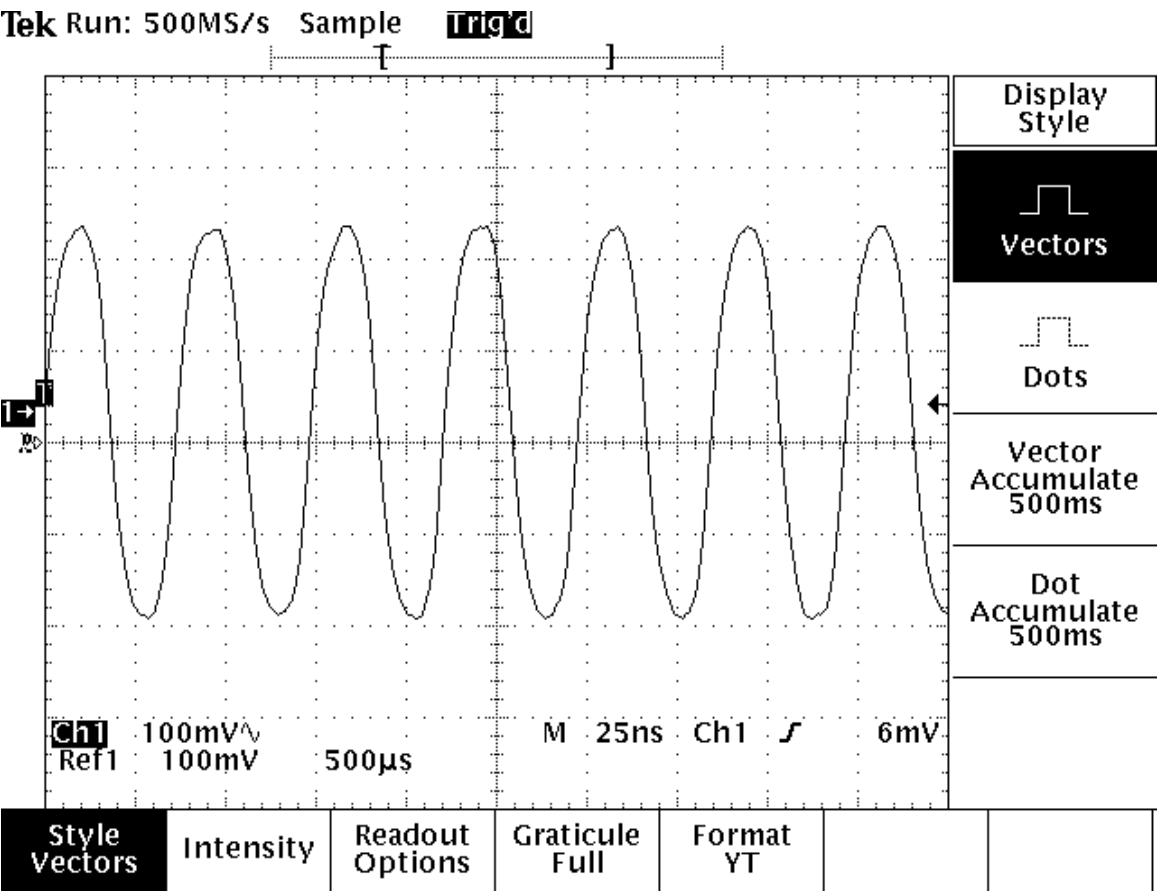
Purpose:To maintain video signal output compatibility.

- 1.Connect the oscilloscope to the video output terminal and terminate at 75 ohme.
- 2.Confirm that the chrominance signal(C)level is 621 mVp-p $\pm$ 30mV



6.MPEG BOARD CHECK WAVEFORM

6.1 27MHz WAVEFORM



7.2 MT1389

MT1389

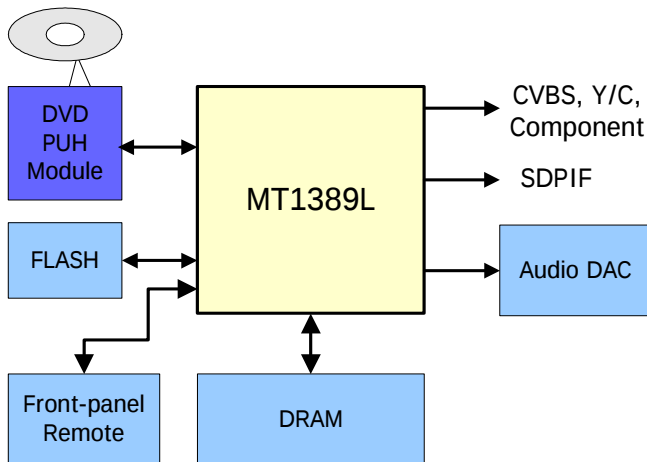
Progressive-Scan DVD Player SOC

Specifications are subject to change without notice

MediaTek MT1389 is a DVD player system-on-chip (SOC) which incorporates advanced features like high quality TV encoder and state-of-art de-interlace processing. The MT1389 enables consumer electronics manufacturers to build high quality, cost-effective DVD players, portable DVD players or any other home entertainment audio/video devices.

Based on MediaTek's world-leading DVD player SOC architecture, the MT1389 is the 3rd generation of the DVD player SOC. It integrates the MediaTek 2nd generation front-end analog RF amplifier and the Servo/MPEG AV decoder.

The progressive scan of the MT1389 utilized a proprietary advanced motion-adaptive de-interlace algorithm to achieve the best movie/video playback. It can easily detect 3:2/2:2 pull down source and restore the correct original pictures. It also supports a patent-pending edge-preserving algorithm to remove the saw-tooth effect.



DVD Player System Diagram Using MT1389

Key Features

- RF/Servo/MPEG Integration
- High Performance Audio Processor
- Motion-Adaptive, Edge-Preserving De-interlace
- 108MHz/12-bit, 6 CH TV Encoder

Applications

- Standard DVD Players
- Portable DVD Players

General Feature List

- Super Integration DVD player single chip
 - High performance analog RF amplifier
 - Servo controller and data channel processing
 - MPEG-1/MPEG-2/JPEG video
 - Dolby AC-3/DTS/DVD-Audio
 - Unified memory architecture
 - Versatile video scaling & quality enhancement
 - OSD & Sub-picture
 - 2-D graphic engine
 - Built-in clock generator
 - Built-in high quality TV encoder
 - Built-in progressive video processor
 - Audio effect post-processor
 - Audio input port
- High Performance Analog RF Amplifier
 - Programmable fc
 - Dual automatic laser power control
 - Defect and blank detection
 - RF level signal generator
- Speed Performance on Servo/Channel Decoding
 - DVD-ROM up to 4XS
 - CD-ROM up to 24XS
- Channel Data Processor
 - Digital data slicer for small jitter capability
 - Built-in high performance data PLL for channel data demodulation
 - EFM/EFM+ data demodulation
 - Enhanced channel data frame sync protection & DVD-ROM sector sync protection
- Servo Control and Spindle Motor Control
 - Programmable frequency error gain and phase error gain of spindle PLL to control spindle motor on CLV and CAV mode
 - Built-in ADCs and DACs for digital servo control
 - Provide 2 general PWM
 - Tray control can be PWM output or digital output
- Embedded Micro controller
 - Built-in 8032 micro controller
 - Built-in internal 373 and 8-bit programmable lower address port
- 1024-bytes on-chip RAM
- Up to 4M bytes FLASH-programming interface
- Supports 5/3.3-Volt. FLASH interface
- Supports power-down mode
- Supports additional serial port
- DVD-ROM/CD-ROM Decoding Logic
 - High-speed ECC logic capable of correcting one error per each P-codeword or Q-codeword
 - Automatic sector Mode and Form detection
 - Automatic sector Header verification
 - Decoder Error Notification Interrupt that signals various decoder errors
 - Provide error correction acceleration
- Buffer Memory Controller
 - Supports 16Mb/32Mb/64Mb/128Mb SDRAM
 - Supports 16-bit SDRAM data bus
 - Provide the self-refresh mode SDRAM
 - Block-based sector addressing
 - Support 3.3 Volt. DRAM Interface
- Video Decode
 - Decodes MPEG1 video and MPEG2 main level, main profile video (720/480 and 720x576)
 - Smooth digest view function with I, P and B picture decoding
 - Baseline, extended-sequential and progressive JPEG image decoding
 - Support CD-G titles
- Video/OSD/SPU/HLI Processor
 - Arbitrary ratio vertical/horizontal scaling of video, from 0.25X to 256X
 - 65535/256/16/4/2-color bitmap format OSD,
 - 256/16 color RLC format OSD
 - Automatic scrolling of OSD image
 - Slide show transition as DVD-Audio Specification
- 2-D Graphic Engine
 - Support decode Text and Bitmap
 - Support line, rectangle and gradient fill
 - Support bitblt
 - Chroma key copy operation
 - Clip mask

- Audio Effect Processing
 - Dolby Digital (AC-3)/EX decoding
 - DTS/DTS-ES decoding
 - MLP decoding for DVD-Audio
 - MPEG-1 layer 1/layer 2 audio decoding
 - MPEG-2 layer1/layer2 2-channel audio
 - High Definition Compatible Digital (HDCD)
 - Windows Media Audio (WMA)
 - Advanced Audio Coding (AAC)
 - Dolby ProLogic II
 - Concurrent multi-channel and downmix out
 - IEC 60958/61937 output
 - PCM / bit stream / mute mode
 - Custom IEC latency up to 2 frames
 - Pink noise and white noise generator
 - Karaoke functions
 - Microphone echo
 - Microphone tone control
 - Vocal mute/vocal assistant
 - Key shift up to +/- 8 keys
 - Chorus/Flanger/Harmony/Reverb
 - Channel equalizer
 - 3D surround processing include virtual surround and speaker separation
- TV Encoder
 - Six 108MHz/12bit DACs
 - Support NTSC, PAL-BDGHINM, PAL-60
 - Support 525p, 625p progressive TV format
 - Automatically turn off unconnected channels
 - Support PC monitor (VGA)
 - Support Macrovision 7.1 L1, Macrovision 525P and 625P
 - CGMS-A/WSS
 - Closed Caption
- Progressive Output
 - Automatic detect film or video source
 - 3:2 pull down source detection
 - Advanced Motion adaptive de-interlace
 - Edge Preserving
 - Minimum external memory requirement
- Audio Input
 - Line-in/SPDIF-in for versatile audio processing
- Outline
 - 256-pin LQFP package
 - 3.3/1.8-Volt. Dual operating voltages

IC BLOCK DIAGRAM & DESCRIPTION

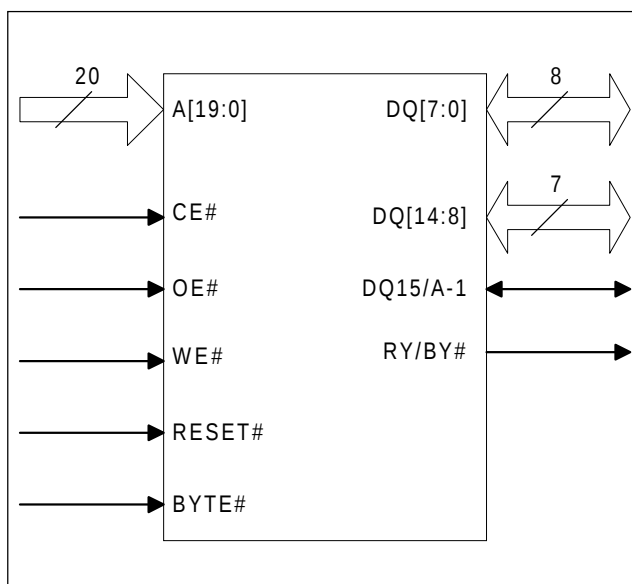


HY29LV160
16 Mbit (2M x 8/1M x 16) Low Voltage Flash Memory

KEY FEATURES

- **Single Power Supply Operation**
 - Read, program and erase operations from 2.7 to 3.6 volts
 - Ideal for battery-powered applications
- **High Performance**
 - 70, 80, 90 and 120 ns access time versions
- **Ultra-low Power Consumption (Typical Values At 5 Mhz)**
 - Automatic sleep mode current: 1 μ A
 - Standby mode current: 1 μ A
 - Read current: 9 mA
 - Program/erase current: 20 mA
- **Flexible Sector Architecture:**
 - One 16 KB, two 8 KB, one 32 KB and thirty-one 64 KB sectors in byte mode
 - One 8 KW, two 4 KW, one 16 KW and thirty-one 32 KW sectors in word mode
 - Top or bottom boot block configurations available
- **Sector Protection**
 - Allows locking of a sector or sectors to prevent program or erase operations within that sector
 - Sectors lockable in-system or via programming equipment
 - Temporary Sector Unprotect allows changes in locked sectors (requires high voltage on RESET# pin)
- **Fast Program and Erase Times**
 - Sector erase time: 0.25 sec typical for each sector
 - Chip erase time: 8 sec typical
 - Byte program time: 9 μ s typical
- **Unlock Bypass Program Command**
 - Reduces programming time when issuing multiple program command sequences
- **Automatic Erase Algorithm Preprograms and Erases Any Combination of Sectors or the Entire Chip**
- **Erase Suspend/Erase Resume**
 - Suspends an erase operation to allow reading data from, or programming data to, a sector that is not being erased
 - Erase Resume can then be invoked to complete suspended erasure
- **Automatic Program Algorithm Writes and Verifies Data at Specified Addresses**
- **100,000 Write Cycles per Sector Minimum**
- **Data# Polling and Toggle Bits**
 - Provide software confirmation of completion of program and erase operations
- **Ready/Busy# Pin**
 - Provides hardware confirmation of completion of program and erase operations
- **Hardware Reset Pin (RESET#) Resets the Device to Reading Array Data**
- **Compliant With Common Flash Memory Interface (CFI) Specification**
 - Flash device parameters stored directly on the device
 - Allows software driver to identify and use a variety of different current and future Flash products
- **Compatible With JEDEC standards**
 - Pinout and software compatible with single-power supply Flash devices
 - Superior inadvertent write protection
- **Space Efficient Packaging**
 - 48-pin TSOP and 48-ball FBGA packages

