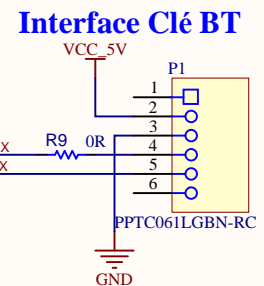
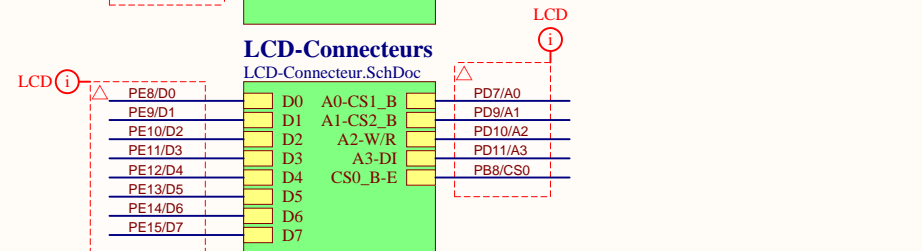
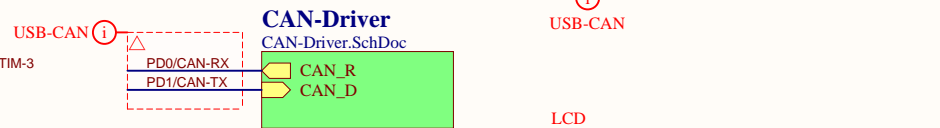
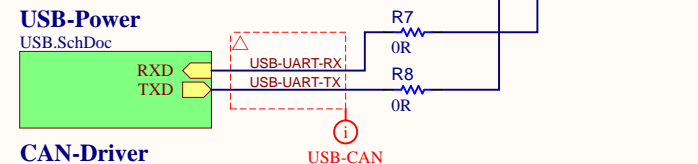
