# ENJOY !! The best operatingsystem serving the planet !! Mac OSX Snowleopard !



Full Mac OSX Snowleopard 10.6.2 install for bootable portable 8GB (USB) disks for Generic Intel PC's [MacOSX Install]



This image comes with absolutely no warranty !! You are using this entirely at your own risk !! This image is designed to run Mac OSX SnowLeopard on generic Intel PC's... And while I have done everything reasonable to ensure that it functions as intended, I cannot test it in every situation. If this causes something bad to happen to your Mac or PC... Don't blame me !! but yourself .....

#### *iPortable Snow x86 optimized Mac OSX 10.6.2 Snowleopard CopyCatX MBR image for generic Intel PC's (32/64bit) and (SSE2/SSE3) or higher..*

Based on previous and never released iPortable 10.5.8 and Hazard's patched Snowleopard 10.6.1 10.6.2 and Snowleopard Server 10.6.2 distro, Empire EFI and MyHack releases... Re-ripped, tweaked and optimized by ProtocolX to make it almost booting on any Intel chipset PC! Powered by Chameleon 2.0 RC4 r684 bootloader



AMD not yet supported.. Intel only [SSE2/SSE3] or higher.. English and Dutch only !! All other system languages and left over PPC architectures are removed !! You can always re-install more languages very easy..

#### - NO APPLE SOFTWARE IS REMOVED IN THIS EDITION!!

This is a full Mac OSX Snowleopard 10.6.2 installation! No account is created, registration screen will be loaded at first boot. (Only removed big file is Alex's voice)

#### -ALL VIDEOKEXTS ARE REMOVED FROM SYSTEM!!

To prevent booting problems on serveral systems. They are zipped and moved to: Hackintosh tools/Snow Drivers/Video Drivers/Removed Video Kexts... Use Kexthelper B7 to re-install your videokexts before trying enabling graphics.

#### - DEFAULT BOOT MODE IS 32BIT!!

The default bootmode of this iPortable Snow is 32bits. So it can run even on an old Intel SSE2 processor. (SSE3 is recommended..) But no 64bit code is removed offcourse... You always can still use this Snowleopard in full 64bits mode.

To enable 64bit in Snowleopard

Type in bootloader:

arch=x86\_64 (Boot in 32/64bits mode) or -force64 (Force booting in 64bit)



### **INSTALL TO USB STICK** (one physical harddrive install)

Put your > 8GB USB pendrive or select other (USB) harddrive in your computer with MacOSX 10.3 to 10.6 installed (CopyCatX is universal). Start Diskutility in Utilities folder.. You're whole harddrive will be erased!

For USB stick: Partition drive to 1 partition: 'Mac OS Extended (journaled)' Make sure that you selected 'Master Boot Record' by options (4) !!

120.03 GB FUJITSU MHW2120BH Mac OSX Leopard	Firs Aid Erase Partition RAID Restore
Snow Leopard 10.6	Current Volume Information Name: Untitled 1
₫ iPortable_Snow_x86 ← HL-DT-ST DVDRW GWA4080MA	2 Partitions 3 Partitions 4 Partitions 5 Partitions 6 Partitions 7 Partitions 7 Partitions 6 Partitions 7 Partitions
	8 Partitions         9 Partitions         10 Partitions         11 Partitions         11 Partitions
	12 Partitions     A new partition will be created.       13 Partitions     Size: 8.05 GB       14 Partitions     15 Partitions       16 Partitions     16 Partitions
	6
	+ - 4 Options Revert Apply
Disk Description : Corsair UFD Connection Bus : USB Connection Type : External USB Serial Number : AA4450000	Media Total Capacity: 8.05 GB (8,053,063,680 Bytes) Write Status : Read/Write S.M.A.R.T. Status : Not Supported 0000001 Partition Map Scheme : Master Boot Record
Disk Description: Corsair UFD Connection Bus: USB Connection Type: External USB Serial Number: AA4450000	Hedia       Total Capacity: 8.05 GB (8,053,063,680 Bytes)         Write Status: Read/Write       S.M.A.R.T. Status : Not Supported         0000001       Partition Map Scheme : Master Boot Record         Choose a partition scheme appropriate for the way you will use this disk:       GUID Partition Table
Disk Description: Corsair UFD Connection Bus: USB Connection Type: External USB Serial Number: AA4450000	+
Disk Description: Corsair UFD Connection Bus: USB Connection Type: External USB Serial Number: AA4450000	+ • • • • • • • • • • • • • • • • • • •
Disk Description: Corsair UFD Connection Bus: USB Connection Type: External USB Serial Number: AA4450000	+ • • • • • • • • • • • • • • • • • • •

5. Select 'Master Boot Record' and click 'ok' and 'apply' (6)..You're USB stick is ready for installing iPortable Snow now.Go to CopyCatX install instructions on page 5 to finish installation..



