

HiveBoard

PMC

SwarmUS

Revision 1.000

Date: 2020-06-01

TOP
HIVE_BOARD_TOP.SchDoc

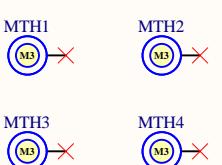
Block diagram
HIVE_BOARD_BLOCK_DIAG.SchDoc

The following components were changed:

BSS138LT1G → BVSS138LT1G

SMLVT3V3 → SMBJ3V3-M3/5B

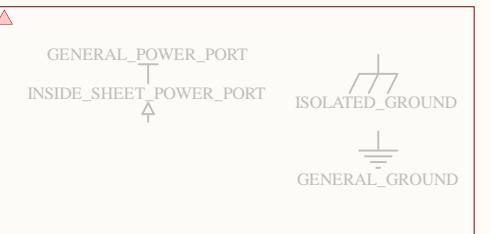
Mounting holes



Fiducials



Revision history	



Package size conversion	
Metric	Imperial
1005	0402
1608	0603
2012	0805
3216	1206
3225	1210
6432	2512

Usage notes

Routing notes

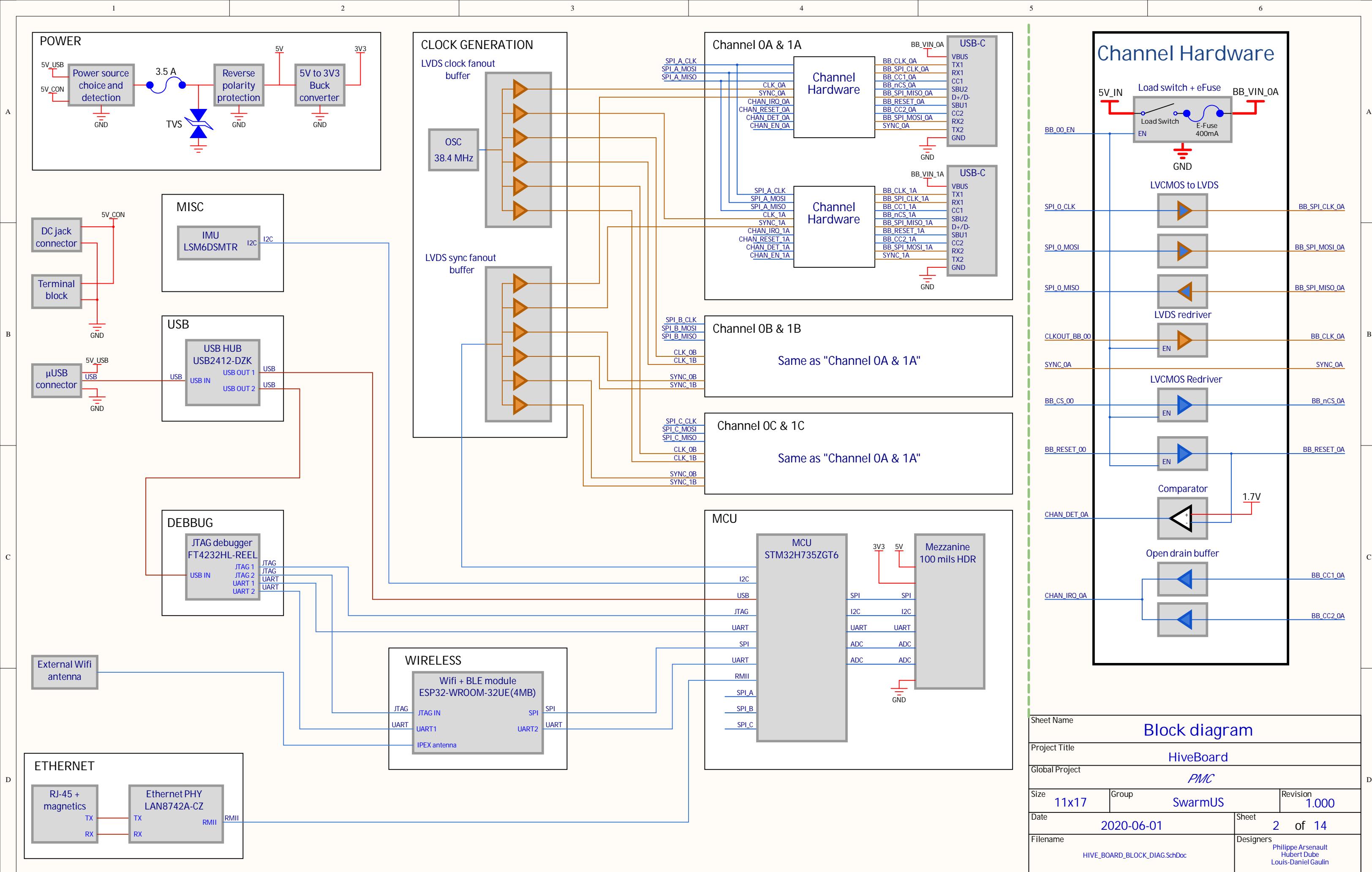
Power notes

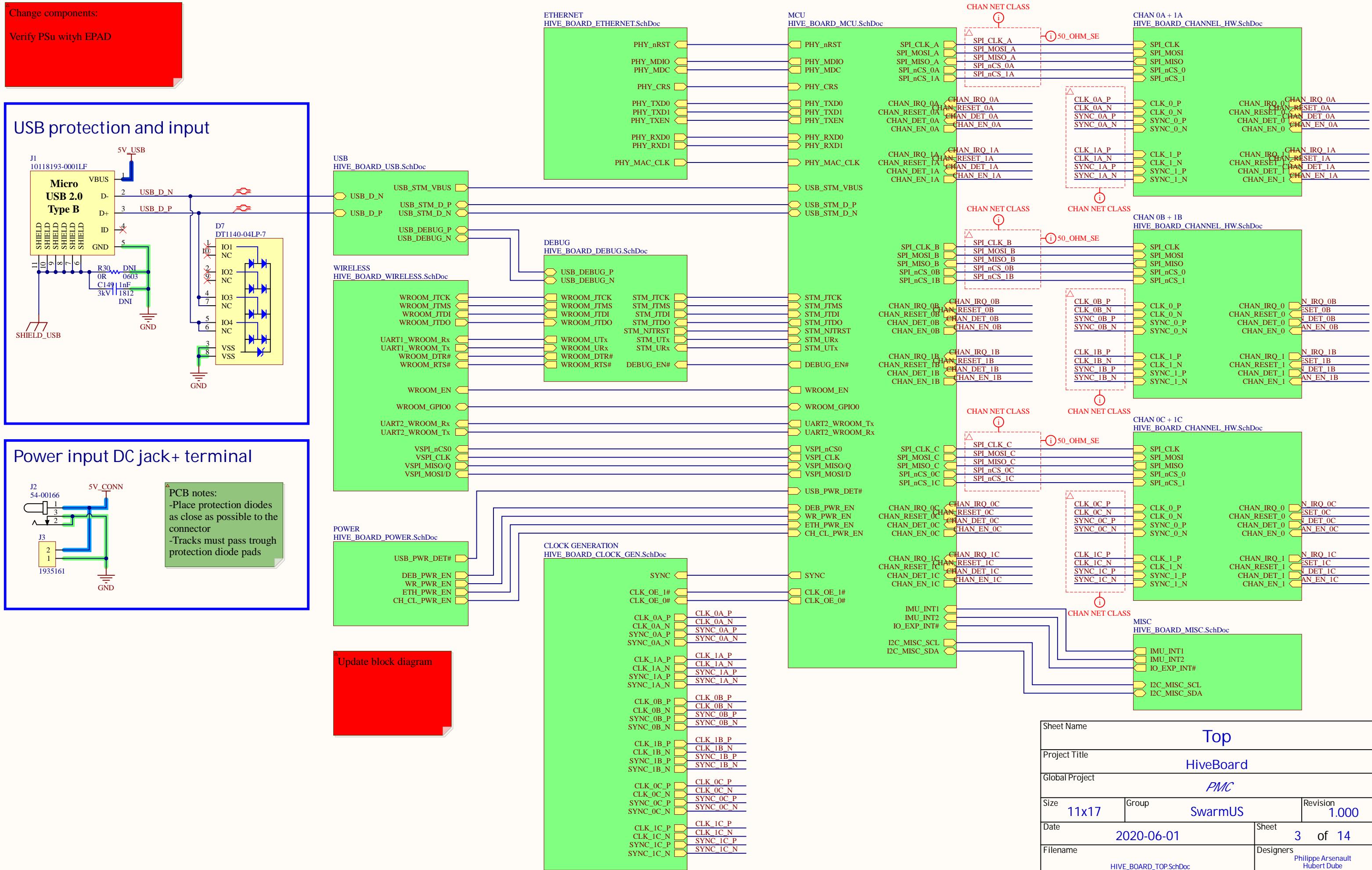
Questions / TODO

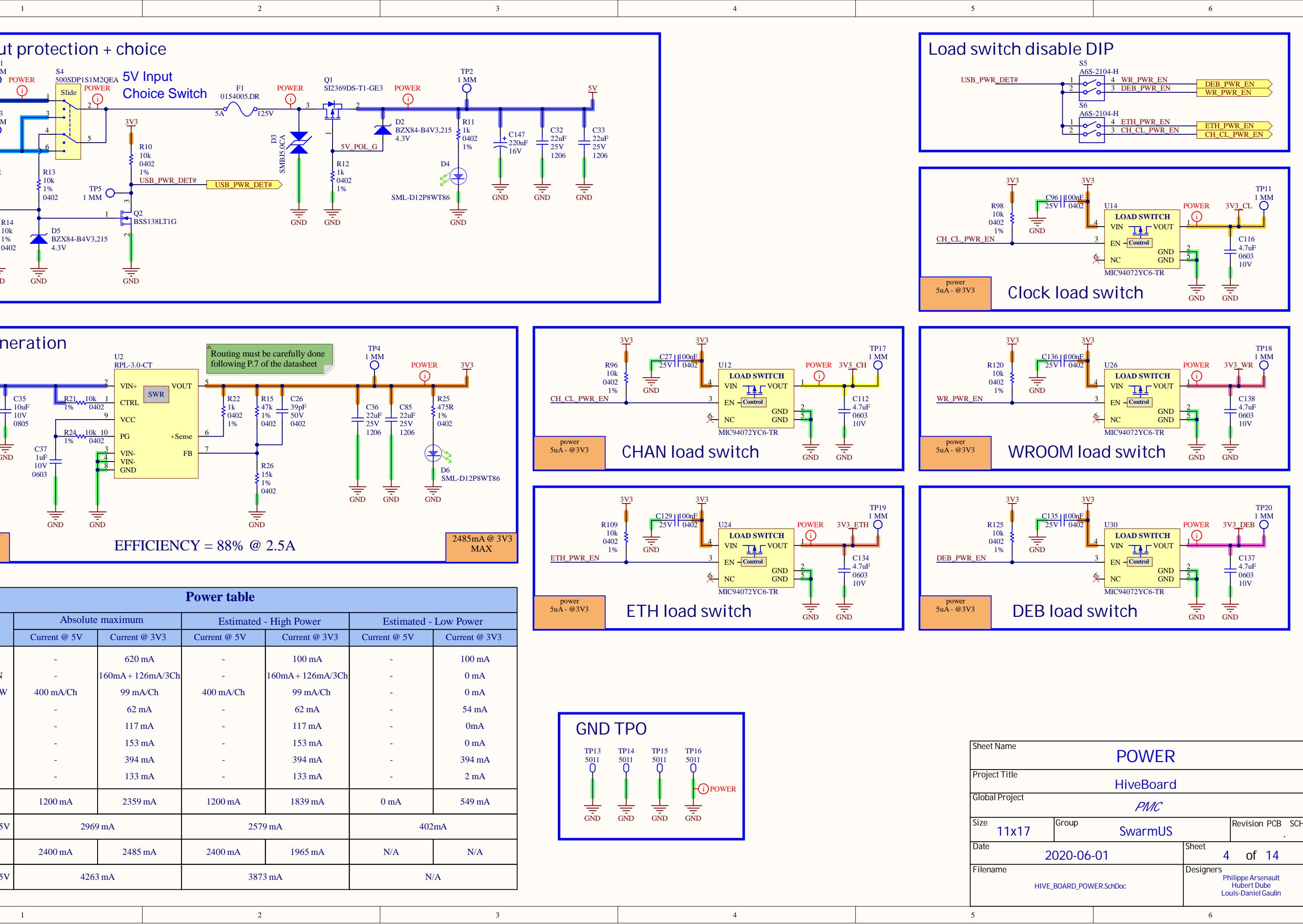
Section name

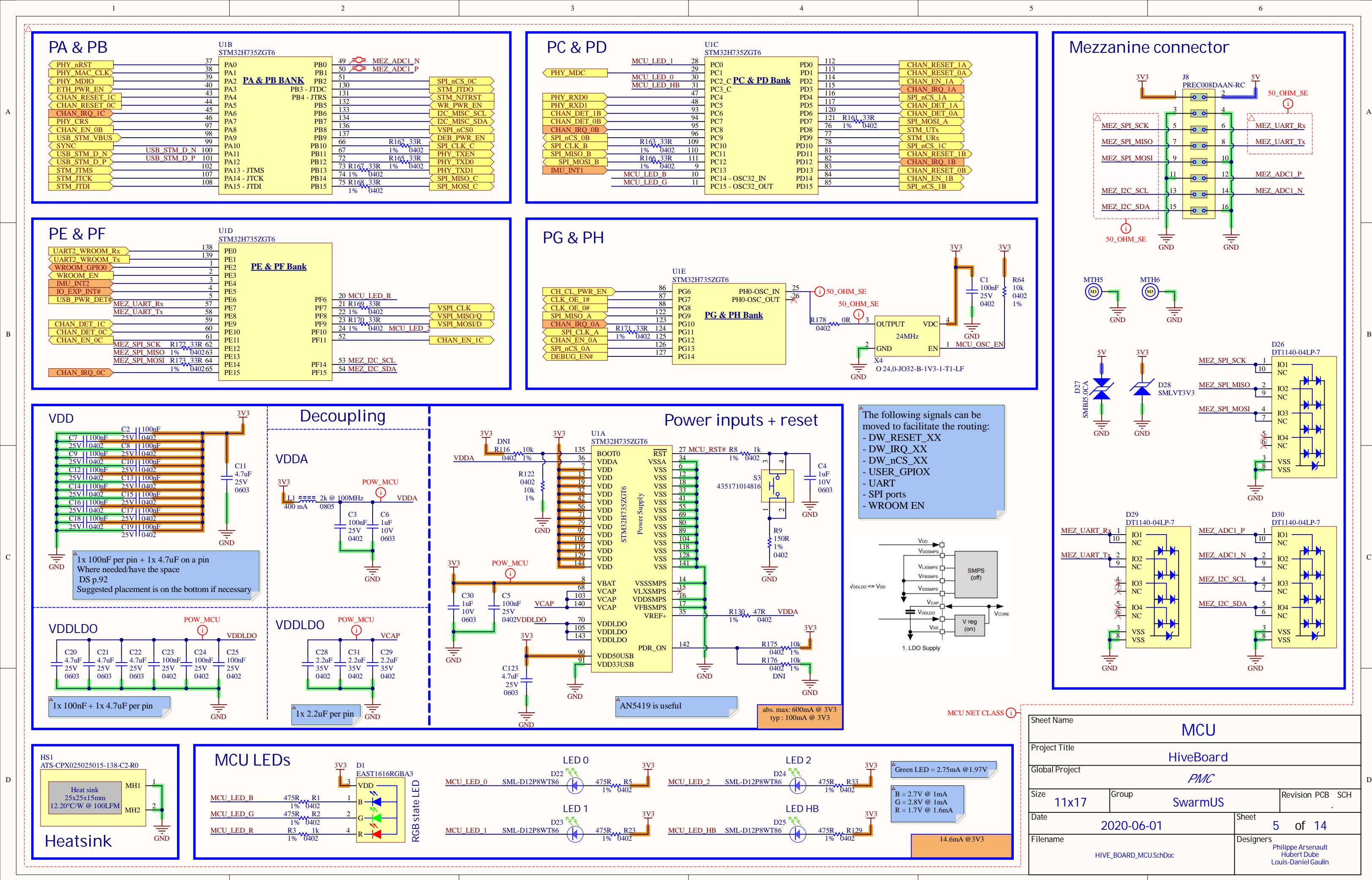
