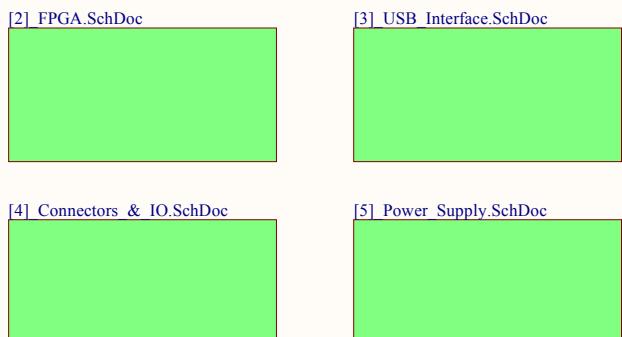
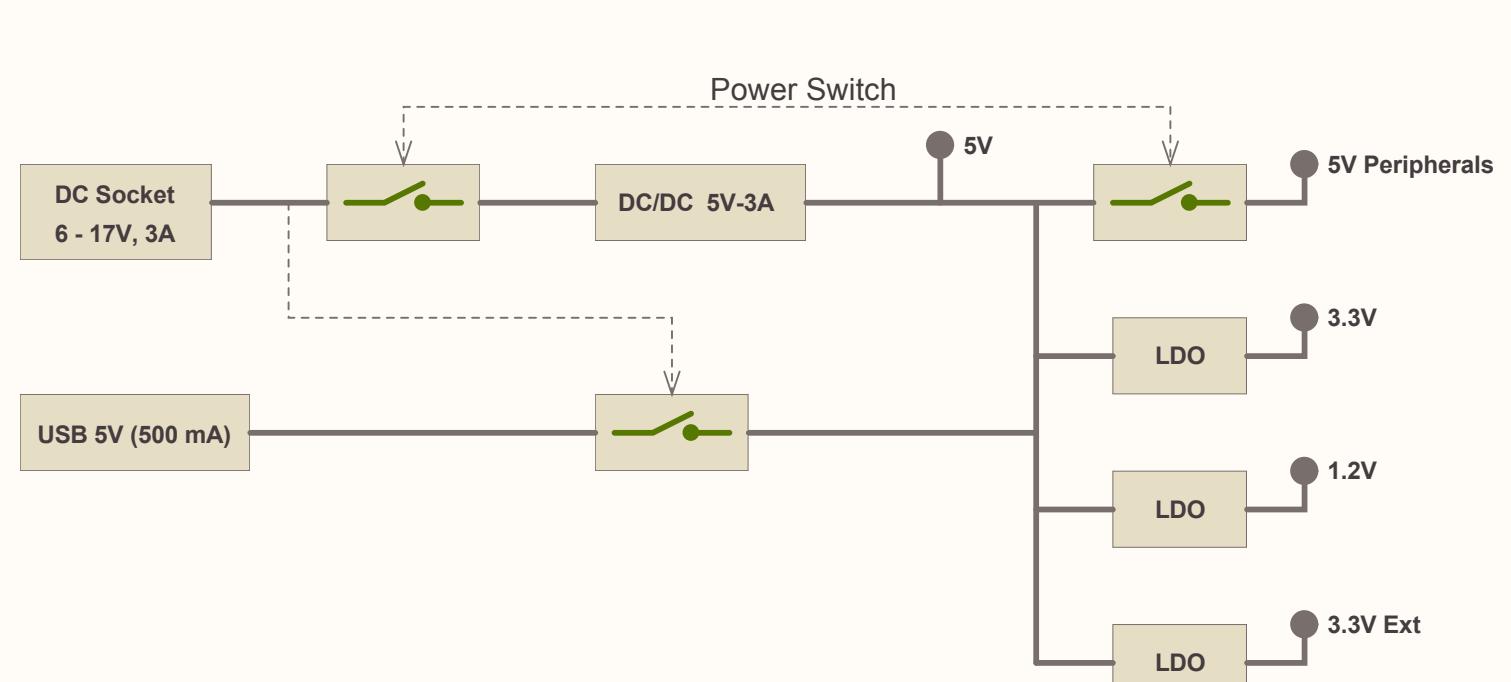
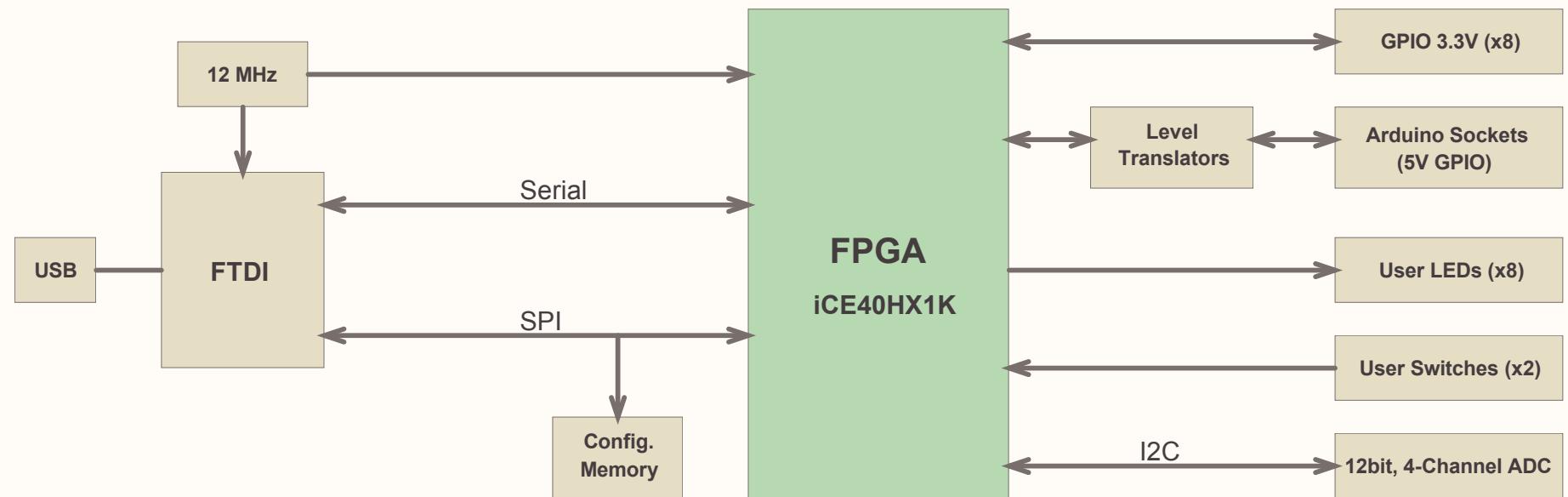


