[Choosing the right installation medium](https://wiki.gentoo.org/wiki/Handbook:AMD64/Installation/Media)

install-amd64-minimal

Create bootable USB or use CD

|  |  |  |
| --- | --- | --- |
| **Partition** | **Description** |  |
| /dev/sda1 | BIOS boot partition | 256M |
| /dev/sda2 | Boot partition (UEFI) | 256M |
| /dev/sda3 | Swap partition | 8G (mem size) |
| /dev/sda4 | Root partition | 30G |

# **Preparations**

## Information Video-Card

02:00.0 VGA compatible controller: Advanced Micro Devices, Inc. [AMD/ATI] Cayman XT [Radeon HD 6970]

02:00.1 Audio device: Advanced Micro Devices, Inc. [AMD/ATI] Cayman/Antilles HDMI Audio [Radeon HD 6930/6950/6970/6990]

|  |  |  |
| --- | --- | --- |
| CAYMAN | HD6950, HD6970, HD6990, HD69xxM | radeon/CAYMAN\_mc.bin radeon/CAYMAN\_me.bin radeon/CAYMAN\_pfp.bin radeon/CAYMAN\_rlc.bin radeon/CAYMAN\_smc.bin radeon/SUMO\_uvd.bin |

**Kenel settings:**

<https://wiki.gentoo.org/wiki/Radeon#Hardware_detection>

**root #**emerge --ask sys-kernel/linux-firmware

**root #**ls /lib/firmware/

**Comfigure KERNEL**

Device Drivers ---> Generic Driver Options ---> -\*- Userspace firmware loading support [\*] Include in-kernel firmware blobs in kernel binary (radeon/<YOUR-MODEL>.bin) (/lib/firmware) Firmware blobs root directory

For kernels beginning with 4.18:

KERNEL **Enable support for Linux firmware**

Device Drivers ---> Generic Driver Options ---> Firmware loader ---> -\*- Firmware loading facility (radeon/<YOUR-MODEL>.bin) Build named firmware blobs into the kernel binary (/lib/firmware) Firmware blobs root directory

FILE **/etc/portage/make.conf**

VIDEO\_CARDS="radeon"

USE-FLAGS

glamor

Starting Installation Process

**root #**mount /dev/sda4 /mnt/gentoo

## Installing a stage tarball

**root #**ntpd -q -g

**root #**cd /mnt/gentoo

**root #**links <https://www.gentoo.org/downloads/mirrors/>

**root #**tar xpvf stage3-\*.tar.bz2 --xattrs-include='\*.\*' --numeric-owner

**root #**nano -w /mnt/gentoo/etc/portage/make.conf

Add lines

* # These settings were set by the catalyst build script that automatically
* # built this stage.
* # Please consult /usr/share/portage/config/make.conf.example for a more
* # detailed example.
* CHOST="x86\_64-pc-linux-gnu"
* COMMON\_FLAGS= "-march=sandybridge -O2 -pipe"
* # C compiler flags
* CFLAGS=""
* CXXFLAGS=""
* # fortran compiler flags
* FCFLAGS=""
* FFLAGS=""
* # NOTE: This stage was built with the bindist Use flag enabled
* PORTDIR="/var/db/repos/gentoo"
* DISTDIR="/var/cache/distfiles"
* PKGDIR="/var/cache/binpkgs"
* # This sets the language of build output to English.
* # Please keep this setting intact when reporting bugs.
* LC\_MESSAGES=C
* # Video Card
* VIDEO\_CARDS="radeon"

## Chrooting

**root #**mirrorselect -i -o >> /mnt/gentoo/etc/portage/make.conf

**root #**mkdir --parents /mnt/gentoo/etc/portage/repos.conf

**root #**cp /mnt/gentoo/usr/share/portage/config/repos.conf /mnt/gentoo/etc/portage/repos.conf/gentoo.conf

**root #**cp --dereference /etc/resolv.conf /mnt/gentoo/etc/

**root #**mount --types proc /proc /mnt/gentoo/proc

**root #**mount --rbind /sys /mnt/gentoo/sys

**root #**mount --make-rslave /mnt/gentoo/sys

**root #**mount --rbind /dev /mnt/gentoo/dev

**root #**mount --make-rslave /mnt/gentoo/dev

**root #**chroot /mnt/gentoo /bin/bash

**root #**source /etc/profile

**root #**export PS1="(chroot) ${PS1}"

**Tip**

If the Gentoo installation is interrupted anywhere after this point, it *should* be possible to 'resume' the installation at this step. There is no need to repartition the disks again! Simply [mount the root partition](https://wiki.gentoo.org/wiki/Handbook:AMD64/Installation/Disks#Mounting_the_root_partition) and run the steps above starting with [copying the DNS info](https://wiki.gentoo.org/wiki/Handbook:AMD64/Installation/Base#Copy_DNS_info) to re-enter the working environment. This is also useful for fixing bootloader issues. More information can be found in the [chroot](https://wiki.gentoo.org/wiki/Chroot) article.