

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

Source: <http://linux.derkeiler.com/Mailing-Lists/Kernel/2007-10/msg07391.html>

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 - *Date:* Mon, 22 Oct 2007 00:53:06 +0800
-

Hi Linus,

This set of commits are for Blackfin architecture updates part #2 for 2.6.24 merge window, only thing related with Blackfin arch.

- Blackfin arch BF52x processor initial support
- General purpose timers API
- Critical bug fixing and code cleanup

Please pull from 'for-linus' branch of

master.kernel.org:/pub/scm/linux/kernel/git/cooloney/blackfin-2.6.git for-linus

to receive the following updates:

```
arch/blackfin/Kconfig | 61 +-
arch/blackfin/Makefile | 23 +-
arch/blackfin/boot/Makefile | 3 +
arch/blackfin/boot/install.sh | 57 +
arch/blackfin/configs/BF527-EZKIT_defconfig | 1241 ++++++
arch/blackfin/configs/BF548-EZKIT_defconfig | 9 +-
arch/blackfin/kernel/Makefile | 1 +
arch/blackfin/kernel/bfin_dma_5xx.c | 26 +
arch/blackfin/kernel/bfin_gpio.c | 35 +-
arch/blackfin/kernel/gptimers.c | 250 +++++
arch/blackfin/kernel/reboot.c | 2 +-
arch/blackfin/kernel/setup.c | 116 +-
arch/blackfin/kernel/traps.c | 2 +
arch/blackfin/lib/Makefile | 2 +-
arch/blackfin/lib/udivdi3.S | 375 ++++++
arch/blackfin/mach-bf527/Kconfig | 251 +++++
arch/blackfin/mach-bf527/Makefile | 9 +
arch/blackfin/mach-bf527/boards/Makefile | 7 +
arch/blackfin/mach-bf527/boards/eth_mac.c | 50 +
arch/blackfin/mach-bf527/boards/ezkit.c | 737 ++++++
arch/blackfin/mach-bf527/cpu.c | 161 +++
arch/blackfin/mach-bf527/dma.c | 115 ++
arch/blackfin/mach-bf527/head.S | 456 ++++++
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
arch/blackfin/mach-bf527/ints-priority.c | 100 ++
arch/blackfin/mach-bf533/boards/cm_bf533.c | 2 +-
arch/blackfin/mach-bf533/boards/ezkit.c | 2 +-
arch/blackfin/mach-bf533/boards/generic_board.c | 2 +-
arch/blackfin/mach-bf533/boards/stamp.c | 2 +-
arch/blackfin/mach-bf537/boards/cm_bf537.c | 2 +-
arch/blackfin/mach-bf537/boards/generic_board.c | 2 +-
arch/blackfin/mach-bf537/boards/pnav10.c | 2 +-
arch/blackfin/mach-bf537/boards/stamp.c | 2 +-
arch/blackfin/mach-bf548/boards/ezkit.c | 4 +-
arch/blackfin/mach-bf548/dma.c | 1 +
arch/blackfin/mach-bf561/boards/cm_bf561.c | 2 +-
arch/blackfin/mach-bf561/boards/ezkit.c | 2 +-
arch/blackfin/mach-bf561/boards/generic_board.c | 2 +-
arch/blackfin/mach-bf561/boards/tepla.c | 2 +-
arch/blackfin/mach-common/ints-priority-dc.c | 8 +-
arch/blackfin/mach-common/ints-priority-sc.c | 55 +-
drivers/serial/Kconfig | 2 +-
include/asm-blackfin/bf5xx_timers.h | 209 -----
include/asm-blackfin/bfin-global.h | 4 +-
include/asm-blackfin/dma.h | 7 +-
include/asm-blackfin/gpio.h | 3 +-
include/asm-blackfin/gptimers.h | 210 +++++
include/asm-blackfin/mach-bf527/anomaly.h | 8 +
include/asm-blackfin/mach-bf527/bf527.h | 127 +++
include/asm-blackfin/mach-bf527/bfin_serial_5xx.h | 152 +++
include/asm-blackfin/mach-bf527/blackfin.h | 78 ++
include/asm-blackfin/mach-bf527/cdefBF52x_base.h | 19 +-
include/asm-blackfin/mach-bf527/defBF527.h | 4 +-
include/asm-blackfin/mach-bf527/defBF52x_base.h | 9 +-
include/asm-blackfin/mach-bf527/dma.h | 60 +
include/asm-blackfin/mach-bf527/irq.h | 263 ++++++
include/asm-blackfin/mach-bf527/mem_init.h | 337 +++++++
include/asm-blackfin/mach-bf527/mem_map.h | 98 ++
include/asm-blackfin/mach-bf527/portmux.h | 205 +++++
include/asm-blackfin/mach-bf548/defBF549.h | 2 +-
include/asm-blackfin/mach-bf548/defBF54x_base.h | 6 +-
include/asm-blackfin/mach-bf548/dma.h | 2 +-
61 files changed, 5669 insertions(+), 317 deletions(-)
create mode 100644 arch/blackfin/boot/install.sh
create mode 100644 arch/blackfin/configs/BF527-EZKIT_defconfig
create mode 100644 arch/blackfin/kernel/gptimers.c
create mode 100644 arch/blackfin/lib/udivdi3.S
create mode 100644 arch/blackfin/mach-bf527/Kconfig
create mode 100644 arch/blackfin/mach-bf527/Makefile
create mode 100644 arch/blackfin/mach-bf527/boards/Makefile
create mode 100644 arch/blackfin/mach-bf527/boards/eth_mac.c
create mode 100644 arch/blackfin/mach-bf527/boards/ezkit.c
create mode 100644 arch/blackfin/mach-bf527/cpu.c
create mode 100644 arch/blackfin/mach-bf527/dma.c
create mode 100644 arch/blackfin/mach-bf527/head.S
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
create mode 100644 arch/blackfin/mach-bf527/ints-priority.c
delete mode 100644 include/asm-blackfin/bf5xx_timers.h
create mode 100644 include/asm-blackfin/gptimers.h
create mode 100644 include/asm-blackfin/mach-bf527/bf527.h
create mode 100644 include/asm-blackfin/mach-bf527/bfin_serial_5xx.h
create mode 100644 include/asm-blackfin/mach-bf527/blackfin.h
create mode 100644 include/asm-blackfin/mach-bf527/dma.h
create mode 100644 include/asm-blackfin/mach-bf527/irq.h
create mode 100644 include/asm-blackfin/mach-bf527/mem_init.h
create mode 100644 include/asm-blackfin/mach-bf527/mem_map.h
create mode 100644 include/asm-blackfin/mach-bf527/portmux.h
```

Bernd Schmidt (1):

Blackfin arch: Fixing Bug: balance calls to get_task_mm with corresponding mmput calls

Bryan Wu (3):

Blackfin arch: Fix bug: missing CHIPID register field definition of BF54x

Blackfin arch: dma add some API and cleanup bf54x DMA definition

Blackfin arch: update boards files

Michael Hennerich (2):

Blackfin arch: add new processor ADSP-BF52x arch/mach support

Blackfin arch: Optimization – no need to make additional math here

Mike Frysinger (9):

Blackfin arch BF548 defconfig: enable watchdog by default

Blackfin arch: force irq_flags into the .data section

Blackfin serial driver Kconfig: depend on DMA not being enabled rather than a specific DMA size

Blackfin arch: use "char bfin_board_name[]" rather than "char *bfin_board_name" per discussion on lkml as the former uses less storage

Blackfin arch: -mno-fdpic works

Blackfin arch: add assembly function for doing 64bit unsigned division

Blackfin arch: add functions for converting between scilks and usecs

Blackfin arch: add a cheesy install target

Blackfin arch: cleanup and promote the general purpose timers api to a core blackfin component

Robin Getz (1):