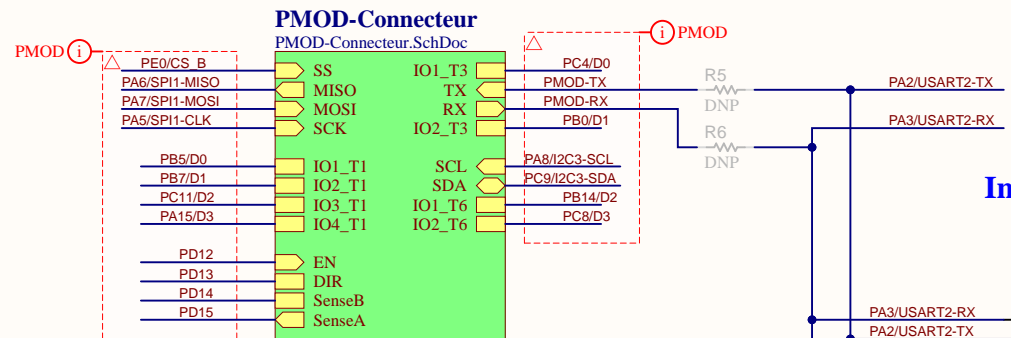
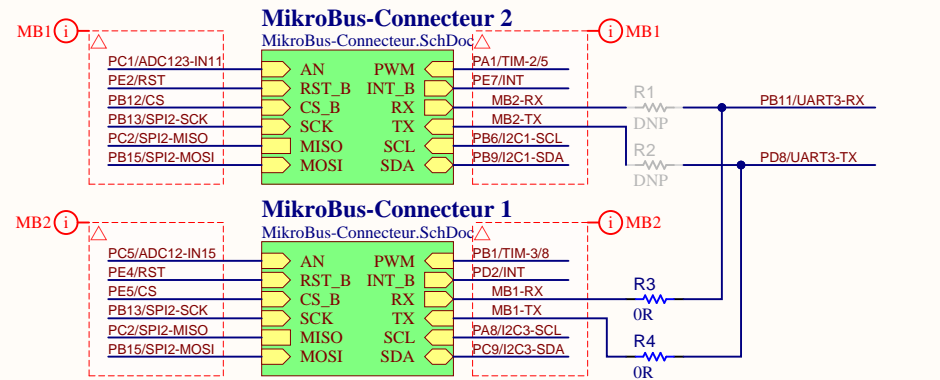
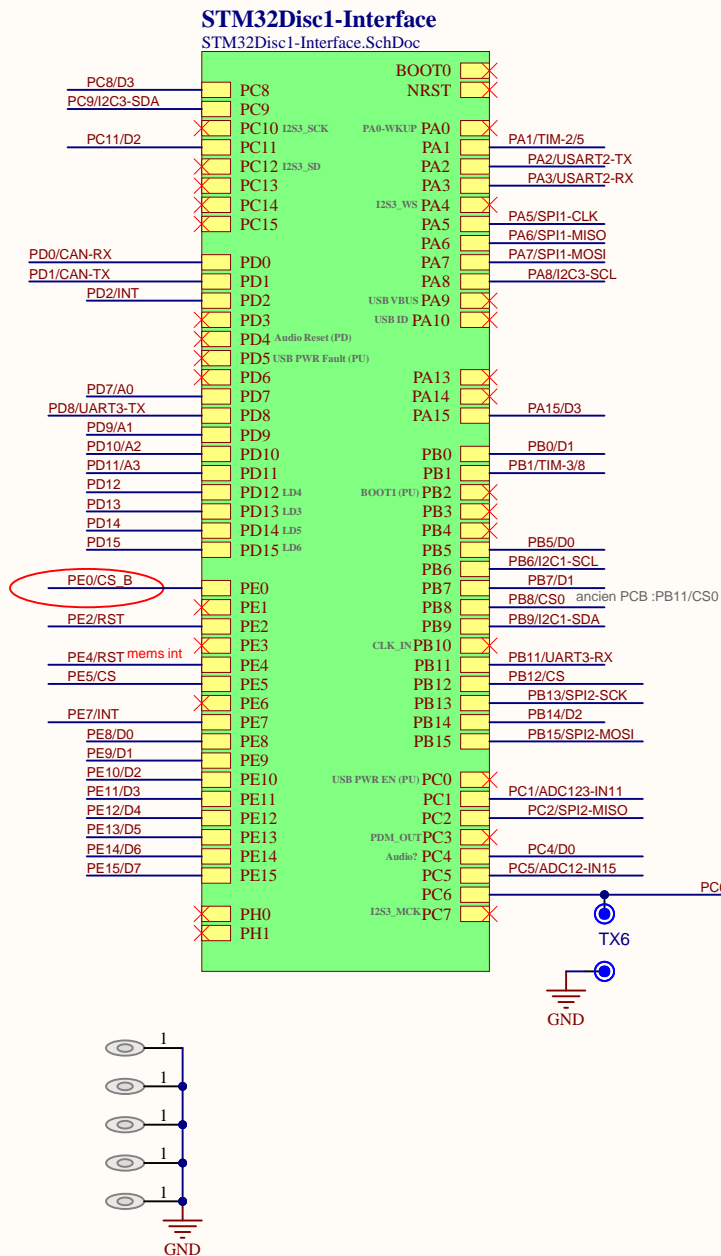


