



Cbrom.exe

Version 1.01

***BIOS ROM
Combination
Utility***

User's Guide

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BIOS ROM Combination Utility

This manual briefly discusses Cbrom, the Award BIOS ROM Combination utility, with instructions to guide you through combining third-party firmware with the Award BIOS in a file format for flash memory chips. Cbrom supports 1-MB and 2-MB flash memory file formats.

Using Cbrom

This manual describes Cbrom ver. 1.01. Later versions may contain additional enhancements.

Cbrom runs at a DOS prompt. To view the complete Cbrom usage, type **CBROM /?** at the DOS prompt and press Enter. A screen similar to this appears:

```
CBROM v1.01
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Syntax: A:\CBROM.EXE InputFile [/other 8000:0 RomFile|Release] [/vga ...]
  InputFile : System BIOS to be added with Option ROMs
    /ncr    : Add NCR(SYMBIOS) SCSI ROM to System BIOS
      NCRFile : NCR ROM file
    /aha    : Add AHA78xx SCSI ROM to System BIOS
      AHAFfile : AHA7850 ROM file
    /vga    : Add VGA BIOS ROM to System BIOS
      VGAFile  : VGA BIOS file name
    /other  : Add special combined ROM to System BIOS
      RomFile  : Special combine ROM file name
      Release  : Release VGA,NCR,AHA or other driver
      <<Examples>>
      A:\CBROM.EXE 2a4ib000.bin /vga VGA.BIN /ncr release
      A:\CBROM.EXE 2a4ib000.bin /other 8000:0 YYY.ROM
```

Cbrom Parameters

- NOTES:**
1. Examples in this manual use **2a59cxxx.bin** as the system BIOS FILE name, **ncr307.rom** as the file name of an NCR SCSI ROM BIOS version 3.07 for the NCR810/825, and **aha7850.rom** as the file name of an Adaptec SCSI ROM BIOS for the Adaptec 7850.

Keep in mind that these file names are **examples only**, to help you understand the process.

2. *Cbrom* commands are not case-sensitive. Upper- or lowercasing of command letters in this manual is for clarity only.

SCSI ROMs

/ncr For standard PCI motherboards, users can combine an NCR SCSI ROM, or Adaptec SCSI ROM and the system BIOS using these commands:

/aha

cbrom 2a59cxxx.bin /ncr ncr307.rom

cbrom 2a59cxxx.bin /aha aha7850.rom

After the program executes one of these commands, a confirmation message similar to these appears:

Combine ncr307.rom file to 2a59cxxx.bin...

Combine aha7850.rom file to 2a59cxxx.bin...

You may also combine more than one ROM, like this:

cbrom 2a59cxxx.bin /ncr ncr307.rom /aha aha7850.rom

After the program executes this command, all three confirmation messages shown above should appear.

Video ROMs

For an all-in-one PCI motherboard, you must combine the VGA BIOS with the system BIOS to also combine option ROMs such as an NCR SCSI BIOS with the system BIOS. Here is an example of combining the VGA BIOS and the NCR SCSI BIOS:

cbrom 2a59cxxx.bin /vga vga.bin /ncr ncr307.rom

After the program executes this command, confirmation messages similar to these appear:

Adding vga.bin 2a59cxxx.bin...46.1%

Combine ncr307.rom file to 2a59cxxx.bin

NOTE: *When adding uncompressed firmware, Cbrom shows the code compression ratio in the confirmation message. In the examples in this manual of adding uncompressed firmware (/vga vga.bin) the “adding” messages differ from the “combining” messages in the examples of adding compressed code, such as ncr ncr307.rom, /aha aha7850.rom. To determine if a ROM is compressed or not, use the debug command (e.g., search for the string marker -lh5).*

Other ROMs

You can combine other ROMs not listed above with the system BIOS. The command has this format:

cbrom 2a59cxxx.bin /other [Expand to RAM Address] [Rom File]

For example, this command adds a LAN card boot ROM:

cbrom 2a59cxxx.bin /other 8000:0 BOOTROM.bin

NOTE: *This function requires specially modified source code. Contact Award for information about obtaining source code customized for this feature.*

Removing a ROM

This command lets you remove any existing ROMs from the system BIOS. For example, you may remove the NCR SCSI BIOS and the Adaptec SCSI BIOS from the system BIOS with these commands:

cbrom 2a59cxxx.bin /ncr release

A confirmation message similar to this appears:

[NCR] driver is released

Then type:

cbrom 2a59cxxx.bin /aha release

A confirmation message similar to this appears:

[AHA] driver is released

Exceeding ROM Space

Sometimes when you attempt to add a third-party ROM to the current firmware in the chip, a message similar to this appears:

2a59cxxx.bin not enough ROM size for adding driver

This error message indicates that the attempted third-party ROM addition exceeds the size allotted for such ROMs in the BIOS binary file. Contact your Award sales representative about obtaining an updated BIOS code base to solve this problem.