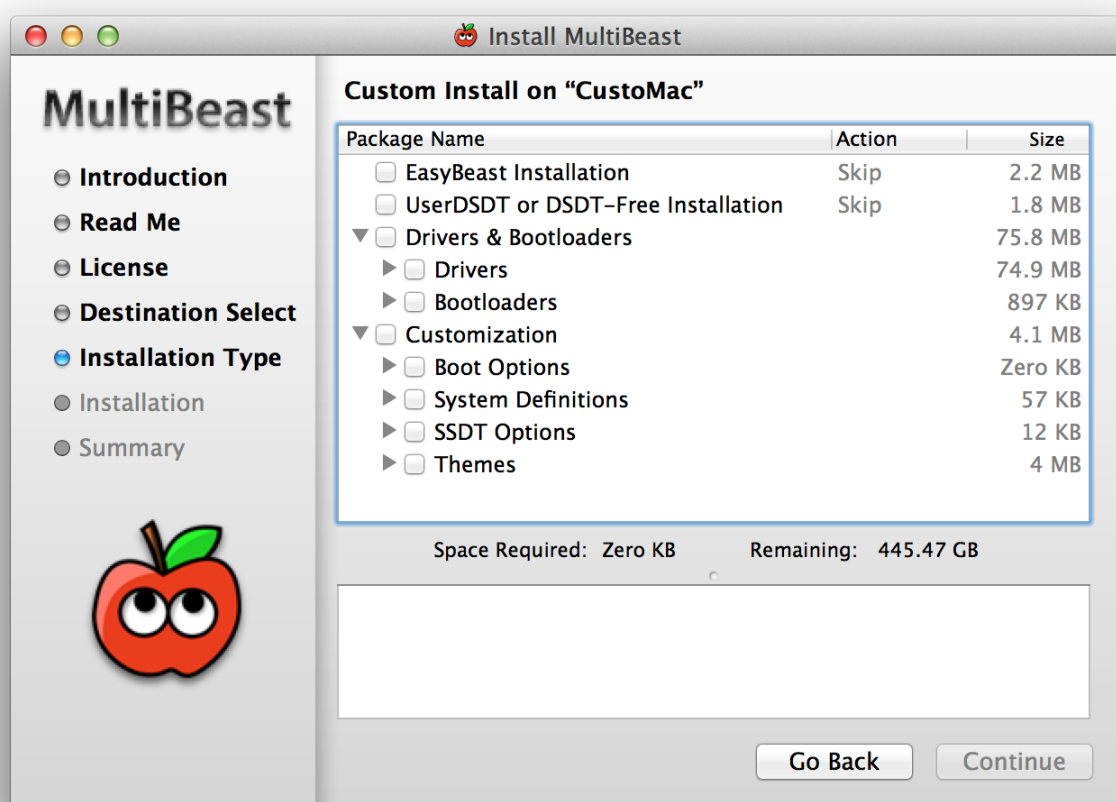




# MultiBeast

MultiBeast is an all-in-one post-installation tool designed to enable boot from a hard drive. It also features a collection of drivers and customization options.



This document will reference all of the features of MultiBeast, as described inside the installer itself. Please read all of the descriptions carefully. You may run MultiBeast as often as you like, but keep in mind that it will not uninstall items, just overwrite them.

**tonymacx86 & MacMan**  
[www.tonymacx86.com](http://www.tonymacx86.com)

**v5.5**



# UniBeast

## Mountain Lion 10.8 Retail Method

1. Purchase OS X Mountain Lion from the Mac App Store
2. Create a bootable USB drive using UniBeast
3. Boot from the UniBeast created drive & Install OS X Mountain Lion
4. Using the UniBeast created drive boot the new installation
5. Run MultiBeast

Thanks to the [Chameleon](#) team, [netkas](#), Project OS X, kozlek, toleda, Lnx2Mac, flAKed, cmf, Shailua, the candle, Henties, Rehabman, Zenith432 and hnak for their contributions that make this tool possible. Additional thanks to the tonymacx86 community for their testing and contributions to this work.