LOGIC DIAGRAM

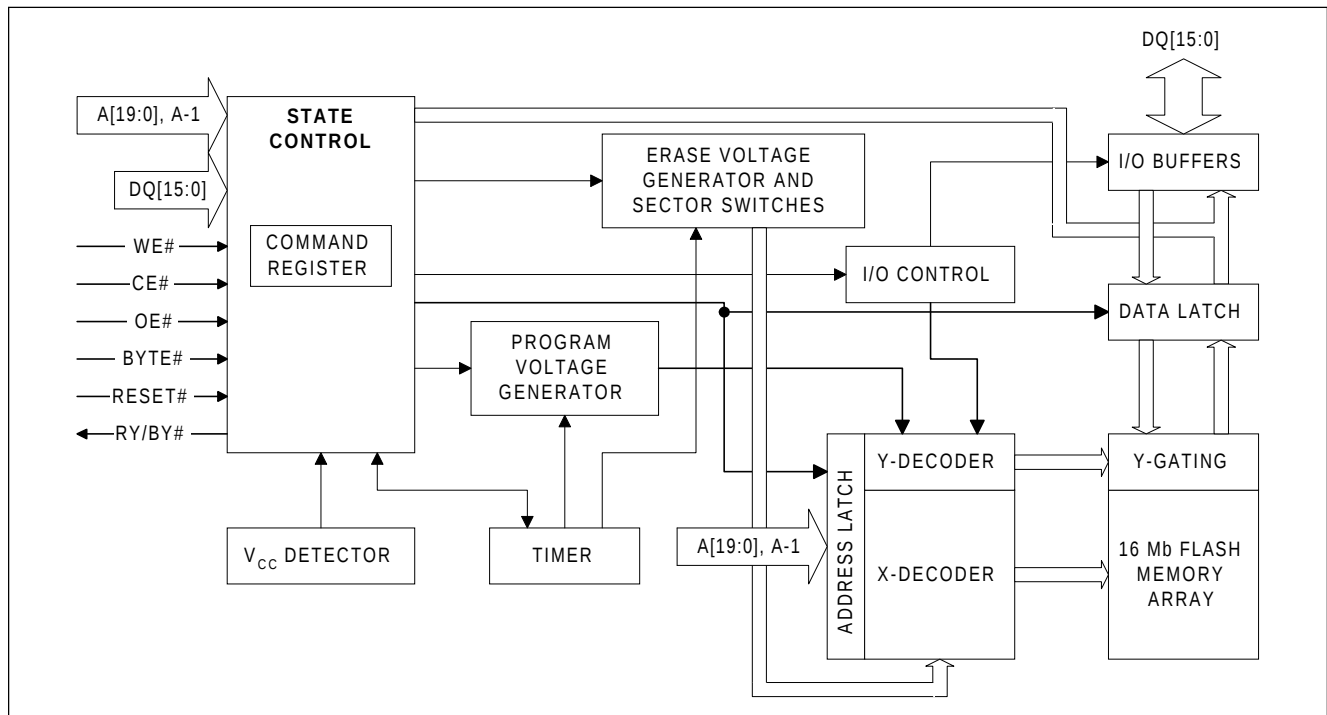


IC BLOCK DIAGRAM & DESCRIPTION

HY29LV160



BLOCK DIAGRAM



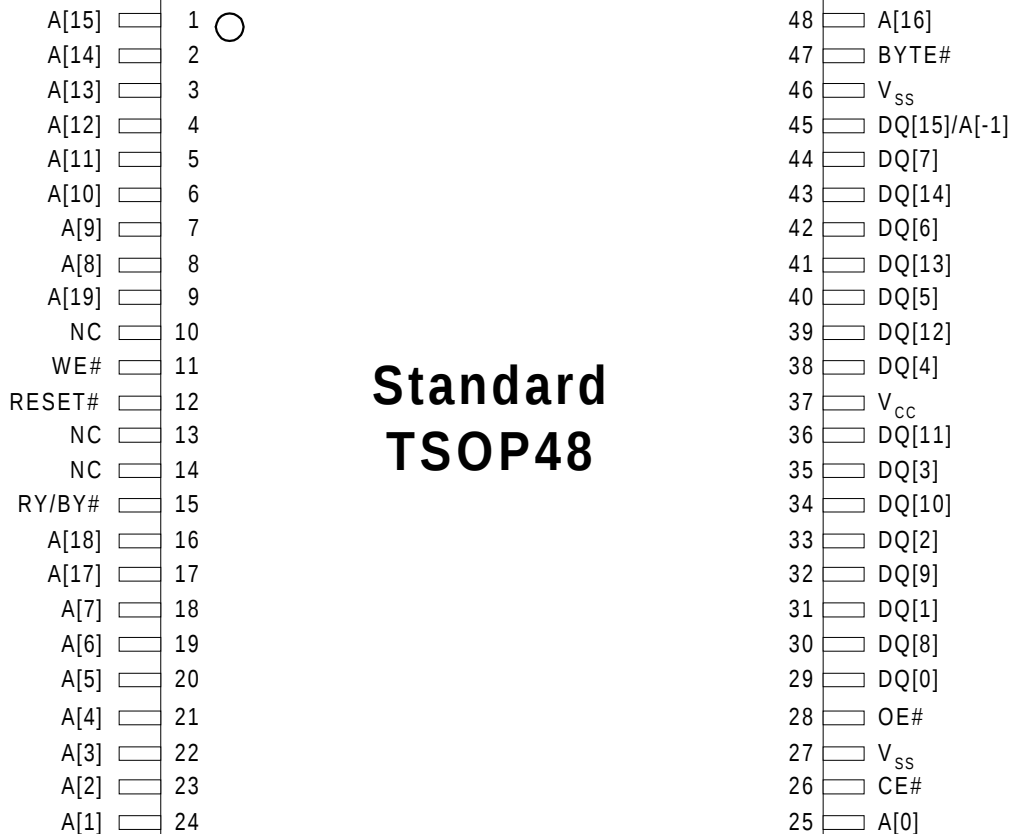
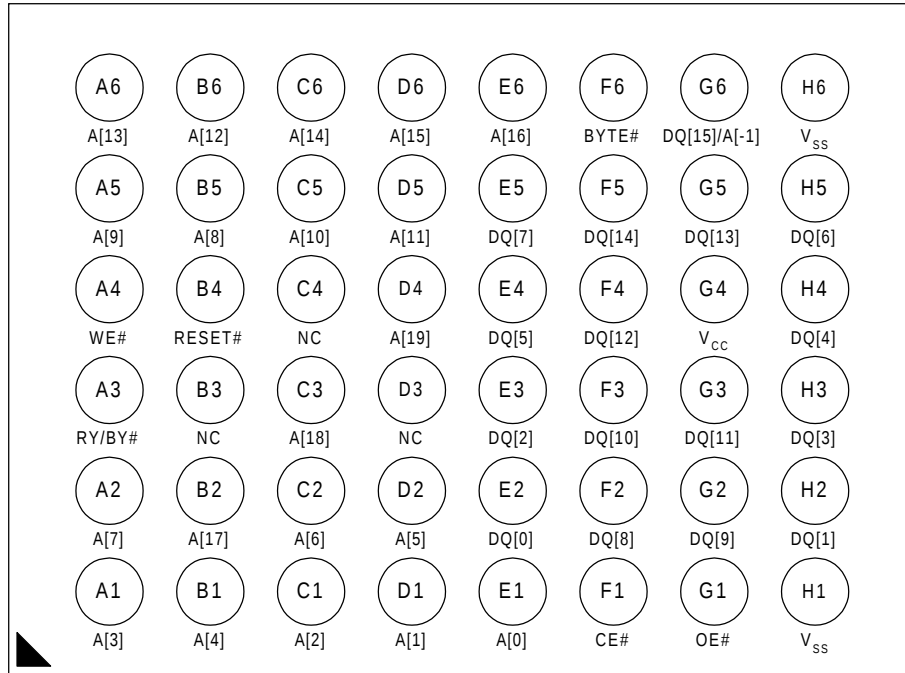
SIGNAL DESCRIPTIONS

Name	Type	Description
A[19:0]	Inputs	Address, active High. These 20 inputs, combined with the DQ[15]/A[-1] input in Byte mode, select one location within the array for read or write operations.
DQ[15]/A[-1], DQ[14:0]	Inputs/Outputs Tri-state	Data Bus, active High. These pins provide an 8- or 16-bit data path for read and write operations. In Byte mode, DQ[15]/A[-1] is used as the LSB of the 21-bit byte address input. DQ[14:8] are unused and remain tri-stated in Byte mode.
BYTE#	Input	Byte Mode, active Low. Low selects Byte mode, High selects Word mode.
CE#	Input	Chip Enable, active Low. This input must be asserted to read data from or write data to the HY29LV160. When High, the data bus is tri-stated and the device is placed in the Standby mode.
OE#	Input	Output Enable, active Low. Asserted for read operations and negated for write operations. BYTE# determines whether a byte or a word is read during the read operation.
WE#	Input	Write Enable, active Low. Controls writing of commands or command sequences in order to program data or erase sectors of the memory array. A write operation takes place when WE# is asserted while CE# is Low and OE# is High.
RESET#	Input	Hardware Reset, active Low. Provides a hardware method of resetting the HY29LV160 to the read array state. When the device is reset, it immediately terminates any operation in progress. While RESET# is asserted, the device will be in the Standby mode.
RY/BY#	Output Open Drain	Ready/Busy Status. Indicates whether a write or erase command is in progress or has been completed. Remains Low while the device is actively programming data or erasing, and goes High when it is ready to read array data.
V _{CC}	--	3-volt (nominal) power supply.
V _{SS}	--	Power and signal ground.

IC BLOCK DIAGRAM & DESCRIPTION

PIN CONFIGURATIONS

48-Ball FBGA (Bottom View)



7.4 HY57V641620HG

DESCRIPTION

The Hyundai HY57V641620HG is a 67,108,864-bit CMOS Synchronous DRAM, ideally suited for the main memory applications which require large memory density and high bandwidth. HY57V641620HG is organized as 4banks of 1,048,576x16.

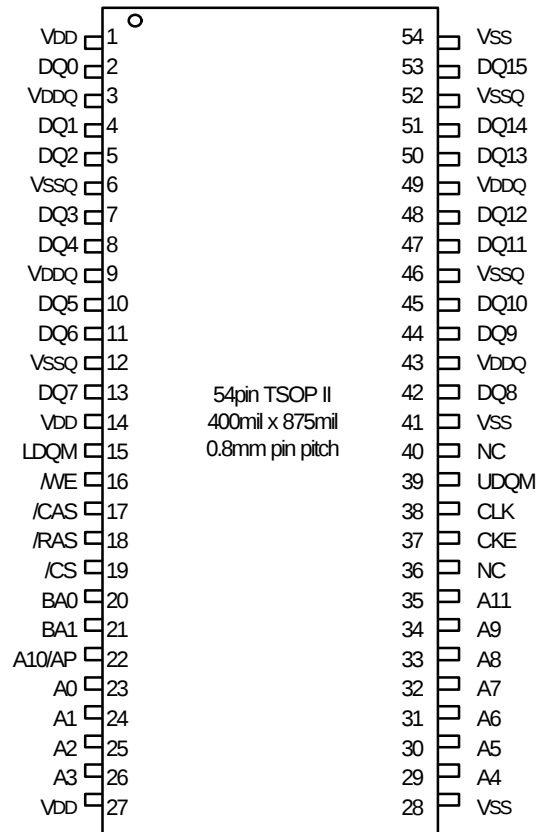
HY57V641620HG is offering fully synchronous operation referenced to a positive edge of the clock. All inputs and outputs are synchronized with the rising edge of the clock input. The data paths are internally pipelined to achieve very high bandwidth. All input and output voltage levels are compatible with LVTTL.