IceZUM Alhambra

IceZUM Core HX1K

Revision History

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



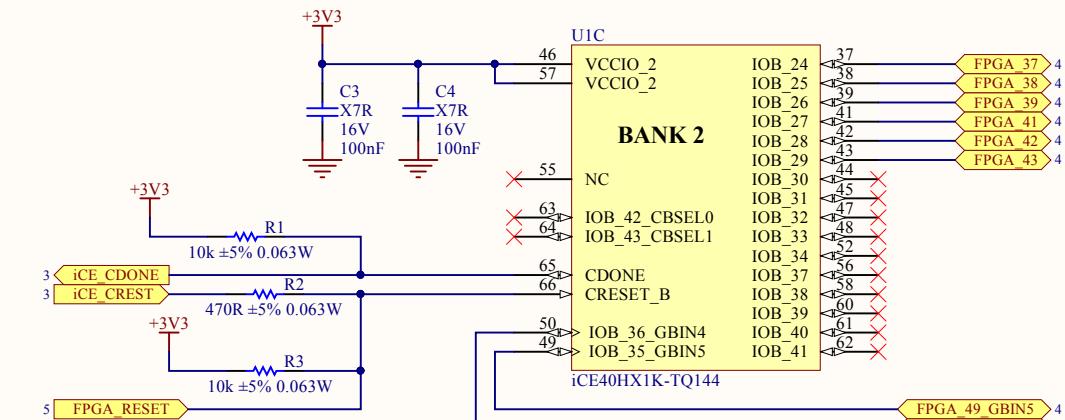
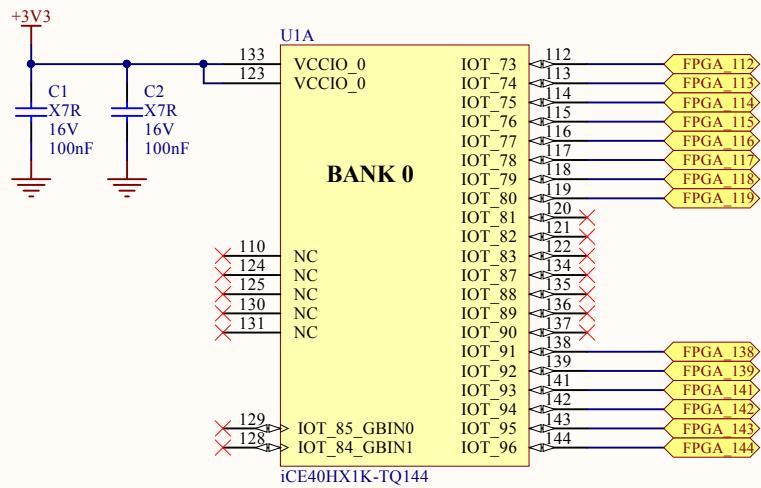
IceZUM Alhambra
FPGA Board



