

# *Specifications*

The Notebook Computer is a state-of-the-art, high performance, portable system. It offers a host of features specially designed to enhance performance and usability.

## **Processor in Intel Mobile Module (IMM) Package**

- Mobile Pentium processors with MMX technology at 266/233/200/166/150/133 MHz.
- Mobile Pentium II processors at 266/233 MHz or higher.

## **Memory**

- 3.3V power supply.
- Supports Fast Page Mode/EDO/SDRAM.
- 8MB expandable up to 256MB.
- 144-pin SODIMM package.

## **System BIOS**

- 256KB flash ROM.
- PCI 2.1.
- Plug and Play 1.0a.

## **Display**

- 14.1" TFT XGA (1024x768 pixels) LCD panel available.
- 13.3" TFT XGA (1024x768 pixels) LCD panel available.
- 12.1" DSTN/TFT SVGA (800x600 pixels) LCD panel available.
- 4MB SGRAM.
- Video Port Manager (VPM 1.10) for Zoomed Video (ZV) port.
- Simultaneous display with an external monitor.

## **Mass Storage**

- 3.5" floppy diskette drive.
- 2.5" hard disk drive (12.7mm high or less).
- 5.25" CD-ROM.

## **Audio**

- PCI Audio.
- Sound Blaster Pro compatible.
- Stereo full duplex support.
- 3D stereo sound effects.
- Built-in microphone.
- Built-in speakers.

## **Keyboard**

- Windows 95.
- Detachable for various language versions.

### **PC Card Sockets**

- One Type III PC card or two Type II PC cards.
- CardBus support.
- One socket ZV (Zoomed Video)-capable.

### **Input/Output**

- Built-in trackpad (PS/2).
- USB port.
- S-video jack for TV output.
- RCA jack for video input.
- Replicator port.
- External monitor (CRT) port.
- Parallel port.
- Serial port.
- PS/2 type port.
- Microphone-in jack.
- Headphone jack.

### **Infrared Wireless Communication**

- IrDA (HPSIR).
- ASKIR.
- FIR.

### **Power Management**

- APM 1.2.
- ACPI.
- Global Standby.
- Suspend and Resume.

### **Rechargeable Battery Pack**

- Ni-MH battery available.
- Li-Ion battery available.
- Battery low warning.
- Auto-switching with AC power adapter.

### **Size & Weight**

- 302mm(w)x249mm(d)x46mm(h).
- 3kg.

### **Temperature Environment**

- Operating 5°C~35°C
- Storage -20°C~60°C

### **Humidity Environment**

- Operating 20%~80%, non-condensing
- Storage 10%~90%, non-condensing

## *I/O Address Map*

Hex Range	Device
000 – 00F	DMA controller-1
020 – 021	Interrupt controller-1
040 – 043	Timer 1
048 – 04B	Timer 2
060 – 06E	KB controller M38813 chip select
070 – 071	RTC and NMI mask
080 – 08F	DMA page register
0A0 – 0A1	Interrupt controller-2
0C0 – 0DF	DMA controller-2
1F0 – 1F7	Fixed disk select
3F6 , 3F7	
2F8 – 2FF	Serial port 2
378 – 37A	Parallel port 1
3B4 , 3B5	CRT controller index (mono)
3D4 , 3D5	CRT controller index (color)
3BA	Feature control
3C0 – 3DA	
3F2 – 3F7	Floppy disk controller
3F0 , 3F1	Configuration port
3F8 – 3FF	Serial port 1

## *System Memory Map*

Address	Size	Function
000000 – 09FFFF	640KB	640KB Base Memory
0A0000 – 0BFFFF	128KB	Video RAM
0C0000 – 0CBFFF	48KB	VGA BIOS
0CC000 – 0DFFFF	80KB	Reserved
0E0000 – 0EFFFF	64KB	System BIOS for SCU, PCI, PnP, PMU
0F0000 – 0FFFFFF	64KB	System BIOS for Kernal
100000 –	16MB to 128MB	Extended Memory

# *System Resource Allocation*

<b>IRQs</b>	<b>Devices</b>
IRQ0	Timer
IRQ 1	Keyboard
IRQ 2	Cascade
IRQ 3	COM2
IRQ 4	COM1
IRQ 5	Audio/MPU-401
IRQ 6	Floppy Disk
IRQ 7	Parallel Port
IRQ8	Real Time Clock
IRQ9	Available
IRQ10	USB
IRQ11	PCMCIA
IRQ12	Trackpad (PS/2)
IRQ13	Floating Point Unit
IRQ14	Primary IDE Interface (HDD)
IRQ15	Secondary IDE Interface (CD-ROM)

# *Motherboard*

The motherboard is designed mainly based Intel IMM structure CPU and 82C371EB(PIIX4E) Chipset ; it includes the following features:

- ✓ 82371EB(PIIX4E) chipset solution from INTEL
- ✓ S3 M5+ Multimedia Flat Panel Controller
- ✓ PCI Local Bus IDE interface
- ✓ FDC37N769 Super I/O with IR Support Controller
- ✓ M38867 Keyboard Controller
- ✓ Flash EPROM 256KB with SystemSoft system BIOS, S3 VGA BIOS
- ✓ DRAM Upgradable to 128MB
- ✓ 7 DMA channels
- ✓ 13 interrupt levels
- ✓ Real time clock / calendar, battery back up
- ✓ Buzzer for sound system
- ✓ Built-in 3D stereo audio subsystem
- ✓ Port connectors :
  - 9 pin serial port (COM1)
  - 25 pin parallel printer port (LPT1)
  - 15 pin external monitor port
  - 6 pin external keyboard port
  - 4 pin USB port
  - 120 pin Port Replicator connector
  - 4 pin S-Video Jack for TV output
  - 1 pin RCA Jack for Video Input

# *Microprocessor*

## **Intel Mobile Module Family**

Intel's Mobile Modules now support the latest in mobile processor technology: Intel Pentium® processor with MMX™ technology at 266, 200, and 166 MHz using the 0.25 micron manufacturing process. These newest Mobile Modules further enhance system-level performance by supporting 512K level-2 cache. And since all Pentium processor Mobile Modules are socket compatible, manufacturers using the module will deliver these new performance levels with virtually no mobile PC re-design.

### **Functionality:**

- ✓ Intel MMCI architecture
- ✓ 512K high-performance Pipeline Burst Static RAM (PB SRAM) Level 2 Cache
- ✓ Voltage regulation for power-saving low voltages enabled by Intel's 0.25 micron process
- ✓ ACPI compliant with integrated temperature sensor

### **Features:**

- ✓ Supports 3.3-volt PCI bus
- ✓ Fastest available memory performance
- ✓ Advanced design suppresses Mobile Module EMI emissions
- ✓ New CPU process technology reduces over-all module power consumption
- ✓ Sized to fit most mobile systems: 4 inches (101.6 mm) long by 2.5 inches (63.5 mm) wide by 0.315 inches (8 mm) high (0.39 inches or 10 mm high at connector)

# *Chips*

## **Core Logic – Intel 82C371EB (PIIX4E) Chipset**

It contains the following features:

- ✓ Intel MMCI architecture
- ✓ Support kits for both Pentium and Pentium II Microprocessor
- ✓ Multifunction PCI to ISA Bridge
- ✓ Supports PCI at 30 and 33 Mhz
- ✓ Supports PCI Rev 2.1 specification
- ✓ Supports Full ISA or Extended I/O Bus
- ✓ Supports Mobil Deep Green Environments
- ✓ 3.3V Operation with 5V Tolerant Buffers
- ✓ Ultra-low power for Mobil Environments Support
- ✓ Full Support for APCI (Advanced Configuration and Power Interface) Revision 1.0
- ✓ Integrated IDE Controller
- ✓ Support Ultra DMA/33
- ✓ Supports two 82C37 Enhanced DMA controller
- ✓ Supports two 82C59 Interrupt controller
- ✓ Supports UHCI USB Ports
- ✓ Supports SMBus

## VGA Controller – S3 M5+

The S3 M5+ Multimedia Flat Panel Controller is a DRAM based Graphics and Multimedia Display Controller. It's fully integrated LCD, CRT&TV 64 bits controller for PCI systems. It contains the following functions:

- ✓ Supports displays with SGRAM 4 MB
- ✓ 64 bit high performance 2D/3D Graphic Engine
- ✓ Supports bus master PCI and SGRAM memory
- ✓ Supports 16/24 bit color DSTNS up to 1024x768x16M color, and TFT panels up to 1280x1024x64K color
- ✓ Supports non-interlaced 1280x1024x64K , 1024x768x16M , 800x600x16M color on CRT
- ✓ Simultaneous display in 24 bit color on flat panel and CRT
- ✓ Internal buffer provides flicker reduction
- ✓ RGB signals driven from the S3 M5+ LUT/DAC can directly interface with a standard off-the-shelf NTSC/PAL encoder
- ✓ Composite synchronization signals support for standard Home TV connection
- ✓ Graphic function optimized by a 64 bit internal data bus and VGA , SVGA, XGA AND SXFA flat panel
- ✓ Provides flexible and extensive power management capabilities and supports four states of VESA Display Power Management signaling
- ✓ Fully compliant ZV-Port interface with device driver support for VPM
- ✓ Industry leading DualView Simultaneous display

## **PC CARD Interface Controller - TI1220**

TI CardBus Interface Controller 1220 implements the PCMCIA 2.0/JEIDA 4.1 standard. It contains the following functions:

- ✓ PCI interface Specification 2.1
- ✓ Supports Zoom Video Mode
- ✓ PCMCIA dual-socket interface
- ✓ Yenta Registers-compatible
- ✓ ACPI 1.0 Compliant
- ✓ One-Slot plus MPEG three Zoomed Video Ports Support
- ✓ Bus Master Transfer capability
- ✓ Supports both 5V & 3.3V pc cards
- ✓ Supports PCMCIA ATA Specification
- ✓ Advanced Submicron, Low Power CMOS Technology

### **ZV Port Custom Interface**

The ZV (Zoomed Video) Port is a single source, point-to-point uni-directional video bus between a PC card socket and a VGA controller. The ZV Port complies with CCIR601 timing to allow NTSC decoders to deliver real-time digital video straight into the VGA frame buffer from a PC card. The ZV Port also allows an industry standard mechanism for transferring digital audio PCM data to a low cost DAC for conversion to an analog signal.

