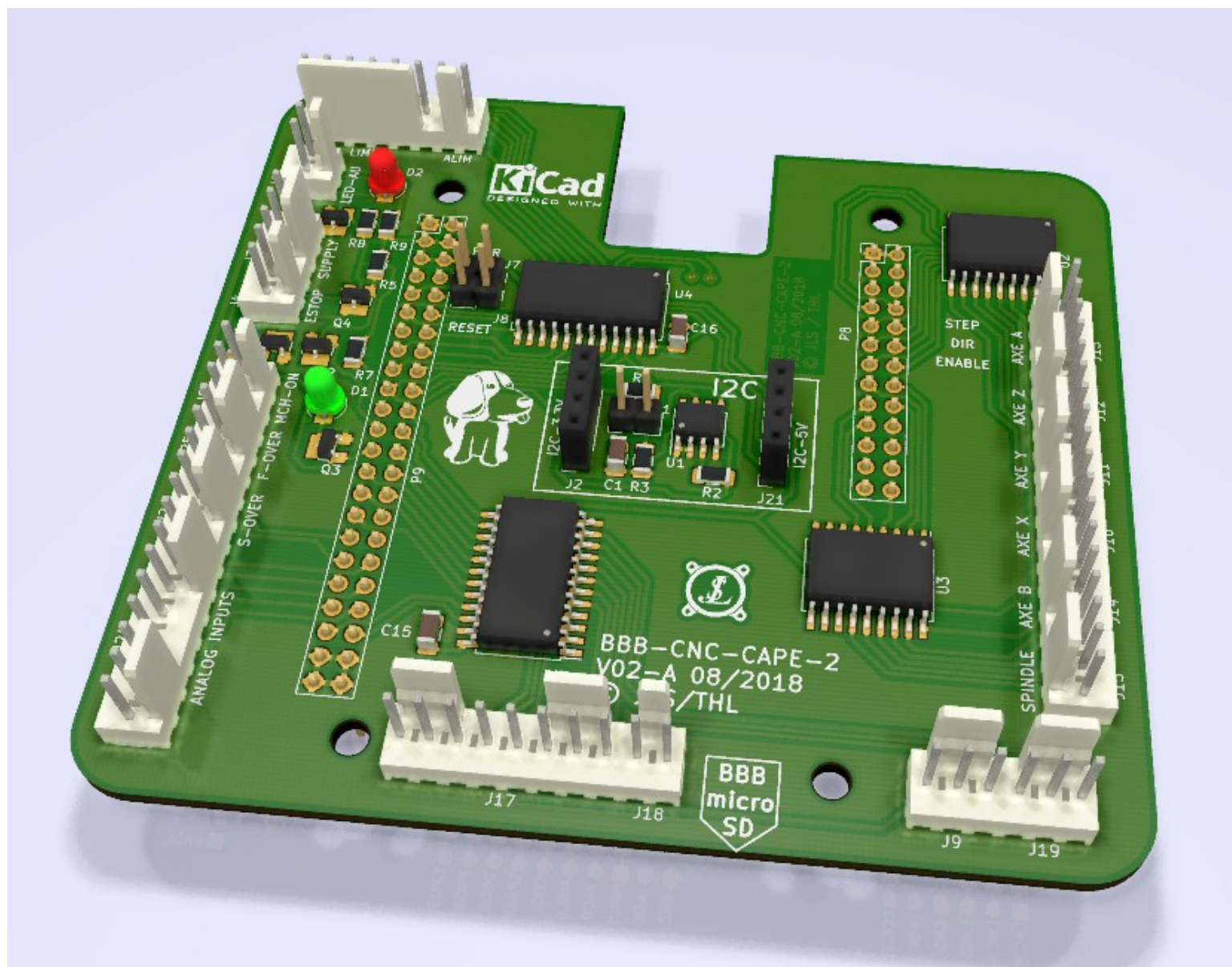
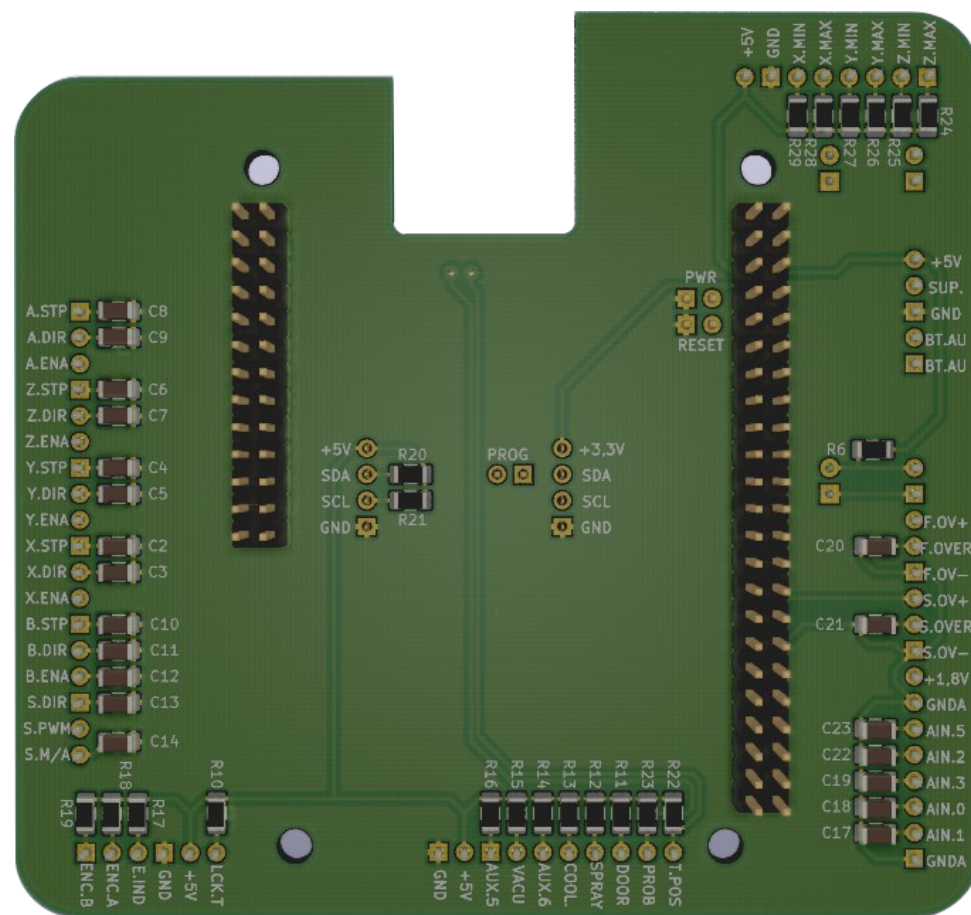
