

```
/******  
*  
* iCub Expressions and eyelids control PIC software  
*  
* README file distributed with  
*  
*          RC_IST_013_A_000_01_CONTROLBOARDFIRMWARE  
*  
* contact: rnunes@isr.ist.utl.pt, jasv@isr.ist.utl.pt  
*****/
```

The program uses the USB routines created by Microchip.

The only file that needs to be changed is the **user.c** that is located inside the user directory. This is also the only file that has comments since it contains the entire communication protocol.

To open the project the user must have the latest version of **Mplab** (for example Mplab IDE v7.52 free version) from Microchip with the C compiler "C18" installed, this is not a free version software.

To open the project, the user must open the "MCHPUSB.mcw" in the project root directory. In case the project does not compile, the include directories are probably not set correctly. In that case, proceed as follows:

Verify if the project root directory is included:

Project->Build Options...->Project

On "Directories"

in the "Show directories for: " -> "Include Search Path" the project root directory must be included (e.g. "D:\PICs\iCub")

Compile the project: **Project-> Build All**

Use your programmer, for example the **Mplab ICD 2** to program the board.

Find windows drivers here: "\iCub\src\picFacialExpressions\inf\win2k_winxp"

Aug.2007