power

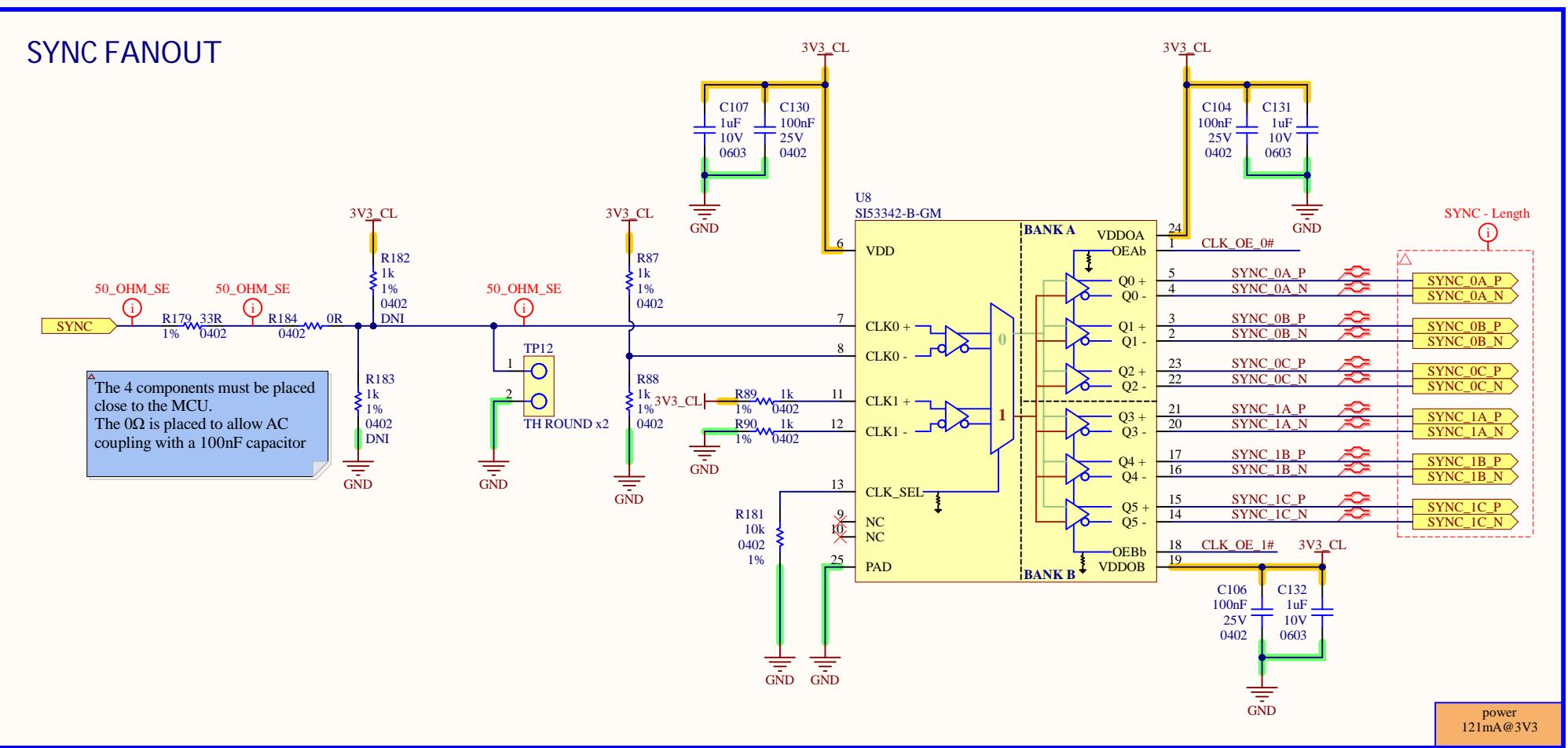
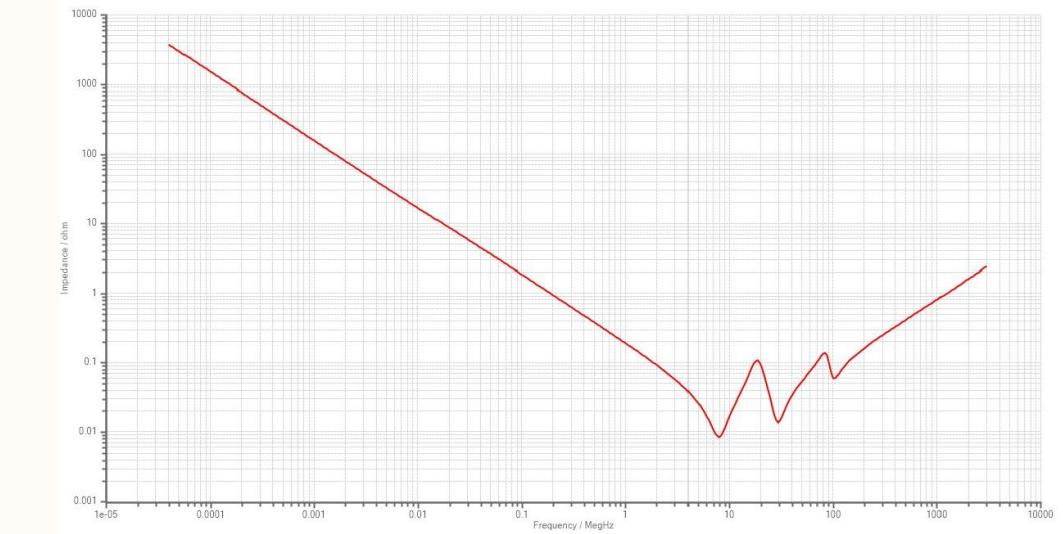
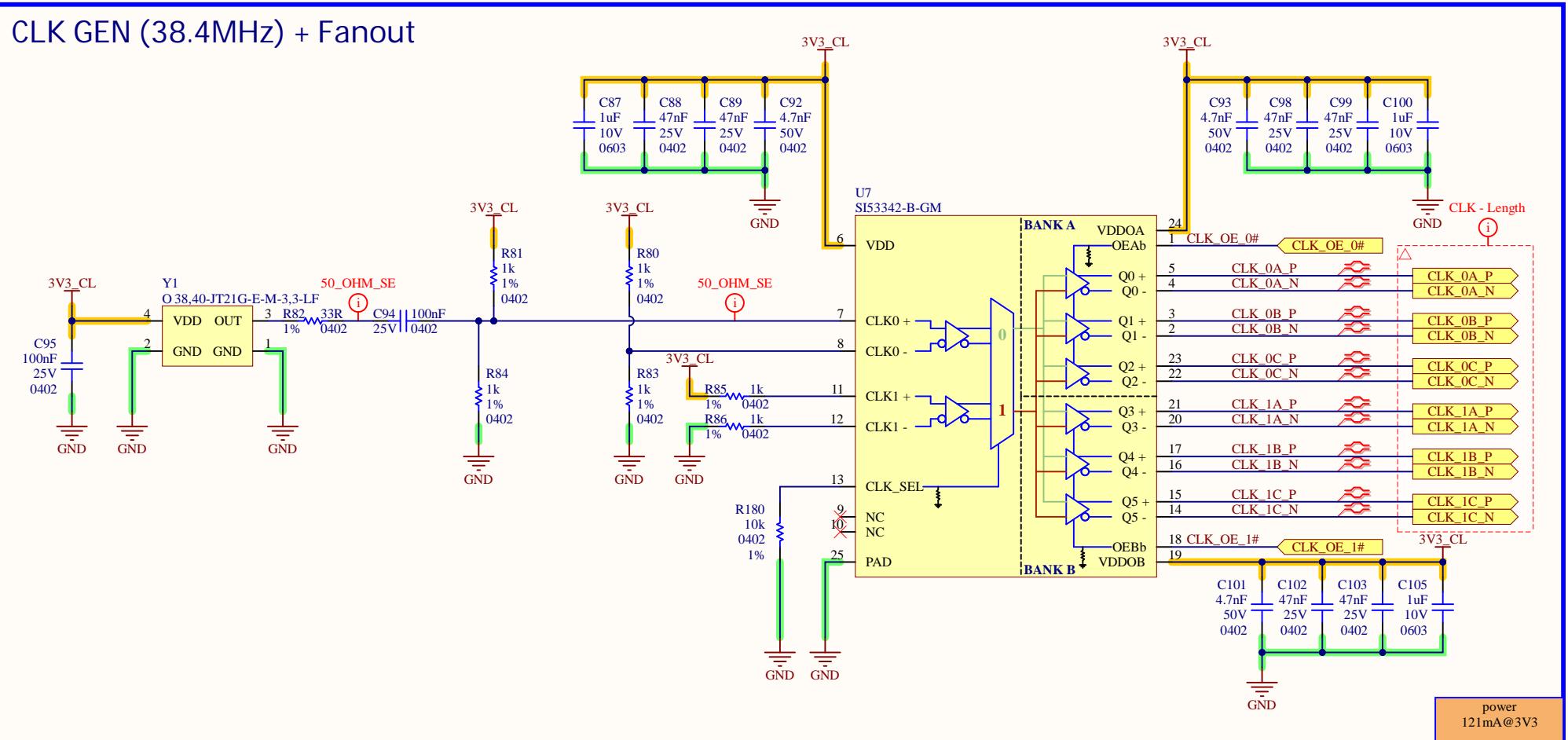
Project Title	HiveBoard		
Global Project	PMC		
Size	11x17	Group	SwarmUS
Date	2020-06-01	Revision	1.000
Filename	HIVE_BOARD_TITLE.SchDoc		
Designers	Philippe Arsenault Hubert Dube Louis-Daniel Gaulin		