PCB Support STM32F407-Discovery



Titre : PCB Support STM32F407-Discovery

Conception : CEGEP Limoilou

Date : 2026-01-04

Fichier : PCB-Support-STM32F407.SchDoc

Approbation : APPROUVÉ PAR

Heure : 15:48:08

Révision : Rev.A
Feuille 1 de 7

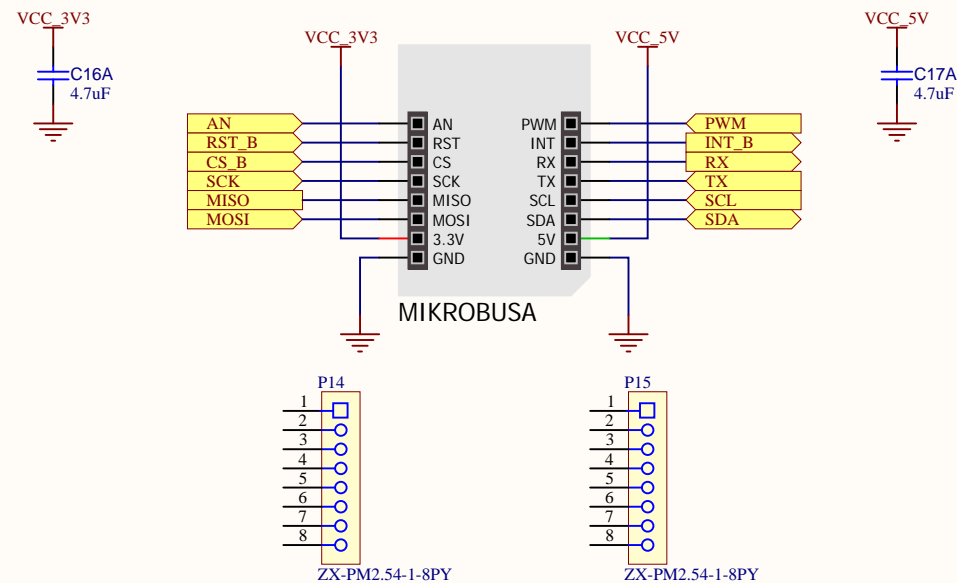
Cégep Limoilou
1300, 8e Avenue
Québec, QC
Canada
G1J 5L5