Programmable options include the length of pipeline (Read latency of 2 or 3), the number of consecutive read or write cycles initiated by a single control command (Burst length of 1,2,4,8 or Full page), and the burst count sequence(sequential or interleave). A burst of read or write cycles in progress can be terminated by a burst terminate command or can be interrupted and replaced by a new burst read or write command on any cycle. (This pipelined design is not restricted by a `2N` rule.)

FEATURES

- Single 3.3±0.3V power supply ^{Note)}
- All device pins are compatible with LVTTL interface
- JEDEC standard 400mil 54pin TSOP-II with 0.8mm of pin pitch
- All inputs and outputs referenced to positive edge of system clock
- Data mask function by UDQM or LDQM
- Internal four banks operation
- Auto refresh and self refresh
- 4096 refresh cycles / 64ms
- Programmable Burst Length and Burst Type
 - 1, 2, 4, 8 or Full page for Sequential Burst
 - 1, 2, 4 or 8 for Interleave Burst
- Programmable $\overline{\text{CAS}}$ Latency ; 2, 3 Clocks

PIN CONFIGURATION

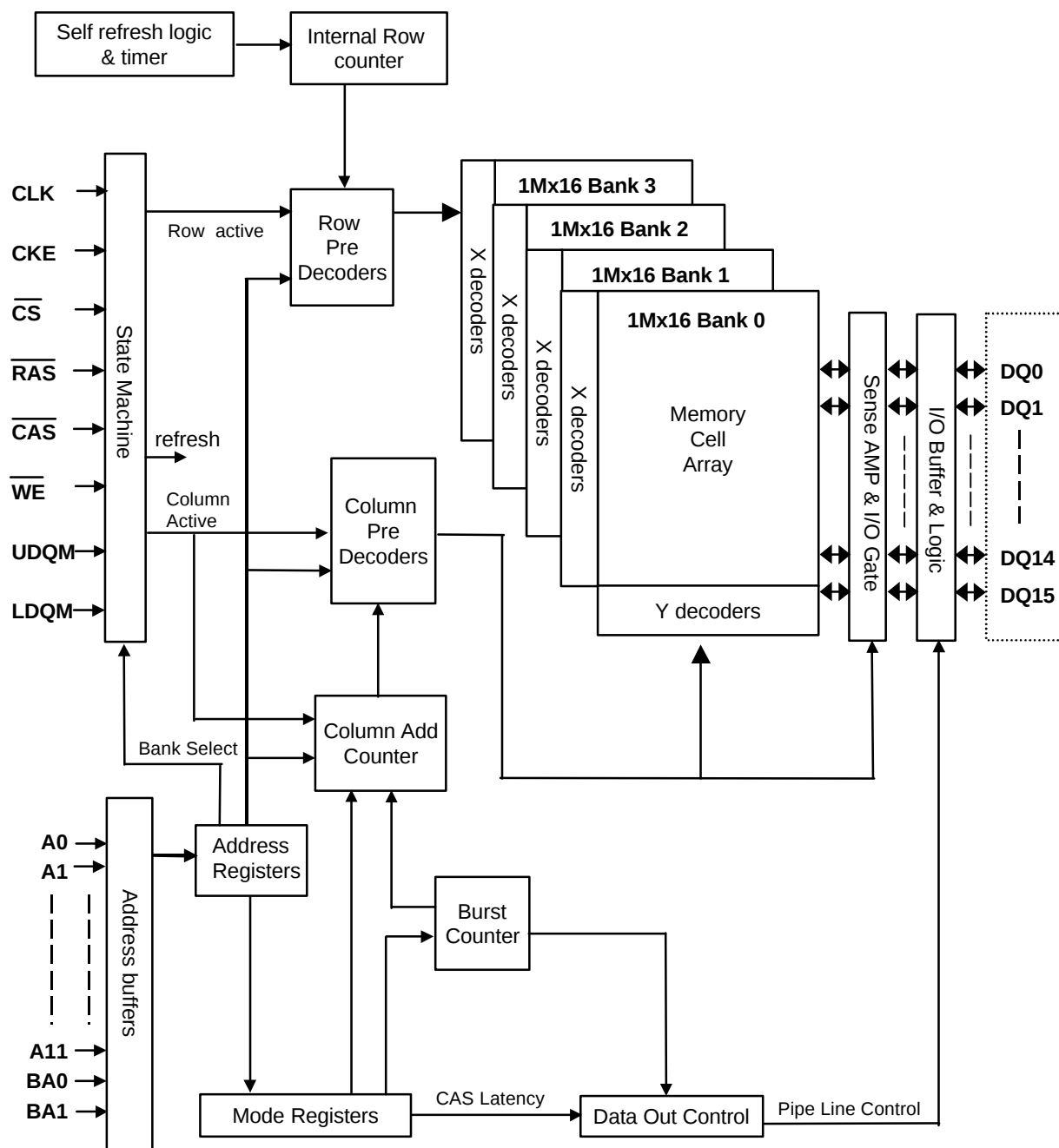


PIN DESCRIPTION

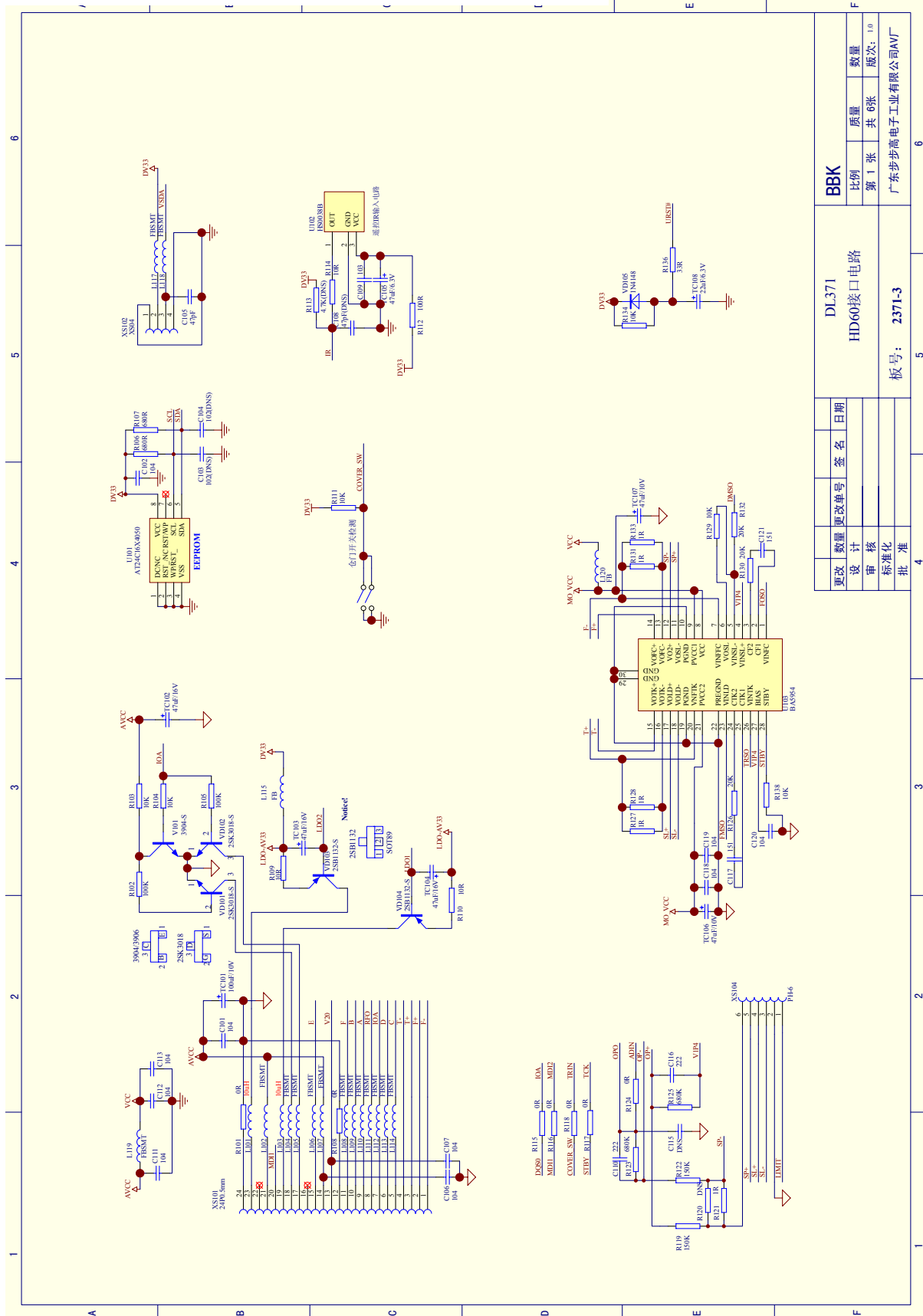
PIN	PIN NAME	DESCRIPTION
CLK	Clock	The system clock input. All other inputs are registered to the SDRAM on the rising edge of CLK
CKE	Clock Enable	Controls internal clock signal and when deactivated, the SDRAM will be one of the states among power down, suspend or self refresh
$\overline{CS}$	Chip Select	Enables or disables all inputs except CLK, CKE and DQM
BA0,BA1	Bank Address	Selects bank to be activated during $\overline{RAS}$ activity Selects bank to be read/written during CAS activity
A0 ~ A11	Address	Row Address : RA0 ~ RA11, Column Address : CA0 ~ CA7 Auto-precharge flag : A10
$\overline{RAS}$, $\overline{CAS}$, $\overline{WE}$	Row Address Strobe, Column Address Strobe, Write Enable	$\overline{RAS}$, $\overline{CAS}$ and $\overline{WE}$ define the operation Refer function truth table for details
LDQM, UDQM	Data Input/Output Mask	Controls output buffers in read mode and masks input data in write mode
DQ0 ~ DQ15	Data Input/Output	Multiplexed data input / output pin
VDD/VSS	Power Supply/Ground	Power supply for internal circuits and input buffers
VDDQ/VSSQ	Data Output Power/Ground	Power supply for output buffers
NC	No Connection	No connection