## **INSTALL TO PARTITION** (Existing harddrive partition install)

1. Select your already existing partition on any harddrive attached to your computer.. 2. Select 'erase' and click on 'erase' as shown in step 3



Your partition should be ready now to install iPortable Snow x86. Go to CopyCatx installation instructions on next page to finish installation.

Note: Offcourse you can also select any other partition on an external or internal harddrive attached on your computer (Hackintosh).

WARNING: <u>DO NOT</u> install iPortable Bootfix on your<u>internal rootdisk</u> on a real Apple computer!! You may get a kernel panic right away when booting!! And a potential risk that your Mac will not be able to boot anymore.. So watch out what you're doing...



### CopyCatX iPortable Snow x86 installation:

- 1. Launch CopyCatX included in iPortable Snow installer.
- 2. Select harddrive or partition you just prepared with Diskutility



4. Select 'Restore' as shown in picture on next page 6.



000	CopyCatX	
	Backup/Restore Untitled 1 /dev/disk2s1 Total Size 7.50 GB 0% Corsair UFD	s a volume backup a volume to a file or to restore the contents of revious backup. the choice of which action you the a new window.
SubRoss Welcome CopyCatX is your best solution de There are three modes of or selected from the buttons or Please take the time to read at have selected the right devic proc Documentation for this prog clicking on the "Show H Online support is availa support@su	Image: Second system       Image: Second system <td< th=""><th>IB       Image: Contract of the second second</th></td<>	IB       Image: Contract of the second
Show I	Show Help Clos Click here to start this Recover FUJITSU MH Copyright 2006 SubRosaSoft.com Inc, All rights reserved	procedure.       press the "Recover" button.       W2120BH 111.79 GB
5.00 J		

5. Click on 'OK' to start iPortable installing procedure.

Now you will be asked to select the image to restore, you have to select the iPortable\_Snow\_x86 image included in iPortable Snow Installer.

Mount the iPortable Snow installer .dmg. (if not already mounted) Select the iPortable\_Snow\_x86.volarchive as shown in picture on page 7





- 1. Select mounted iPortable .dmg image in Finder. The CopyCatX volarchive will be visible as shown in picture above.
- 2. Select the iPortable\_Snow\_x86 image. (other files just can't be selected)
  - 3. Click 'open' to continue iPortable cloning procedure.





It should be bootable now in almost any computer with Intel processor. Try to set (USB) stick or harddrive to 1st harddrive in BIOS or just select it in your BIOS startmenu.

If iPortable won't boot.. (Blinking cursor or MBR errors) Install iPortable Bootfix on destination disk to make it bootable!! You may check also your bootflag with G-Parted live CD!!



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You should never see this! But sometimes when destination blocks are less then from the source where the image is taken from, you can have this serious error!



Diskutility can't repair the disk in this situation.. First be sure that the cloning procedure is finished.. Sometimes this error can occure before the cloning proces is finished. Sometimes you've got to 'force quit' CopyCatX. Look in iPortable First Aid package.

With rebuilding volume with <u>'DiskWarrior'</u> you can fix this!!



Select your iPortable harddisk and click 'rebuild' after a while you have to click 'replace'.

After rebuilding your volume you may have to install iPortable bootfix on destination disk. Otherwise it may not boot anymore! In case it still doesn't boot check bootflag with G-Parted LiveCD!

You may have to install iPortable Boot Fix on destination disk after rebuilding volume with Diskwarrior in case it won't boot anymore!!