## Super I/O FDD Controller – SMC FDC37N769

The SMC's FDC37N769 super I/O is optimized for motherboard applications. It provides:

- ✓ 3.3 Volt operation
- ✓ Intelligent Auto Power Management
- ✓ 16 Bit Address Qualification (Optional)
- ✓ 2.88MB Super I/O Floppy Disk Controller
  - Support Vertical Recording Format
  - 16 Byte Data FIFO
  - Enhanced Digital Data Separator. Data rate up to 1Mb/s.
- ✓ Multi-Mode Parallel Port with ChiProtect Circuitry
  - Standard Mode  
IBM PC/AT and PS/2 compatible bi-directional Parallel port.
  - Enhanced Mode  
Enhanced Parallel Port (EPP) Compatible
  - High Speed Mode  
Microsoft and Hewlett Packard Extended Capabilities Port (ECP) Compatible
- ✓ Serial Port
  - Two high speed NS16C550 compatible UARTs with Send/Receive 16 Byte FIFOs
  - Programmable Baud Rate Generator
  - Supports 230K and 460K Baud
  - Modem Control Circuitry
  - Infrared-IrDA,HPSIR,ASKIR,Fast IR(4Mbps IrDA),Consumer IR Support

## **High Quality Audio Chip – ESS Maestro-2+**

- ✓ 500-MIPS-equivalent dual-engine PCI audio accelerator
- ✓ 64-Voice wavetable synthesis with support for Downloadable Samples(DLS)
- ✓ HRTF 3-D positional audio acceleration under DirectX 5.0
- ✓ Multi-Stream Directsound and Direct Sound 3D acceleration
- ✓ Hardware acceleration for DirectMusic, ActiveMovie, and DirectInput API
- ✓ AC-3 speaker virtualization
- ✓ Enhanced effects (reverb, chorus, flange, treble, bass, and 3D stereo extender)
- ✓ Advanced platform for interactive 3-D gaming, DVD movie playback, and internet communications

## **Real PCI to USB (UHCI) Chip – Intel 82371AB PIIX4**

- ✓ Two USB 1.0 ports for serial transfers at 12 or 1.5Mbit/sec.
- ✓ Support legacy keyboard and mouse.
- ✓ Support UHCI design guide revision 1.1 interface.

## **Keyboard Controller - M38867M8**

- ✓ Memory size: 1024 bytes(RAM)/32K bytes(ROM)
- ✓ Timers: 8 bit timer X 4 , 8 bit prescalers X 3
- ✓ Comparator: 8 channels
- ✓ The minimum instruction execution time:0.5us (8MHZ)
- ✓ Clock Generating Circuit: 2 clock generating circuits
- ✓ Interrupts: 21 sources,16 vectors
- ✓ Multi-Master IIC-bus/SMBus(option):1 channel

## **Infrared Communications Controller**

- ✓ IrDA v1.1(4Mbps),HPSIR,ASKIR,Consumer IR Support
- ✓ 2 IR Ports
- ✓ 96 Base I/O Address and 7 IRQ Options

## **RGB to NTSC/PAL Encoder in M5+**

- ✓ TrueScal rendering engine supports underscan to display VGA mode.
- ✓ Advanced flicker filtering.
- ✓ Programmable power management.
- ✓ Support both NTSC and PAL TV format.

## DRAM Speed

The speed ratings of DRAM for various CPU external clock rates are listed below (using 1Mx16, 4Mx16 or 8Mx8 memory):

DRAM Speed	50MHz (clocks)	60MHz (clocks)	66MHz (clocks)
70ns	read x-3-3-3	read x-4-4-4	read x-4-4-4
70ns	write x-3-3-3	write x-3-3-3	write x-3-3-3

**Refresh cycle** (with CAS-BEFORE-RAS Refresh Cycle) = 2K

**FPM/EDO** : speed at 60ns or faster

**SDRAM** : speed at 75MHz or faster

# *Pin Configurations*

## **Floppy Disk Drive Interface**

The Notebook PC uses one 26-pin FFC connector to interface with the built-in 1.44MB 3.5" disk drive. The pin configuration is:

<b>Pin</b>	<b>Description</b>	<b>Pin</b>	<b>Description</b>
1	VCC	2	INDEX#
3	VCC	4	DRV0#
5	VCC	6	DSKCHG#
7	N.C.	8	N.C.
9	3MODE#	10	MTR0#
11	N.C.	12	DIR#
13	N.C.	14	STEP#
15	GND	16	WDATA#
17	GND	18	WGATE#
19	GND	20	TRK0#
21	GND	22	WP-FD#
23	GND	24	RDATA#
25	GND	26	HDSEL#

## Hard Disk Drive Interface

The Notebook PC has a standard PC/AT interface (IDE) which can directly interface with any hard disk drive with an embedded controller supporting the same PC/AT interface through the use of a 44-pin pin header connector. The 44-pin connector has the following pin configurations:

Pin	Description	Pin	Description
1	HDRST#	2	GND
3	DDP7	4	DDP8
5	DDP6	6	DDP9
7	DDP5	8	DDP10
9	DDP4	10	DDP11
11	DDP3	12	DDP12
13	DDP2	14	DDP13
15	DDP1	16	DDP14
17	DDP0	18	DDP15
19	GND	20	N.C.
21	PDREQ	22	GND
23	PDIOW#	24	GND
25	PDIOR#	26	GND
27	PIORDY	28	GND
29	PDAK#	30	GND
31	IRQ14	32	N.C.
33	PDA1	34	N.C.
35	PDA0	36	PDA2
37	CS1P#	38	CS3P#
39	HD-LED#	40	GND
41	VCC	42	VCC
43	GND	44	N.C.

## RS-232C Serial Interface

The Notebook PC has one RS-232C serial port which enables users to connect a serial printer, a serial mouse, a plotter, a modem, etc. The key features of the serial port are listed as follows:

- ✓ IBM PC/AT compatible.
- ✓ Compatible with NS16C550.
- ✓ Individual modem control/signals for each channel.
- ✓ Programmable serial interface characteristics:
  - 5-, 6-, 7-, or 8-bit characters.
  - Even, odd, or no parity bit generation and detection.
  - 1, 1 ½, or 2 stop bit generation.
  - Tri-state TTL drives capabilities for bi-directional data bus and control bus.

The RS-232C serial port uses a 9pin D-sub male connector which has the following pin configurations:

Pin	Description
1	DCD (DATA Carrier Detect)
2	RXD (Received Data)
3	TXD (Transmitted Data)
4	DTR (Data Terminal Ready)
5	GND (Signal Ground)
6	DSR (Data Set Ready)
7	RTS (Request To Send)
8	CTS (Clear To Send)
9	RI (Ring Indicator)

## Parallel Interface

The parallel interface is implemented using a 25-pin D-sub female connector which has the following pin configurations:

Pin	Description	Pin	Description
1	Strobe#	2	Data 0
3	Data 1	4	Data 2
5	Data 3	6	Data 4
7	Data 5	8	Data 6
9	Data 7	10	ACK#
11	Busy	12	Paper Empty
13	Select	14	Auto Linefeed#
15	Error#	16	Initialize#
17	Select In	18	Ground
19	Ground	20	Ground
21	Ground	22	Ground
23	Ground	24	Ground
25	Ground		

# Expansion Memory Socket

## Socket 1:

Pin	Description	Pin	Description	Pin	Description
1	GND	2	GND	3	MD0
4	MD32	5	MD1	6	MD33
7	MD2	8	MD34	9	MD3
10	MD35	11	MEM-VCC	12	MEM-VCC
13	MD4	14	MD36	15	MD5
16	MD37	17	MD6	18	MD38
19	MD7	20	MD39	21	GND
22	GND	23	ICAS#0	24	ICAS#4
25	ICAS#1	26	ICAS#5	27	MEM-VCC
28	MEM-VCC	29	IMA0	30	IMA3
31	IMA1	32	IMA4	33	IMA2
34	IMA5	35	GND	36	GND
37	MD8	38	MD40	39	MD9
40	MD41	41	MD10	42	MD42
43	MD11	44	MD43	45	MEM-VCC
46	MEM-VCC	47	MD12	48	MD44
49	MD13	50	MD45	51	MD14
52	MD46	53	MD15	54	MD47
55	GND	56	GND	57	N.C
58	N.C	59	N.C	60	N.C
61	MEMCLK1	62	CKE	63	MEM-VCC
64	MEM-VCC	65	SRAS#	66	SCAS#
67	IMWE#	68	CKE	69	IRAS#0
70	IMA12	71	IRAS#1	72	IMA13
73	GND	74	MEMCLK2	75	GND
76	GND	77	N.C	78	N.C
79	N.C	80	N.C	81	MEM-VCC
82	MEM-VCC	83	MD16	84	MD48
85	MD17	86	MD49	87	MD18
88	MD50	89	MD19	90	MD51
91	GND	92	GND	93	MD20
94	MD52	95	MD21	96	MD53
97	MD22	98	MD54	99	MD23
100	MD55	101	MEM-VCC	102	MEM-VCC
103	IMA6	104	IMA7	105	IMA8
106	IMA11	107	GND	108	GND
109	IMA9	110	IMA12	111	IMA10
112	N.C	113	MEM-VCC	114	MEM-VCC
115	ICAS#2	116	ICAS#6	117	ICAS#3
118	ICAS#7	119	GND	120	GND
121	MD24	122	MD56	123	MD25
124	MD57	125	MD26	126	MD58
127	MD27	128	MD59	129	MEM-VCC
130	MEM-VCC	131	MD28	132	MD60
133	MD29	134	MD61	135	MD30
136	MD62	137	MD31	138	MD63
139	GND	140	GND	141	SMBDA
142	SMBCL	143	MEM-VCC	144	MEM-VCC

