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## lshw 란?

list Hardware 약자로서 하드웨어 정보를 뽑아 xtm, html 등의 포맷 또는 그냥 바이너리 등으로 뽑아주는 툴입니다. windows의 aida32와 같은 프로그램입니다.

1. 아래 사이트에서 프로그램을 다운로드 한다.

SourceForge.net 클릭

<http://ezix.org/project/wiki/HardwareLiSter>

### Hardware Lister (lshw)

**Navigation:** ( [HardwareLiSter/GUI](#), [Software](#) )

lshw (**H**ardware **L**ister) is a small tool to provide detailed information on the hardware configuration of the machine. It can report exact memory configuration, firmware version, mainboard configuration, CPU version and speed, cache configuration, bus speed, etc. on DMI-capable x86 or EFI (IA-64) systems and on some PowerPC machines (⇒ [PowerMac G4](#) is known to work).

#### Requirements

- Linux 2.4.x or 2.6.x (2.2.x might work, though)
- a PA-RISC, Alpha, IA-64 (Itanium), PowerPC or x86 based machine
- an ANSI (or close enough to ANSI compliance) C++ compiler (tested with GCC 2.95.4 and 3.2.2)
- for the (optional) [GTK+ graphical user interface](#), you will need a complete GTK+ 2.4 development environment (`gtk2-devel` on RedHat/Fedora derivatives)

Information can be output in plain text, XML or HTML.

It currently supports DMI (x86 and EFI only), OpenFirmware device tree (PowerPC only), PCI/AGP, ISA PnP (x86), CPUID (x86), IDE/ATA/ATAPI, PCMCIA (only tested on x86), USB and SCSI.

The latest version is [B.02.12.01](#).

Other releases are available at [SourceForge.net](#).

2. lshw Download 클릭

#### ezIX

[Project](#) [Tracker](#) [Mailing Lists](#) [Forums](#) [Code](#) [Services](#) [Download](#) [Documentation](#) [Tasks](#)

#### About ezIX

ezIX is an attempt to build a 'usable' UNIX system for desktop/personal users. It is based on the Linux kernel, GNU libc and tools, borrows ideas from Linux distributions, commercial UNIX flavours, MacOS, OS X and Windows.

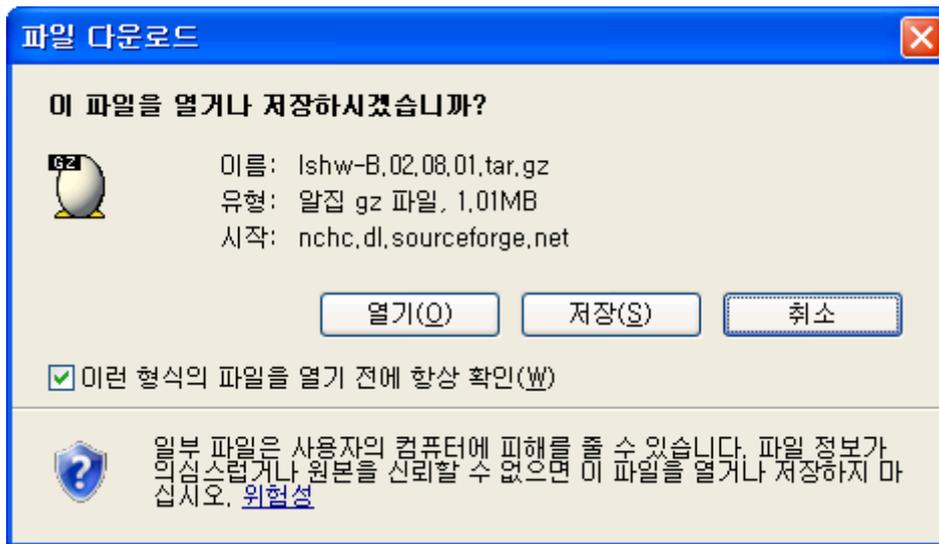
#### Latest File Releases

Package	Release	Date	Notes / Monitor	Downloads
lshw	B.02.08.01	May 9, 2006	 	<a href="#">Download</a>
popdns	T.00.02	June 27, 2004	 	<a href="#">Download</a>
xdaf	A.01.11.01	January 3, 2003	 	<a href="#">Download</a>

3. lshw-B.02.08.01.tar.gz 클릭

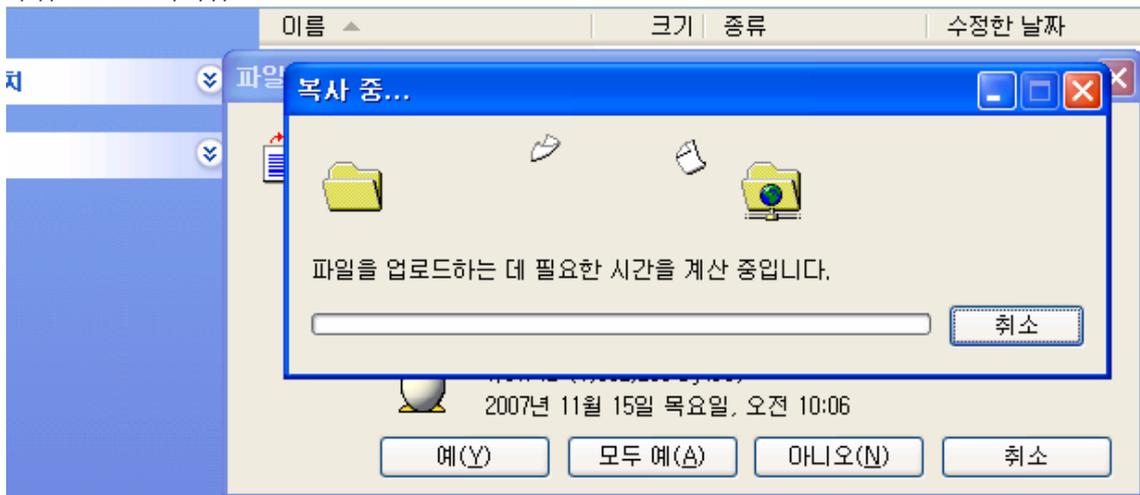
Package	Release (date)	Filename
Ishw		
Latest	B.02.08.01 (2006-05-09 00:55)	Ishw-B.02.08.01.tar.gz
Totals:	1	1

4. lshw 파일을 다운로드 한다.



