

Data over JDL Fibolink

10/11/04

Install 2 packages on Redhat Linux RH9:

1) physmem

2) pRorc

1) physmem:

get from afs/cern.ch/alice/day/ddl/physmem.tar.gz

unpack, and in the newly created directory do:

gmake dev

gmake

create a lilo file with some memory reserved
e.g.:

"cancer.rh9" uses grub to boot, so add the following in the `/boot/grub/grub.conf` file:

kernel `linux-2.4.20-31.9smp` mem=1536M

then do:

`lsbin/insmod physmem.o`

`cat /proc/meminfo` (to check Linux memory)

`grep physmem /var/log/messages`

Put the loading in `rc.local` (in `/etc/rc.d`)

for lilo: $\left\{ \begin{array}{l} \text{initrd} = /boot/initrd-2.4.20-31.9smp.img \\ \text{append} = "mem=1536M" \end{array} \right.$

rorc-lib

20
10/26/04

2) Get the rorc-lib code from

|afs/cern.ch/alice/dag/doll/rorc

up until today I was using

pRorc-vers.4.2.7-2004.05.25.tgz

now I am switching to:

rorc-vers.4.3.3-2004.08.15.tgz

use:

make -f Makefile all

to generate all of the executables and the driver in

Linux/rorc-driver.o

To simulate the sending of events use the programs

rorc-send

rorc-receive

First load the driver:

|sbin/insmod Linux/rorc-driver.o

To remove

|sbin/rmmod rorc-driver

Changed JDLR-3 and JDLR-2 fibos

23-Feb-05

Now:

<u>Minor</u>	<u>Channel</u>	<u>TCPU</u>	<u>PCAN</u>	
0	0	TCPU-1	255	Trig
0	1	TCPU-2	253	East
1	0	TCPU-3	254	West
1	1			

Stress Test of TCPU

3/7/05

Use FEMU configurations to generate patterns:

Register

ps :

2	-	alternating 0x00 - 0xFF
3	-	flying 0's
4	-	flying 1's
5	-	incrementing counter
6	-	decrementing counter

bl :

1	-	16 words
2	-	32 words
3	-	64 words
⋮		
15	-	256k words

dt :

1	-	external pushbutton
2	-	trigger input
3	-	16 clk gap
4	-	128 clk gap
5	-	every 10 ms
6	-	every 100 ms

As an example, load the following via the command fcic. menu

- ps = 5 - incrementing counter
- bl = 4 - 128 word count length
- dt = 3 - 16 clk gap
- fc = 3 - f0BSY activated every 16k words received (not used)
- tc = 3 - f5TEN# deactivated every 16k words sent (not used)

Then use the command

- /rorc - receive - r 0 (no resets)
- x 3 (check counter and data)
- l 128 (128 word count length)
- p I (incrementing counter pattern)