

2. Introduction and Specification

1) 제품 특징

(1) 고성능 노트북 컴퓨터

- Intel Core 2 Duo Processor 및 DDR II Memory를 적용한 고성능 컴퓨터
- 최신 nVidia PCI-Express Graphic 적용 / 최신 Intel Internal Graphic 적용
- Wireless LAN (선택사양), Bluetooth (선택사양) 등의 무선 기능 강화
- 다양한 멀티미디어를 즐길 수 있는 Play AVStation 제공
- Integrated Web-Cam 적용
- Palmrest 재질, 색상 등 외관 디자인

Processors / Chipset

- Intel Santa Rosa Merom CPU
- Intel Montevina Penryn CPU
- 25W/35W TDP
- nVIDIA NB9M
- DDR2 Dual Channel

Graphic Solutions

- Internal: Intel GMA
- External: nVIDIA GeForce 9300M GE

Expansion

- 3USB2.0, VGA, HP out, Mic-in
- PCI Express Card Reader (54mm)
- 3 in 1 Card Reader (SD, MMC, SDHC)
- RJ45 (RJ11 F.Option)
- HDMI

LCD panel

- Super Bright Glare LCD
- Non-Glare LCD
- 15.4" WXGA (1280x800)

Storage

- 2.5" 9.5mmH
- SATA Only
- 80 / 120 / 160 / 200 / 250GB / 320G

Multimedia

- Play AVStation
- Web-Camera
- Integrated Mic
- 2 Stereo Speakers (2W * 2)
- EDS (Enhanced Digital Sound)

Communications

- Gigabit (10/100/10000) Ethernet
- Modem V.92 (F.Option)
- Wireless Solution
 - Mini Card Type (802.11b/g, 802.11abg/n)
 - Bluetooth V2.0 + EDR (F.Option)

ODD

- SATA only
- Combo
- Super Multi Dual Layer
- DVD-ROM (국판 직판)

Power Management

- 6 Cell Battery (Bundle)
- 9 Cell Battery (Option)



(2) 사용성을 고려한 세심한 디자인 배려

- 다양한 키보드의 핫키 기능
- 멀티 카드 슬롯 장착
- 사용감이 뛰어난 고급스러운 디자인



당사 '08년 라인업 상 최고의 가격 경쟁력
 최저 수준의 원가 재료비 달성을 통한 가격 경쟁력 강화 모델

3rd Generation New Design
 '07년 원형 디자인을 계승 발전시킨 신개념 디자인
 LCD Back / Top 디자인 차별화를 통한 채널 대응 전략

Montevina Penryn CPU 적용
 최신 인텔 CPU & 칩셋, nVIDIA 외장 그래픽 채용*

소비자 Needs를 충족시키는 편리한 사용성
 1.3M Web Cam, HDMI 포트, 은나노 항균 키보드, 삼성 차별화 S/W

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2) 제품 사양

Processor and Motherboard	Description
CPU	Intel® Core™ 2 Duo Processor Intel® Pentium Dual Core™ Processor Intel® Celeron® Processor Penryn/Merom/Celeron (Max 35W)
Speed	R510 : Intel® Core™ 2 Duo Processor T9400(2.53GHz) ~ Intel® Core™ 2 Duo Processor T5450(1.66GHz)
Cache	6MB/3MB L2 Cache (Penryn), (Celeron - TBD)
Chipset	Intel Cantiga(GM,PM) + ICH9-M
BIOS	16 Mbit, Flash upgradable, SPI ROM
Thermal Design Performance	MAX. 35W
Memory	
Memory / Max. Memory	1GB ~ MAX 4GB
Memory type	Dual channel DDR2 800/667
Memory modules	1GB, 2GB, 4GB SODIMM
Sockets	2 SODIMM Sockets for DDR2 Dual Channels
Basic Memory	1GB
Display and Graphics	
LCD	15.4" WXGA Super Bright Glare / Non-Glare
Interface	PCI Express 16x, DirectX 10 support
Graphic Controller	[Internal Graphic] Cantiga-GM [External Graphic] NB9M-GE
Video Memory	[Internal Graphic] Shared Memory 32MB ~ Max 256MB [External Graphic] gDDR2 256MB / 512MB Descreted graphic memory
Ext. Port	VGA (Dual Independent Display) HDMI (DVI Supported with HDMIto DVI Cable) HDCP (High Bandwidth Digital Content Protection)
Ext. CRT Resolution	Upto 1,920x1,440 : 32-bit true color EDID 지원 (Extended Display Identity Data, 출력 모니터 비율에 따라 4:3, 16:10 등 지원)
Storage	
Hard Disk Drive	9.5mmH SATA HDD User replaceable
Supports	SMART Ultra DMA 33/66/100, DMA Mode 2/4 ; SATA
Average Access Time	13m sec.
Speed	5400RPM , TMR/PMR Type
Capacity	120GB / 160GB / 200GB / 250GB / 320GB: - 120 ~ 320GB SATA 5400rpm
Optical Disk Drive	DVD/Combo / Super Multi (12.7mm) ; Factory Option
Type	Fixed type (Factory Option)
S/W supplied	Cyberlink DVD Suite
Security	RPC-II Regional Encoding
Optical Driver Modules	

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<i>Processor and Motherboard</i>	<i>Description</i>
Combo Drive 1	Factory Option
Module type	Fixed 12.7mm Slim
Speed	8x DVD-ROM, 24x RW, 24x CD-R : TSST, TS-L332A
Average Access Time	DVD 130ms Typ, CD 130ms Typ
Weight	176g or less
S/W Supplied	Cyberlink DVD Solution
Security	RPC-II Regional Encoding
Combo Drive 2	Factory Option
Module type	Fixed 12.7mm Slim
Speed	8x DVD-ROM, 24x RW, 24x CD-R, 24x CD : TSST, TS-L462D
Average Access Time	DVD 130ms Typ, CD 130ms Typ..
Weight	176g or less
S/W supplied	Cyberlink DVD Solution
Security	RPC-II Regional Encoding
Super Multi Dual Layer 1	Factory Option
Module type	Fixed 12.7mm Slim
Speed	5x DVD-RAM, 8x DVD±R 2.4x DVD+R DL, 4x DVD±RW, 24x CD-R, 16x CD-RW, 8x DVD, 24x CD : Panasonic UJ-850
Average Access Time	DVD 130ms Typ., CD 130ms Typ.
Weight	180g or less
S/W supplied	Cyberlink DVD Solution
Security	RPC-II Regional Encoding
Super Multi Dual Layer 2	Factory Option
Module type	Fixed 12.7mm Slim
Speed	5x DVD-RAM, 8x DVD±R, 6x DVD±R DL, 8x DVD+RW, 6x DVD-RW, 24x CD-R/RW, 8x DVD, 24x CD : TSSTTS-L632D
Average Access Time	DVD 130ms Typ., CD 130ms Typ.
Weight	180g or less
S/W supplied	Cyberlink DVD Solution
Security	RPC-II Regional Encoding
Super MultiDual Layer 3	Factory Option
Module type	Fixed 12.7mm Slim
Speed	5x DVD-RAM, 8x DVD±R, 6x DVD±R DL, 8x DVD+RW, 6x DVD-RW, 24x CD-R/RW, 8x DVD, 24x CD : TeacDV-W28EC
Average Access Time	DVD 130ms Typ., CD 130ms Typ.
Weight	180g or less
S/W supplied	Cyberlink DVD Solution
Security	RPC-II Regional Encoding
Network Tools	
Fax/Modem	56Kbps / V.92 Azalia Modem, DELPHI (D40) (Factory Option)
Chipset	CSP1040 AGR A3 & A3 5V1
Features	
LAN	Gigabit (10/100/1000)
Chipset	Marvell 88E8055
Features	Integrated PHY, MAC 10/100/1000, RJ45 Output

