

Ports - Porting #1591

armv7h kernel unsuitable for QEMU

2017-12-21 08:31 PM - isacdaavid

Status: open	% Done: 0%
Priority: feature	
Assignee:	
Category:	
Description	
<p>we have been using QEMU for some time to build armv7h packages on x86. however it should also be possible to boot a full armv7h Parabola system using one of the available machines in qemu-arch-extra.</p> <p>one can skip emulation of the bootloader step by telling QEMU to load a kernel directly. for instance, the following works for this Debian kernel :</p> <pre>qemu-system-arm -machine vexpress-a9 -cpu cortex-a9 \ -serial stdio \ -kernel \$KERNEL_IMAGE \ -append "root=/dev/mmcblk0 rw console=ttyAMA0" \ -initrd \$INITRAMFS \ </pre> <p>this is not the case with our kernels. i suspect we might be missing some module or configuration. ALARM is of no help either.</p>	

History

#1 - 2018-02-01 10:29 AM - oaken-source

I managed to boot into our linux-libre kernels using qemu. The image was created using my trusted parabola-arm-imagebuilder: <https://github.com/oaken-source/parabola-arm-imagebuilder>

in a nutshell, the qemu call looks like this:

```
qemu-system-arm -machine vexpress-a9 -cpu cortex-a9 -m 1G \  
-kernel $_bootdir/vmlinuz-linux-libre \  
-dtb $_bootdir/dtbs/vexpress-v2p-ca9.dtb \  
-initrd $_bootdir/initramfs-linux-libre.img \  
-append "root=/dev/mmcblk0p3 rw roottype=ext4 console=ttyAMA0" \  
-nographic -serial mon:stdio \  
-drive if=sd,driver=raw,cache=writeback,file=$_imagefile
```