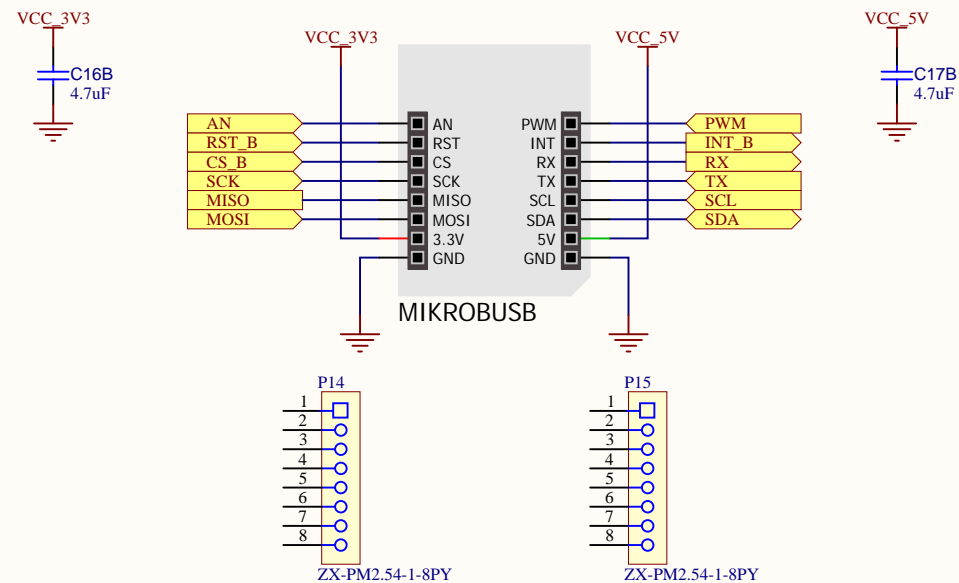
A



Mikro Bus - Connecteur

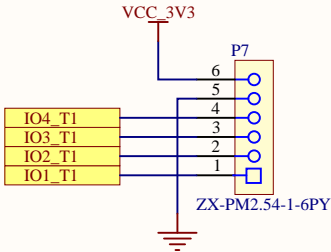


Mikro Bus - Connecteur

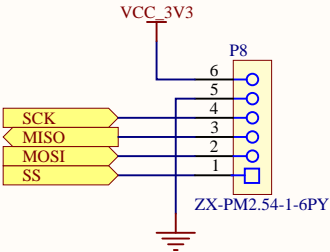


Connecteurs - PMOD Interface

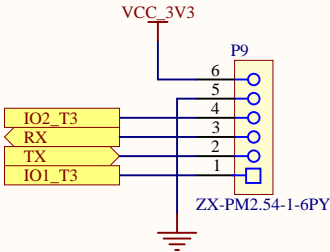
GPIO Type 1



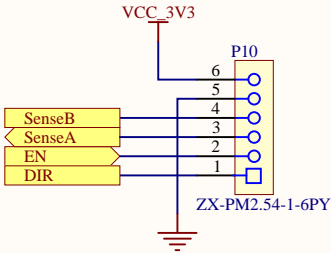
SPI Type 2



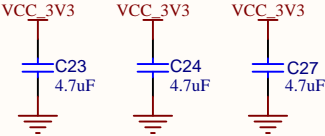
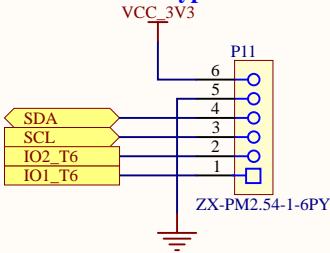
UART Type 3



H-Bridge Type 4



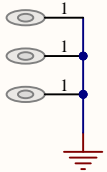
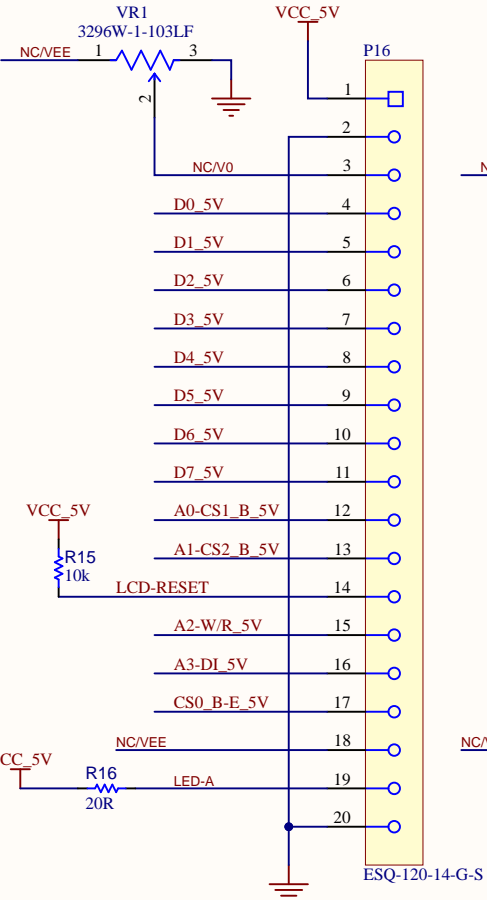
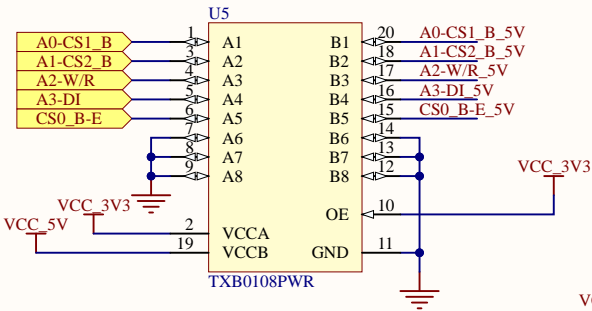
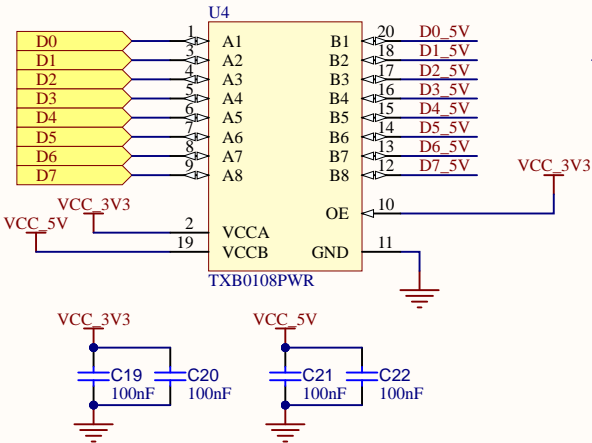
I2C Type 6