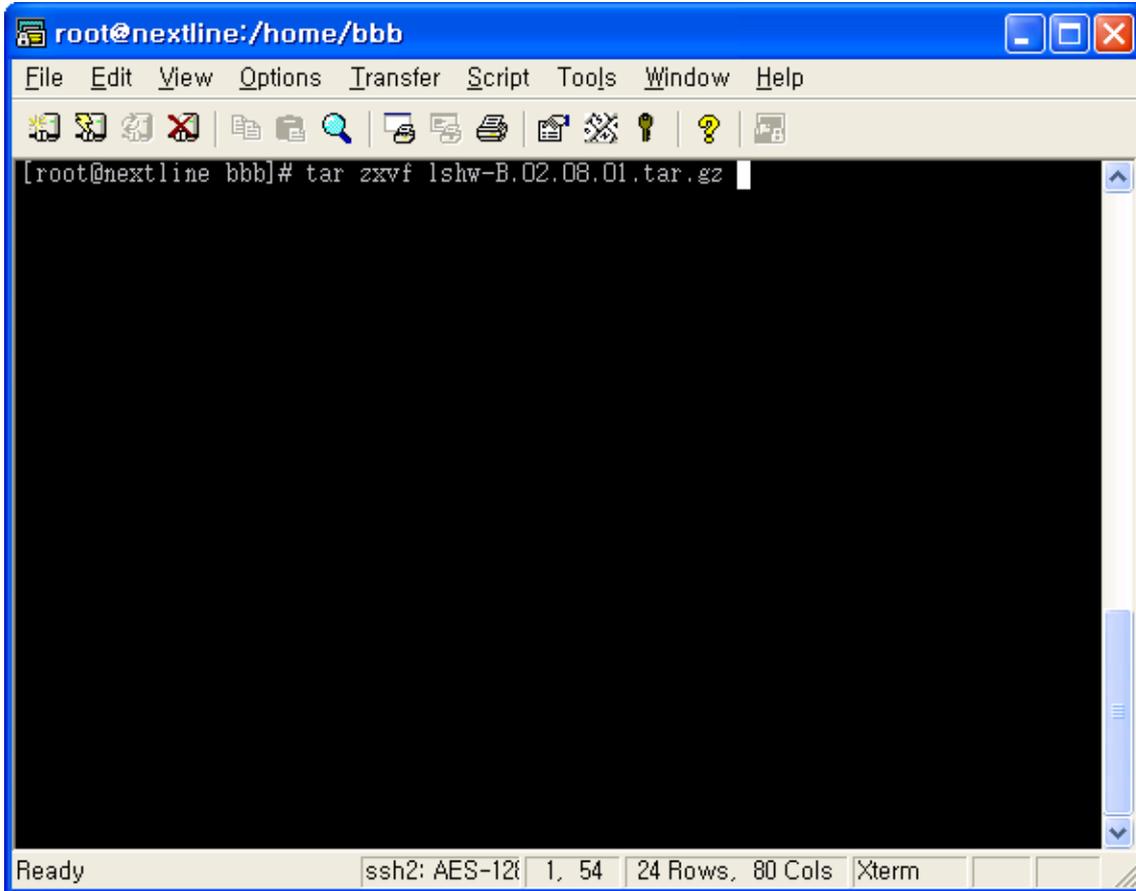
5. ftp로 다운받은 lshw 프로그램을 서버에 upload 한다.

ftp://192.168.0.3/app/



6. upload 된 파일의 압축을 해제 한다.