Special thanks to all of the tonymacx86.com mods.



# EasyBeast Installation

EasyBeast is a solution for Core 2, Core i or Xeon systems with no native CPU Power Management. It installs Chimera v2.2.0 r2248 to allow your system to boot from the hard drive. Installs FakeSMC.kext, ElliottForceLegacyRTC, EvOreboot.kext, JMicron36xATA.kext, AHCI\_3rdParty\_SATA.kext and NullCPUPowerManagement.kext in /System/Library/Extensions.

Installs a org.chameleon.Boot.plist with GraphicsEnabler=Yes, Apple Boot Screen, UseKernelCache=Yes and darkwake=0 kernel flag, MacPro3,1 smbios.plist with a unique serial number, Desktop power management hibernate mode and tonymacx86 black theme in /Extra. Patches /System/Library/Extensions/AppleRTC.kext to prevent CMOS resets. Does not include any Network or Sound drivers.



## UserDSDT or DSDT-Free Installation

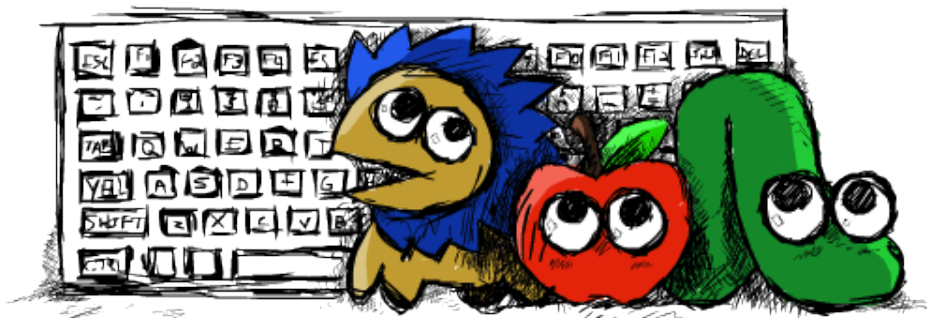
UserDSDT or DSDT-Free is a solution for those desktop systems who have a pre-edited DSDT on the desktop with an .aml extension or a motherboard that works without a DSDT. Installs your DSDT if found as DSDT.aml, a org.chameleon.Boot.plist with GraphicsEnabler=Yes, Apple Boot Screen, UseKernelCache=Yes, GenerateCStates=Yes, GeneratePStates=Yes and darkwake=0 kernel flag, MacPro3,1 smbios.plist with a unique serial number, Desktop power management hibernate mode and tonymacx86 black theme in /Extra. Installs FakeSMC.kext in /System/Library/Extensions. Installs Chimera v2.2.0 r2248 so the system will be bootable from the hard drive and ready for sleep with all hardware recognized in System Profiler. Patches /System/Library/Extensions/AppleRTC.kext to prevent CMOS resets. Does not include any Network or Sound drivers.

## Drivers & Bootloaders

Collection of drivers and bootloaders. If you're unsure, don't install anything in here. Advanced users may skip EasyBeast and UserDSDT to do an à la carte install using this collection.

### Drivers

Drivers provide additional functionality to the operating system. The drivers contained here provide either enhanced hardware support or are mandatory for non-DSDT based systems. Be sure to read the descriptions carefully before installation.





## Audio

Collection of kexts to enable the on-board Audio on your system. Make sure to read the descriptions carefully and only install the correct files for your audio codec.

### Realtek ALC8xx

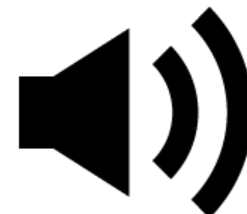
Enables audio for motherboards featuring the Realtek ALC888, ALC888b/887, ALC889, ALC889a/885, ALC892, or ALC898 high-definition audio codecs.

#### With DSDT

Replaces the current AppleHDA.kext with a patched 10.8.5 AppleHDA.kext to enable full functionality for the Realtek ALC888, ALC888b/887, ALC889, ALC889a/885 or ALC892 high-definition audio codecs. Edits by toleda. Patches /Extra/DSDT.aml to replace the appropriate layout-id with layout-id 1.