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<i>Processor and Motherboard</i>	<i>Description</i>
802.11b/g Wireless LAN	Atheros, Intel Shirley Peak
Type	Mini card type 802.11b/g, Mini card 802.11abg/n
Chipset	AR2423
Bluetooth	BCM92045NMD: Factory Option
Type	USB daughter card with integrated PIFA antenna
Chipset	Broadcom BCM2045
Standard	Version 2.0
I/O Interface	
PC CardBus Slots	PCI Express Card Slot (54mm Type)
I/O Ports	
USB Port	3 (USB2.0)
Video (CRT) Port	1
HDMI	1
Audio Jacks	HeadPhone-out
Modem / LAN	RJ11, RJ45
Power	1 DC-in (5pie)
Camera	1.3 M pixel Camera
Input Devices	
Key board	88KEY(KR/US) Travel length 2.6mm / Key Pitch 19.05mm
Touchpad	PS/2 Touchpad with 2 buttons, Scroll Area
Power and Power Management	
Battery (Standard)	AA-PB3NC6B (6cells, Smart Li-Ion Battery)
Dimension	204 x 48 x 20mm
Weight	350g (max)
Recharge Time	2 hours to 100% with Windows on & off
Battery Life	over 2.5hour (Battery mark 4.01)
Details of Cell	6cells (2Parallel 3Serial) - Standard only
Voltage	11.1Vdc
Battery Capacity	2000mAh/cell
Battery Rating	11.1V / 4000mAh (44.4Wh)
Battery (LongLife)	AA-PL2NC9B (9cells, Smart Li-Ion Battery)
Recharge Time	4 hours to 100% with Windows on & off
Battery Life	over 5hour (Battery mark 4.01)
Details of Cell	9cells (3Parallel 3Serial)
Voltage	11.1Vdc
Battery Capacity	2600mAh/cell
Battery Rating	11.1V / 7800mAh (86.58Wh)
AC Adapter	AD-9019S(2.0GHz↑)
Output Power	90Watts
Dimension	126 X 51 X 30 mm
Weight (AC Adapter)	320g (max)
Worldwide Compatibility	Auto-sensing 100 - 240VAC
Line Frequency	50 / 60Hz

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Processor and Motherboard	Description
Adapter Rating - Input	100V - 240V, 1.4A
Adapter Rating - Output	19.0VDC / 3.16A
Power Management Features	ACPI 1.0b support, Standby(S3), Hibernate(S4)
System Dimensions	
Dimensions (W X D X H)	358 x 265.2 x 31.8 ~ 36.35
Weight (Full system w/4cell Battery)	

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3). 제품 사양 비교



3-1)Comparing product specifications

	R60+	Lyon
Image		
Design	07년 원형 디자인	08년 신규 디자인
CPU	Intel Santa Rosa Merom	Intel Montevina Penryn
Chipset	AMD RS600ME	Intel GM45 / PM45
Graphics	Int. :ATI Radeon Xpress 1250 Ext. : ATI Mobility Radeon X2300 128MB	Int. : Intel Gantiga GM45 integrated graphic Ext. : nVIDIA Geforce 9300M GE 256/512MB
LCD	15.4" WXGA Glare / N-Glare	15.4" WXGA Glare / N-Glare
I/O Ports	3 USB, PCI Express, 2-in-1	3 USB, PCI Express 3-in-1, HDMI
Communication	10/100 LAN, Bluetooth Atheros 11BG	Gigabit LAN, Bluetooth Atheros 11BG / Intel 11N
Others	-	1.3M Web-Cam

2. Introduction and Specification

3). 제품 사양 비교

3-1)Comparing product specifications

Model		Praha	LYON
Feature CPU & Chipset			
		R60 Plus	R510
Platform		Intel Merom, AMD RS600ME / SB600	Intel Penryn / Merom Intel Montevina
LCD		15.4" WXGA	15.4" WXGA
CHIP SET		RS600ME + SB600	Intel ICH9M+Cantiga-GM
CPU		T9500	T9400
Graphics	Internal	RadeonXPRESS1250M	Intel Gantiga GM45 Intigrated graphic
Network	Modem	56Kbps F.Option	56Kbps F.Option
	Ethernet	10/100	Gigabit (10/100/1000)
	Wireless	bg	bg Mini card type 802.11abg/n Ready
Port		PCI Express Card, 3 USB2.0, VGA, RJ-45,RJ-11 (F. Option), Headphone-out, Mic-in, DC-in, Kensington Lock	PCI Express Card,3 USB2.0, VGA, HDMI, RJ-45, RJ-11 (F. Option), Headphone-out, Mic-in, DC-in, Kensington Lock
BATTERY		6CELL	6CELL
ODD		Super-Multi	Super-Multi
Size (cm)		335.9 x 240.4 28.2~38.8	358 x 265.2 ~ 31.3 ~ 35.8 28.2~38.8
Weight (kg)		2.46	2.7

2. Introduction and Specification

3). 제품 사양 비교

3-2) Comparing product specifications jatsasa (B/M Selected models)

HP



- Note PC M/S 1위 (21.9%, Q3'07)
- Intel / AMD 모델 Mix로 채널 차별화 대응
- In-Mold Pattern 디자인 적용 등 차별화 디자인으로 B2C 공략 강화

Acer



- Gateway, Packard Bell 인수
- M/S 상승세(15%), Q3' 07 Dell 추월 → 2위
- 구주, CIS 시장 강세
- 가격 대비 제품 경쟁력 확보

Dell



- Online Direct Marketing 한계
→ B2C 중심에서 B2B 확대로 전략 수정
- B2C 대응 전략 강화
컬러 마케팅, Game PC, Retail 채널 확대

Toshiba







- 아웃 소싱을 통한 원가 경쟁력 강화
- 모델 차별화 전략
 - AV / Game PC, Ultra Mobility PC
 - Market Segment에 따른 제품 차별화