## Socket 2:

Pin	Description	Pin	Description	Pin	Description
1	GND	2	GND	3	MD0
4	MD32	5	MD1	6	MD33
7	MD2	8	MD34	9	MD3
10	MD35	11	MEM-VCC	12	MEM-VCC
13	MD4	14	MD36	15	MD5
16	MD37	17	MD6	18	MD38
19	MD7	20	MD39	21	GND
22	GND	23	ICAS#0	24	ICAS#4
25	ICAS#1	26	ICAS#5	27	MEM-VCC
28	MEM-VCC	29	IMA0	30	IMA3
31	IMA1	32	IMA4	33	IMA2
34	IMA5	35	GND	36	GND
37	MD8	38	MD40	39	MD9
40	MD41	41	MD10	42	MD42
43	MD11	44	MD43	45	MEM-VCC
46	MEM-VCC	47	MD12	48	MD44
49	MD13	50	MD45	51	MD14
52	MD46	53	MD15	54	MD47
55	GND	56	GND	57	N.C
58	N.C	59	N.C	60	N.C
61	MEMCLK3	62	CKE	63	MEM-VCC
64	MEM-VCC	65	SRAS#	66	SCAS#
67	IMWE#	68	CKE	69	IRAS#2
70	IMA12	71	IRAS#3	72	IMA13
73	GND	74	MEMCLK4	75	GND
76	GND	77	N.C	78	N.C
79	N.C	80	N.C	81	MEM-VCC
82	MEM-VCC	83	MD16	84	MD48
85	MD17	86	MD49	87	MD18
88	MD50	89	MD19	90	MD51
91	GND	92	GND	93	MD20
94	MD52	95	MD21	96	MD53
97	MD22	98	MD54	99	MD23
100	MD55	101	MEM-VCC	102	MEM-VCC
103	IMA6	104	IMA7	105	IMA8
106	IMA11	107	GND	108	GND
109	IMA9	110	IMA12	111	IMA10
112	N.C	113	MEM-VCC	114	MEM-VCC
115	ICAS#2	116	ICAS#6	117	ICAS#3
118	ICAS#7	119	GND	120	GND
121	MD24	122	MD56	123	MD25
124	MD57	125	MD26	126	MD58
127	MD27	128	MD59	129	MEM-VCC
130	MEM-VCC	131	MD28	132	MD60
133	MD29	134	MD61	135	MD30
136	MD62	137	MD31	138	MD63
139	GND	140	GND	141	SMBDA
142	SMBCL	143	MEM-VCC	144	MEM-VCC

## Internal Trackpad Interface

There is a connector used to interface with the internal trackpad. It should be disabled when external serial mouse has been installed. The trackpad is hardware-connected to PS/2 port, hardware-compatible to Microsoft PS/2 mouse and software-compatible to Microsoft mouse mode. The following is the pin configurations for the connector:

Pin	Description
1	VCC
2	PS/2 DATA
3	PS/2 CLK
4	GND

## External Monitor Interface

Pin	Description
1	RED
2	GREEN
3	BLUE
4	N.C
5	GND
6	GND
7	GND
8	GND
9	N.C
10	GND
11	N.C
12	DDCDATA
13	HSYNC
14	VSYNC
15	DDCCLK

### RGB Out

Output Impedance : 75 $\Omega$   
RGB peak voltage : 0.7Vpp

## External Keyboard/PS2 Mouse Interface

Pin	Description
1	EKDA
2	EMDA
3	GND
4	VCC
5	EKCLK
6	EMCLK

## External USB (Universal Serial Bus) Interface

Pin	Description
1	VCC
2	DATA-
3	DATA+
4	GND

## External S-Video TV-out Interface

Pin	Description
1	GND
2	GND
3	XLUMA
4	XCRMA

## Video-in Interface

Pin	Description
1	Video-In
2	GND

## PCMCIA CardBus Interface

### Socket A:

Pin	Description	Pin	Description
A1	GND	A2	N/A
A3	A_CD3	A4	A_CD1#
A5	A_CD4	A6	A_CD11
A7	A_CD5	A8	A_CD12
A9	GND	A10	A_CD6
A11	A_CD13	A12	A_CD7
A13	A_CD14	A14	A_CE1#
A15	A_CD15	A16	GND
A17	A_CA10	A18	A_CE2#
A19	A_OE#	A20	A_VS1
A21	A_CA11	A22	GND
A23	A_IORD#	A24	A_CA9
A25	A_IOWR#	A26	A_CA8
A27	A_CA17	A28	GND
A29	A_CA13	A30	A_CA18
A31	A_CA14	A32	A_CA19
A33	A_WE#	A34	A_CA20
A35	A_RDYBY#	A36	A_CA21
A37	A_VCC_C	A38	A_VCC_C
A39	A_VPP	A40	A_VPP
A41	GND	A42	A_CA16
A43	GND	A44	A_CA22
A45	A_CA15	A46	A_CA23
A47	A_CA12	A48	A_CA24
A49	A_CA7	A50	A_CA25
A51	GND	A52	A_CA6
A53	A_VS2	A54	A_CA5
A55	A_RESET	A56	A_CA4
A57	A_WAIT#	A58	A_CA3
A59	GND	A60	A_INPACK
A61	A_CA2	A62	A_REG#
A63	A_CA1	A64	A_BVD2#
A65	A_CA0	A66	A_BVD1#
A67	A_CD0	A68	GND
A69	A_CD8	A70	A_CD1
A71	A_CD9	A72	A_CD2
A73	A_CD10	A74	GND
A75	A_WP#	A76	A_CD2#
A77	GND	A78	

## Socket B:

Pin	Description	Pin	Description
B1	GND	B2	N/A
B3	<b>B_CD3</b>	B4	B_CD1#
B5	B_CD4	B6	B_CD11
B7	B_CD5	B8	B_CD12
B9	GND	B10	B_CD6
B11	B_CD13	B12	B_CD7
B13	B_CD14	B14	B_CE1#
B15	B_CD15	B16	GND
B17	B_CA10	B18	B_CE2#
B19	B_OE#	B20	B_VS1
B21	B_CA11	B22	GND
B23	B_IORD#	B24	B_CA9
B25	B_IOWR#	B26	B_CA8
B27	B_CA17	B28	GND
B29	B_CA13	B30	B_CA18
B31	B_CA14	B32	B_CA19
B33	B_WE#	B34	B_CA20
B35	B_RDYBY#	B36	B_CA21
B37	B_VCC_C	B38	B_VCC_C
B39	B_VPP	B40	B_VPP
B41	GND	B42	B_CA16
B43	GND	B44	B_CA22
B45	B_CA15	B46	B_CA23
B47	B_CA12	B48	B_CA24
B49	B_CA7	B50	B_CA25
B51	GND	B52	B_CA6
B53	B_VS2	B54	B_CA5
B55	B_RESET	B56	B_CA4
B57	B_WAIT#	B58	B_CA3
B59	GND	B60	B_INPACK
B61	B_CA2	B62	B_REG#
B63	B_CA1	B64	B_BVD2#
B65	B_CA0	B66	B_BVD1#
B67	B_CD0	B68	GND
B69	B_CD8	B70	B_CD1
B71	B_CD9	B72	B_CD2
B73	B_CD10	B74	GND
B75	B_WP#	B76	B_CD2#
B77	GND	B78	GND

## LCD Interface

Pin	Description	Pin	Description
1	GND	2	GND
3	SHFCLK	4	LP
5	GND	6	GND
7	M	8	FLM
9	PP0	10	PP1
11	PP2	12	PP3
13	VCC	14	VCC
15	VCC	16	VCC
17	PP4	18	PP5
19	PP6	20	PP7
21	VCC3	22	VCC3
23	VCC3	24	VCC3
25	PP8	26	PP9
27	PP10	28	PP11
29	AA-VCC	30	AA-VCC
31	PP12	32	PP13
33	PP14	34	PP15
35	AB-VCC	36	AB-VCC
37	PP16	38	PP17
39	PP18	40	PP19
41	100DVCC	42	100DVCC
43	PP20	44	PP21
45	PP22	46	PP23
47	TxVCC	48	TxVCC
49	PP24	50	PP25
51	PP26	52	PP27
53	TxAVCC	54	TxAVCC
55	PP28	56	PP29
57	GND	58	GND
59	PP30	60	PP31
61	TxPVCC	62	TxPVCC
63	PP32	64	PP33
65	PP34	66	PP35
67	LCDVDD	68	LCD-ADJ
69	LCDVDD	70	LCDVDD
71	VD12	72	VD13
73	VD14	74	VD15
75	ACIN	76	BATON
77	DEDGE	78	CEGE
79	TEST	80	HALFCK
81	SUPV	82	EXT-RES
83	CONTADJ	84	BRIGADJ
85	ENABKKL	86	ENAVEE
87	BATFULL	88	BATCHA
89	BAT-BEEP	90	HD-LED
91	SUS-LED	92	FPPOL
93	GND	94	GND
95	PD	96	LID
97	N.C.	98	N.C.
99	B+	100	B+

## SIGMA Design MPEG II Module

Pin	Description	Pin	Description
1	3V3_SUS	2	14.3MHZ
3	GND	4	PCICLK
5	GND	6	REQ#
7	+5V	8	AD31
9	AD29	10	AD27
11	AD25	12	CBE3#
13	AD23	14	AD21
15	AD19	16	AD17
17	CBE2#	18	GND
19	IRDY#	20	DEVSEL#
21	3V3	22	PERR#
23	SERR#	24	CBE1#
25	+5V	26	AD14
27	AD12	28	AD10
29	AD8	30	AD7
31	AD5	32	AD3
33	AD1	34	GND
35	DVD_ON#	36	DVD_EN#
37	Y0	38	Y2
39	GND	40	Y4
41	Y6	42	UV0
43	UV2	44	3V3
45	UV4	46	UV6
47	GND	48	SCLK
49	MCLK	50	TV_OUT
51	3V3	52	INTA#
53	RST#	54	GND
55	GNT#	56	AD30
57	+5V	58	AD28
59	AD26	60	AD24
61	IDSEL	62	AD22
63	AD20	64	AD18
65	AD16	66	FRAME#
67	GND	68	TRDY#
69	GND	70	STOP#
71	3V3	72	PAR
73	AD15	74	AD13
75	+5V	76	AD11
77	AD9	78	GND
79	CBE0#	80	AD6
81	AD4	82	AD2
83	AD0	84	GND
85	PCLK	86	Y1
87	Y3	88	HREF
89	VSYNC	90	Y5
91	Y7	92	UV1
93	UV3	94	3V3
95	UV5	96	UV7
97	GND	98	SDATA
99	LRCLK	100	Reserved

