



Specifications for the Attitude Control and Determination System-XCubeSat

12 April 2015

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Chapter 1

Introduction

The objective of this document is to summarize in one place the specifications related to the software of the Attitude Control and Determination System, henceforth ADCS of the nano-satellite X-CubeSat developed by the students of cole Polytechnique, Paris. We have divided the document into the following sections

- Definition of the architecture of the ADCS
- External Interfaces available on the ADCS
- Sensors and peripherals on the ADCS
- Data formats used for computing
- Protocols for testing

This document shall be useful for all people currently concerned with the conception of the ADCS and eventually for students who will take over the project in the months to come. This document is however, far from being complete and additions, corrections and deletions will be made till the day of delivery.

Chapter 2

Architecture of the ADCS

Chapter 3

External interfaces

Chapter 4

Sensors and peripherals

Chapter 5

Data formats

Chapter 6

Testing