Product Requirements Document

[*insert company logo*]

**Company Name**

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| --- | --- |
| Product: | [enter product name] |
| Revision: | [enter revision number, 0.0] |
| Date: | [enter modification date] |
| Contact: | [enter name of contact] |
| Location: | [enter address] |
| Email: | [enter contact email] |
| Phone: | [enter contact phone number] |

# Document Revision History

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| --- | --- | --- | --- | --- |
| Date | Revision No | Revised By | Approved By | Description |
| 20161119 | 0.1 | J. Doe | J. Smith | First draft for review |
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# Introduction

The Products 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 with regard to implementation.

## Market Problem

[Identify and justify the specific market problem. Explain any interlinking market problems.]

<Comment: The market problem is a "consumer", "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 the consumer's needs remain unsatisfied (business-to-consumer, B2C). The solution to a consumer problem is a whole product.
* Product Problem - An industry situation in which the product requirements are unmet (business-to-business, B2B).
* Technology Problem - Challenges in applied science. The solution to a technology problem is scientific research.>

## 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.]

<Comment: The market opportunity is a lucrative, lasting, and sizeable market problem. Market Opportunity = Market Problem + Volume + Duration + Earning Potential.>

## Product Concept

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

## Sales Axioms

[List the product's sales axioms. Sales axioms are to be used and reflected upon whenever communicating the product to anyone, particularly customers in target markets. The sales axioms frame the category to which the product belongs. The combination of sales axioms also represents value to customers.]

<Example:

* Reliability - How long before breakdowns. The Honda Civic provides outstanding mechanical and instrument reliability. (Result: Peace of mind)
  + The Honda Civic is one of the most reliable vehicles in its class as indicated in reliability ratings by the JD Power Consumer Center for the last five years. The score given by JD Power is based on problems reported with the engine, transmission, steering, suspension, and braking systems after two years of ownership. (Proof)
  + With common periodical preventive maintenance, the Civic can continue functioning with many original parts up to 300,000 miles. (Fact)
* Fuel Efficiency - The ratio between the driving range and a unit amount of input fuel (miles per gallon - mpg). The Honda Civic offers excellent fuel economy. (Result: Reduced operating expenses, gasoline)
  + With a gas mileage rating of 32 mpg in the city and 40 mpg on the highway for the 5-speed model and 30 mpg in the city and 38 mpg on the highway for the automatic, the automobile produces by far the best gas mileage for a car in its class. (Fact)
* Serviceability - Ease of performing periodical preventative maintenance and recovery/repair services. The Civic is designed for easy maintenance by the owner and authorized mechanics. (Result: reduced maintenance expenses, labor and parts)
  + The Civic is designed to provide improved access to the vehicle's mechanical components for easier maintenance and repair. (Fact)
  + The Civic structure places mechanical components far from vulnerable areas affected by collisions. Most frequently damaged components are fastened by screws, instead of welds, which allows for easier, faster, and less costly repair/replacement. (Fact) >

## Unique Selling Proposition

[Describe the product's unique selling proposition (USP). The USP can be one word or several paragraphs long. Keeping the USP simple and brief makes it easier to comprehend and more effective.]

<Comment:

* Three unique selling proposition elements are:
  + Value to Customers - the one statement that makes the product describes the unique value of the product.
  + Competitive Differentiator - the one statement that makes the product different from any other competing products.
  + Target Market Appeal - the one reason customers will buy the product even though it may seem to be no different from any other similar products.
* The following may constitute a product's unique selling proposition: particular product attributes, quality, customer service, guarantee, serving a specific market segment, distribution, patriotism, sentimental appeal, rarity, locality, tradition, synergy, fashion, patents, trademarks, convenience, variety, and packaging.
* The following are examples of unique selling propositions:
  + Advil cold medication -- fast relief.
  + Apple computers -- user-friendliness.
  + Rolls-Royce automobiles -- luxury. >

# Product Market & Customer

This section provides macro information about the environment into which the product will be introduced.