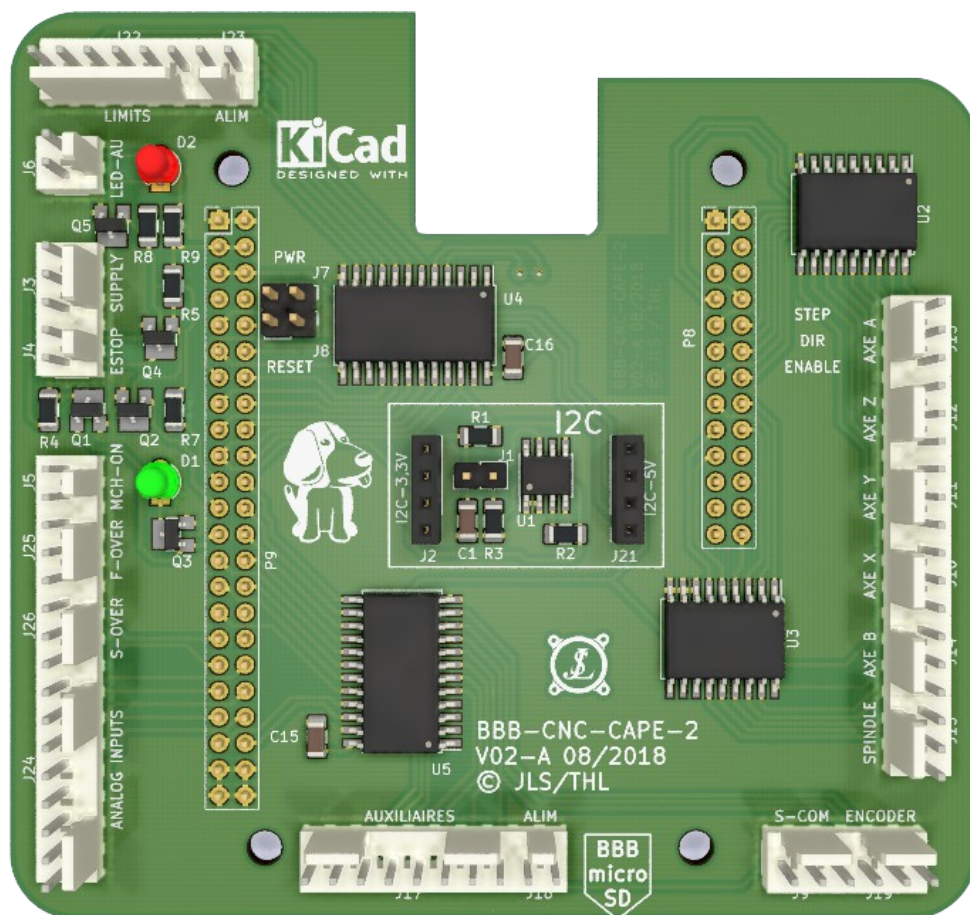