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3). 제품 사양 비교

3-3) 타사 모델 비교

Toshiba Satellite A200	Fujitsu Amilo Li2727	ASUS Pro50RL	Acer Aspire 5315
			
€749	€699	€699	€599
T2310 (1.46Ghz)	T2310 (1.46Ghz)	T5250 (1.46Ghz)	CelM 530(1.73Ghz)
2GB	2GB	2GB	2GB
15.4" WXGA Glare	15.4" WXGA Glare	15.4" WXGA Glare	15.4" WXGA Glare
ATI MR HD2600_256MB	Intel GMA X3100	ATI Radeon Xpress 1100	Intel GMA X3100
160GB	250GB	160GB	160GB
Super Multi_DL	Super Multi_DL	Super Multi_DL	Super Multi_DL
802.11abg/n	802.11b/g	802.11b/g	802.11b/g
Vista Home Premium	Vista Home Premium	Vista Home Premium	Vista Home Premium
4 USB, TV-out	4 USB	1.3M Web-Cam	-

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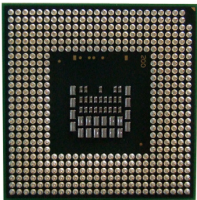
2. Introduction and Specification

2-5. Option Material List

HDD		
		
BA59-02286A	MK1246GSX	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02226A	WD1200BEVS-22UST0	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02202A	HTS542512K9A300	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02189A	HM121HI	120G,2.5INCH,SATA,160G/P,5400RPM,FDB
BA59-02215A	MK1237GSX	120G,2.5INCH,SATA,80G/P,5400RPM,FDB
BA59-02208A	MHY2120BH	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02287A	MK1646GSX	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02187A	HM160HI	120G,2.5INCH,SATA,160G/P,5400RPM,FDB
BA59-02277A	WD1600BEVS-22RST0	120G,2.5INCH,SATA,80G/P,5400RPM,FDB
BA59-02279A	WD1600BEVT-22ZCT0	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02209A	MHY2160BH	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02203A	HTS542516K9A300	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02290A	MK2046GSX	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02210A	MHY2200BH	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02204A	HTS542520K9A300	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02288A	MK2546GSX	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02228A	WD2500BEVS-22UST0	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02205A	HTS542525K9A300	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02190A	HM250JI	120G,2.5INCH,SATA,160G/P,5400RPM,FDB
BA59-02211A	MHY2250BH	120G,2.5INCH,SATA,125G/P,5400RPM,FDB
BA59-02280A	WDC-WD3200BEVT-22ZCT0	120G,2.5INCH,SATA,160G/P,5400RPM,FDB
ODD		
		
BA96-03380A	DVD-ROM(TS-L333A)	TSST,TS-L333A
BA96-03384A	DVD-ROM(DV-28S-V)	TEAC,DV-28S-V
BA96-03385A	DVD-COMBO(DW-224S-V)	TEAC,DW-224S-V
BA96-03382A	SUPER_DL(TS-L633A)	TSST,TS-L633A
BA96-03386A	SUPER_DL(DV-W28S-R)	TEAC,DV-W28S-R
BA96-03381A	DVD-COMBO(TS-L463A)	TSST,TS-L463A



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WLAN		
		
BA59-02154A	MODULE-WLAN	DT/NP,WLL3141,-,802.11BG,mini card
BA59-02297A	MODULE-WLAN	N/P,512ANXMMWG,-,802.11AGN,mini card,1TX 2RX
MEMORY		
		
1105-001684	DDR2 667MHz, 1GByte, 128Mx64, SO-DIMM, 200P	M470T2953
1105-001790	DDR2 667MHz, 1GByte, 128Mx64, SO-DIMM, 200P	NT1GT64U8HB0BN-3C
1105-001825	DDR2 667MHz, 2GByte, 128Mx64, SO-DIMM, 200P	M470T5663CZ3
1105-001797	DDR2 667MHz, 1GByte, 128Mx64, SO-DIMM, 200P	SCOPE1A1633Z
1105-001870	DDR2 SDRAM, 1GByte, 128Mx64, SO-DIMM, 200P	M470T2864QZ3-CE6
1105-001888	DDR2 SDRAM, 2GByte, 256Mx64, SO-DIMM, 200P	M470T5663QZ3-CE6
1105-001886	DDR2 SDRAM, 1GByte, 128Mx64, SO-DIMM, 200P	M470T2864QZ3-CF7
1105-001900	DDR2 SDRAM, 2GByte, 256Mx64, SO-DIMM, 200P	M470T5663QZ3-CE7
CPU		
		
0902-002228	T5450_1.66G	LF80537GF0282MT
0902-002330	T5670_1.80G	LF80537GG0332MT
0902-002254	T5550_1.83G	LF80537GF0342MT
0902-002282	T5750_2.0G	LF80537GF0412MT
0902-002331	T5870_2.0G	LF80537GG0412MN

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0902-002326	T5850_2.16G	LF80537GF0482M
0902-002341	P8400_2.26G	AW80577SH0513M
0902-002337	P8600_2.40G	AW80577SH0563M
0902-002666	T9400_2.53G	AW80576GH0616M
0902-002340	P9500_2.53G	AW80576SH0616M
BATTERY		
		
BA43-00162A	BATTERY 6C/ 2000mAh(SDI)	P32R04-06-H01
BA43-00155A	BATTERY 6C/ 2000mAh(SANYO)	3UR18650Y-2-SDN-14
BLUETOOTH		
		
BA59-01691A	FOXCON B/T MODULE	Bluetooth V2.0,T60H928.01,Bluetooth Module,USB I/F,V2.0,C
BA59-01916A	SEMC0 B/T MODULE	Bluetooth Version 2.0, BTO2P0B2SA, Bluetooth Module, USB I/F, BTW 5.0, Max Throughput 3Mbps,-,-,W26*L14*H5.1mm,TR, RIO, Sorren

