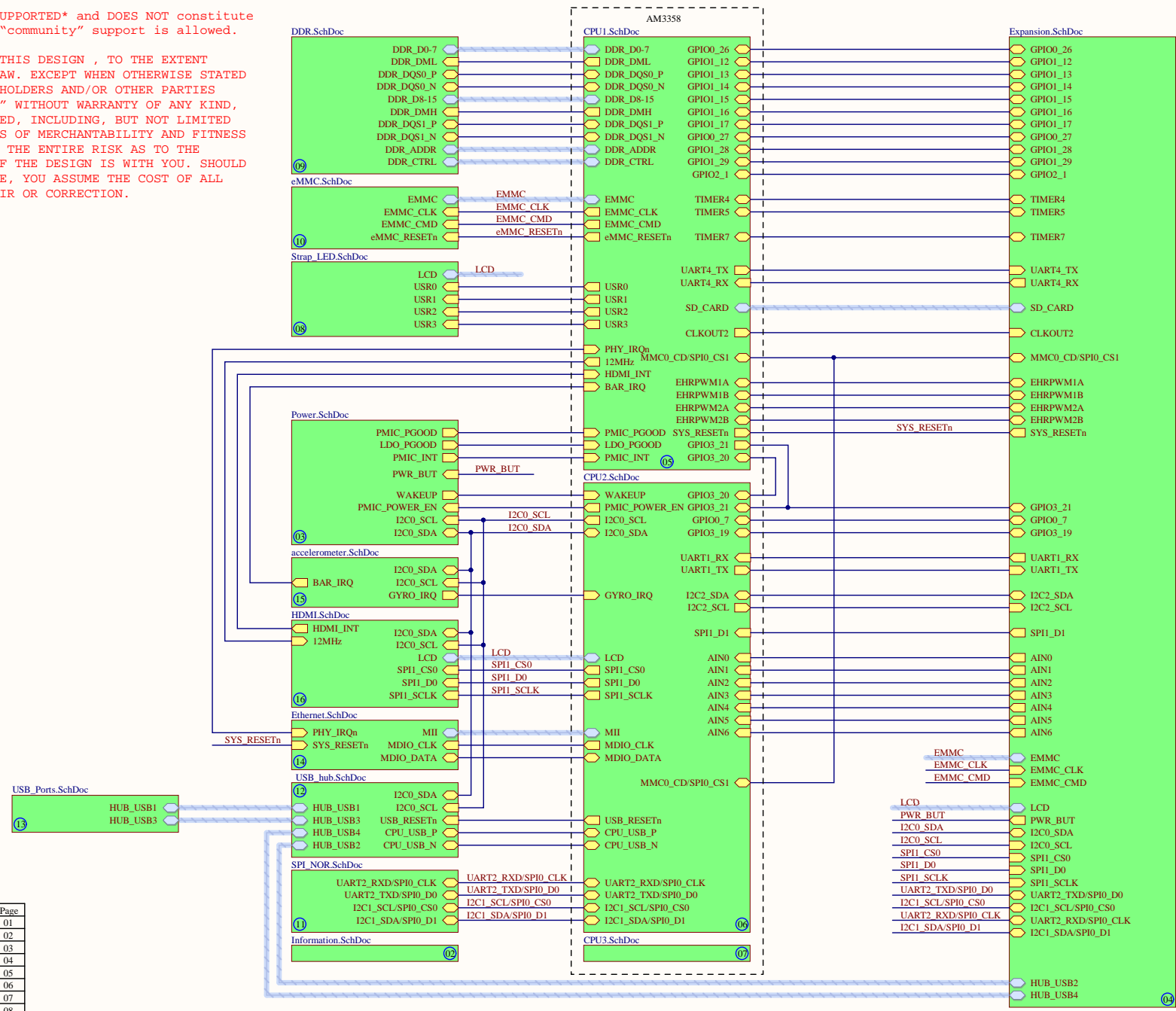



This schematic is \*NOT SUPPORTED\* and DOES NOT constitute a reference design. Only "community" support is allowed.

THERE IS NO WARRANTY FOR THIS DESIGN, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE DESIGN "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE DESIGN IS WITH YOU. SHOULD THE DESIGN PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.



Block	Range	Page
Top Level	-	01
Information	4300 - 4399	02
DC-DC and Power	200 - 299	03
Port Expansion	7000 - 7099	04
CPU DDR, Clocks GPIOI	2000 - 2099	05
CPU GPIO2	2100 - 2199	06
CPU Power and Ground	2200 - 2299	07
CPU Pin Strapping and LEDs	7100 - 7199	08
DDR	3400 - 3499	09
eMMC Flash	3300 - 3099	10
SPI NOR Flash	3100 - 3199	11
USB Hub	4300 - 4399	12
USB Ports	4200 - 4299	13
Ethernet and RJ45	4000 - 4099	14
Accelerometer and Barometer	7400 - 7499	15
HDMI Port	5800 - 5899	16

Title: Top Level		 SanCloud Ltd 164 Walkden Road Worsley Manchester M28 7DP United Kingdom
Size: A3	Date: 23/01/2018	
Drawn by: David Fields		
Review by: *		
Revision: 1D		
Sheet: 01 of 16	Copyright 2018 SanCloud Ltd	

Not to be disclosed in part or whole with 3rd parties without written permission.