Blackfin arch: Fix up /proc/cpuinfo so it is like everyone else

```
diff --git a/arch/blackfin/Kconfig b/arch/blackfin/Kconfig
index ad28dc7..7888551 100644
--- a/arch/blackfin/Kconfig
+++ b/arch/blackfin/Kconfig
@@ -71,7 +71,7 @@ config GENERIC_CALIBRATE_DELAY
```

```
config IRQCHIP_DEMUX_GPIO
```

```
bool
```

```
- depends on (BF53x || BF561 || BF54x)
```

```
+ depends on (BF52x || BF53x || BF561 || BF54x)
```

```
default y
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
source "init/Kconfig"
@@ -85,6 +85,21 @@ choice
prompt "CPU"
default BF533

+config BF522
+ bool "BF522"
+ help
+ BF522 Processor Support.
+
+config BF525
+ bool "BF525"
+ help
+ BF525 Processor Support.
+
+config BF527
+ bool "BF527"
+ help
+ BF527 Processor Support.
+
config BF531
bool "BF531"
help
@@ -144,13 +159,18 @@ endchoice

choice
prompt "Silicon Rev"
+ default BF_REV_0_1 if BF527
default BF_REV_0_2 if BF537
default BF_REV_0_3 if BF533
default BF_REV_0_0 if BF549

config BF_REV_0_0
bool "0.0"
- depends on (BF549)
+ depends on (BF549 || BF527)
+
+config BF_REV_0_1
+ bool "0.2"
+ depends on (BF549 || BF527)

config BF_REV_0_2
bool "0.2"
@@ -176,6 +196,11 @@ config BF_REV_NONE

endchoice

+config BF52x
+ bool
+ depends on (BF522 || BF525 || BF527)
+ default y
```

```
+
config BF53x
bool
depends on (BF531 || BF532 || BF533 || BF534 || BF536 || BF537)
@@ -204,6 +229,12 @@ choice
configuration to ensure that all the other settings are
correct.

+config BFIN527_EZKIT
+ bool "BF527-EZKIT"
+ depends on (BF522 || BF525 || BF527)
+ help
+ BF533-EZKIT-LITE board Support.
+
config BFIN533_EZKIT
bool "BF533-EZKIT"
depends on (BF533 || BF532 || BF531)
@@ -299,11 +330,17 @@ config MEM_MT48LC8M32B2B5_7
depends on (BFIN561_BLUETECHNIX_CM)
default y

+config MEM_MT48LC32M16A2TG_75
+ bool
+ depends on (BFIN527_EZKIT)
+ default y
+
config BFIN_SHARED_FLASH_ENET
bool
depends on (BFIN533_STAMP)
default y

+source "arch/blackfin/mach-bf527/Kconfig"
source "arch/blackfin/mach-bf533/Kconfig"
source "arch/blackfin/mach-bf561/Kconfig"
source "arch/blackfin/mach-bf537/Kconfig"
@@ -329,7 +366,7 @@ config CLKIN_HZ
int "Crystal Frequency in Hz"
default "11059200" if BFIN533_STAMP
default "27000000" if BFIN533_EZKIT
- default "25000000" if BFIN537_STAMP
+ default "25000000" if (BFIN537_STAMP || BFIN527_EZKIT)
default "30000000" if BFIN561_EZKIT
default "24576000" if PNAV10
help
@@ -362,7 +399,7 @@ config VCO_MULT
range 1 64
default "22" if BFIN533_EZKIT
default "45" if BFIN533_STAMP
- default "20" if BFIN537_STAMP
+ default "20" if (BFIN537_STAMP || BFIN527_EZKIT)
default "22" if BFIN533_BLUETECHNIX_CM
```

```
default "20" if BFIN537_BLUETECHNIX_CM
default "20" if BFIN561_BLUETECHNIX_CM
@@ -398,7 +435,7 @@ config SCLK_DIV
range 1 15
default 5 if BFIN533_EZKIT
default 5 if BFIN533_STAMP
- default 4 if BFIN537_STAMP
+ default 4 if (BFIN537_STAMP || BFIN527_EZKIT)
default 5 if BFIN533_BLUETECHNIX_CM
default 4 if BFIN537_BLUETECHNIX_CM
default 4 if BFIN561_BLUETECHNIX_CM
@@ -450,6 +487,7 @@ comment "Memory Setup"
config MEM_SIZE
int "SDRAM Memory Size in MBytes"
default 32 if BFIN533_EZKIT
+ default 64 if BFIN527_EZKIT
default 64 if BFIN537_STAMP
default 64 if BFIN561_EZKIT
default 128 if BFIN533_STAMP
@@ -459,6 +497,7 @@ config MEM_ADD_WIDTH
int "SDRAM Memory Address Width"
default 9 if BFIN533_EZKIT
default 9 if BFIN561_EZKIT
+ default 10 if BFIN527_EZKIT
default 10 if BFIN537_STAMP
default 11 if BFIN533_STAMP
default 10 if PNAV10
@@ -749,9 +788,19 @@ config LARGE_ALLOCS
a lot of RAM, and you need to be able to allocate very large
contiguous chunks. If unsure, say N.

+config BFIN_GPTIMERS
+ tristate "Enable Blackfin General Purpose Timers API"
+ default n
+ help
+ Enable support for the General Purpose Timers API. If you
+ are unsure, say N.
+
+ To compile this driver as a module, choose M here: the module
+ will be called gptimers.ko.
+
config BFIN_DMA_5XX
bool "Enable DMA Support"
- depends on (BF533 || BF532 || BF531 || BF537 || BF536 || BF534 || BF561 || BF54x)
+ depends on (BF52x || BF53x || BF561 || BF54x)
default y
help
DMA driver for BF5xx.
diff --git a/arch/blackfin/Makefile b/arch/blackfin/Makefile
index 3689337..3c87291 100644
--- a/arch/blackfin/Makefile
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+++ b/arch/blackfin/Makefile
@@ -12,12 +12,17 @@ LDFLAGS_vmlinux := -X
OBJCOPYFLAGS := -O binary -R .note -R .comment -S
GZFLAGS := -9

+CFLAGS += $(call cc-option,-mno-fdpic)
+AFLAGS += $(call cc-option,-mno-fdpic)
CFLAGS_MODULE += -mlong-calls
KALLSYMS += --symbol-prefix=_

KBUILD_DEFCONFIG := BF537-STAMP_defconfig

# setup the machine name and the machine dependent settings
+machine-$(CONFIG_BF522) := bf527
+machine-$(CONFIG_BF525) := bf527
+machine-$(CONFIG_BF527) := bf527
machine-$(CONFIG_BF531) := bf533
machine-$(CONFIG_BF532) := bf533
machine-$(CONFIG_BF533) := bf533
@@ -32,6 +37,9 @@ machine-$(CONFIG_BF561) := bf561
MACHINE := $(machine-y)
export MACHINE

+cpu-$(CONFIG_BF522) := bf522
+cpu-$(CONFIG_BF525) := bf525
+cpu-$(CONFIG_BF527) := bf527
cpu-$(CONFIG_BF531) := bf531
cpu-$(CONFIG_BF532) := bf532
cpu-$(CONFIG_BF533) := bf533
@@ -97,12 +105,23 @@ archclean:
$(Q)$(MAKE) $(clean)=$(boot)

-all: vmImage
boot := arch/$(ARCH)/boot
BOOT_TARGETS = vmImage
-.PHONY: $(BOOT_TARGETS)
+PHONY += $(BOOT_TARGETS) install
+KBUILD_IMAGE := $(boot)/vmImage
+
+all: vmImage
+
$(BOOT_TARGETS): vmlinux
$(Q)$(MAKE) $(build)=$(boot) $(boot)/$@
+
+install:
+ $(Q)$(MAKE) $(build)=$(boot) BOOTIMAGE=$(KBUILD_IMAGE) install
+
define archhelp
echo '* vmImage - Kernel-only image for U-Boot (arch/$(ARCH)/boot/vmImage)'
+ echo 'install - Install kernel using'
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+ echo ' (your) ~/bin/$(CROSS_COMPILE)installkernel or'
+ echo ' (distribution) PATH: $(CROSS_COMPILE)installkernel or'
+ echo ' install to $$$(INSTALL_PATH)'
endif
diff --git a/arch/blackfin/boot/Makefile b/arch/blackfin/boot/Makefile
index 8cd3356..522f3c1 100644
--- a/arch/blackfin/boot/Makefile
+++ b/arch/blackfin/boot/Makefile
@@ -26,3 +26,6 @@ $(obj)/vmlinux.gz: $(obj)/vmlinux.bin FORCE
$(obj)/vmImage: $(obj)/vmlinux.gz
$(call if_changed,uimage)
@echo 'Kernel: $$@ is ready'
+
+install:
+ sh $(srctree)/$(src)/install.sh $(KERNELRELEASE) $(BOOTIMAGE) System.map "$(INSTALL_PATH)"
diff --git a/arch/blackfin/boot/install.sh b/arch/blackfin/boot/install.sh
new file mode 100644
index 0000000..9560a6b
--- /dev/null
+++ b/arch/blackfin/boot/install.sh
@@ -0,0 +1,57 @@
+#!/bin/sh
+#
+# arch/blackfin/boot/install.sh
+#
+# This file is subject to the terms and conditions of the GNU General Public
+# License. See the file "COPYING" in the main directory of this archive
+# for more details.
+#
+# Copyright (C) 1995 by Linus Torvalds
+#
+# Adapted from code in arch/i386/boot/Makefile by H. Peter Anvin
+# Adapted from code in arch/i386/boot/install.sh by Mike Frysinger
+#
+# "make install" script for Blackfin architecture
+#
+# Arguments:
+# $1 - kernel version
+# $2 - kernel image file
+# $3 - kernel map file
+# $4 - default install path (blank if root directory)
+#
+
+verify () {
+ if [ ! -f "$1" ]; then
+ echo "" 1>&2
+ echo " *** Missing file: $1" 1>&2
+ echo ' *** You need to run "make" before "make install".' 1>&2
+ echo "" 1>&2
+ exit 1
+ fi

```

```

+}
+
+# Make sure the files actually exist
+verify "$2"
+verify "$3"
+
+# User may have a custom install script
+
+if [ -x ~/bin/${CROSS_COMPILE}installkernel ]; then exec ~/bin/${CROSS_COMPILE}installkernel
"$@"; fi
+if which ${CROSS_COMPILE}installkernel >/dev/null 2>&1; then
+ exec ${CROSS_COMPILE}installkernel "$@"
+fi
+
+# Default install – same as make zilo
+
+back_it_up() {
+ local file=$1
+ [ -f ${file} ] || return 0
+ local stamp=$(stat -c %Y ${file} 2>/dev/null)
+ mv ${file} ${file}.${stamp:-old}
+}
+
+back_it_up $4/uImage
+back_it_up $4/System.map
+
+cat $2 > $4/uImage
+cp $3 $4/System.map
diff --git a/arch/blackfin/configs/BF527-EZKIT_defconfig
b/arch/blackfin/configs/BF527-EZKIT_defconfig
new file mode 100644
index 0000000..df974e7
--- /dev/null
+++ b/arch/blackfin/configs/BF527-EZKIT_defconfig
@@ -0,0 +1,1241 @@
+#
+# Automatically generated make config: don't edit
+# Linux kernel version: 2.6.22.9
+#
+# CONFIG_MMU is not set
+# CONFIG_FPU is not set
+CONFIG_RWSEM_GENERIC_SPINLOCK=y
+# CONFIG_RWSEM_XCHGADD_ALGORITHM is not set
+CONFIG_BLACKFIN=y
+CONFIG_ZONE_DMA=y
+CONFIG_BFIN=y
+CONFIG_SEMAPHORE_SLEEPERS=y
+CONFIG_GENERIC_FIND_NEXT_BIT=y
+CONFIG_GENERIC_HWEIGHT=y
+CONFIG_GENERIC_HARDIRQS=y
+CONFIG_GENERIC_IRQ_PROBE=y