## Target Market

[Describe in very general terms the market to which the solution is targeted. Of the target market segments highlighted in the MRD, summarize the prioritized market segment(s) that this produce release will address. Also indicate any issues that will impact the product’s use internationally, as well as any special conditions.]

## Target Customer

[Define and describe the general customer profile towards which the product is targeted. Also, describe the buyer and user.]

# Product Environment

This section provides macro information on the constraints and assumptions that guide the limit the product's scope, functionality, and impact on its future design.

## General Constraints

[Identify and enumerate any core elements that will limit the developer's options in building the system/product. These are typically hardware/software limitations and interfaces to other systems.]

## 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.]

# Product Requirements

This section describes that functional and feature requirements of the product.

<Comment: Each product requirement must be written as a clear and concise statement, rather than 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.>

## 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.]

|  |  |
| --- | --- |
| Requirement | Description |
| PR Identifier | [Provide a unique identifier for the product requirement. Recommended naming convention is product initials followed by ".PRxxx" (e.g. SLC.PR200). Introduce gaps into the identifier so future requirements can be inserted without need for renumbering. |
| Directive | [Provide the requirement's directive, a statement that describes a facet of the product. The directive is an instruction, guiding what the product does or has. Directives are phrases as follows: "Product shall/should provide…"] |
| Constraints | [Provide all possible constraints, the design limitations imposed on the product, relevant to this particular product requirement.] |
| MR Identifier | [Provide reference to the market requirement identifier, listed in the MRD, which is the cause for introducing this product requirement.] |

<Comment: Recommended name convention is product initials followed by ".PR" with the product requirement's number (e.g. SLC.PR200) and followed by other product requirement's components initials and numbers. Introduce gaps into the identifiers in order that future product requirements can be inserted without the need for renumbering. Following is an example of a functional product requirement. Note the identifier name convention used for the rationales and constraints.>

|  |  |
| --- | --- |
| Requirement | Description |
| PR Identifier | SLC.PR200 |
| Directive | Product shall provide an electrical output signal. |
| Constraints | SLC.PR200.C10 - amplitude of the output shall be less than 1.0 volt 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 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 placed by the user on the solution. These can be conditions that support the solution and constitute the environment in which the solution will operate. For example, for a software product, conformance demands can include operating system platforms, GUI interfaces, and supported standards. Write each requirement separately in its own table.]

## Performance Requirements

[List the quantitative and qualitative demands that shape the solution. Therese 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.]

## Internationalized 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.]

## Documentation Requirements

[List the written support demands that shape the solution. Write each requirement separately in its own table.]

## 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 limitations (e.g. land only). Write each requirement separately in its own table.]

## Physical Requirements

[If applicable, provide a list of market requirements that detail the solution’s desired physical attributes, such as size, weight, color, dimensions, and construction materials. Write each requirement separately in its own table.]

## Support & Training Requirements

[List the 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.]

## Pricing & License Requirements

[Identify pricing and license requirements that support the requirements listed in the MRD. Write each requirement separately in its own table.]

## Miscellaneous Product Requirements

[List all requirements not covered in other sections. Write each requirement separately in its own table.]

## Solution Overview

[Provide a general description of the solution, its purpose and functionality. Explain how the solution fits into the overall company strategy.]

## 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.]

## Product Requirements Summary

[In the table below, list the prioritized requirements. This table can act as a quick reference guide to the full product requirements data. Sort table by Category (primary) and Priority (secondary).]

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Identifier | Directive | Constraints | MR Identifier | Category | Priority |
| SLC.PR200 | Product shall provide an electrical output signal. | SLC.PR200.C10  SLC.PR200.C20  SLC.PR200.C30 | SLC.MR239 | Functional | Critical  High  Medium  Low |
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# Supporting Data

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

## PRD Assumptions

[Describe any assumption made when writing this document. Be specific about the assumptions that if changed will alter the direction of the PRD and resulting solution.]

## Research Information

[Describe and list the type and scope of research conducted for this product solution.]

## Product Diagram/Architecture

[Describe the solution architecture and modules accompanied by a schematic diagram.]