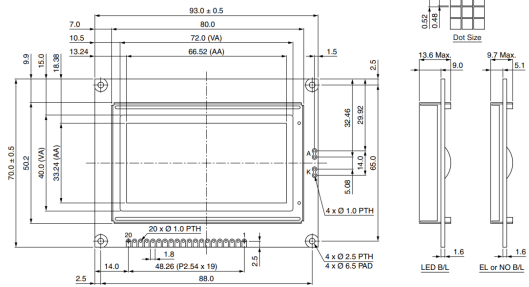
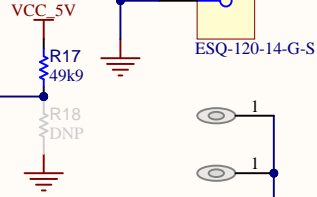
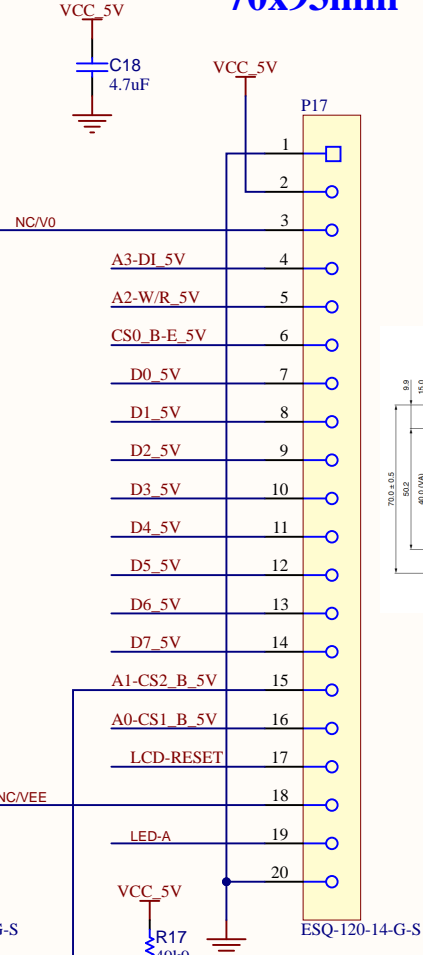
Pmod type pinouts						
type	1 (7)	2 (8)	3 (9)	4 (10)	5 (11)	6 (12)
Type 1 (GPIO)	GPIO1	GPIO2/PWM	GPIO3	GPIO4	GND	Vcc
Type 1A (extended GPIO)	GPIO1	GPIO2/PWM	GPIO3	GPIO4	GND	Vcc
Type 2 (SPI)	CS	MOSI	MISO	SCK	GND	Vcc
Type 2A (extended SPI)	CS1	MOSI	MISO	SCK	GND	Vcc
Type 3 (UART)	CTS/GPIO	TxD	RxD	RTS/GPIO	GND	Vcc
Type 3A (extended UART)	CTS/GPIO	TxD	RxD	RTS/GPIO	GND	Vcc
Type 4 (H-bridge)	DIR	EN	SenseA	SenseB	GND	Vcc
Type 5 (dual H-bridge)	DIR1	EN1	DIR2	EN2	GND	Vcc
Type 5A (extended dual H-bridge)	DIR1	EN1	Sense1A	Sense1B	GND	Vcc
Type 6 (I2C)	no/INT	no/RESET	SCL	SDA	GND	Vcc
Type 6A (extended I2C)	no/INT	no/RESET	SCL	SDA	GND	Vcc
Type 7 (I2S)	LRCLK	DACdata	ADCL	BCLK	GND	Vcc