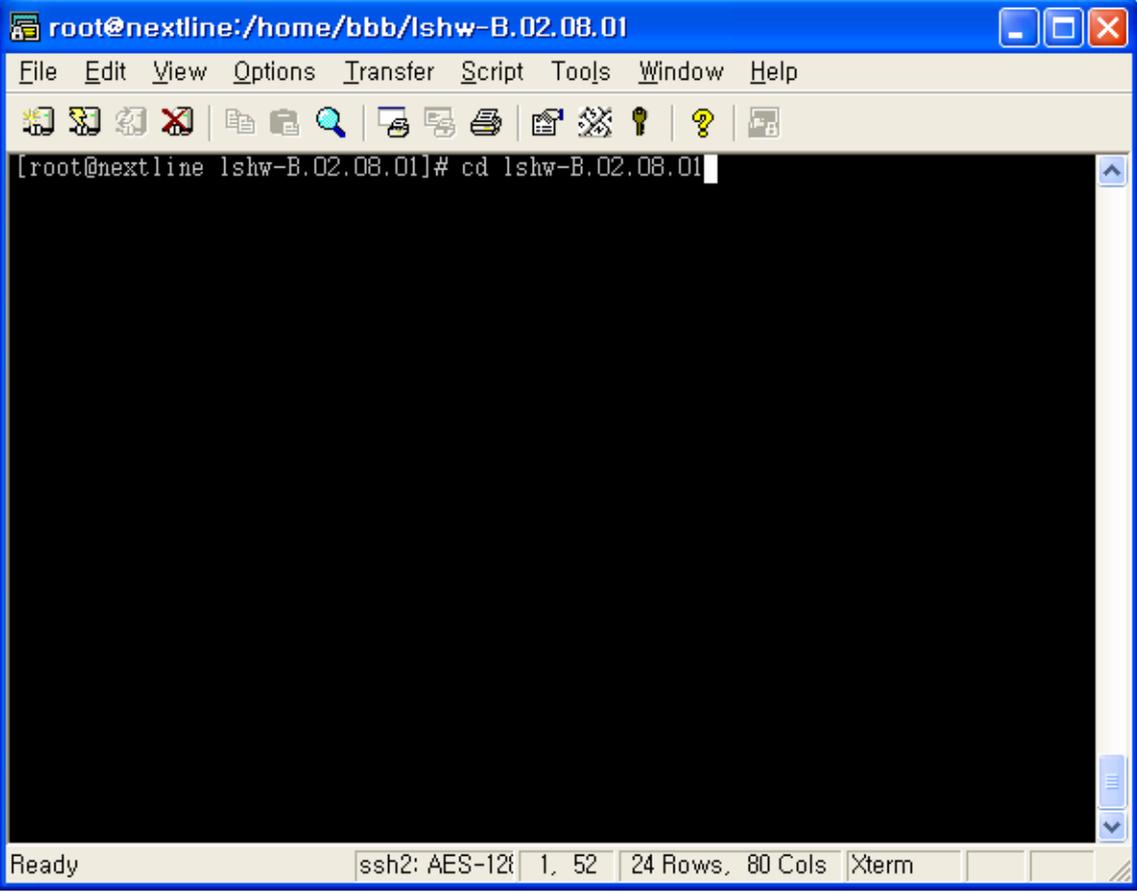
명령어 : `tar zxvf lshw-B.02.08.01.tar.gz`



The image shows a terminal window titled "root@nextline:/home/bbb". The window has a menu bar with "File", "Edit", "View", "Options", "Transfer", "Script", "Tools", "Window", and "Help". Below the menu bar is a toolbar with various icons. The main area of the terminal is black, and the command prompt shows "[root@nextline bbb]# tar zxvf lshw-B.02.08.01.tar.gz" with a cursor at the end. The status bar at the bottom of the window displays "Ready", "ssh2: AES-128", "1, 54", "24 Rows, 80 Cols", and "Xterm".

7. 압축해제한 디렉토리로 이동한다.

