

| | | | | | | | | | |
|--------------|---------|--|---|--|--|--|--|--|---------|
| Document No. | Prep By | IN2244 | R | | | | | | Sheet 1 |
| | AWH | Architecture and Detailed Design - PMU | E | | | | | | Of 9 |
| | | | C | | | | | | |
| | | | N | | | | | | |

Architecture and Detailed Design

for

Pressure Measurement Unit (PMU)

| | | | | | | | | | |
|--------------|---------|--|---|--|--|--|--|--|---------|
| Document No. | Prep By | IN2244 | R | | | | | | Sheet 2 |
| | AWH | Architecture and Detailed Design - PMU | E | | | | | | Of 9 |
| | | | C | | | | | | |
| | | | N | | | | | | |

Revisions of This Document

| Revision | Date | Originator | Comments |
|----------|------------|------------------------|-----------------|
| 0.1 | January 24 | Alexander Walsch (AWH) | Initial Version |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | | | | | | | | | |
|--------------|---------|--|---|--|--|--|--|--|---------|
| Document No. | Prep By | IN2244 | R | | | | | | Sheet 3 |
| | AWH | Architecture and Detailed Design - PMU | E | | | | | | Of 9 |
| | | | C | | | | | | |
| | | | N | | | | | | |

Table of Contents

| | |
|---------------------------------------|----------|
| 1. Introduction..... | 4 |
| 1.1 Purpose..... | 4 |
| 1.2 Intended Audience..... | 4 |
| 1.3 References..... | 4 |
| 2. Reusable Components..... | 5 |
| 3. System Architecture..... | 6 |
| 4. Detailed Design..... | 7 |
| 4.1 Power Supply..... | 7 |
| 4.1.1 General..... | 7 |
| 4.1.2 Hardware..... | 7 |
| 4.1.3 Software..... | 7 |
| 4.2 Input Output..... | 7 |
| 4.2.1 General..... | 7 |
| 4.2.2 Hardware..... | 7 |
| 4.2.3 Software..... | 7 |
| 4.3 Supervisory..... | 7 |
| 4.3.1 General..... | 7 |
| 4.3.2 Hardware..... | 7 |
| 4.3.3 Software..... | 7 |
| 4.4 Processing..... | 7 |
| 4.4.1 General..... | 7 |
| 4.4.2 Hardware..... | 7 |
| 4.4.3 Software..... | 7 |
| 5. Reliability and Safety..... | 8 |
| 5.1 Hardware..... | 8 |
| 5.2 Software..... | 8 |
| Appendix A: Abbreviations..... | 9 |

| | | | | | | | | | |
|--------------|---------|--|-------------|-------------|--|--|--|--|-----------------|
| Document No. | Prep By | IN2244 | R E V | | | | | | Sheet 4 Of 9 |
| | AWH | Architecture and Detailed Design - PMU | | E C N | | | | | |

1. Introduction

1.1 Purpose

Describe the purpose of this document.

1.2 Intended Audience

Who should read this document – designers, field personnel, etc.

1.3 References

| Reference | Title | Version Nr. | Author | Source / Location |
|-----------|---|-------------|------------------|-------------------|
| [1] | System Requirements Specification for PMU | | Alexander Walsch | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Table 1: References

| | | | | | | | | | |
|--------------|---------|--|---|--|--|--|--|--|---------|
| Document No. | Prep By | IN2244 | R | | | | | | Sheet 5 |
| | AWH | Architecture and Detailed Design - PMU | E | | | | | | Of 9 |
| | | | C | | | | | | |
| | | | N | | | | | | |

2. Reusable Components

A similar design has been realized in the xyz project...

| | | | | | | | | | | |
|--------------|---------|--------|---|---|---|--|--|--|--|---------|
| Document No. | Prep By | IN2244 | R | E | V | | | | | Sheet 6 |
| | AWH | | | | | | | | | |

3. System Architecture

Describe the main components, hardware and software (for small systems we can combine this)

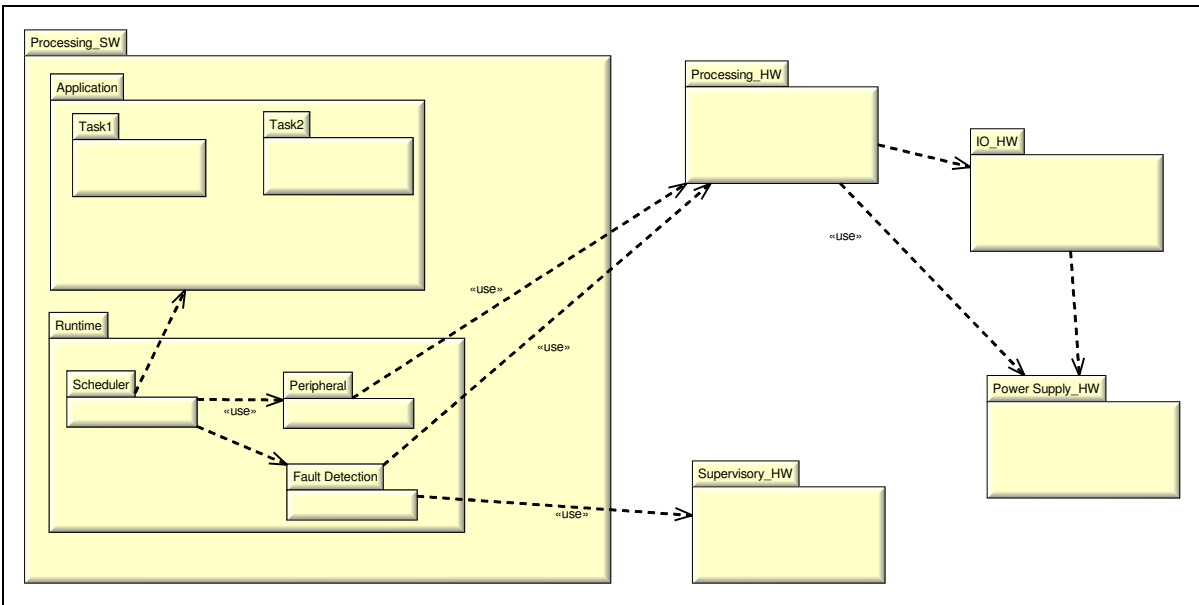


Figure 1: Architecture of the PMU showing hardware and software components.

| Component | Description |
|-----------|-------------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

| | | | | | | | | |
|--------------|---------|--|---|--|--|--|--|-----------------|
| Document No. | Prep By | IN2244 Architecture and Detailed Design - PMU | R | | | | | Sheet 7 Of 9 |
| | AWH | | E | | | | | |
| | | | C | | | | | |
| | | | N | | | | | |

4. Detailed Design

4.1 Power Supply

4.1.1 General

4.1.2 Hardware

4.1.3 Software

4.2 Input Output

4.2.1 General

4.2.2 Hardware

4.2.3 Software

4.3 Supervisory

4.3.1 General

4.3.2 Hardware

4.3.3 Software

4.4 Processing

4.4.1 General

4.4.2 Hardware

4.4.3 Software

| | | | | | | | | | |
|--------------|---------|--|---|--|--|--|--|--|---------|
| Document No. | Prep By | IN2244 | R | | | | | | Sheet 8 |
| | AWH | Architecture and Detailed Design - PMU | E | | | | | | Of 9 |
| | | | C | | | | | | |
| | | | N | | | | | | |

5. Reliability and Safety

5.1 Hardware

5.2 Software