```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+# CONFIG_GENERIC_TIME is not set
+CONFIG_GENERIC_GPIO=y
+CONFIG_FORCE_MAX_ZONEORDER=14
+CONFIG_GENERIC_CALIBRATE_DELAY=y
+CONFIG_IRQCHIP_DEMUX_GPIO=y
+CONFIG_DEFCONFIG_LIST="/lib/modules/$UNAME_RELEASE/.config"
+
+#
+# Code maturity level options
+#
+CONFIG_EXPERIMENTAL=y
+CONFIG_BROKEN_ON_SMP=y
+CONFIG_INIT_ENV_ARG_LIMIT=32
+
+#
+# General setup
+#
+CONFIG_LOCALVERSION=""
+CONFIG_LOCALVERSION_AUTO=y
+CONFIG_SYSVIPC=y
+# CONFIG_IPC_NS is not set
+CONFIG_SYSVIPC_SYSCTL=y
+# CONFIG_POSIX_MQUEUE is not set
+# CONFIG_BSD_PROCESS_ACCT is not set
+# CONFIG_TASKSTATS is not set
+# CONFIG_UTS_NS is not set
+# CONFIG_AUDIT is not set
+CONFIG_IKCONFIG=y
+CONFIG_IKCONFIG_PROC=y
+CONFIG_LOG_BUF_SHIFT=14
+CONFIG_SYSFS_DEPRECATED=y
+# CONFIG_RELAY is not set
+CONFIG_BLK_DEV_INITRD=y
+CONFIG_INITRAMFS_SOURCE=""
+# CONFIG_CC_OPTIMIZE_FOR_SIZE is not set
+CONFIG_SYSCTL=y
+CONFIG_EMBEDDED=y
+CONFIG_UID16=y
+CONFIG_SYSCTL_SYSCALL=y
+CONFIG_KALLSYMS=y
+# CONFIG_KALLSYMS_EXTRA_PASS is not set
+CONFIG_HOTPLUG=y
+CONFIG_PRINTK=y
+CONFIG_BUG=y
+CONFIG_ELF_CORE=y
+CONFIG_BASE_FULL=y
+CONFIG_FUTEX=y
+CONFIG_ANON_INODES=y
+CONFIG_EPOLL=y
+CONFIG_SIGNALFD=y
+CONFIG_EVENTFD=y
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+CONFIG_VM_EVENT_COUNTERS=y
+CONFIG_BIG_ORDER_ALLOC_NOFAIL_MAGIC=3
+# CONFIG_NP2 is not set
+CONFIG_SLAB=y
+# CONFIG_SLUB is not set
+# CONFIG_SLOB is not set
+CONFIG_RT_MUTEXES=y
+CONFIG_TINY_SHMEM=y
+CONFIG_BASE_SMALL=0
+
+#
+# Loadable module support
+#
+CONFIG_MODULES=y
+CONFIG_MODULE_UNLOAD=y
+# CONFIG_MODULE_FORCE_UNLOAD is not set
+# CONFIG_MODVERSIONS is not set
+# CONFIG_MODULE_SRCVERSION_ALL is not set
+CONFIG_KMOD=y
+
+#
+# Block layer
+#
+CONFIG_BLOCK=y
+# CONFIG_LBD is not set
+# CONFIG_BLK_DEV_IO_TRACE is not set
+# CONFIG_LSF is not set
+
+#
+# IO Schedulers
+#
+CONFIG_IOSCHED_NOOP=y
+CONFIG_IOSCHED_AS=y
+# CONFIG_IOSCHED_DEADLINE is not set
+CONFIG_IOSCHED_CFQ=y
+CONFIG_DEFAULT_AS=y
+# CONFIG_DEFAULT_DEADLINE is not set
+# CONFIG_DEFAULT_CFQ is not set
+# CONFIG_DEFAULT_NOOP is not set
+CONFIG_DEFAULT_IOSCHED="anticipatory"
+# CONFIG_PREEMPT_NONE is not set
+CONFIG_PREEMPT_VOLUNTARY=y
+# CONFIG_PREEMPT is not set
+
+#
+# Blackfin Processor Options
+#
+
+#
+# Processor and Board Settings
+#
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+# CONFIG_BF522 is not set
+# CONFIG_BF525 is not set
+CONFIG_BF527=y
+# CONFIG_BF531 is not set
+# CONFIG_BF532 is not set
+# CONFIG_BF533 is not set
+# CONFIG_BF534 is not set
+# CONFIG_BF536 is not set
+# CONFIG_BF537 is not set
+# CONFIG_BF542 is not set
+# CONFIG_BF544 is not set
+# CONFIG_BF548 is not set
+# CONFIG_BF549 is not set
+# CONFIG_BF561 is not set
+CONFIG_BF_REV_0_0=y
+# CONFIG_BF_REV_0_1 is not set
+# CONFIG_BF_REV_0_2 is not set
+# CONFIG_BF_REV_0_3 is not set
+# CONFIG_BF_REV_0_4 is not set
+# CONFIG_BF_REV_0_5 is not set
+# CONFIG_BF_REV_ANY is not set
+# CONFIG_BF_REV_NONE is not set
+CONFIG_BF52x=y
+CONFIG_BFIN_SINGLE_CORE=y
+CONFIG_BFIN527_EZKIT=y
+# CONFIG_BFIN533_EZKIT is not set
+# CONFIG_BFIN533_STAMP is not set
+# CONFIG_BFIN537_STAMP is not set
+# CONFIG_BFIN533_BLUETECHNIX_CM is not set
+# CONFIG_BFIN537_BLUETECHNIX_CM is not set
+# CONFIG_BFIN548_EZKIT is not set
+# CONFIG_BFIN561_BLUETECHNIX_CM is not set
+# CONFIG_BFIN561_EZKIT is not set
+# CONFIG_BFIN561_TEPLA is not set
+# CONFIG_PNAV10 is not set
+# CONFIG_GENERIC_BOARD is not set
+CONFIG_MEM_MT48LC32M16A2TG_75=y
+
+#
+# BF527 Specific Configuration
+#
+
+#
+# Alternative Multiplexing Scheme
+#
+# CONFIG_BF527_SPORT0_PORTF is not set
+CONFIG_BF527_SPORT0_PORTG=y
+CONFIG_BF527_SPORT0_TSCLK_PG10=y
+# CONFIG_BF527_SPORT0_TSCLK_PG14 is not set
+# CONFIG_BF527_UART1_PORTF is not set
+CONFIG_BF527_UART1_PORTG=y
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+# CONFIG_BF527_NAND_D_PORTF is not set
+CONFIG_BF527_NAND_D_PORTH=y
+
+#
+# Interrupt Priority Assignment
+#
+
+#
+# Priority
+#
+CONFIG_IRQ_PLL_WAKEUP=7
+CONFIG_IRQ_DMA0_ERROR=7
+CONFIG_IRQ_DMAR0_BLK=7
+CONFIG_IRQ_DMAR1_BLK=7
+CONFIG_IRQ_DMAR0_OVR=7
+CONFIG_IRQ_DMAR1_OVR=7
+CONFIG_IRQ_PPI_ERROR=7
+CONFIG_IRQ_MAC_ERROR=7
+CONFIG_IRQ_SPORT0_ERROR=7
+CONFIG_IRQ_SPORT1_ERROR=7
+CONFIG_IRQ_UART0_ERROR=7
+CONFIG_IRQ_UART1_ERROR=7
+CONFIG_IRQ_RTC=8
+CONFIG_IRQ_PPI=8
+CONFIG_IRQ_SPORT0_RX=9
+CONFIG_IRQ_SPORT0_TX=9
+CONFIG_IRQ_SPORT1_RX=9
+CONFIG_IRQ_SPORT1_TX=9
+CONFIG_IRQ_TWI=10
+CONFIG_IRQ_SPI=10
+CONFIG_IRQ_UART0_RX=10
+CONFIG_IRQ_UART0_TX=10
+CONFIG_IRQ_UART1_RX=10
+CONFIG_IRQ_UART1_TX=10
+CONFIG_IRQ_OPTSEC=11
+CONFIG_IRQ_CNT=11
+CONFIG_IRQ_MAC_RX=11
+CONFIG_IRQ_PORTH_INTA=11
+CONFIG_IRQ_MAC_TX=11
+CONFIG_IRQ_PORTH_INTB=11
+CONFIG_IRQ_TMR0=12
+CONFIG_IRQ_TMR1=12
+CONFIG_IRQ_TMR2=12
+CONFIG_IRQ_TMR3=12
+CONFIG_IRQ_TMR4=12
+CONFIG_IRQ_TMR5=12
+CONFIG_IRQ_TMR6=12
+CONFIG_IRQ_TMR7=12
+CONFIG_IRQ_PORTG_INTA=12
+CONFIG_IRQ_PORTG_INTB=12
+CONFIG_IRQ_MEM_DMA0=13
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+CONFIG_IRQ_MEM_DMA1=13
+CONFIG_IRQ_WATCH=13
+CONFIG_IRQ_PORTF_INTA=13
+CONFIG_IRQ_PORTF_INTB=13
+CONFIG_IRQ_SPI_ERROR=7
+CONFIG_IRQ_NFC_ERROR=7
+CONFIG_IRQ_HDMA_ERROR=7
+CONFIG_IRQ_HDMA=7
+CONFIG_IRQ_USB_EINT=10
+CONFIG_IRQ_USB_INT0=11
+CONFIG_IRQ_USB_INT1=11
+CONFIG_IRQ_USB_INT2=11
+CONFIG_IRQ_USB_DMA=11
+
+#
+# Board customizations
+#
+# CONFIG_CMDLINE_BOOL is not set
+
+#
+# Clock/PLL Setup
+#
+CONFIG_CLKIN_HZ=25000000
+# CONFIG_BFIN_KERNEL_CLOCK is not set
+CONFIG_MAX_VCO_HZ=600000000
+CONFIG_MIN_VCO_HZ=50000000
+CONFIG_MAX_SCLK_HZ=133000000
+CONFIG_MIN_SCLK_HZ=27000000
+
+#
+# Kernel Timer/Scheduler
+#
+# CONFIG_HZ_100 is not set
+CONFIG_HZ_250=y
+# CONFIG_HZ_300 is not set
+# CONFIG_HZ_1000 is not set
+CONFIG_HZ=250
+
+#
+# Memory Setup
+#
+CONFIG_MEM_SIZE=64
+CONFIG_MEM_ADD_WIDTH=10
+CONFIG_BOOT_LOAD=0x1000
+CONFIG_BFIN_SCRATCH_REG_RETN=y
+# CONFIG_BFIN_SCRATCH_REG_RETE is not set
+# CONFIG_BFIN_SCRATCH_REG_CYCLES is not set
+
+#
+# Blackfin Kernel Optimizations
+#
```

```
+
+#
+# Memory Optimizations
+#
+CONFIG_I_ENTRY_L1=y
+CONFIG_EXCPT_IRQ_SYSC_L1=y
+CONFIG_DO_IRQ_L1=y
+CONFIG_CORE_TIMER_IRQ_L1=y
+CONFIG_IDLE_L1=y
+# CONFIG_SCHEDULE_L1 is not set
+CONFIG_ARITHMETIC_OPS_L1=y
+CONFIG_ACCESS_OK_L1=y
+# CONFIG_MEMSET_L1 is not set
+# CONFIG_MEMCPY_L1 is not set
+# CONFIG_SYS_BFIN_SPINLOCK_L1 is not set
+# CONFIG_IP_CHECKSUM_L1 is not set
+CONFIG_CACHELINE_ALIGNED_L1=y
+# CONFIG_SYSCALL_TAB_L1 is not set
+# CONFIG_CPLB_SWITCH_TAB_L1 is not set
+CONFIG_RAMKERNEL=y
+# CONFIG_ROMKERNEL is not set
+CONFIG_SELECT_MEMORY_MODEL=y
+CONFIG_FLATMEM_MANUAL=y
+# CONFIG_DISCONTIGMEM_MANUAL is not set
+# CONFIG_SPARSEMEM_MANUAL is not set
+CONFIG_FLATMEM=y
+CONFIG_FLAT_NODE_MEM_MAP=y
+# CONFIG_SPARSEMEM_STATIC is not set
+CONFIG_SPLIT_PTLOCK_CPUS=4
+# CONFIG_RESOURCES_64BIT is not set
+CONFIG_ZONE_DMA_FLAG=1
+CONFIG_LARGE_ALLOCS=y
+CONFIG_BFIN_DMA_5XX=y
+# CONFIG_DMA_UNCACHED_2M is not set
+CONFIG_DMA_UNCACHED_1M=y
+# CONFIG_DMA_UNCACHED_NONE is not set
+
+#
+# Cache Support
+#
+CONFIG_BFIN_ICACHE=y
+CONFIG_BFIN_DCACHE=y
+# CONFIG_BFIN_DCACHE_BANKA is not set
+# CONFIG_BFIN_ICACHE_LOCK is not set
+# CONFIG_BFIN_WB is not set
+CONFIG_BFIN_WT=y
+CONFIG_L1_MAX_PIECE=16
+
+#
+# Asynchronous Memory Configuration
+#
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+
+#
+# EBIU_AMBCTL Global Control
+#
+CONFIG_C_AMCKEN=y
+CONFIG_C_CDPRIO=y
+# CONFIG_C_AMBEN is not set
+# CONFIG_C_AMBEN_B0 is not set
+# CONFIG_C_AMBEN_B0_B1 is not set
+# CONFIG_C_AMBEN_B0_B1_B2 is not set
+CONFIG_C_AMBEN_ALL=y
+
+#
+# EBIU_AMBCTL Control
+#
+CONFIG_BANK_0=0x7BB0
+CONFIG_BANK_1=0x5554
+CONFIG_BANK_2=0x7BB0
+CONFIG_BANK_3=0xFFC0
+
+#
+# Bus options (PCI, PCMCIA, EISA, MCA, ISA)
+#
+# CONFIG_PCI is not set
+# CONFIG_ARCH_SUPPORTS_MSI is not set
+
+#
+# PCCARD (PCMCIA/CardBus) support
+#
+# CONFIG_PCCARD is not set
+
+#
+# Executable file formats
+#
+CONFIG_BINFMT_ELF_FDPIC=y
+CONFIG_BINFMT_FLAT=y
+CONFIG_BINFMT_ZFLAT=y
+# CONFIG_BINFMT_SHARED_FLAT is not set
+# CONFIG_BINFMT_MISC is not set
+
+#
+# Power management options
+#
+# CONFIG_PM is not set
+
+#
+# Networking
+#
+CONFIG_NET=y
+
+#
```

