

Mechatronics 3700 Death Star Tracker: Technical Manual

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Abstract

This document describes how each of the modules (including both software and hardware) work, and how to use them.

Part I

Technical Documentation

Chapter 1

Introduction

1.1 Document Identification

1.2 System Overview

1.3 Document Overview

1.4 Reference Documents

1.4.1 Acronyms and Abbreviations

Chapter 2

System Description

2.1 Introduction

2.2 Operational Scenarios

2.3 System Requirements

2.4 Module Design

2.5 Module Requirements: Module X

2.5.1 Functional Requirements

Inputs

Processes

Outputs

Timing

Failure Modes

2.5.2 Non-Functional (Quality of Service) Requirements

Performance

Interfaces

Design Constraints

2.6 Conceptual Design: Module X

2.6.1 Assumptions Made

2.6.2 Constraints on Module X Performance

Chapter 3

User Interface Design

3.1 Classes of User

3.2 Interface Design: User Class Y

3.2.1 User Inputs and Outputs

3.2.2 Input Validation and Error Trapping