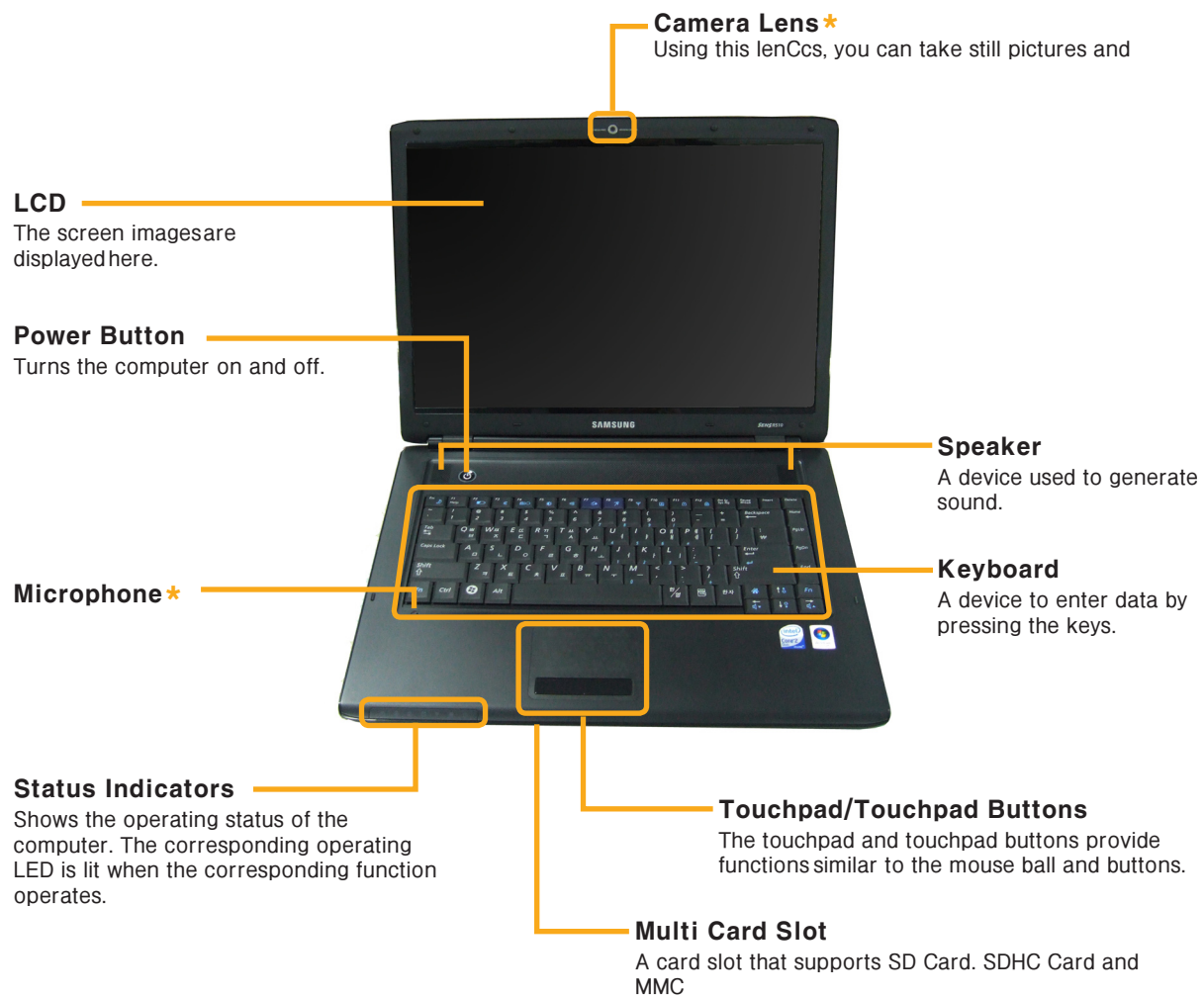
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2-6. Function of Product

2-6-1. Overview

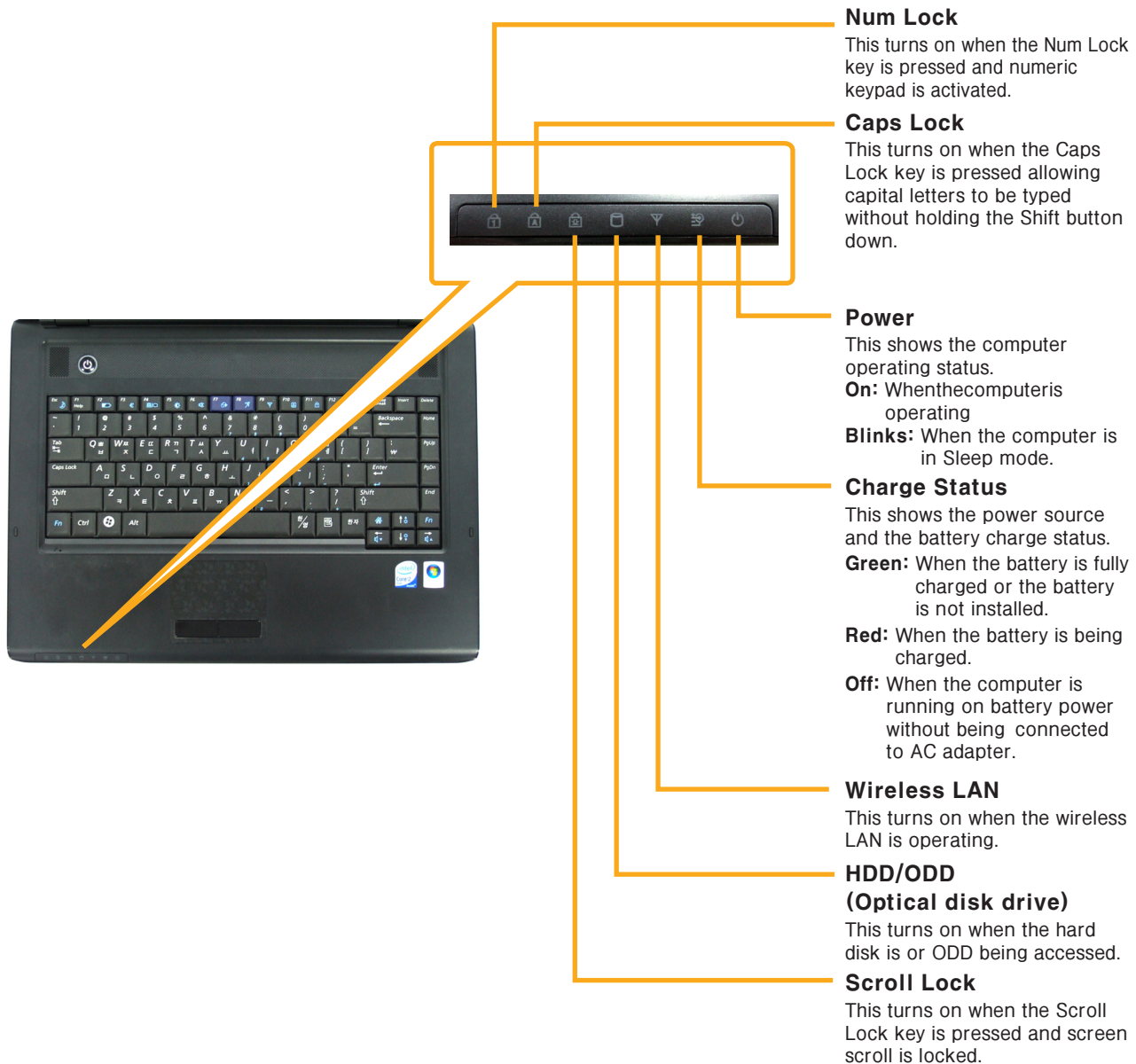
Front View



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Status Indicators



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Right View



CD Drive(ODD) *

Plays CD or DVD titles.

Since an ODD(Optical DiskDrive) is optional, the installed drive depends on the computer model.

Left View

USB Port

You can connect USB devices to the USB port such as a keyboard/mouse, digital camera, etc.

Monitor Port

A Port used to connect a monitor, TV or Projector supporting a 15pin D-SUB interface

Express Card Slot

Install the Express Card into this slot.



Fan Vents

The internal heat of the computer is emitted through these holes.