SCHEMAS et PLANS de FABRICATION BBB-CNC-Cape-2 V02-A

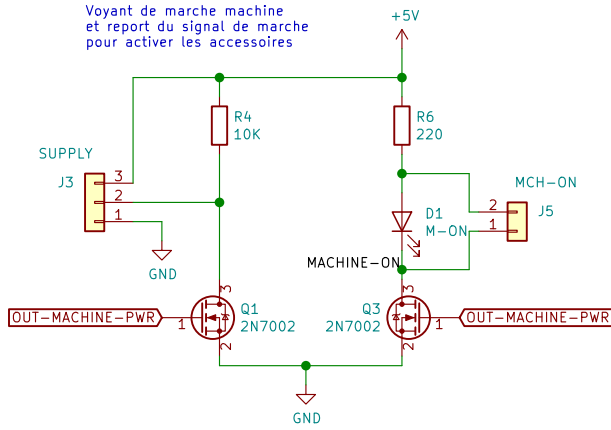


Vue des composants côté face et repérage des entrées/sorties côté arrière (côté Beaglebone Black)

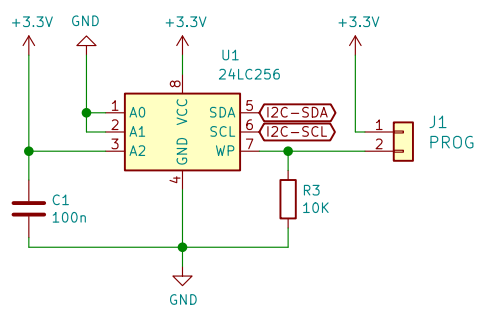
Les connecteurs sont au pas de 2,54mm et peuvent être droits ou coudés



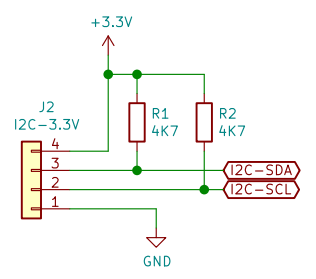
Voyant de marche machine et report du signal de marche pour activer les accessoires