LCD - Connecteurs

Option LCD KS0108 50x75mm

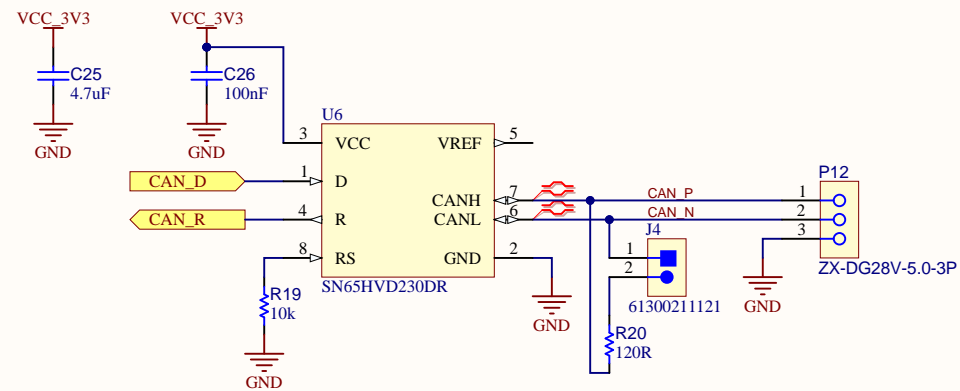


Option LCD 12864 70x93mm



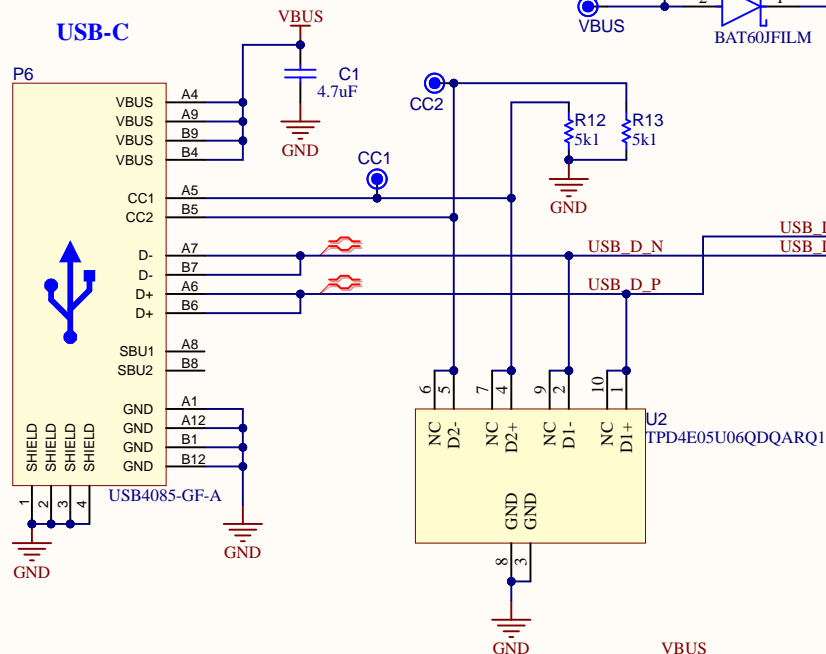
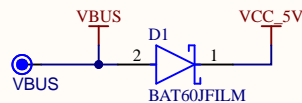
INTERFACE PIN FUNCTION		
PIN NO.	SYMBOL	FUNCTION
1	V _{DD}	Power supply (+5 V)
2	V _{SS}	Ground
3	V _{DD}	Power supply (+5 V)
4	V _{SS}	Ground
5	D ₀	Data bus line
6	D ₁	Data bus line
7	D ₂	Data bus line
8	D ₃	Data bus line
9	D ₄	Data bus line
10	D ₅	Data bus line
11	D ₆	Data bus line
12	D ₇	Data bus line
13	D ₈	Data bus line
14	D ₉	Data bus line
15	D ₁₀	Data bus line
16	D ₁₁	Data bus line
17	D ₁₂	Data bus line
18	D ₁₃	Data bus line
19	D ₁₄	Data bus line
20	D ₁₅	Data bus line
21	D ₁₆	Data bus line
22	D ₁₇	Data bus line
23	D ₁₈	Data bus line
24	D ₁₉	Data bus line
25	D ₂₀	Data bus line
26	D ₂₁	Data bus line
27	D ₂₂	Data bus line
28	D ₂₃	Data bus line
29	D ₂₄	Data bus line
30	D ₂₅	Data bus line
31	D ₂₆	Data bus line
32	D ₂₇	Data bus line
33	D ₂₈	Data bus line
34	D ₂₉	Data bus line
35	D ₃₀	Data bus line
36	D ₃₁	Data bus line
37	D ₃₂	Data bus line
38	D ₃₃	Data bus line
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40	D ₃₅	Data bus line
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42	D ₃₇	Data bus line
43	D ₃₈	Data bus line
44	D ₃₉	Data bus line