## Port Replicator Connector

Pin	Description	Pin	Description
1	A++	2	AD
3	A++	4	AD
5	A++	6	AD
7	PWRGND	8	PWRGND
9	PWRGND	10	PWRGND
11	PWRGND	12	PWRGND
13	VCC	14	VCCS
15	VCC	16	VCCS
17	GND	18	GND
19	GND	20	GND
21	DCDA	22	DSRA
23	SINA	24	RTSA
25	SOUTA	26	CTSA
27	DTRA	28	RIA
29	DVDGND	30	DVDPORTOUT
31	CCO	32	CCO
33	CCO	34	CCO
35	CCO	36	CCO
37	VCC	38	VCCS
39	PD0	40	PACK#
41	PD1	42	PBUSY
43	PD2	44	PPE
45	PD3	46	PSLCT
47	PD4	48	PSTB#
49	PD5	50	PATFD
51	PD6	52	PPERR#
53	PD7	54	PINIT#
55	GND	56	PSLIN#
57	GND	58	GND
59	XCRMA	60	TVAGND
61	DDCDA	62	FBO
63	DDCLK	64	GND
65	GND	66	GND
67	GND	68	GND
69	USBP0-	70	USBP0+
71	DUSBP1-	72	DUSBP1+
73	OC1#	74	GND
75	GND	76	GND
77	GD0	78	GD1
79	GD2	80	GD3
81	GD4	82	GD5
83	GD6	84	GD7
85	RXD	86	TXD
87	GND	88	TVAGND
89	AVSS	90	XLUMA
91	RED	92	GREEN
93	BLUE	94	AVSS
95	AVSS	96	PORTHSYNC
97	PORTVSYNC	98	GND
99	GND	100	GND

## Port Replicator Connector (Continued)

101	GND	102	GND
103	SOUT2	104	RTS2#
105	DTR2#	106	COM2RI
107	DSR2#	108	CTS2#
109	RI2#	110	SIN2
111	DCD2#	112	COMSTBY#
113	EKDA	114	EMDA
115	EKCLK	116	EMCLK
117	GND	118	GND
119	VGND	120	PORTVDO_IN

## *Flash ROM BIOS*

The DIP Switch needed to be set in the **On** position when updating the existing system BIOS. The DIP Switches should be reset to the **Off** position after BIOS updating is complete.

Flash ROM BIOS	S2-1	S2-2
Existing BIOS	Off	Off
Updating BIOS	On	On

## *Hot Keys*

Hot Keys	System Features	Remark
Fn + F3	Expand LCD display	
Fn + F4	Control display top/center position	
Fn + F6	Toggle CRT/LCD//LCD+CRT/TV/CRT+TV	
Fn + F9	Decrease LCD brightness	
Fn + F10	Increase LCD brightness	
Fn + F11	Decrease audio volume	
Fn + F12	Increase audio volume	
Fn + Z	Toggle audio mute on/off	
Fn + Esc	Put the system in a suspend state for power management	

# *DC / DC Converter*

## **Input Characteristics**

Input Voltage            from AC adapter      9.0 ~ 21V  
                                 from battery            12V

## **Efficiency**

The total efficiency is 85% minimum at full load condition.

## **Output Characteristics**

+5V and +3.45V power on simultaneously.

Voltage	Regulation	Ripple & Noise	Current Typical	Current Peak
+ 5 V	- 4% ~ +2 %	150mVp-p	3.0 A	4.0 A
+3.45 V	- 4% ~ +2 %	150mVp-p	3.3 A	4.0 A
+ 12 V	- 5% ~ +5%	200mVp-p	0.22 A	0.4 A

## **System Alarm**

Type	Battery Low	Shut Down
Li-Ion	9.8 V ± 0.3V	8.8 V ± 0.3V
Ni-MH	11 V ± 0.3V	10 V ± 0.3V

## CPU Power Connector

### 20 Pin Assignment CN1

Pin	Assignment
1~10	B+
11~17	DD_ON
12~18	A
19	CCO
20	F

### 30 Pin Assignment CN2

Pin	Assignment
1~6	VCC3
7~12	GND
13~18	VCC
19~24	GND
25	12V
26	Temp
27	Bat
28	Bat low
29	X
30	Shut Down

## Charger B/D Connector CN1

Pin	Assignment
1~6	B+
7~12	Bat
13~17,19	GND
26~29	GND
18	BATCHA
20	BAT FULL
21	F
22	Bat CLK
23	A
24	Bat Data
25	Temp
30~32	CCO
33	A++
34	FBO

## Charger B/D Connector CN2

Pin	Assignment
1	-
2	A (Moli)
3	F (Panasonic)
4	X
5	Temp
6	CLK
7	Data
8	+

## Battery Connector Assignment

Pin	Assignment
1	-
2	A (Moli)
3	F (Panasonic)
4	X
5	Temp
6	CLK
7	Data
8	+

# *Inverter*

1. LED1, LED2 → SML-010 (GREEN)  
LED3-LED6 → SML-020 (GREEN/RED)

## **2. DIP 15-Pin Connector (Pin Assignment):**

1. B+
2. B+
3. GND
4. GND
5. BRIGADJ
6. BKLO
7. BATFULL
8. BATCHA
9. BAT\_BEEP
10. ACIN
11. BATON
12. HDD\_LED
13. SUS\_LED
14. X
15. X

