

[PATCH] Make nand block functions use provided byte/word helpers.

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 - *Date:* Tue, 28 Feb 2006 20:59:03 +0000
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Hi.

I've been writing a NAND driver for the flash on the Amstrad E3. One of the peculiarities of this device is that the write & read enable lines are on a latch, rather than strobed by the act of reading/writing from the data latch. As such I've got custom read_byte/write_byte functions defined. However the nand_*_buf functions in drivers/mtd/nand/nand_base.c are all appropriate, except for the fact they call readb/writeb themselves, instead of using this->read_byte or this->write_byte. The patch below changes them to use these functions, meaning a driver just needs to define read_byte and write_byte functions and gains all the nand_*_buf functions free.

Signed-off-by: Jonathan McDowell <noodles@xxxxxxxx>

```
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--- linux-2.6.15/drivers/mtd/nand/nand_base.c.orig 2006-02-28 20:41:54.000000000 +0000
+++ linux-2.6.15/drivers/mtd/nand/nand_base.c 2006-02-28 20:46:44.000000000 +0000
@@ -302,7 +302,7 @@ static void nand_write_buf(struct mtd_in
struct nand_chip *this = mtd->priv;

for (i=0; i<len; i++)
- writeb(buf[i], this->IO_ADDR_W);
+ this->write_byte(mtd, buf[i]);
}

/**
@@ -319,7 +319,7 @@ static void nand_read_buf(struct mtd_inf
struct nand_chip *this = mtd->priv;

for (i=0; i<len; i++)
- buf[i] = readb(this->IO_ADDR_R);
+ buf[i] = this->read_byte(mtd);
}

/**
@@ -336,7 +336,7 @@ static int nand_verify_buf(struct mtd_in
```

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```
struct nand_chip *this = mtd->priv;

for (i=0; i<len; i++)
- if (buf[i] != readb(this->IO_ADDR_R))
+ if (buf[i] != this->read_byte(mtd))
return -EFAULT;

return 0;
@@ -358,7 +358,7 @@ static void nand_write_buf16(struct mtd_
len >>= 1;

for (i=0; i<len; i++)
- writew(p[i], this->IO_ADDR_W);
+ this->write_word(mtd, p[i]);

}

@@ -378,7 +378,7 @@ static void nand_read_buf16(struct mtd_i
len >>= 1;

for (i=0; i<len; i++)
- p[i] = readw(this->IO_ADDR_R);
+ p[i] = this->read_word(mtd);
}

/**
@@ -397,7 +397,7 @@ static int nand_verify_buf16(struct mtd_
len >>= 1;

for (i=0; i<len; i++)
- if (p[i] != readw(this->IO_ADDR_R))
+ if (p[i] != this->read_word(mtd))
return -EFAULT;
```

return 0;

J.

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[There are always at least two ways to program the same thing.]
[<http://www.blackcatnetworks.co.uk/> - IPv6 enabled ADSL/dialup/colo]

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