

GameCube Linux

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Who?

- The GameCube Linux Project
- <http://www.gc-linux.org/>
- started by the Xbox Linux people
- most information had been reverse engineered before

Why?

- The GC is silent, small and cheap
- Linux = maximum flexibility
 - **“PC”/thin client:** KDE, VNC on TV
 - **media player:** play DivX from network
 - **server:** PowerPC!
 - **development:** e.g. emulators on Linux

Drivers

- Interrupt controller
- Framebuffer
 - YUV colour space problem
 - 3D acceleration in the works
- Gamepad
- Keyboard: original keyboard, 2 different adapters

Drivers

- Broadband Adapter
- ARAM block device (can be used as swap!)
- Audio (ARAM!)
- Memory card
- SD card
- RAM/RTC

What is working?

- as a computer:
 - X-Window!
 - KDE? memory problems
 - Remote Desktop (X,VNC, RDC) works great
- as a media player:
 - enough power to play fullscreen DivX

What is working?

- as a server:
 - any full Linux distribution can be used without much hassle
 - all software works, if memory is enough
 - PostgreSQL regression test works flawlessly

What is working?

- games and emulators:
 - powerful enough to run many games and emulators
 - software should be based on SDL
 - initrd with bundled emulator possible

Current drawbacks

- rootfs and media are typically taken from network (NFS), network is slow (10 MBit)
- few ready-to-use solutions
- booting often cumbersome