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64	D ₅₉	Data bus line
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74	D ₆₉	Data bus line
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360	D ₃₅₅	Data bus line
361	D ₃₅₆	Data bus line
362	D ₃₅₇	Data bus line
363	D ₃₅₈	Data bus line
364	D ₃₅₉	Data bus line
365	D ₃₆₀	Data bus line
366	D ₃₆₁	Data bus line
367	D ₃₆₂	Data bus line
368	D ₃₆₃	Data bus line
369	D ₃₆₄	Data bus line
370	D ₃₆₅	Data bus line
371	D ₃₆₆	Data bus line
372	D ₃₆₇	Data bus line
373	D ₃₆₈	Data bus line
374	D ₃₆₉	Data bus line
375	D ₃₇₀	Data bus line
376	D ₃₇₁	Data bus line
377	D ₃₇₂	Data bus line
378	D ₃₇₃	Data bus line
379	D ₃₇₄	Data bus line
380	D ₃₇₅	Data bus line
381	D ₃₇₆	Data bus line
382	D ₃₇₇	Data bus line
383	D ₃₇₈	Data bus line
384	D ₃₇₉	Data bus line
385	D ₃₈₀	Data bus line
386	D ₃₈₁	Data bus line
387	D ₃₈₂	Data bus line
388	D ₃₈₃	Data bus line
389	D ₃₈₄	Data bus line
390	D ₃₈₅	Data bus line
391	D ₃₈₆	Data bus line
392	D ₃₈₇	Data bus line
393	D ₃₈₈ </	

Driver CAN

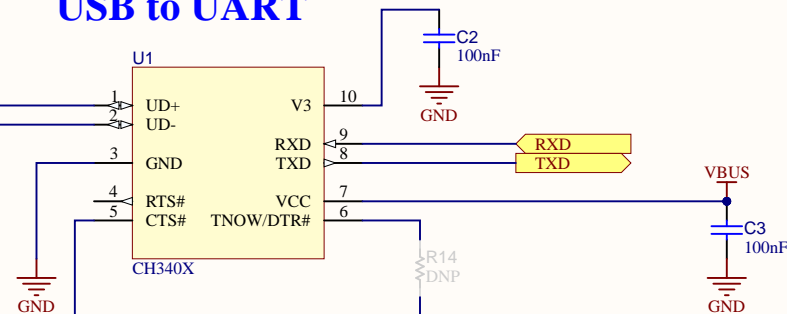


CC voltage (typ.)	Host advertises	Meaning
~0.2–0.4 V	Default USB current	500 mA (USB 2.0) / 900 mA (USB 3.x)
~0.9–1.2 V	1.5 A@5V	High-current USB-C
~1.6–2.0 V	3.0 A@5V	Maximum without USB-PD