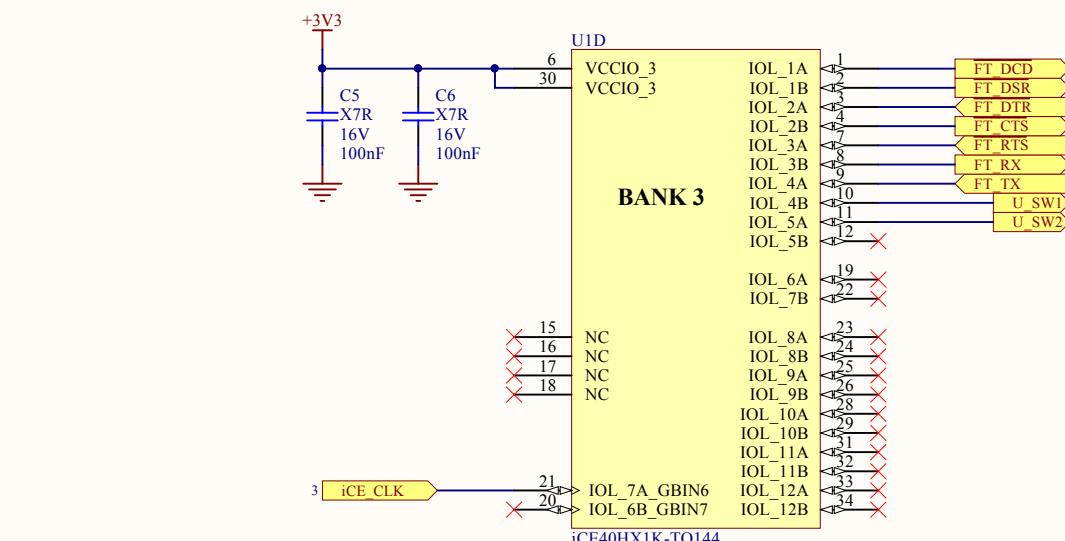
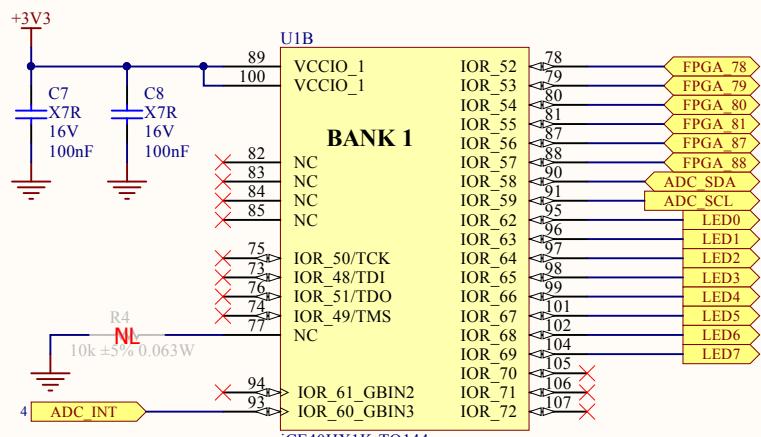
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Sheet	Top Sheet	A3
Project	IceZUM_Core_HX1K.PriPcb	
Sheet	1 of 5	Number:
Author	Eladio Delgado Mingorance	Date: 31/08/2016 Time: 15:14:08

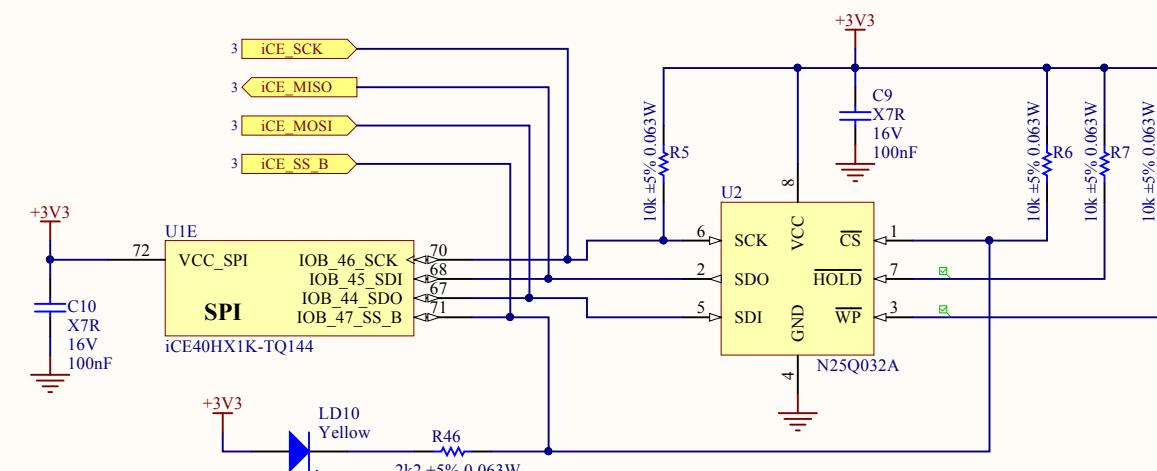
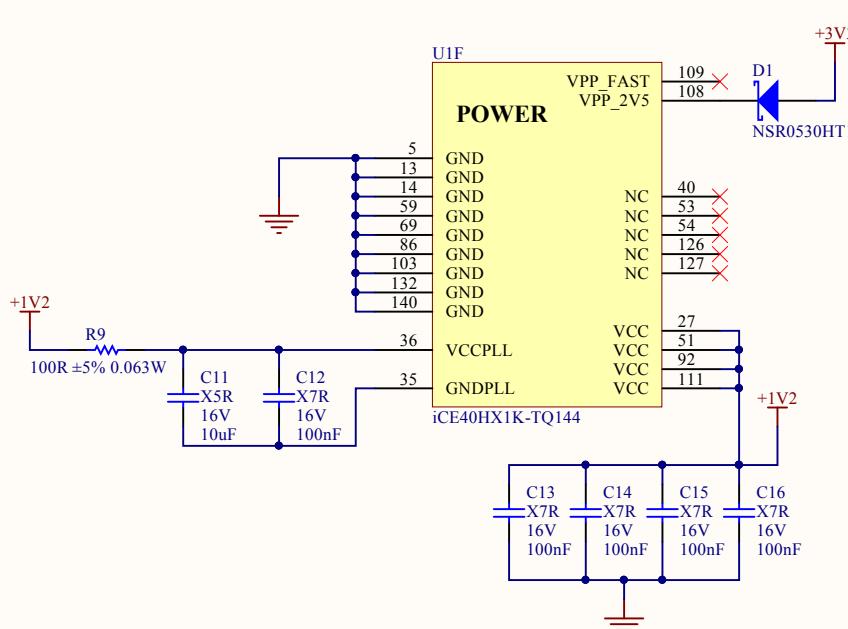
A