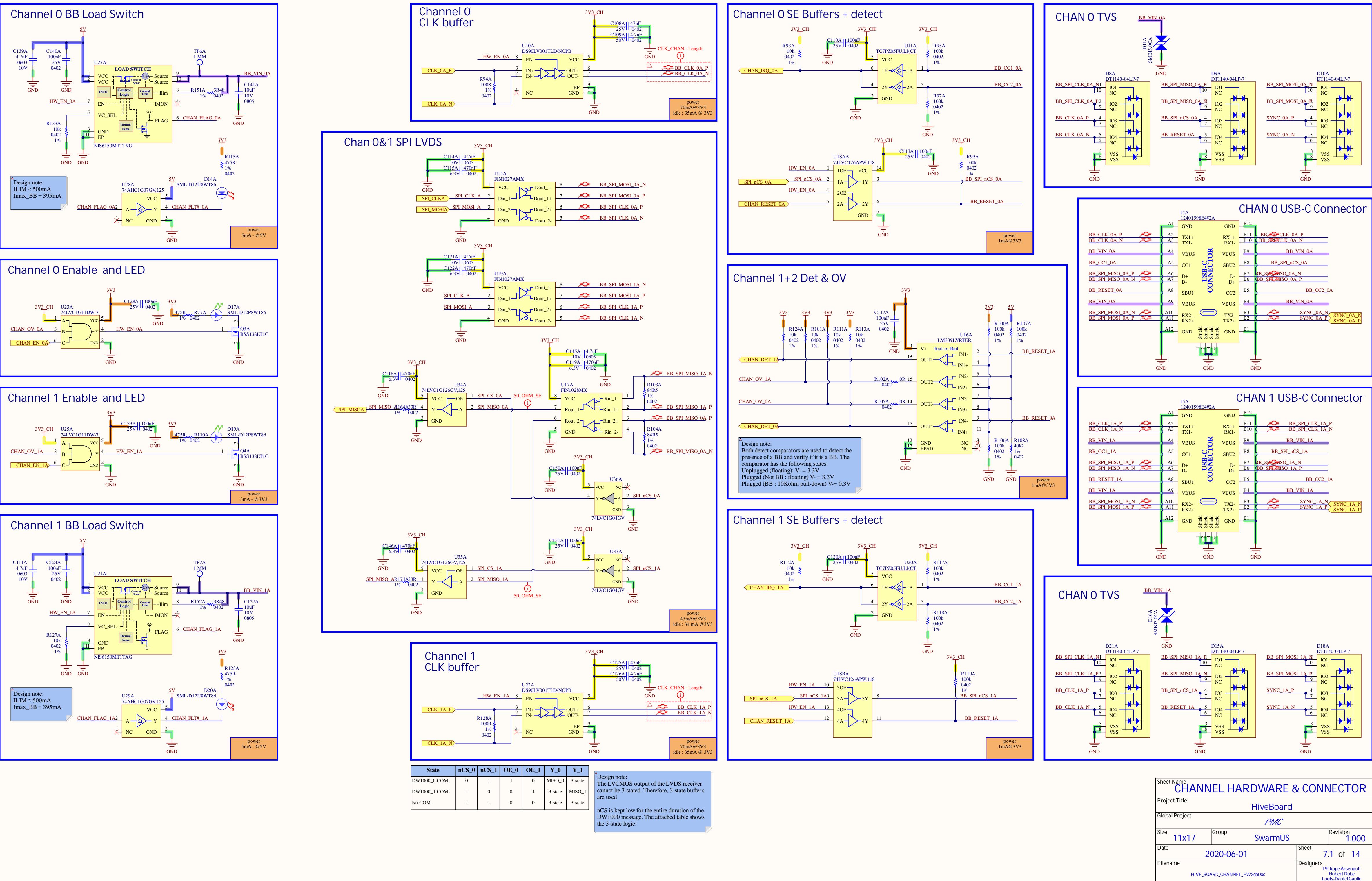


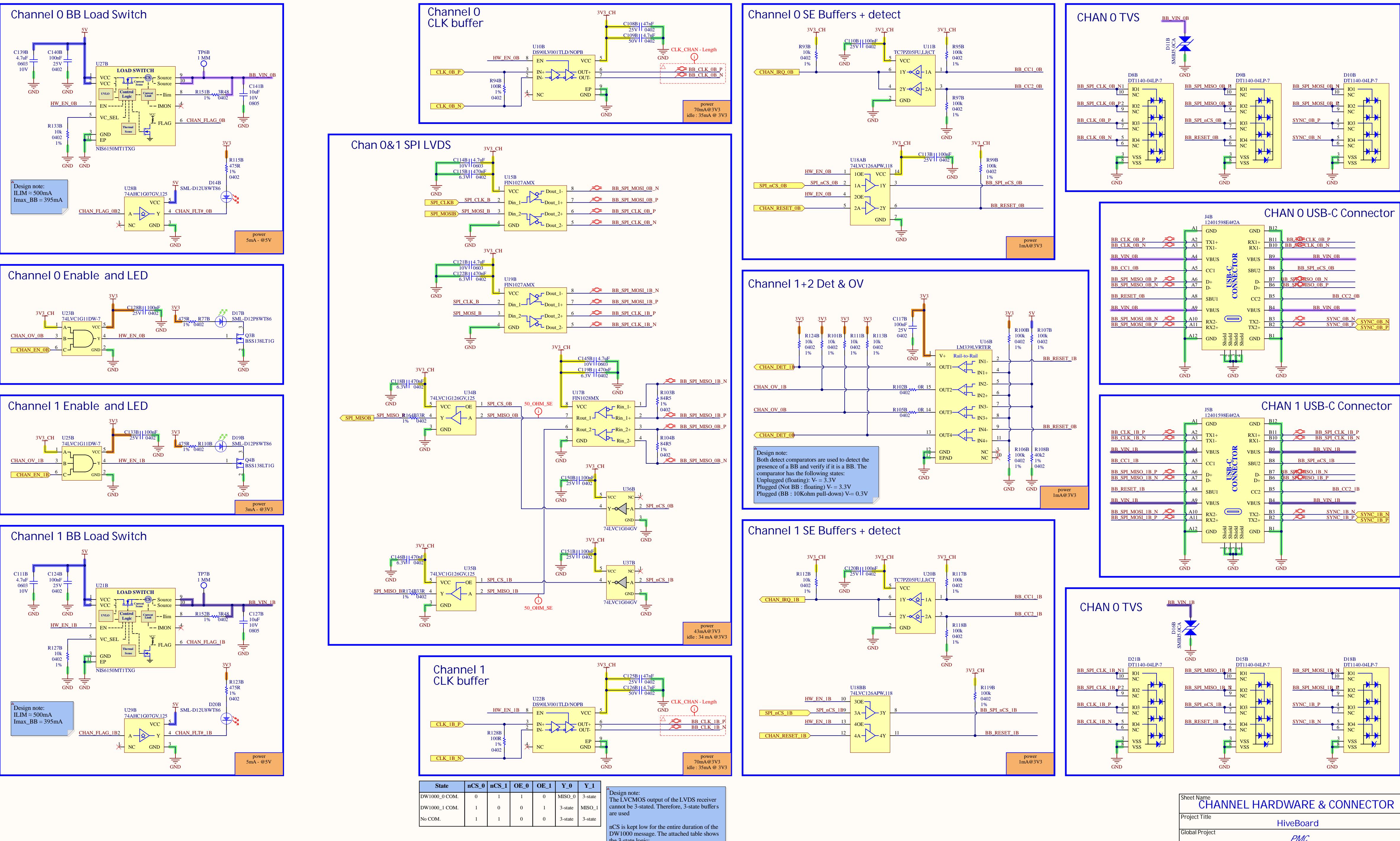


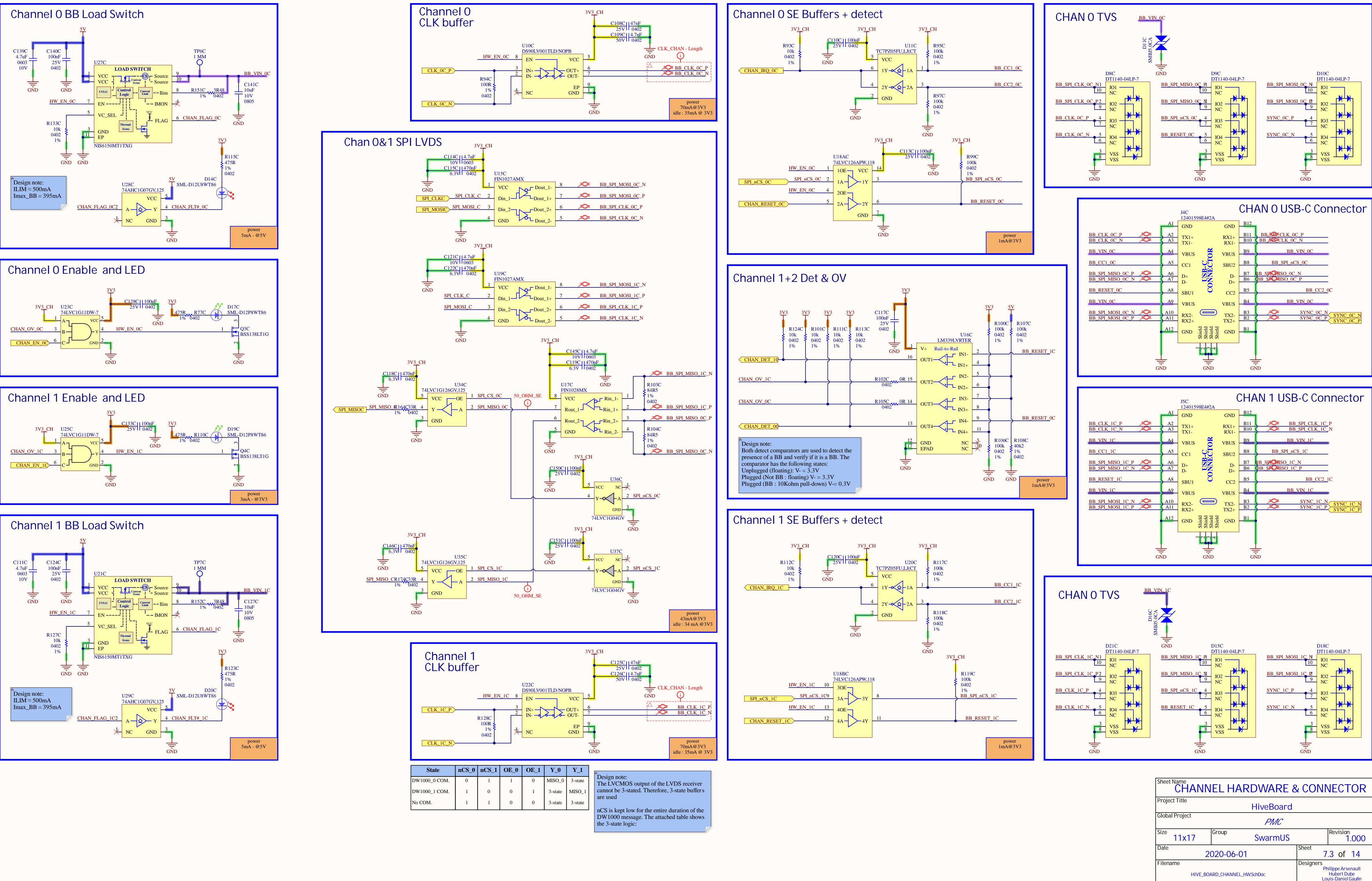




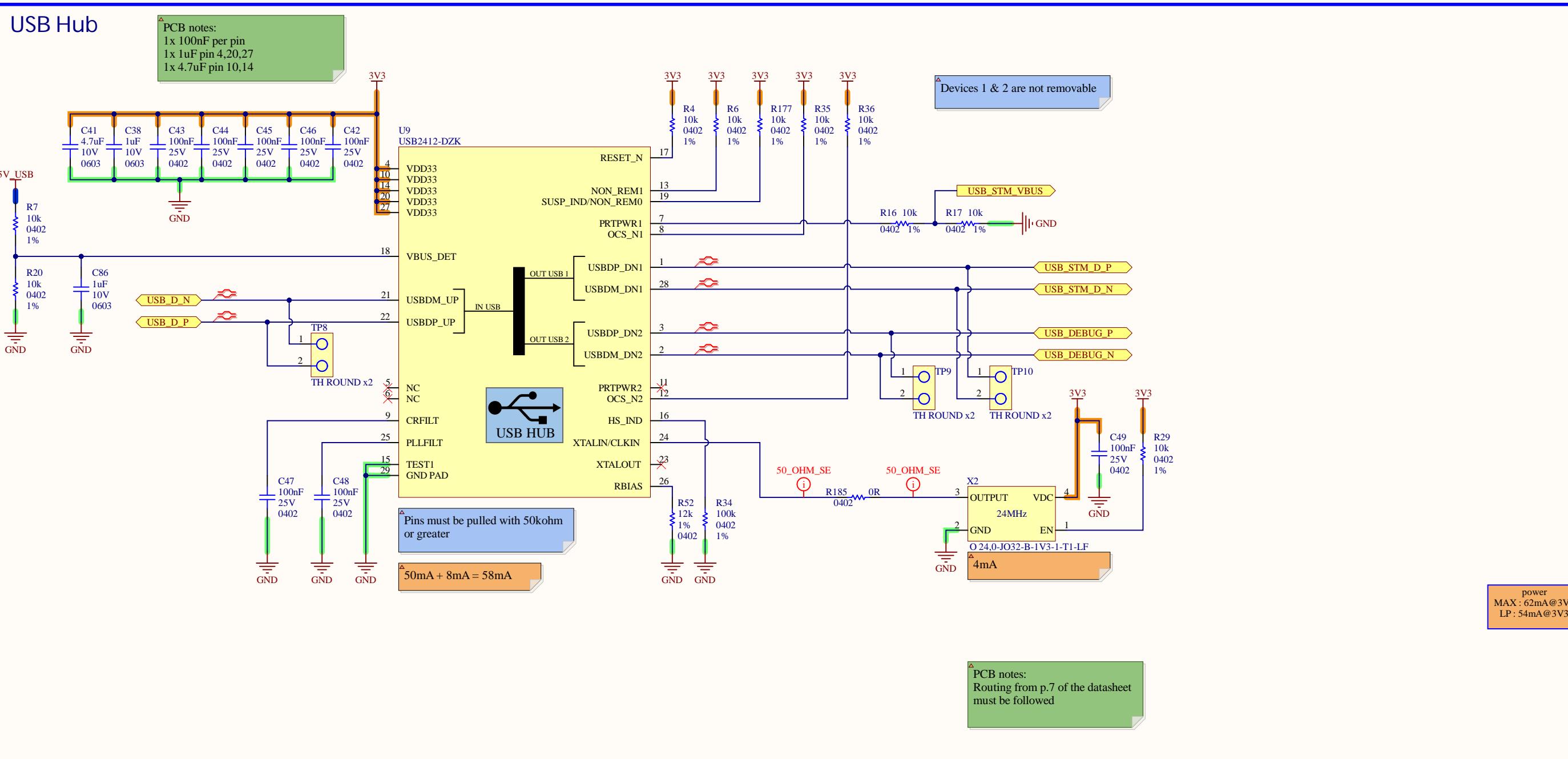
Sheet Name	CLOCK GEN & FANOUT		
Project Title	HiveBoard		
Global Project	PMC		
Size	11x17	Group	SwarmUS
Date	2020-06-01	Sheet	6 of 14
Filename	HIVE_BOARD_CLOCK_GEN.SchDoc	Designers	Philippe Arsenault Hubert Dubé Louis-Daniel Gaulin