## **3. Lamp Current**

$2.0 \pm 0.2 \text{ mA} \sim 5.0 \pm 5.5 \text{ mA rms}$

## **4. Lamp Voltage**

700 Vrms

## **5. Starting Voltage**

1400 Vrms @ 0°C

## **6. Freq : 30 ~ 80 KHZ**

## **7. BRIGADJ ( Brightness ) : 0 ~ 2.5 V**

## **8. B+ : 7 ~ 22 V**

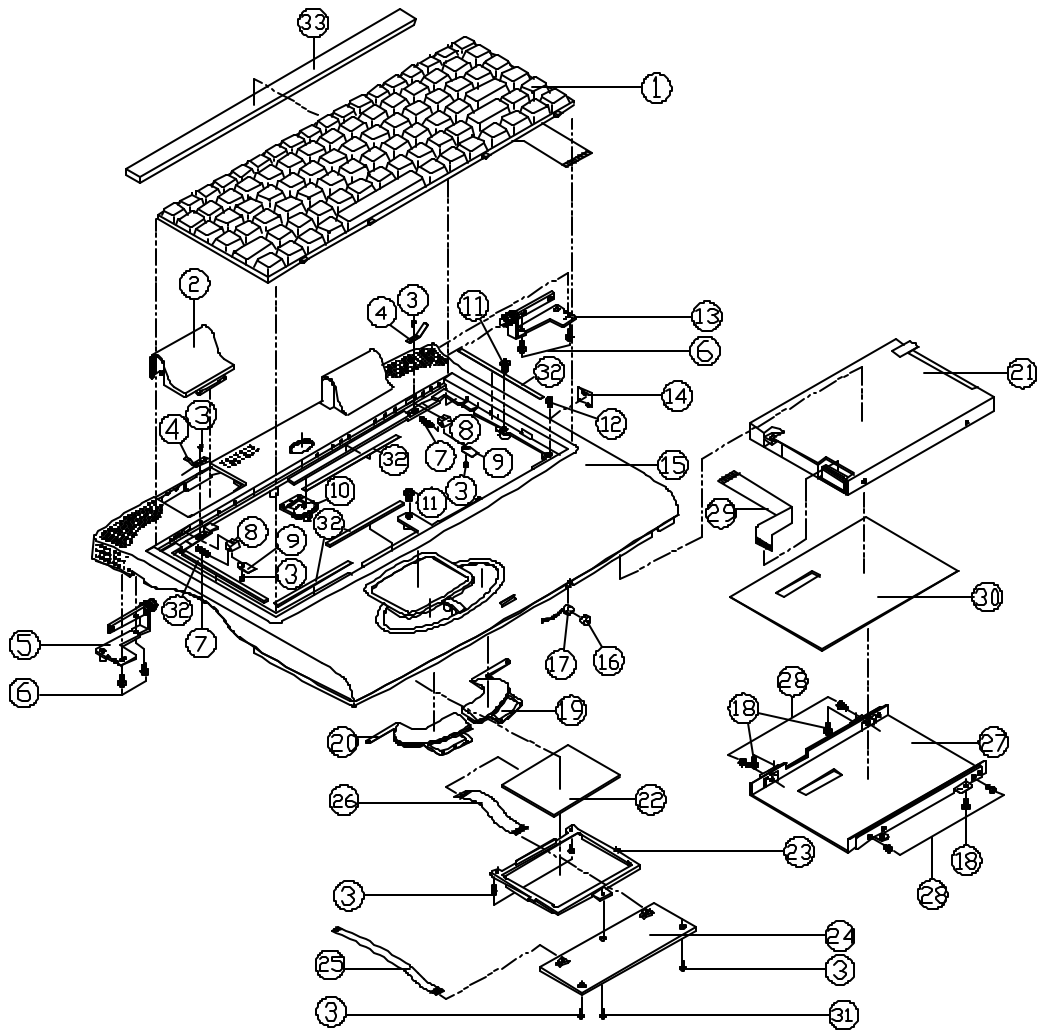
## **9. BKLO : 3.3 V (ON) ; 0V (OFF).**

## **10. Temperature Rise:**

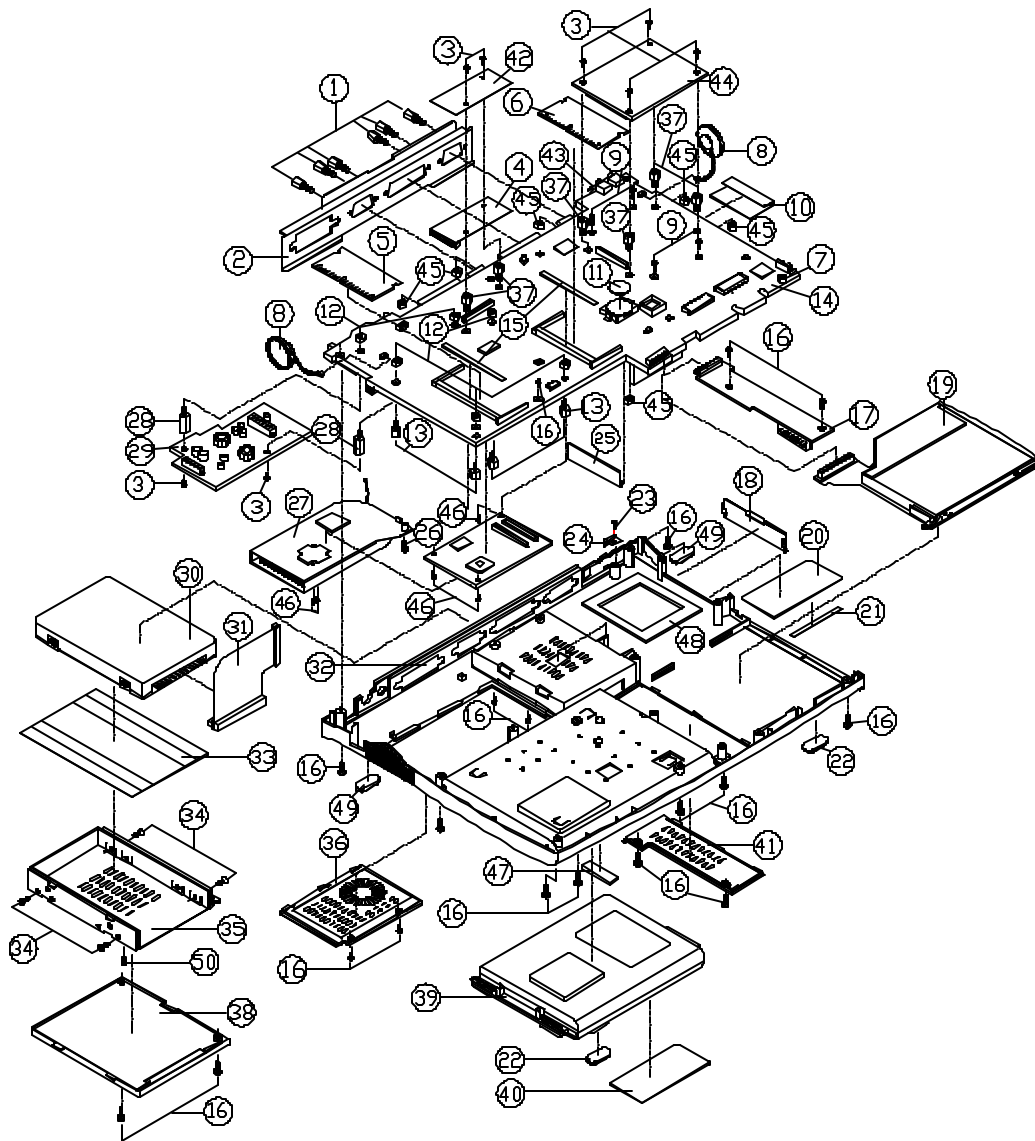
Temperature Rise under 40°C

Max. operation temperature 75°C

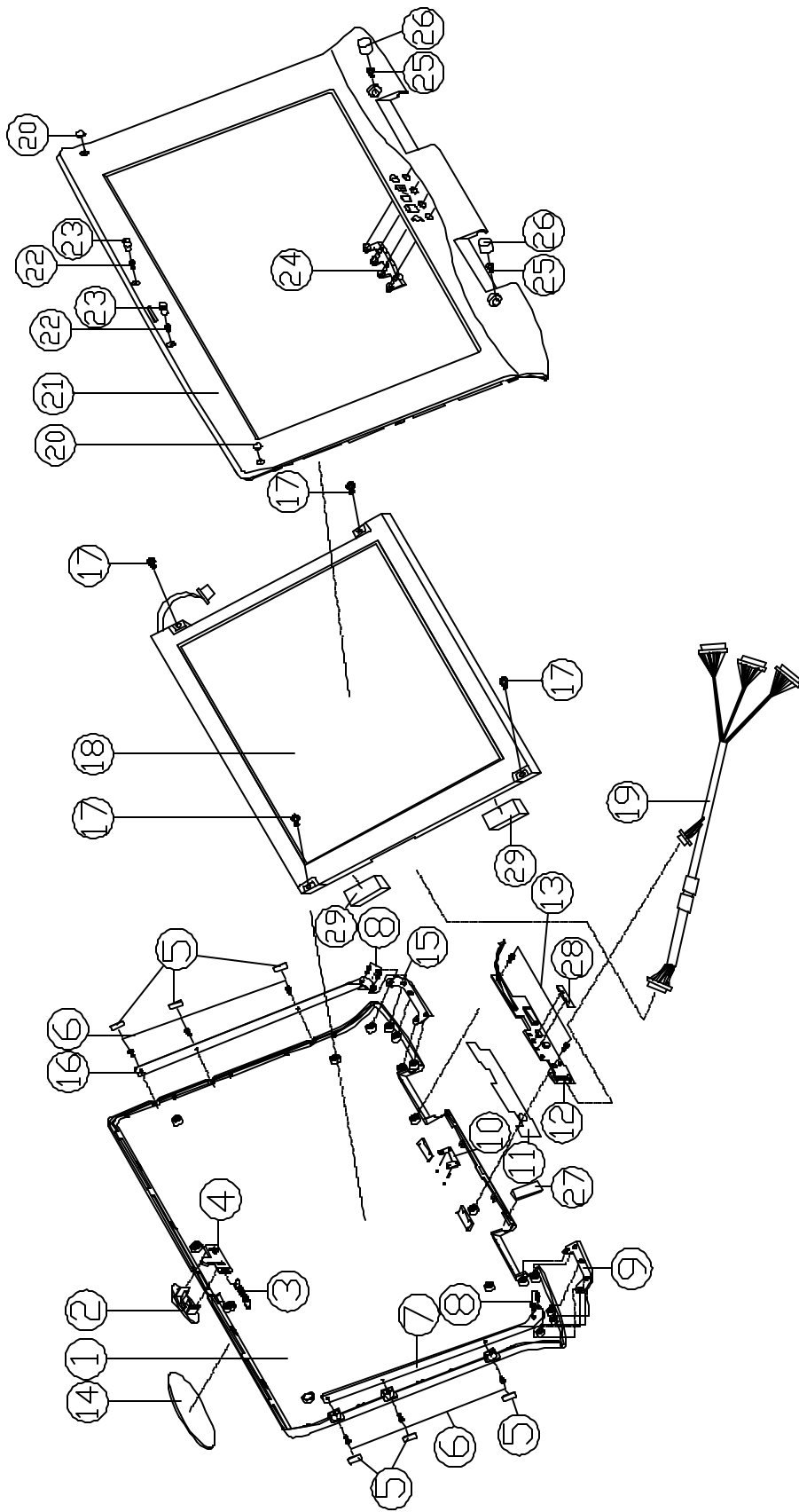
# System Block Diagram



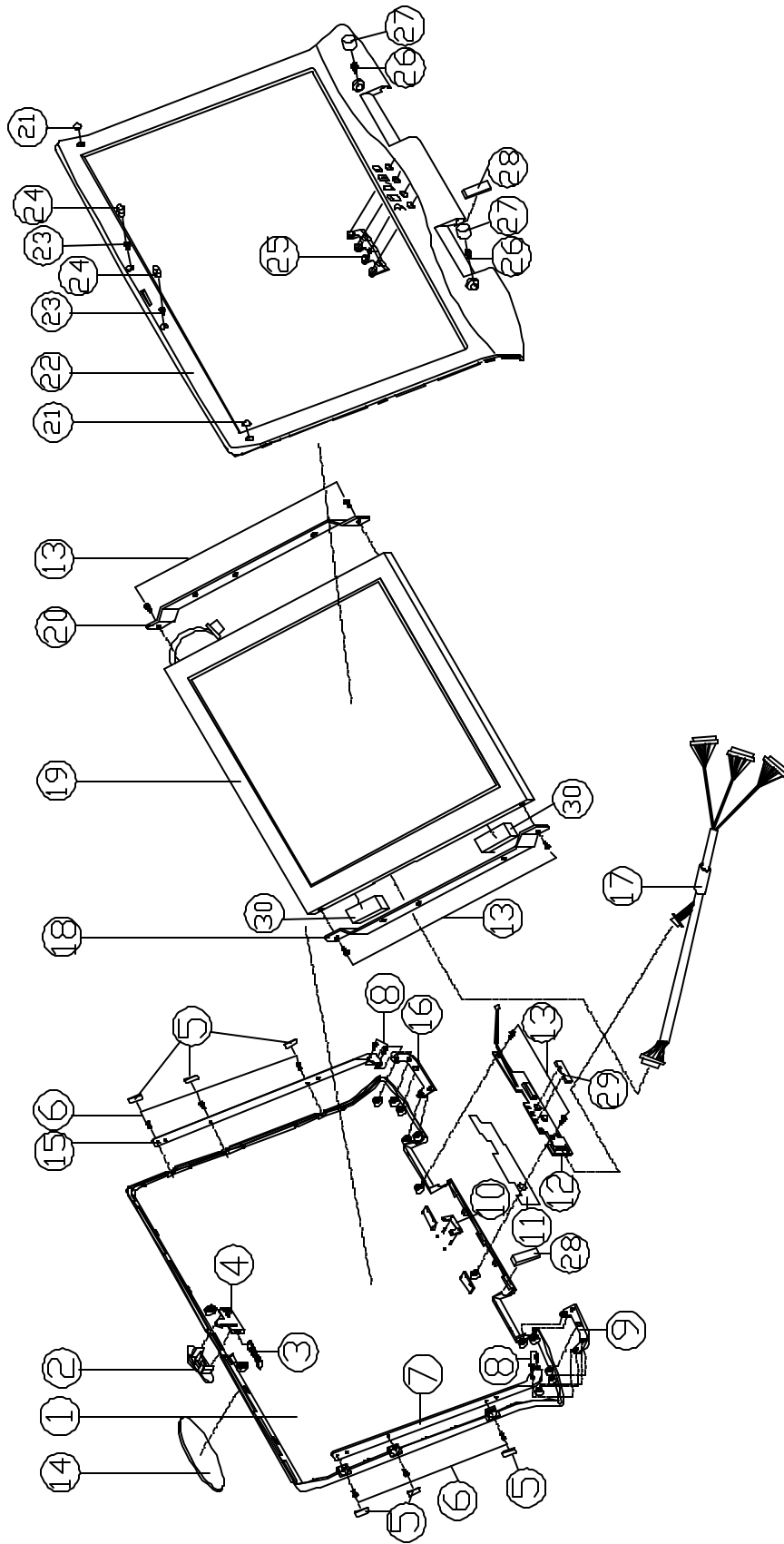
ITEM	PART NAME	PART NO	REMARK
1	KEYBOARD FOR 1100	80-11A08-7G0	
2	CONNECTOR COVER	42-11A72-011	
3	SCREW	35-41120-3RA	
4	K/B SPRING PLATE	38-35020-010	
5	HINGE(L) ASS'Y	79-11A0Y-020	
6	SCREW	35-41130-6RA	
7	SPRING FOR K/B LOCK KNOB	38-00R26-010	
8	K/B LOCK KNOB	42-85082-030	
9	K/B LOCK BRACKET	33-66002-020	
10	POWER KNOB	42-11A84-010	
11	SCREW	35-06125-6RA	
12	SCREW	35-01120-4RA	
13	HINGE(R) ASS'Y	79-11A0Y-010	
14	IR COVER	42-11AI2-011	
15	TOP CASE	39-11A12-01C	
16	MIC RUBBER	47-91023-010	
17	MIC,CABLE	28-H7B02-191	
18	SCREW	35-41125-4RA	
19	GLIDE POINT KNOB (R)	42-11A82-010	
20	GLIDE POINT KNOB (L)	42-11A82-020	
21	3.5" FDD	85-23211-567-C	
22	GLIDE POINT TP-3 LOGTECH	87-62070-081	
23	GLIDE PAD HOLDER	33-85002-010	
24	SWITCH BOARD	77-11A0S-D01	
25	FPC CABLE	27-9350C-B50	PUCKA
26	FFC CABLE	27-9350C-850	PUCKA
27	FDD CASE	33-11A0J-040	
28	SCREW	35-B3126-3RA	
29	FFC CABLE	27-9350C-171	PUCKA
30	MYLAR FOR FDD	40-11A5J-010	
31	SCREW	35-06120-6RA	
32	EMI SPONGE(2) FOR K/B	47-35097-020	
33	EMI SPONGE FOR K/B	47-11A97-010	



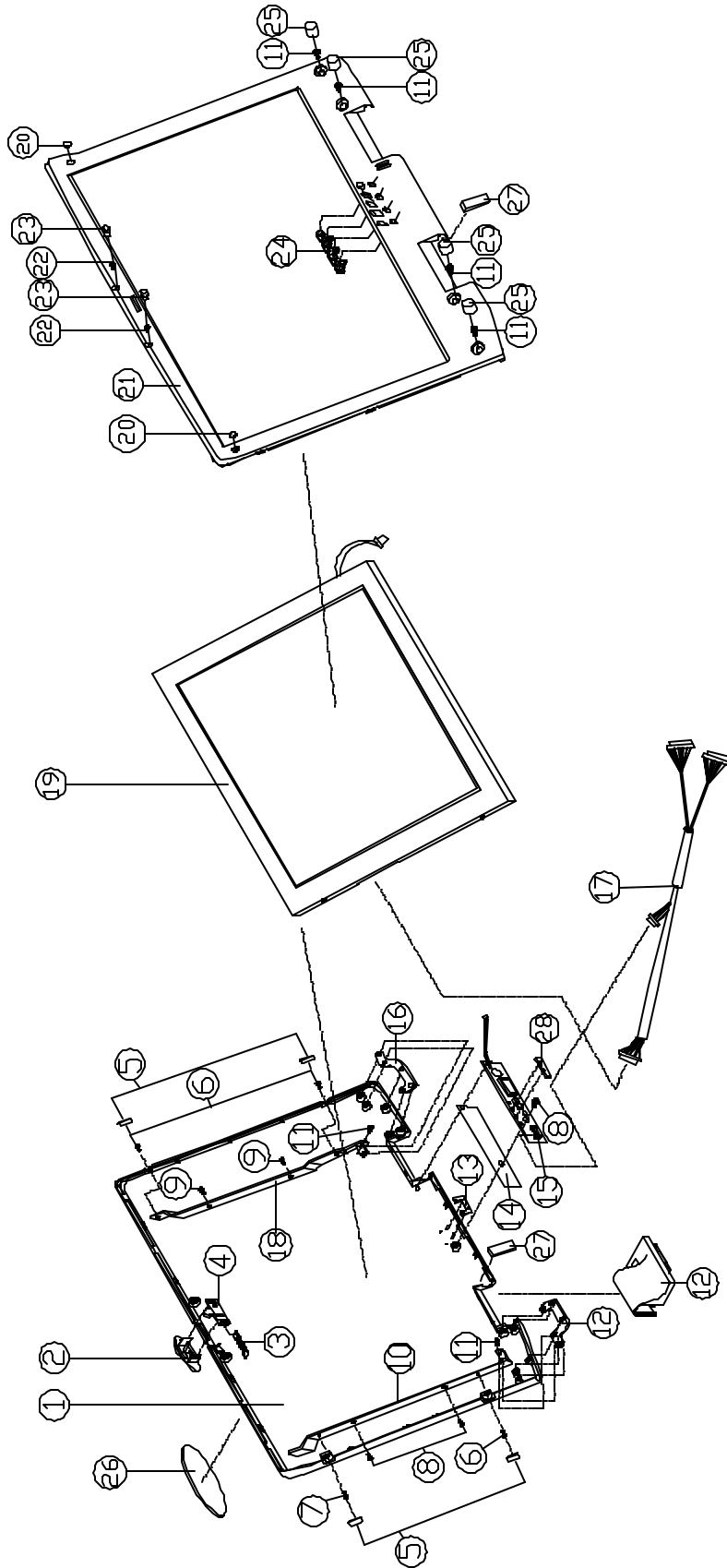
ITEM	PART NAME	PART NO	REMARK
1	HEX STUD	34-07009-011	
2	REAR BRACKET	33-11A0Q-010	
3	SCREW	35-41120-3RA	
4	FLATLINK CARD	77-11AFL-D00	
4	SVGA CARD	77-11ACL-D00-A	SAN/LG/HYUNDAZ
4	SVGA CARD	77-11ACL-D00-B	HISIDEN
4	SVGA CARD	77-11ACL-D00-C	SAN YD/KY D CERA
5	EDO RAM CARD 8M 3.3V	77-7202T-270	
