

ARM(32)中与VFP相关的config

CONFIG_FPE_NWFPE
CONFIG_FPE_NWFPE_XP
CONFIG_FPE_FASTFPE
CONDIF_VFP
CONDIF_VFPv3

CONFIG_FPE_NWFPE
CONFIG_FPE_NWFPE_XP

对应的是软件模拟floating point运算，即application执行VFP instruction造成陷入kernel,由kernel来用软件算法来模拟该instruction。

```
1. config FPE_NWFPE_XP
2.     bool "Support extended precision"
3.     depends on FPE_NWFPE
4.     help
5.         Say Y to include 80-bit support in the kernel floating-point
6.         emulator. Otherwise, only 32 and 64-bit support is compiled in.
7.         Note that gcc does not generate 80-bit operations by default,
8.         so in most cases this option only enlarges the size of the
9.         floating point emulator without any good reason.
```

```
1. config VFP
2.     bool "VFP-format floating point maths"
3.     depends on CPU_V6 || CPU_V6K || CPU_ARM926T || CPU_V7 || CPU_FEROCEON
4.     help
5.         Say Y to include VFP support code in the kernel. This is needed
6.         if your hardware includes a VFP unit.
7.
8.         Please see <file:Documentation/arm/VFP/release-notes.txt> for
9.         release notes and additional status information.
```

应该是在kernel中支持VFP操作。

VFPv3是armv7支持的较新的版本。

arch/arm/vfp

arch/arm/nwfpe

arch/arm/fastfpe (没有啊?)

由于gcc已经支持 `-mfloat-abi=soft` ,即在user space模拟floating point运算， `nwfpe` 实在没有存在必要了。

在用户态模拟执行肯定比在内核态模拟执行性能要好。