Software ports - Porting #1591

armv7h kernel unsuitable for QEMU

2017-12-21 08:31 PM - isacdaavid

Status:	open	**% Done:**	0%
Priority:	feature		
Assignee:			
Category:			

Description

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.

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 :

```
qemu-system-arm -machine vexpress-a9 -cpu cortex-a9 \
                -serial stdio \
                -kernel $KERNEL_IMAGE \
                -append "root=/dev/mmcblk0 rw console=ttyAMA0" \
                -initrd $INITRAMFS \
```

this is not the case with our kernels. i suspect we might be missing some module or configuration. ALARM is of no help either.

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
```