B



C



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.PriPcb**

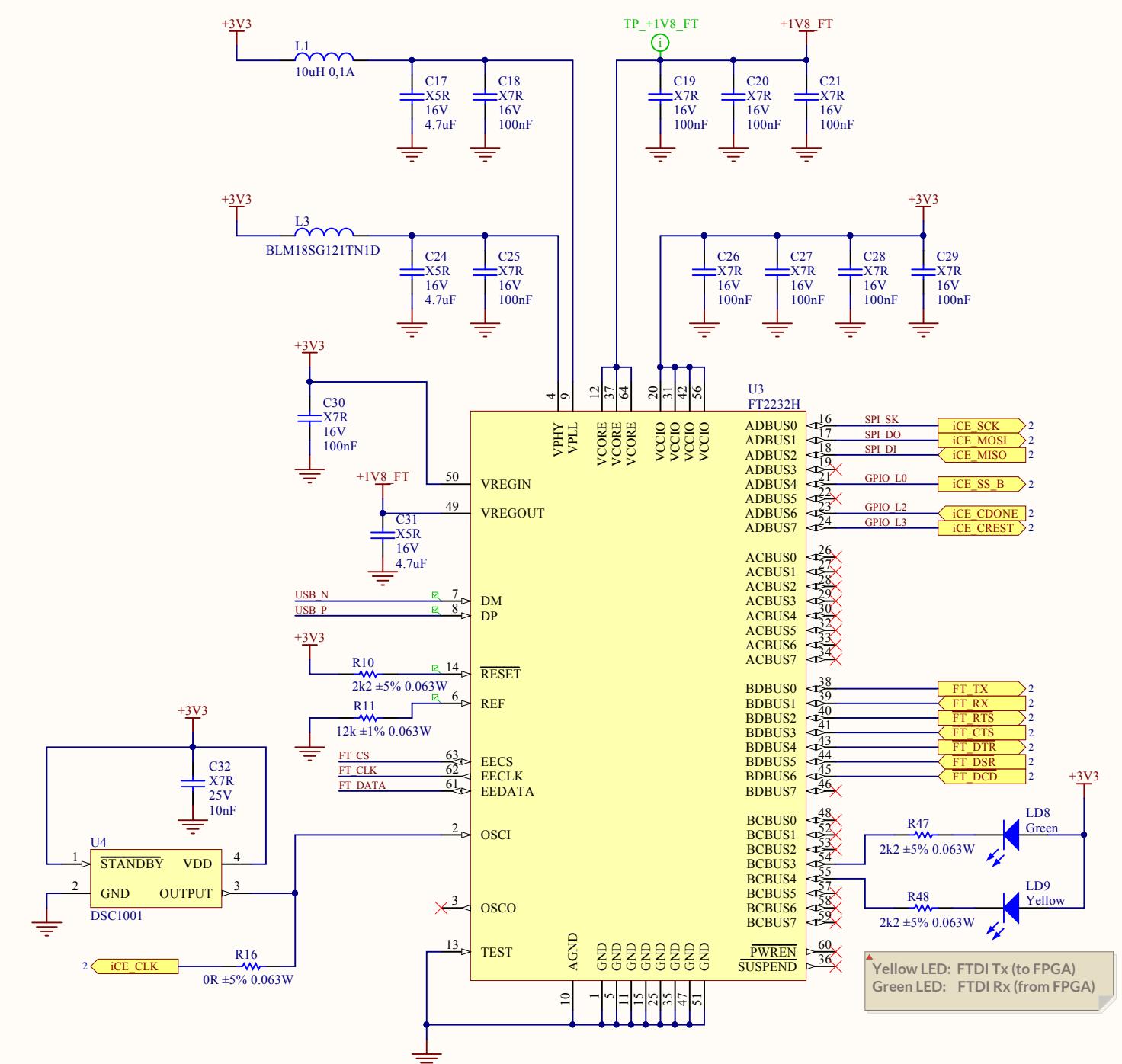
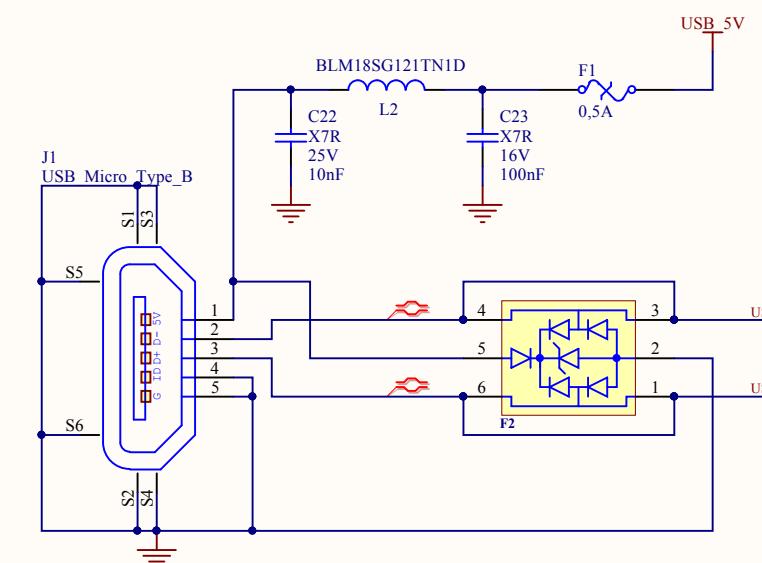
Revision: 1.1

