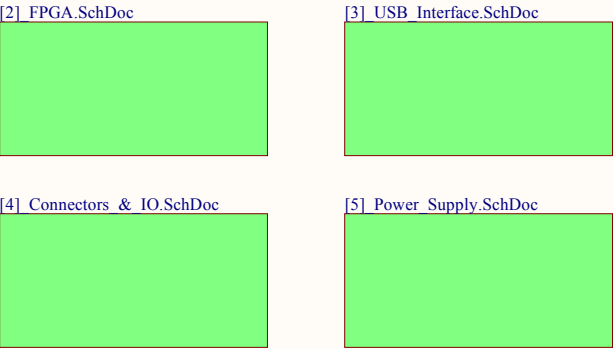
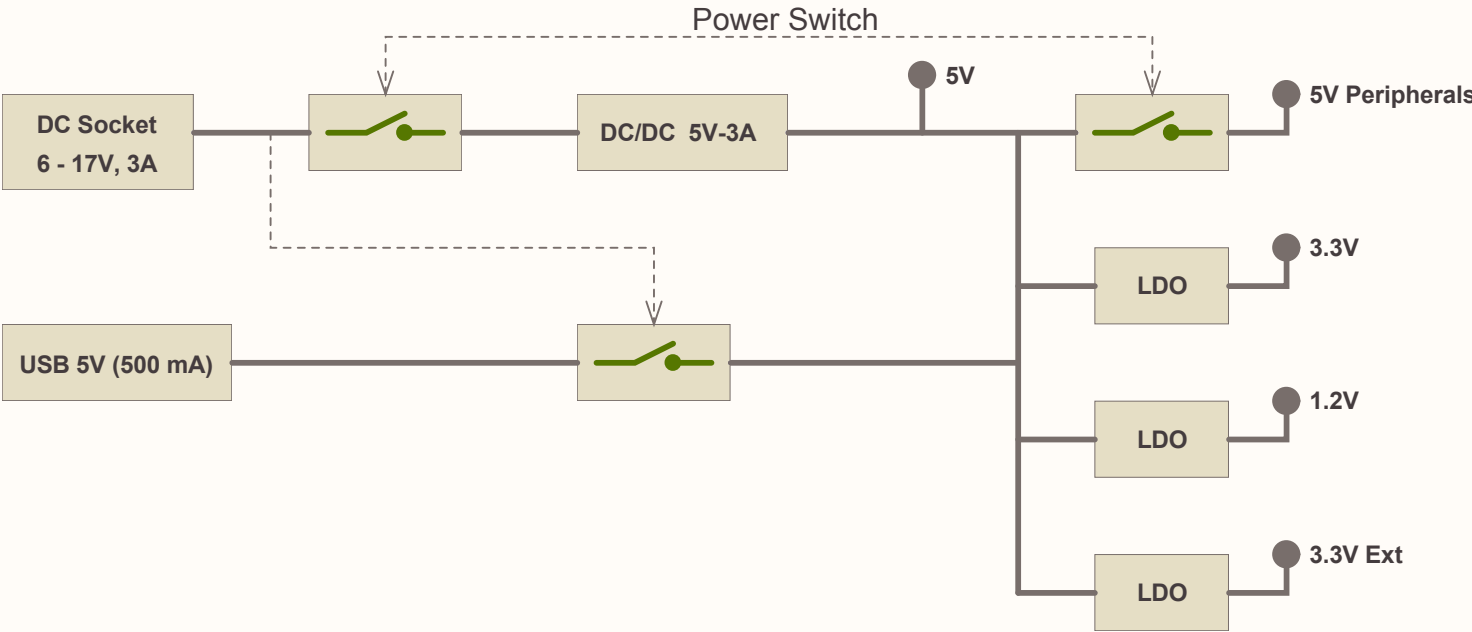
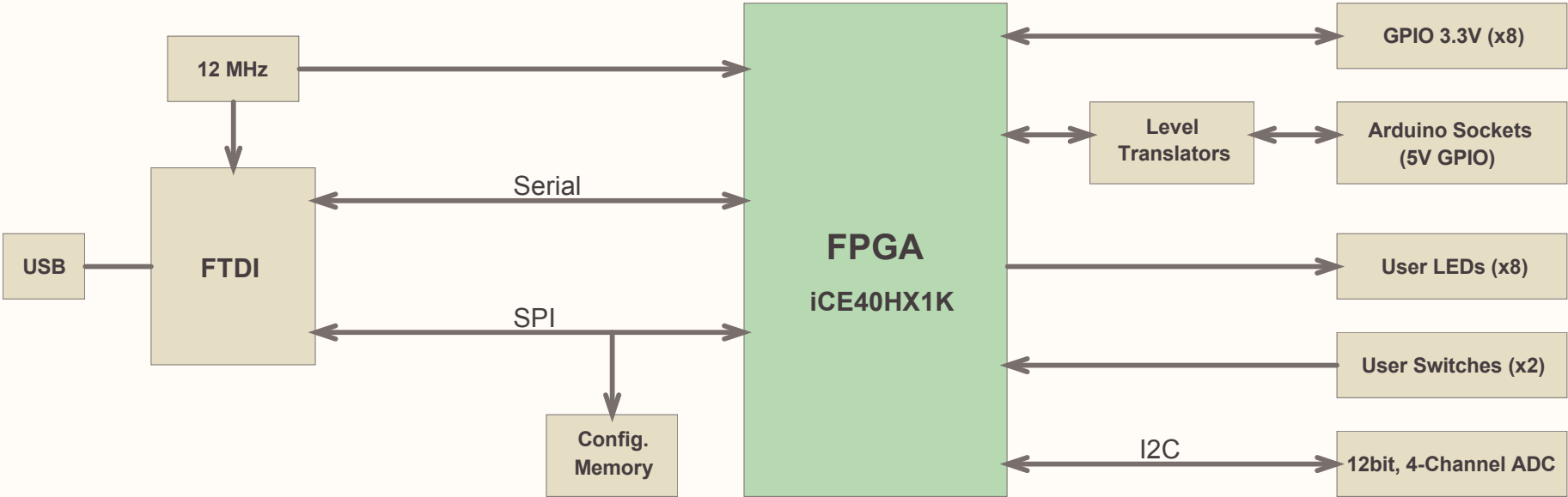