```
+# Networking options
+#
+CONFIG_PACKET=y
+# CONFIG_PACKET_MMAP is not set
+CONFIG_UNIX=y
+CONFIG_XFRM=y
+# CONFIG_XFRM_USER is not set
+# CONFIG_XFRM_SUB_POLICY is not set
+# CONFIG_XFRM_MIGRATE is not set
+# CONFIG_NET_KEY is not set
+CONFIG_INET=y
+# CONFIG_IP_MULTICAST is not set
+# CONFIG_IP_ADVANCED_ROUTER is not set
+CONFIG_IP_FIB_HASH=y
+CONFIG_IP_PNP=y
+# CONFIG_IP_PNP_DHCP is not set
+# CONFIG_IP_PNP_BOOTP is not set
+# CONFIG_IP_PNP_RARP is not set
+# CONFIG_NET_IPIP is not set
+# CONFIG_NET_IPGRE is not set
+# CONFIG_ARPD is not set
+CONFIG_SYN_COOKIES=y
+# CONFIG_INET_AH is not set
+# CONFIG_INET_ESP is not set
+# CONFIG_INET_IPCOMP is not set
+# CONFIG_INET_XFRM_TUNNEL is not set
+# CONFIG_INET_TUNNEL is not set
+CONFIG_INET_XFRM_MODE_TRANSPORT=y
+CONFIG_INET_XFRM_MODE_TUNNEL=y
+CONFIG_INET_XFRM_MODE_BEET=y
+CONFIG_INET_DIAG=y
+CONFIG_INET_TCP_DIAG=y
+# CONFIG_TCP_CONG_ADVANCED is not set
+CONFIG_TCP_CONG_CUBIC=y
+CONFIG_DEFAULT_TCP_CONG="cubic"
+# CONFIG_TCP_MD5SIG is not set
+# CONFIG_IPV6 is not set
+# CONFIG_INET6_XFRM_TUNNEL is not set
+# CONFIG_INET6_TUNNEL is not set
+# CONFIG_NETLABEL is not set
+# CONFIG_NETWORK_SECMARK is not set
+# CONFIG_NETFILTER is not set
+# CONFIG_IP_DCCP is not set
+# CONFIG_IP_SCTP is not set
+# CONFIG_TIPC is not set
+# CONFIG_ATM is not set
+# CONFIG_BRIDGE is not set
+# CONFIG_VLAN_8021Q is not set
+# CONFIG_DECNET is not set
+# CONFIG_LLC2 is not set
+# CONFIG_IPX is not set
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+# CONFIG_ATALK is not set
+# CONFIG_X25 is not set
+# CONFIG_LAPB is not set
+# CONFIG_ECONET is not set
+# CONFIG_WAN_ROUTER is not set
+
+#
+# QoS and/or fair queueing
+#
+# CONFIG_NET_SCHED is not set
+
+#
+# Network testing
+#
+# CONFIG_NET_PKTGEN is not set
+# CONFIG_HAMRADIO is not set
+# CONFIG_IRDA is not set
+# CONFIG_BT is not set
+# CONFIG_AF_RXRPC is not set
+
+#
+# Wireless
+#
+# CONFIG_CFG80211 is not set
+# CONFIG_WIRELESS_EXT is not set
+# CONFIG_MAC80211 is not set
+# CONFIG_IEEE80211 is not set
+# CONFIG_RFKILL is not set
+
+#
+# Device Drivers
+#
+
+#
+# Generic Driver Options
+#
+CONFIG_STANDALONE=y
+CONFIG_PREVENT_FIRMWARE_BUILD=y
+# CONFIG_FW_LOADER is not set
+# CONFIG_SYS_HYPERVISOR is not set
+
+#
+# Connector – unified userspace <-> kernelspace linker
+#
+# CONFIG_CONNECTOR is not set
+CONFIG_MTD=y
+# CONFIG_MTD_DEBUG is not set
+# CONFIG_MTD_CONCAT is not set
+CONFIG_MTD_PARTITIONS=y
+# CONFIG_MTD_REDBOOT_PARTS is not set
+# CONFIG_MTD_CMDLINE_PARTS is not set
```

```
+
+#
+# User Modules And Translation Layers
+#
+CONFIG_MTD_CHAR=m
+CONFIG_MTD_BLKDEVS=y
+CONFIG_MTD_BLOCK=y
+# CONFIG_FTL is not set
+# CONFIG_NFTL is not set
+# CONFIG_INFTL is not set
+# CONFIG_RFD_FTL is not set
+# CONFIG_SSFDC is not set
+
+#
+# RAM/ROM/Flash chip drivers
+#
+# CONFIG_MTD_CFI is not set
+CONFIG_MTD_JEDECPROBE=m
+CONFIG_MTD_GEN_PROBE=m
+# CONFIG_MTD_CFI_ADV_OPTIONS is not set
+CONFIG_MTD_MAP_BANK_WIDTH_1=y
+CONFIG_MTD_MAP_BANK_WIDTH_2=y
+CONFIG_MTD_MAP_BANK_WIDTH_4=y
+# CONFIG_MTD_MAP_BANK_WIDTH_8 is not set
+# CONFIG_MTD_MAP_BANK_WIDTH_16 is not set
+# CONFIG_MTD_MAP_BANK_WIDTH_32 is not set
+CONFIG_MTD_CFI_I1=y
+CONFIG_MTD_CFI_I2=y
+# CONFIG_MTD_CFI_I4 is not set
+# CONFIG_MTD_CFI_I8 is not set
+# CONFIG_MTD_CFI_INTELEXT is not set
+# CONFIG_MTD_CFI_AMDSTD is not set
+# CONFIG_MTD_CFI_STAA is not set
+CONFIG_MTD_MW320D=m
+CONFIG_MTD_RAM=y
+CONFIG_MTD_ROM=m
+# CONFIG_MTD_ABSENT is not set
+
+#
+# Mapping drivers for chip access
+#
+CONFIG_MTD_COMPLEX_MAPPINGS=y
+# CONFIG_MTD_PHYSMAP is not set
+CONFIG_MTD_BF5xx=m
+CONFIG_BFIN_FLASH_SIZE=0x400000
+CONFIG_EBIU_FLASH_BASE=0x20000000
+# CONFIG_MTD_UCLINUX is not set
+# CONFIG_MTD_PLATRAM is not set
+
+#
+# Self-contained MTD device drivers
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+#
+# CONFIG_MTD_DATAFLASH is not set
+# CONFIG_MTD_M25P80 is not set
+# CONFIG_MTD_SLRAM is not set
+# CONFIG_MTD_PHRAM is not set
+# CONFIG_MTD_MTDRAM is not set
+# CONFIG_MTD_BLOCK2MTD is not set
+
+#
+# Disk-On-Chip Device Drivers
+#
+# CONFIG_MTD_DOC2000 is not set
+# CONFIG_MTD_DOC2001 is not set
+# CONFIG_MTD_DOC2001PLUS is not set
+CONFIG_MTD_NAND=m
+# CONFIG_MTD_NAND_VERIFY_WRITE is not set
+# CONFIG_MTD_NAND_ECC_SMC is not set
+# CONFIG_MTD_NAND_MUSEUM_IDS is not set
+CONFIG_MTD_NAND_BFIN=m
+CONFIG_BFIN_NAND_BASE=0x20212000
+CONFIG_BFIN_NAND_CLE=2
+CONFIG_BFIN_NAND_ALE=1
+CONFIG_BFIN_NAND_READY=3
+CONFIG_MTD_NAND_IDS=m
+# CONFIG_MTD_NAND_DISKONCHIP is not set
+# CONFIG_MTD_NAND_NANDSIM is not set
+# CONFIG_MTD_NAND_PLATFORM is not set
+# CONFIG_MTD_ONENAND is not set
+
+#
+# UBI – Unsorted block images
+#
+# CONFIG_MTD_UBI is not set
+
+#
+# Parallel port support
+#
+# CONFIG_PARPORT is not set
+
+#
+# Plug and Play support
+#
+# CONFIG_PNPACPI is not set
+
+#
+# Block devices
+#
+# CONFIG_BLK_DEV_COW_COMMON is not set
+# CONFIG_BLK_DEV_LOOP is not set
+# CONFIG_BLK_DEV_NBD is not set
+CONFIG_BLK_DEV_RAM=y
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+CONFIG_BLK_DEV_RAM_COUNT=16
+CONFIG_BLK_DEV_RAM_SIZE=4096
+CONFIG_BLK_DEV_RAM_BLOCKSIZE=1024
+# CONFIG_CDROM_PKTCDVD is not set
+# CONFIG_ATA_OVER_ETH is not set
+
+#
+# Misc devices
+#
+# CONFIG_IDE is not set
+
+#
+# SCSI device support
+#
+# CONFIG_RAID_ATTRS is not set
+# CONFIG_SCSI is not set
+# CONFIG_SCSI_NETLINK is not set
+# CONFIG_ATA is not set
+
+#
+# Multi-device support (RAID and LVM)
+#
+# CONFIG_MD is not set
+
+#
+# Network device support
+#
+CONFIG_NETDEVICES=y
+# CONFIG_DUMMY is not set
+# CONFIG_BONDING is not set
+# CONFIG_EQUALIZER is not set
+# CONFIG_TUN is not set
+CONFIG_PHYLIB=y
+
+#
+# MII PHY device drivers
+#
+# CONFIG_MARVELL_PHY is not set
+# CONFIG_DAVICOM_PHY is not set
+# CONFIG_QSEMI_PHY is not set
+# CONFIG_LXT_PHY is not set
+# CONFIG_CICADA_PHY is not set
+# CONFIG_VITESSE_PHY is not set
+# CONFIG_SMSC_PHY is not set
+# CONFIG_BROADCOM_PHY is not set
+# CONFIG_FIXED_PHY is not set
+
+#
+# Ethernet (10 or 100Mbit)
+#
+CONFIG_NET_ETHERNET=y
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+CONFIG_MII=y
+# CONFIG_SMC91X is not set
+CONFIG_BFIN_MAC=y
+CONFIG_BFIN_MAC_USE_L1=y
+CONFIG_BFIN_TX_DESC_NUM=10
+CONFIG_BFIN_RX_DESC_NUM=20
+CONFIG_BFIN_MAC_RMII=y
+# CONFIG_SMSC911X is not set
+# CONFIG_DM9000 is not set
+CONFIG_NETDEV_1000=y
+CONFIG_NETDEV_10000=y
+
+#
+# Wireless LAN
+#
+# CONFIG_WLAN_PRE80211 is not set
+# CONFIG_WLAN_80211 is not set
+# CONFIG_WAN is not set
+# CONFIG_PPP is not set
+# CONFIG_SLIP is not set
+# CONFIG_SHAPER is not set
+# CONFIG_NETCONSOLE is not set
+# CONFIG_NETPOLL is not set
+# CONFIG_NET_POLL_CONTROLLER is not set
+
+#
+# ISDN subsystem
+#
+# CONFIG_ISDN is not set
+
+#
+# Telephony Support
+#
+# CONFIG_PHONE is not set
+
+#
+# Input device support
+#
+CONFIG_INPUT=y
+# CONFIG_INPUT_FF_MEMLESS is not set
+# CONFIG_INPUT_POLLDEV is not set
+
+#
+# Userland interfaces
+#
+# CONFIG_INPUT_MOUSEDEV is not set
+# CONFIG_INPUT_JOYDEV is not set
+# CONFIG_INPUT_TSDEV is not set
+# CONFIG_INPUT_EVDEV is not set
+# CONFIG_INPUT_EVBUG is not set
+
```