Sheet 2 of 5 Number:

Time: 15:14:08

Author: Eladio Delgado Mingorance Date: 31/08/2016

MAREDEM TECHNOLOGIES



IceZUM Alhambra FPGA Board

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Sheet **USB**

A3

Project **IceZUM Core HX1K.PriPcb**

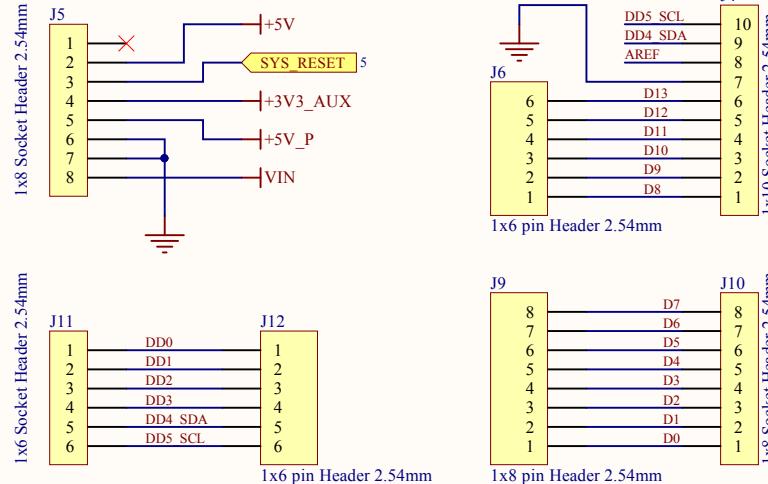
Revision: 1.1

Sheet 3 of 5 Number:

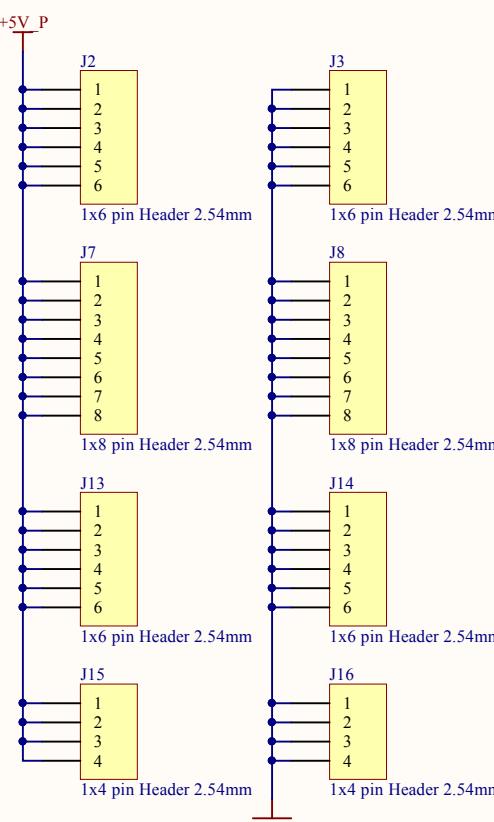
Time: 15:14:08

Author: Eladio Delgado Mingorance Date: 31/08/2016

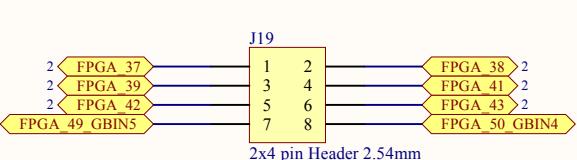
MAREDEM TECHNOLOGIES



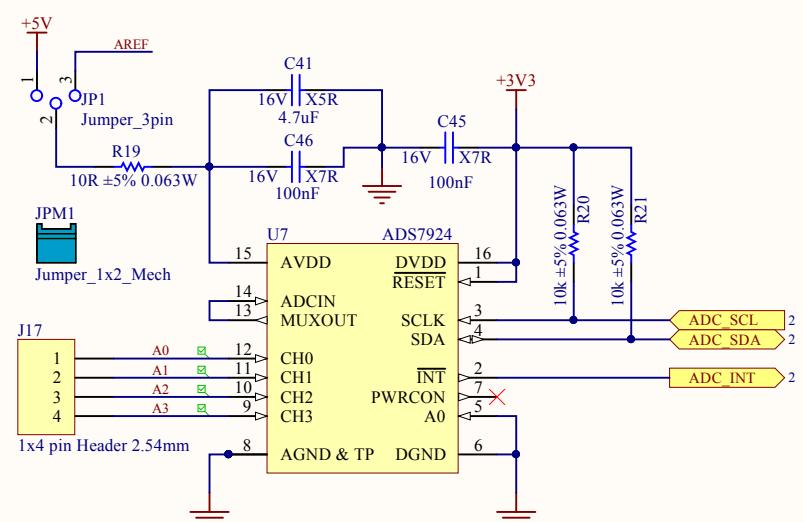
Arduino Sockets & Replicating Headers



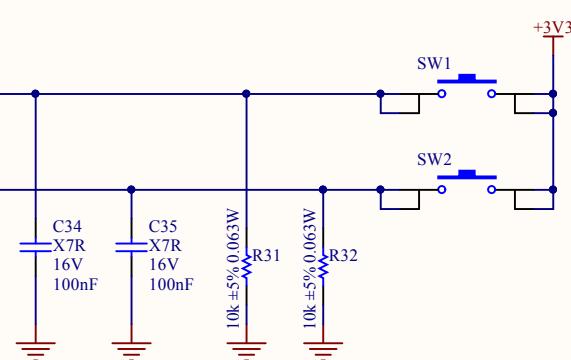
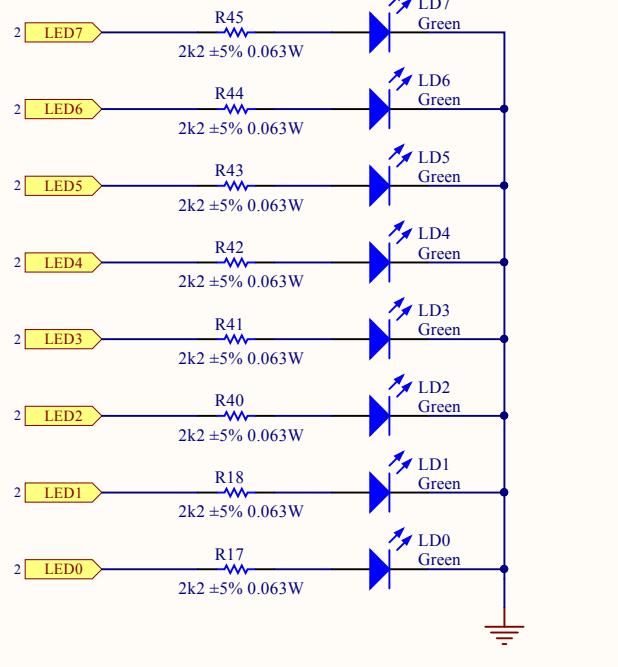
Power Headers



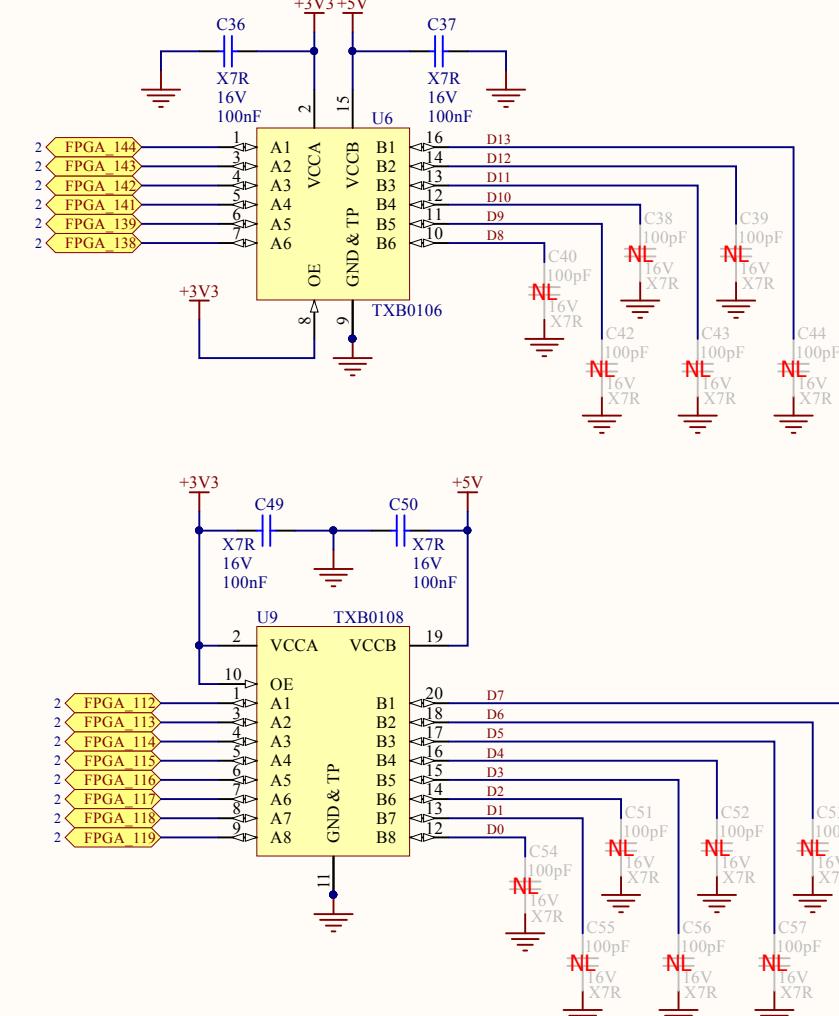
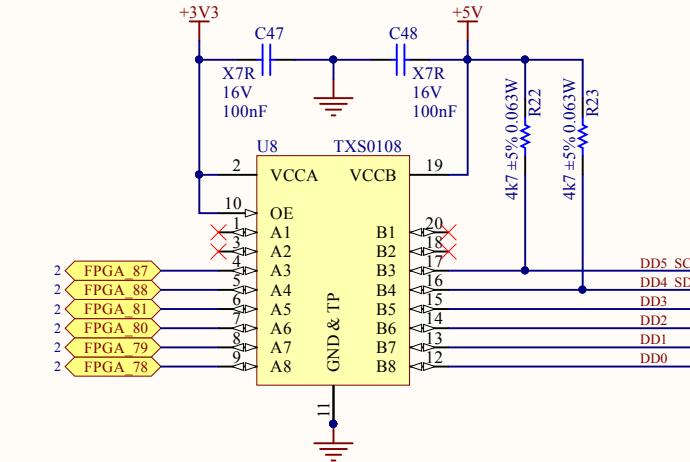
FPGA Direct GPIO (3V3)



