

# Arquitectura de Computadores 2

## Universidade de Aveiro

### INTRODUCTION: Establishing USB connection to Pic32

```
redeagleye@nohostname:~> ldpic32 -i
```

```
DETPIC32 Serial Programmer, V0.4  
Universidade de Aveiro, DETI  
J.L.Azevedo, 2011, 2012  
Report bugs to jla@ua.pt
```

```
ERROR: opening ("/dev/ttyUSB0")
```

### Solution:

This happens because your *username* is not associated with the group *dialout* which one is used by `"/dev/ttyUSB0"`

Lets associate your *username* to group *dialout*:

*usermod* arguments:

- a add the user to the supplemental group(s) (Use only with the -G argument!)
- G *group1,group2,group#*

```
redeagleye@nohostname:~> sudo usermod -a -G dialout redeagleye
```

This is a permanent fix!

The red username *redeagleye* should be replaced for the one you use on your system!!

**After using the above command please LOG OUT and LOG IN!!**

In order to check your username groups you can use the command bellow:

```
redeagleye@nohostname:~> id redeagleye  
uid=1000(redeagleye) gid=100(users) groups=16(dialout),100(users)
```

*The red username **redeagleye** should be replaced for the one you use on your system!!*

Check connection to pic:

```
redeagleye@nohostname:~> ldpic32 -i
```

```
DETPIC32 Serial Programmer, V0.4  
Universidade de Aveiro, DETI  
J.L.Azevedo, 2011, 2012  
Report bugs to jla@ua.pt
```

Press reset to start

push reset button

```
ldpic32 -i
```

```
DETPIC32 Serial Programmer, V0.4  
Universidade de Aveiro, DETI  
J.L.Azevedo, 2011, 2012  
Report bugs to jla@ua.pt
```

System info:

```
- BL Version      : DETPIC32 SBL V0.3  
- Device ID      : 14 (32MX795F512H)  
- Core frequency  : 40 MHz  
- Peripheral freq. : 20 MHz  
- Flash size     : 524288 Bytes (512 kB)  
- RAM size       : 131072 Bytes (128 kB)  
- User program size: 5368 Bytes (1.0%)
```

Output after push reset button

## Open Pic Terminal :

```
redeagle@nohostname:~> pterm
```

```
DETPIC32 terminal emulator, V0.5 (January 2013)  
Universidade de Aveiro, DETI  
TOS, 2011-2013  
Send bug reports to tos@ua.pt
```

push reset button

```
redeagle@nohostname:~> pterm
```

```
DETPIC32 terminal emulator, V0.5 (January 2013)  
Universidade de Aveiro, DETI  
TOS, 2011-2013  
Send bug reports to tos@ua.pt
```

```
#DP32BL0316$  
DETPIC32, Bootloader V0.3  
Universidade de Aveiro, DETI  
J.L.Azevedo, 2011
```

AC2 - DETPIC32 primer

msg

```
Program terminated - exit code 0
```

Output after push reset button