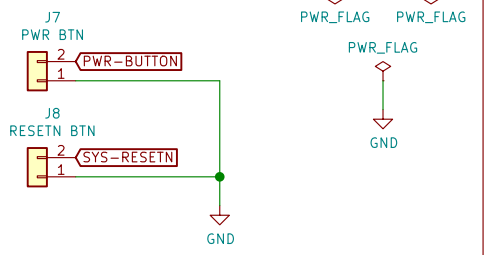
EEPROM de configuration de cape



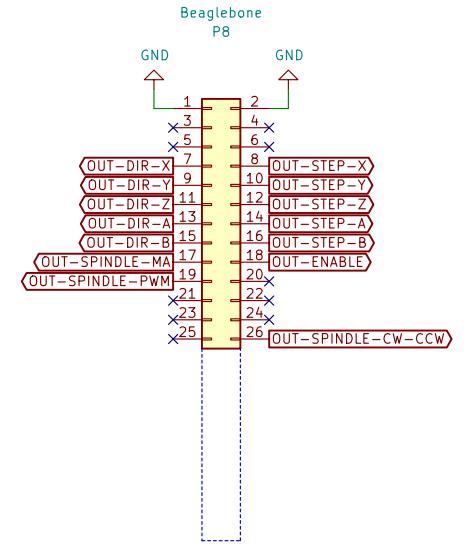
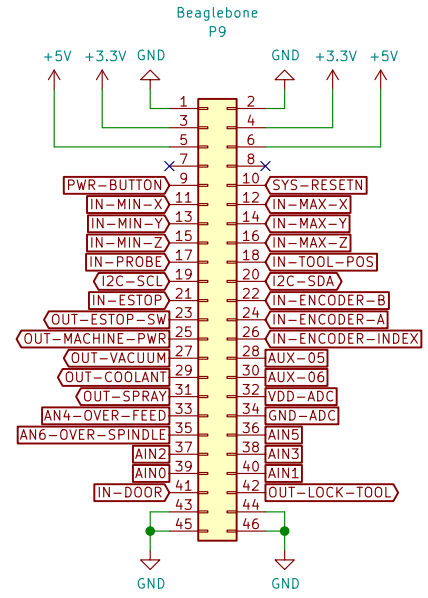
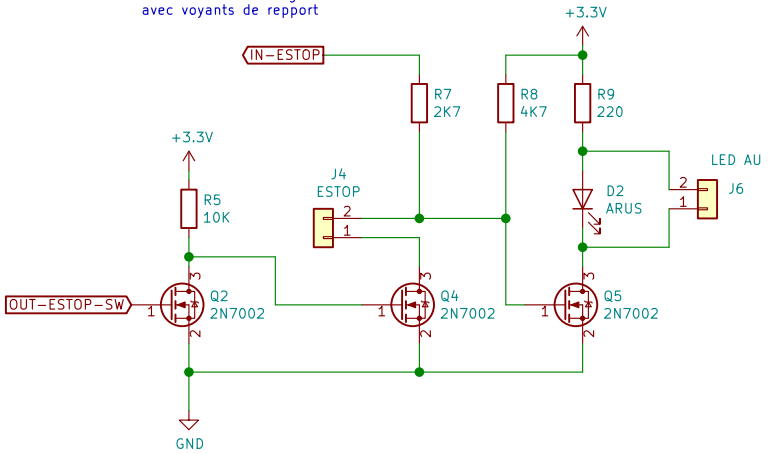
Connexion I2C en 3.3V



Connexion vers boutons externes power et reset pour la Beaglebone Black

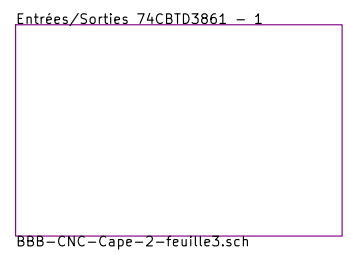
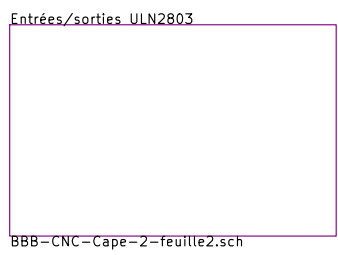