#### Without DSDT

Installs HDAEnabler1.kext and replaces the current AppleHDA.kext in /System/Library/Extensions with a patched 10.8.5 AppleHDA.kext to enable full functionality for the Realtek ALC888, ALC888b/887, ALC889, ALC889a/885 or ALC892 high-definition audio codecs. AppleHDA.kext edits by toleda.



### Optional 3 Port Audio Enabler

This optional HDAEnabler is for those motherboards that ONLY have 3 audio ports. Otherwise when using layout-id 1 you will see output ports that doesn't exist. Installs HDAEnabler2.kext in /System/Library/Extensions and removes any HDAEnabler found.

### Universal

Enables audio for most codecs. Uses VoodooHDA which is an open source audio driver for devices compliant with the Intel High Definition Audio (HDA) specification, based primarily on code from the FreeBSD hdac driver. It is intended as an Intel-only replacement for AppleHDA. Enables sound without DSDT patching on 32/64-bit systems. Installs VoodooHDA.kext in /System/Library/Extensions. Caution- this driver may be unstable, causing system boot errors.

### VoodooHDA 0.2.1 / 0.2.2

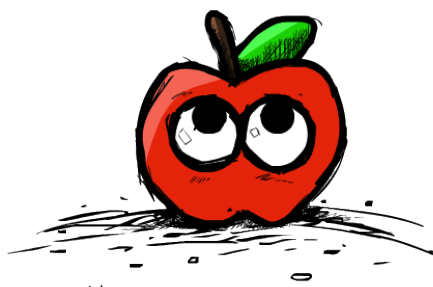
VoodooLabs branches.

### VoodooHDA 0.2.56 / 0.2.61 / 2.7.2 / 2.7.3 / 2.8.2 / 2.8.4

Project OS X branches. Includes VoodooHDA.prefPane installed in /System/Library/PreferencePanels.

### VoodooHDA VT2021 2.7.2

Project OS X branch version 2.7.2 edited by lazybon3 specifically for the VIA VT2021.





## Disk

Collection of kexts that provide enhanced hardware support for optical and disk drives.

### **IOAHCIBlockStorageInjector**

Makes drives appear as internal. Installs IOAHCIBlockStorageInjector.kext in /System/Library/Extensions. Not needed when using AHCI\_3rdParty\_SATA.kext.

### **3rd Party SATA**

Provides support for the ASMedia ASM1061, JMicron 36x (aka GSATA) and Marvell 88SE912 SATA controllers. All drives connected to these ports show on the desktop as Internal and can NOT be hot swapped. Installs AHCI\_3rdParty\_SATA.kext in /System/Library/Extensions.

### **3rd Party eSATA**

Provides support for the ASMedia ASM1061, JMicron 36x (aka GSATA) and Marvell 88SE912 SATA controllers. All drives connected to these ports show on the desktop as External and can be hot swapped. Installs AHCI\_3rdParty\_eSATA.kext in /System/Library/Extensions.

### **JMicron36x ATA**

MacMan's version of JMicronATA. Enables the IDE port on the JMicron 36x (aka GSATA) chips. Supports optical and hard drives. Installs JMicron36xATA.kext in /System/Library/Extensions.

### **10.8.3+ TRIM Patch**

This will patch /System/Library/Extensions/IOAHCIFamily.kext /Contents/PlugIns/IOAHCIBlockStorage.kext to add support for non-Apple SSD drives. Please note, do not install the TRIM Patch on Sandforce controller based SSDs- these already perform garbage collection in firmware.



## Graphics

Collection of patches to fully enable graphics capabilities.

### **Intel Graphics Patch for Mixed Systems**

Patches AppleIntelSNBGraphicsFB.kext and AppleIntelFramebufferCapri.kext to enable the use of the HD 3000 GPU on 7-Series motherboards and the HD 4000 GPU on 6-Series motherboards. Only use if you have a mixed Sandy Bridge / Ivy Bridge configuration.