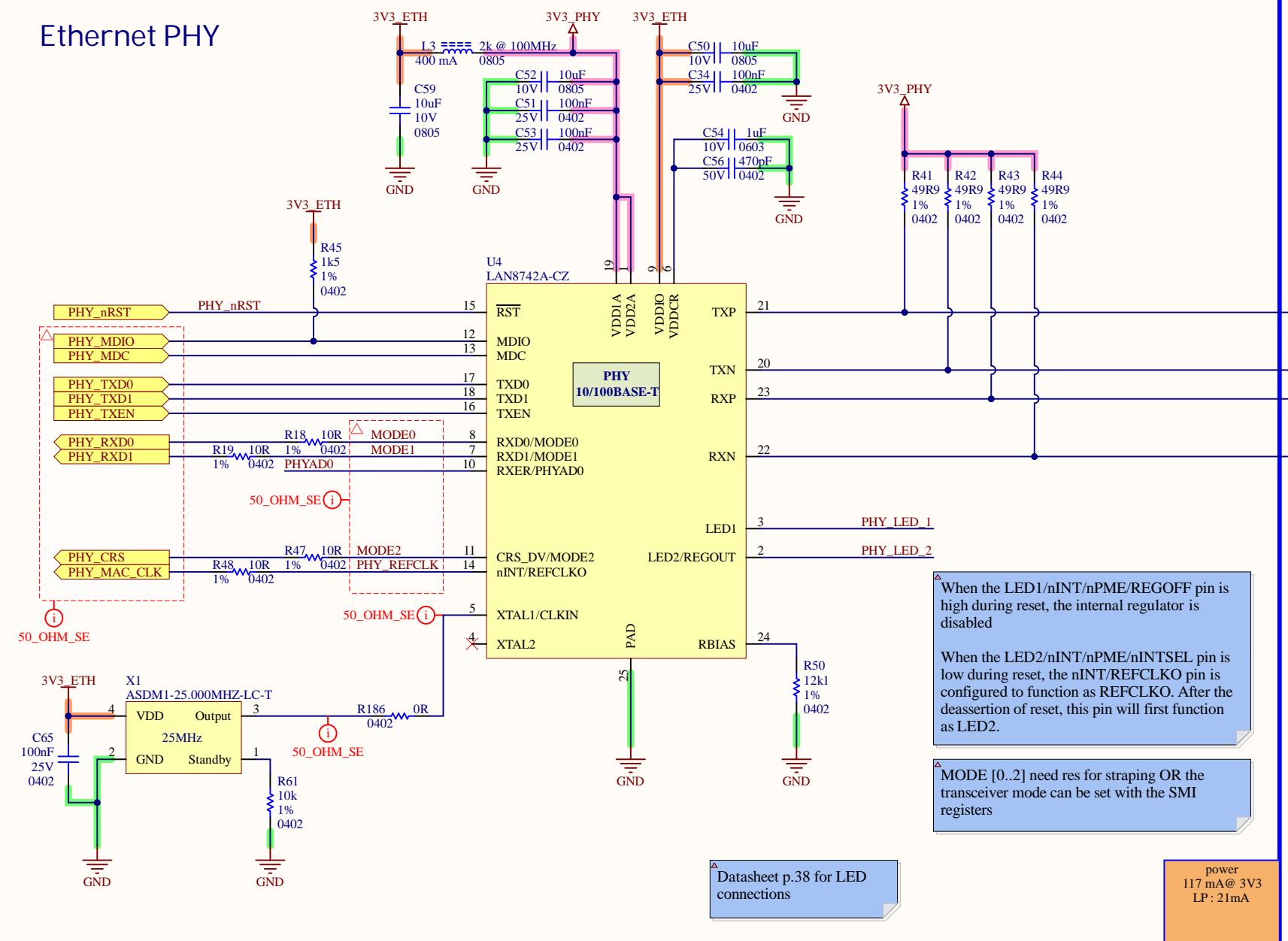


Sheet Name: CHANNEL HARDWARE & CONNECTOR
Project Title: HiveBoard
Global Project: PMC
Size: 11x17 Group: SwarmUS Revision: 1.000
Date: 2020-06-01 Sheet: 7.3 of 14
Filename: HIVE_BOARD_CHANNEL_HWSchDoc Designers: Philippe Arsenault, Hubert Dubé, Louis-Daniel Gaulin