A

B

C

D

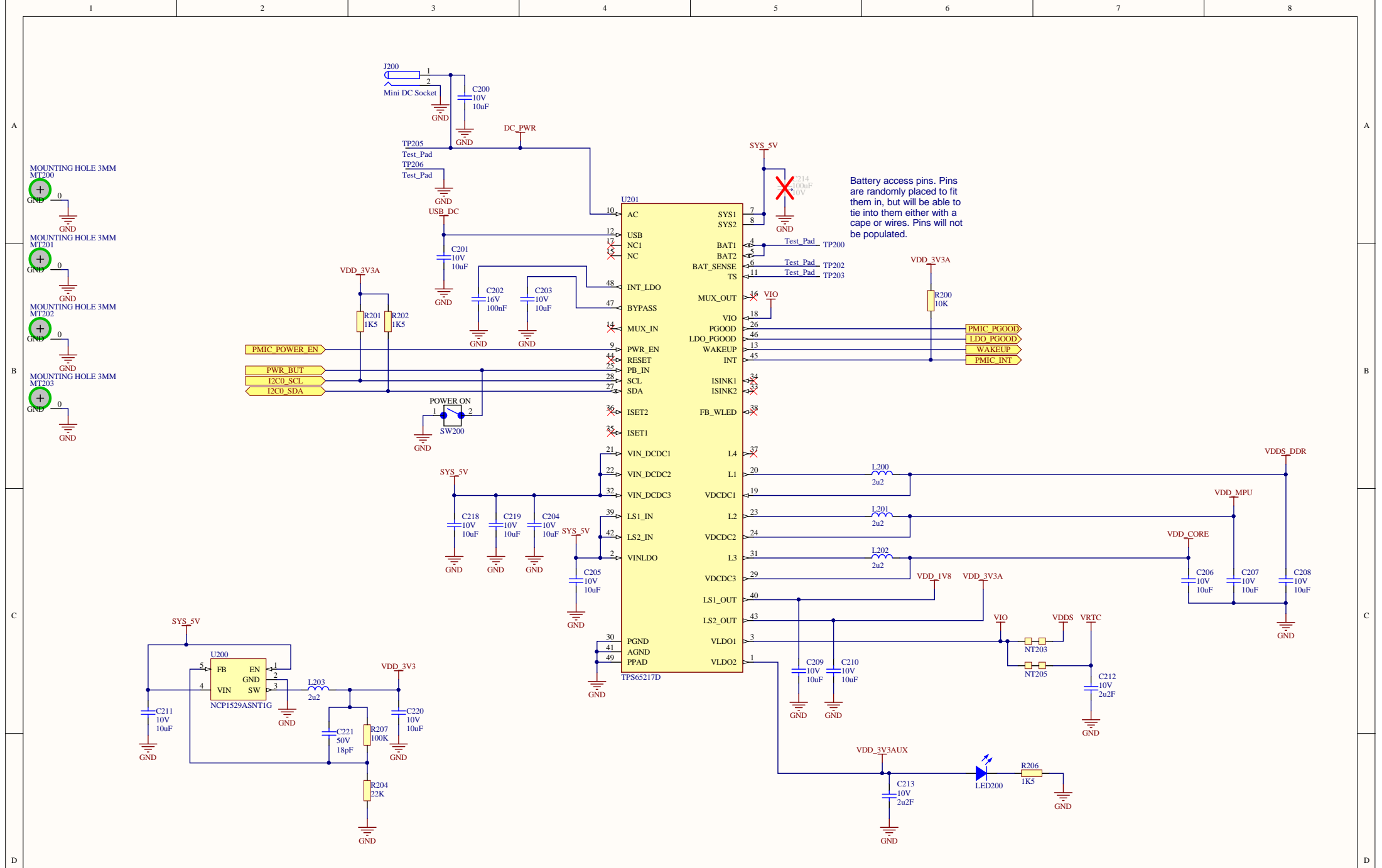
A

B

C

D



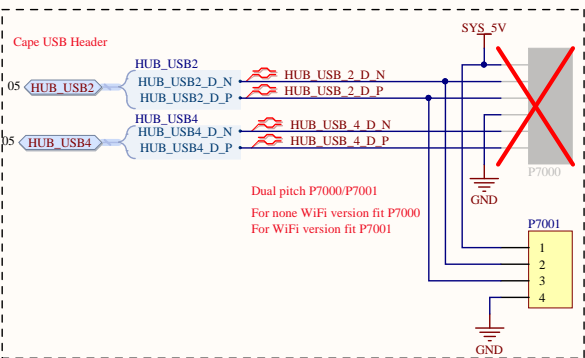
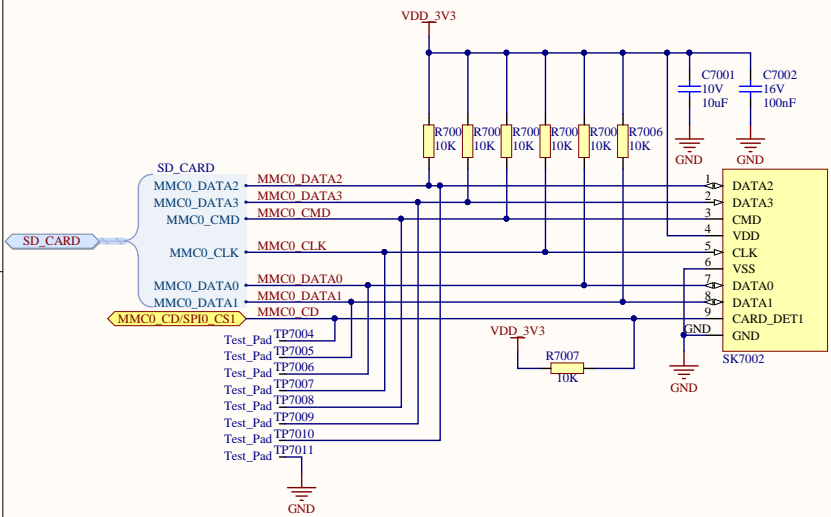
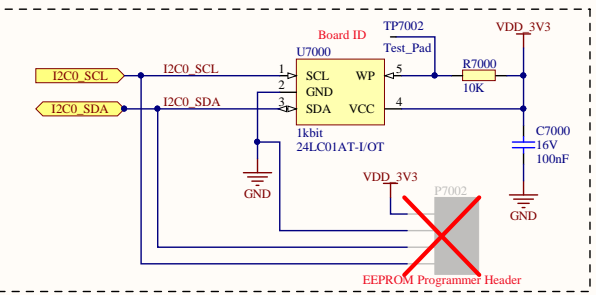
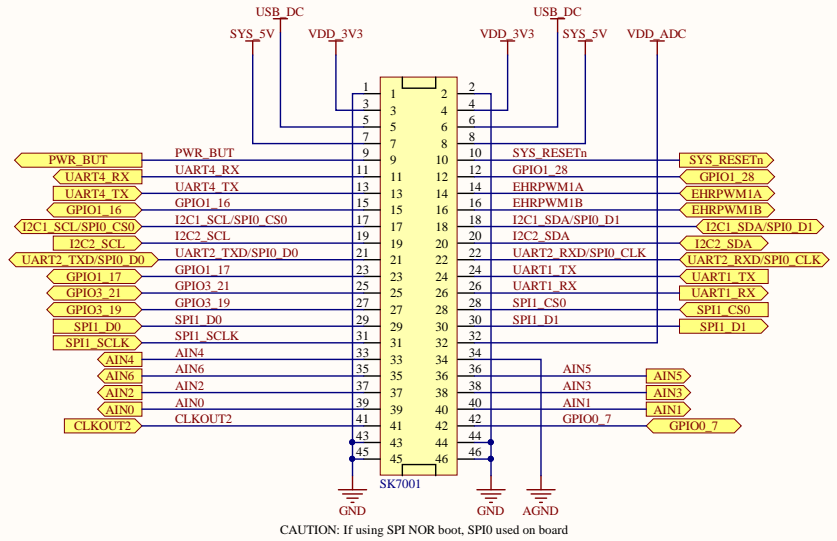
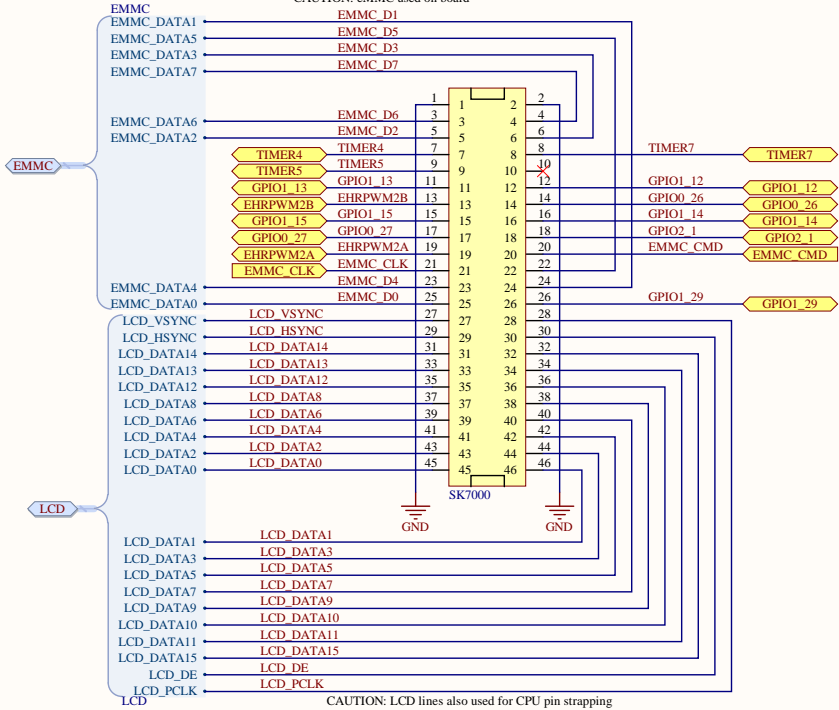