### **NVIDIA Fermi OpenCL Patches**

Required to enable OpenCL on GF104 / GF 106 / GF108 GT430 thru GTX460 and GF114 / GF116 GT520 thru GTX560Ti cards.

#### **10.8.x OpenCL Patch**

This will patch the Apple released version of /System/Library/Extensions /GeForceGLDriver.bundle/Contents/MacOS/libclh.dylib using patch info from netkas.org.

#### **NVIDIA Retail 304.00.00f20 OpenCL Patch**

This will patch the NVIDIA Retail 304.00.00f20 version of /System/Library/Extensions /GeForceGLDriver.bundle/Contents/MacOS/libclh.dylib using patch info from forum member vczilla.

#### **>2GB OpenCL Patch**

Required to enable OpenCL on Fermi 4xx/5xx cards with 2GB or more of RAM.



## Miscellaneous

Collection of miscellaneous kexts that provide enhanced hardware support or mandatory for systems not using a DSDT. EasyBeast and UserDSDT already installs all of the mandatory kexts. Be sure to read the descriptions carefully before installation.

### **ElliottForceLegacyRTC.kext**

Prevents a CMOS reset on reboot without a DSDT. Installs ElliottForceLegacyRTC.kext in /System/Library/Extensions.

### **EvOreboot**

If you don't have a DSDT, shutdown and reboot do not work without this kext. Installs EvOreboot.kext in /System/Library/Extensions.

### **FakeSMC**

FakeSMC.kext is the only absolutely mandatory kext, and is required for booting the system. Original by netkas, new branch by kozlek. Installs FakeSMC.kext in /System/Library/Extensions/.

### **FakeSMC Plugins**

FakeSMC plugins from kozlek's branch to allow software access to hardware monitors.

#### **Motherboard Plugins**

Installs FakeSMC plugins ACPI Sensors.kext, CPUSensors.kext, GPUSensors.kext and LPCSensors.kext in /System/Library/Extensions/FakeSMC.kext/Contents/PlugIns. These plugins allow software access to motherboard hardware monitors.

#### **HWMonitor Application**

Hardware Monitoring application from kozlek's branch. Requires FakeSMC Motherboard Plugins. Installs /Applications/HWMonitor.app.

### **NullCPUPowerManagement**

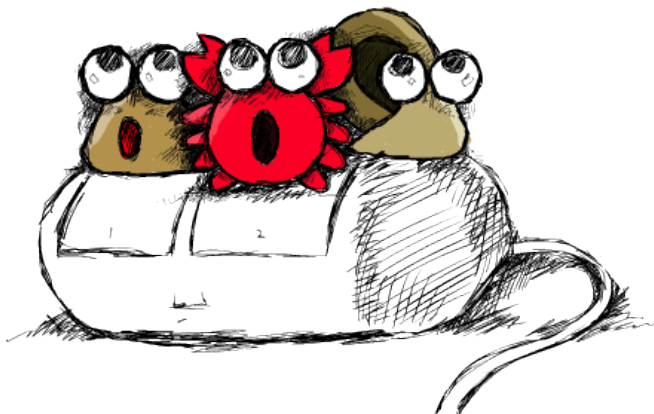
Disables AppleIntelCPUPowerManagement.kext to prevent kernel panic without proper HPET DSDT edits. Installs NullCPUPowerManagement.kext in /System/Library/Extensions.

### **PS/2 Keyboard/Mouse/Trackpad**

Enables non-USB keyboards, mice and trackpads. Installs AppleACPIPS2Nub.kext and ApplePS2Controller.kext in /System/Library/Extensions.

### **USB 3.0 - Universal**

Zenith432's GenericUSBXHCI.kext to enable USB 3.0. Installs GenericUSBXHCI.kext in /System/Library/Extensions/ and xhcdump in /usr/local/bin. Also enables USB 2.0 on LGA 1156 motherboards that aren't using a DSDT and don't enable Rate Matching Hub in BIOS.