```
+#  
+# Input Device Drivers  
+#  
+# CONFIG_INPUT_KEYBOARD is not set  
+# CONFIG_INPUT_MOUSE is not set  
+# CONFIG_INPUT_JOYSTICK is not set  
+# CONFIG_INPUT_TABLET is not set  
+# CONFIG_INPUT_TOUCHSCREEN is not set  
+CONFIG_INPUT_MISC=y  
+# CONFIG_INPUT_ATI_REMOTE is not set  
+# CONFIG_INPUT_ATI_REMOTE2 is not set  
+# CONFIG_INPUT_KEYSPAN_REMOTE is not set  
+# CONFIG_INPUT_POWERMATE is not set  
+# CONFIG_INPUT_YEALINK is not set  
+# CONFIG_INPUT_UINPUT is not set  
+# CONFIG_BF53X_PFBUTTONS is not set  
+# CONFIG_TWI_KEYPAD is not set  
+  
+#  
+# Hardware I/O ports  
+#  
+# CONFIG_SERIO is not set  
+# CONFIG_GAMEPORT is not set  
+  
+#  
+# Character devices  
+#  
+# CONFIG_AD9960 is not set  
+# CONFIG_SPI_ADC_BF533 is not set  
+# CONFIG_BF5xx_PFLAGS is not set  
+# CONFIG_BF5xx_PPIFCD is not set  
+# CONFIG_BF5xx_TIMERS is not set  
+# CONFIG_BF5xx_PPI is not set  
+# CONFIG_BFIN_SPORT is not set  
+# CONFIG_BFIN_TIMER_LATENCY is not set  
+# CONFIG_TWI_LCD is not set  
+# CONFIG_AD5304 is not set  
+# CONFIG_BF5xx_TEA5764 is not set  
+# CONFIG_BF5xx_FBDMA is not set  
+# CONFIG_VT is not set  
+# CONFIG_SERIAL_NONSTANDARD is not set  
+  
+#  
+# Serial drivers  
+#  
+# CONFIG_SERIAL_8250 is not set  
+  
+#  
+# Non-8250 serial port support  
+#  
+CONFIG_SERIAL_BFIN=y
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+CONFIG_SERIAL_BFIN_CONSOLE=y
+# CONFIG_SERIAL_BFIN_DMA is not set
+CONFIG_SERIAL_BFIN_PIO=y
+# CONFIG_SERIAL_BFIN_UART0 is not set
+CONFIG_SERIAL_BFIN_UART1=y
+# CONFIG_BFIN_UART1_CTSRTS is not set
+CONFIG_SERIAL_CORE=y
+CONFIG_SERIAL_CORE_CONSOLE=y
+# CONFIG_SERIAL_BFIN_SPORT is not set
+CONFIG_UNIX98_PTYS=y
+# CONFIG_LEGACY_PTYS is not set
+
+#
+# CAN, the car bus and industrial fieldbus
+#
+# CONFIG_CAN4LINUX is not set
+
+#
+# IPMI
+#
+# CONFIG_IPMI_HANDLER is not set
+CONFIG_WATCHDOG=y
+# CONFIG_WATCHDOG_NOWAYOUT is not set
+
+#
+# Watchdog Device Drivers
+#
+# CONFIG_SOFT_WATCHDOG is not set
+CONFIG_BFIN_WDT=y
+CONFIG_HW_RANDOM=y
+# CONFIG_GEN_RTC is not set
+# CONFIG_R3964 is not set
+# CONFIG_RAW_DRIVER is not set
+
+#
+# TPM devices
+#
+# CONFIG_TCG_TPM is not set
+CONFIG_I2C=y
+CONFIG_I2C_BOARDINFO=y
+CONFIG_I2C_CHARDEV=m
+
+#
+# I2C Algorithms
+#
+# CONFIG_I2C_ALGOBIT is not set
+# CONFIG_I2C_ALGOPCF is not set
+# CONFIG_I2C_ALGOPCA is not set
+
+#
+# I2C Hardware Bus support
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+#
+# CONFIG_I2C_BLACKFIN_GPIO is not set
+CONFIG_I2C_BLACKFIN_TWI=m
+CONFIG_I2C_BLACKFIN_TWI_CLK_KHZ=50
+# CONFIG_I2C_GPIO is not set
+# CONFIG_I2C_OCORES is not set
+# CONFIG_I2C_PARPORT_LIGHT is not set
+# CONFIG_I2C_SIMTEC is not set
+# CONFIG_I2C_STUB is not set
+
+#
+# Miscellaneous I2C Chip support
+#
+# CONFIG_SENSORS_DS1337 is not set
+# CONFIG_SENSORS_DS1374 is not set
+# CONFIG_SENSORS_AD5252 is not set
+# CONFIG_SENSORS_EEPROM is not set
+# CONFIG_SENSORS_PCF8574 is not set
+# CONFIG_SENSORS_PCF8575 is not set
+# CONFIG_SENSORS_PCA9543 is not set
+# CONFIG_SENSORS_PCA9539 is not set
+# CONFIG_SENSORS_PCF8591 is not set
+# CONFIG_SENSORS_MAX6875 is not set
+# CONFIG_I2C_DEBUG_CORE is not set
+# CONFIG_I2C_DEBUG_ALGO is not set
+# CONFIG_I2C_DEBUG_BUS is not set
+# CONFIG_I2C_DEBUG_CHIP is not set
+
+#
+# SPI support
+#
+CONFIG_SPI=y
+CONFIG_SPI_MASTER=y
+
+#
+# SPI Master Controller Drivers
+#
+CONFIG_SPI_BFIN=y
+# CONFIG_SPI_BITBANG is not set
+
+#
+# SPI Protocol Masters
+#
+# CONFIG_SPI_AT25 is not set
+# CONFIG_SPI_SPIDEV is not set
+
+#
+# Dallas's 1-wire bus
+#
+# CONFIG_W1 is not set
+CONFIG_HWMON=y
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+# CONFIG_HWMON_VID is not set
+# CONFIG_SENSORS_ABITUGURU is not set
+# CONFIG_SENSORS_AD7418 is not set
+# CONFIG_SENSORS_ADM1021 is not set
+# CONFIG_SENSORS_ADM1025 is not set
+# CONFIG_SENSORS_ADM1026 is not set
+# CONFIG_SENSORS_ADM1029 is not set
+# CONFIG_SENSORS_ADM1031 is not set
+# CONFIG_SENSORS_ADM9240 is not set
+# CONFIG_SENSORS_ASB100 is not set
+# CONFIG_SENSORS_ATXP1 is not set
+# CONFIG_SENSORS_DS1621 is not set
+# CONFIG_SENSORS_F71805F is not set
+# CONFIG_SENSORS_FSCHER is not set
+# CONFIG_SENSORS_FSCPOS is not set
+# CONFIG_SENSORS_GL518SM is not set
+# CONFIG_SENSORS_GL520SM is not set
+# CONFIG_SENSORS_IT87 is not set
+# CONFIG_SENSORS_LM63 is not set
+# CONFIG_SENSORS_LM70 is not set
+# CONFIG_SENSORS_LM75 is not set
+# CONFIG_SENSORS_LM77 is not set
+# CONFIG_SENSORS_LM78 is not set
+# CONFIG_SENSORS_LM80 is not set
+# CONFIG_SENSORS_LM83 is not set
+# CONFIG_SENSORS_LM85 is not set
+# CONFIG_SENSORS_LM87 is not set
+# CONFIG_SENSORS_LM90 is not set
+# CONFIG_SENSORS_LM92 is not set
+# CONFIG_SENSORS_MAX1619 is not set
+# CONFIG_SENSORS_MAX6650 is not set
+# CONFIG_SENSORS_PC87360 is not set
+# CONFIG_SENSORS_PC87427 is not set
+# CONFIG_SENSORS_SMSC47M1 is not set
+# CONFIG_SENSORS_SMSC47M192 is not set
+# CONFIG_SENSORS_SMSC47B397 is not set
+# CONFIG_SENSORS_VT1211 is not set
+# CONFIG_SENSORS_W83781D is not set
+# CONFIG_SENSORS_W83791D is not set
+# CONFIG_SENSORS_W83792D is not set
+# CONFIG_SENSORS_W83793 is not set
+# CONFIG_SENSORS_W83L785TS is not set
+# CONFIG_SENSORS_W83627HF is not set
+# CONFIG_SENSORS_W83627EHF is not set
+# CONFIG_HWMON_DEBUG_CHIP is not set
+
+#
+# Multifunction device drivers
+#
+# CONFIG_MFD_SM501 is not set
+
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+#  
+# Multimedia devices  
+#  
+# CONFIG_VIDEO_DEV is not set  
+# CONFIG_DVB_CORE is not set  
+# CONFIG_DAB is not set  
+  
+#  
+# Graphics support  
+#  
+# CONFIG_BACKLIGHT_LCD_SUPPORT is not set  
+  
+#  
+# Display device support  
+#  
+# CONFIG_DISPLAY_SUPPORT is not set  
+# CONFIG_VGASTATE is not set  
+# CONFIG_FB is not set  
+  
+#  
+# Sound  
+#  
+# CONFIG_SOUND is not set  
+  
+#  
+# HID Devices  
+#  
+CONFIG_HID=y  
+# CONFIG_HID_DEBUG is not set  
+  
+#  
+# USB support  
+#  
+CONFIG_USB_ARCH_HAS_HCD=y  
+# CONFIG_USB_ARCH_HAS_OHCI is not set  
+# CONFIG_USB_ARCH_HAS_EHCI is not set  
+# CONFIG_USB is not set  
+  
+#  
+# Enable Host or Gadget support to see Inventra options  
+#  
+  
+#  
+# NOTE: USB_STORAGE enables SCSI, and 'SCSI disk support'  
+#  
+  
+#  
+# USB Gadget Support  
+#  
+# CONFIG_USB_GADGET is not set  
+# CONFIG_MMC is not set
```