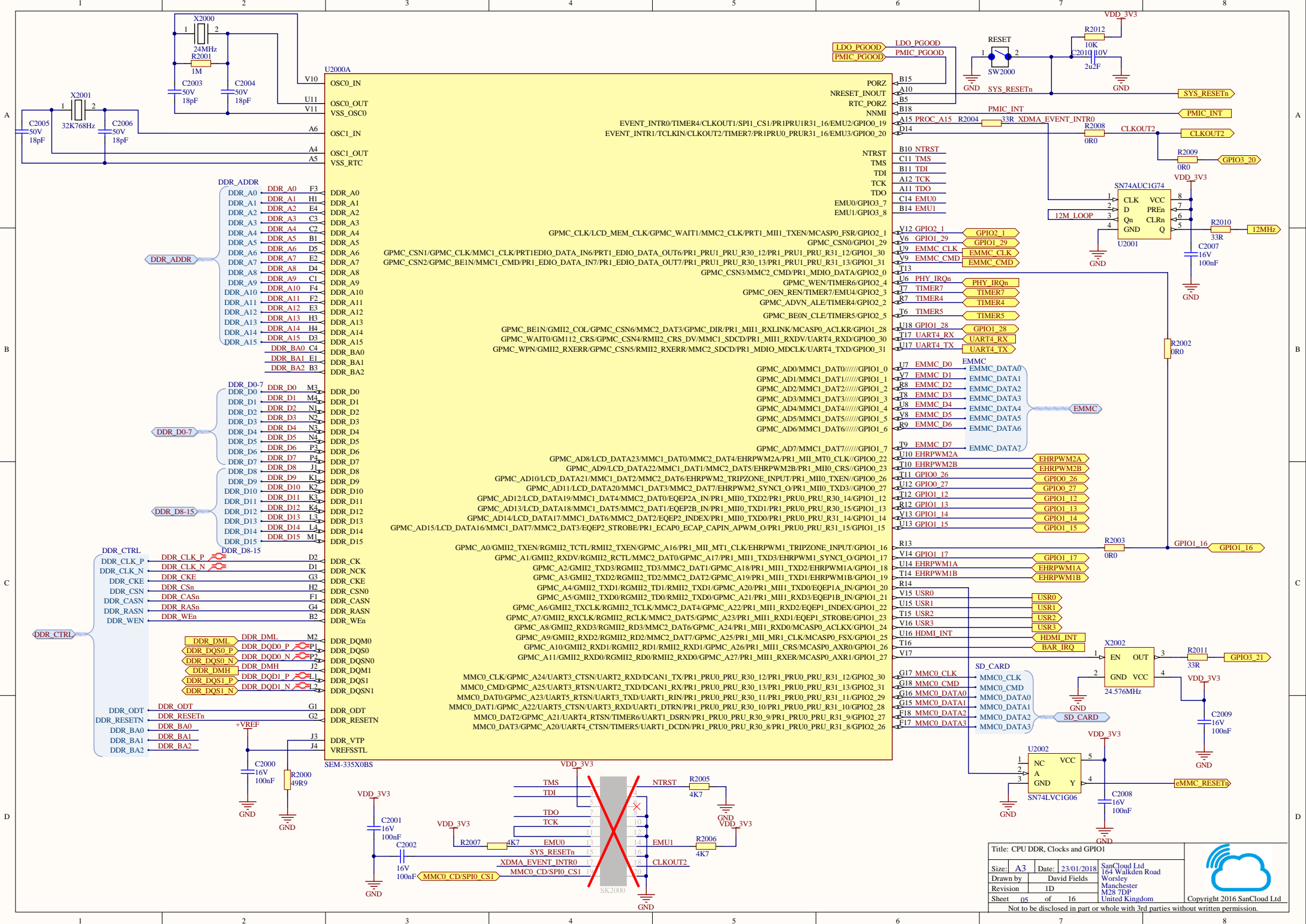
Battery access pins. Pins are randomly placed to fit them in, but will be able to tie into them either with a cape or wires. Pins will not be populated.

Title: DC-DC and Power			
Size: A3	Date: 23/01/2018	SanCloud Ltd 164 Walkden Road Worsley Manchester M28 7DP United Kingdom	
Drawn by: David Fields	Revision: 1D	Copyright 2016 SanCloud Ltd	
Sheet: 03	of: 16	Not to be disclosed in part or whole with 3rd parties without written permission.	

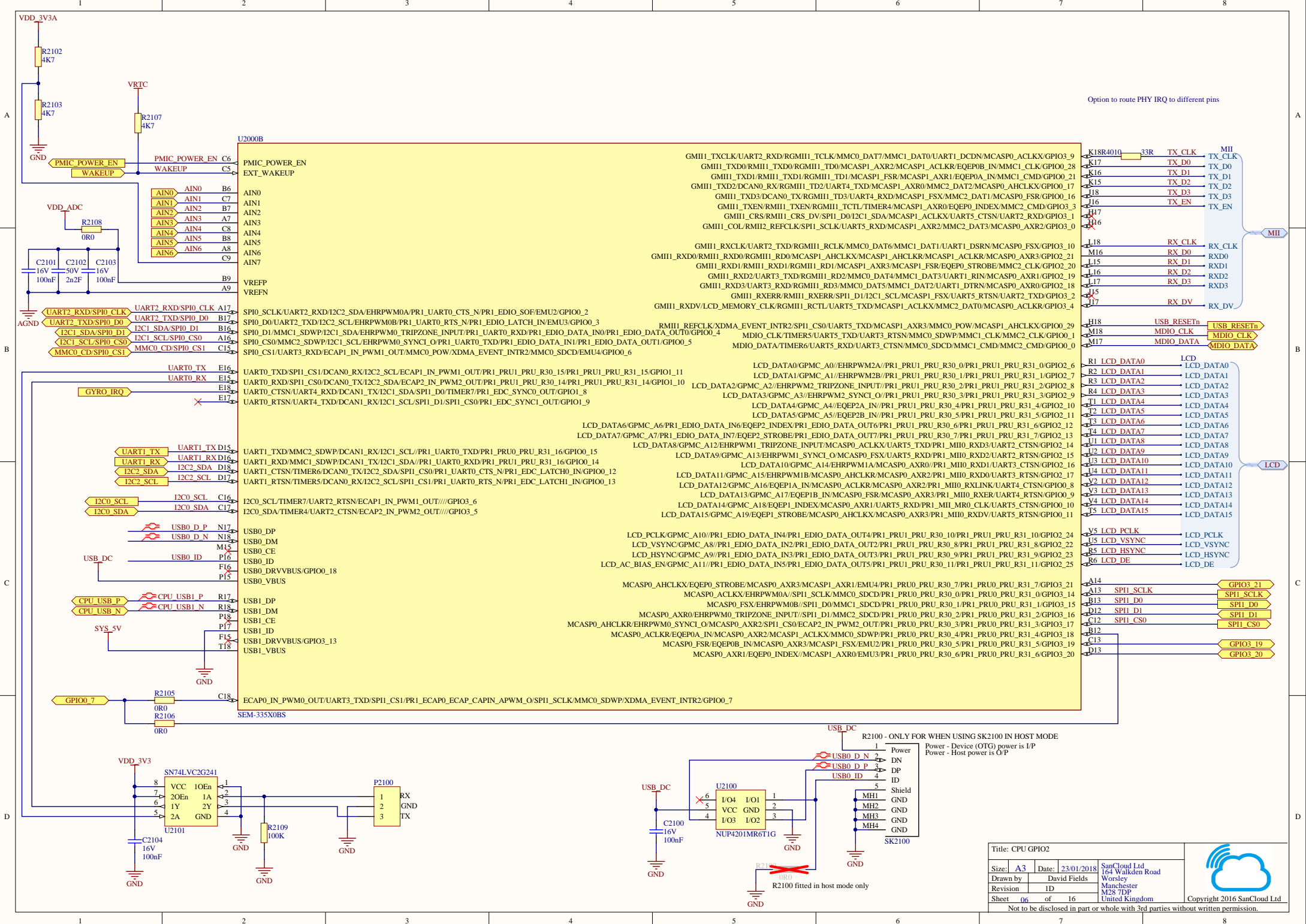


CAUTION: eMMC used on board





Title: CPU DDR, Clocks and GPIO1			
Size: A3	Date: 23/01/2018	SanCloud Ltd 164 Walkden Road Worsley Manchester M28 7DP United Kingdom	
Drawn by: David Fields	Revision: 1D	Copyright 2016 SanCloud Ltd	
Sheet 05 of 16	Not to be disclosed in part or whole with 3rd parties without written permission.		



