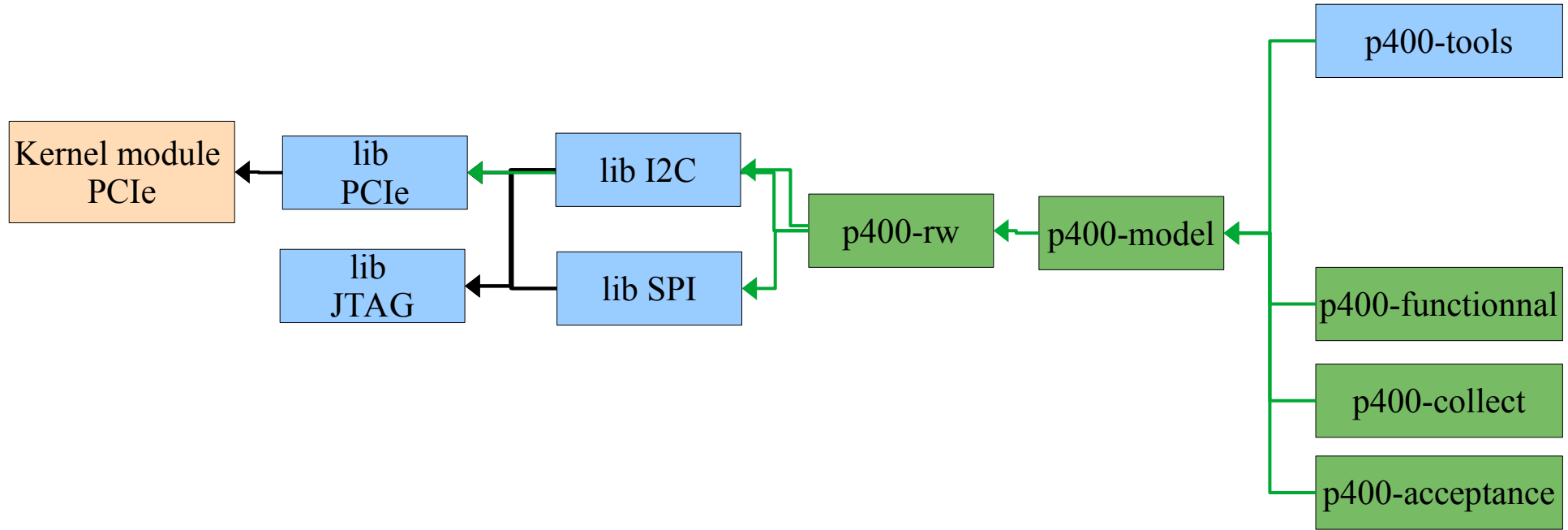


PCle400 Statut :

Software

Hiérarchie de couches software



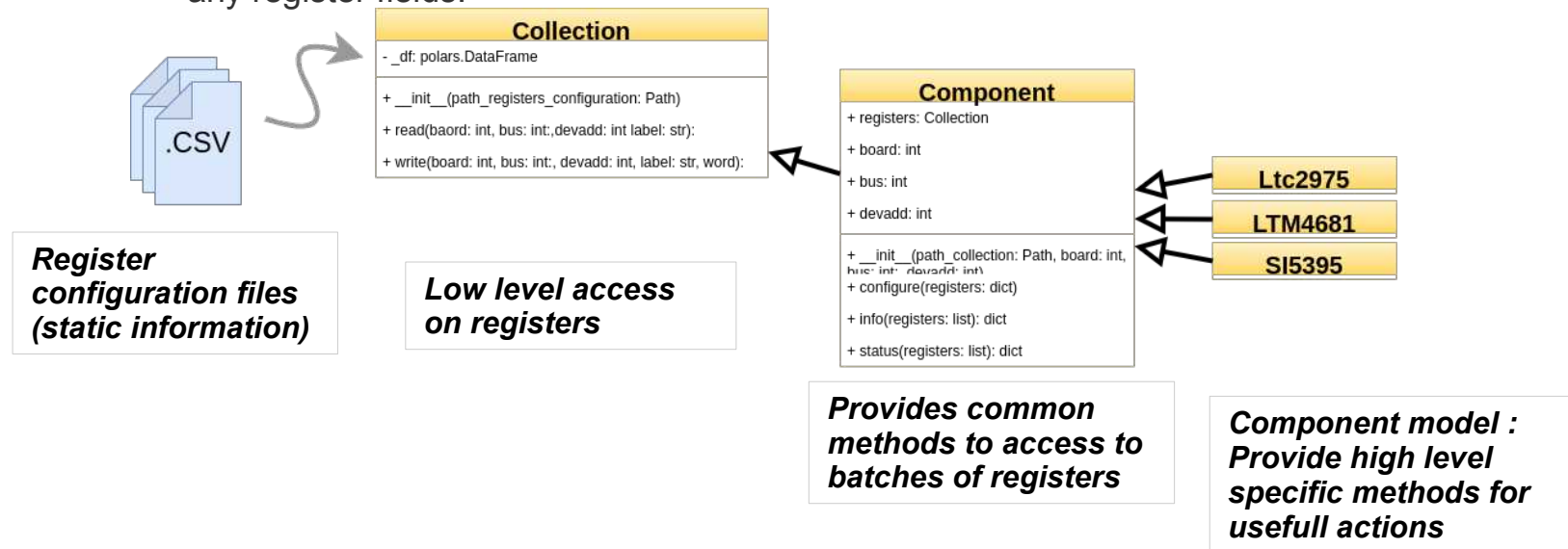
Software

Peripheral components

- Each component can be described by a list of registers with limited number of fields

Implementation

- Take advantage of Dataframes and its manipulation methods in order to efficiently access any register fields.



Tâches de développement

3 tâches majeures :

- Description/Modélisation des composants (p400-model, tests unitaires)
- Mise en place bus d'accès PCIe / JTAG sur devkit Agilex
 - ▶ Sujet de la réunion du 29 juin
- Elaboration du plan de test fonctionnel de la carte prototype PCIe400

Description et modélisation des composants

Component	Manufacturer	Description	Protocol	Test setup	Responsabilité
LTM4681	Analog Devices	DCDC	I2C	Devkit	LP2I B
SI5395	Skyworks	PLL	I2C	Devkit	LP2I B
LTM4677	Analog Devices	DCDC	I2C	Devkit	LP2I B
SI5397	Skyworks	PLL	I2C	Devkit	LP2I B
MAX10 Sequencer	Intel	Sequencer general monitoring	I2C	Devkit	CPPM
LTC2975	Analog Devices	LDO monitoring	I2C	-	LP2I B
LTC2497	Analog Devices	ADC current and voltage	I2C	-	LP2I B
OBT	Amphenol	Opto-electronic XCVR	I2C	-	LP2I B
24AA64	ST	Flash EEPROM	I2C	-	LP2I B
LMK04821	Texas Instrument	PLL	SPI	Idrogen	IJClab
SFP+ 1GbE	TBD	Opto-electronic XCVR	I2C	Idrogen	IJClab
PIO	Agilex	FPGA internal register	AVMM	Agilex I/F series	IJClab
Mailbox Client	Agilex	FPGA general monitoring	AVMM	Agilex I/F series	IJClab
MAX31730	Analog Devices	Temperature Sensor	I2C	Agilex I series	IJClab
XCVR PHY	Agilex	FPGA XCVR	AVMM	Agilex I series	CPPM
QSFP112	TBD	Opto-electronic XCVR	I2C		
SFP+ 10GPON	TBD	Opto-electronic XCVR	I2C		