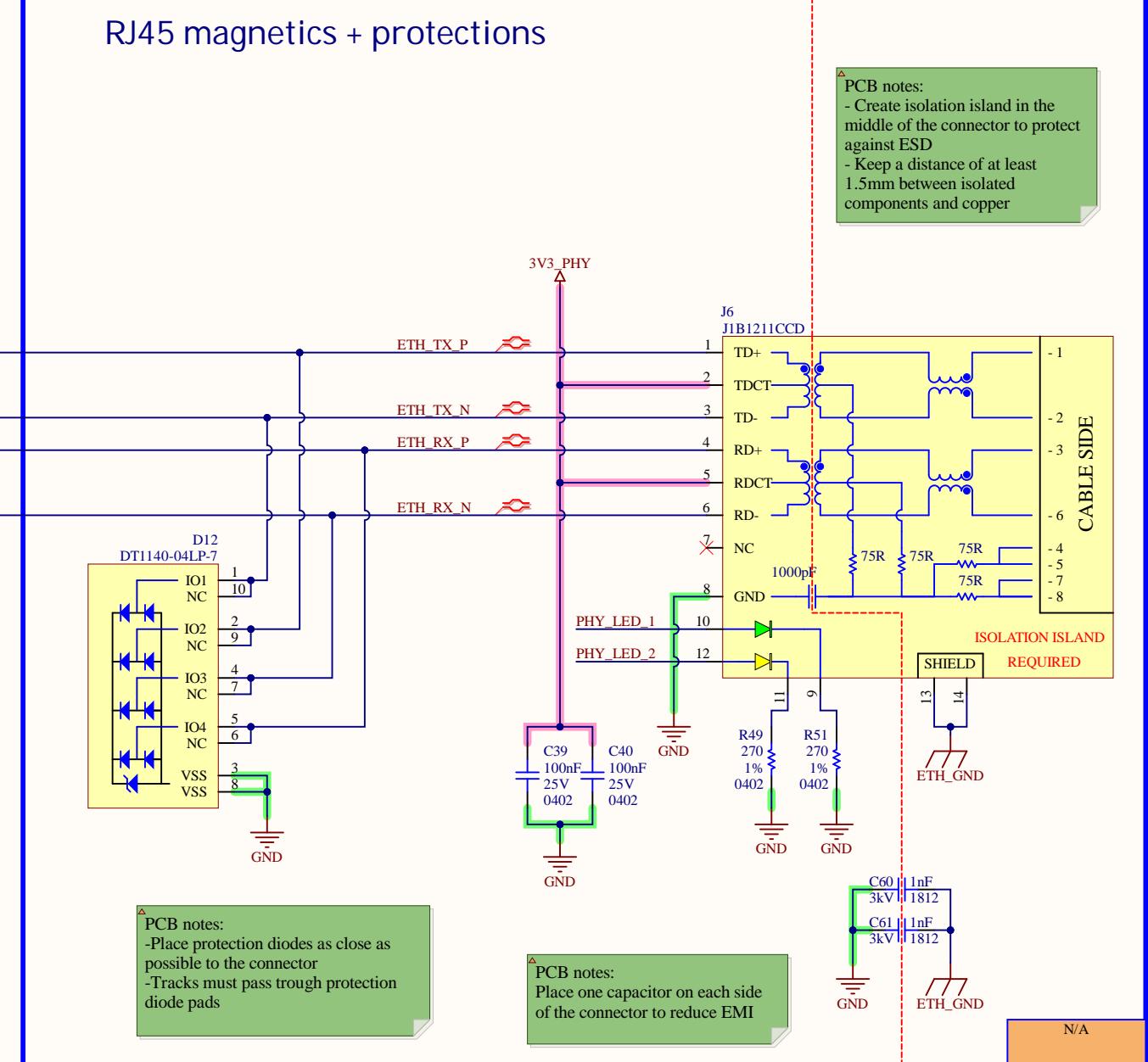


Sheet Name	USB Hub		
Project Title	HiveBoard		
Global Project	PMC		
Size	11x17	Group	SwarmUS
Date	2020-06-01		Sheet 8 of 14
Filename	HIVE_BOARD_USB.SchDoc		Designers Philippe Arsenault, Hubert Dube, Louis-Daniel Gaulin

Ethernet PHY

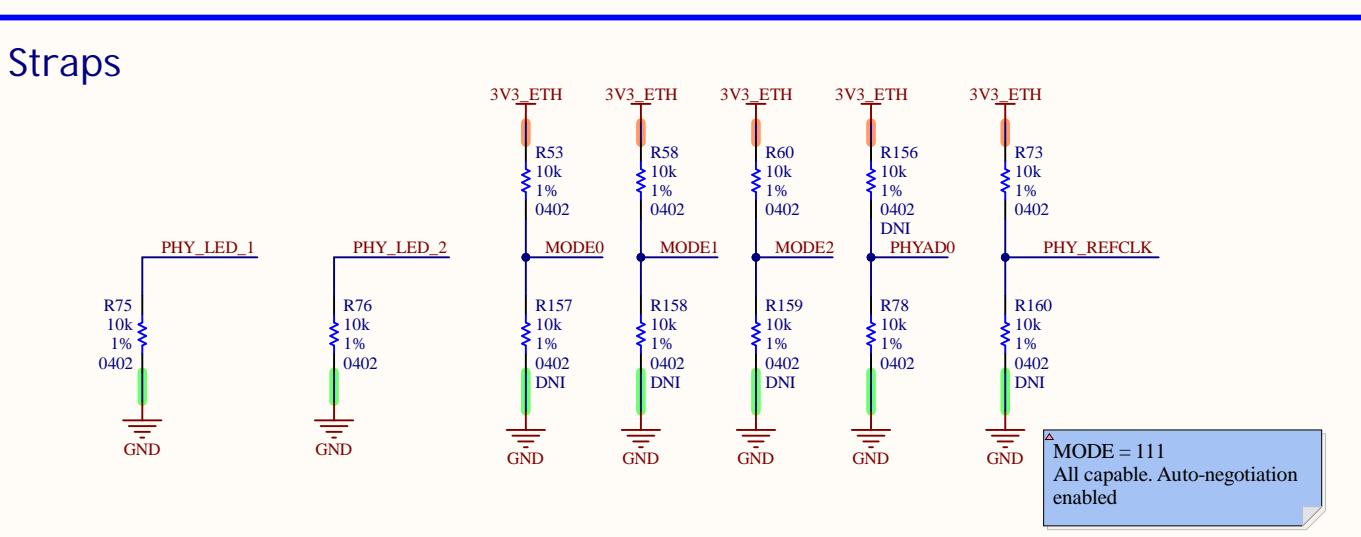


RJ45 magnetics + protections

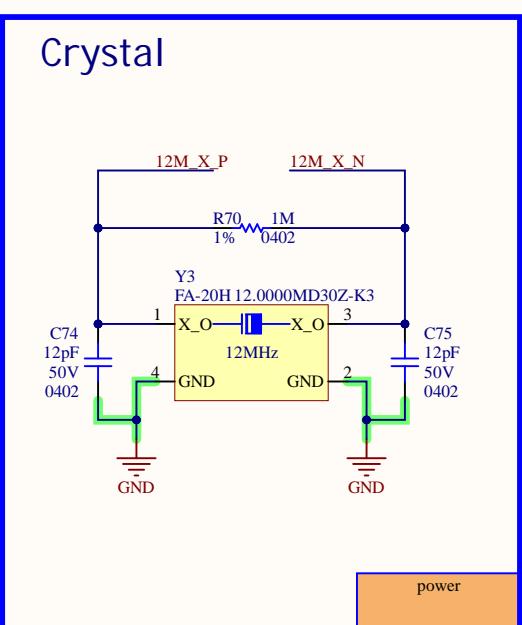
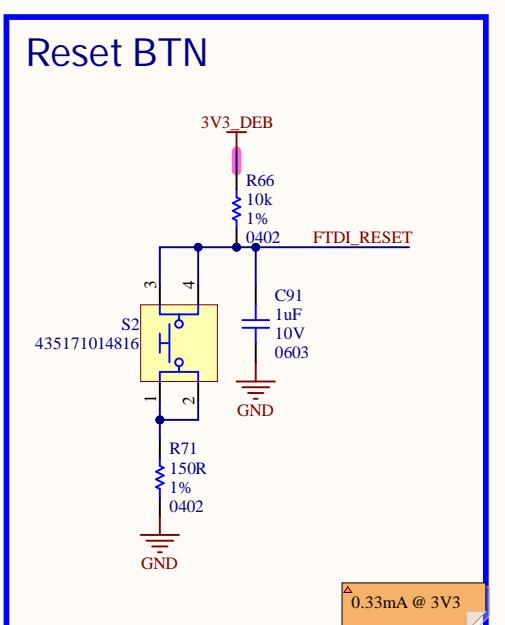
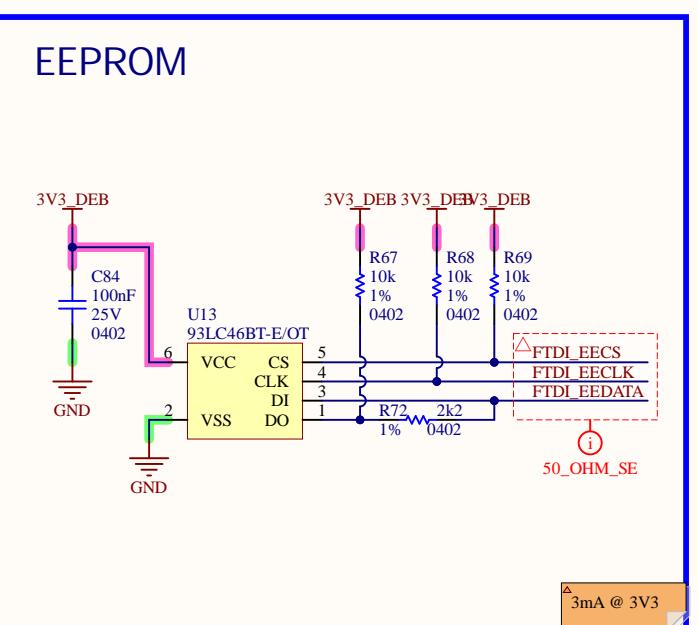
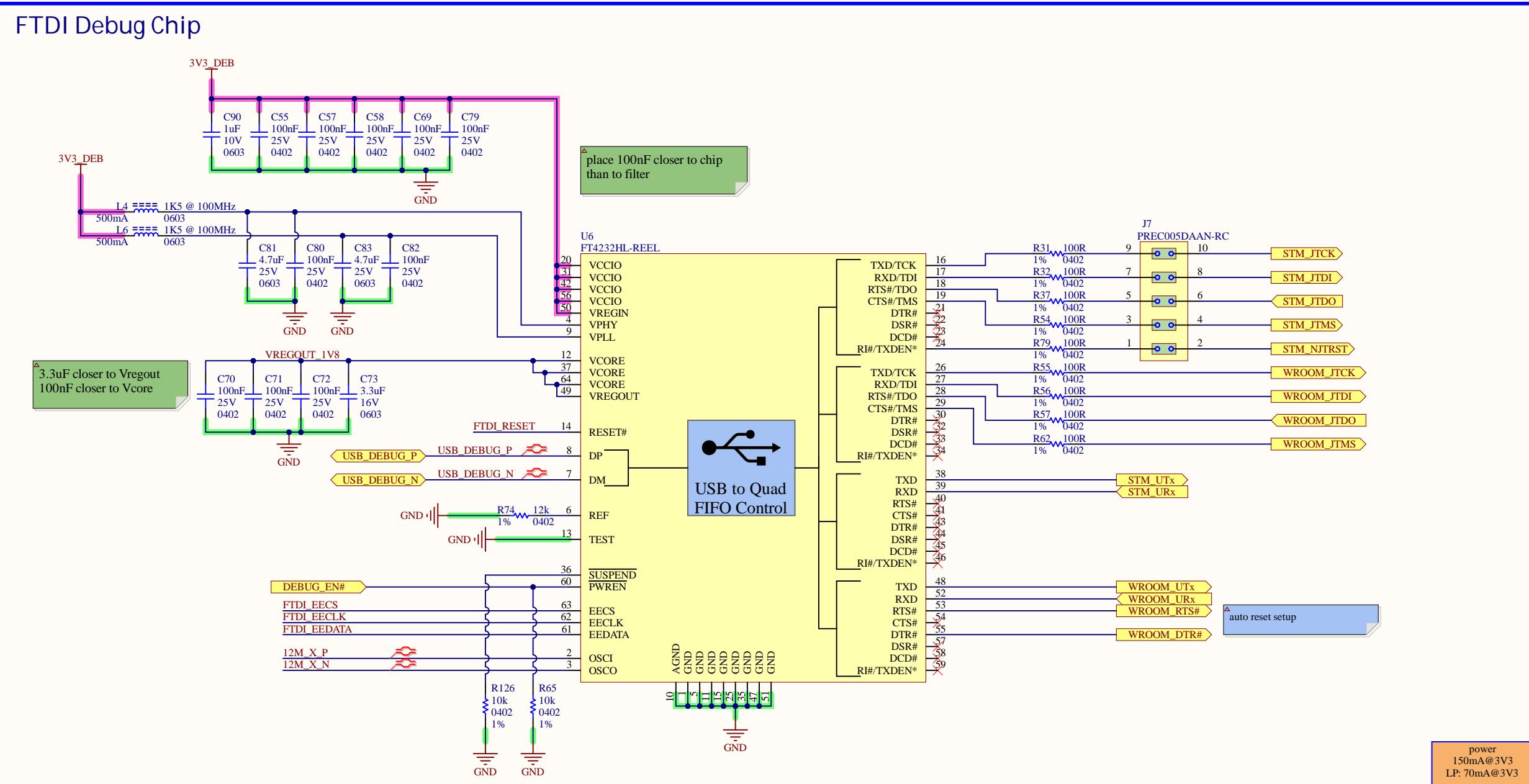


