

Fichero main.c

/\*\*\*\*\*
\*\*\*\*

FILE NAME main.c

DESCRIPTION Main Program

Copyright : 2005 Renesas Technology Europe Ltd.

Copyright : 2005 Renesas Technology Corporation.

All Rights Reserved

\*\*\*\*
\*\*\*\*\*/

/\*\*\*\*\*
\*\*\*\*

Revision History

DD.MM.YYYY OSO-UID Description

14.09.2005 RTE-DDE First Release

\*\*\*\*
\*\*\*\*\*/

/\*\*\*\*\*
\*\*\*\*

System Includes

\*\*\*\*
\*\*\*\*\*/

/\*\*\*\*\*
\*\*\*\*

User Includes

\*\*\*\*\*

\*\*\*\*\*/

#include "input.h"

#include "output.h"

#include "main.h"

#include "display.h"

/\*\*\*\*\*

\*\*\*\*\*/

Global variables

\*\*\*\*\*

\*\*\*\*\*/

/\*\*\*\*\*

\*\*\*\*\*/

User Program Code

\*\*\*\*\*

\*\*\*\*\*/

void inicializacion\_IO(void){

    pd0=0b00000000; //set P0 como input

    pd1=0b00000000; //set P1 como input

    pd2=0b00000000; //set P2 como input

    pd3=0b11111111; //set P3 como output

    pd4=0b11111111; //set P4 como output

    p3=0b00000000;

    p4=0b00000000;

    inicializarDisplay();

```
}
```

```

/*****
*****/

```

Function Name:       Main

Description:    Main function

Parameters:    none

Return value:   none

```

*****/

```

```
void main(void)
```

```
{
```

```
    int iDN;
```

```
    int iPA1_old;
```

```
    int iPA2_old;
```

```
    int iPB1_old;
```

```
    int iPB2_old;
```

```
    int iEjesA1;
```

```
    int iEjesA2;
```

```
    int iEjesB1;
```

```
    int iEjesB2;
```

```
    int iContador;
```

```
    inicializacion_IO();
```

```
    borrar ( );
```

```
    SER_ON;
```

```
while(1){  
  
    BES_OFF;  
  
    while(is_OFF_BEE);  
  
    SER_OFF;  
  
    SEV_ON;  
  
    SSR_ON;  
  
    SSV_OFF;  
  
    BES_ON;  
  
  
  
    while(is_OFF_BUE && is_OFF_CEP){  
  
        if(is_ON_BEE){  
  
            SEV_ON;  
  
            SER_OFF;  
  
        }  
  
        else{  
  
            SEV_OFF;  
  
            SER_ON;  
  
        }  
  
        if(is_OFF_BEE){  
  
            BES_OFF;  
  
        }  
  
        else{  
  
            BES_ON;  
  
        }  
  
    }  
  
    iDN=0;
```

```

iEjesA1=0;

iEjesA2=0;

iEjesB1=0;

iEjesB2=0;

iPA1_old=PA1;

iPA2_old=PA2;

iPB1_old=PB1;

iPB2_old=PB2;


for(iContador=0;iContador<10000;iContador++);

while(is_ON_BUE || is_ON_CEP || is_ON_CES){ /*AÑADIDA CORTINA SENTIDO*/

    if((is_ON_PG1 && is_ON_PG2) || (is_ON_PD1 && is_ON_PD2)){

        iDN=1;

    }

    if((is_ON_PA1) && (iPA1_old!=PA1)){
iPA1_old=PA1;

        iEjesA1=iEjesA1+1;

    }


        if((is_ON_PA2) && (iPA2_old!=PA2)){
iPA2_old=PA2;

            iEjesA2=iEjesA2+1;

        }


        if((is_ON_PB1) && (iPB1_old!=PB1)){
iPB1_old=PB1;

            iEjesB1= iEjesB1+1;

```

```
}
```

```
if((is_ON_PB2) && (iPB2_old!=PB2)){
```

```
iPB2_old=PB2;
```

```
iEjesB2=iEjesB2 + 1;
```

```
}
```

```
}
```

```
while(is_OFF_BUP);
```

```
if (iDN==0){
```

```
CAT1_ON;
```

```
display ("CAT1");
```

```
}
```

```
else if ((iEjesA1<3) && (iEjesA2<3) && (iEjesB1<3) && (iEjesB2<3) &&  
(iDN==1)){
```

```
CAT2_ON;
```

```
display ("CAT2");
```

```
}
```

```
else {
```

```
CAT3_ON;
```

```
display ("CAT3");
```

```
}
```

```
while(is_OFF_PEE);  
  
display ("Buen viaje");  
  
SSV_ON;  
  
SSR_OFF;  
  
PES_ON;  
  
BSS_ON;  
  
CAT1_OFF;  
  
CAT2_OFF;  
  
CAT3_OFF;
```

```
while(is_OFF_BUS);  
  
SSV_OFF;  
  
SSR_ON;  
  
for(iContador=0;iContador<10000;iContador++);  
  
while(is_ON_BUS);  
  
BSS_OFF;  
  
PES_OFF;  
  
borrar ();  
  
}
```

```
}
```

```
/*****  
*****/
```

End of function main

```
*****/
```