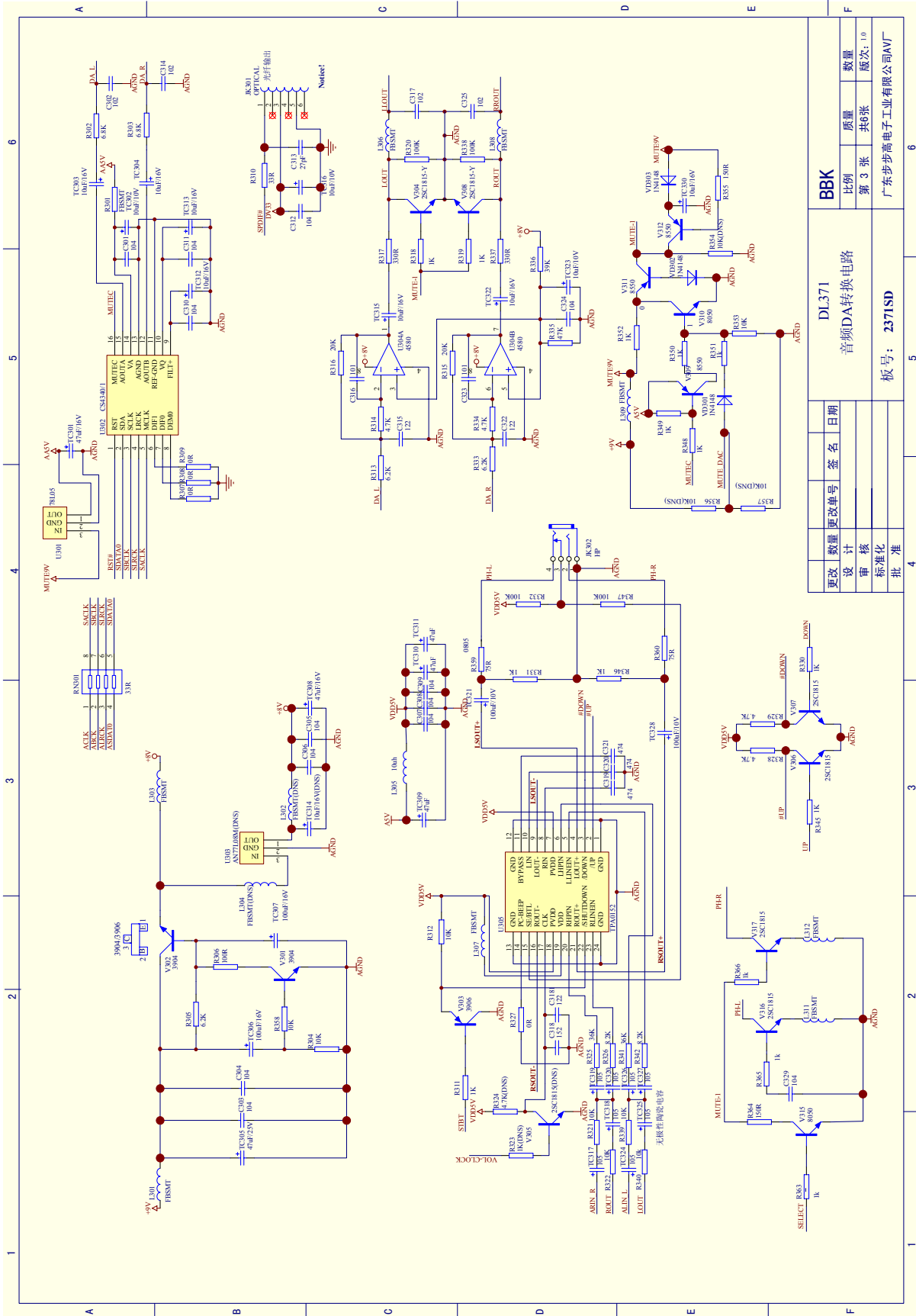
FUNCTIONAL BLOCK DIAGRAM

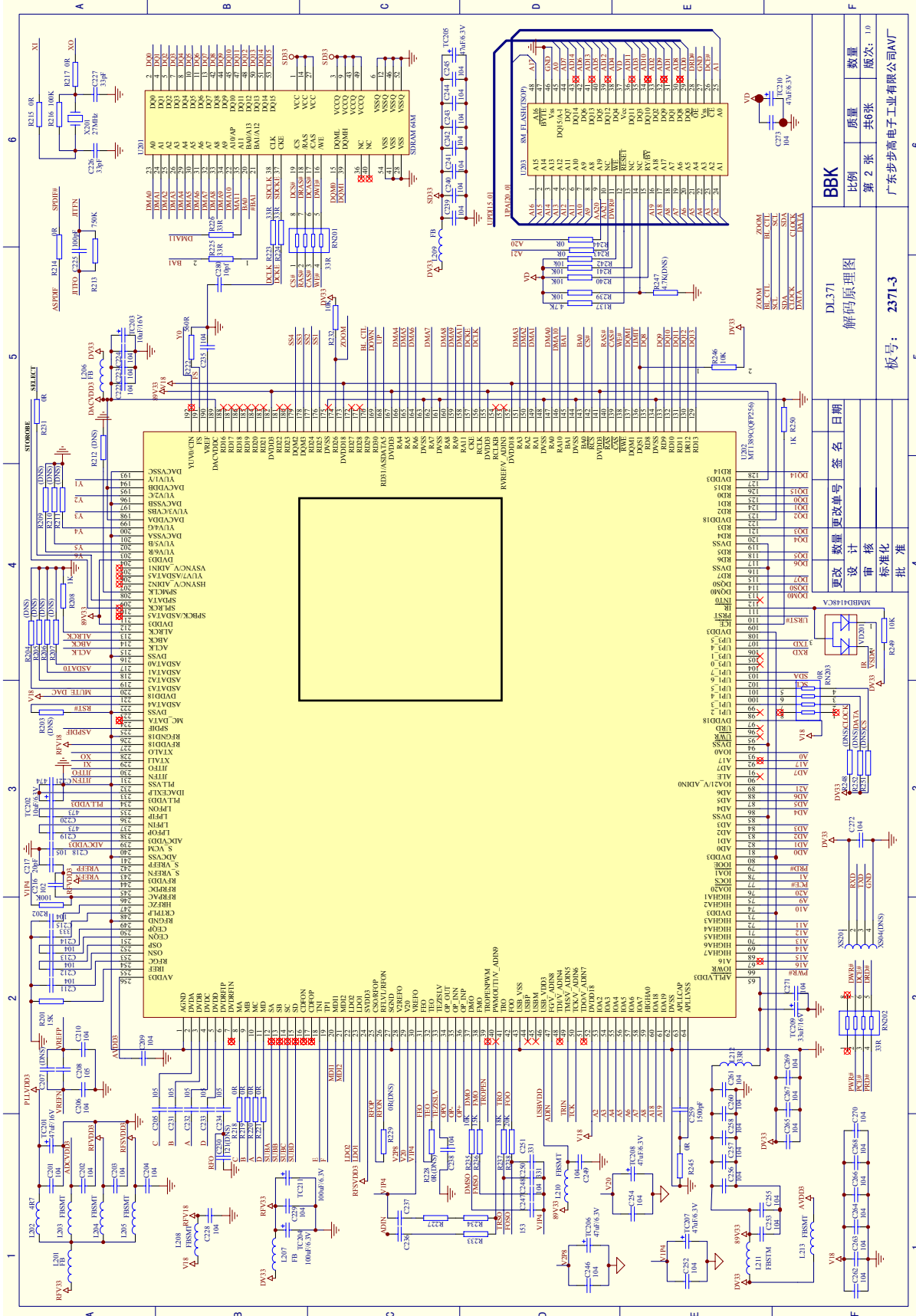
1Mbit x 4banks x 16 I/O Synchronous DRAM



8.SCHEMATIC & P.C.B WIRING DIAGRAM DECODE BOARD







B8K

DL371
解码原理图

更改 数量 变更单号 签名 日期

设计 审核 标准

批准

批注

板号: 2371-3

比例 质量 数量

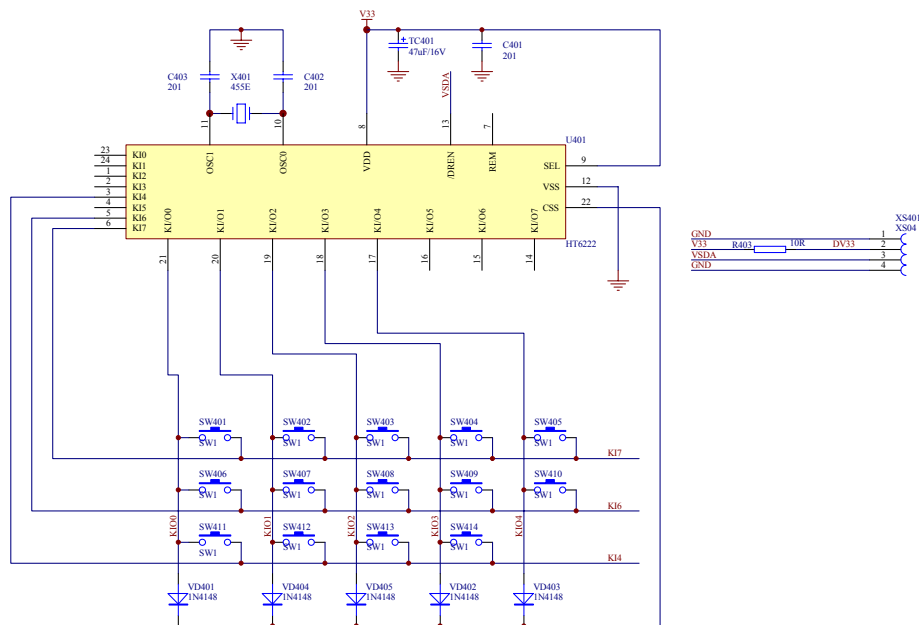
第 2 张 共6张 版次: 1.0

广东步步高电子有限公司AV厂

DECODE BOARD

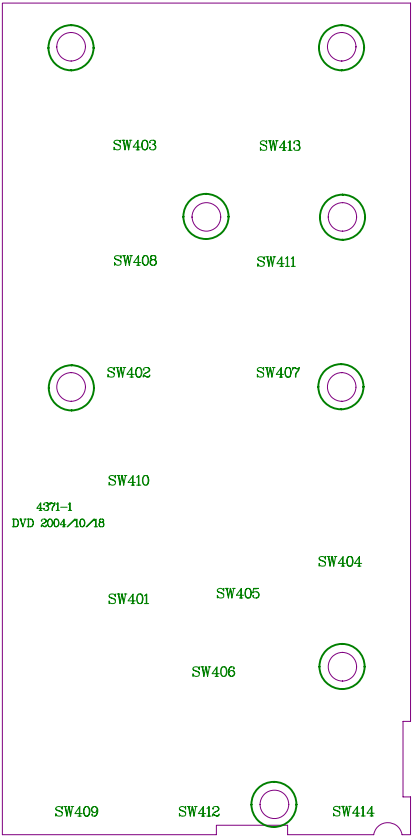


MAIN FRONT PANEL

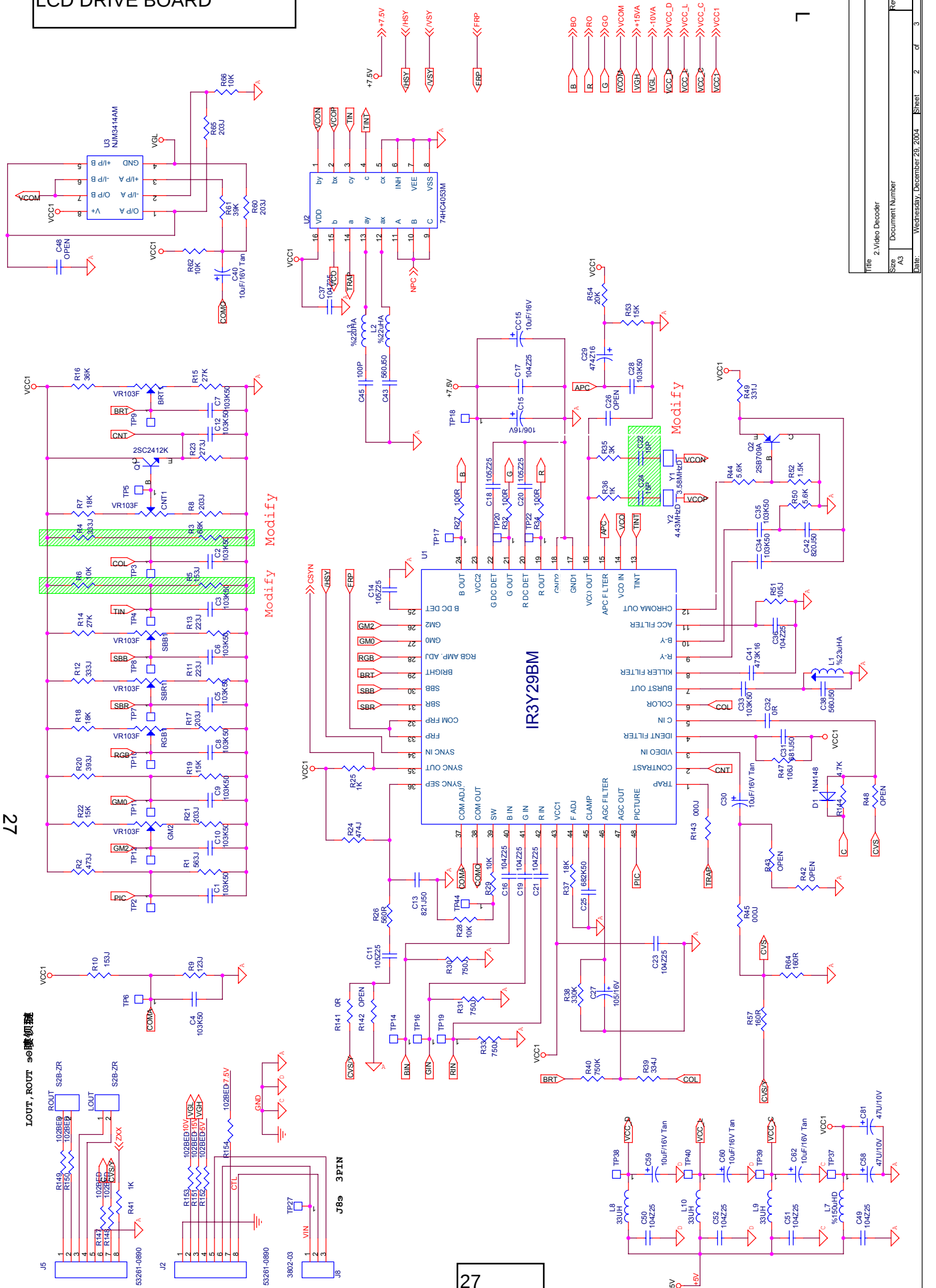


更改	数量	更改单号	签 名	日期	DL371 主 面 板 电 原 理 图 板号: 4371-0	BBK		
设 计						比例	质量	数量
审 核						第 1 张	共 1 张	版次: 1.0
标准化						广东步步高电子工业有限公司AV厂		
批 准								

