MAILINGS

REVIEW

VIEW DEVELOPER

[Company Name] [Project Name]

[Document Name] [Version Number]

# **Detailed Design**

This chapter describes the proposed design in detail. Provide the necessary information for the development team to integrate the hardware components, write the software code, so that the hardware and software components will provide a functional product.

Note: Every design item should map back to the Functional Requirements Document. These should be captured in the Requirements Traceability Matrix.

#### Hardware Detailed Design 6.1

In this section, provide enough information for the developers to build and/or procure the system's hardware.

Note: If this section becomes too lengthy, consider placing it in the Appendix or reference it in a separate document. Add additional diagrams, if necessary, to describe each component and its functions.

Include the following information (as applicable):

- Cable type(s) and length(s)
- Connector specifications
- Details of hardware items, such as monitors, printers, servers, I/O devices, and the relationship to each other
- · Hard drive/floppy drive/CD-ROM requirements
- Memory and/or storage space requirements
- Monitor resolution
- Power input requirements for each component
- Processor requirements
- Signal impedances and logic states

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# Software Detailed Design

A software module is the lowest level of design granularity in the system. In this section, provide enough detailed information for the developers to write the source code for all modules in the system (and/or integrate COTS software programs).

For each module, provide the following information:

- Narrative introduction to each module, its function(s), the conditions under which it is used (called or scheduled), processing, logic, interfaces to other modules, interfaces to external systems, security requirements, etc.
- Graphical representation of the module processing, logic, flow of control, and algorithms, using charts, diagrams, flowcharts as appropriate
- Data elements, record structures, and file structures associated with module input and output
- Report layout
- For COTS packages, specify any call routines or bridging programs to integrate the package with the system and/or other COTS packages, such as DLLs (Dynamic Link Libraries)

Repeat this section for each module.

#### 6.2.1 Module [X]

Provide a detailed description of each software module.

## 6.2.1.1 Processing

Provide a processing narrative for each module.

Explain the process by which each module interacts with other parts of the system, including other modules. Describe the data elements and data structures which provide input to each module, how the module transforms the data, and the data elements or data structures which are output

### Local data structures

Describe the local data structures

#### 6.2.2 Module [X]

Provide a detailed description of each software module.