Option to route PHY IRQ to different pins

- MII TX\_CLK
- TX\_D0
- TX\_D1
- TX\_D2
- TX\_D3
- TX\_EN
- RX\_CLK
- RX\_D0
- RX\_D1
- RX\_D2
- RX\_D3
- RX\_DV

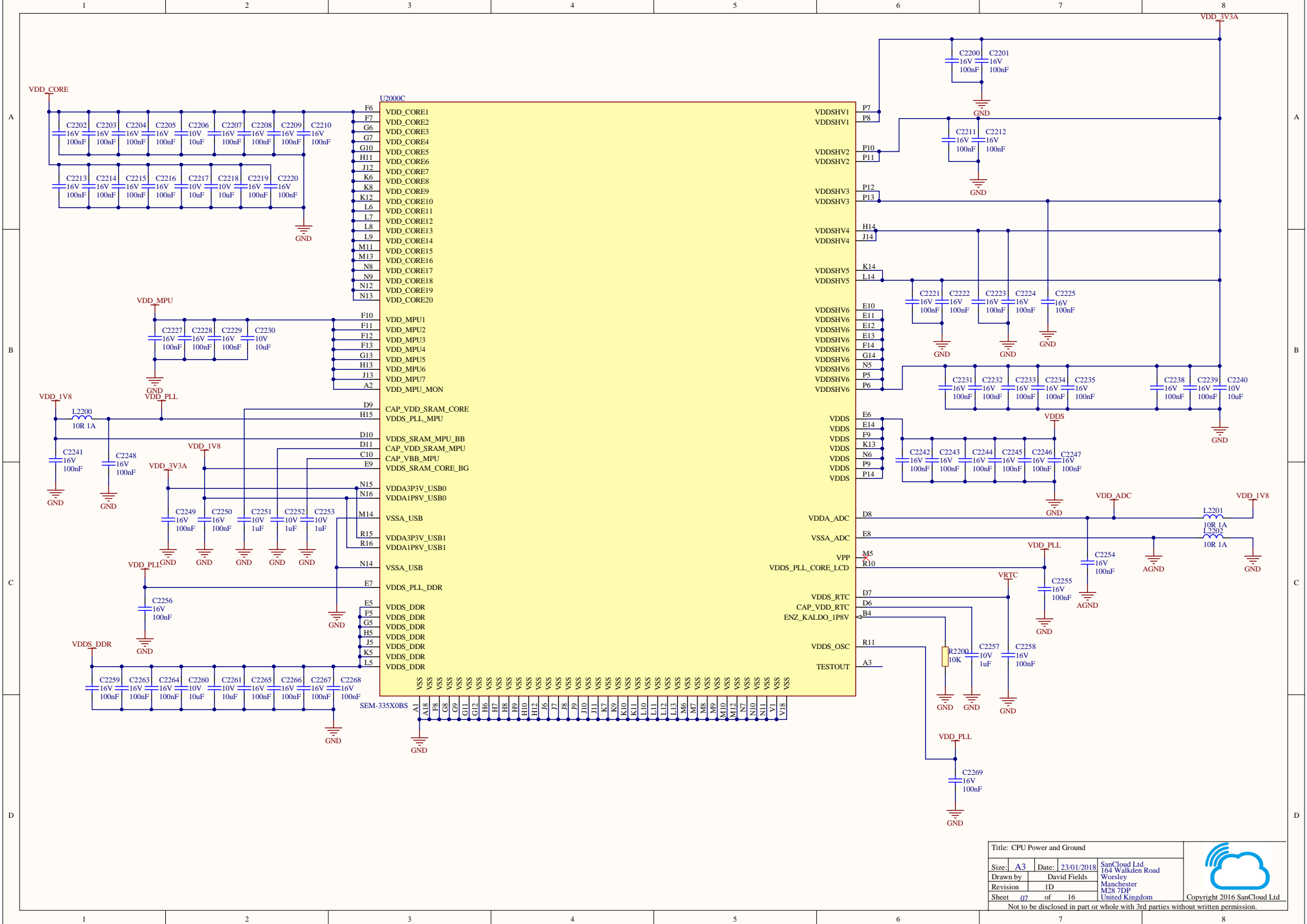
- USB RESETn
- MDIO\_CLK
- MDIO\_DATA

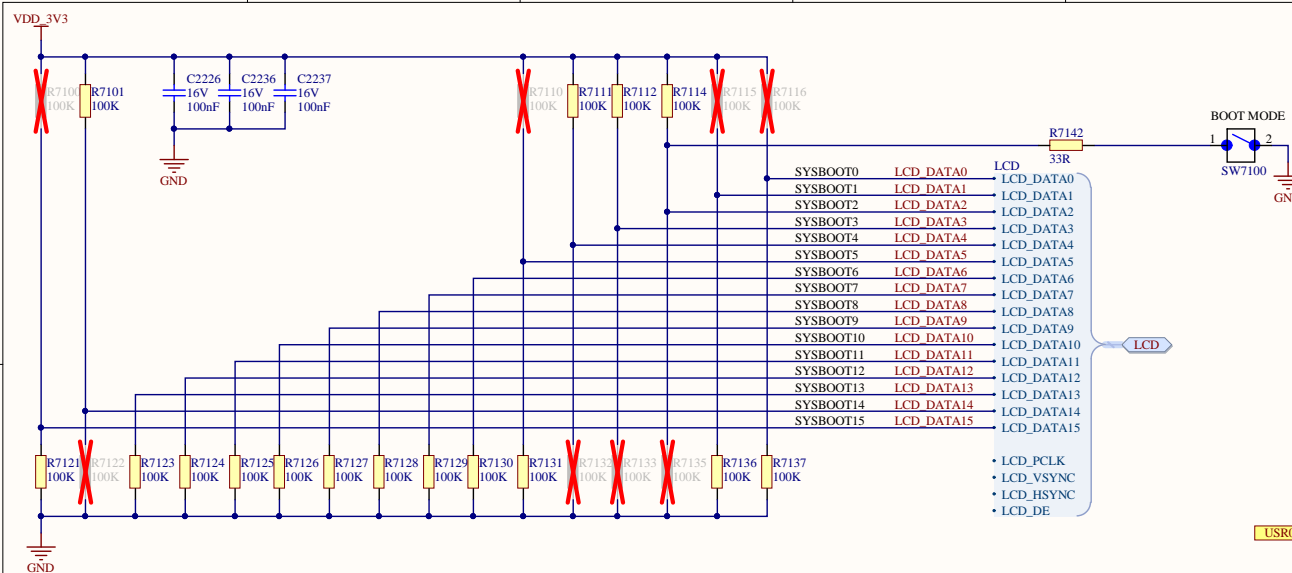
- LCD LCD\_DATA0
- LCD\_DATA1
- LCD\_DATA2
- LCD\_DATA3
- LCD\_DATA4
- LCD\_DATA5
- LCD\_DATA6
- LCD\_DATA7
- LCD\_DATA8
- LCD\_DATA9
- LCD\_DATA10
- LCD\_DATA11
- LCD\_DATA12
- LCD\_DATA13
- LCD\_DATA14
- LCD\_DATA15
- LCD\_PCLK
- LCD\_VSYNC
- LCD\_HSYNC
- LCD\_DE