4-Channel I2C ADC



User Switches & LEDs



Level Translators for FPGA to Arduino GPIO

IceZUM Alhambra

FPGA Board

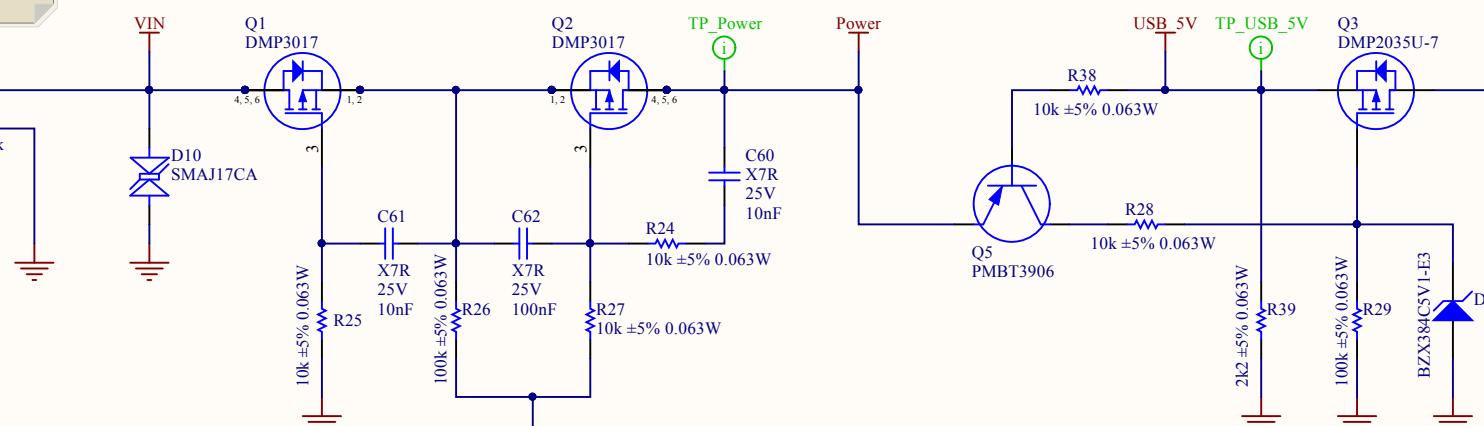


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Sheet **Connectors & I/O** A3 | Project **IceZUM Core HX1K.PrtPcb** Revision: **1.1**
 Sheet 4 of 5 Number: **1** Author: **Eladio Delgado Mingorance** Date: **31/08/2016** Time: **15:14:09**

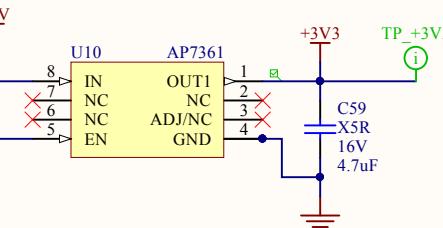
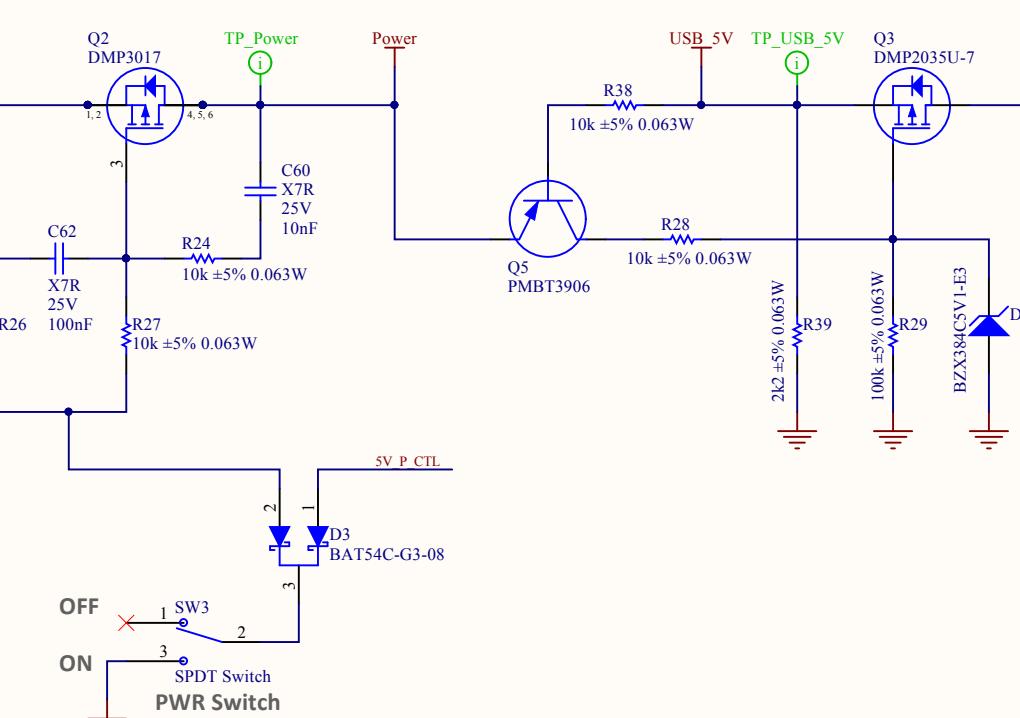


