

README file for the Linux g\_NCR5380 driver.

(c) 1993 Drew Eckhard  
NCR53c400 extensions (c) 1994, 1995, 1996 Kevin Lentin

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

This driver supports both NCR5380 and NCR53c400 cards in port or memory mapped modes. Currently this driver can only support one of those mapping modes at a time but it does support both of these chips at the same time. The next release of this driver will support port & memory mapped cards at the same time. It should be able to handle multiple different cards in the same machine.

The drivers/scsi/Makefile has an override in it for the most common NCR53c400 card, the Trantor T130B in its default configuration:

Port: 0x350  
IRQ : 5

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

If the default configuration does not work for you, you can use the kernel command lines (eg using the lilo append command):

ncr5380=port, irq, dma  
ncr53c400=port, irq

or

ncr5380=base, irq, dma  
ncr53c400=base, irq

The driver does not probe for any addresses or ports other than those in the OVERRIDE or given to the kernel as above.

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.

When NCR53c400 support is compiled in, BIOS parameters will be returned by the driver (the raw 5380 driver does not and I don't plan to fiddle with it!).

This driver works as a module.

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

ncr\_irq=xx the interrupt  
ncr\_addr=xx the port or base address (for port or memory mapped, resp.)  
ncr\_dma=xx the DMA  
ncr\_5380=1 to set up for a NCR5380 board  
ncr\_53c400=1 to set up for a NCR53C400 board

e. g.

modprobe g\_NCR5380 ncr\_irq=5 ncr\_addr=0x350 ncr\_5380=1  
for a port mapped NCR5380 board or

modprobe g\_NCR5380 ncr\_irq=255 ncr\_addr=0xc8000 ncr\_53c400=1  
for a memory mapped NCR53C400 board with interrupts disabled.

g\_NCR5380.txt

(255 should be specified for no or DMA interrupt, 254 to autoprobe for an IRQ line if overridden on the command line.)

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