Blackblot® PMTK PRM Product Requirements Document

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Document Revision History:

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1. **Introduction**

1.1. **Document Objective**

The Product Requirements Document (PRD) provides a complete requirements definition of a product, based on the market requirements. The PRD describes the features and functions of a product without regard to implementation.

1.2. **Market Problem**

<Identify and justify the specific market problem. Explain any other interlinking market problems.>

<Comment: The market problem is a "consumer" or "product" or "technology" problem in the target market. The market problem is essentially a situation (difficulty) that exists in the target market and requires change.>

- **Consumer Problem** – A marketplace situation in which consumer needs remain unsatisfied (B2C). The solution to a consumer problem is a whole product.
- **Product Problem** – An industry situation in which product requirements are unmet (B2B). The solution to a product problem is a product component.
- **Technology Problem** – Challenges in applied science. The solution to a technology problem is scientific research.

1.3. **Market Opportunity**

Provide a statement detailing the specific market opportunity. Size and substantiate the market opportunity as much as possible. Document the assumptions and facts that validate and justify the market opportunity. Explain any other interlinking market opportunities.


1.4. **Product Concept**

Describe in general terms the proposed product, its functions, and capabilities.

1.5. **Sales Axioms**

Describe the product’s suggested sales axioms. See the "PMTK Sales Axioms" template.

1.6. **Unique Selling Proposition (USP)**

Describe the product’s suggested Unique Selling Proposition (USP). See the "PMTK Unique Selling Proposition" template.

2. **Product Project Overview**

2.1. **Section Objective**

This section provides macro information about the environment into which the product will be introduced.
2.2. **Target Market Description**  
<Describe in very general terms the market to which the solution is targeted.>

2.3. **Target Customer Description**  
<Define and describe the general customer profile towards which the product is targeted. Also, describe the buyer and user.>

3. **Product Environment**  
3.1. **Section Objective**  
This section provides macro information on the constraints and assumptions that guide and limit the product’s scope, functionally, and impact on its future design.

3.2. **General Constraints**  
<Identify and enumerate any core elements that will limit the developers’ options in building the system. These are typically hardware/software limitations and interfaces to other systems.>

3.3. **Assumptions and Dependencies**  
<Create a numbered list of all the assumptions that affect the product. Include all dependency issues resulting from development efforts with other products, the need for output from other product projects, or the need-to-know decisions made by other development groups.>

4. **Product Requirements**  
4.1. **Section Objective**  
This section describes the functional and feature requirements of the product.  
<Comment: Each product requirement must be written as a clear and concise statement, rather than in a long narrative or paragraph form. Do NOT describe the product design in the product requirements document. The PRD is a description of “what” the product is from an external viewpoint. The PRD does not state “how” the product does what it does. Avoid providing detailed design or implementation specifications. Rationale and sources are optional within each product requirement.>

4.2. **Functional Requirements**  
<List the features and functions provided by the product. This effectively is a list of what the product does or has. Write each requirement separately in its own table.>

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
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<tr>
<td>PR Identifier</td>
<td>&lt;Provide a unique identifier for the product requirement. Recommended name convention is product initials followed by .PRxxx (i.e. SLC.PR200). Introduce gaps into the identifiers so future requirements can be inserted without need for renumbering.&gt;</td>
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### Requirement Description

<table>
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<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Directive</td>
<td>Product shall provide an electrical output signal.</td>
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| Constraints | SLC.PR200.C10 – amplitude of the output shall be less than 1.0 volts peak-to-peak.  
SLC.PR200.C20 – output signal shall be limited to 20,000 hertz.  
SLC.PR200.C30 – output impedance shall be no more than 20 ohms. |
| MR Identifier | SLC.MR239 |

### Development Requirements

Provide a list of the engineering demands that shape the solution. These requirements constitute the solution’s development environment. With regard to software, these are often the development tools and API sets. Write each requirement separately in its own table.

### Compatibility Requirements

Provide a list of the conformance demands that shape the solution. These can be conditions that support the solution and constitute the environment in which the solution will operate. With regard to software, these are elements such as: operating system platforms, GUI interfaces, or supported standards. Write each requirement separately in its own table.

### Performance Requirements

List the quantitative and qualitative demands that shape the solution. These requirements reflect the need for certain levels of speed, usability, capacity, or scalability. These requirements are sometimes referred to as non-functional requirements. Write each requirement separately in its own table.
4.6. **Internationalization Requirements**
<List the language and cultural demands that shape the solution. These requirements reflect the need to tailor the solution to the nuances imposed by different global markets. These requirements impact the solution's design so as to accommodate for culturally diverse markets. Write each requirement separately in its own table.>

4.7. **Documentation Requirements**
<List the written support demands that shape the solution. Write each requirement separately in its own table.>

4.8. **Physical Requirements**
<If applicable, provide a list of product requirements that detail the solution's desired physical attributes such as size, weight, color, dimensions, or construction materials. Write each requirement separately in its own table.>

4.9. **Distribution Requirements**
<List the product requirements that are based on implications that affect the solution's distribution channels. These requirements deal with how the solution is transported to the customer's possession, and include elements such as: regulatory barriers, legal restrictions on export, or transport limitation (i.e., land only). Write each requirement separately in its own table.>

4.10. **Support and Training Requirements**
<List the product requirements that are based on implications that affect the need for user support and training structures because of the solution. Write each requirement separately in its own table.>

4.11. **Miscellaneous Product Requirements**
<List all requirements not covered in other sections. Write each requirement separately in its own table.>

4.12. **Solution Overview**
<Provide a general description of the solution, its purpose and functionality. Explain how the solution fits into the overall corporate product strategy.>

4.13. **Solution Technology Overview**
<Provide a description of the technology and innovation found in the solution itself, and also in those technologies which will be employed in producing the solution. This section is relevant only if a product or product concept already exists.>

4.14. **Product Requirements Summary Table**
<The table below is a summary of all product requirements. It provides an overview of the functional solution. Enter into the table the various product requirements in concise form and sort the table by Category (primary) and Priority (secondary).>
5. **Supporting Data**

5.1. **Section Objective**
This section provides data in support of claims, assertions, assumptions, and statements made throughout this document.

5.2. **PRD Assumptions**
<Describe any assumptions made when writing this document. Be specific about the assumptions that if changed will alter the direction of the PRD and resulting solution.>

5.3. **Research Information**
<If relevant, describe and list the type and scope of research conducted in the course of writing this document.>

5.4. **Product Diagram/Architecture**
<If relevant, describe the solution's architecture and modules accompanied by a schematic diagram.>