

# Debian ARM BoF



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# Agenda

- Port(s) status
- armel vs armhf
- armhf bringup
- Kernel
- Misc
- Take notes in gobby please
  - `gobby-0.5 -c gobby.debian.net`
  - `debconf11/debconf-arm-bof`



# ARM port(s) - status

- “arm” - EOL; still in Lenny/oldstable
- “armeb” - never hit Debian
- “armel” - current port, soft-float ABI
  - v4t in Debian, v7 in Ubuntu
- “armhf” - being bootstrapped now, hard-float ABI
  - v7 in both Debian and Ubuntu



# armel vs armhf

- armel supported for older hardware, before FPU guaranteed
- armhf targeted at newer hardware, guaranteed FPU
  - more efficient
  - potentially **much** faster, depending on software involved
- can use the same kernel, but incompatible in userland



# armhf bringup

- Port started by Konstantinos Margaritis, supported by Genesi.
- Most of the archive built and working in debian-ports
  - Core system works
  - Bootstrapping languages, e.g. Java
- Ready for inclusion into main Debian archive very soon (August?), selecting build hardware now



# Kernel

- Upstream ARM kernel
- Debian ARM kernels
- Light at the end of the tunnel?
  - Linaro and SoC vendors
  - Device Tree and single image?



# Other distros

- Fedora starting armhf work
- Gentoo
- Mageia
- [cross-distro@lists.linaro.org](mailto:cross-distro@lists.linaro.org)



# Misc

- AC100 support?
  - <http://people.debian.org/~jak/ac100/>  
unofficial repo
- OpenGL vs GLES
- Cross-bootstrapping
- Optimisations and sub/partial arches





# Thanks



- Slides © 2011 Steve McIntyre <[93sam@debian.org](mailto:93sam@debian.org)>
- Released under GPL v2 at <http://www.einval.com/~steve/talks/Debconf11-arm/>