MAIN FRONT PANEL

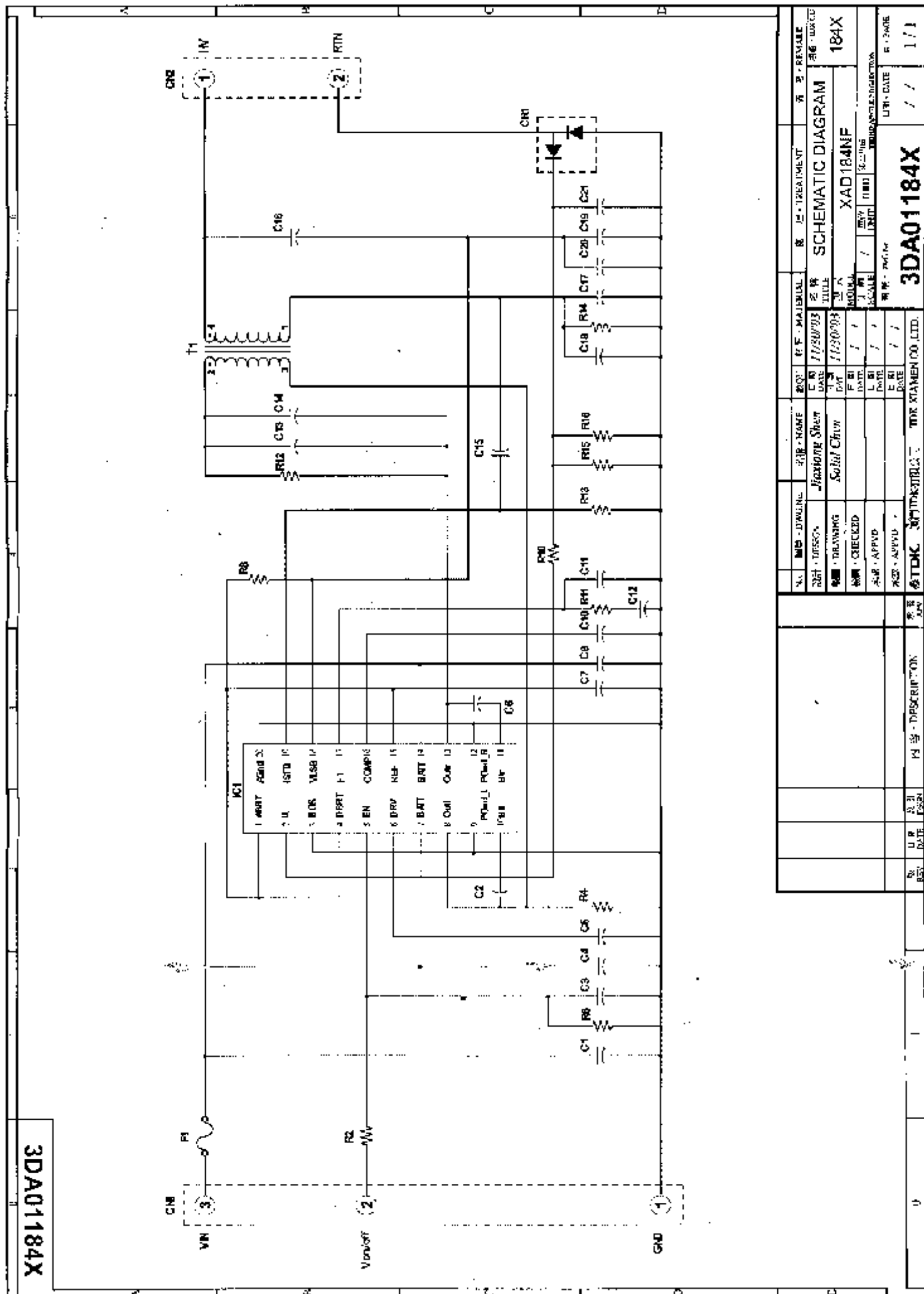


LCD DRIVE BOARD

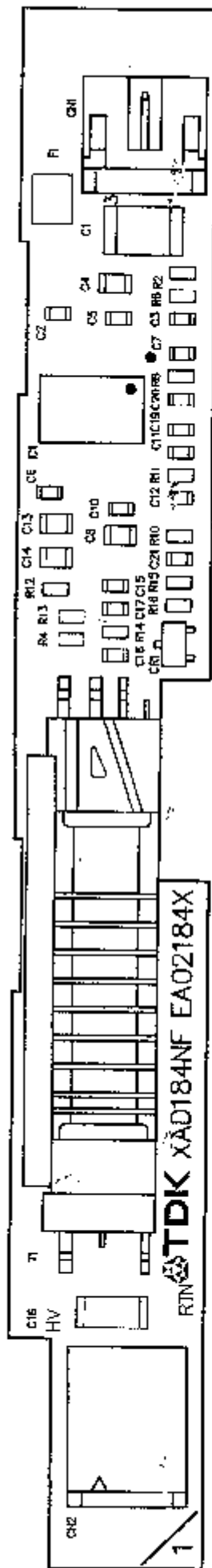


Title	2.Video Decoder
Size	Document Number
Rev	A3
Date	Wednesday, December 29, 2004
Sheet	2 of 3

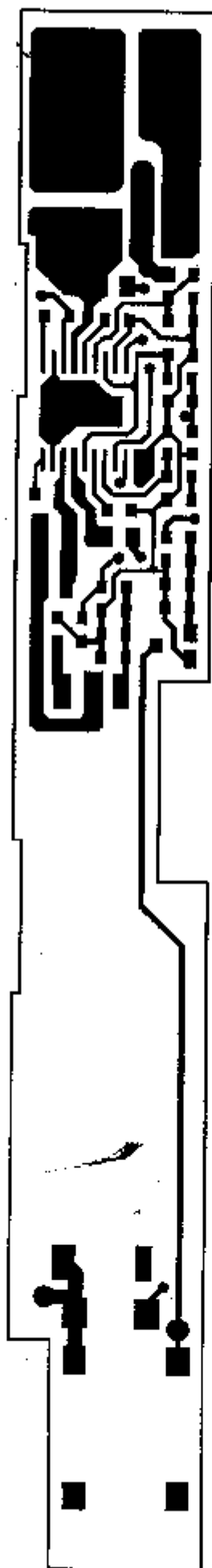
BOOST BOARD



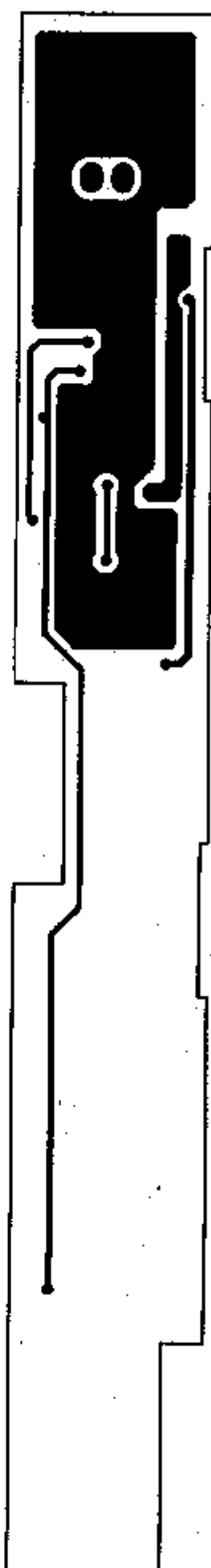
Top Overlay



TopLayer



BottomLayer

[illegible]

PARTS LIST

IDX. CD.		XAD184NF					
184X							
PART NUMBER		DESCRIPTION	QUANT	ITEM NO.	MFRS.	INS.	
C1	C4532X5R1C226MT000N	CAPACITOR	1	IN27200303	TDK		
C2	C1608X7R1E103KT000N OR C1608X7R1H103KT000N	CAPACITOR	1	IN01605301 IN01603601	TDK TDK		
C3	C1608X7R1E104KT000N OR C1608X7R1H104KT000N	CAPACITOR	1	IN01618702 IN01661801	TDK TDK		
C4	C2012X7R1E105KT000N OR C2012X7R1C105KT000N	CAPACITOR	1	IN30626701 UN30652203	TDK TDK		
C5	C1608X7R1E104KT000N OR C1608X7R1H104KT000N	CAPACITOR	1	IN01618702 IN01661801	TDK TDK		
C6	C1608X7R1E103KT000N OR C1608X7R1H103KT000N	CAPACITOR	1	IN01605301 IN01603601	TDK TDK		
C7	C1608Y5V1C105ZT000N OR C1608X5R1C105KT000N	CAPACITOR	1	IN30300701 IN30205102	TDK TDK		
C8	C2012X7R1E105KT000N OR C2012X7R1C105KT000N	CAPACITOR	1	IN30626701 IN30652203	TDK TDK		
C10	C1608X7R1E152KT000N OR C1608X7R1H152KT000N	CAPACITOR	1	IN01650801 IN01671801	TDK TDK		
C11	C1608X7R1E103KT000N OR C1608X7R1H103KT000N	CAPACITOR	1	IN01605301 IN01603601	TDK TDK		
C12	C1608Y5V1C105ZT000N OR C1608X5R1C105KT000N	CAPACITOR	1	IN30300701 IN30205102	TDK TDK		
C13	C2012X7R1C474KT000N OR C2012X7R1E474KT000N	CAPACITOR	1	IN30602604 IN30608002	TDK TDK		
C14	C2012X7R1C474KT000N OR C2012X7R1E474KT000N	CAPACITOR	1	IN30602604 IN30608002	TDK TDK		
C15	C1608X7R1E104KT000N OR C1608X7R1H104KT000N	CAPACITOR	1	IN01618702 IN01661801	TDK TDK		
C16	302R29N150JV4E OR C4520C0G3F150JT0A0N	CAPACITOR	1		JOHANSON TDK		
C17	C1608X7R1E683KT000N OR C1608X7R1H683KT000N	CAPACITOR	1	NS13006 IN58801200	TKD TDK		
C18	NA						
C19	C1608X7R1E562KT000N OR C1608X7R1H562KT000N	CAPACITOR	1	IN01674801 IN01670201	TDK TDK		
C20	NA						
C21	C1608X7R1E103KT000N OR C1608X7R1H103KT000N	CAPACITOR	1	IN01605301 IN01603601	TDK TDK		
R2	RC0603FRF10K OR RMC16P1002F	RESISTOR	1	NS06033 NS06494	YAGEO KAMAYA		
R4	RC0603FRF4.3K OR RMC16P4301F	RESISTOR	1	NS06165 NS06552	YAGEO KAMAYA		
				TITLE: ELECTRICAL PARTS LIST			
				MODEL: XAD184NF			
				DESIGNED	Jiaxiong Shen	DATE	01/30/04
				DRAWN	Jiaxiong Shen		01/30/04
				CHECKED			/ /
REV.	DATE	DESCRIPTION	DRAWN	APV.	APPVD.		/ /
TDK XIAMEN CO., LTD. POWER MFG. DEPT. 321-329, Tongji South RD., Jimei Dist., Xiamen, Fujian, P.R.China			DATE	APPVD.			/ /
				DWG. NO.	4CA01184X		PAGE 1/2

BOOST BOARD

PARTS LIST

IDX. CD.		XAD184NF					
184X							
PART NUMBER		DESCRIPTION	QUANT	ITEM NO.	MFRS.	INS.	
R6	RC0603FRF100K RMC16P1003F	OR RESISTOR	1	NS06028 NS06514	YAGEO KAMAYA		
R8	RC0603FRF300K RMC16P3003F	OR RESISTOR	1	NS06163 NS06527	YAGEO KAMAYA		
R10	RC0603FRF0R0 RMC16P0R00	OR RESISTOR	1	NS06168 NS06481	YAGEO KAMAYA		
R11	RC0603FRF100K RMC16P1003F	OR RESISTOR	1	NS06028 NN06541	YAGEO KAMAYA		
R12	RC0603FRF1K RMC16P1001F	OR RESISTOR	1	NS06020 NS06502	YAGEO KAMAYA		
R13	RC0603FRF300K RMC16P3003F	OR RESISTOR	1	NS06163 NS06527	YAGEO KAMAYA		
R14	RC0603FRF4.3K RMC16P4301F	OR RESISTOR	1	NS06165 NS06552	YAGEO KAMAYA		
R15	RC0603FRF200R RMC16P2000F	OR RESISTOR	1	NS06219 NS06584	YAGEO KAMAYA		
R16	RC0603FRF2K RMC16P2001F	OR RESISTOR	1	NS06113 NS06531	YAGEO KAMAYA		
T1	TDK 10U1-X12	TRANSFORMER	1		GUANN JYE		
IC1	MP1010BEM MP1015EM	IC	1	NS35008 NS35004	MPS		
PB1	3EA02184X 02	P.W.B.	1		MILKY-WAY CCTC XINE		
F1	CCP2E63 TE	FUSE	1		KOA		
CN1	8680S-0300	CONNECTOR	1		E&T		
CN2	4100-02 SM02B-BHSS-1-TB	CONNECTOR	1		E&T ACES		
	4EU02184X	CABLE	1		TDK		
CR1	1SS226(TE85L) MA157-TX	DIODE	1		TOSHIBA PANASONIC		
Packaging Parts List Refer to 4CC12073X Packaging Darling Refer to 4LC12073X							
				TITLE: ELECTRICAL PARTS LIST			
				MODEL: XAD184NF			
				DESIGNED		DATE / /	
				DRAWN		/ /	
				CHECKED		/ /	
REV.	DATE	DESCRIPTION	DRAWN	APV.	APPVD.		/ /
TDK XIAMEN CO., LTD. POWER MFG. DEPT. 321~339, Tongji South RD., Jimei Dist., Xiamen, Fujian, P.R.China			DATE	APPVD.		/ /	
				DWG. NO. 4CA01184X			PAGE 2/2