IceZUM Alhambra

IceZUM Core HX1K

Revision History



2016-08-30: Rev1.1 (Date code 1635)
2016-02-18: Initial release, Rev1.0 (Date code 1607)




IceZUM Alhambra

FPGA Board

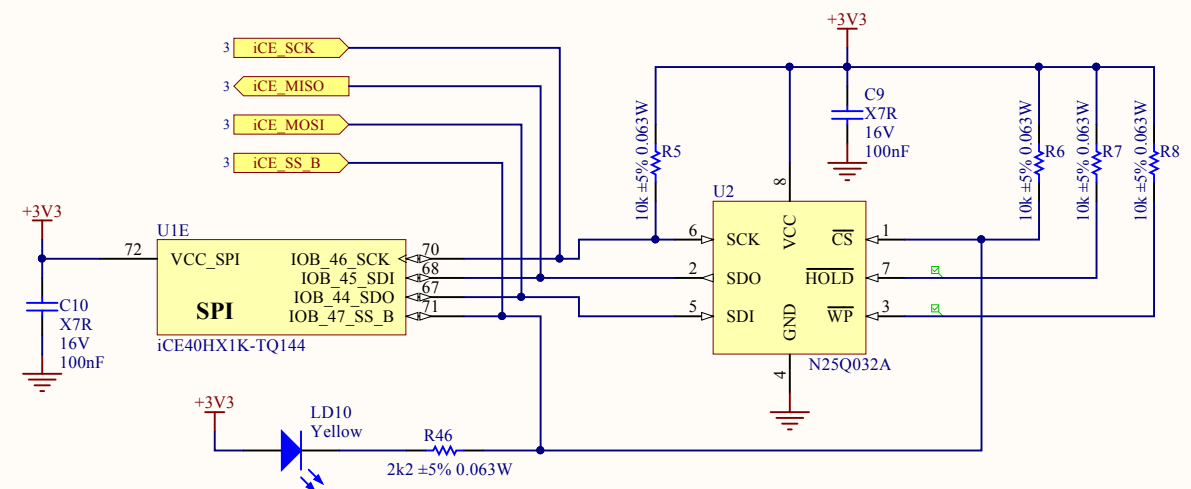
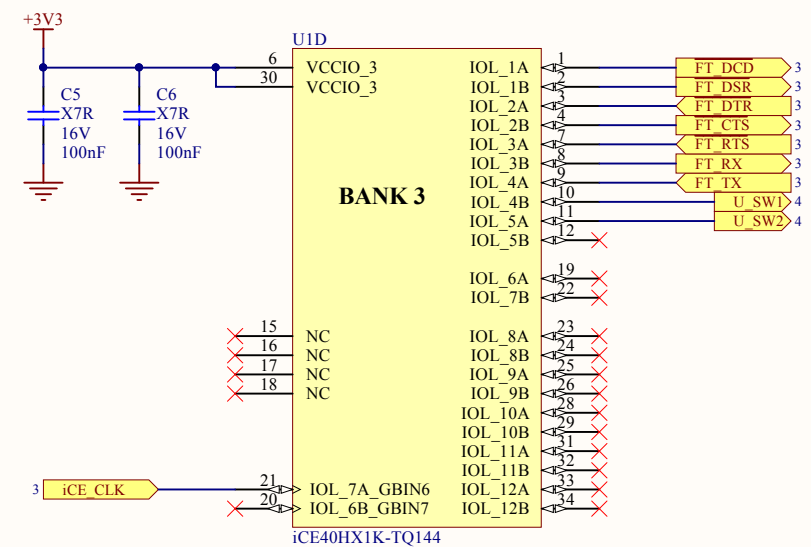
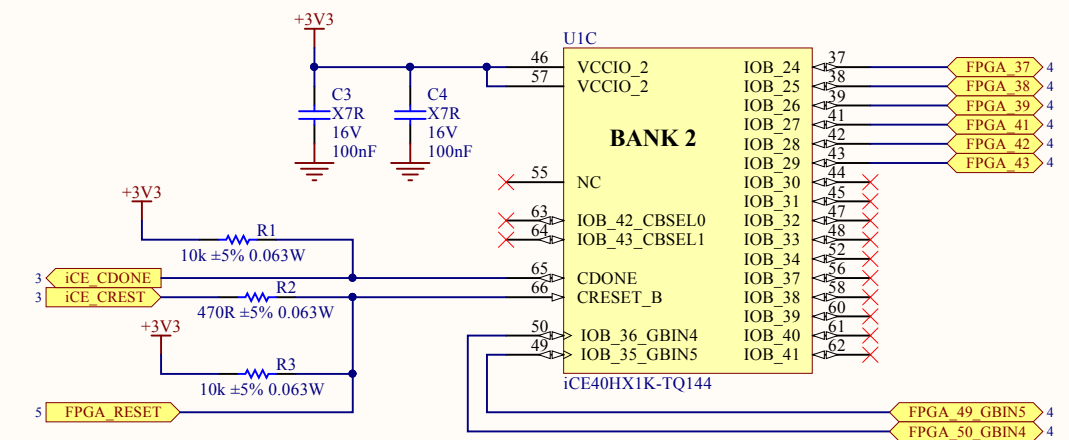