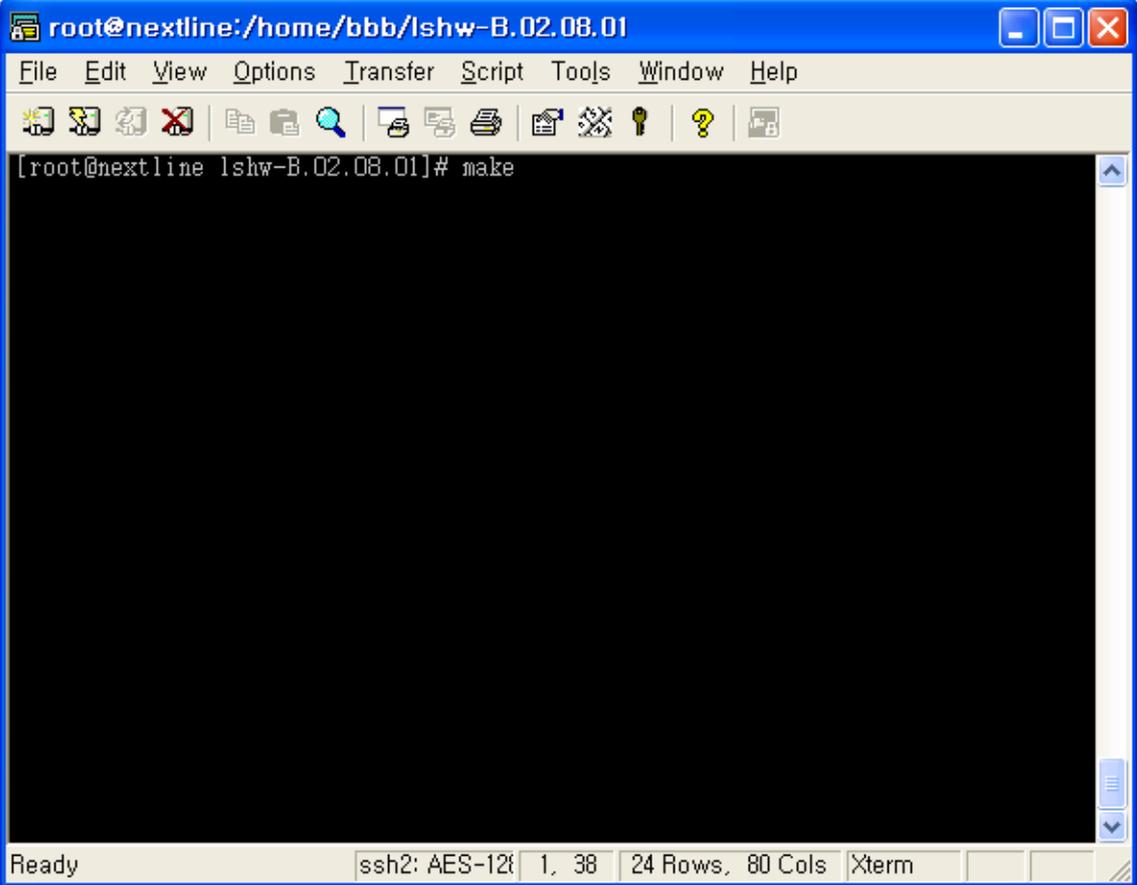
명령어 : cd lshw-B.02.08.01



The image shows a terminal window with a blue title bar. The title bar text is "root@nextline:/home/bbb/lshw-B.02.08.01". Below the title bar is a menu bar with "File", "Edit", "View", "Options", "Transfer", "Script", "Tools", "Window", and "Help". A toolbar with various icons is located below the menu bar. The main terminal area has a black background with white text. The text shows the prompt "[root@nextline lshw-B.02.08.01]#" followed by the command "cd lshw-B.02.08.01" and a cursor. At the bottom of the window, there is a status bar with the text "Ready", "ssh2: AES-128", "1, 52", "24 Rows, 80 Cols", and "Xterm".

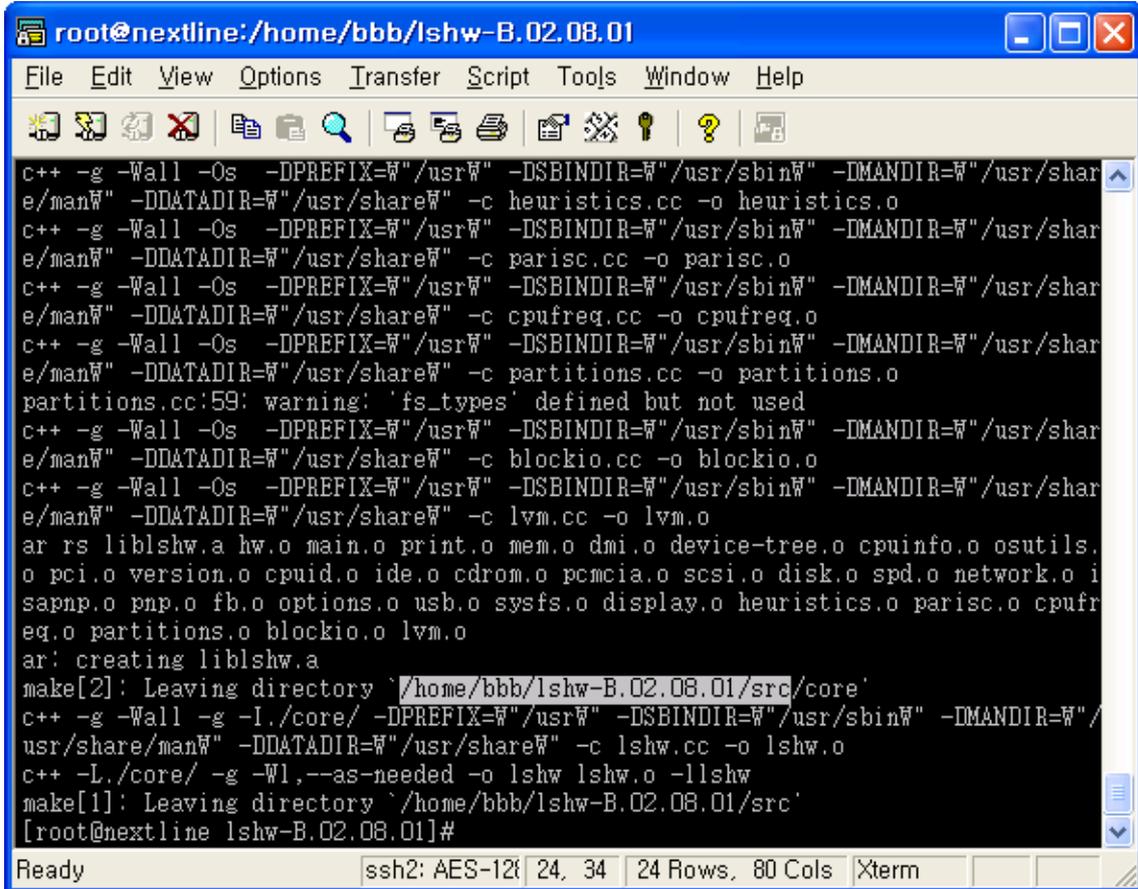
8. 프로그램을 인스톨한다.

명령어 : make



The image shows a terminal window titled "root@nextline:/home/bbb/lshw-B.02.08.01". The window has a menu bar with "File", "Edit", "View", "Options", "Transfer", "Script", "Tools", "Window", and "Help". Below the menu bar is a toolbar with various icons. The main area of the terminal is black, with the text "[root@nextline lshw-B.02.08.01]# make" visible at the top. The status bar at the bottom of the window shows "Ready", "ssh2: AES-128", "1, 38", "24 Rows, 80 Cols", and "Xterm".

