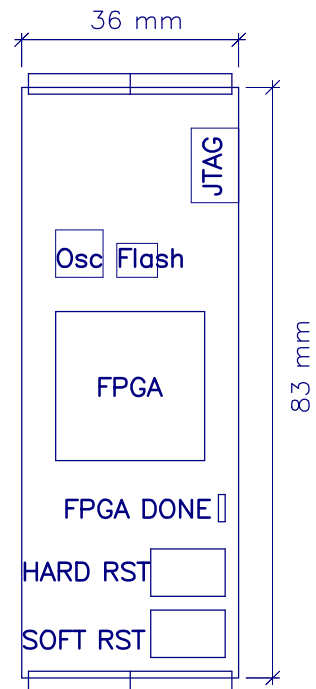


HEVs
 Route du Rawyl 47
 1950 Sion 2
 www.hevs.ch

Designer:
 Oliver Gubler
 oliver.gubler@hevs.ch
 or
 oliver.gubler@gmail.com

CanSat Master FPGA

Page	Title	Description
1	Cover	This first page
2	Connector	
3	FPGA	

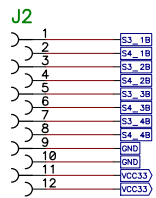
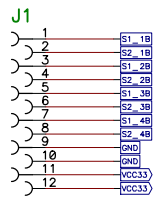


Revision	Changes
1.0	Initial Version
2.0	+ added test point for GND - removed LED on 1V2 (there exists no LED at this low voltage) + added LED on 3V3

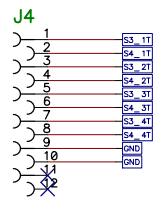
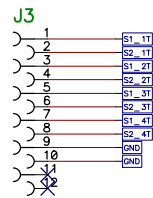
CanSat Master FPGA cover	DES	2014-07-17 guo
	REV	V1.0
	1/5	{Path} CanSat_Master_FPGA_v2.sch

Connectors

Bottom



Top



CanSat Master FPGA

connector

DES 2014-07-17 guo

REV V1.0

HAUTE ECOLE VALAISANNE

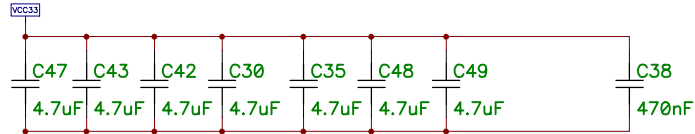
2/5 {Path}
CanSat_Master_FPGA_v2.sch

FPGA Power & Decoupling

VCCINT Decoupling



VCCAUX Decoupling



VCC0 Bank 0 Decoupling



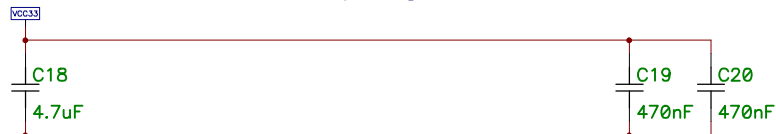
VCC0 Bank 1 Decoupling



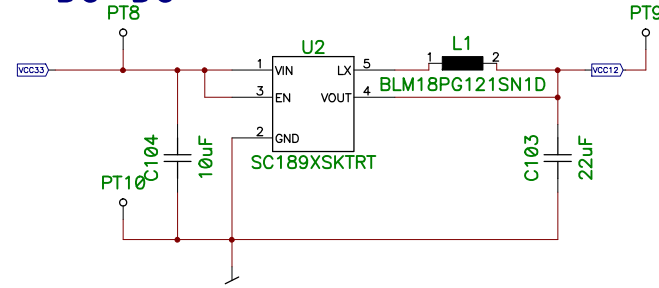
VCC0 Bank 2 Decoupling



VCC0 Bank 3 Decoupling



DC-DC



CanSat Master FPGA

FPGA Power & Decoupling

HAUTE ECOLE VALAISANNE

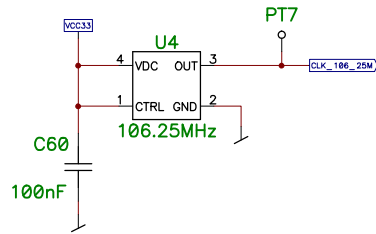
DES 2014-07-17 guo

REV V1.0

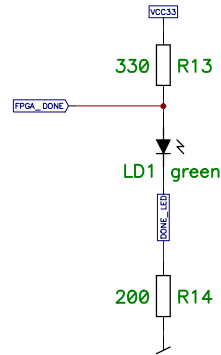
3/5 {Path} CanSat_Master_FPGA_v2.sch

FPGA Config

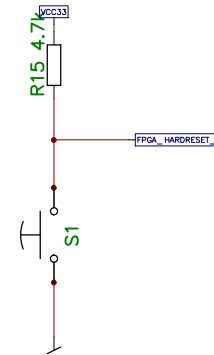
Main Oscillator



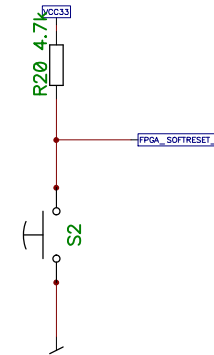
FPGA Done LED



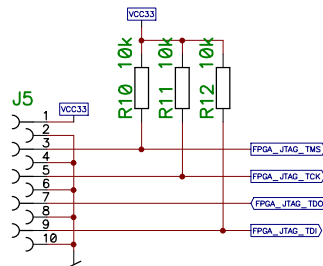
FPGA Hardreset Reprogram



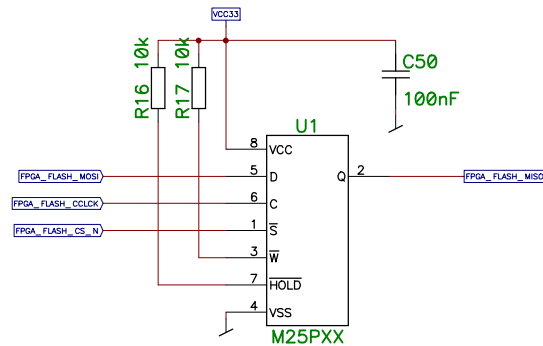
FPGA Softreset Initialize design



JTAG connector



SPI Flash



CanSat Master FPGA

FPGA Config

HAUTE ECOLE VALAISANNE

DES	2014-07-17 guo
REV	V1.0
4/5	{Path} CanSat_Master_FPGA_v2.sch

FPGA

FPGA XC6SLX9-2TQG144C

M[1:0] <= 01 : Master Serial

- Connections Guidelines:
- CLK_106_25M has to be connected to a GLCK
 - Sx_1B, Sx_1T has to be connected to a GLCK
 - all Pins of the same Sx have to be on the same bank

CanSat Master FPGA	DES	2014-07-17 guo
FPGA	REV	V1.0
HAUTE ECOLE VALAISANNE	5/5	{Path} CanSat_Master_FPGA_v2.sch