5	EDO RAM CARD 16M 3.3V	77-7202T-470	
5	EDO RAM CARD 32M 3.3V	77-7207T-870	
5	EDO RAM CARD 64M 3.3V	77-7207T-A70	
6	SDRAM CARD 8M	77-7202U-273	
6	SDRAM CARD 16M	77-7202U-473	
6	SDRAM CARD 64M	77-3508U-A70	
7	HEX STUD	34-11A0S-010	
8	SPK+CON+RUBBER	23-C2605-A5E	
9	SCREW	35-41120-15A	
10	CARD BUS MYLAR	40-11M5P-010	
11	MYLAR FOR BATTERY	40-8505M-010	
12	NUT SN M2.5	36-05111-250	
13	HEX STUD	34-62M0S-03A	
14	MAIN BOARD	77-11M00-D01	
15	MYLAR FOR DIMM	40-8505S-010	
16	SCREW	35-06125-6RA	
17	CHARGER BOARD	77-11A0E-D00	
18	CARD BUS COVER	42-11A7P-011	
19	CD-ROM ASS'Y 1100	79-11A2Z-010	Reference Ass'y Dwg 99-11A05-050
20	FCC DOC LABEL	45-11M03-010	
21	FCC DOC LABEL 1100	45-11A03-011	
22	BOTTOM CASE RUBBER PAD	47-35023-010	
23	SCREW	35-41125-4RA	
24	KEY LOCK BRACKET	33-35003-020	
25	MYLAR FOR CB-CONN.	40-11A5P-010	
26	SCREW	35-02120-11A	
27	HEAT SINK ASS'Y	31-11M0N-010	
28	HEX STUD	34-11A0S-020	
29	DC/DC	77-11M0C-D01A	
30	HDD	42-8507Q-001	
31	FPC CABLE	28-79R44-B90	PUCKA
32	BOTTOM CASE	39-11M13-01C	
33	MYLAR FOR HDD	40-6205I-010	
34	SCREW	35-B6130-4RA	
35	HDD BRACKET	33-11A0I-010	
36	CPU COVER FOR IMM+SHIELDING	42-11M73-011	
37	HEX STUD	34-3500S-010	
38	HDD COVER	42-11A7I-011	
39	BATTERY ASS'Y NI-MH	87-11A80-322A	SMP
39	BATTERY ASS'Y NI-MH	87-11A80-341A	GLW
39	BATTERY ASS'Y LI-ION	87-11A80-447A	GLW
39	BATTERY ASS'Y NI-MH	87-11A8S-341A	GLW
39	BATTERY ASS'Y LI-ION	87-11A8S-447A	GLW
39	BATTERY ASS'Y NI-MH	87-11A80-427	SMP
39	BATTERY ASS'Y LI-ION	87-11A80-447A	SMP
39	BATTERY ASS'Y LI-ION	87-11A8S-427	SMP
40	LABEL FOR BATTERY	45-11A0M-010	LI-ION
40	LABEL FOR BATTERY	45-11ASM-010	NI-MH
41	CD-ROM COVER	42-11A7Z-011	
42	MYLAR FOR DATA/B	40-11A5S-010	
43	EMI SHIELDING SPRING FOR PHONE JACK	38-11A12-010	
44	MPEG MODULE	79-11M2X-010	
45	NUT NI M2.0	36-05111-200	
46	SCREW	35-41120-4RA	
47	SPONGE FOR BOTTOM	47-11A93-010	
48	MYLAR FOR BOTTOM	40-11A53-010	
49	BOTTOM CASE FOOT RUBBER	47-85M23-01D	
50	SCREW	35-B1125-4R0	