9. make 명령어로 설치가 완료된 화면



```
root@nextline:/home/bbb/lshw-B.02.08.01
File Edit View Options Transfer Script Tools Window Help
c++ -g -Wall -Os -DPREFIX="/usr/" -DSBINDIR="/usr/sbin/" -DMANDIR="/usr/share/man/" -DDATADIR="/usr/share/" -c heuristics.cc -o heuristics.o
c++ -g -Wall -Os -DPREFIX="/usr/" -DSBINDIR="/usr/sbin/" -DMANDIR="/usr/share/man/" -DDATADIR="/usr/share/" -c parisc.cc -o parisc.o
c++ -g -Wall -Os -DPREFIX="/usr/" -DSBINDIR="/usr/sbin/" -DMANDIR="/usr/share/man/" -DDATADIR="/usr/share/" -c cpufreq.cc -o cpufreq.o
c++ -g -Wall -Os -DPREFIX="/usr/" -DSBINDIR="/usr/sbin/" -DMANDIR="/usr/share/man/" -DDATADIR="/usr/share/" -c partitions.cc -o partitions.o
partitions.cc:59: warning: 'fs_types' defined but not used
c++ -g -Wall -Os -DPREFIX="/usr/" -DSBINDIR="/usr/sbin/" -DMANDIR="/usr/share/man/" -DDATADIR="/usr/share/" -c blockio.cc -o blockio.o
c++ -g -Wall -Os -DPREFIX="/usr/" -DSBINDIR="/usr/sbin/" -DMANDIR="/usr/share/man/" -DDATADIR="/usr/share/" -c lvm.cc -o lvm.o
ar rs liblshw.a hw.o main.o print.o mem.o dmi.o device-tree.o cpuinfo.o osutils.o pci.o version.o cpuid.o ide.o cdrom.o pcmcia.o scsi.o disk.o spd.o network.o i
sapnp.o pnp.o fb.o options.o usb.o sysfs.o display.o heuristics.o parisc.o cpufreq.o partitions.o blockio.o lvm.o
ar: creating liblshw.a
make[2]: Leaving directory `/home/bbb/lshw-B.02.08.01/src/core'
c++ -g -Wall -g -I./core/ -DPREFIX="/usr/" -DSBINDIR="/usr/sbin/" -DMANDIR="/usr/share/man/" -DDATADIR="/usr/share/" -c lshw.cc -o lshw.o
c++ -L./core/ -g -Wl,--as-needed -o lshw lshw.o -llshw
make[1]: Leaving directory `/home/bbb/lshw-B.02.08.01/src'
[root@nextline lshw-B.02.08.01]#
```

Ready ssh2: AES-128 24, 34 24 Rows, 80 Cols Xterm

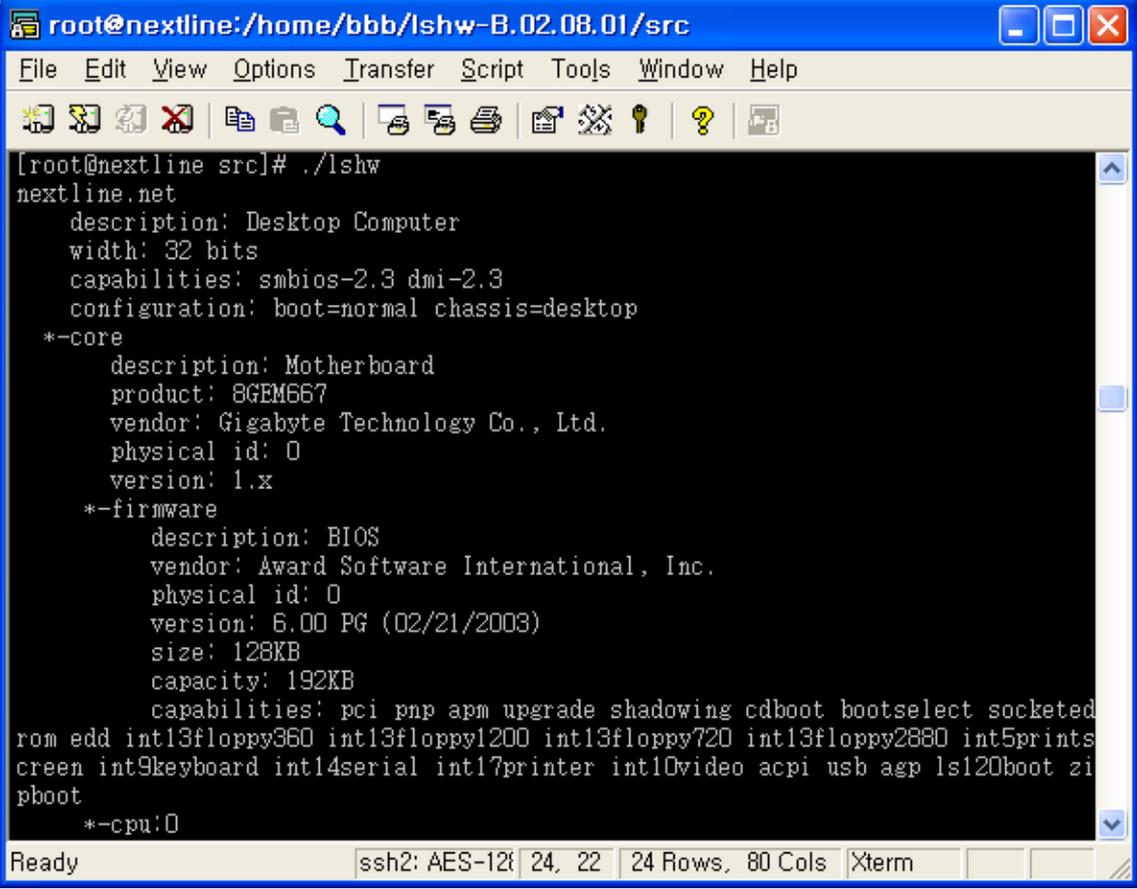
10. 설치가 완료된 디렉토리로 이동하여 실행한다.

여기서는 위그림에 하얀색 박스로 표시된

/home/bbb/lshw-B.02.08.01/src 디렉토리에 실행한다.