- GPIO3\_21
- SPI1\_SCLK
- SPI1\_D0
- SPI1\_D1
- SPI1\_CS0
- GPIO3\_19
- GPIO3\_20

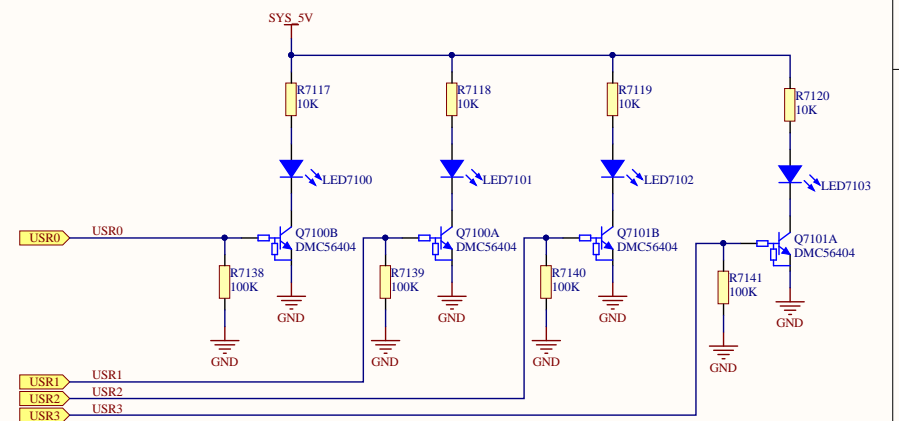
Title: CPU GPIO2		
Size: A3	Date: 23/01/2018	
Drawn by: David Fields	SanCloud Ltd 164 Walkden Road Manchester M28 7DP United Kingdom	
Revision: 1D		
Sheet: 06 of 16	Copyright 2016 SanCloud Ltd	
Not to be disclosed in part or whole with 3rd parties without written permission.		