RMII CLOCK
frequency is 50MHz.
13ieme harmonique is 650MHz.
Wavelength is 46cm
IF MAC CLK is less than 11cm : not considered a transmission line

Straps

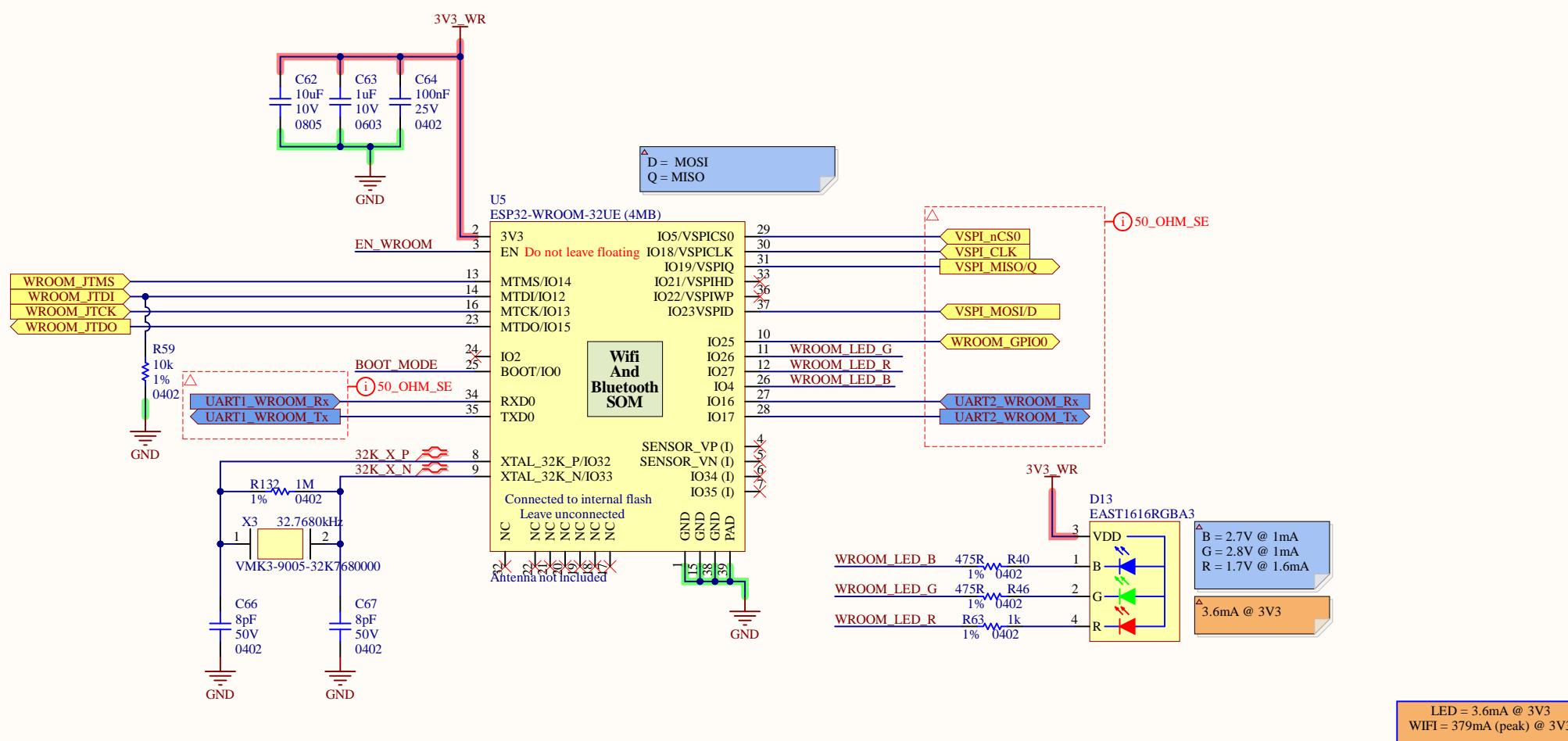


Sheet Name	ETHERNET		
Project Title	HiveBoard		
Global Project	PMC		
Size	11x17	Group	SwarmUS
Date	2020-06-01	Sheet	9 of 14
Filename	HIVE_BOARD_ETHERNET.SchDoc		
Designers	Philippe Arsenault Hubert Dube Louis-Daniel Gaulin		

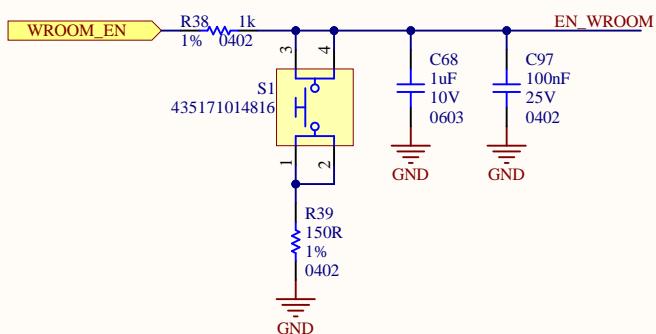


Sheet Name	DEBUG		
Project Title	HiveBoard		
Global Project	PMC		
Size 11x17	Group SwarmUS	Revision PCB	SCH .
Date 2020-06-01	Sheet 10 of 14		
Filename HIVE_BOARD_DEBUG.SchDoc	Designers Philippe Arsenault Hubert Dubé Louis-Daniel Gaulin		

