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| Author: |  |
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|  |  |
| Department: | Research & Development |

# Document Interface Specification

# Versioning

|  |  |
| --- | --- |
| **Interface** | **Version** |

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# Software Interface Design

## Syntax

### Data types and constants

#### Global User-Defined Types

**PRIMITIVE TYPES**

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**ENUMS**

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**RECORD TYPES**

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| --- |
| **extends** |
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| --- | --- | --- | --- |
|  | Range:  Min:  Max: |  |  |

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**VECTOR TYPES**

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**Primitive Type Mappings**

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| --- | --- |
| **Primitive type** | **Target C++ type** |

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#### Interface

PRIMITIVE TYPES

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ENUMS

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RECORD TYPES

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VECTOR TYPES

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Primitive Type Mappings

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| --- | --- |
| **Primitive type** | **Target C++ type** |

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### Signature

#### Interface

COMMANDS

|  |  |
| --- | --- |
| ( , ) | |
| Description |  |

|  |  |
| --- | --- |
| Parameter |  |

|  |  |
| --- | --- |
| Returns |  |

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SIGNALS

|  |  |
| --- | --- |
| ( , ) | |
| Description |  |

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| --- | --- |
| Parameter |  |

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EVENTS

|  |  |
| --- | --- |
| ( , ) | |
| Description |  |

|  |  |
| --- | --- |
| Parameter |  |

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## Semantics

### State behavior

#### Interface

|  |  |  |
| --- | --- | --- |
| **Global Variables** | | |
| **Type** | **Name** | **Comment** |

|  |  |  |
| --- | --- | --- |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| **Variable Initializations** | | |
| **Variable** | **Value** | **Comment** |

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| --- | --- | --- |
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STATE MACHINE

Transitions defined in every state except states , :

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| --- | --- | --- |
| **Event** | **Guard** | **Actions** |

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| --- | --- | --- |
| -( , ) |  |  |

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| --- | --- | --- | --- |
| **Initial State** | | | |
| **Event** | **Guard** | **Target State** | **Actions** |

|  |  |  |  |
| --- | --- | --- | --- |
| -( , ) |  |  |  |

### Timing constraints

#### Interface

Constraint

None.

### Data constraints

#### Interface

Constraint

None.

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# Control of the Form

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| GEN: Process Owner |
| Q&R: Q&R Manager |

# History of the Form

| Revision | Doc. Date | Author | CR-ID | Description |
| --- | --- | --- | --- | --- |
| 03 | 2017 Aug 22 | Rob Albers,  Benno Tonissen | 2017/112 | * Comply with new format * Added dedicated software interface design specification sections with guidance. |

<List the changes and dates of approved revisions of the form/template. List three revisions maximum, with the most recent change mentioned first. Approved revisions are identified as 'NumberNumber', starting with 00. Always include the change request identification number under CR-ID. Make sure the date in the table matches the form / template date in the footer of the document.>