## Network

### Atheros - Shailua's ALXEthernet

Enables AR8161 Gigabit Ethernet, AR8162 Fast Ethernet, AR8151 v1.0 Gigabit Ethernet, AR8151 v2.0 Gigabit Ethernet, AR8152 v2.0 Fast Ethernet, AR8152 v1.1 Fast Ethernet, AR8131 Gigabit Ethernet, AR8132 Fast Ethernet. Port of the Linux Atheros alx Ethernet driver by Shailua. Installs ALXEthernet.kext in /System/Library/Extensions/IONetworkingFamily.kext/Contents/PlugIns.

### Intel - Hnak's AppleIntelE1000e

Enables Intel 825xx ethernet controllers. hnak's port of the e1000.sourceforge.net Intel Wired Ethernet for Linux driver. Installs AppleIntelE1000e.kext in System/Library/Extensions/IONetworkingFamily.kext/Contents/PlugIns.

### Realtek - Lnx2Mac's RealtekRTL81xx

Enables Realtek 81xx Ethernet controllers by launching Lnx2Mac's Installer which installs RealtekRTL81xx.kext in /System/Library/Extensions. Recommended.

### Realtek – AppleRTL8169Ethernet

Official Realtek driver for 81xx Ethernet controllers. Installs AppleRTL8169Ethernet.kext in /System/Library/Extensions/IONetworkingFamily.kext/Contents/PlugIns.

## System

### AppleACPIPlatform Rollback

#### 10.6.8 Rollback for ASUS X58 Systems

Replaces the current AppleACPIPlatform.kext in /System/Library/Extensions with an patched 10.6.8 AppleACPIPlatform.kext by ErmaC for ASUS X58 motherboards running OS X Lion 10.7.4 or later.

#### 10.8.1 Rollback for ASUS X58 Systems

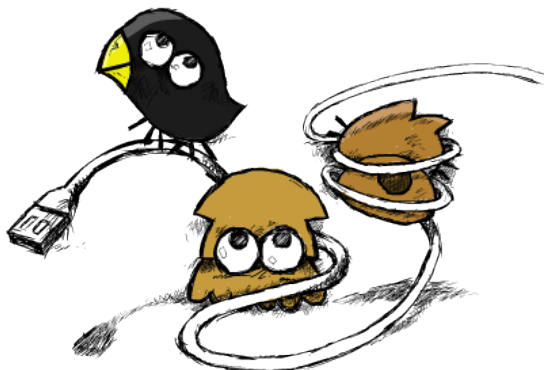
Replaces the current AppleACPIPlatform.kext in /System/Library/Extensions with the 10.8.1 version. Required on some non-Gigabyte motherboards.

### Patched AppleIntelCPUPowerManagement

Operating system version-specific replacement /System/Library/Extensions/AppleIntelCPUPowerManagement.kext for use on UEFI motherboards with locked MSRs. It removes the requirement of NullCPUPowerManagement.kext to prevent kernel panic at boot which it will delete as part of the install. Patched using AICPMPatch by el coniglio.

### AppleRTC Patch for CMOS Reset

Patches /System/Library/Extensions/AppleRTC.kext/ to prevent CMOS resets.





## Bootloaders

Install to make your drive bootable. Not necessary for a EasyBeast or UserDSDT install. Does not include any themes.

### **Chimera v2.2.0 r2248**

MacMan's branch of Chameleon 2.2.

### **Chimera v2.0.1 r2109**

MacMan's branch of Chameleon 2.1.



### **Chimera v1.11.1 r1394**

MacMan's branch of Chameleon 2.0.

## Customization

A collection of boot time configuration files and system customization options.

## Boot Options

Contains scripts to edit /Extra/org.chameleon.Boot.plist files to enable/disable special boot loader features at startup.

### **Generate CPU States**

Adds GenerateCStates=Yes and GeneratePStates=Yes to /Extra/org.chameleon.Boot.plist

### **GraphicsEnabler=No**

Changes GraphicsEnabler=Yes to GraphicsEnabler=No in /Extra/org.chameleon.Boot.plist.