DC Power Input:
Voltage: 6 - 17V
Current: 3A

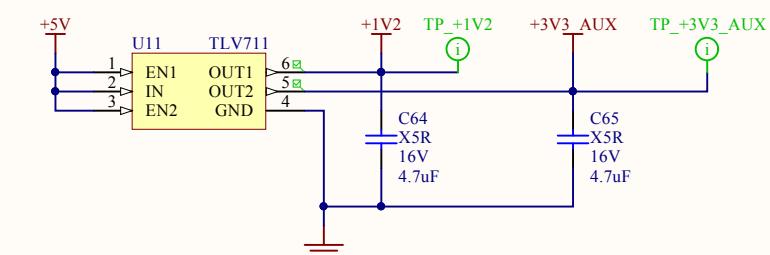


PWR Switch operation:
Board powered from JACK:
It switches ON/OFF entire board
Board powered from USB:
It switches ON/OFF peripherals power
Logic always ON
Board powered from JACK & USB:
Switch OFF: Logic ON / Peripherals OFF,
logic powered from USB
Switch ON: Logic ON / Peripherals ON,
entire board powered from JACK

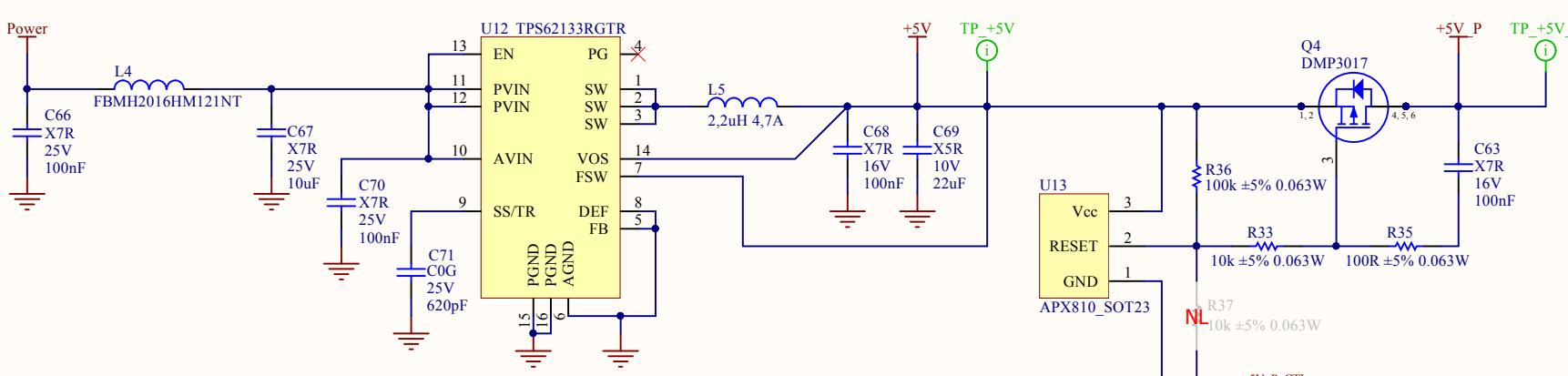
Power Inputs Control and Protections



3.3V Rail, 700 mA Max.

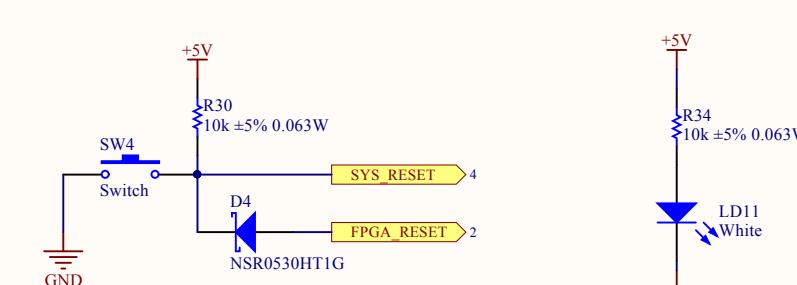


1.2V Rail (200 mA) and External 3.3V Rail (200 mA)



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.PnjPcb	
Sheet	5 of 5	Number:
Author	Eladio Delgado Mingorance	Date: 31/08/2016 Time: 15:14:09