Caution

If the vents are blocked the computer may overheat.
Avoid blocking the vents as this may be dangerous.

Headphone Jack

A jack used to connect the headphones.

Microphone Jack

A jack used to connect the microphone.

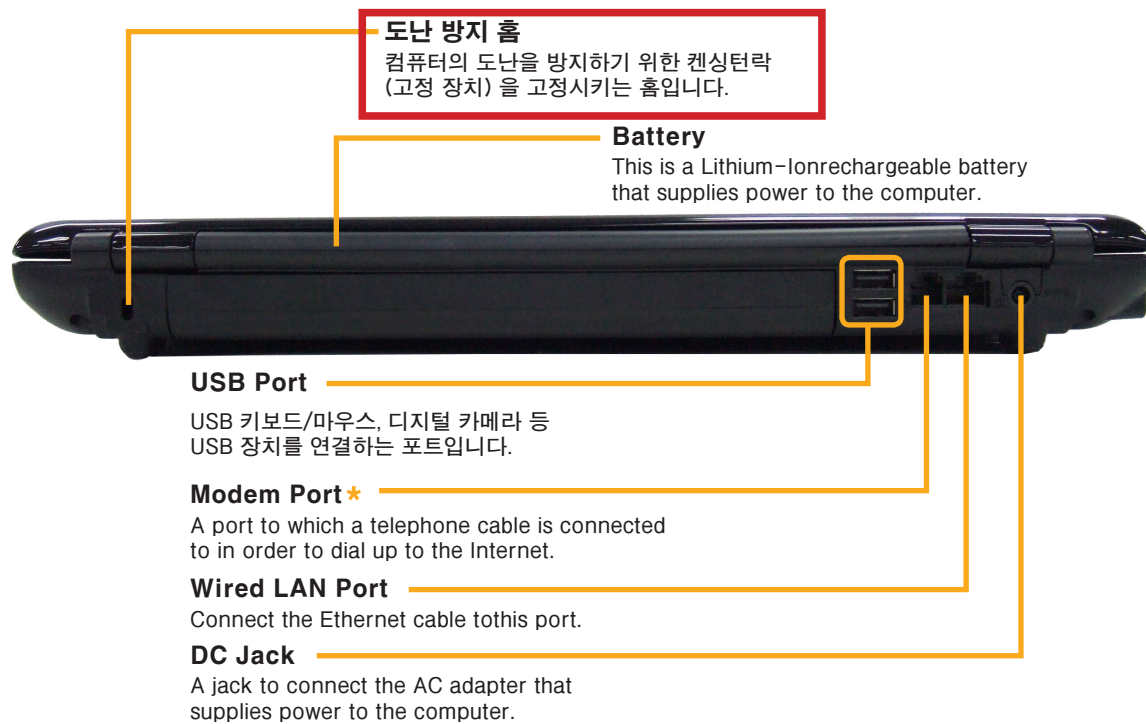
Digital Video/Audio Port(HDMI)

You can connect an HDMI cable to this port.
Using this port, you can enjoy digital video and audio on the TV.

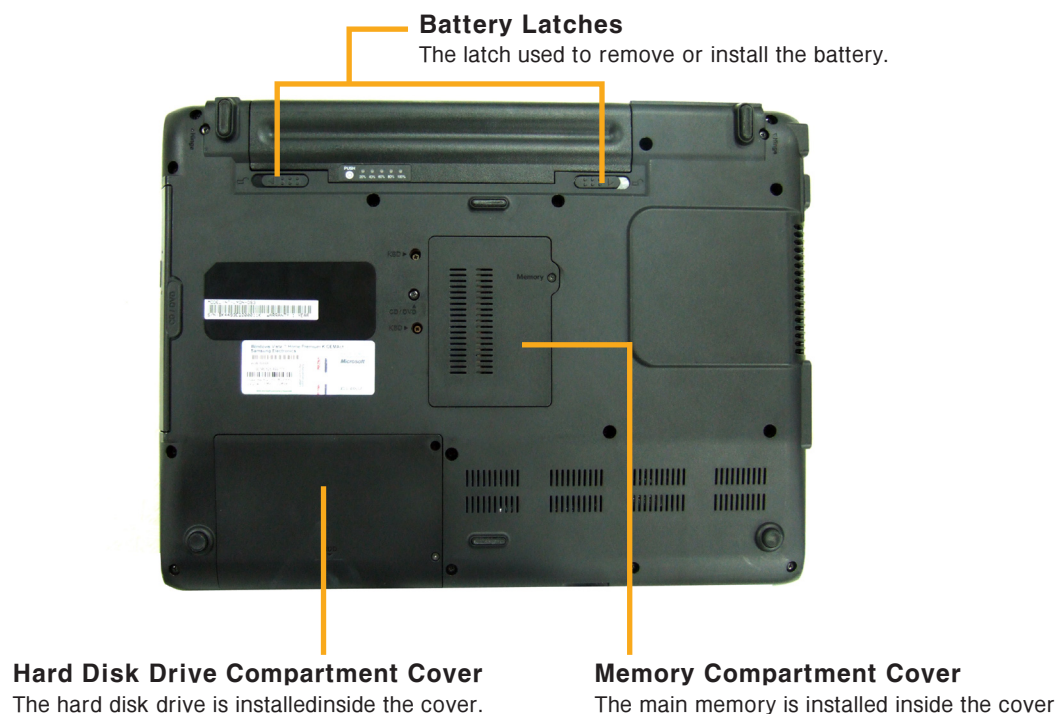
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2. Introduction and Specification

Back View



Bottom View



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2. Introduction and Specification

2-6-2. New Added Function

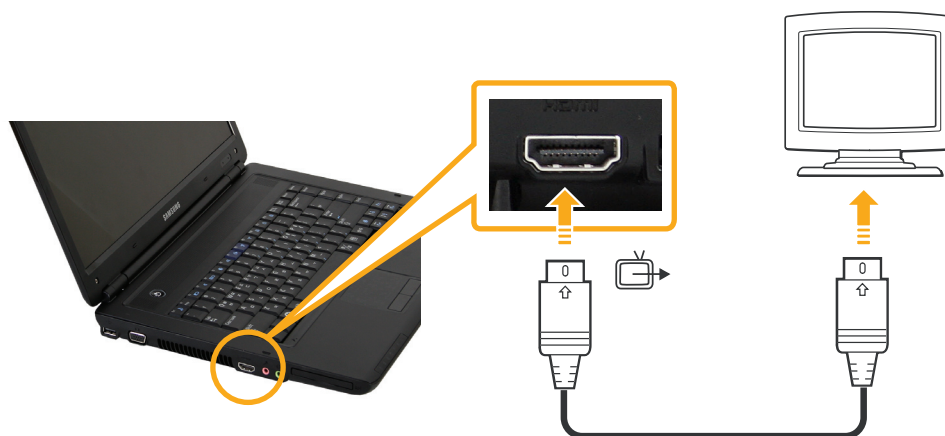
Camera (Option)

Easy use of taking a picture and moving image.