### **Instant Menu**

Adds Instant Menu=Yes or replaces Timeout=n in /Extra/org.chameleon.Boot.plist

### **PCI Root ID Fix**

Adds PCIRootUID=1 to Kernel Flags in /Extra/org.chameleon.Boot.plist

### **Use KernelCache**

Adds UseKernelCache=Yes to /Extra/org.chameleon.Boot.plist. Not needed when using EasyBeast or UserDSDT.

### **Verbose Boot**

Adds -v to Kernel Flags in /Extra/org.chameleon.Boot.plist.

### **1080p Display**

Adds Graphics Mode = "1920x1080x32" or changes Graphics Mode to "1920x1080x32" in /Extra/org.chameleon.Boot.plist.

### **Power Management Hibernation Mode**

Click the triangle to expand and then choose the appropriate power management hibernate mode based on system type. Choose only one.

#### **Desktop**

Configures the system for Desktop power management hibernate mode and deletes /var/vm/sleepimage to reclaim disk space.

#### **Laptop**

Configures the system for Laptop power management hibernate mode







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## System Definitions

Contains pre-edited smbios.plist files that will identify your system as a specific Mac model. MacPro3,1 is installed by default by EasyBeast, and UserDSDT installations, and is the general recommendation.

### iMac

These pre-edited smbios.plist files will identify your system as an iMac.

### Mac Pro

These pre-edited smbios.plist files will identify your system as a Mac Pro.

### MacBook Pro

These pre-edited smbios.plist files will identify your system as a MacBook Pro.

### Mac mini

These pre-edited smbios.plist files will identify your system as a Mac mini.

## SSDT Options

Optimized versions of Sandy Bridge Core i CPU specific SSDTs. Each CPU type supports a specific maximum Turbo Boot clock rate. Installs SSDT.aml in /Extra.

### Sandy Bridge Core i5

Optimized SSDT supporting Sandy Bridge Core i5 CPUs with a maximum Turbo Boost clock of 3.8 GHz. Installs SSDT.aml in /Extra.

### Sandy Bridge Core i7

Optimized SSDT supporting Sandy Bridge Core i7 CPUs with a maximum Turbo Boost clock of 3.9 GHz. Installs SSDT.aml in /Extra.

### Sandy Bridge Core i5/i7 Overclocked

Optimized SSDT supporting Sandy Bridge Core i5 or Core i7 CPUs overclocked up to 4.2 Ghz. Installs SSDT.aml in /Extra.

## Themes

Themes for bootloader GUI customization. Installed in /Extra.

### Chameleon Default

Default Chameleon theme

### tonymacx86 Remixed

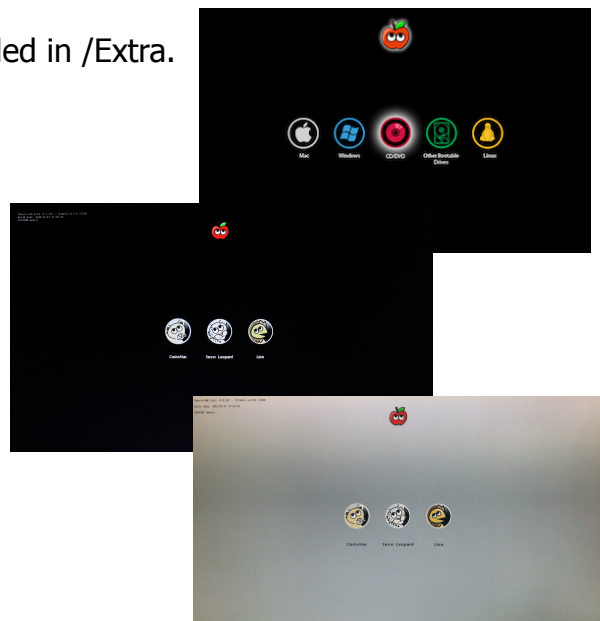
Alternate tonymacx86 theme by Complx

### tonymacx86 Black

Default tonymacx86 theme by Adamsmasher

### tonymacx86 White

Alternate tonymacx86 theme by Adamsmasher





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