Chaîne d'arrêt d'urgence avec voyants de report



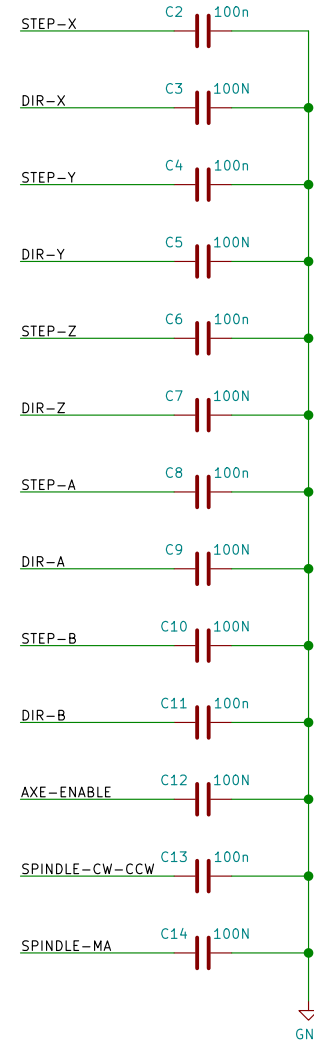
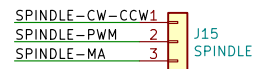
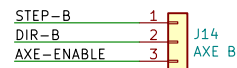
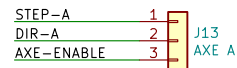
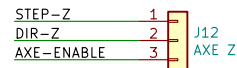
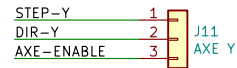
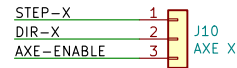
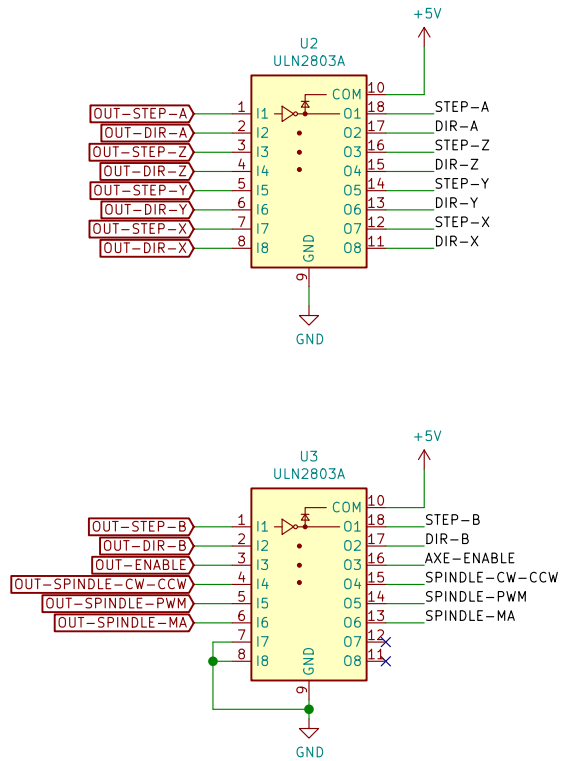
Connexion vers la Beaglebone Black
Le connecteur PB est réduit car les fonctions GLCD ne sont pas utilisées
cette réduction de connecteur permet de gagner de la place sur le PCB

ACCES AUX FEUILLES COMPLEMENTAIRES AVEC LA GESTION DES ENTREES / SORTIES



02A - Optimisation par fonction de la répartition des connecteurs
02A - Adaptation aux standards des capes Beaglebone
Version avec ULN2803 pour AXE-ENABLE
Auteur : JLS/THL
Fichier : bbb-cnc-cape-2.sch
Page : /
BBB-CNC-Cape-2
Date: 29/08/2018
KiCad E.D.A. kicad (5.1.2)-1
Format : A4
02-A
1/3

Gestion des sorties de commandes moteurs et broche
L'adaptation des tensions 3.3V vers 5V est réalisée par les ULN2803



Condensateurs antiparasites
sur les sorties autres que PWM

02A - Optimisation par fonction de la répartition des connecteurs
02A - Adaptation aux standards des capes Beaglebone
Version avec ULN2803 pour AXE-ENABLE

