http://10.19.133.165/release/gcc/mgcc-4.6/201307-2123-4.6.4/little-endian/v7/host-x86_64-linux/armv7r-marvell-eabi-soft x86 64 20130716.tar.bz2

使用该toolchain可以build r4-freertos successfully.

解压该toolchain到 r4-freertos/toolchain/Marvell_4.6.4_toolchain_20130716 directory

对Makefile-os修改如下

```
diff --git a/Makefile-os b/Makefile-os
1.
2.
      index 6337b30..4b291cb 100644
      --- a/Makefile-os
3.
4.
     +++ b/Makefile-os
     @@ -57,7 +57,9 @@ else # ($(UNAME),WindowsNT)
      # fully describing the version of the toolchain with date version endian ho
     st etc is helpful
      # ln -s /opt/mrvlcompiler/2009q3-18-4.2.0_little-endian_host-i686-linux /op
      t/armgcc
8.
9.
      -ARM_ROOT := /opt/armgcc_M6220r_eabi
      +#ARM ROOT := /opt/armgcc M6220r eabi
10.
11.
      +#ARM_ROOT := /opt/freertos-toolchain/gcc-arm-none-eabi-4_7-2013q1
12.
      +ARM_ROOT := /home/walterzh/work2/LSP/ccsgit/r4-freertos/toolchain/Marvell_4
      .6.4_toolchain_20130716/armv7r-marvell-eabi-soft_x86_64
13.
14.
      #if there is TOOLCHAIN_ID defined, use it to find right toolchain
15.
      ifdef TOOLCHAIN_ID
      @@ -85,6 +87,8 @@ endif
16.
17.
      #use default if TOOL PREFIX is not defined
18.
      ifndef TOOL_PREFIX
19.
      TOOL PREFIX = arm-marvell-eabi
      +#TOOL_PREFIX = arm-none-eabi
20.
21.
22.
      endif
23.
24.
      # TOOLCHAIN can be provided
```

其他不要修改!

```
1.
      walterzh@walterzh-Precision-T1650:~/work2/LSP/ccsgit/r4-freertos-lowpower$ g
      diff --git a/Makefile-os b/Makefile-os
 2.
      index 6337b30..0403cc0 100644
      --- a/Makefile-os
 4.
     +++ b/Makefile-os
     @@ -57,7 +57,7 @@ else # ($(UNAME),WindowsNT)
      # fully describing the version of the toolchain with date_version_endian_ho
      st etc is helpful
      # ln -s /opt/mrvlcompiler/2009q3-18-4.2.0_little-endian_host-i686-linux /op
 8.
      t/armgcc
9.
      -ARM_ROOT := /opt/armgcc_M6220r_eabi
10.
      +ARM_ROOT := /home/walterzh/work2/LSP/ccsgit/r4-freertos/toolchain/Marvell_4
11.
      .6.4 toolchain 20130716/armv7r-marvell-eabi-soft x86 64
12.
      #if there is TOOLCHAIN_ID defined, use it to find right toolchain
13.
       ifdef TOOLCHAIN_ID
14.
```

真正的差异就是指定正确的toolchain!

Note:

in Makefile-os

ARMLINK = $(ARM_ROOT)/bin/$ (TOOL_PREFIX)-gcc

这没有错,如果改成

 ${\sf ARMLINK} = (ARM_ROOT)/bin/({\sf TOOL_PREFIX}) \text{-Id}$

反而链接会报错!