9.DVDPX-180S MATERIAL

DV371D MATERIAL LIST

1. MAIN PANEL

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTIT	LOCATION
90003	SMD RESISTOR	1/16W 10Ω ±5% 0603	PCS	1	R403
0310048	SMD CAPACITOR	50V 151 ±5% NPO 0603	PCS	2	C402,C403
0310376	SMD TANTALUM CAPACITOR	NRS10V47U±20%3528(B2)	PCS	1	TC401
0700002	SMD DIODE	LL4148	PCS	3	VD401,VD402,VD403
0700001	SMD DIODE	LS4148	PCS	3	VD401,VD402,VD403
700007	SMD DIODE	1N4148	PCS	3	VD401,VD402,VD403
0700056	SMD DUAL DIODE	MMBD4148SE SOT-23	PCS	9	Q401~Q409
0970003	CERAMIC RESONATOR	455E	PCS	1	X401
0881587	IC	PT2222A SOP	PCS	1	U401
1940150	SOCKET	4P 1.0mm SMD	PCS	1	XS401
1631968	PCB	4371-2	PCS	1	
0310207	SMD CAPACITOR	50V 104 ±20% X7R 0603	PCS	1	C401
0310543	SMD CAPACITOR	50V 104 ±10% X7R 0603	PCS	1	C401
0310222	SMD CAPACITOR	25V 104 ±20% X7R 0603	PCS	1	C401

2. SWITCH BOARD

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTIT	LOCATION
1350053	TESTING SWITCH	SPVE110600	PCS	2	SW201,SW202
2110171	DUAL LEAD	26# 80mm RED/BLACK	PCS	1	
1563277	PCB	9371-0	PCS	1	

3. POWER SOCKET BOARD

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTIT	LOCATION
0310207	SMD CAPACITOR	50V 104 ±20% X7R 0603	PCS	2	C501,C502
0310543	SMD CAPACITOR	50V 104 ±10% X7R 0603	PCS	2	C501,C502
0310222	SMD CAPACITOR	25V 104 ±20% X7R 0603	PCS	2	C501,C502
310549	SMD CERAMIC CAPACITOR	25V 106+80%-20% 1210	PCS	2	TC501,TC502
0390374	SMD MAGNETIC CORE INDUCTOR	10UH±30% CDRH8D38	PCS	2	L501,L502
1870021	POWER SOCKET	DC-023	PCS	1	JK501
2300020	SMD PROTECTOR TUBE	3A 250V	PCS	1	F501
2300023	SMD PROTECTOR TUBE	T3AL 125V	PCS	1	F501
2150204	SCREEN-SHIELDED LINE	22# 52mm 1P SCREEN-SHIELDED WHITE	PCS	1	
1631969	PCB	F371-1	PCS	1	

4. BATTERY CONNECTING BOARD

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTIT	LOCATION
1860063	BATTERY CONNECTOR	4p 2.5mm DC-001-040-100	PCS	1	CN1
2121557	FLAT CABLE	4P 120mm 22# RED/BLACK BLACK/RED	PCS	1	
1631736	PCB	G371-0	PCS	1	
1030028	SMD VOLTAGE DEPENDENT RESISTOR	V1608A18NR (18V) 0603	PCS	1	OVER THE GROUND AND PARALLEL CONNECTION OF BATTERY POWER OUTOUT JACK

5. BATTERY PROTECTING BOARD

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTIT	LOCATION
0090014	SMD RESISTOR	1/16W 1K ±5% 0603	PCS	4	RB48,RB49,RB50,RB51
1050008	SMD THERMISTER	NTC 10K±5% B:3950K 0805	PCS	1	NTC
0090233	SMD RESISTOR	1/16W 4.7MΩ ±5% 0603	PCS	1	RB52
0310594	SMD CAPACITOR	25V 104±10% X7R 0603	PCS	3	CB18,CB16,CB17
310230	SMD CAPACITOR	50V 474 +80%-20% 0603	PCS	2	CB14,CB15
0310379	SMD CAPACITOR	25V 474 +80%-20% 0603	PCS	2	CB14,CB15
0310217	SMD CAPACITOR	16V 225 +80%-20% 1206	PCS	1	CB19
0790040	FIELD EFFECT TUBE	UPA1870 SSOP	PCS	1	QB8
0881535	IC	S8232 SOP	PCS	1	IC3
1632367	PCB	D371-5	PCS	1	

6. LCD DRIVE BOARD

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTIT	LOCATION
0090001	SMD RESISTOR	1/16W 0Ω ±5% 0603	PCS	7	R45,R90,R91,R100,R143,C32,R141
90222	SMD RESISTOR	1/16W 160Ω ±5% 0603	PCS	2	R64,R57
0090006	SMD RESISTOR	1/16W 75Ω ±5% 0603	PCS	3	R30,R31,R33
0090181	SMD RESISTOR	1/16W 100Ω ±5% 0603	PCS	10	R27,R32,R34,R81,R103,R104,R105, R106,R134,R133

0090009	SMD RESISTOR	1/16W 330Ω ±5% 0603	PCS	1	R49
0090012	SMD RESISTOR	1/16W 560 Ω ±5% 0603	PCS	8	R26,R72,R83,R88,R92,R95,R113,R114
90014	SMD RESISTOR	1/16W 1K ±5% 0603	PCS	10	R36,R25,R41,R79,R80,R85,R86,R87,R93,R94
0090016	SMD RESISTOR	1/16W 1.5K ±5% 0603	PCS	1	R52
0090253	SMD RESISTOR	1/16W 2.4K ±5% 0603	PCS	1	R121
0090021	SMD RESISTOR	1/16W 6.8K ±5% 0603	PCS	1	R122
0090183	SMD RESISTOR	1/16W 3K ±5% 0603	PCS	2	R68,R35
0090019	SMD RESISTOR	1/16W 4.7K ±5% 0603	PCS	5	R110,R112,R145,R146,R144
0090225	SMD RESISTOR	1/16W 5.6K ±5% 0603	PCS	2	R44,R50
0310047	SMD CAPACITOR	50V 101 ±5% NPO 0603	PCS	1	C45
0090023	SMD RESISTOR	1/16W 10K ±5% 0603	PCS	9	R6,R28,R29,R62,R66,R71,R76,R77,R107
90187	SMD RESISTOR	1/16W 12K ±5% 0603	PCS	1	R9
0090024	SMD RESISTOR	1/16W 15K ±5% 0603	PCS	8	R5,R10,R19,R22,R73,R74,R78,R53
90188	SMD RESISTOR	1/16W 18K ±5% 0603	PCS	3	R7,R18,R37
0090025	SMD RESISTOR	1/16W 20K ±5% 0603	PCS	6	R8,R17,R21,R60,R65,R54
0090026	SMD RESISTOR	1/16W 22K ±5% 0603	PCS	2	R11,R13
0090255	SMD RESISTOR	1/16W 24K ±5% 0603	PCS	1	R102
0090027	SMD RESISTOR	1/16W 27K ±5% 0603	PCS	3	R15,R23,R14
90189	SMD RESISTOR	1/16W 30K ±5% 0603	PCS	1	R58
0090028	SMD RESISTOR	1/16W 33K ±5% 0603	PCS	2	R4,R12
0090190	SMD RESISTOR	1/16W 36K ±5% 0603	PCS	1	R16
0090191	SMD RESISTOR	1/16W 39K ±5% 0603	PCS	3	R20,R67,R61
0090029	SMD RESISTOR	1/16W 47K ±5% 0603	PCS	2	R2,R109
0090030	SMD RESISTOR	1/16W 56K ±5% 0603	PCS	2	R1,R59
0090032	SMD RESISTOR	1/16W 68K ±5% 0603	PCS	2	R3,R111
0090193	SMD RESISTOR	1/16W 82K ±5% 0603	PCS	1	R108
0090034	SMD RESISTOR	1/16W 100K ±5% 0603	PCS	1	R70
0090200	SMD RESISTOR	1/16W 200K ±5% 0603	PCS	1	R75
90205	SMD RESISTOR	1/16W 330K ±5% 0603	PCS	2	R39,R38
0090212	SMD RESISTOR	1/16W 750K ±5% 0603	PCS	1	R40
0310234	SMD CAPACITOR	16V 105 +80%-20% 0603	PCS	1	C27
0090208	SMD RESISTOR	1/16W 470K ±5% 0603	PCS	1	R24
0090109	SMD RESISTOR	1/16W 1M Ω ±5% 0603	PCS	3	R51,R97,R101
90219	SMD RESISTOR	1/16W 10MΩ ±5% 0603	PCS	1	R47
0160158	SMD ROTATED POTENTIOMETER	W203-10K±25%	PCS	8	VR1,SBR1,SBB1,RGB1,CNT1,BRT1,VR2,GM2
0310219	SMD CAPACITOR	16V 106 +80%-20% 1206	PCS	11	C30,C40,C47,C55,C59,C60,C62,CC15,CC54,CC55,C15
0310376	SMD TANTALUM CAPACITOR	NRS10V47U±20%3528(B2)	PCS	2	C58,C81
0310042	SMD CAPACITOR	50V 15P ±5% NPO 0603	PCS	2	C22,C24
0310043	SMD CAPACITOR	50V 22P ±5% NPO 0603	PCS	1	C64
0310045	SMD CAPACITOR	50V 47P ±5% NPO 0603	PCS	4	C77,C78,C79,C80
0310192	SMD CAPACITOR	50V 56P ±5% NPO 0603	PCS	2	C38,C43
0310046	SMD CAPACITOR	50V 82P ±5% NPO 0603	PCS	1	C42
0310049	SMD CAPACITOR	50V 221 ±5% NPO 0603	PCS	2	C56,C57
0310052	SMD CAPACITOR	50V 391 ±5% NPO 0603	PCS	1	C61
0310197	SMD CAPACITOR	50V 561 ±10% 0603	PCS	1	C65
310054	SMD CAPACITOR	50V 681 ±5% NPO 0603	PCS	1	C31
0310215	SMD CAPACITOR	50V 821 ±10% 0603	PCS	1	C13
0310068	SMD CAPACITOR	50V 222 ±10% 0603	PCS	1	C70
0310071	SMD CAPACITOR	50V 682 ±10% 0603	PCS	1	C25
0310072	SMD CAPACITOR	50V 103 ±10% 0603	PCS	15	C1,C2,C3,C4,C5,C6,C7,C8,C9,C10,C12,C28,C33,C34,C35
310056	SMD CAPACITOR	16V 473 ±10% 0603	PCS	1	C41
0310207	SMD CAPACITOR	50V 104 ±20% 0603	PCS	18	C16,C17,C19,C21,C23,C36,C37,C39,C49,C50,C51,C52,C54,C66,C67,C69,C72,C76
0310084	SMD CAPACITOR	50V 104 +80%-20% 0603	PCS	18	C16,C17,C19,C21,C23,C36,C37,C39,C49,C50,C51,C52,C54,C66,C67,C69,C72,C76
0310170	SMD CAPACITOR	25V 474 ±20% 0805	PCS	1	C29
0310163	SMD CAPACITOR	50V 474 +80%-20% 0805	PCS	1	C29
0310368	SMD CAPACITOR	25V 105+80%-20% 0805	PCS	4	C11,C14,C18,C20
0310217	SMD CAPACITOR	16V 225 +80%-20% 1206	PCS	1	C68
0390302	SMD MAGNETIC BEADS	MGHB1608S102	PCS	13	R69,R115~R118,R147~R154
0390042	SMD INDUCTOR	1.2UH ±10% 2012	PCS	1	L11
390199	SMD INDUCTOR	22uH ±10% 3216	PCS	2	L2,L3