# Set bootflag with G-parted editor

Download the latest release of G-Parted liveCD (or other Linux distro where G-parted editor is available. gparted-live-0.5.1-1.iso is currently the latest stable release. Burn .iso image to CD or obtain the USB installer to run from USB pendrive or disk. Put in your iPortable\_Snow\_x86 disk that won't boot and start G-Parted LiveCD.



Select your iPortable disk here:

Select your iPortable partition here. Click right mouse button and select 'Manage Flags' as shown in picture. Set 'bootflag'. And reboot your computer. Your iPortable partition should be bootable now. Otherwise you may have to choose 'device' in Gparted and 'set disk label' to repartition your whole drive to msdos label. Start the cloning proces again...

#### **Troubleshoot first boot iPortable Snow x86**

Put in your (USB) pendrive or other harddrive like eSATA external device and check your BIOS to setup your iPortable disk as 1st boot device or check shortkey for BIOS bootmenu and select your (USB) pendrive or other harddrive with iPortable installed. If you might get a EBIOS read error: Device timeout you have to wait 1 minute or so..



or -v -f For Intel Dual Core processor you can type: mach\_kernel -v



Darwin/x86 boot v5.0.132 - Chameleon v2.0-RC4 r Build date: 2009-12-15 09:32:16 658MB memory



You can type any kernel as shown in picture. Some Intel® i5 core PC's need: legacy\_kernel cpuratio=25 or cpuratio=20 as bootflag. Some will work with mach\_kernel too..

Some Intel® i7 core processors also need different bootflags to boot. Like: busratio=20 fsb=133 cpus=1 -x -v or: busratio=20 cpus=1 -x -t -v or just: cpus=1 busratio=20 -v Recommended kernel for i7 core is: mach\_kernel

You can try different kernels but if you can run vanillakernel (mach\_kernel) that should be the best option.

Check picture on next page for example bootflag for i7 core PC's







Sometimes you have to rebuild your mkext for proper boot. Type -v -f (-f force rebuilding extensions cache)

Boot in single usermode and safemode use: -x -s (recommended for troubleshoot)

Some other system with 4GB or more RAM installed need bootflag: maxmem=4087 or just maxmem=2048

Some need to skip registration because it crashes on registration screen or just get a bluescreen with mouse. Just type: -s -v You should get a prompt now where you can type.

Type: /sbin/fsck -fy <enter> /sbin/mount -uw / <enter> touch /private/var/db/.AppleSetupDone <enter>



You also can repair kextpermissions with -s (single user mode)

Again boot with -s -v

#### Type:

sudo -s

rm -Rf "/Volumes/iPortable\_Snow\_x86/System/Library/ Extensions.mkext" <enter>

chmod -R 755 "/Volumes/iPortable\_Snow\_x86/System/Library/ Extensions" <enter>

chown -R root:wheel "/Volumes/iPortable\_Snow\_x86/System/ Library/Extensions" <enter>

touch "/Volumes/iPortable\_Snow\_x86/System/Library/Extensions/" <enter>

kextcache -v -l -t -m "/Volumes/iPortable\_Snow\_x86/System/ Library/Extensions.mkext" "/Volumes/iPortable\_Snow\_x86/System/ Library/Extensions" <enter>

kextcache -v 1 -t -m "/Volumes/iPortable\_Snow\_x86/System/ Library/Caches/com.apple.kext.caches/Startup/Extensions.mkext" "/ Volumes/iPortable\_Snow\_x86/System/Library/Extensions/" <enter>

If you get a bluescreen with only a mouse cursor you might also use bootflag: platform=X86PC -v or with PciRoot=0 or PciRoot=1

There are hundreds combinations of bootflags that might do the trick, but you should it find it out your self... Every PC has it own settings and such. On next page a couple of bootflags with explanation



#### more options for Darwin's promt:

- \* -f This forces rebuilding of extensions cache
- \* -s Boots into a single user command line mode
- \* -v Verbose, boots in text mode showing all debug info and errors
- \* -x Boots into safe mode
- \* -F Ignore configurationfile
- \* rd=disk0s1 Tells Darwin to boot from a certain partition specified in BSD format. (Disk 0 specifies first HDD and s1 specifies first partition as 0 is the MBR.)
- \* cpus=1 Tells the system how many CPUs or cores to use, useful for Core Duo users.
- \* platform=X86PC Can be used if problems with normal booting, ACPI is another option here
- \* -legacy Boots OS X in 32bit mode rather than 64bit if 64bit is used due to a 64bit processor
- \* idehalt=0 May stop stuttering
- \* "Graphics Mode"="WIDTHxHEIGHTxDEPTH" (e.g. "1024x768x32") For VESA 3.0 graphics, you may append a refresh rate after an "@" character (e.g. "1280x1024x32@75")

You have may have to put extra extensions in 'extra' folder on root. These will be loaded at boot with chameleon bootloader. check google for kexts. <u>www.kexts.com</u> may have the right kexts for you...