HDMI Port

Convenient connection with TV through HDMI port.



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New Keyboard



Shortcut Keys




You can use the following functions by pressing the keys below with the Fn key.





Fn+	이름	기능
	REST(Sleep Mode)	Switches to Sleep mode. To wake the computer up, press the Power button.
	Gauge	Shows the remaining battery charge. You can only use this function when the Easy Display Manager program is installed.
	Euro	Enters the Euro monetary unit symbol. This key may not be provided depending on the keyboard type.
	CRT/LCD	Switches the screen output to the LCD or external monitor when an external monitor (or TV) is connected to the computer.
	Backlit	Turns the LCD backlight on or off.
	Mute	Mutes or cancels mute.
	Samsung Magic Doctor	System diagnosis, recovery and Internet consultation program, Samsung Magic Doctor, will be launched.
	Easy SpeedUP Manager	You can select operation mode when you need maximum system performance or low-noise/low power consumption with one-click. Slilent : Low-noise and low power consumption mode Normal : Normal Mode Speed : Maximum performance mode. The system operates in its maximum performance, and system resources are allocated to the currently active program with priority for maximum performance.
	Wireless LAN	Turns the wireless LAN function on or off in models with wireless LAN capability.

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	Touchpad	Turns the Touchpad function on or off. When using an external mouse only, you can turn the Touchpad off.
	Num Lock	Turns the numeric keyboard on or off.
	Scroll Lock	If you turn the Scroll Lock on, you can scroll the screen up or down without changing the cursor location in some applications.


Screen Brightness Control

To adjust the LCD brightness press the **Fn** +  key combination or the **Fn** +  key combination. The changed screen brightness is displayed at the center of the screen for a moment.

Volume Control

To control the volume, press the **Fn** +  key combination or the **Fn** +  key combination. You can mute the sound or cancel the mute function by clicking the **Fn** +  key combination.

Numeric Key

The numbers are printed in blue on the numeric keys. If Num Lock is turned on by pressing the **Fn** +  key combination, you can use the numeric keys to enter digits.

Other Function Keys

Application Key

Performs the right-click mouse function (touchpad).

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2-6-3. S/W List

6-1) S/W List

Item Specification	ItmVersion
Recovery Settings III	3.0.0.2
Recovery Solution III	3.0.0.4
Recovery Environment III	3.0.0.4.VISTA
Recovery EmptyWim	1.0.0.0
ChkWiz Anchor	(ChkWiz4Vista)_2.0.0.4
SW Media Installer - 1 of 1	Vista 2.0.2.2
Intel Matrix Storage Manager	8.0.0.1030
Adobe Reader (ITA)	8.1.0.137
Easy Network Manager	4.0.0.2
Cyberlink DVD Suite	132
Adobe Reader (KOR)	8.1.0.137
Adobe Reader (ENG)	8.1.0.137
Adobe Reader (FRN)	8.1.0.137
Adobe Reader (GER)	8.1.0.137
Adobe Reader (SPA)	8.1.0.137
Adobe Reader (CHS)	8.1.0.137
Adobe Reader (CHT)	8.1.0.137
Adobe Reader (POR)	7.0.8.218
Adobe Reader (RUS)	8.0.0.456
Adobe Reader (UKR)	8.0.0.456
Vista 32bit-Marvell LAN Driver [10/100 & GbE]	10.51.3.3
Intel Cantiga Vista 32bit Graphics Driver(GM45)	7.15.10.1462
SetDisplayResolution(NP)	1.2.0.3
Broadcom Bluetooth Driver (BCM92045NMD)	6.0.1.6300
Cantiga Chipset	8.7.0.1007
Atheros WLAN Driver (Vista)	7.3.1.109-WHQL(Generic)

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Item Specification	ItmVersion
Easy Display Manager	2.2.2.0 (HDMI)
Play AVStation	4.1.20.47_POLAND
AVStation Movie Contents_INSTALL	4.1.8
AVStation Movie Contents_NotePC_KOR	4.1.8
Touchpad Driver	10.1.2.0(WHQL)
Media Center KOR IME (New_SWDesc)	3.1.5
Samsung Magic Doctor 5	5.0.3.1
Media Center Update (Vista)	2.2.0
Agere Delphi Modem Driver (Vista)	2.1.77_Vista_Logo_Poland_Translation_Fix
Easy SpeedUp Manager	2.0.0.14
HotfixChecker	1.0.0.0
VistaSP1-Hotfix-common	1.0.0.1
Easy Partition Manager	2.2.2.2
Easy Battery Manager 3	3.2.1.6
Dungeon&Fighter Setup Icon	1.0.0.1_2
Intel WLAN Driver (Floresville Vista)	12.0.0.66
Vimicro 1.3M Camera Driver	331.2000.4008.6_WHQL_HF4
Play Camera Single	1.0.1.5
McAfee VirusScan (ENG)	8.0.226.0
McAfee VirusScan (KOR)	8.0.226.0
McAfee VirusScan (FRN)	8.0.226.0
McAfee VirusScan (CHS)	8.0.226.0
McAfee VirusScan (CHT)	8.0.226.0
McAfee VirusScan (SPN)	8.0.226.0
McAfee VirusScan (GER)	8.0.226.0
MS Office 2007 Ready	1.2

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Item Specification	ItmVersion
McAfee VirusScan (ITA)	8.0.226.0
MS Office 2007 ready (UKR)	1.2
Wallpaper VISTA	2.0.0.0
Samsung Screen Saver (KOR)	1.0.2.0
Samsung Screen Saver (International)	1.0.2.0
McAfee DAT Update	5247.0 (08.03.07)
PC Doumi (문제 해결 도우미)	1.0.0.4
AVStation Movie Contents_NotePC_NoKOR	4.1.8
ALC26X Vista Sound Driver	6.0.1.5566LogoEDSP1
CSUP (MDA)	1.0.0.4
Vista SP1 32bit OS Ultimate (25G)	SP1
Vista SP1 32bit OS Home Premium(25G)	SP1
Vista SP1 32bit OS Home Basic (25G)	SP1
Vista SP1 32bit OS Business (25G)	SP1
Vista SP1 32bit ENG Language Pack	SP1
Lyon External Graphics Driver - Vista	174.82 (ADC, No HDA)
Samsung Update Plus	1.3.0.12

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2. Introduction and Specification

2-8. System Setup (BIOS Setup)

MAIN

SATA Port 1

- HDD model name is displayed in this item for SATA Port 1.

SATA Port 2

- HDD model name is displayed in this item for SATA Port 2.

Total Memory

- Total memory size of the system.

Slot1 Memory

- Memory size of the slot 1.

Slot2 Memory

- Memory size of the slot 2.