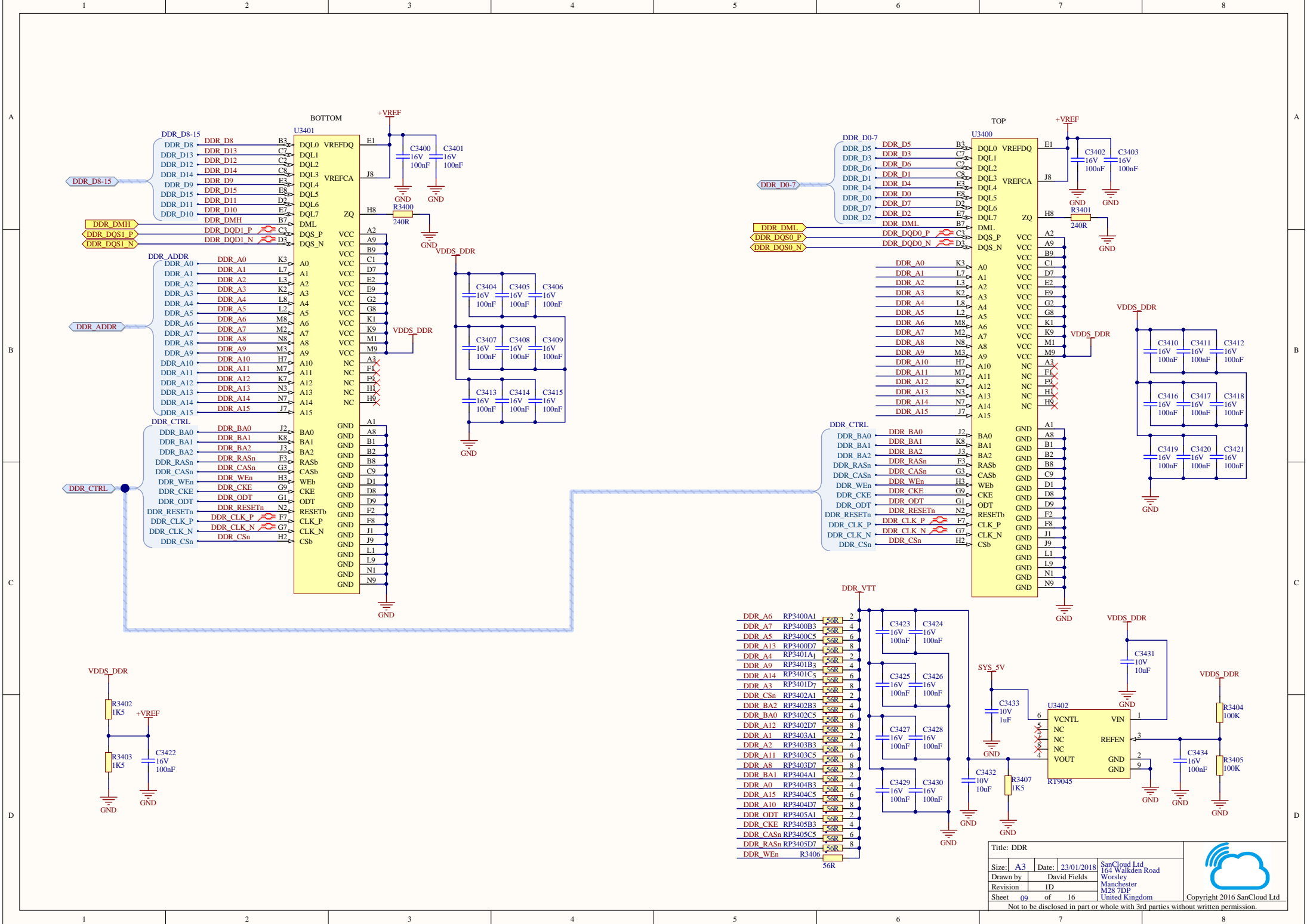




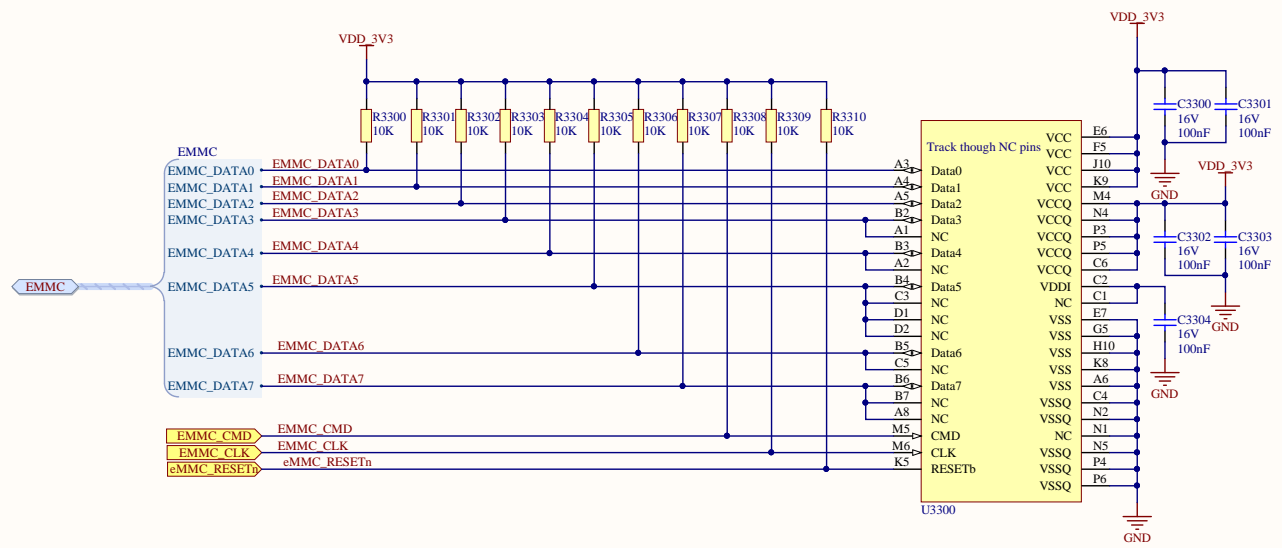
SYSBOOT[15:14]	SYSBOOT[13:12]	SYSBOOT[11:10]	SYSBOOT[9]	SYSBOOT[8]	SYSBOOT[7:6]	SYSBOOT[5]	SYSBOOT[4:0]	Boot Sequence			
00b = 19.2MHz 01b = 24MHz 10b = 25MHz 11b = 26MHz	00b (all other values reserved)	Don't care for ROM code	Don't care for ROM code	Don't care for ROM code	Don't care for ROM code	0 = CLKOUT1 disabled 1 = CLKOUT1 enabled	11100b <-	MMCI SW7100 open	MMC0 SW7100 closed	UART0	USB0
00b = 19.2MHz 01b = 24MHz 10b = 25MHz 11b = 26MHz	00b (all other values reserved)	Don't care for ROM code	Don't care for ROM code	Don't care for ROM code	Don't care for ROM code	0 = CLKOUT1 disabled 1 = CLKOUT1 enabled	11000b	SPI0 SW7100 open	MMC0 SW7100 closed	USB0	UART0

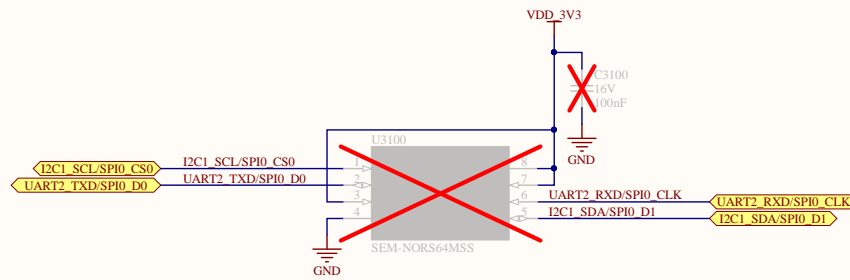


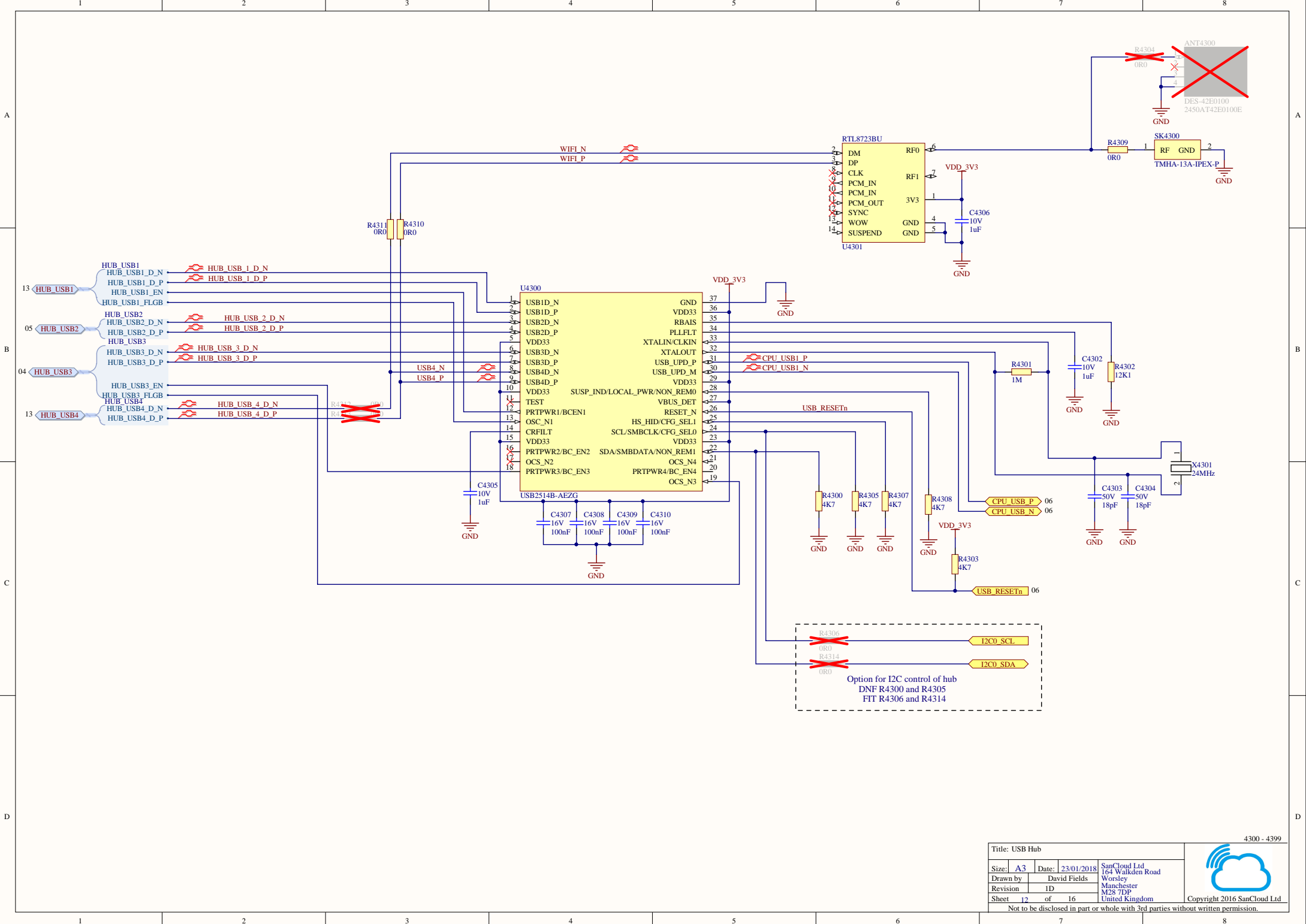




Title: DDR			
Size: A3	Date: 23/01/2018	SanCloud Ltd 164 Walkden Road Worsley Manchester M28 7DP United Kingdom	
Drawn by: David Fields	Revision: 1D	Copyright 2016 SanCloud Ltd	
Sheet: 09 of 16	Not to be disclosed in part or whole with 3rd parties without written permission.		

