README file for the Linux g_NCR5380 driver

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This file documents the NCR53c400 extensions by Kevin Lentin and some enhancements to the NCR5380 core.

This driver supports NCR5380 and NCR53c400 and compatible cards in port or memory mapped modes.

Use of an interrupt is recommended, if supported by the board, as this will allow targets to disconnect and thereby improve SCSI bus utilization.

If the irq parameter is 254 or is omitted entirely, the driver will probe for the correct IRQ line automatically. If the irq parameter is 0 or 255 then no IRQ will be used.

The NCR53c400 does not support DMA but it does have Pseudo-DMA which is supported by the driver.

This driver provides some information on what it has detected in /proc/scsi/g_NCR5380/x where x is the scsi card number as detected at boot time. More info to come in the future.

This driver works as a module. When included as a module, parameters can be passed on the insmod/modprobe command line:

irq=xx[,...]	the interrupt(s)		
base=xx[,...]	the port or base address(es) (for port or memory mapped, resp.)		
card=xx[,...]	card type(s):		
		0	NCR5380,
		1	NCR53C400,
		2	NCR53C400A,
		3	Domex Technology Corp 3181E (DTC3181E)
		4	Hewlett Packard C2502

These old-style parameters can support only one card:

ncr_irq=xx	the interrupt
ncr_addr=xx	the port or base address (for port or memory mapped, resp.)
ncr_5380=1	to set up for a NCR5380 board
ncr_53c400=1	to set up for a NCR53C400 board
ncr_53c400a=1	to set up for a NCR53C400A board
dtc_3181e=1	to set up for a Domex Technology Corp 3181E board
hp_c2502=1	to set up for a Hewlett Packard C2502 board

E.g. Trantor T130B in its default configuration:

```
modprobe g_NCR5380 irq=5 base=0x350 card=1
```

or alternatively, using the old syntax:

```
modprobe g_NCR5380 ncr_irq=5 ncr_addr=0x350 ncr_53c400=1
```

E.g. a port mapped NCR5380 board, driver to probe for IRQ:

```
modprobe g_NCR5380 base=0x350 card=0
```

or alternatively:

```
modprobe g_NCR5380 ncr_addr=0x350 ncr_5380=1
```

E.g. a memory mapped NCR53C400 board with no IRQ:

```
modprobe g_NCR5380 irq=255 base=0xc8000 card=1
```

or alternatively:

```
modprobe g_NCR5380 ncr_irq=255 ncr_addr=0xc8000 ncr_53c400=1
```

E.g. two cards, DTC3181 (in non-PnP mode) at 0x240 with no IRQ and HP C2502 at 0x300 with IRQ 7:

```
modprobe g_NCR5380 irq=0,7 base=0x240,0x300 card=3,4
```

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