아래 그림과 같이 서버정보가 나온다.

명령어 : ./lshw



```
root@nextline:/home/bbb/lshw-B.02.08.01/src
File Edit View Options Transfer Script Tools Window Help
[root@nextline src]# ./lshw
nextline.net
  description: Desktop Computer
  width: 32 bits
  capabilities: smbios-2.3 dmi-2.3
  configuration: boot=normal chassis=desktop
*-core
  description: Motherboard
  product: 8GEM667
  vendor: Gigabyte Technology Co., Ltd.
  physical id: 0
  version: 1.x
*-firmware
  description: BIOS
  vendor: Award Software International, Inc.
  physical id: 0
  version: 6.00 PG (02/21/2003)
  size: 128KB
  capacity: 192KB
  capabilities: pci pnp apm upgrade shadowing cdboot bootselect socketed
rom edd int13floppy360 int13floppy1200 int13floppy720 int13floppy2880 int5prints
creen int9keyboard int14serial int17printer int10video acpi usb agp ls120boot zi
pboot
*-cpu:0
Ready          ssh2: AES-128 24, 22 24 Rows, 80 Cols Xterm
```

11. 위 처럼 ./lshw 라고 입력하면 정보를 한눈에 보기에 힘들게 출력이 된다.

여러 옵션들이 있는데 대표적인 몇 가지만 소개한다.