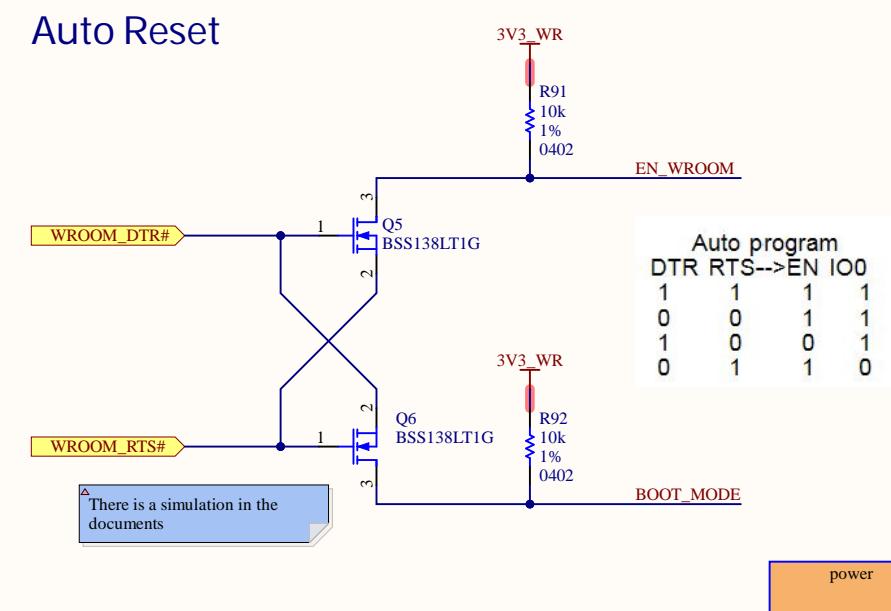
WROOM



Reset BTN



Auto Reset



Sheet Name

WIRELESS**HiveBoard**

Project Title

PMC

Global Project

SwarmUS

Size

11x17

Group Revision PCB SCH

Date

2020-06-01

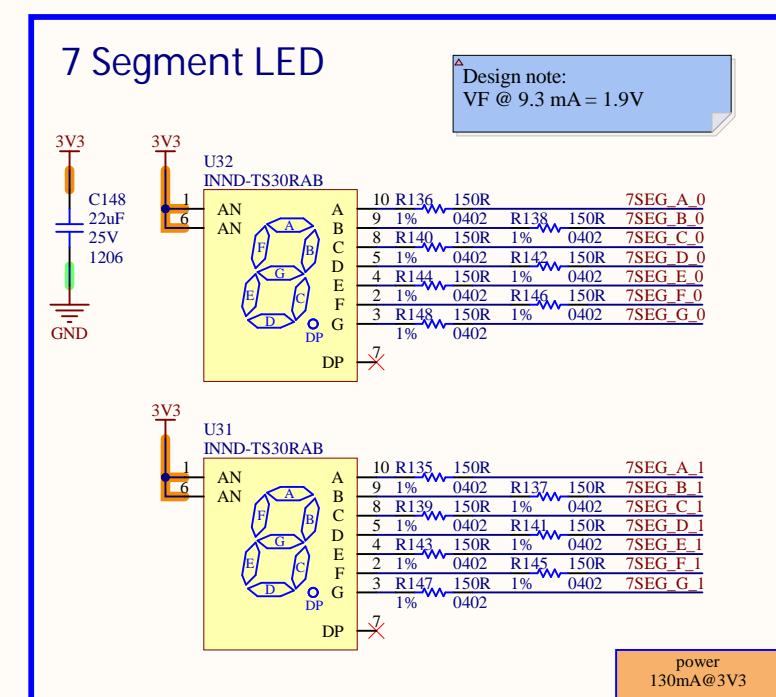
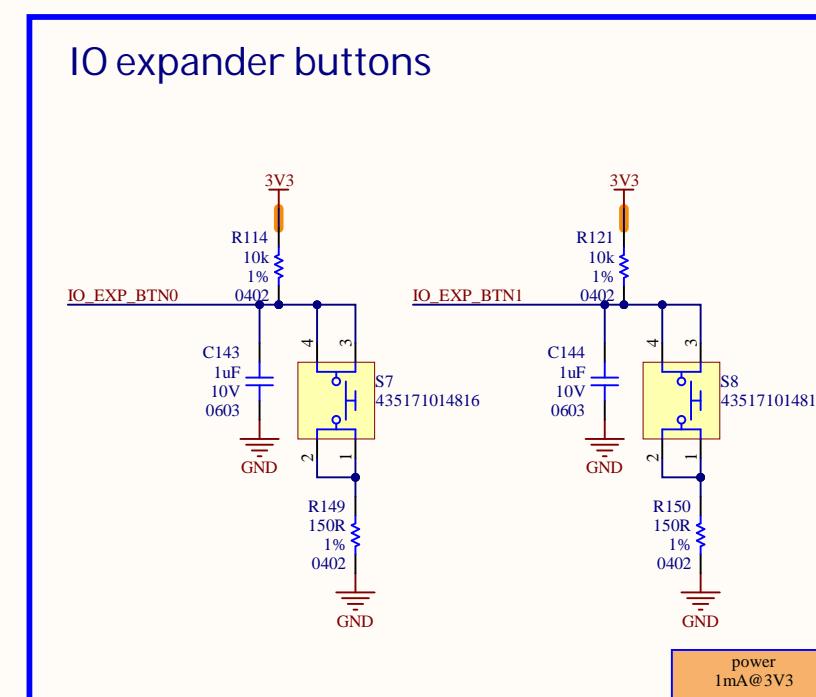
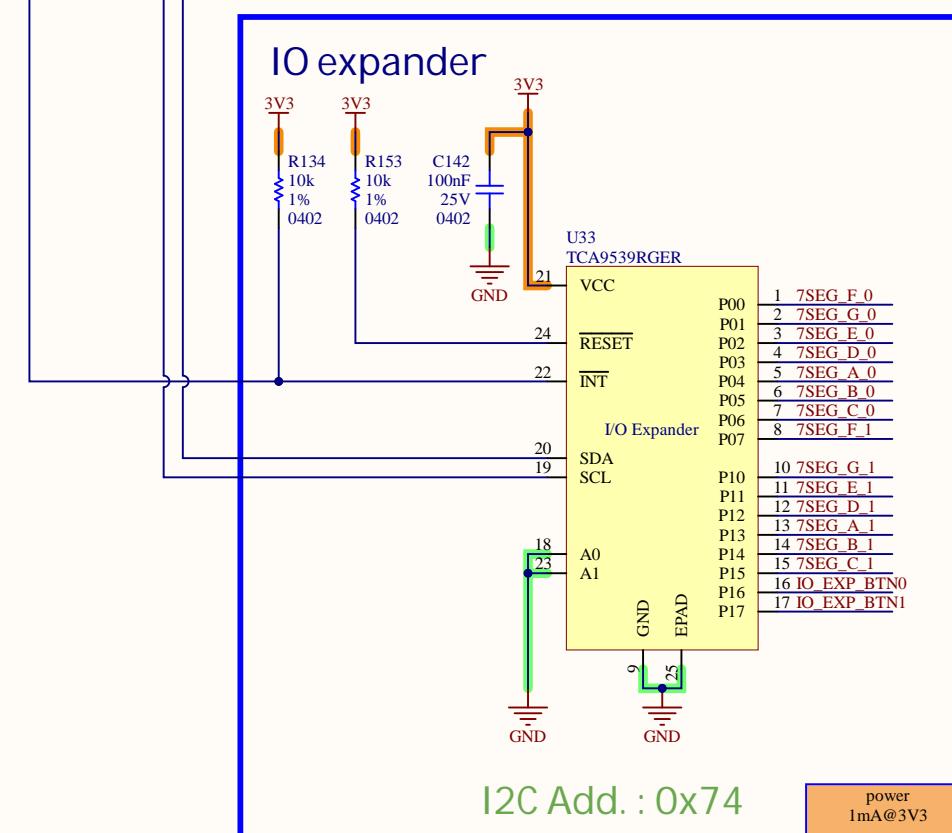
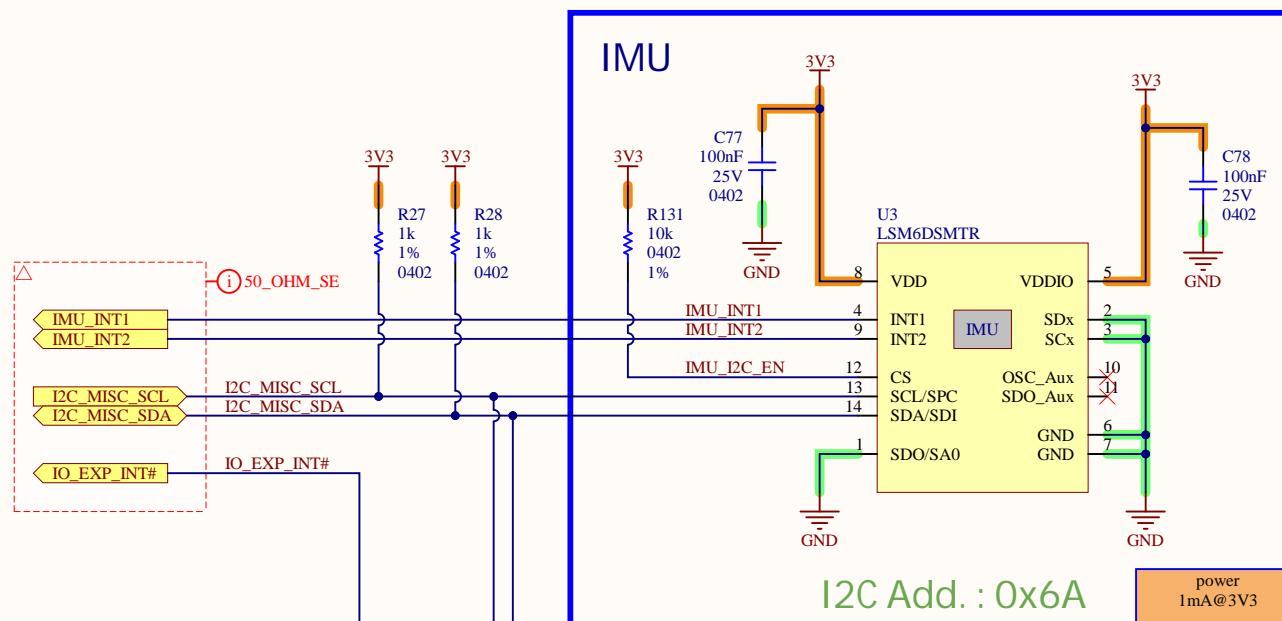
Sheet 11 of 14

Filename

HIVE_BOARD_WIRELESS.SchDoc

Designers

Philippe Arsenault
Hubert Dubé
Louis-Daniel Gaulin



Sheet Name	MISC		
Project Title	HiveBoard		
Global Project	PMC		
Size	11x17	Group	SwarmUS
Date	2020-06-01		Sheet 12 of 14
Filename	HIVE_BOARD_MISC.SchDoc		Designers Philippe Arsenault Hubert Dube Louis-Daniel Gaulin