> Chameleon bootloader has it own bootflags also. Check <u>http://chameleon.osx86.hu</u>/ for more info.

On next page a few quick steps to do at first login... This will optimize your iPortable installation.



# <u>First login iPortable Snow x86</u>

🗯 Finder File Edit View	Go Window Help	49 🔺 🖷	🕪 Wed 5:08:03 🔍
	iPortable_Snow_x86 □ □ □ □ □ 《 Q		iPortable_Snow_x86 8.05 GB, 1.64 GB free
▼ DEVICES	Applications Users		OSx86 Leopard 50.43 GB, 11.32 GB free
GSX86 10.5.7	Extra		22.57 GB, 5.07 GB free Mac Storage
MacBook Pro 15 van P	Hackintosh tools		247.07 GB, 5.75 GB free
Applications	Sy tem		
Tadau	1 of 6 selected, 1.64 GB available		
+			

Go to Hackintosh folder on rootdisk. This is your first login screen. It's Mac OSX Snowleopard 10.6.2! You first gonna make your own dstd.aml file. This can solve serveral hardware related problems.

Launch DSTD patcher GUI. As shown on next page. Select your iPortable disk as target disk and click: 'Run DSDT patcher' It should be generated on your root partition.





You can also put your generated dstd.aml in your 'extra' folder also located on root of iPortable.

Next thing to do is to repair your kext permissions. If you are not able to login with iPortable you may have succes if you repair permissions with 'pfix' find shortcut in hackintosh tools folder on root.

Just run 'pfix' script and drag and drop your iPortable disk from desktop from your mac or hack into the terminal. Hit enter and type your password.

Next page will show you the last step to do when you're logged in Mac OSX already.





Now run 'Kext Utility' to repair kext permissions of your Snowleopard installation, this can be very important to maintain a stable OSX.

This should be done every time when you're installing kexts (drivers). Kexthelper B7 might also help you with installing kexts. When 'Kext Utility' is finished you may reboot...

To enable Graphics you must install videokexts they are located: Hackintosh tools/Snow Drivers/Video drivers. Just run Kexthelper, drag all videokexts into Kexthelper window. enter password. Remove framebufferdisabler.kext from 'extensions' folder in 'extra' folder. Enjoy iPortable Snow!!



# **Included kernels for switching and testing:**

chocolate_kernel	10.0.0 legacy kernel supports SSE2 and SSE3. Do not use on Intel 2 core duo and i7 core processors! Supports a lot of different configurations!
anv_kernel	10.2.0 kernel for Intel and AMD 10.2.0 SSE2/SSE3. SSE2 users might have problem with some applications. No full on the fly cpuid patcher yet. It's still in beta stage. Use Chameleon RC3 PCEFI 10.5 (recomended). To boot in 64-bit mode use -force64
atom_kernel	Rebuilded 10.2.0 kernel for Intel® Atom processors. Since update 10.6.2 these processors aren't supported anymore with mach_kernel. A lot of netbooks uses this processor!
legacy_kernel	New legacy 10.2.0 kernel made from sources of Voodoo XNU. This kernel includes emulation SEE2/SEE3 for old processors like Pentium 4's. It is also compatible with AMD processors. Don't use this kernels on i7 processors or you will get kernel panic. Try vanilla (mach_kernel) instead. Some i5 core processors will work with this kernel with custom bootflag.
blackknight_kernel	10.2.0 kernel AnV/Qoopz/Voodoo-based with corrected Phenom FSB detection. No full on the fly cpuid patcher yet. Works with maximum overclocking on Phenom CPU-s. Chameleon RC3 PCEFI 10.5 (recomended). To boot in 64-bit mode use -force64. This kernel might also solve 100% CPU use with Intel SSE2 systems.
mach_kernel	Orginal 'vanilla' kernel 10.2.0 kernel from Apple. This is an unmodified kernel that ships with the Mac OSX Snowleopard 10.6.2 update. This doesn't work anymore with Atom processors. This only works with a SSSE3 processor or higher!! Intel2core Duo, i7 core processors can run this kernel