0390215	SMD INDUCTOR	33uH±10% 3225	PCS	3	L8,L9,L10
0390198	SMD MAGNETIC CORE INDUCTOR	150uH ±10% CR32	PCS	1	L7
0390202	SMD MAGNETIC CORE INDUCTOR	23uH±20% CP-4L2	PCS	1	L1
0700052	SMD DIODE	MA335	PCS	1	D2
780209	SMD TRIODE	2SB709A	PCS	2	Q2,Q4
0780210	SMD TRIODE	XN4501	PCS	1	Q3
0780204	SMD TRIODE	2SC2412K	PCS	1	Q1
0881533	IC	IR3Y29B QFP	PCS	1	U1
0880743	IC	BU4053BCF SOP	PCS	2	U2,U8
0881539	IC	NJM3414AM SOP	PCS	1	U3
0881540	IC	UPS017 QFP	PCS	1	U4
0881538	IC	NJM2107 SOP	PCS	1	U5
0960212	SMD CRYSTAL OSCILLATOR	3.58MHz 49-S	PCS	1	Y1
0960213	SMD CRYSTAL OSCILLATOR	4.43MHz 49-S	PCS	1	Y2
1940152	SOCKET	8P 1.0mm SMD	PCS	2	J2,J5
1940194	CABLE SOCKET	26P 0.5mm SMD WITH CLASP	PCS	1	JP5
0700072	SMD VOLTAGE REGULATOR DIODE	6.8V150mW SOD-323	PCS	1	D3
0700007	SMD DIODE	1N4148	PCS	1	D1
1631638	PCB	C373A-4	PCS	1	

7. CAR POWER ADAPTER

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTIT	LOCATION
0010303	METAL OXIDE FILM RESISTOR	1/2W0.1 Ω±5% SHAPED VERTICAL 5	PCS	2	R1,R7
0090286	SMD RESISTOR	1/16W62Ω±5% 0603	PCS	1	R10
0090181	SMD RESISTOR	1/16W 100Ω ±5% 0603	PCS	1	R11
0090017	SMD RESISTOR	1/16W 2.2K ±5% 0603	PCS	1	R14
0010304	METAL OXIDE FILM RESISTOR	1W330 Ω±5% SHAPED VERTICAL 5	PCS	1	R8
0090014	SMD RESISTOR	1/16W 1K ±5% 0603	PCS	3	R12,R15,R16
0090050	SMD RESISTOR	1/10W 1K ±5% 0805	PCS	2	R4,R6
0090016	SMD RESISTOR	1/16W 1.5K ±5% 0603	PCS	1	R9
0090178	SMD RESISTOR	1/10W 3.6K ±5% 0805	PCS	1	R5
0090022	SMD RESISTOR	1/16W 8.2K ±5% 0603	PCS	1	R13
0090480	PRECISION SMD RESISTOR	1/10W 24K±1% 0805	PCS	1	R3
0310029	SMD CAPACITOR	50V 102 ±10% 0805	PCS	1	C9
0310144	SMD CAPACITOR	50V 104 ±10% 0805	PCS	4	C4,C5,C8,C10
0310102	SMD CAPACITOR	50V 471 ±10% 0805	PCS	1	C6
0310234	SMD CAPACITOR	16V 105 +80%-20% 0603	PCS	1	C13
0310654	SMD CERAMIC CAPACITOR	25V 106 +80%-20% Y5V 1206	PCS	2	C12,C14
0260370	CD	CD11C 35V100U±20%6.3×11 2.5	PCS	2	C1,C2
0260168	CD	CD11 25V1000U±20%10×20 5	PCS	1	C3
0780085	SMD TRIODE	8050D	PCS	1	V1
0780129	SMD TRIODE	8550D	PCS	1	V2
0881701	IC	MC34063A SOP	PCS	1	U1
0881867	IC	FDS9435A SOP	PCS	1	U2
0882105	IC	LM393 SO8	PCS	1	U3
0620025	LIGHT RADIATION DIODE	3R 4SD RED	PCS	1	VD2
0390251	VERTICAL INDUCTOR	3UH±15% 12×8.5 5mm	PCS	1	L1
0410131	INDUCTOR COIL	85UH±10% Φ18×8Φ0.8	PCS	1	L2
0700007	SMD DIODE	1N4148	PCS	2	VD4,VD5
0680041	SCHOTTKY DIODE	SB560 SHAPED VERTICAL 5 CURVE IN CATHODE	PCS	1	VD1
0700004	SMD VOLTAGE REGULATOR DIODE	5.1V ±5% 1/2W	PCS	1	VD3
1632170	PCB	D333-2	PCS	1	
5070678	SELF-SEALED PLASTIC BAG FOR ENVIRONMENTAL PROTECTION (WITH HOLE)	120×260×0.05 PE	PCS	1	
2140139	POWER CORD	2P2.5m WITH Φ4.0 DC PLUG	PCS	1	P+,P-
5232167	FIBRE TUBING	Φ1 WHITE	1ETR	0.024	
3031156	UPPER COVER OF CAR POWER CONNECTING CASE	AK008 BLACK	PCS	1	
3040843	LOWER COVER OF CAR POWER CONNECTING CASE	AK008 BLACK	PCS	1	
3870754	GASKET	AK008	PCS	1	
3870755	CONTACT HEAD	AK008	PCS	1	
3630186	SHRAPNEL	AK008	PCS	2	
3810034	SPRING	AK008	PCS	1	
3870756	FUSE HOLDER	AK008	PCS	1	
3060299	COVER OF CONTACT HEAD	AK008 BLACK	PCS	1	

2110002	LEAD	24# 30mm RED	PCS	2	
2110004	LEAD	24# 40mm BLACK	PCS	1	
2300018	FUSE TUBE	T3.15AL 250V (VDE/UL)	PCS	1	
5232168	DUST-PROOF NET	AK008 BLACK	PCS	4	

8. DECODE BOARD

MATERIAL CODE	MATERIAL NAME	SPECIFICATIONS	UNIT	QUANTIT	LOCATION
0090001	SMD RESISTOR	1/16W 0Ω ±5% 0603	PCS	36	L406,L418,R101,R108,R115,R116,R117,R118,R124,R214,R215,R217,R218,R219,R220,R221,R243,R244,R245,R327,R404,R410,R411,R412,R420,R522,R607,R608,R617,R635,R652,T C317,TC324,R422,R424,R425
90536	SMD RESISTOR	1/8W 0.27Ω ±5% 1206	PCS	5	R649,R660,R661,R662,R663
0090259	SMD RESISTOR	1/16W 820K ±5% 0603	PCS	1	R628
0090272	SMD RESISTOR	1/16W 1Ω ±5% 0603	PCS	5	R120,R127,R128,R131,R133
0310188	SMD CAPACITOR	50V 10P ±5% NPO 0603	PCS	1	C280
0090017	SMD RESISTOR	1/16W 2.2K ±5% 0603	PCS	2	R658,R669
90106	SMD RESISTOR	1/16W 4.7Ω ±5% 0603	PCS	1	L202
0090314	SMD RESISTOR	1/16W 5.1Ω ±5% 0603	PCS	2	R508,R520
0090003	SMD RESISTOR	1/16W 10Ω ±5% 0603	PCS	4	R109,R110,R114,R626
0090005	SMD RESISTOR	1/16W 33Ω ±5% 0603	PCS	7	L212,R136,R223,R224,R225,R226,R310
0090006	SMD RESISTOR	1/16W 75Ω ±5% 0603	PCS	1	R402
0090237	SMD RESISTOR	1/16W 39Ω ±5% 0603	PCS	2	R403,R405
0090181	SMD RESISTOR	1/16W 100Ω ±5% 0603	PCS	7	R112,R507,R519,R529,R664,R665,R231
0090232	SMD RESISTOR	1/16W 150Ω ±5% 0603	PCS	2	R355,R306
0090009	SMD RESISTOR	1/16W 330Ω ±5% 0603	PCS	3	R317,R337,R603
0090014	SMD RESISTOR	1/16W 1K ±5% 0603	PCS	19	R525,R208,R250,R330,R331,R345,R346,R350,R351,R352,R506,R517,R527,R532,R668,R609,R408,R415,R353
0090171	SMD RESISTOR	1/8W 1K ±5% 1206	PCS	1	R611
0090011	SMD RESISTOR	1/16W 470Ω ±5% 0603	PCS	4	R623,R666,R656,R667
0090012	SMD RESISTOR	1/16W 560Ω ±5% 0603	PCS	1	R222
0090013	SMD RESISTOR	1/16W 680Ω ±5% 0603	PCS	6	R106,R107,R318,R319,R365,R366
0090236	SMD RESISTOR	1/16W 1.8K ±5% 0603	PCS	1	R524
0090016	SMD RESISTOR	1/16W 1.5K ±5% 0603	PCS	1	R659
0090018	SMD RESISTOR	1/16W 3.3K ±5% 0603	PCS	4	R414,R641,R348,R349
0090019	SMD RESISTOR	1/16W 4.7K ±5% 0603	PCS	11	R314,R328,R329,R334,R606,R616,R620,R621,R633,R634,R137
90129	SMD RESISTOR	1/8W 4.7K ±5% 1206	PCS	1	R642
0090020	SMD RESISTOR	1/16W 5.1K ±5% 0603	PCS	2	R505,R516
90185	SMD RESISTOR	1/16W 6.2K ±5% 0603	PCS	3	R305,R313,R333
0090021	SMD RESISTOR	1/16W 6.8K ±5% 0603	PCS	4	R302,R303,R326,R342
0090022	SMD RESISTOR	1/16W 8.2K ±5% 0603	PCS	1	R639
0090023	SMD RESISTOR	1/16W 10K ±5% 0603	PCS	38	R103,R104,R111,R129,R134,R138,R232,R235,R239,R240,R241,R242,R246,R249,R304,R312,R321,R322,R339,R340,R358,R510,R523,R530,R601,R602,R610,R622,R624,R625,R638,R640,R644,R645,R654,R307~R309
0090024	SMD RESISTOR	1/16W 15K ±5% 0603	PCS	2	R201,R236
90187	SMD RESISTOR	1/16W 12K ±5% 0603	PCS	2	R515,R521
0090188	SMD RESISTOR	1/16W 18K ±5% 0603	PCS	1	R237
0090025	SMD RESISTOR	1/16W 20K ±5% 0603	PCS	7	R315,R316,R126,R130,R132,R238,R518
0090189	SMD RESISTOR	1/16W 30K ±5% 0603	PCS	1	R509
0090028	SMD RESISTOR	1/16W 33K ±5% 0603	PCS	2	R501,R511
0090190	SMD RESISTOR	1/16W 36K ±5% 0603	PCS	2	R325,R341
0090191	SMD RESISTOR	1/16W 39K ±5% 0603	PCS	1	R336
0090029	SMD RESISTOR	1/16W 47K ±5% 0603	PCS	8	R335,R502,R503,R504,R512,R513,R514,R655
0090192	SMD RESISTOR	1/16W 51K ±5% 0603	PCS	1	R531
0090034	SMD RESISTOR	1/16W 100K ±5% 0603	PCS	8	R102,R105,R202,R216,R320,R332,R338,R347
0090197	SMD RESISTOR	1/16W 150K ±5% 0603	PCS	2	R119,R122
0090201	SMD RESISTOR	1/16W 220K ±5% 0603	PCS	1	R636