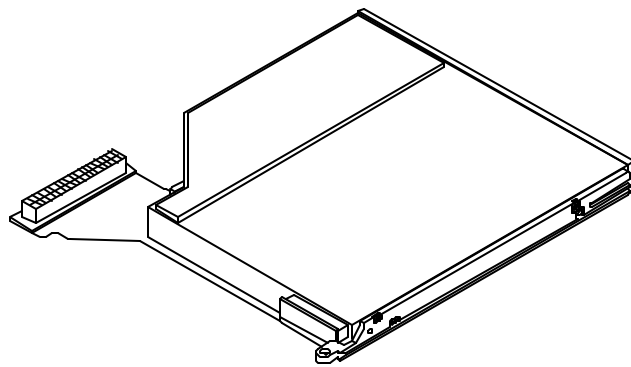
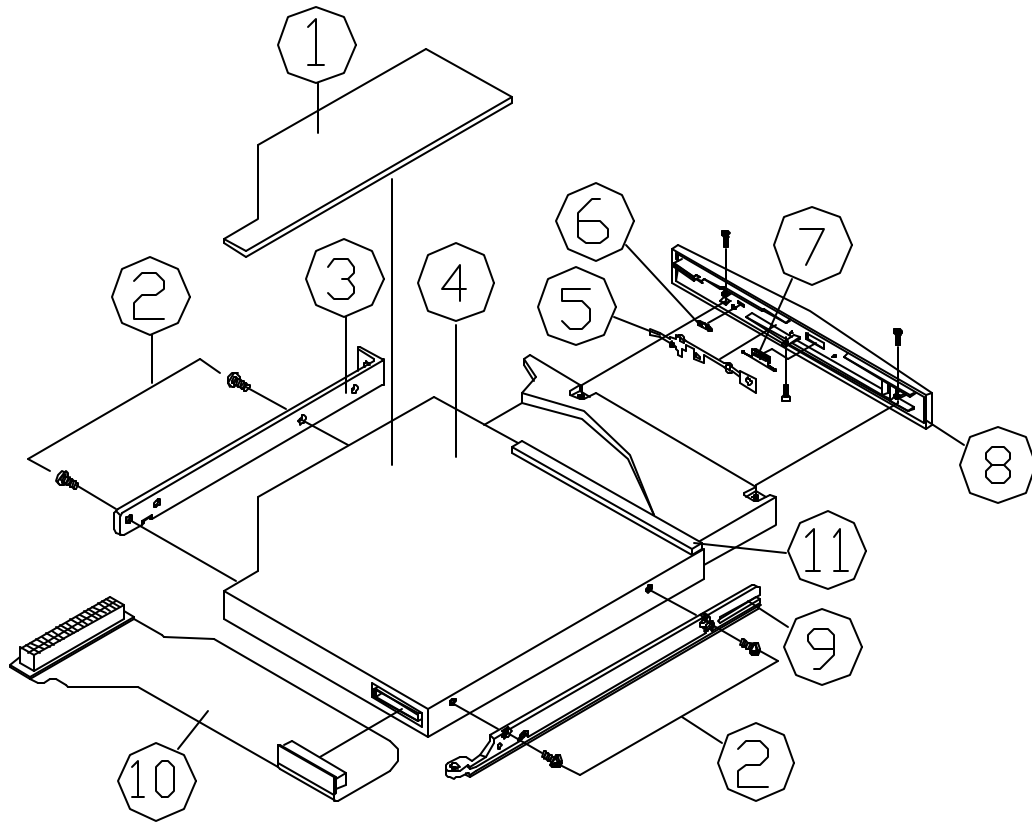
ITEM	PART NAME	PART NO	REMARK
1	DISPLAY BACK PANEL(12.1")	39-11B01-02B	KYOCERA
1	DISPLAY BACK PANEL(12.1")	39-11A01-72B	HOSIDEN
1	DISPLAY BACK PANEL(12.1")	39-11A01-12A	SAMSUNG
1	DISPLAY BACK PANEL(12.1")	39-11A01-32A	HYUNDAI
2	HOOK KNOB	42-11A81-010	
3	SPRING FOR HOOK	38-10R35-020	
4	DISPLAY HOOK	42-11AA1-010	
5	MYLAR FOR DISPLAY	40-11A51-010	
6	SCREW	35-B4125-4RA	
7	LCD BRACKET(L) FOR 12.1"	33-11A01-040	
8	SCREW	35-B6130-4RA	
9	BOSS ENHANCE BRACKET(L)	33-11A01-020	
10	LED LENS FOR BACK PANEL	42-11A01-020	
11	MYLAR FOR INVERTER	40-11A51-020	
12	INVERTER MODULE	76-110TR-D10	SAM/LG/HY/KY/SY
13	SCREW	35-41120-3RA	
14	DISPLAY BACK COVER LABEL	45-11A01-010	
15	BOSS ENHANCE BRACKET(R)	33-11A01-010	
16	LCD BRACKET(R) FOR 12.1"	33-11A01-030	
17	SCREW	35-41130-6RA	
18	LCD (12.1")	50-F5808-64K	KYOCERA
18	LCD (12.1")	50-F5708-64S	SAMSUNG
18	LCD (12.1")	50-F5708-63Y	HYUNDAI
18	LCD (12.1")	50-F5778-64H-1	HOSIDEN
19	CABLE	28-77B56-U90	HUA LI
19	CABLE	28-77B56-351	HUA LI
19	CABLE	28-77B56-X70	HUA LI
20	DISPLAY RUBBER PAD (UP)	47-11A21-010	
21	DISPLAY FRONT PANEL(12.1")	39-11A01-01B	
22	SCREW	35-01120-4R0	
23	DISPLAY RUBBER PAD (MIDDLE)	47-11A21-020	
24	LED LENS FOR FRONT PANEL	42-11A01-010	
25	SCREW	35-84130-6RA	
26	DISPLAY RUBBER PAD (LOWER)	47-85021-010	
27	EMI SPONGE	47-35091-010	
28	SPONGE FOR INVERTER LED	47-11A91-020	
29	GLIDE POINT SPONGE	47-62092-020	



ITEM	PART NAME	PART NO	REMARK
1	DISPLAY BACK PANEL<13.3"	39-11A01-42A	SAMSUNG
1	DISPLAY BACK PANEL<13.3"	39-11A01-52A	LG
1	DISPLAY BACK PANEL<13.3"	39-11A01-62A	HYUNDAI
2	HOOK KNOB	42-11A81-010	
3	SPRING FOR HOOK	38-10R35-010	
4	DISPLAY HOOK	42-11AA1-010	
5	MYLAR FOR DISPLAY	40-11A51-010	
6	SCREW	35-B4125-4RA	
7	LCD BRACKET<L> FOR 13.3"	33-11A01-320	LG/HY
8	SCREW	35-B6130-4RA	
9	BOSS ENHANCE BRACKET<L>	33-11A01-020	
10	LED LENS FOR BACK PANEL	42-11A01-020	
11	MYLAR FOR INVERTER	40-11A51-020	
12	INVERTER MODULE	76-110TR-D10	SAM/LG/HY/HDS
13	SCREW	35-41120-3RA	
14	DISPLAY BACK COVER LABEL	45-11A01-010	
15	LCD BRACKET<R> FOR 13.3"	33-11A01-310	LG/HY
16	BOSS ENHANCE BRACKET<R>	33-11A01-010	
17	CABLE	28-77B35-020	HUA LI
17	CABLE	28-77B35-T90	HUA LI
17	CABLE	28-77B35-S50	HUA LI
17	CABLE	28-77B35-T50	HUA LI
18	LCD BRACKET<L>	33-11A01-220	LG
18	LCD BRACKET<L>	33-11A01-320	HYUNDAI
19	LCD	50-G6708-63Y	HYUNDAI
19	LCD	50-G6708-65S	SAMSUNG
19	LCD	50-G6787-63L	LG
20	LCD BRACKET<R>	33-11A01-310	HYUNDAI
20	LCD BRACKET<R>	33-11A01-210	LG
21	DISPLAY RUBBER PAD <UP>	47-11A21-010	
22	DISPLAY FRONT PANEL<13.3"	39-11A01-21B	
23	SCREW	35-01120-4R0	
24	DISPLAY RUBBER PAD <MIDDLE>	47-11A21-020	
25	LED LENS FOR FRONT PANEL	42-11A01-010	
26	SCREW	35-84130-6RA	
27	DISPLAY RUBBER PAD <LOWER>	47-85021-010	
28	EMI SPONGE	47-35091-010	
29	SPONGE FOR INVERTER LED	47-62092-020	
30	GLIDE POINT SPONGE	47-11A91-020	