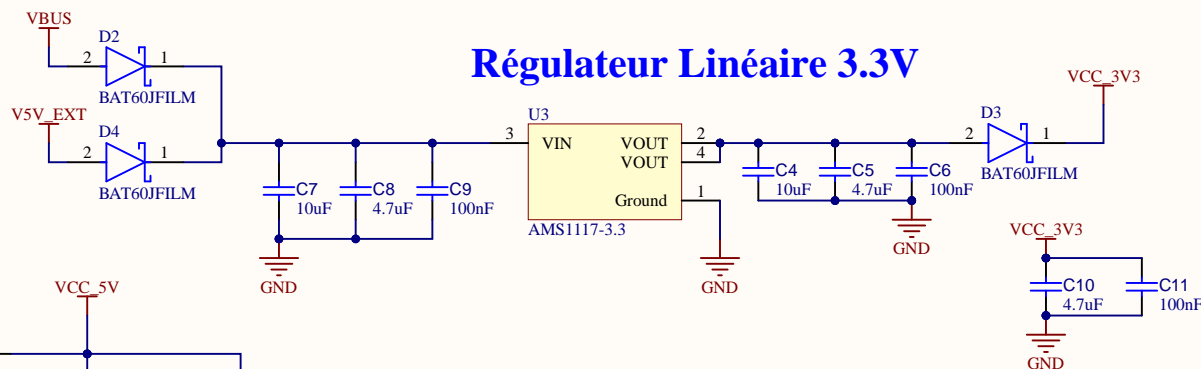
Interface USB et CAN



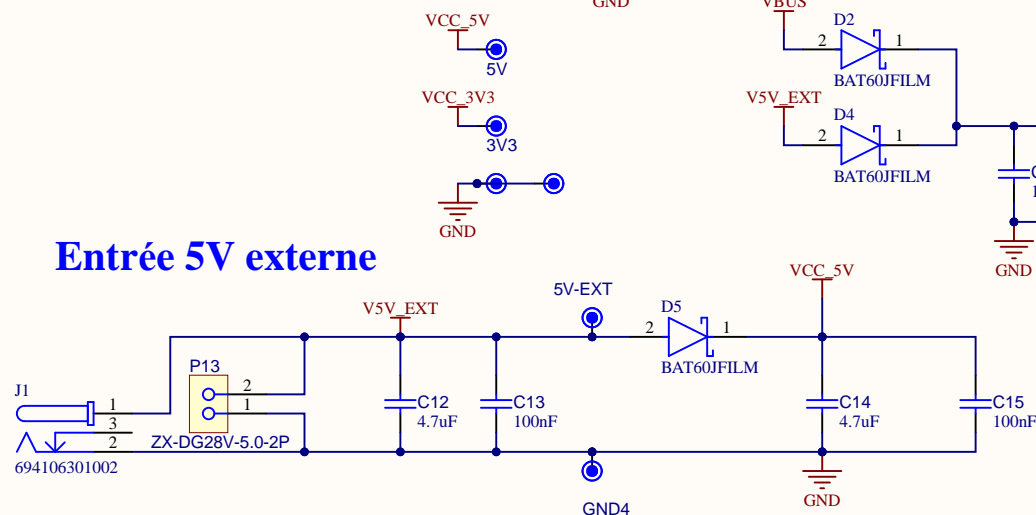
USB to UART



Régulateur Linéaire 3.3V



Entrée 5V externe



Titre : Interface USB et CAN

Conception : CEGEP Limoilou

Date : 2026-01-04

Fichier : USB.SchDoc

Approbation : APPROUVÉ PAR

Heure : 15:48:09

Feuille 7 de 7

Révision : Rev.A

Cégep Limoilou
1300, 8e Avenue
Québec, QC
Canada
G1J 5L5