90211	SMD RESISTOR	1/16W 680K ±5% 0603	PCS	2	R123,R125
0090212	SMD RESISTOR	1/16W 750K ±5% 0603	PCS	1	R213
0090597	PRECISION SMD RESISTOR	1/16W1.4k ±1% 0603	PCS	1	R612
0090543	PRECISION SMD RESISTOR	1/16W1k ±1% 0603	PCS	3	R614,R630,R632
0090110	PRECISION SMD RESISTOR	1/16W 2K ±1% 0603	PCS	4	R605,R615,R631,R651
90549	PRECISION SMD RESISTOR	1/16W 3k ±1% 0603	PCS	2	R613,R650
0090534	PRECISION SMD RESISTOR	1/16W4.75K ±1% 0603	PCS	1	R604
0090598	PRECISION SMD RESISTOR	1/16W6.2k ±1% 0603	PCS	1	R629
0090490	PRECISION SMD RESISTOR	1/16W 22K±1% 0603	PCS	3	R627,R647,R657
0100019	SMD RESISTOR NETWORKS	1/16W33Ω ±5% 8P	PCS	4	RN201,RN301,RN202,RN203
0260615	SMD CD	16V220U±20% 6.5×6.5×8	PCS	2	TC601,TC602
0260620	SMD CD	25V220U±20%8×8×10.3	PCS	1	TC608
0310374	SMD TANTALUM CAPACITOR	16V47UF±20% 6032(C)	PCS	2	TC606,TC330
0310708	SMD TANTALUM CAPACITOR	25V22U±20%7343(D)	PCS	1	TC209
0310375	SMD TANTALUM CAPACITOR	16V100UF±20% 7343(D)	PCS	7	TC306,TC307,TC321,TC328,TC101,TC603,TC605
0310548	SMD TANTALUM CAPACITOR	6.3V100UF±20% 3528(B2)	PCS	5	TC204,TC211,TC522,TC510,TC517
310390	SMD TANTALUM CAPACITOR	16V10U±20% 3216	PCS	7	TC202,TC303,TC304,TC315,TC322,TC406,TC407
0310179	SMD TANTALUM CAPACITOR	6.3V 22UF ±20% 3528	PCS	1	TC108
0310376	SMD TANTALUM CAPACITOR	NRS10V47U±20%3528(B2)	PCS	25	TC102,TC103,TC104,TC201,TC301,TC404,TC405,TC604,TC609,TC309,TC310,TC311,TC105,TC205,TC206,TC207,TC208,TC210,TC106,TC107,TC402,TC512,TC401,TC511,TC505
0310085	SMD CAPACITOR	50V 20P ±5% NPO 0603	PCS	4	C217,C406,C409,C418
0310190	SMD CAPACITOR	50V 27P ±5% NPO 0603	PCS	4	C313,C413,C414,C532
310044	SMD CAPACITOR	50V 33P ±5% NPO 0603	PCS	4	C226,C227,C620,C621
0310045	SMD CAPACITOR	50V 47P ±5% NPO 0603	PCS	7	C402,C403,C404,C405,C407,C408,C105
0310047	SMD CAPACITOR	50V 101 ±5% NPO 0603	PCS	3	C316,C323,C225
0310231	SMD CAPACITOR	50V 122 ±10% 0603	PCS	3	C315,C322,C3181
0310049	SMD CAPACITOR	50V 221 ±5% NPO 0603	PCS	2	C505,C513
0310068	SMD CAPACITOR	50V 222 ±10% 0603	PCS	2	C110,C116
0310048	SMD CAPACITOR	50V 151 ±5% NPO 0603	PCS	3	C117,C121,C534
0310051	SMD CAPACITOR	50V 331 ±5% NPO 0603	PCS	2	C250,C251
0310196	SMD CAPACITOR	50V 471 ±10% 0603	PCS	1	C509
0310066	SMD CAPACITOR	50V 102 ±10% 0603	PCS	14	C302,C314,C317,C325,C410,C415,C503,C511,C518,C519,C605,C613,C216,C540
310067	SMD CAPACITOR	50V 152 ±10% 0603	PCS	2	C259,C318
0310217	SMD CAPACITOR	16V 225 +80%-20% 1206	PCS	3	C612,TC518,TC519
0310072	SMD CAPACITOR	50V 103 ±10% 0603	PCS	1	C109
0310201	SMD CAPACITOR	50V 153 ±10% 0603	PCS	1	C247
0310204	SMD CAPACITOR	50V 333 ±10% 0603	PCS	1	C214
310207	SMD CAPACITOR	50V 104 ±20% X7R 0603	PCS	105	C101,C102,C106,C107,C111,C112,C113,C118,C119,C120,C201,C202,C203,C204,C209,C210,C211,C212,C213,C215,C222,C223,C224,C228,C229,C235,C238,C239,C240,C241,C242,C243,C244,C245,C246,C248,C249,C252~C258,C260~C273,C301,C303~C312,C324,C401,C412,C419,C420,C421,C504,C506,C512,C514,C515,C516,C517,C520,C521,C522,C523,C527,C530,C531,C539,C601,C602,C603,C604,C607,C608,C614,C615,C617,C619,C622,L405,C329,C623,R354

0310543	SMD CAPACITOR	50V 104 ±10% X7R 0603	PCS	105	C101,C102,C106,C107,C111,C112,C113,C118,C119,C120,C201,C202,C203,C204,C209,C210,C211,C212,C213,C215,C222,C223,C224,C228,C229,C235,C238,C239,C240,C241,C242,C243,C244,C245,C246,C248,C249,C252~C258,C260~C273,C301,C303~C312,C324,C401,C412,C419,C420,C421,C504,C506,C512,C514,C515,C516,C517,C520,C521,C522,C523,C527,C530,C531,C539,C601,C602,C603,C604,C607,C608,C614,C615,C617,C619,C622,L405,C329,C623,R354
0310222	SMD CAPACITOR	25V 104 ±20% X7R 0603	PCS	105	C101,C102,C106,C107,C111,C112,C113,C118,C119,C120,C201,C202,C203,C204,C209,C210,C211,C212,C213,C215,C222,C223,C224,C228,C229,C235,C238,C239,C240,C241,C242,C243,C244,C245,C246,C248,C249,C252~C258,C260~C273,C301,C303~C312,C324,C401,C412,C419,C420,C421,C504,C506,C512,C514,C515,C516,C517,C520,C521,C522,C523,C527,C530,C531,C539,C601,C602,C603,C604,C607,C608,C614,C615,C617,C619,C622,L405,C329,C623,R354
0310112	SMD CAPACITOR	16V 224 ±10% 0603	PCS	4	C502,C524,C606,C618
0310198	SMD CAPACITOR	50V 472 ±10% 0603	PCS	1	C533
0310205	SMD CAPACITOR	50V 473 ±10% 0603	PCS	2	C219,C220
0310379	SMD CAPACITOR	25V 474 +80%-20% 0603	PCS	12	C610,C611,C221,C319,C320,C321,C507,C508,C525,C526,C535,C536
0310234	SMD CAPACITOR	16V 105 +80%-20% 0603	PCS	20	C205,C208,C218,C231,C232,C233,C501,C528,C529,C537,C538,TC318,TC319,TC320,TC325,TC326,TC327,C510,C616,C234
0310549	SMD CERAMIC CAPACITOR	25V 106+80%-20% 1210	PCS	26	TC502,TC503,TC504,TC507,TC508,TC509,TC513,TC514,TC610,TC501,TC506,TC302,TC316,TC323,TC203,TC312,TC313,TC516,TC515,C541,C542,TC403,TC308,TC305,TC607,TC329
90620	SMD RESISTOR	1/8W 75Ω±5% 1206	PCS	2	R359,R360
0390096	SMD INDUCTOR	1.8UH ±10% 1608	PCS	3	L403,L404,L413
0390331	SMD MAGNETIC CORE INDUCTOR	6.8UH±30% CDRH4B18	PCS	1	L511
0390328	SMD MAGNETIC CORE INDUCTOR	2.2UH±30% CDH5B18	PCS	1	L514
0390044	SMD INDUCTOR	10UH ±10% 2012	PCS	2	L101,L103
90304	PRECISION SMD RESISTOR	1/16W 10K±1% 0603	PCS	2	R618,R619
0090243	SMD RESISTOR	1/16W 1.5MΩ ±5% 0603	PCS	1	R637
0390332	SMD MAGNETIC CORE INDUCTOR	10UH ±30% CDRH8D28	PCS	2	L502,L507
0390333	SMD MAGNETIC CORE INDUCTOR	33UH±30% CDRH105R	PCS	1	L602
0390241	SMD MAGNETIC CORE INDUCTOR	10uH±20%CDRH5D18	PCS	1	L305
0390188	SMD MAGNETIC BEADS	BGH1608B102L	PCS	26	L102,L104,L105,L106,L107,L108,L109,L110,L111,L112,L113,L114,L118,L213,L306,L308,L414,L415,L416,L419,L420,L422,L503,L601,L311,L312
0390259	SMD MAGNETIC BEADS	FCM2012-120T2A	PCS	41	L115,L201,L206,L207,L209,L513,L117,L119,L120,L203,L204,L205,L208,L210,L301,L303,L307,L309,L407,L408,L409,L410,L411,L426,L421,L423,L424,L425,L504,L505,L508,L509,L510,L512,L211,L501,L5011,L506,L5061,R301,L402

0881182	IC	LM1117MP-ADJ SOT-223	PCS	1	U503
0882282	IC	AMS1117-ADJ SOT-223	PCS	1	U503
0700007	SMD DIODE	1N4148	PCS	4	VD105,VD301,VD302,VD303
0700001	SMD DIODE	LS4148	PCS	4	VD105,VD301,VD302,VD303
0700002	SMD DIODE	LL4148	PCS	4	VD105,VD301,VD302,VD303
0700121	SMD VOLTAGE REGULATOR DIODE	10V 1/2W	PCS	1	ZD601
0700137	SMD VOLTAGE REGULATOR DIODE	11V 1/2W MINIMELF	PCS	1	D508
0700136	SMD VOLTAGE REGULATOR DIODE	16V 1/2W MINIMELF	PCS	1	D506
0680027	SMD SCHOTTKY DIODE	SS34	PCS	3	VD602,D501,D502
680028	SMD SCHOTTKY DIODE	MBRS340	PCS	2	VD604,VD504
0680024	SMD SCHOTTKY DIODE	1N5819 (HOMEMADE)	PCS	1	VD503
0680042	SMD SCHOTTKY DIODE	BAT54S SOT-23	PCS	4	D503,D504,D505,D507
700063	SMD DUAL DIODE	MMBD4148CA SOT-23	PCS	1	VD201
0700056	SMD DUAL DIODE	MMBD4148SE SOT-23	PCS	3	VD401,VD402,VD403
0780085	SMD TRIODE	8050D	PCS	6	V310,V607,V602~V605
0780129	SMD TRIODE	8550D	PCS	4	V309,V311,V312,V601
0780197	SMD TRIODE	C1815	PCS	6	V306,V307,V304,V308,V316,V317
0780193	SMD TRIODE	2SK3018	PCS	2	VD101,VD102
0780040	SMD TRIODE	3904	PCS	7	V101,V505,V301,V302,V501,V503,V608
0780041	SMD TRIODE	3906	PCS	4	V506,V502,V504,V606
0570068	SMD TVS DIODE	PSD12 (12V) SOD-323	PCS	1	ONVER THE GROUND AND PARALLEL CONNECTION OF DECODE + 9V POWER INPUT JACK
1030027	SMD VOLTAGE DEPENDENT RESISTOR	V1608A05NR(5.6V) 0603	PCS	1	D6601
780115	SMD TRIODE	2SB1132	PCS	2	VD103,VD104
0881855	IC	XC602P502PR SOT-89	PCS	3	U301,U401,U606
0881631	IC	XC6201P502PR SOT-89	PCS	3	U301,U401,U606
0880185	IC	NJM4558M SOP	PCS	1	U304
0880562	IC	4580 SOP	PCS	1	U304
880361	IC	4558 SOP	PCS	1	U304
2360016	RECEIVING HEAD	HS0038B3V	PCS	1	U102
0881415	IC	HY57V641620HGT-7 TSOP	PCS	1	U201
0881872	IC	KSV464P4JA-70 TSOP	PCS	1	U201
0882022	IC	CS4340A SOP	PCS	1	U302
0881031	IC	24C02N SOP	PCS	1	U101
0882268	IC	AAT1102M MSOP	PCS	1	U504
0882269	IC	AAT1343T2 TSSOP	PCS	1	U501
0790039	FIELD EFFECT TUBE	IRF7316 S08	PCS	1	Q602
790042	FIELD EFFECT TUBE	CEM4953 S08	PCS	1	Q602
0790021	FIELD EFFECT TUBE	IRF7416 SOP	PCS	4	Q501,Q502,Q603,Q601
0881405	IC	BA5954FM HSOP	PCS	1	U103
0881937	IC	TPA0152 TSSOP24	PCS	1	U305
0881674	IC	LM393D SO8	PCS	2	U601,U602
882359	IC	AAI393 SO8	PCS	2	U601,U602
0880176	IC	LM358M SOP	PCS	1	U605
0882257	IC	MT1389FE/C (C VERSION) QFP	PCS	1	U202
0882285	IC	TL431-2.5V SOT-23	PCS	1	U603
0882322	IC	AZ431-2.5V SOT-23	PCS	1	U603
0882284	IC	S3F9454 SOP(371)	PCS	1	U604
0960020	CRYSTAL OSCILLATOR	27.00MHz 49-S	PCS	1	X201
1940150	SOCKET	4P 1.0mm SMD	PCS	1	XS102
1940152	SOCKET	8P 1.0mm SMD	PCS	2	XS401,XS402
0620067	BICOLOR LIGHT RADIATION DIODE	2RG59PC RED/GREEN 2×4.5×4	PCS	1	LED601
0620086	BICOLOR LIGHT RADIATION DIODE	2.5RG59HW-A×5 RED/GREEN	PCS	1	LED601
1310085	PUSH SWITCH	SK-42D01-PG4	PCS	1	SW401
1940094	CABLE SOCKET	24P 0.5mm SMD WITH CLASP	PCS	1	XS101
1940220	SOCKET	6P 1.25mm SMD	PCS	1	XS104
1350065	TESTING SWITCH	SPVE0010	PCS	1	SW501
1310083	PUSH SWITCH	SK-12D06-D2	PCS	1	SW601
1090049	ELECTRO-OPTIC TRANSFORMER	GPIFD310TP	PCS	1	JK301
1910101	AV SOCKET	PJ-327 BLACK	PCS	1	JK302
1910104	AV SOCKET	PJ-327 YELLOW	PCS	1	JK403

0960245	SMD CRYSTAL OSCILLATOR	8.00MHz ±20ppm 49-S	PCS	1	X601
1632392	PCB	2371-4	PCS	1	