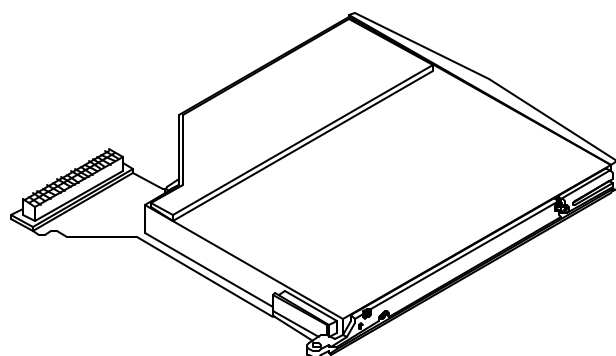
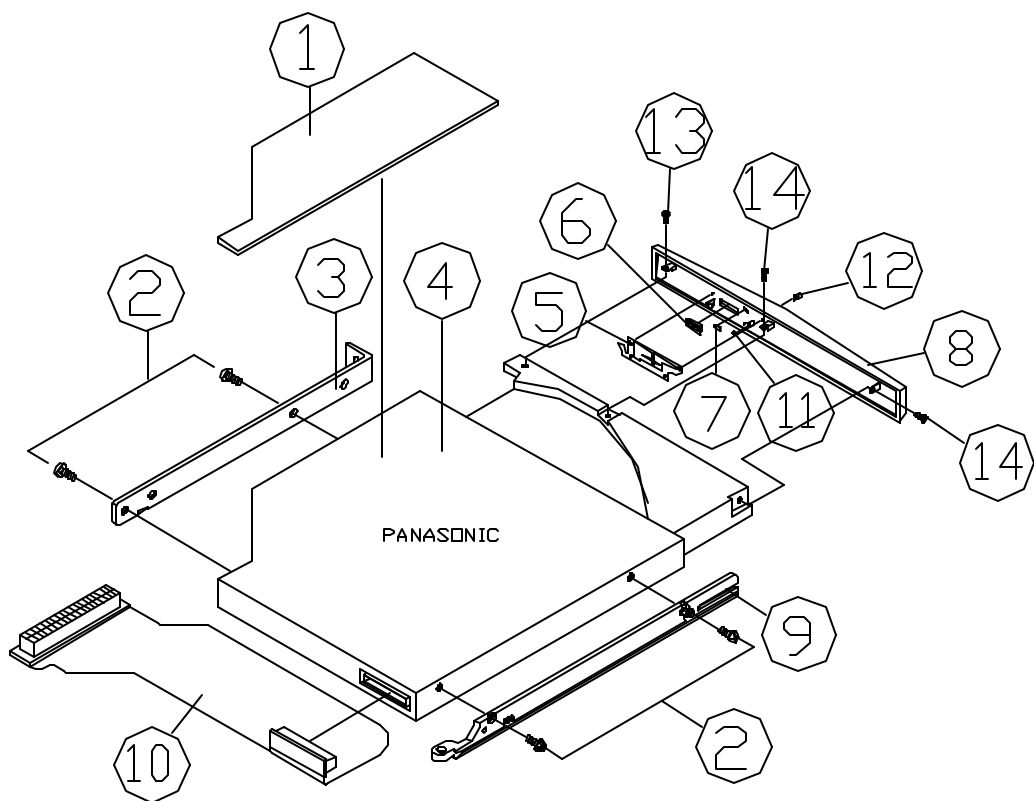


ITEM	PART NAME	PART NO	REMARK
1	DISPLAY BACK PANEL(14.1")	39-11A01-82A	HYUNDAI/LG
2	HOOK KNOB FOR DISPLAY	42-11A81-010	
3	SPRING FOR HOOK	38-10R35-020	
4	HOOK FOR 14.1" BACK PANEL	42-11AA1-010	
5	MYLAR FOR DISPLAY	40-11A51-010	
6	SCREW	35-41120-5RE	HYUNDAI
6	SCREW	35-41120-3RA	LG
7	SCREW	35-41120-5RE	HYUNDAI
8	SCREW	35-41120-3RA	HYUNDAI/LG
9	SCREW	35-41120-3RA	LG
10	LCD BRACKET(L)	33-11A01-620	LG
10	LCD BRACKET(L)	33-11A01-520	HYUNDAI
11	SCREW	35-84130-6RA	
12	BOSS ENHANCE BRACKET(L)	33-11A01-060	HYUNDAI/LG
13	LED LENS FOR BACK PANEL	42-11A91-020	
14	INVERTER MYLAR	40-11A51-040	
15	INVERTER MODULE	76-11ATR-DC0	HD/LG/HY14.1T INNSUN
15	INVERTER MODULE	76-11ATR-D30	HD/LG/HY14.1 AMBIT
16	BOSS ENHANCE BRACKET(R)	33-11A01-050	
17	CABLE	28-77B35-U50	HYUNDAI
17	CABLE	28-77B35-171	LG
18	LCD BRACKET(R)	33-11A01-510	HYUNDAI
18	LCD BRACKET(R)	33-11A01-610	LG
19	LCD	50-J6787-63Y	HYUNDAI
19	LCD	50-J6787-63L-1	LG
20	DISPLAY RUBBER PAD (UP)	47-11A21-010	
21	DISPLAY FRONT PANEL(14.1")	39-11A01-31A	
22	SCREW	35-01120-4R0	
23	DISPLAY RUBBER PAD (MIDDLE)	47-11A21-120	
24	LED LENS FOR FRONT PANEL	42-11A91-010	
25	DISPLAY RUBBER PAD (BOTTOM)	47-85021-010	
26	DISPLAY BACK COVER LABEL	45-11A01-010	
27	EMI SPONGE	47-35091-010	
28	SPONGE FOR INVERTER LED	47-11A91-020	
29	SPONGE	40-11A91-030	
30	RUBBER	47-11A21-030	



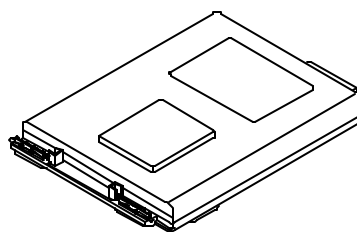
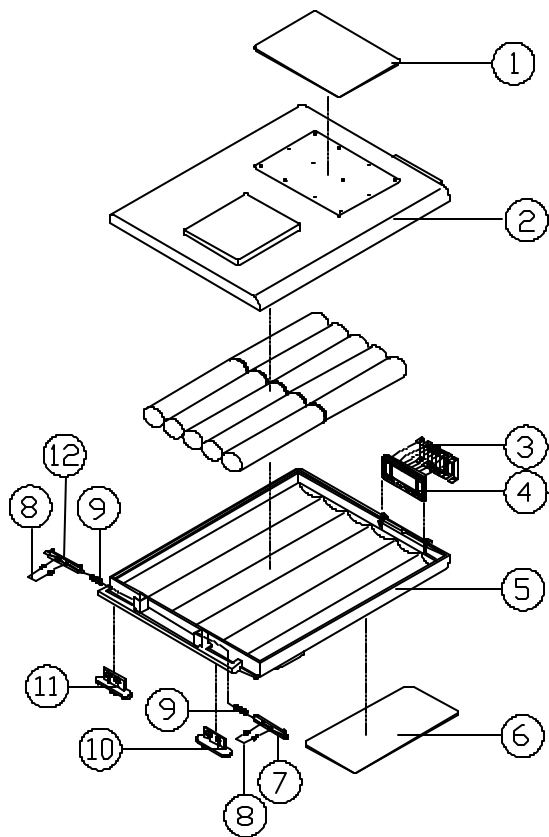
CD-ROM 組合圖

ITEM	PART NAME	PART NO	REMARK
1	MYLAR FOR CD-ROM	40-11A5Z-010	
2	SCREW	35-46120-3RA	
3	CD-ROM GUIDE RAIL(R)	42-11A7Z-040	
4	CD-ROM 24X	87-62010-054	TEAC
5	SPRING PLATE	38-62012-020	TEAC
6	CD-ROM LENS	42-52P7Z-110	TEAC
7	CD-ROM EJECT BUTTON	42-11A7Z-030	TEAC
8	CD-ROM PANEL	42-11A7Z-020	TEAC
9	CD-ROM GUIDE RAIL(L)	42-11A7Z-050	
10	FPC CABLE	28-79R50-A60	
11	SHIELD SPONGE (A) TOP CASE TO K/B	47-72092-030	



DVD-ROM組合圖

ITEM	PART NAME	PART NO	REMARK
1	MYLAR FOR CD-ROM	40-11A5Z-010	
2	SCREW	35-B6120-2RE	
3	CD-ROM GUIDE RAIL(R)	42-11A7Z-040	
4	DVD SR-8171 12.7MM	87-11M90-090	PANASONIC
5	DVD BEZEL PLATE	33-11MV-010	PANASONIC
6	DVD EJECT BUTTON	42-11M7V-040	PANASONIC
7	DVD LED LENS	42-11M7V-010	PANASONIC
8	DVD BEZEL	42-11M7V-030	PANASONIC
9	CD-ROM GUIDE RAIL(L)	42-11A7Z-050	
10	FPC CABLE	28-79R50-A60	
11	DVD CUT WASHER	42-11M9V-010	PANASONIC
12	DVD ENERGY EJECT BUTTON	42-11M7V-020	PANASONIC
13	SCREW	35-81520-2R5	PANASONIC
14	SCREW	35-81920-3R5	PANASONIC



**BATTERY 組合圖**

ITEM	PART NAME	PART NO	REMARK
1	MYLAR FOR LI-ION	40-3505M-010	LI-ION
2	BATT. TOP CASE	42-11A3M-011	
3	BATT. CONTACT PLATE	38-11A20-010	
4	BATT. HOLDER	42-11A3M-030	
5	BATT. BOTTOM CASE	42-11A3M-021	
6	BATTERY LABEL (1001XX)	45-11A0M-010	LI-ION
6	BATTERY LABEL (1002XX)	45-11ASM-010	NI-MH
7	BATTERY LOCK(DOWN)	42-11A8M-021	
8	SCREW	35-41120-3RA	
9	SPRING FOR HDD LOCK KNOB	38-00R26-010	
10	BATTERY LOCK KNOB(DOWN)	42-11A8M-040	
11	BATTERY LOCK KNOB(UP)	42-11A8M-030	
12	BATTERY LOCK(UP)	42-11A8M-010	