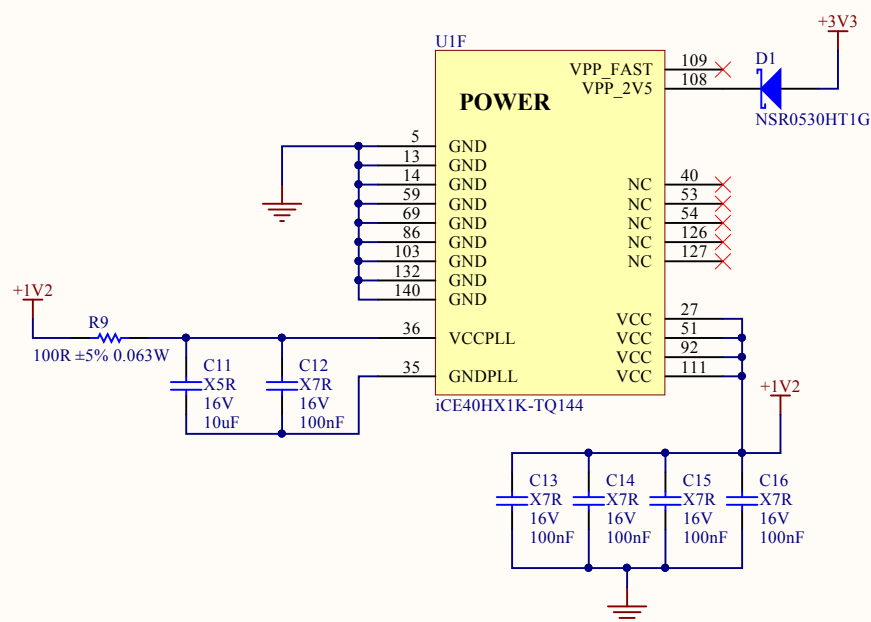
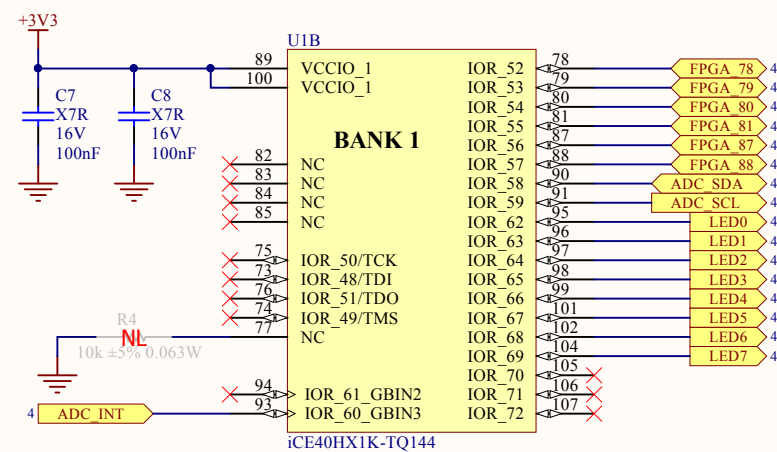
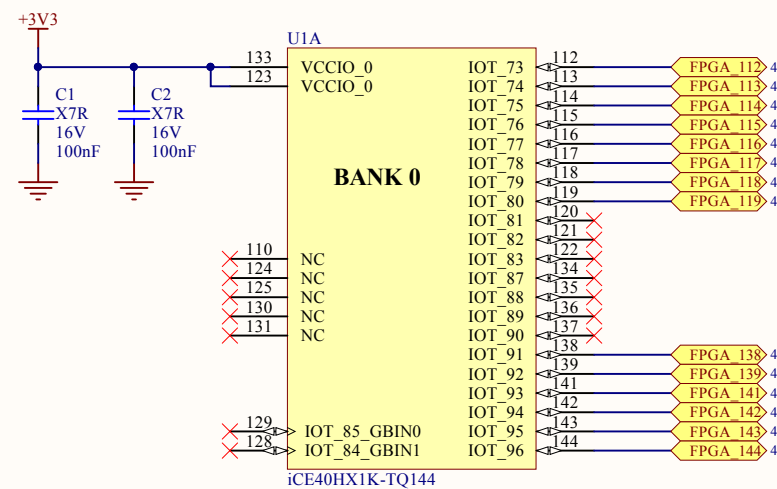
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Sheet	Top Sheet	A3
Project	IceZUM Core HX1K.PrjPcb	Revision: 1.1
Sheet 1 of 5	Number:	
Author: Eladio Delgado Mingorance	Date: 30/08/2016	Time: 23:15:43