```
+
+#
+# LED devices
+#
+# CONFIG_NEW_LEDS is not set
+
+#
+# LED drivers
+#
+
+#
+# LED Triggers
+#
+
+#
+# InfiniBand support
+#
+
+#
+# EDAC – error detection and reporting (RAS) (EXPERIMENTAL)
+#
+
+#
+# Real Time Clock
+#
+CONFIG_RTC_LIB=y
+CONFIG_RTC_CLASS=y
+CONFIG_RTC_HCTOSYS=y
+CONFIG_RTC_HCTOSYS_DEVICE="rtc0"
+# CONFIG_RTC_DEBUG is not set
+
+#
+# RTC interfaces
+#
+CONFIG_RTC_INTF_SYSFS=y
+CONFIG_RTC_INTF_PROC=y
+CONFIG_RTC_INTF_DEV=y
+# CONFIG_RTC_INTF_DEV_UIE_EMUL is not set
+# CONFIG_RTC_DRV_TEST is not set
+
+#
+# I2C RTC drivers
+#
+# CONFIG_RTC_DRV_DS1307 is not set
+# CONFIG_RTC_DRV_DS1672 is not set
+# CONFIG_RTC_DRV_MAX6900 is not set
+# CONFIG_RTC_DRV_RS5C372 is not set
+# CONFIG_RTC_DRV_ISL1208 is not set
+# CONFIG_RTC_DRV_X1205 is not set
+# CONFIG_RTC_DRV_PCF8563 is not set
+# CONFIG_RTC_DRV_PCF8583 is not set
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+
+#
+# SPI RTC drivers
+#
+# CONFIG_RTC_DRV_RS5C348 is not set
+# CONFIG_RTC_DRV_MAX6902 is not set
+
+#
+# Platform RTC drivers
+#
+# CONFIG_RTC_DRV_DS1553 is not set
+# CONFIG_RTC_DRV_DS1742 is not set
+# CONFIG_RTC_DRV_M48T86 is not set
+# CONFIG_RTC_DRV_V3020 is not set
+
+#
+# on-CPU RTC drivers
+#
+CONFIG_RTC_DRV_BFIN=y
+
+#
+# DMA Engine support
+#
+# CONFIG_DMA_ENGINE is not set
+
+#
+# DMA Clients
+#
+
+#
+# DMA Devices
+#
+
+#
+# PBX support
+#
+# CONFIG_PBX is not set
+
+#
+# File systems
+#
+# CONFIG_EXT2_FS is not set
+# CONFIG_EXT3_FS is not set
+# CONFIG_EXT4DEV_FS is not set
+# CONFIG_REISERFS_FS is not set
+# CONFIG_JFS_FS is not set
+# CONFIG_FS_POSIX_ACL is not set
+# CONFIG_XFS_FS is not set
+# CONFIG_GFS2_FS is not set
+# CONFIG_OCFS2_FS is not set
+# CONFIG_MINIX_FS is not set
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+# CONFIG_ROMFS_FS is not set
+CONFIG_INOTIFY=y
+CONFIG_INOTIFY_USER=y
+# CONFIG_QUOTA is not set
+# CONFIG_DNOTIFY is not set
+# CONFIG_AUTOFS_FS is not set
+# CONFIG_AUTOFS4_FS is not set
+# CONFIG_FUSE_FS is not set
+
+#
+# CD-ROM/DVD Filesystems
+#
+# CONFIG_ISO9660_FS is not set
+# CONFIG_UDF_FS is not set
+
+#
+# DOS/FAT/NT Filesystems
+#
+# CONFIG_MSDOS_FS is not set
+# CONFIG_VFAT_FS is not set
+# CONFIG_NTFS_FS is not set
+
+#
+# Pseudo filesystems
+#
+CONFIG_PROC_FS=y
+CONFIG_PROC_SYSCTL=y
+CONFIG_SYSFS=y
+# CONFIG_TMPFS is not set
+# CONFIG_HUGETLB_PAGE is not set
+CONFIG_RAMFS=y
+# CONFIG_CONFIGFS_FS is not set
+
+#
+# Miscellaneous filesystems
+#
+# CONFIG_ADFS_FS is not set
+# CONFIG_AFFS_FS is not set
+# CONFIG_HFS_FS is not set
+# CONFIG_HFSPLUS_FS is not set
+# CONFIG_BEFS_FS is not set
+# CONFIG_BFS_FS is not set
+# CONFIG_EFS_FS is not set
+CONFIG_YAFFS_FS=m
+CONFIG_YAFFS_YAFFS1=y
+# CONFIG_YAFFS_DOES_ECC is not set
+CONFIG_YAFFS_YAFFS2=y
+CONFIG_YAFFS_AUTO_YAFFS2=y
+# CONFIG_YAFFS_DISABLE_LAZY_LOAD is not set
+CONFIG_YAFFS_CHECKPOINT_RESERVED_BLOCKS=10
+# CONFIG_YAFFS_DISABLE_WIDE_TNODES is not set
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+ # CONFIG_YAFFS_ALWAYS_CHECK_CHUNK_ERASED is not set
+ CONFIG_YAFFS_SHORT_NAMES_IN_RAM=y
+ CONFIG_JFFS2_FS=m
+ CONFIG_JFFS2_FS_DEBUG=0
+ CONFIG_JFFS2_FS_WRITEBUFFER=y
+ # CONFIG_JFFS2_SUMMARY is not set
+ # CONFIG_JFFS2_FS_XATTR is not set
+ # CONFIG_JFFS2_COMPRESSION_OPTIONS is not set
+ CONFIG_JFFS2_ZLIB=y
+ CONFIG_JFFS2_RUNTIME=y
+ # CONFIG_JFFS2_RUBIN is not set
+ # CONFIG_CRAMFS is not set
+ # CONFIG_VXFS_FS is not set
+ # CONFIG_HPFS_FS is not set
+ # CONFIG_QNX4FS_FS is not set
+ # CONFIG_SYSV_FS is not set
+ # CONFIG_UFS_FS is not set
+
+ #
+ # Network File Systems
+ #
+ CONFIG_NFS_FS=m
+ CONFIG_NFS_V3=y
+ # CONFIG_NFS_V3_ACL is not set
+ # CONFIG_NFS_V4 is not set
+ # CONFIG_NFS_DIRECTIO is not set
+ # CONFIG_NFSD is not set
+ CONFIG_LOCKD=m
+ CONFIG_LOCKD_V4=y
+ CONFIG_NFS_COMMON=y
+ CONFIG_SUNRPC=m
+ # CONFIG_SUNRPC_BIND34 is not set
+ # CONFIG_RPCSEC_GSS_KRB5 is not set
+ # CONFIG_RPCSEC_GSS_SPKM3 is not set
+ CONFIG_SMB_FS=m
+ # CONFIG_SMB_NLS_DEFAULT is not set
+ # CONFIG_CIFS is not set
+ # CONFIG_NCP_FS is not set
+ # CONFIG_CODA_FS is not set
+ # CONFIG_AFS_FS is not set
+ # CONFIG_9P_FS is not set
+
+ #
+ # Partition Types
+ #
+ # CONFIG_PARTITION_ADVANCED is not set
+ CONFIG_MSDOS_PARTITION=y
+
+ #
+ # Native Language Support
+ #
```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+CONFIG_NLS=m
+CONFIG_NLS_DEFAULT="iso8859-1"
+# CONFIG_NLS_CODEPAGE_437 is not set
+# CONFIG_NLS_CODEPAGE_737 is not set
+# CONFIG_NLS_CODEPAGE_775 is not set
+# CONFIG_NLS_CODEPAGE_850 is not set
+# CONFIG_NLS_CODEPAGE_852 is not set
+# CONFIG_NLS_CODEPAGE_855 is not set
+# CONFIG_NLS_CODEPAGE_857 is not set
+# CONFIG_NLS_CODEPAGE_860 is not set
+# CONFIG_NLS_CODEPAGE_861 is not set
+# CONFIG_NLS_CODEPAGE_862 is not set
+# CONFIG_NLS_CODEPAGE_863 is not set
+# CONFIG_NLS_CODEPAGE_864 is not set
+# CONFIG_NLS_CODEPAGE_865 is not set
+# CONFIG_NLS_CODEPAGE_866 is not set
+# CONFIG_NLS_CODEPAGE_869 is not set
+# CONFIG_NLS_CODEPAGE_936 is not set
+# CONFIG_NLS_CODEPAGE_950 is not set
+# CONFIG_NLS_CODEPAGE_932 is not set
+# CONFIG_NLS_CODEPAGE_949 is not set
+# CONFIG_NLS_CODEPAGE_874 is not set
+# CONFIG_NLS_ISO8859_8 is not set
+# CONFIG_NLS_CODEPAGE_1250 is not set
+# CONFIG_NLS_CODEPAGE_1251 is not set
+# CONFIG_NLS_ASCII is not set
+# CONFIG_NLS_ISO8859_1 is not set
+# CONFIG_NLS_ISO8859_2 is not set
+# CONFIG_NLS_ISO8859_3 is not set
+# CONFIG_NLS_ISO8859_4 is not set
+# CONFIG_NLS_ISO8859_5 is not set
+# CONFIG_NLS_ISO8859_6 is not set
+# CONFIG_NLS_ISO8859_7 is not set
+# CONFIG_NLS_ISO8859_9 is not set
+# CONFIG_NLS_ISO8859_13 is not set
+# CONFIG_NLS_ISO8859_14 is not set
+# CONFIG_NLS_ISO8859_15 is not set
+# CONFIG_NLS_KOI8_R is not set
+# CONFIG_NLS_KOI8_U is not set
+# CONFIG_NLS_UTF8 is not set
+
+#
+# Distributed Lock Manager
+#
+# CONFIG_DLM is not set
+
+#
+# Profiling support
+#
+# CONFIG_PROFILING is not set
+
```

```
+#
+# Kernel hacking
+#
+# CONFIG_PRINTK_TIME is not set
+CONFIG_ENABLE_MUST_CHECK=y
+CONFIG_MAGIC_SYSRQ=y
+# CONFIG_UNUSED_SYMBOLS is not set
+CONFIG_DEBUG_FS=y
+# CONFIG_HEADERS_CHECK is not set
+# CONFIG_DEBUG_KERNEL is not set
+# CONFIG_DEBUG_BUGVERBOSE is not set
+CONFIG_DEBUG_MMRS=y
+CONFIG_DEBUG_HUNT_FOR_ZERO=y
+CONFIG_DEBUG_BFIN_HWTRACE_ON=y
+CONFIG_DEBUG_BFIN_HWTRACE_COMPRESSION_OFF=y
+# CONFIG_DEBUG_BFIN_HWTRACE_COMPRESSION_ONE is not set
+# CONFIG_DEBUG_BFIN_HWTRACE_COMPRESSION_TWO is not set
+CONFIG_DEBUG_BFIN_HWTRACE_COMPRESSION=0
+# CONFIG_DEBUG_BFIN_HWTRACE_EXPAND is not set
+# CONFIG_DEBUG_BFIN_NO_KERN_HWTRACE is not set
+CONFIG_EARLY_PRINTK=y
+CONFIG_CPLB_INFO=y
+CONFIG_ACCESS_CHECK=y
+
+#
+# Security options
+#
+# CONFIG_KEYS is not set
+CONFIG_SECURITY=y
+# CONFIG_SECURITY_NETWORK is not set
+CONFIG_SECURITY_CAPABILITIES=y
+
+#
+# Cryptographic options
+#
+# CONFIG_CRYPTO is not set
+
+#
+# Library routines
+#
+CONFIG_BITREVERSE=y
+# CONFIG_CRC_CCITT is not set
+# CONFIG_CRC16 is not set
+# CONFIG_CRC_ITU_T is not set
+CONFIG_CRC32=y
+# CONFIG_LIBCRC32C is not set
+CONFIG_ZLIB_INFLATE=y
+CONFIG_ZLIB_DEFLATE=m
+CONFIG_PLIST=y
+CONFIG_HAS_IOMEM=y
+CONFIG_HAS_IOPORT=y
```

```

+CONFIG_HAS_DMA=y
diff --git a/arch/blackfin/configs/BF548-EZKIT_defconfig
b/arch/blackfin/configs/BF548-EZKIT_defconfig
index e80f3d5..d856988 100644
--- a/arch/blackfin/configs/BF548-EZKIT_defconfig
+++ b/arch/blackfin/configs/BF548-EZKIT_defconfig
@@ -809,7 +809,14 @@ CONFIG_UNIX98_PTYS=y
# IPMI
#
# CONFIG_IPMI_HANDLER is not set
-# CONFIG_WATCHDOG is not set
+CONFIG_WATCHDOG=y
+# CONFIG_WATCHDOG_NOWAYOUT is not set
+
+#
+# Watchdog Device Drivers
+#
+# CONFIG_SOFT_WATCHDOG is not set
+CONFIG_BFIN_WDT=y
CONFIG_HW_RANDOM=y
# CONFIG_GEN_RTC is not set
# CONFIG_R3964 is not set
diff --git a/arch/blackfin/kernel/Makefile b/arch/blackfin/kernel/Makefile
index 8aeb606..8a4cfb2 100644
--- a/arch/blackfin/kernel/Makefile
+++ b/arch/blackfin/kernel/Makefile
@@ -9,6 +9,7 @@ obj-y := \
sys_bfin.o time.o traps.o irqchip.o dma-mapping.o flat.o \
fixed_code.o cplbinit.o cacheinit.o reboot.o bfin_gpio.o

+obj-$(CONFIG_BFIN_GPTIMERS) += gptimers.o
obj-$(CONFIG_MODULES) += module.o
obj-$(CONFIG_BFIN_DMA_5XX) += bfin_dma_5xx.o
obj-$(CONFIG_DUAL_CORE_TEST_MODULE) += dualcore_test.o
diff --git a/arch/blackfin/kernel/bfin_dma_5xx.c b/arch/blackfin/kernel/bfin_dma_5xx.c
index e19164f..503eef4 100644
--- a/arch/blackfin/kernel/bfin_dma_5xx.c
+++ b/arch/blackfin/kernel/bfin_dma_5xx.c
@@ -420,6 +420,32 @@ unsigned short get_dma_curr_ycount(unsigned int channel)
}
EXPORT_SYMBOL(get_dma_curr_ycount);

+unsigned long get_dma_next_desc_ptr(unsigned int channel)
+{
+ BUG_ON(!(dma_ch[channel].chan_status != DMA_CHANNEL_FREE
+ && channel < MAX_BLACKFIN_DMA_CHANNEL));
+
+ return dma_ch[channel].regs->next_desc_ptr;
+}
+EXPORT_SYMBOL(get_dma_next_desc_ptr);
+