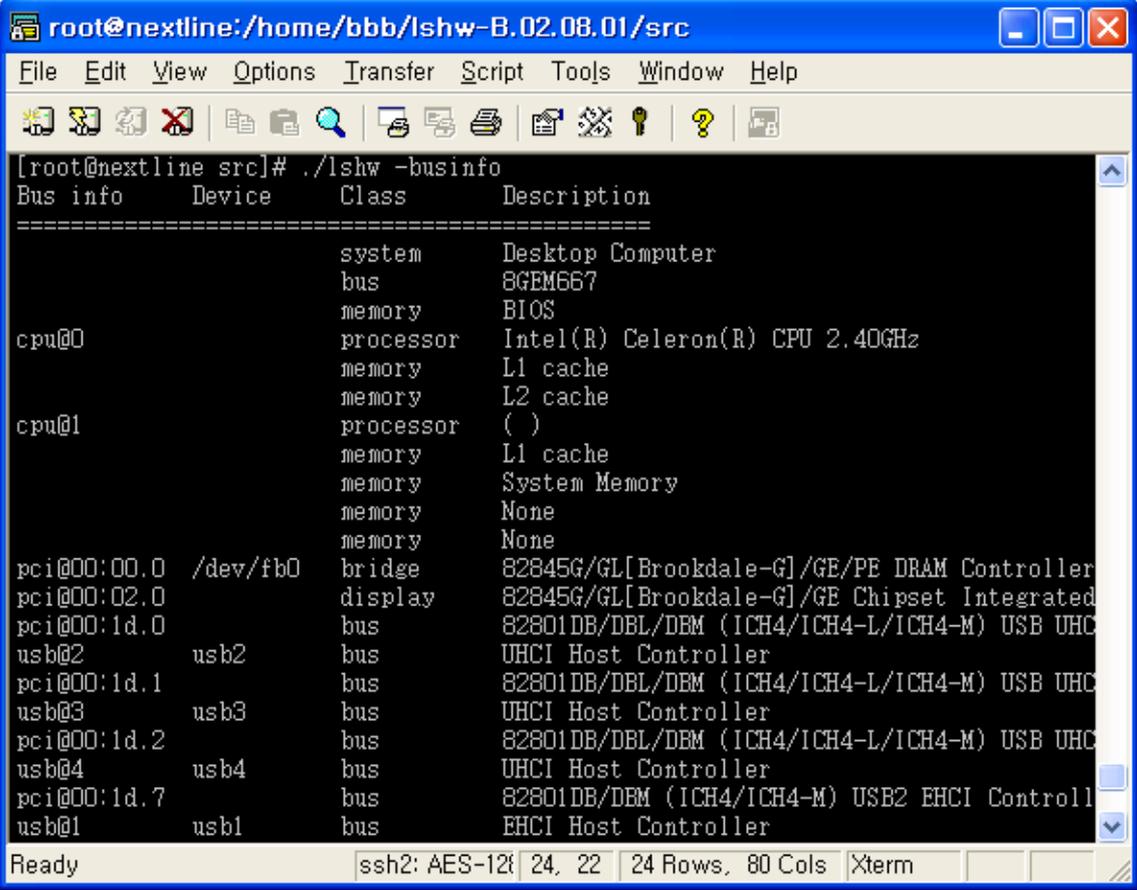
① 명령어 : ./lshw -short

BIOS, CPU, RAM, USB, HDD 및 파티션, BUS Controller, Main Board 정보등을 간략하게 확인할 수 있다.

```
[root@nextline src]# ./lshw -short
H/W path          Device          Class          Description
=====
/0                system          Desktop Computer
/0/0              bus             8GEM667
/0/0/0            memory          128KB BIOS
/0/4              processor       Intel(R) Celeron(R) CPU 2.40GHz
/0/4/9            memory          8KB L1 cache
/0/4/a            memory          128KB L2 cache
/0/5              processor       ( )
/0/5/0            memory          8KB L1 cache
/0/1a             memory          512MB System Memory
/0/1a/0           memory          256MB DIMM CMOS Window DRAM 266
/0/1a/1           memory          256MB DIMM CMOS Window DRAM 266
/0/d0000000       /dev/fb0        bridge         82845G/GL[Brookdale-G]/GE/PE DR
/0/d0000000/2     display         82845G/GL[Brookdale-G]/GE Chips
/0/d0000000/1d    bus             82801DB/DBL/DBM (ICH4/ICH4-L/IC
/0/d0000000/1d/1  usb2            bus            UHCI Host Controller
/0/d0000000/1d.1  bus             82801DB/DBL/DBM (ICH4/ICH4-L/IC
/0/d0000000/1d.1/1  usb3            bus            UHCI Host Controller
/0/d0000000/1d.2   bus             82801DB/DBL/DBM (ICH4/ICH4-L/IC
/0/d0000000/1d.2/1  usb4            bus            UHCI Host Controller
/0/d0000000/1d.7   bus             82801DB/DBM (ICH4/ICH4-M) USB2
/0/d0000000/1d.7/1  usb1            bus            EHCI Host Controller
```

② 명령어 : `./lshw -businfo`

bus 에 대한 자세한 정보를 확인할 수 있다.



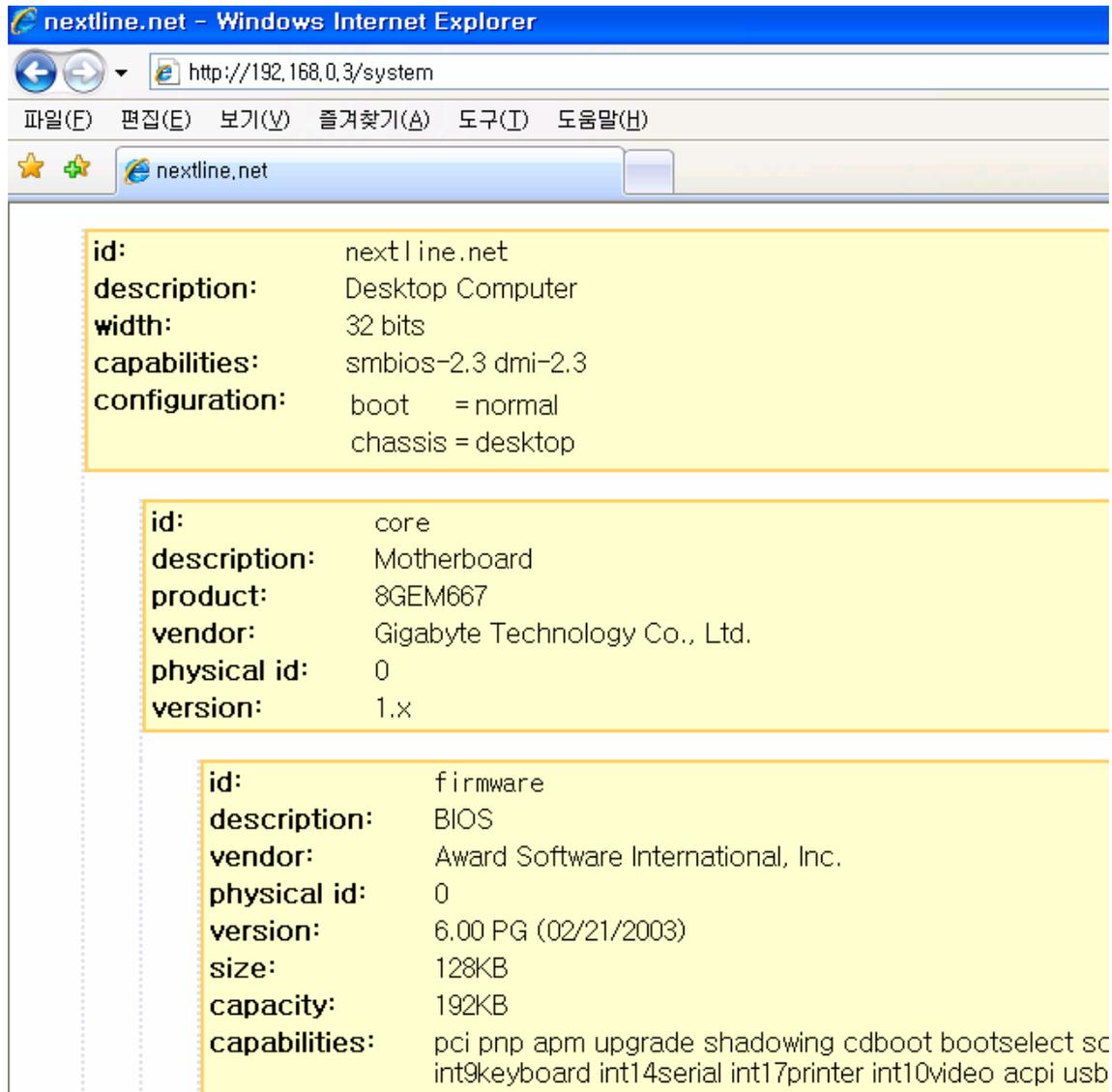
```
root@nextline:/home/bbb/lshw-B.02.08.01/src
File Edit View Options Transfer Script Tools Window Help
[root@nextline src]# ./lshw -businfo
Bus info      Device      Class      Description
=====
                system      Desktop Computer
                bus        8GEM667
                memory     BIOS
cpu@0         processor   Intel(R) Celeron(R) CPU 2.40GHz
                memory     L1 cache
                memory     L2 cache
cpu@1         processor   ( )
                memory     L1 cache
                memory     System Memory
                memory     None
                memory     None
pci@00:00.0   /dev/fb0    bridge     82845G/GL[Brookdale-G]/GE/PE DRAM Controller
pci@00:02.0   display     82845G/GL[Brookdale-G]/GE Chipset Integrated
pci@00:1d.0   bus         82801DB/DBL/DBM (ICH4/ICH4-L/ICH4-M) USB UHC
usb@2         usb2        bus        UHCI Host Controller
pci@00:1d.1   bus         82801DB/DBL/DBM (ICH4/ICH4-L/ICH4-M) USB UHC
usb@3         usb3        bus        UHCI Host Controller
pci@00:1d.2   bus         82801DB/DBL/DBM (ICH4/ICH4-L/ICH4-M) USB UHC
usb@4         usb4        bus        UHCI Host Controller
pci@00:1d.7   bus         82801DB/DBM (ICH4/ICH4-M) USB2 EHCI Controll
usb@1         usb1        bus        EHCI Host Controller
Ready          ssh2: AES-128 24, 22 24 Rows, 80 Cols Xterm
```