MARELDEM TECHNOLOGIES




LED lights up on access to FPGA configuration memory:


- memory is being programmed by FTDI
- memory is being read by FPGA after reset or power-on


IceZUM Alhambra

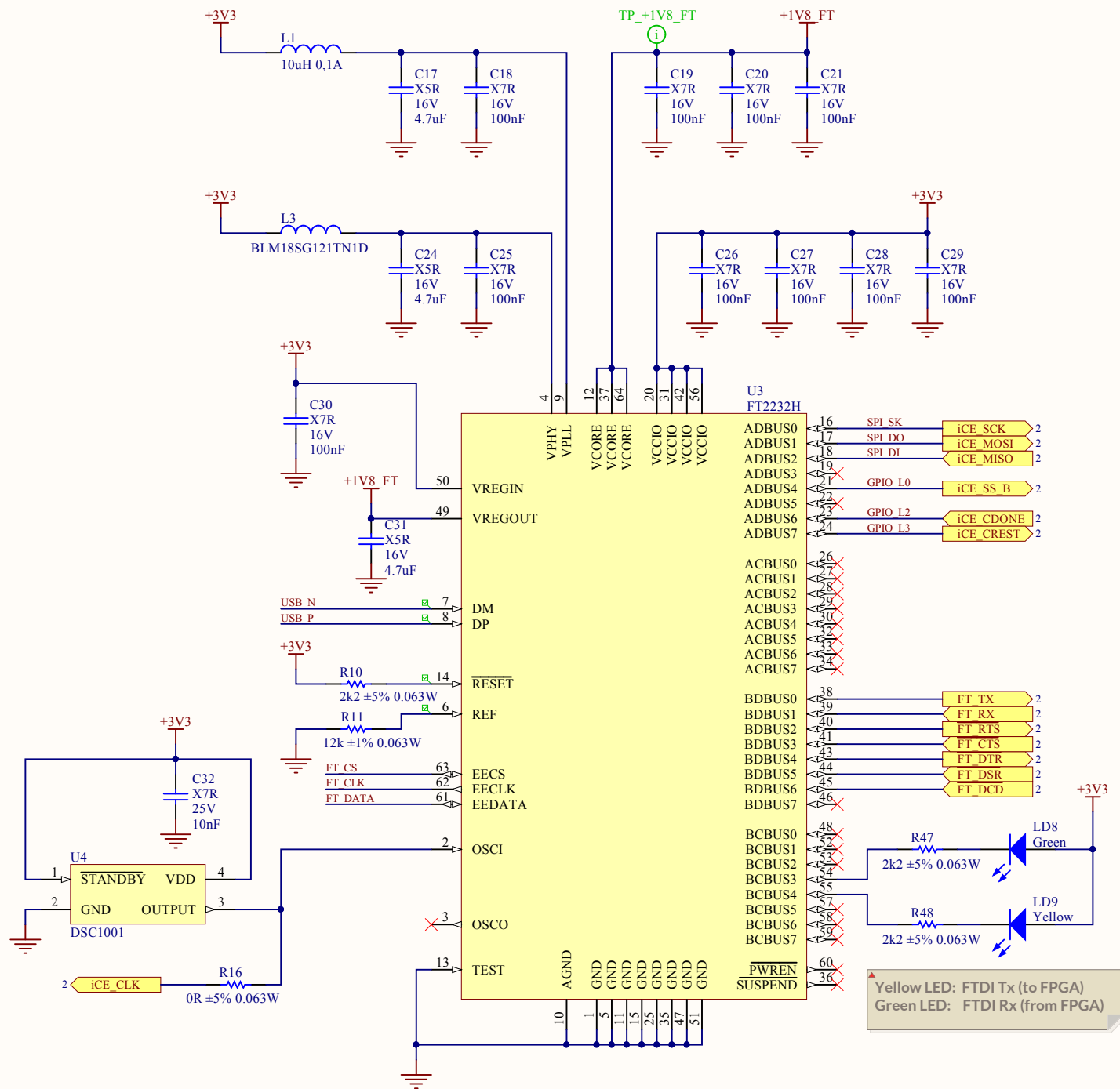
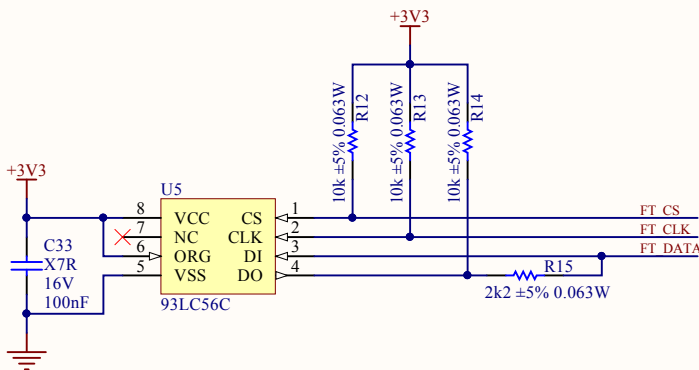
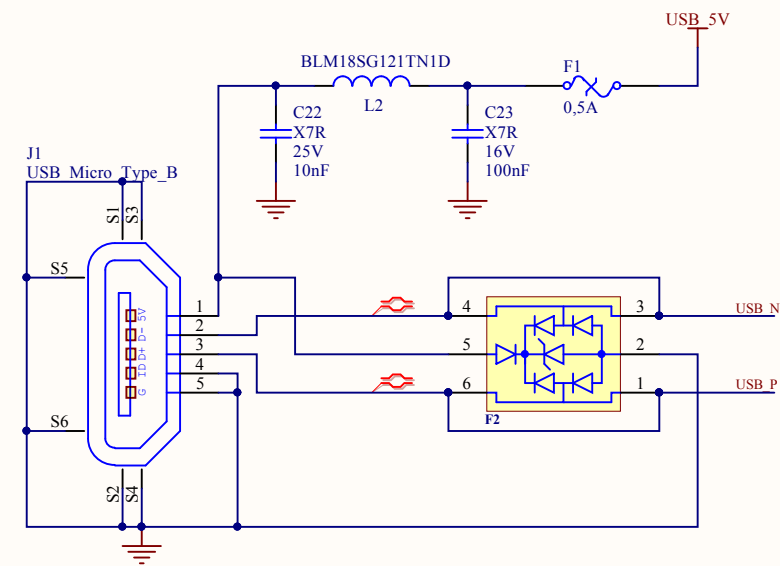
FPGA Board