```

```

+unsigned long get_dma_curr_desc_ptr(unsigned int channel)
+{
+ BUG_ON(!(dma_ch[channel].chan_status != DMA_CHANNEL_FREE
+ && channel < MAX_BLACKFIN_DMA_CHANNEL));
+
+ return dma_ch[channel].regs->curr_desc_ptr;
+}
+
+unsigned long get_dma_curr_addr(unsigned int channel)
+{
+ BUG_ON(!(dma_ch[channel].chan_status != DMA_CHANNEL_FREE
+ && channel < MAX_BLACKFIN_DMA_CHANNEL));
+
+ return dma_ch[channel].regs->curr_addr_ptr;
+}
+EXPORT_SYMBOL(get_dma_curr_addr);
+
+static void *__dma_memcpy(void *dest, const void *src, size_t size)
+{
+int direction; /* 1 - address decrease, 0 - address increase */
diff --git a/arch/blackfin/kernel/bfin_gpio.c b/arch/blackfin/kernel/bfin_gpio.c
index 3fe0cd4..ce85d4b 100644
--- a/arch/blackfin/kernel/bfin_gpio.c
+++ b/arch/blackfin/kernel/bfin_gpio.c
@@ -124,7 +124,7 @@ static struct gpio_port_t *gpio_bankb[gpio_bank(MAX_BLACKFIN_GPIOS)] = {
};
#endif

#ifndef BF537_FAMILY
+#if defined(BF527_FAMILY) || defined(BF537_FAMILY)
static struct gpio_port_t *gpio_bankb[gpio_bank(MAX_BLACKFIN_GPIOS)] = {
(struct gpio_port_t *) PORTFIO,
(struct gpio_port_t *) PORTGIO,
@@ -139,6 +139,21 @@ static unsigned short *port_fer[gpio_bank(MAX_BLACKFIN_GPIOS)] = {
#endif

+#ifndef BF527_FAMILY
+static unsigned short *port_mux[gpio_bank(MAX_BLACKFIN_GPIOS)] = {
+ (unsigned short *) PORTF_MUX,
+ (unsigned short *) PORTG_MUX,
+ (unsigned short *) PORTH_MUX,
+};
+
+static const
+u8 pmux_offset[][16] =
+ { { 0, 0, 0, 0, 0, 0, 0, 0, 2, 2, 4, 6, 8, 8, 10, 10 }, /* PORTF */
+ { 0, 0, 0, 0, 0, 2, 2, 4, 4, 6, 8, 10, 10, 10, 12, 12 }, /* PORTG */
+ { 0, 0, 0, 0, 0, 0, 0, 0, 2, 4, 4, 4, 4, 4, 4, 4 }, /* PORTH */
+ };
+#endif

```

```

+
#ifdef BF561_FAMILY
static struct gpio_port_t *gpio_bankb[gpio_bank(MAX_BLACKFIN_GPIOS)] = {
(struct gpio_port_t *) FIO0_FLAG_D,
@@ -186,6 +201,10 @@ static unsigned int sic_iwr_irqs[gpio_bank(MAX_BLACKFIN_GPIOS)] =
{IRQ_PROG_INTB
static unsigned int sic_iwr_irqs[gpio_bank(MAX_BLACKFIN_GPIOS)] = {IRQ_PROG_INTB,
IRQ_PORTG_INTB, IRQ_MAC_TX};
#endif

+#ifdef BF527_FAMILY
+static unsigned int sic_iwr_irqs[gpio_bank(MAX_BLACKFIN_GPIOS)] = {IRQ_PORTF_INTB,
IRQ_PORTG_INTB, IRQ_PORTH_INTB};
+#endif
+
#ifdef BF561_FAMILY
static unsigned int sic_iwr_irqs[gpio_bank(MAX_BLACKFIN_GPIOS)] = {IRQ_PROG0_INTB,
IRQ_PROG1_INTB, IRQ_PROG2_INTB};
#endif
@@ -238,7 +257,7 @@ static int cmp_label(unsigned short ident, const char *label)
return -EINVAL;
}

-#ifdef BF537_FAMILY
+#if defined(BF527_FAMILY) || defined(BF537_FAMILY)
static void port_setup(unsigned short gpio, unsigned short usage)
{
if (!check_gpio(gpio)) {
@@ -354,6 +373,18 @@ inline u16 get_portmux(unsigned short portno)

return (pmux >> (2 * gpio_sub_n(portno)) & 0x3);
}
+#elif defined(BF527_FAMILY)
+inline void portmux_setup(unsigned short portno, unsigned short function)
+{
+ u16 pmux, ident = P_IDENT(portno);
+ u8 offset = pmux_offset[gpio_bank(ident)][gpio_sub_n(ident)];
+
+ pmux = *port_mux[gpio_bank(ident)];
+ pmux &= ~(3 << offset);
+ pmux |= (function & 3) << offset;
+ *port_mux[gpio_bank(ident)] = pmux;
+ SSYNC();
+}
+
+ #else
+ #define portmux_setup(...) do { } while (0)
+ #endif
diff --git a/arch/blackfin/kernel/gptimers.c b/arch/blackfin/kernel/gptimers.c
new file mode 100644
index 0000000..cb7ba9b
--- /dev/null

```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+++ b/arch/blackfin/kernel/gptimers.c
@@ -0,0 +1,250 @@
+/*
+ * bfin_gptimers.c – derived from bf53x_timers.c
+ * Driver for General Purpose Timer functions on the Blackfin processor
+ *
+ * Copyright (C) 2005 John DeHORITY
+ * Copyright (C) 2006 Hella Aglaia GmbH (awe@xxxxxxxxxxxxxxxxx)
+ *
+ * Licensed under the GPLv2.
+ */
+
+#include <linux/kernel.h>
+#include <linux/module.h>
+
+#include <asm/io.h>
+#include <asm/blackfin.h>
+#include <asm/gptimers.h>
+
+#ifdef DEBUG
+# define tassert(expr)
+#else
+# define tassert(expr) \
+ if (!(expr)) \
+ printk(KERN_DEBUG "%s:%s:%i: Assertion failed: " #expr "\n", \
+ __FILE__, __func__, __LINE__);
+#endif
+
+#define BFIN_TIMER_NUM_GROUP (BFIN_TIMER_OCTET(MAX_BLACKFIN_GPTIMERS - 1) + 1)
+
+typedef struct {
+ uint16_t config;
+ uint16_t __pad;
+ uint32_t counter;
+ uint32_t period;
+ uint32_t width;
+} GPTIMER_timer_regs;
+
+typedef struct {
+ uint16_t enable;
+ uint16_t __pad0;
+ uint16_t disable;
+ uint16_t __pad1;
+ uint32_t status;
+} GPTIMER_group_regs;
+
+static volatile GPTIMER_timer_regs *const timer_regs[MAX_BLACKFIN_GPTIMERS] =
+{
+ (GPTIMER_timer_regs *)TIMER0_CONFIG,
+ (GPTIMER_timer_regs *)TIMER1_CONFIG,
+ (GPTIMER_timer_regs *)TIMER2_CONFIG,
```

```

+#if (MAX_BLACKFIN_GPTIMERS > 3)
+ (GPTIMER_timer_regs *)TIMER3_CONFIG,
+ (GPTIMER_timer_regs *)TIMER4_CONFIG,
+ (GPTIMER_timer_regs *)TIMER5_CONFIG,
+ (GPTIMER_timer_regs *)TIMER6_CONFIG,
+ (GPTIMER_timer_regs *)TIMER7_CONFIG,
+#endif
+#if (MAX_BLACKFIN_GPTIMERS > 8)
+ (GPTIMER_timer_regs *)TIMER8_CONFIG,
+ (GPTIMER_timer_regs *)TIMER9_CONFIG,
+ (GPTIMER_timer_regs *)TIMER10_CONFIG,
+ (GPTIMER_timer_regs *)TIMER11_CONFIG,
+#endif
+};
+
+static volatile GPTIMER_group_regs *const group_regs[BFIN_TIMER_NUM_GROUP] =
+{
+ (GPTIMER_group_regs *)TIMER0_GROUP_REG,
+#if (MAX_BLACKFIN_GPTIMERS > 8)
+ (GPTIMER_group_regs *)TIMER8_GROUP_REG,
+#endif
+};
+
+static uint32_t const dis_mask[MAX_BLACKFIN_GPTIMERS] =
+{
+ TIMER_STATUS_TRUN0,
+ TIMER_STATUS_TRUN1,
+ TIMER_STATUS_TRUN2,
+#if (MAX_BLACKFIN_GPTIMERS > 3)
+ TIMER_STATUS_TRUN3,
+ TIMER_STATUS_TRUN4,
+ TIMER_STATUS_TRUN5,
+ TIMER_STATUS_TRUN6,
+ TIMER_STATUS_TRUN7,
+#endif
+#if (MAX_BLACKFIN_GPTIMERS > 8)
+ TIMER_STATUS_TRUN8,
+ TIMER_STATUS_TRUN9,
+ TIMER_STATUS_TRUN10,
+ TIMER_STATUS_TRUN11,
+#endif
+};
+
+static uint32_t const irq_mask[MAX_BLACKFIN_GPTIMERS] =
+{
+ TIMER_STATUS_TIMIL0,
+ TIMER_STATUS_TIMIL1,
+ TIMER_STATUS_TIMIL2,
+#if (MAX_BLACKFIN_GPTIMERS > 3)
+ TIMER_STATUS_TIMIL3,
+ TIMER_STATUS_TIMIL4,

```

