

u-boot support kgdb

比如在config file中

```
1.  /*
2.   * gdb support
3.   */
4. #define CONFIG_CMD_KGDB
5. #define CONFIG_KGDB_BAUDRATE      115200
```

common/kgdb.c and common/kgdb_stubs.c会编译

```
obj-$(CONFIG_CMD_KGDB) += kgdb.o kgdb_stubs.o
```

in u-boot/README

```
1. - Kgdb Serial Baudrate: (if CONFIG_CMD_KGDB is defined)
2.           CONFIG_KGDB_BAUDRATE
3.           Select one of the baudrates listed in
4.           CONFIG_SYS_BAUDRATE_TABLE, see below.
```

但arm arch目前(2015.10 version)还不支持。

如果build，会碰到如下错误

```
1. | common/built-in.o: In function `do_kgdb':
2. | /home/walterzh/work/2016-05-LSP/gerrit/build-bundle/poky/build/tmp/work/gr
anite2-poky-linux-gnueabi/u-boot-marvell/v2015.10+gitAUTOINC+647e2d4f01-r0/g
it/common/kgdb.c:580: undefined reference to `kgdb_breakpoint'
3. | common/built-in.o: In function `kgdb_error':
4. | /home/walterzh/work/2016-05-LSP/gerrit/build-bundle/poky/build/tmp/work/gr
anite2-poky-linux-gnueabi/u-boot-marvell/v2015.10+gitAUTOINC+647e2d4f01-r0/g
it/common/kgdb.c:544: undefined reference to `kgdb_longjmp'
5. | common/built-in.o: In function `handle_exception':
6. | /home/walterzh/work/2016-05-LSP/gerrit/build-bundle/poky/build/tmp/work/gr
anite2-poky-linux-gnueabi/u-boot-marvell/v2015.10+gitAUTOINC+647e2d4f01-r0/g
it/common/kgdb.c:332: undefined reference to `kgdb_longjmp'
7. | /home/walterzh/work/2016-05-LSP/gerrit/build-bundle/poky/build/tmp/work/gr
anite2-poky-linux-gnueabi/u-boot-marvell/v2015.10+gitAUTOINC+647e2d4f01-r0/g
it/common/kgdb.c:344: undefined reference to `kgdb_trap'
8. | /home/walterzh/work/2016-05-LSP/gerrit/build-bundle/poky/build/tmp/work/gr
anite2-poky-linux-gnueabi/u-boot-marvell/v2015.10+gitAUTOINC+647e2d4f01-r0/g
it/common/kgdb.c:346: undefined reference to `kgdb_setjmp'
9. | /home/walterzh/work/2016-05-LSP/gerrit/build-bundle/poky/build/tmp/work/gr
anite2-poky-linux-gnueabi/u-boot-marvell/v2015.10+gitAUTOINC+647e2d4f01-r0/g
it/common/kgdb.c:349: undefined reference to `kgdb_enter'
10. | /home/walterzh/work/2016-05-LSP/gerrit/build-bundle/poky/build/tmp/work/gr
anite2-poky-linux-gnueabi/u-boot-marvell/v2015.10+gitAUTOINC+647e2d4f01-r0/g
it/common/kgdb.c:392: undefined reference to `kgdb_setjmp'
11. | /home/walterzh/work/2016-05-LSP/gerrit/build-bundle/poky/build/tmp/work/gr
anite2-poky-linux-gnueabi/u-boot-marvell/v2015.10+gitAUTOINC+647e2d4f01-r0/g
it/common/kgdb.c:411: undefined reference to `kgdb_getregs'
12. | /home/walterzh/work/2016-05-LSP/gerrit/build-bundle/poky/build/tmp/work/gr
anite2-poky-linux-gnueabi/u-boot-marvell/v2015.10+gitAUTOINC+647e2d4f01-r0/g
it/common/kgdb.c:419: undefined reference to `kgdb_putregs'
13. | /home/walterzh/work/2016-05-LSP/gerrit/build-bundle/poky/build/tmp/work/gr
anite2-poky-linux-gnueabi/u-boot-marvell/v2015.10+gitAUTOINC+647e2d4f01-r0/g
it/common/kgdb.c:488: undefined reference to `kgdb_exit'
14. | /home/walterzh/work/2016-05-LSP/gerrit/build-bundle/poky/build/tmp/work/gr
anite2-poky-linux-gnueabi/u-boot-marvell/v2015.10+gitAUTOINC+647e2d4f01-r0/g
it/common/kgdb.c:502: undefined reference to `kgdb_putreg'
```

因为每个arch必须自己实现具体的依赖于platform的kgdb interfaces

in include/kgdb.h

```
1. /* these functions are provided by the platform specific kgdb support */
2. extern void kgdb_flush_cache_range(void *, void *);
3. extern void kgdb_flush_cache_all(void);
4. extern int kgdb_setjmp(long *);
5. extern void kgdb_longjmp(long *, int);
6. extern void kgdb_enter(struct pt_regs *, kgdb_data *);
7. extern void kgdb_exit(struct pt_regs *, kgdb_data *);
8. extern int kgdb_getregs(struct pt_regs *, char *, int);
9. extern void kgdb_putreg(struct pt_regs *, int, char *, int);
10. extern void kgdb_putregs(struct pt_regs *, char *, int);
11. extern int kgdb_trap(struct pt_regs *);
12. extern void kgdb_breakpoint(int argc, char * const argv[]);
```

目前只有blackfin arch and powerpc arch实现了kgdb platform specific interfaces.

in arch/blackfin/lib/kgdb.c

in arch/powerpc/lib/kgdb.c