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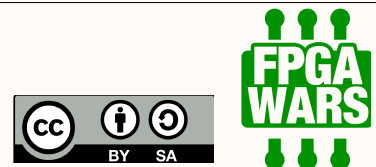


Sheet FPGA	A3	
Project IceZUM Core HX1K.PrjPeb	Revision: 1.1	
Sheet 2 of 5 Number:	Time: 23:15:43	
Author: Eladio Delgado Mingorance Date: 30/08/2016		



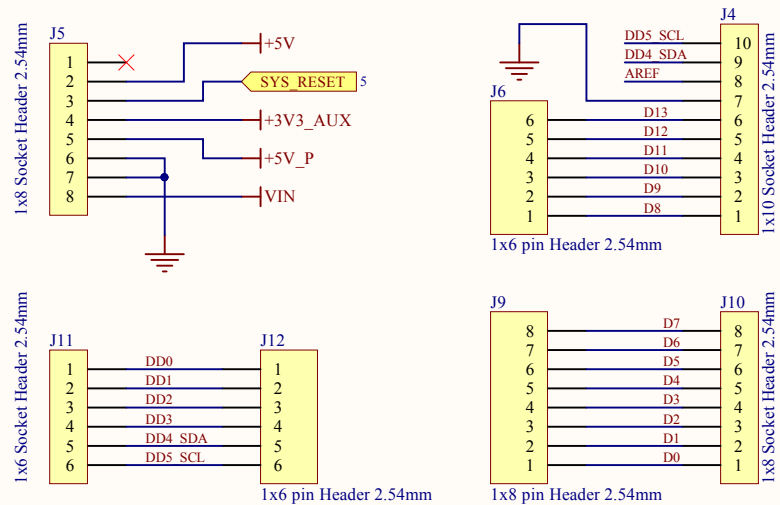
IceZUM Alhambra FPGA Board

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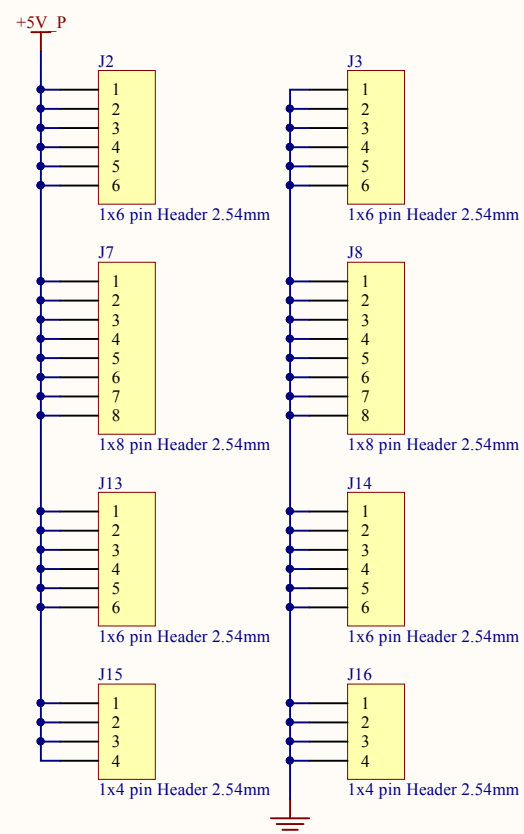


Sheet	USB	A3
Project	IceZUM Core HX1K.PrjPcb	Revision: 1.1
Sheet 3 of 5	Number:	
Author: Eladio Delgado Mingorance	Date: 30/08/2016	Time: 23:15:44