③ html 로만 들어서 쉽게 볼 수 있다.

명령어 : ./lshw -html > /웹페이지의 홈디렉터리/system.html

익스플로러에 도메인 or IP/만든 파일명

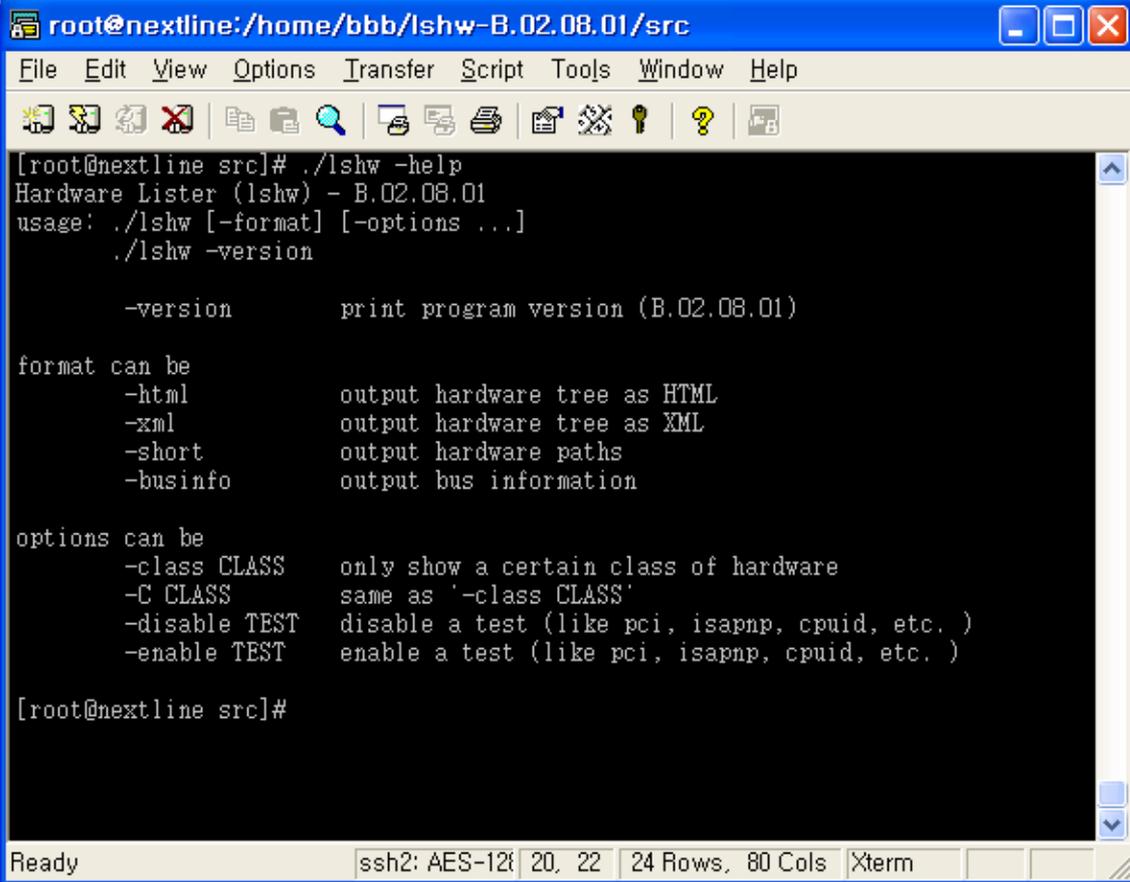
예) 192.168.0.3/system.html



④ 명령어 : `./lshw -help`

여러 옵션들에 대한 설명을 볼 수 있다.

여기서 옵션들을 확인하여 원하는 서버의 H/W 정보를 살펴 볼 수 있다.



```
root@nextline:/home/bbb/lshw-B.02.08.01/src
File Edit View Options Transfer Script Tools Window Help
[root@nextline src]# ./lshw -help
Hardware Lister (lshw) - B.02.08.01
usage: ./lshw [-format] [-options ...]
        ./lshw -version

        -version          print program version (B.02.08.01)

format can be
  -html                  output hardware tree as HTML
  -xml                   output hardware tree as XML
  -short                 output hardware paths
  -businfo               output bus information

options can be
  -class CLASS           only show a certain class of hardware
                        same as '-class CLASS'
  -C CLASS               same as '-class CLASS'
  -disable TEST          disable a test (like pci, isapnp, cpuid, etc. )
  -enable TEST           enable a test (like pci, isapnp, cpuid, etc. )

[root@nextline src]#
```

Ready ssh2: AES-128 20, 22 24 Rows, 80 Cols Xterm