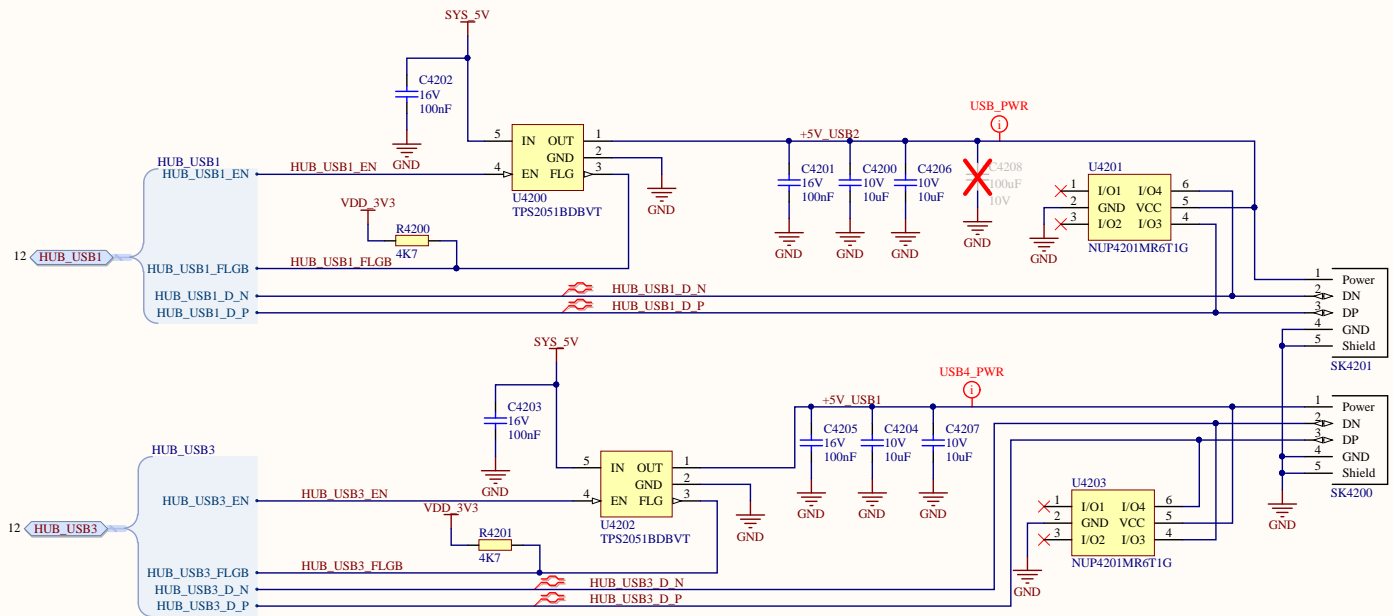


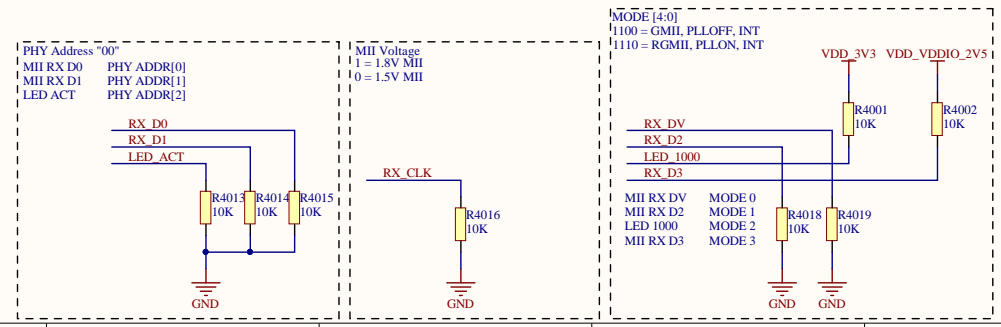
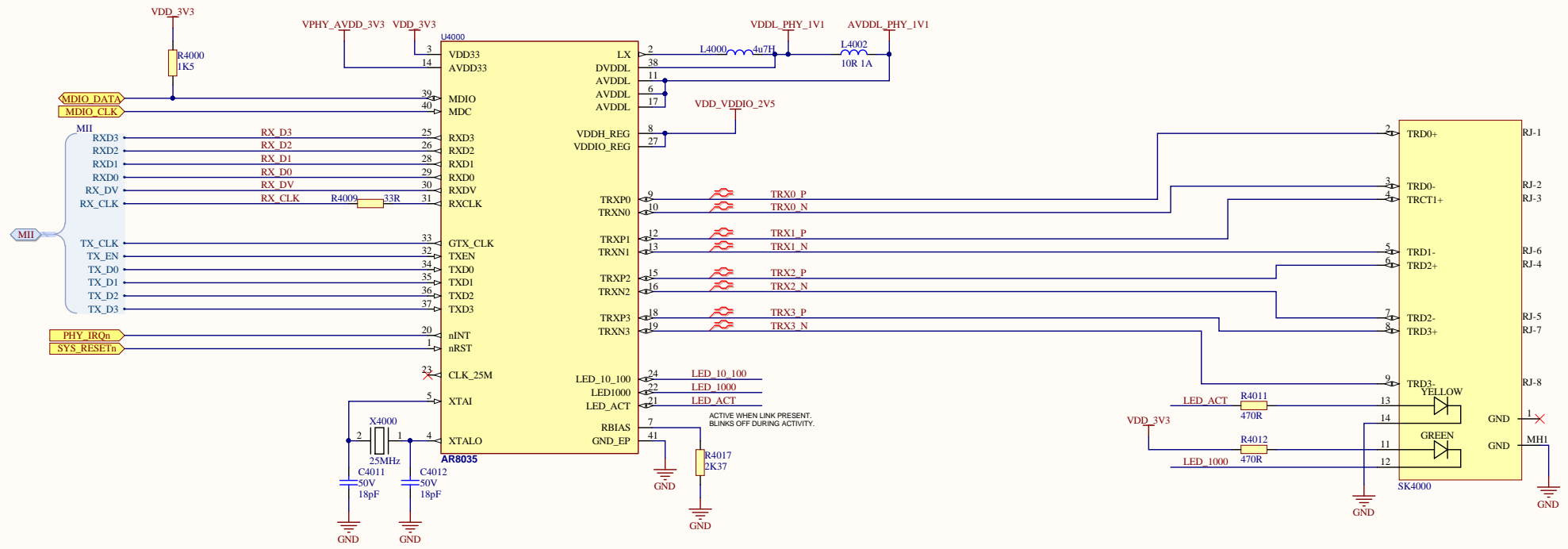
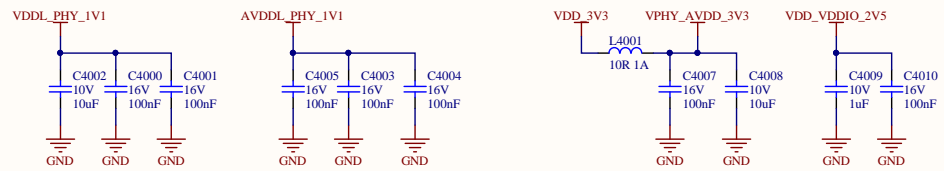