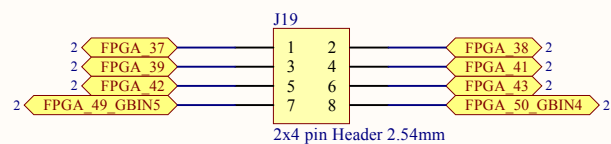




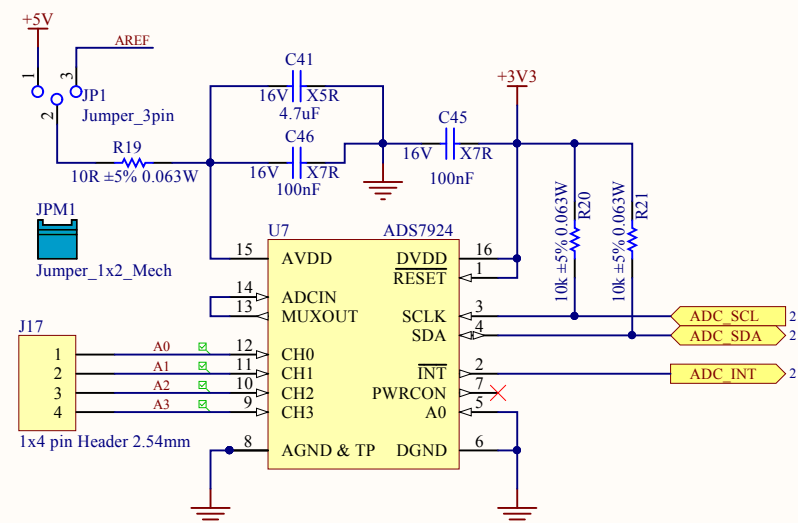
Arduino Sockets & Replicating Headers



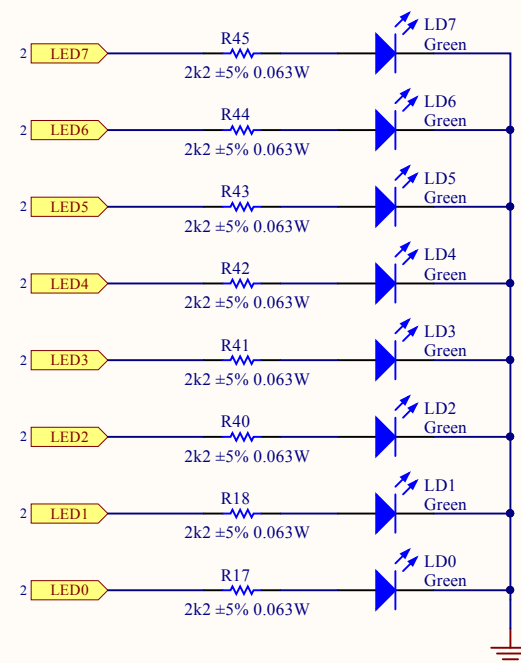
Power Headers



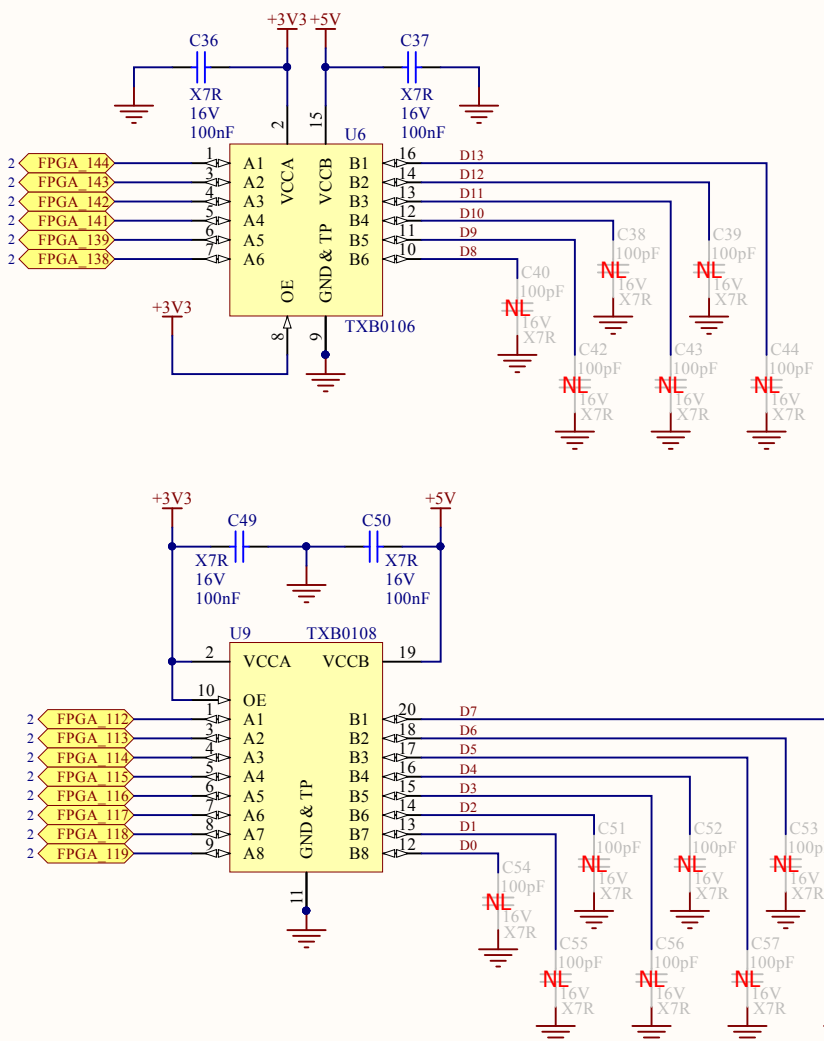
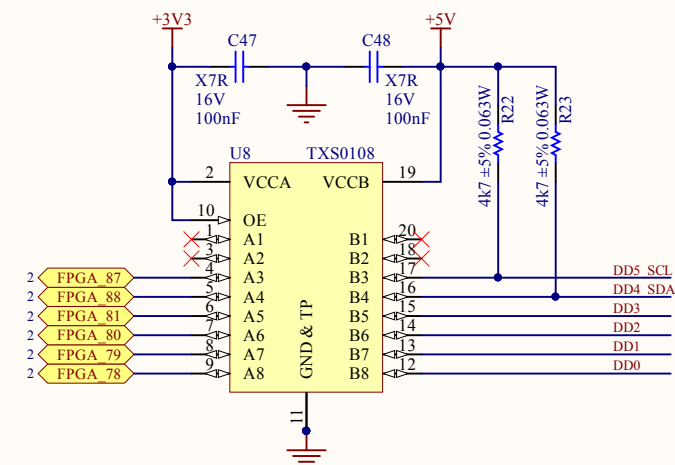
FPGA Direct GPIO (3V3)