Phoenix SecureCore(tm) Setup Utility				
Main	Advanced	Security	Boot	Exit
<div>System Time [18:06:14]</div> <div>System Date [04/16/2008]</div> <div>▶ SATA Port 1 [FUJITSU MHY2160BH-(PM)]</div> <div>▶ SATA Port 2 [TSSTcorp CDDVDW TS-L633A-]</div> <div>CPU Type Intel(R) Core (TM) 2 Duo CPU</div> <div>CPU Speed 2.53 GHz</div> <div>Total Memory 1024 MB</div> <div>Slot1 Memory Not Installed</div> <div>Slot2 Memory 1024 MB</div> <div>BIOS Version 00LE.PV10.20080326.KSY</div> <div>MICOM Version 00LEPV03</div>				<div>Item Specific Help</div> <div><Tab>, <Shift-Tab>, or <Enter> selects field.</div>
F1 Help	↑↓ Select Item	F5/F6 Change Values	F9 Setup Defaults	
ESC Exit	←→ Select Menu	Enter Select ▶ Sub-Menu	F10 Save and Exit	

2. Introduction and Specification

Advanced

Intel(R) SpeedStep(TM)

- This selects whether Intel® SpeedStep™ Thchnology is enabled or not.

Legacy USB Support

- Enable support for Legacy Universal Serial Bus.

Large Disk Access Mode

- UNIX, Novell NetWare or other O/S, select ‘ Other ’.

AHCI Mode Control

- Select a AHCI mode always enabled or disabled.

EDB (Execute Disable Bit)

- supports the Data Execution Prevention (DEP) feature. DEP is a set of H/W & S/W technologies that perform additional checks on memory to help prevent malicious code from running on a system.

Internal LAN

- “Enabled” will allow the internal LAN to operate correctly.

Touch Pad Mouse

- ‘ Disabled ’ prevents installed Touch Pad mouse from functioning, but frees up IRQ 12. ‘ Enabled ’ forces the Touch Pad mouse to be enabled.

CPU Power Saving Mode

- ‘ Enabled ’ will decrease system power consumption.

USB S3 Wake-up

- Select Enabled to support that system can be waked up from ACPI S3 state by USB activities.

Purchased Date

- Purchased date is displayed after 10 times boot.

Phoenix SecureCore(tm) Setup Utility									
Main		Advanced		Security		Boot		Exit	
<div>Intel (R) SpeedStep (TM) [Enabled]</div> <div>Legacy OS Boot [Enabled]</div> <div>Legacy USB Support [Enabled]</div> <div>Large Disk Access Mode [DOS]</div> <div>AHCI Mode Control [Enabled]</div> <div>EDB (Execute Disable Bit) [Disabled]</div> <div>Internal LAN [Enabled]</div> <div>Touch Pad Mouse [Enabled]</div> <div>CPU Power Saving Mode [Enabled]</div> <div>USB S3 Wake-up [Disabled]</div>							Item Specific Help		
							<div>This selects whether Intel (R) SpeedStep (TM) Techhnology is enabled or not.</div> <div>'Disbled' means that system does not support Intel (R) SpeedStep (TM) Technology.</div> <div>'Enabled' is recommened.</div>		
									F1
ESC	Exit	←→	Select Menu	Enter	Select ► Sub-Menu	F10	Save and Exit		

2. Introduction and Specification

Security

set Supervisor Password

- Supervisor Password controls access to the setup utility.

set User Password

- User Password controls access to a few items in the setup utility.

set HDD Password

- User can set a password of a HDD.

Password on Boot

- Supervisor Password controls access to system boot.

Fixed Disk Boot Sector

- “Write Protect” will protect to write in Boot Sector of HDD.

Phoenix SecureCore(tm) Setup Utility									
Main		Advanced		Security		Boot		Exit	
<div>Supervisor Password<div>Clear</div></div> <div>User Password<div>Clear</div></div> <div>HDD Password<div>Clear</div></div> <div>Set Supervisor Password<div>[Enter]</div></div> <div>Set User Password<div>[Enter]</div></div> <div>Set HDD Password<div>[Enter]</div></div> <div> </div> <div>Password on boot<div>[Enabled]</div></div> <div>Fixed disk boot sector<div>[Normal]</div></div>						Item Specific Help			
						Supervisor Password controls access to the setup utility			

F1	Help	↑↓	Select Item	F5/F6	Change Values	F9	Setup Defaults
ESC	Exit	↔	Select Menu	Enter	Select ► Sub-Menu	F10	Save and Exit

2. Introduction and Specification

Boot

Boot Device Priority

- Select system boot options.

NumLock

- Selects Power-on state for Numlock.

Enable Keypad

- Select a method of Keypad.
 - [Only By Fn Key] : Leave the embedded keypad disabled when the Numlock LED is on.
 - [By NumLock] : Enable the embedded keypad when Numlock LED is on and no external keyboard is attached.

Summary Screen

- Display system configuration on boot.

Boot-time Diagnostic Screen

- Display the diagnostic screen during boot.

PXE Oproam

- This selects whether network boot PXE will be loaded or not during the POST.
 - [Only with F12] : The network boot PXE will be loaded only if F12 is pressed during the POST.
 - [Always] : The network boot PXE will be always loaded during the POST.

Brightness Control Mode

- [Auto] : The brightness values are set by the status of AC adapter at each bootup.
- [User Control] : The brightness values could be remained regardless of the status of AC adapter.

Wireless Device Control

- [Always On / Off] : The wireless devices are turned on or not.
- [Last Status] : The wireless devices are restored to last status.

Smart Battery Calibration

- If you select this option, the system battery will be discharged completely for more accurate battery level detection.
This option only works with SMART battery.

Phoenix SecureCore(tm) Setup Utility							
Main		Advanced		Security		Boot	Exit
<div>▶ Boot Device Priority</div> <div><div>NumLock</div><div>[OFF]</div></div> <div><div>Enble Keypad</div><div>[By NumLock]</div></div> <div><div>Summary screen</div><div>[Disabled]</div></div> <div><div>Boot-time Diagnostic Screen</div><div>[Disabled]</div></div> <div><div>PXE OPROM</div><div>[Only with F12]</div></div> <div><div>Brightness Mode Control</div><div>[Auto]</div></div> <div><div>Wireless Device Control</div><div>[Always On]</div></div> <div><div>Smart Battery Calibration</div><div></div></div>						Item Specific Help	
						Select system boot options	

F1	Help	↑↓	Select Item	F5/F6	Change Values	F9	Setup Defaults
ESC	Exit	↔	Select Menu	Enter	Select ▶ Sub-Menu	F10	Save and Exit

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2. Introduction and Specification

Exit

Exit Saving changes

- Exit System Setup and save your changes to CMOS.

Exit Discarding Changes

- Exit utility without saving Setup data to CMOS.