```
+ TIMER_STATUS_TIMIL5,  
+ TIMER_STATUS_TIMIL6,  
+ TIMER_STATUS_TIMIL7,  
+ #endif  
+ #if (MAX_BLACKFIN_GPTIMERS > 8)  
+ TIMER_STATUS_TIMIL8,  
+ TIMER_STATUS_TIMIL9,  
+ TIMER_STATUS_TIMIL10,  
+ TIMER_STATUS_TIMIL11,  
+ #endif  
+ };  
+  
+ void set_gptimer_pwidth(int timer_id, uint32_t value)  
+ {  
+ tassert(timer_id < MAX_BLACKFIN_GPTIMERS);  
+ timer_regs[timer_id]->width = value;  
+ SSYNC();  
+ }  
+ EXPORT_SYMBOL(set_gptimer_pwidth);  
+  
+ uint32_t get_gptimer_pwidth(int timer_id)  
+ {  
+ tassert(timer_id < MAX_BLACKFIN_GPTIMERS);  
+ return timer_regs[timer_id]->width;  
+ }  
+ EXPORT_SYMBOL(get_gptimer_pwidth);  
+  
+ void set_gptimer_period(int timer_id, uint32_t period)  
+ {  
+ tassert(timer_id < MAX_BLACKFIN_GPTIMERS);  
+ timer_regs[timer_id]->period = period;  
+ SSYNC();  
+ }  
+ EXPORT_SYMBOL(set_gptimer_period);  
+  
+ uint32_t get_gptimer_period(int timer_id)  
+ {  
+ tassert(timer_id < MAX_BLACKFIN_GPTIMERS);  
+ return timer_regs[timer_id]->period;  
+ }  
+ EXPORT_SYMBOL(get_gptimer_period);  
+  
+ uint32_t get_gptimer_count(int timer_id)  
+ {  
+ tassert(timer_id < MAX_BLACKFIN_GPTIMERS);  
+ return timer_regs[timer_id]->counter;  
+ }  
+ EXPORT_SYMBOL(get_gptimer_count);  
+  
+ uint32_t get_gptimer_status(int group)  
+ {
```

```

+ tassert(group < BFIN_TIMER_NUM_GROUP);
+ return group_regs[group]->status;
+}
+EXPORT_SYMBOL(get_gptimer_status);
+
+void set_gptimer_status(int group, uint32_t value)
+{
+ tassert(group < BFIN_TIMER_NUM_GROUP);
+ group_regs[group]->status = value;
+ SSYNC();
+}
+EXPORT_SYMBOL(set_gptimer_status);
+
+uint16_t get_gptimer_intr(int timer_id)
+{
+ tassert(timer_id < MAX_BLACKFIN_GPTIMERS);
+ return (group_regs[BFIN_TIMER_OCTET(timer_id)]->status & irq_mask[timer_id]) ? 1 : 0;
+}
+EXPORT_SYMBOL(get_gptimer_intr);
+
+void clear_gptimer_intr(int timer_id)
+{
+ tassert(timer_id < MAX_BLACKFIN_GPTIMERS);
+ group_regs[BFIN_TIMER_OCTET(timer_id)]->status = irq_mask[timer_id];
+}
+EXPORT_SYMBOL(clear_gptimer_intr);
+
+void set_gptimer_config(int timer_id, uint16_t config)
+{
+ tassert(timer_id < MAX_BLACKFIN_GPTIMERS);
+ timer_regs[timer_id]->config = config;
+ SSYNC();
+}
+EXPORT_SYMBOL(set_gptimer_config);
+
+uint16_t get_gptimer_config(int timer_id)
+{
+ tassert(timer_id < MAX_BLACKFIN_GPTIMERS);
+ return timer_regs[timer_id]->config;
+}
+EXPORT_SYMBOL(get_gptimer_config);
+
+void enable_gptimers(uint16_t mask)
+{
+ int i;
+ tassert((mask & ~BLACKFIN_GPTIMER_IDMASK) == 0);
+ for (i = 0; i < BFIN_TIMER_NUM_GROUP; ++i) {
+ group_regs[i]->enable = mask & 0xFF;
+ mask >>= 8;
+ }
+ SSYNC();

```

```

+}
+EXPORT_SYMBOL(enable_gptimers);
+
+void disable_gptimers(uint16_t mask)
+{
+ int i;
+ uint16_t m = mask;
+ tassert((mask & ~BLACKFIN_GPTIMER_IDMASK) == 0);
+ for (i = 0; i < BFIN_TIMER_NUM_GROUP; ++i) {
+ group_regs[i]->disable = m & 0xFF;
+ m >>= 8;
+ }
+ for (i = 0; i < MAX_BLACKFIN_GPTIMERS; ++i)
+ if (mask & (1 << i))
+ group_regs[BFIN_TIMER_OCTET(i)]->status |= dis_mask[i];
+ SSYNC();
+}
+EXPORT_SYMBOL(disable_gptimers);
+
+void set_gptimer_pulse_hi(int timer_id)
+{
+ tassert(timer_id < MAX_BLACKFIN_GPTIMERS);
+ timer_regs[timer_id]->config |= TIMER_PULSE_HI;
+ SSYNC();
+}
+EXPORT_SYMBOL(set_gptimer_pulse_hi);
+
+void clear_gptimer_pulse_hi(int timer_id)
+{
+ tassert(timer_id < MAX_BLACKFIN_GPTIMERS);
+ timer_regs[timer_id]->config &= ~TIMER_PULSE_HI;
+ SSYNC();
+}
+EXPORT_SYMBOL(clear_gptimer_pulse_hi);
+
+uint16_t get_enabled_gptimers(void)
+{
+ int i;
+ uint16_t result = 0;
+ for (i = 0; i < BFIN_TIMER_NUM_GROUP; ++i)
+ result |= (group_regs[i]->enable << (i << 3));
+ return result;
+}
+EXPORT_SYMBOL(get_enabled_gptimers);
+
+MODULE_AUTHOR("Axel Weiss (awe@xxxxxxxxxxxxxxxx)");
+MODULE_DESCRIPTION("Blackfin General Purpose Timers API");
+MODULE_LICENSE("GPL");
diff --git a/arch/blackfin/kernel/reboot.c b/arch/blackfin/kernel/reboot.c
index 356078e..ae28aac 100644
--- a/arch/blackfin/kernel/reboot.c

```

[GIT-PULL Part #2] Blackfin arch fixing and updates for 2.6.24 merge windows

```
+++ b/arch/blackfin/kernel/reboot.c
@@ -11,7 +11,7 @@
#include <asm/reboot.h>
#include <asm/system.h>

-#if defined(BF537_FAMILY) || defined(BF533_FAMILY)
+#if defined(BF537_FAMILY) || defined(BF533_FAMILY) || defined(BF527_FAMILY)
#define SYSCR_VAL 0x0
#elif defined(BF561_FAMILY)
#define SYSCR_VAL 0x20
diff --git a/arch/blackfin/kernel/setup.c b/arch/blackfin/kernel/setup.c
index 8dcd76e..0e74644 100644
--- a/arch/blackfin/kernel/setup.c
+++ b/arch/blackfin/kernel/setup.c
@@ -459,7 +459,7 @@ static u_long get_vco(void)
return vco;
}

-/*Get the Core clock*/
+/* Get the Core clock */
u_long get_cclk(void)
{
u_long csel, ssel;
@@ -493,12 +493,24 @@ u_long get_sclk(void)
}
EXPORT_SYMBOL(get_sclk);

+unsigned long sclk_to_usecs(unsigned long sclk)
+{
+ return (USEC_PER_SEC * (u64)sclk) / get_sclk();
+}
+EXPORT_SYMBOL(sclk_to_usecs);
+
+unsigned long usecs_to_sclk(unsigned long usecs)
+{
+ return get_sclk() / (USEC_PER_SEC * (u64)usecs);
+}
+EXPORT_SYMBOL(usecs_to_sclk);
+
+/*
+ * Get CPU information for use by the procf.
+ */
static int show_cpuinfo(struct seq_file *m, void *v)
{
- char *cpu, *mmu, *fpu, *name;
+ char *cpu, *mmu, *fpu, *vendor, *cache;
uint32_t revid;

u_long cclk = 0, sclk = 0;
@@ -508,70 +520,83 @@ static int show_cpuinfo(struct seq_file *m, void *v)
mmu = "none";
```

```

fpu = "none";
revid = bfin_revid();
- name = bfin_board_name;

cclk = get_cclk();
sclk = get_sclk();

- seq_printf(m, "CPU:\t\tADSP-%s Rev. 0.%d\n"
- "MMU:\t\t%s\n"
- "FPU:\t\t%s\n"
- "Core Clock:\t%9lu Hz\n"
- "System Clock:\t%9lu Hz\n"
- "BogoMips:\t%lu.%02lu\n"
- "Calibration:\t%lu loops\n",
- cpu, revid, mmu, fpu,
- cclk,
- sclk,
- (loops_per_jiffy * HZ) / 500000,
- ((loops_per_jiffy * HZ) / 5000) % 100,
- (loops_per_jiffy * HZ));
- seq_printf(m, "Board Name:\t%s\n", name);
- seq_printf(m, "Board Memory:\t%ld MB\n", physical_mem_end >> 20);
- seq_printf(m, "Kernel Memory:\t%ld MB\n", (unsigned long)_ramend >> 20);
- if (bfin_read_IMEM_CONTROL() & (ENICPLB | IMC))
- seq_printf(m, "I-CACHE:\tON\n");
- else
- seq_printf(m, "I-CACHE:\tOFF\n");
- if ((bfin_read_DMEM_CONTROL()) & (ENDCPLB | DMC_ENABLE))
- seq_printf(m, "D-CACHE:\tON"
-#if defined CONFIG_BFIN_WB
- " (write-back)"
-#elif defined CONFIG_BFIN_WT
- " (write-through)"
-#endif
- "\n");
- else
- seq_printf(m, "D-CACHE:\tOFF\n");
-
+ switch (bfin_read_CHIPID() & CHIPID_MANUFACTURE) {
+ case 0xca:
+ vendor = "Analog Devices";
+ break;
+ default:
+ vendor = "unknown";
+ break;
+ }

+ seq_printf(m, "processor\t: %d\n"
+ "vendor_id\t: %s\n"
+ "cpu family\t: 0x%x\n"
+ "model name\t: ADSP-%s %lu(MHz CCLK) %lu(MHz SCLK)\n"

```

```

+ "stepping\t: %d\n",
+ 0,
+ vendor,
+ (bfin_read_CHIPID() & CHIPID_FAMILY),
+ cpu, cclk/1000000, sclk/1000000,
+ revid);
+
+ seq_printf(m, "cpu MHz\t\t: %lu.%03lu/%lu.%03lu\n",
+ cclk/1000000, cclk%1000000,
+ sclk/1000000, sclk%1000000);
+ seq_printf(m, "bogomips\t: %lu.%02lu\n"
+ "Calibration\t: %lu loops\n",
+ (loops_per_jiffy * HZ) / 500000,
+ ((loops_per_jiffy * HZ) / 5000) % 100,
+ (loops_per_jiffy * HZ));
+
+ /* Check Cache configuration */
switch (bfin_read_DMEM_CONTROL() & (1 << DMC0_P | 1 << DMC1_P)) {
case ACACHE_BSRAM:
- seq_printf(m, "DBANK-A:\tCACHE\n" "DBANK-B:\tSRAM\n");
+ cache = "dbank-A/B\t: cache/sram";
dcache_size = 16;
dsup_banks = 1;
break;
case ACACHE_BCACHE:
- seq_printf(m, "DBANK-A:\tCACHE\n" "DBANK-B:\tCACHE\n");
+ cache = "dbank-A/B\t: cache/cache";
dcache_size = 32;
dsup_banks = 2;
break;
case ASRAM_BSRAM:
- seq_printf(m, "DBANK-A:\tSRAM\n" "DBANK-B:\tSRAM\n");
+ cache = "dbank-A/B\t: sram/sram";
dcache_size = 0;
dsup_banks = 0;
break;
default:
+ cache = "unknown";
+ dcache_size = 0;
+ dsup_banks = 0;
break;
}

+ /* Is it turned on? */
+ if (!(bfin_read_DMEM_CONTROL() & (ENDCPLB | DMC_ENABLE)))
+ dcache_size = 0;

- s

```