4-Channel I2C ADC



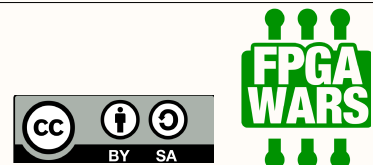
User Switches & LEDs



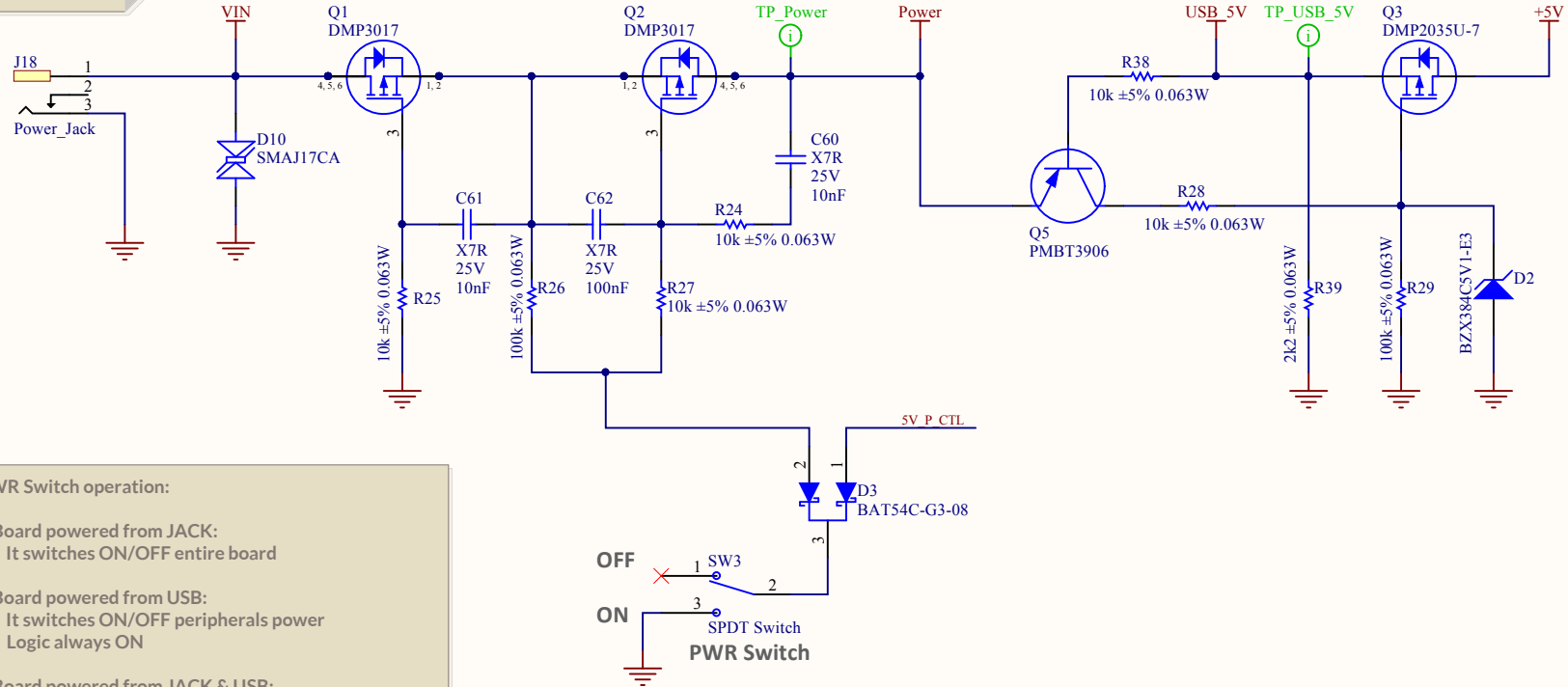
Level Translators for FPGA to Arduino GPIO