Auteur : JLS/THL



Fichier : BBB-CNC-Cape-2-feuille2.sch
Page : /Entrées/sorties ULN2803/

BBB-CNC-Cape-2

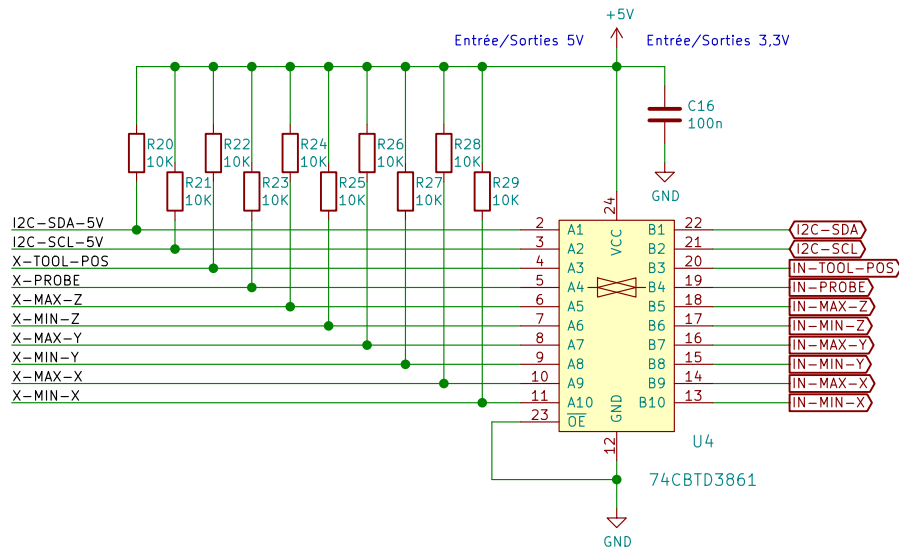
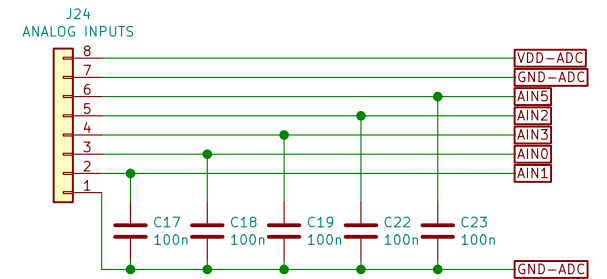
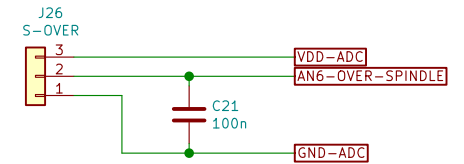
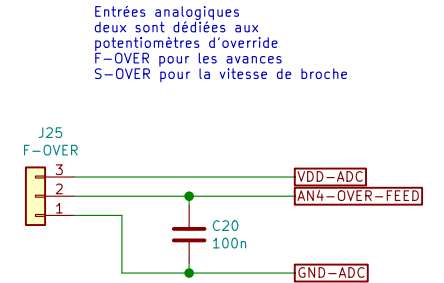
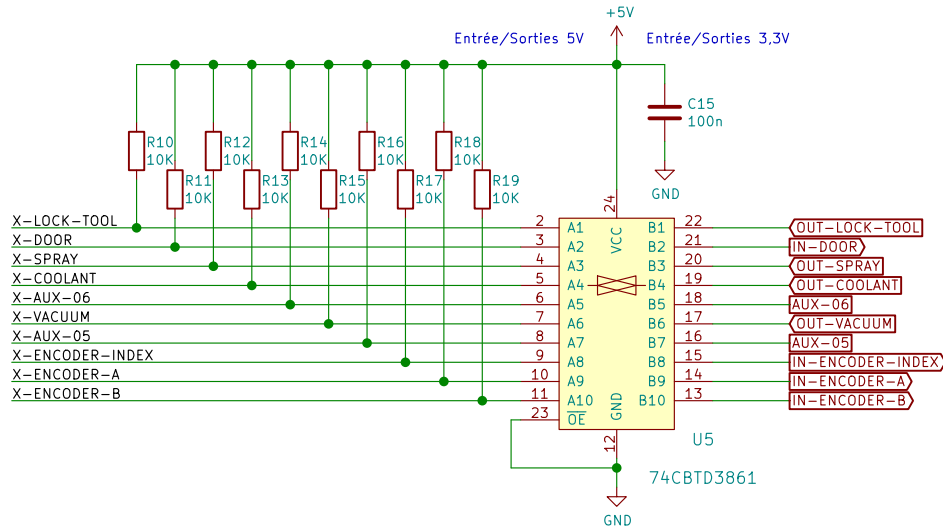
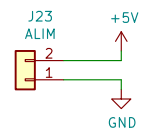
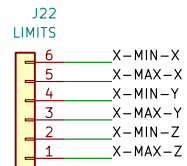
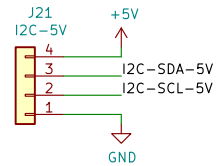
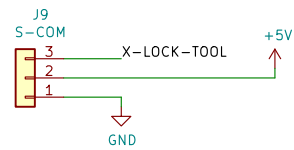
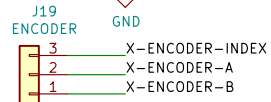
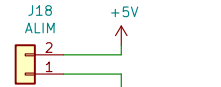
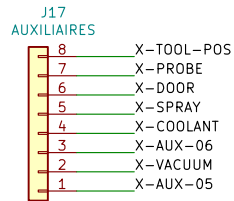
Date: 29/08/2018

