



INGENIEUR POLYTECH LILLE IMA

Projets IMA4 SC & SA 2018/2019

Manettes pour travaux pratiques

BOËNS QUENTIN

**CONTROLE DU FONCTIONNEMENT DES BOUTONS
DE LA MANETTE 16U2**

POLYTECH Lille
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03-28-76-73-60
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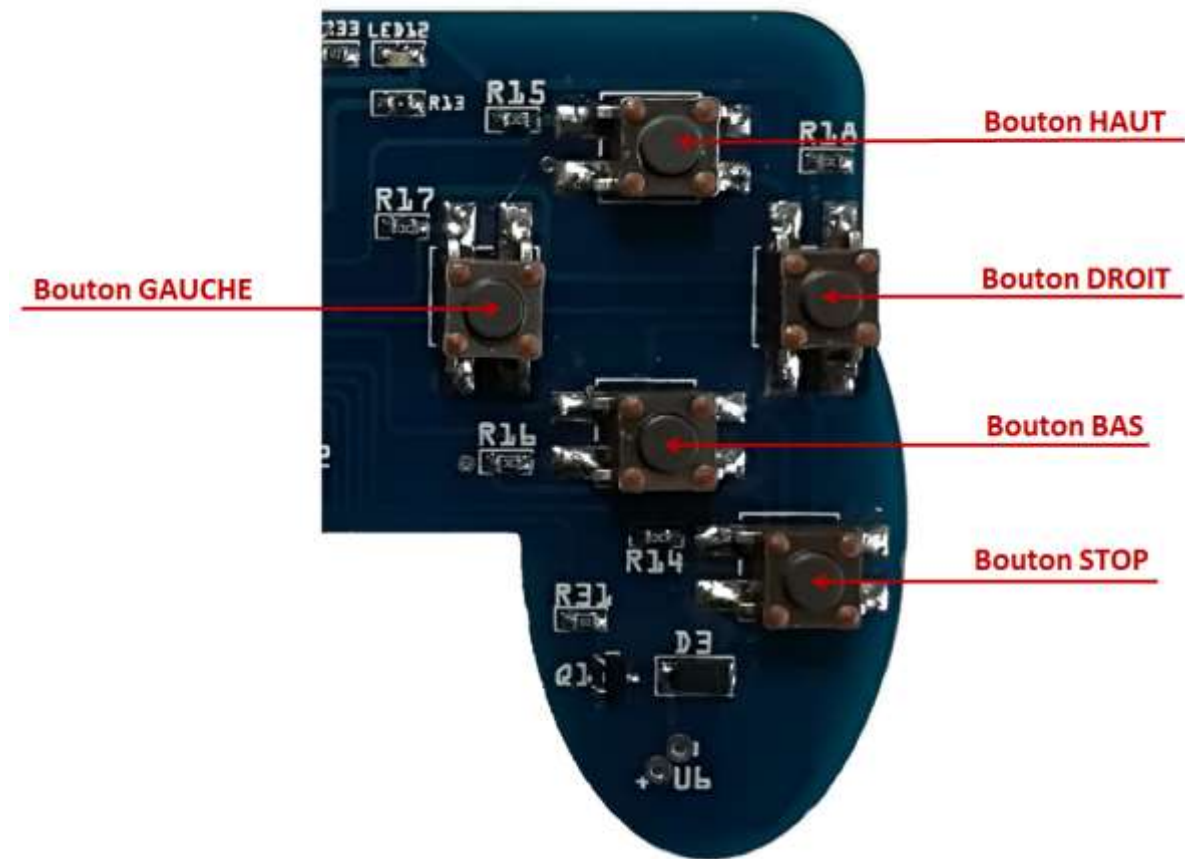
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1. Description des boutons de la manette



2. Suivi des actions sur les boutons

La programmation de l'état des manettes est :

```
etat_LED[0] = ((PINC & 0x10)!=0)?0x01:0x00;
etat_LED[1] = ((PINC & 0x20)!=0)?0x01:0x00;
etat_LED[2] = ((PINC & 0x40)!=0)?0x01:0x00;
etat_LED[3] = ((PINC & 0x80)!=0)?0x01:0x00;
etat_LED[4] = ((PINB & 0x80)!=0)?0x01:0x00;

//Bouton haut
if (etat_LED[0] == 0x01) Data[0] = 0x48;

//Bouton gauche
if (etat_LED[1] == 0x01) Data[1] = 0x47;

//Bouton droit
if (etat_LED[2] == 0x01) Data[2] = 0x44;

//Bouton bas
if (etat_LED[3] == 0x01) Data[3] = 0x42;

//Bouton STOP
if (etat_LED[4] == 0x01) Data[4] = 0x50;

*ReportSize = GENERIC_REPORT_SIZE;
return false;
```

3. Résultats des pressions sur les boutons

Commande : `sudo usbhid-dump -entity=all`

```
001:009:000:DESCRIPTOR 1544352474.633172
06 00 FF 09 01 A1 01 09 02 15 00 25 FF 75 08 95
08 81 02 09 03 15 00 25 FF 75 08 95 08 91 02 C0

Starting dumping interrupt transfer stream
with 1 minute timeout.
```

BOUTON HAUT	Appui	001:009:000:STREAM 48 00 00 00 00 00 00 00	1544352479.954023
	Relâchement	001:009:000:STREAM 00 00 00 00 00 00 00 00	1544352480.174096
BOUTON GAUCHE	Appui	001:009:000:STREAM 00 47 00 00 00 00 00 00	1544352482.534135
	Relâchement	001:009:000:STREAM 00 00 00 00 00 00 00 00	1544352482.726134
BOUTON DROIT	Appui	001:009:000:STREAM 00 00 44 00 00 00 00 00	1544352484.414058
	Relâchement	001:009:000:STREAM 00 00 00 00 00 00 00 00	1544352484.618127
BOUTON BAS	Appui	001:009:000:STREAM 00 00 00 42 00 00 00 00	1544352486.110188
	Relâchement	001:009:000:STREAM 00 00 00 00 00 00 00 00	1544352486.274188
BOUTON STOP	Appui	001:009:000:STREAM 00 00 00 00 50 00 00 00	1544352488.334227
	Relâchement	001:009:000:STREAM 00 00 00 00 00 00 00 00	1544352488.518220