IceZUM Alhambra
FPGA Board

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DC Power Input:
Voltage: 6 - 17V
Current: 3A



PWR Switch operation:

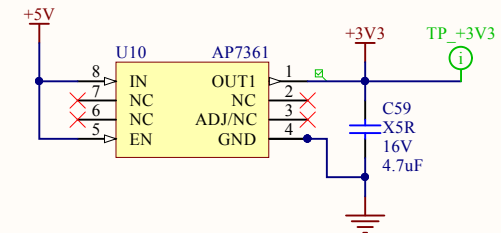
Board powered from JACK:
It switches ON/OFF entire board

Board powered from USB:
It switches ON/OFF peripherals power
Logic always ON

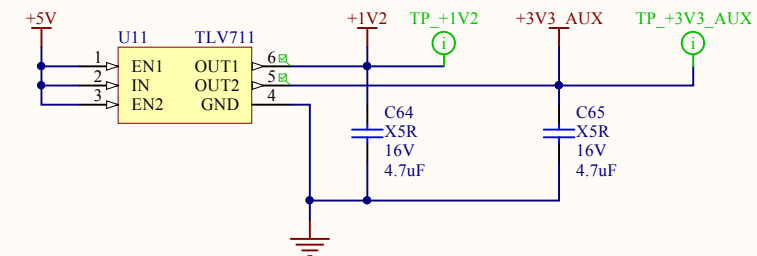
Board powered from JACK & USB:
Switch OFF: Logic ON / Peripherals OFF,
logic powered from USB

Switch ON: Logic ON / Peripherals ON,
entire board powered from JACK

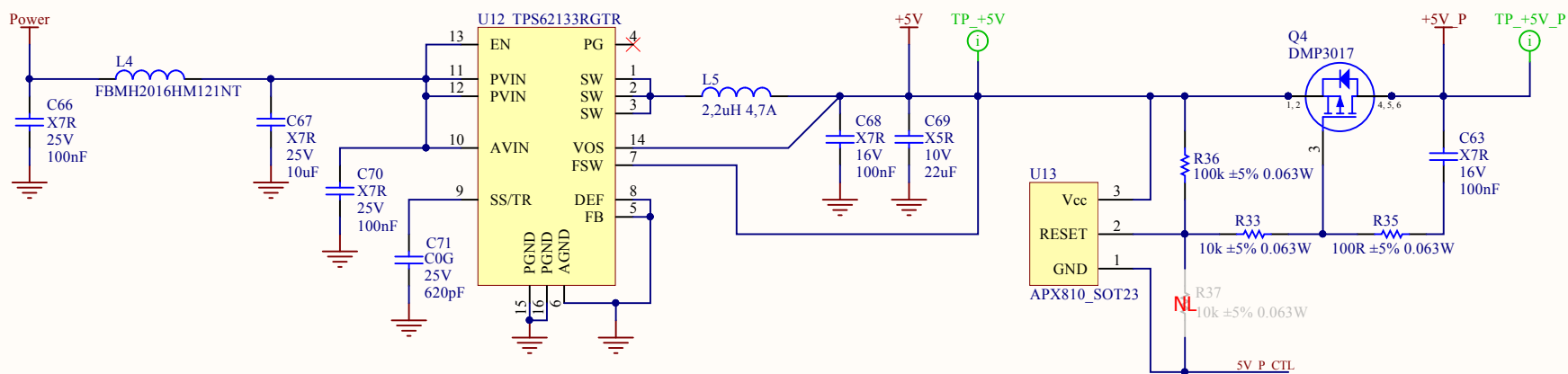
Power Inputs Control and Protections



3.3V Rail, 700 mA Max.

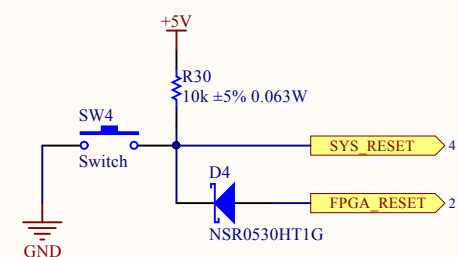


1.2V Rail (200 mA) and External 3.3V Rail (200 mA)

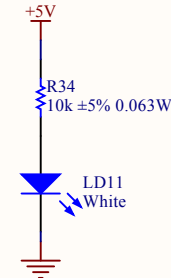


5V, 3A Power Supply

Peripherals Power Switch



RESET



Power LED

IceZUM Alhambra
FPGA Board

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Sheet **Power Supply** A3
Project **IceZUM Core HX1K.PrjPcb** Revision: **1.1**
Sheet **5** of **5** Number:
Author: **Eladio Delgado Mingorance** Date: **30/08/2016** Time: **23:15:45**

maredem
MAREDEM TECHNOLOGIES