Load Setup Defaults

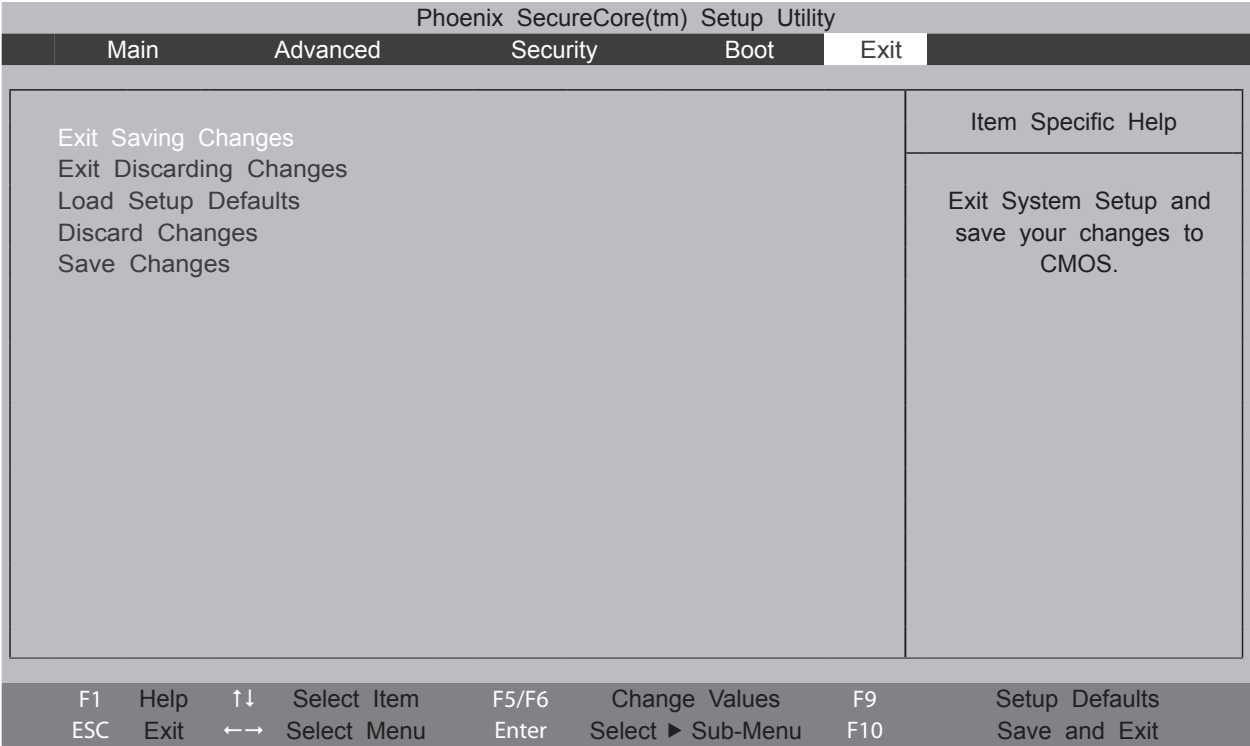
- Load default values for all SETUP items.

Discard Changes

- Load previous values from CMOS for all SETUP items.

Save Changes

- Save Setup Data to CMOS.



BIOS Vendor

BIOS Vendor : **Phoenix**

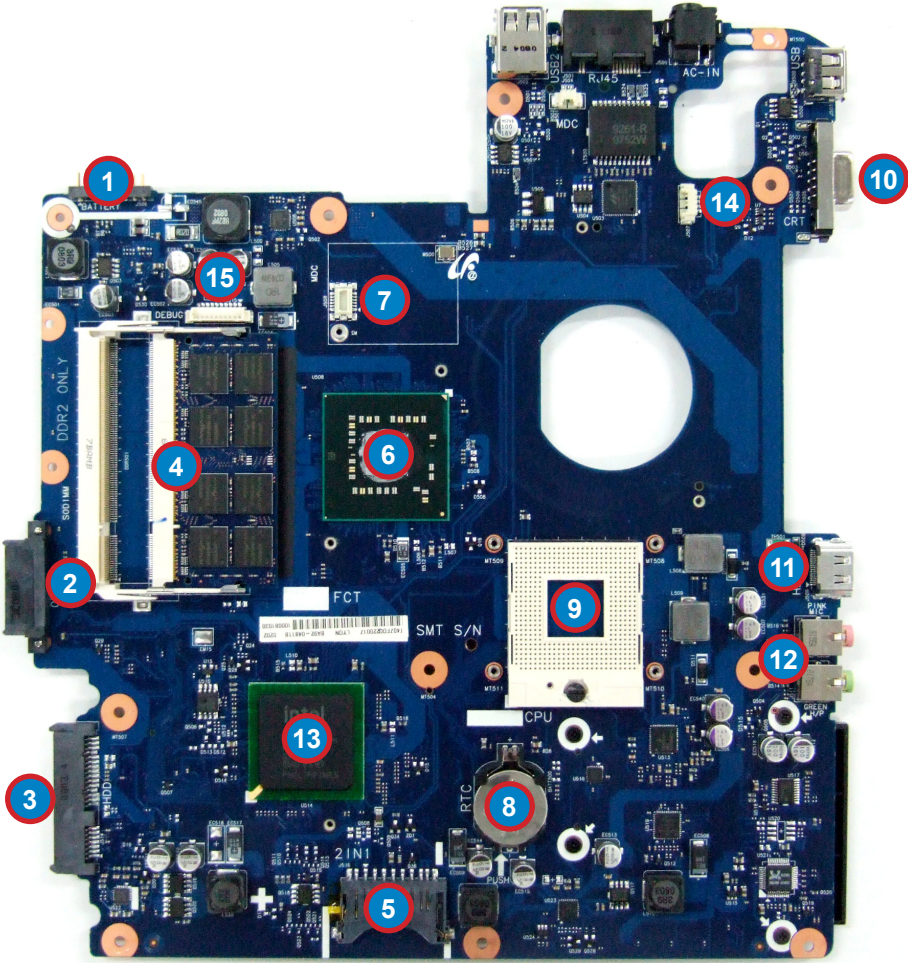
2. Introduction and Specification

2-9. Mainboard Part Description

Lyon External TOP					
1	DC-in Connector	J500	9	Touchpad FFC Connector	J6
2	RJ45/RJ11 Combo	J502	10	Keyboard Connector	J7
3	USB Connector (x2)	J503	11	CPU Support	M5
4	Camera Connector	J1	12	Wireless LAN Connector	J10
5	Power Button	SW1	13	Bluetooth Cable Connector	J11
6	LCD Connector	J2	14	PCI Express Card Frame	J9
7	Speaker Connector	J4	15	Touch Pad Button	SW2 / SW#
8	Mic Connector	J5			

2. Introduction and Specification

Lyon External Bottom



1	Battery Connector	J506	11	HDMI Port	J510
2	ODD Connector	J511	12	H/P In / Mic In	J512/513
3	SATA HDD Connector	J514	13	Intel ICH9M	U513
4	SODIMM Socket (DDRII)	DDR 501/ DDR501	14	FAN Connector	J507
5	3-in-1 Connector	J515	15	Debug Card Connector	J509
6	Intel Cantiga PM/GM: U509	U509			
7	MDC	J508			
8	RTC Battery	BATT500			
9	CPU	CPU 500			
10	VGA Port	J505			