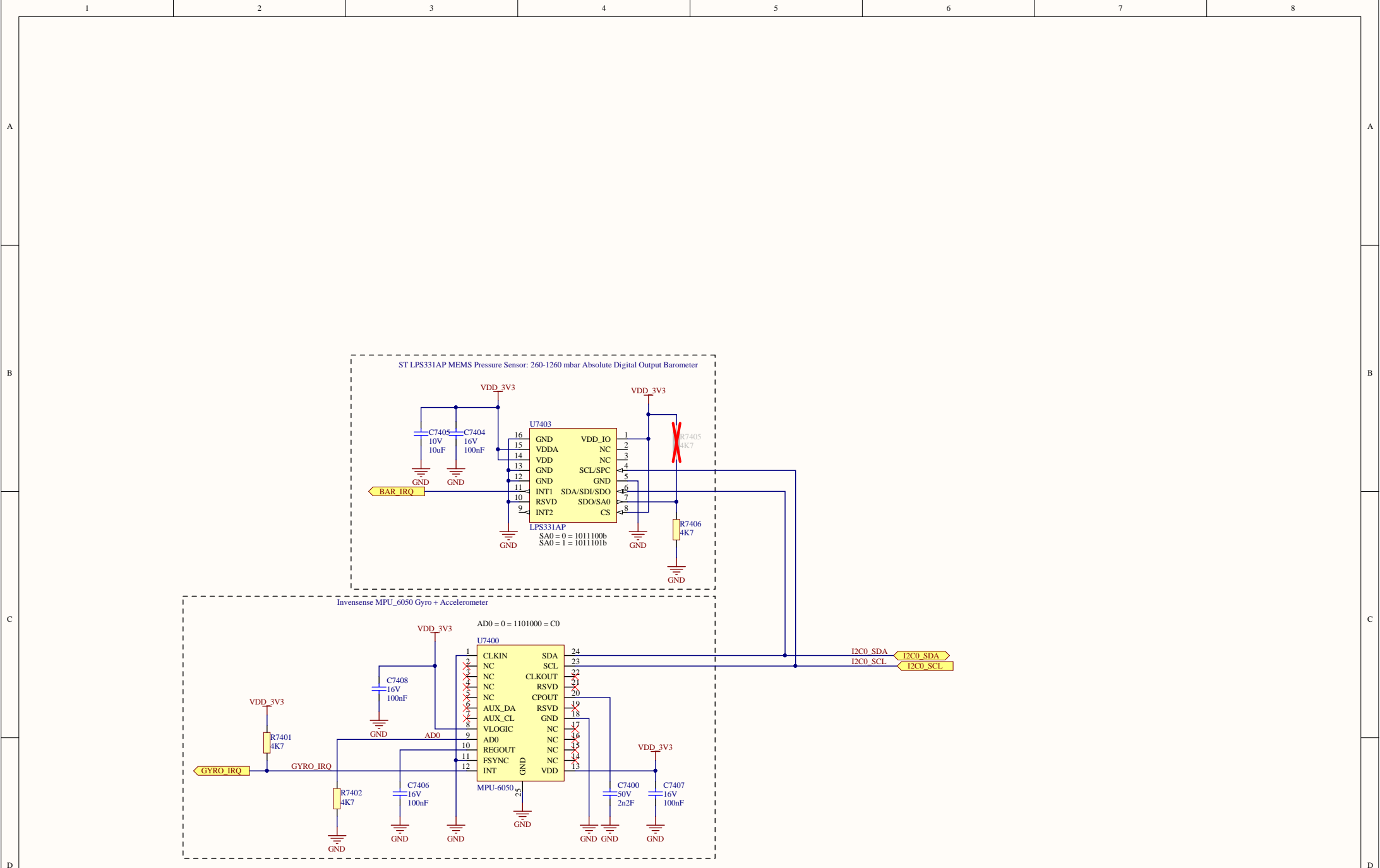
Option for I2C control of hub  
 DNF R4300 and R4305  
 FIT R4306 and R4314







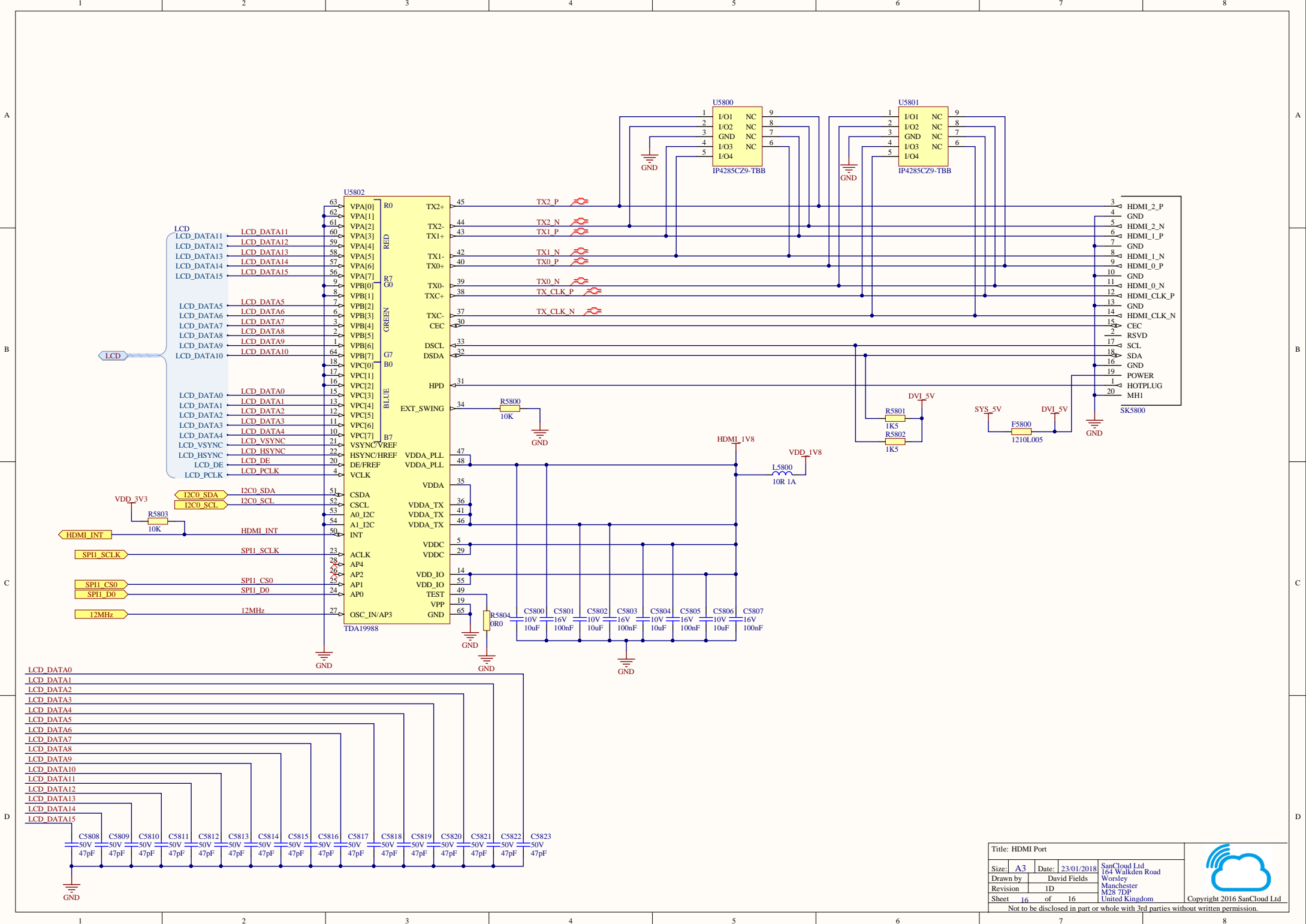
Title: Ethernet and RJ45			
Size: A3	Date: 23/01/2018	SanCloud Ltd 164 Walkden Road Worsley Manchester M28 7DP United Kingdom	
Drawn by: David Fields	Revision: 1D	Copyright 2016 SanCloud Ltd	
Sheet 14	of 16	Not to be disclosed in part or whole with 3rd parties without written permission.	



Title: Accelerometer and Barometer			
Size: A3	Date: 23/01/2018	SanCloud Ltd 164 Walkden Road Worsley Manchester M28 7DP United Kingdom	
Drawn by: David Fields	Revision: 1D	Copyright 2016 SanCloud Ltd	
Sheet 15 of 16	Not to be disclosed in part or whole with 3rd parties without written permission.		







Title: HDMI Port			
Size: A3	Date: 23/01/2018	SanCloud Ltd 164 Walkden Road Worsley Manchester M28 7DP United Kingdom	
Drawn by: David Fields	Revision: 1D	Copyright 2016 SanCloud Ltd	
Sheet: 16	of 16	Not to be disclosed in part or whole with 3rd parties without written permission.	