#### **Included 3rd party applications**

- EZ 7z (Very good file compressor) - KCNScrew (january 2010) (a lot of information of applications and serials) (Very good CD/DVD burner without the need of CI/QE) - LiquidCD - Property List Editor (Plist editor from Apple) (Handy HTML editor) - Smultron - Stuffit Expander (Extract a lot of different compressed archives) (Lightweight very fine torrent client) - Transmission - UnRARx (Extracts the populair .RAR archives, also parts..) (Can compress and extract zip archives) - BetterZip



### **Included 3rd party Utilities**

- Appcleaner
- Carbon Copy Cloner
- CopyCatX
- Diskwarrior 4.2
- Clonetools H1

(De-install applications in a proper way, removes also clutter) (Free and fine cloner for backup and rescue tasks) (Best solution for making exact copy's of volumes)

(Fixes corrupted harddisks)

Also a cloner, this cloner can clone a live running OSX!!, so you can clone a live and running iPortable to your internal harddisk!!!





#### **Included OSx86 Hackintosh Utiltities**

32-64-bit Kernel Startup Mode Selector AMD Patcher (leo) **About This Mac Modifier** AnyToISO 2.5.1 - Keygen **AnyToISO** AppleHDAPatcherv1.20 **BootCDMaker Bootloaders** CPU-X CPU-i **ChangeVisibility** Checksum Custom DVD SlimbuildGUI-1 **DPCIManager DSDT Patcher GUI** DSDTSE **Disk Order DisplayUtility EFI** partition Mounter EFIStudio 1.1 **EFiXUpdater EvOToolsX** (snow) **Extensions-Repair Gfx Utilities HexEditors Hide Folders INSTAHackintosh** (beta) **IORegistryExplorer IPObserver** Kernel64Enabler Kext Helper b7 **Kext Utility** KextSpy **KextStatInfo KeyViewer** Lizard MKextTool-1.0

**MSR** Tools **Man Viewer** Marvin's AMD Utility v.25 **NVCAP** Maker 1.4 NetbookBootMaker 0.8.3 NetbookInstaller 0.8.3 RC4 **Network Diagnostics OSx86 Update** OSx86tools **PPCKextsRemover PPF-O-Matic PPFMaster** Pacifist **PackageMaker PartitionsList PlistEdit Pro Pref Setter Preferential Treatment Property List Editor 2.2 Quartz Debug** QuartzSimple **Repair & Set Permissions scripts RepairKexts Permission SMART Utility SpindownHD** Super\_PI SwitchResX Control **USB** Prober **UUIDGenerator Universal Checker Universal OSx86 Installer** Winclone freeMem **iASLMe iPatch** mCoreTest64 mkextMaker unHiddenIT

BIG THX to: Kalyway, Maxxuss, Dune , Dense , modbin, jas , Joe75 , etorix , netkas , rp4k , tehmachacker ,zef , kabyl , magicone, kaitek jacquesdupontd , lastexile , chiva4ry , Uphuck, rofl , unisex ,asap18 ,iAtkos, XyZ, Crazor, fassl, iNDi, Turbo, mackerintel, mecurysquad, Munky, sckevyn, Zef, cosmo1t, dfe, , XxX, PCWiz team, VoodooTeam, Prasys, StageXNU, Auqamac, Steven Lin yourself and all the others ! U know who you are!

### Think of this as of a demo version and as of a free marketing campaign. Therefore, let it be...

# ENJOY ! the best operatingsystem serving the planet !....if you love MacOSX think to buy it !!!

Apple produces amazing software and amazing computers. Do yourself a favour and support them as we do !!!

This live iPortable Snow should only be used to preview Mac OS X Leopard. If you really like Mac OS X Leopard and you want to use it.....

you maybe should get a real Mac. If buying a real Mac is too much, you can, at least, buy a license for Mac OS X Leopard...

last update 03-feb-2010 by Protocol-X