KiCad E.D.A. kicad (5.1.2)-1

Format : A4

02-A

2/3



02A - Optimisation par fonction de la répartition des connecteurs
 02A - Adaptation aux standards des capes Beaglebone
 Version avec ULN2803 pour AXE-ENABLE
 Auteur : JLS/THL



Fichier : BBB-CNC-Cape-2-feuille3.sch
 Page : /Entrées/Sorties 74CBTD3861 - 1/

BBB-CNC-Cape-2

Date: 29/08/2018

KiCad E.D.A. kicad (5.1.2)-1

Format : A4

02-A

3/3

Nomenclature des composants

Référence	Quantité	Désignation	Boîtier
J11	1	AXE Y	BBB-CNC-PinHeader_1x03_P2.54mm
J15	1	SPINDLE	BBB-CNC-PinHeader_1x03_P2.54mm
C1,C2,C4,C6,C8,C11,C13,C15,C16,C17,C18,C19,C20,C21,C22,C23	16	100n	C_1206_3216Metric
C3,C5,C7,C9,C10,C12,C14	7	100n	C_1206_3216Metric
D1	1	M-ON	LED_D3.0mm_green
D2	1	ARUS	LED_D3.0mm_red
J1	1	PROG	PinHeader_1x02_P2.54mm_Vertical
J3	1	SUPPLY	BBB-CNC-PinHeader_1x03_P2.54mm
J4	1	ESTOP	BBB-CNC-PinHeader_1x02_P2.54mm
J5	1	MCH-ON	BBB-CNC-PinHeader_1x02_P2.54mm
J6	1	LED AU	BBB-CNC-PinHeader_1x02_P2.54mm
J7	1	PWR BTN	PinHeader_1x02_P2.54mm_Vertical
J8	1	RESETN BTN	PinHeader_1x02_P2.54mm_Vertical
J10	1	AXE X	BBB-CNC-PinHeader_1x03_P2.54mm
J12	1	AXE Z	BBB-CNC-PinHeader_1x03_P2.54mm
J13	1	AXE A	BBB-CNC-PinHeader_1x03_P2.54mm
J14	1	AXE B	BBB-CNC-PinHeader_1x03_P2.54mm
J17	1	AUXILIAIRES	BBB-CNC-PinHeader_1x08_P2.54mm
J18,J23	2	ALIM	BBB-CNC-PinHeader_1x02_P2.54mm
J19	1	ENCODER	BBB-CNC-PinHeader_1x03_P2.54mm
J24	1	ANALOG INPUTS	BBB-CNC-PinHeader_1x08_P2.54mm
J25	1	F-OVER	BBB-CNC-PinHeader_1x03_P2.54mm
J26	1	S-OVER	BBB-CNC-PinHeader_1x03_P2.54mm
P8	1	Beaglebone	BBB-PinHeader_2x13_P2.54mm_Vertical
P9	1	Beaglebone	BBB-PinHeader_2x23_P2.54mm_Vertical
Q1,Q2,Q3,Q4,Q5	5	2N7002	SOT23-W-large-pad
R1,R2,R8	3	4K7	R_1206_3216Metric
R3,R4,R5,R10,R11,R12,R13,R14,R15,R16,R17,R18,R19,R20,R21,R22,R23,R24,R25,R26,R27,R28,R29	23	10K	R_1206_3216Metric
R6,R9	2	220	R_1206_3216Metric
R7	1	2K7	R_1206_3216Metric
U1	1	24LC256	SOIC-8_3.9x4.9mm_P1.27mm
U4,U5	2	74CBTD3861	SOIC-24W_7.5x15.4mm_P1.27mm
J9	1	S-COM	BBB-CNC-PinHeader_1x03_P2.54mm
J2	1	I2C-3.3V	PinSocket_1x04_P2.54mm_Vertical
J21	1	I2C-5V	PinSocket_1x04_P2.54mm_Vertical
J22	1	LIMITS	BBB-CNC-PinHeader_1x06_P2.54mm
U2,U3	2	ULN2803A	SOIC-18W_7.5x11.6mm_P1.27mm

