1. 范围
2. 引用文档
3. 基本类型
   1. 基本类型

|  |  |  |
| --- | --- | --- |
| **{{dataTypes}}数据类型标识** | **长度（Byte）** | **类型描述** |
| [typeId] | [typeSize] | [typeDesc] |

* 1. 结构体

{{?structs}}

* + 1. {{typeName}}

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **名称** | {{typeName}} | | **标识** | {{typeId}} |
| **描述** | {{typeDesc}} | | **属性** | Struct |
| **成员变量** | {{structMembers}}**名称** | **类型** | **描述** | |
| [memName] | [memType] | [memDesc] | |
| **类型定义** | {{definition}} | | | |
| **备注** |  | | | |

{{/structs}}

1. 接口设计

{{?midWares}}

* 1. {{midName}}（{{midID}}）

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **名称** | {{midName}} | | **标识** | {{midID}} |
| **描述** | {{midDesc}} | | | |
| **{{objectDatas}}序号** | **类名称** | **类标识** | **类描述** | |
| [eq] | [className] | [classId] | [classDesc] | |

{{?classs}}

* + 1. {{className}}（{{classId}}）

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **名称** | {{className}} | | **标识** | {{classId}} |
| **描述** | {{classDesc}} | | | |
| **父类** | {{classFather}} | | | |
| **{{interfaces}}序号** | **接口名称** | **接口标识** | **接口描述** | |
| [eq] | [interfaceName] | [interfaceId] | [interfaceDesc] | |

{{?methods}}

* + - 1. {{interfaceName}}（{{interfaceId}}）

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **名称** | {{interfaceName}} | | **标识** | {{interfaceId}} |
| **描述** | {{interfaceDesc}} | | | |
| **函数原型** | {{interfaceCode}} | | | |
| **输入参数** | **{{inputParams}}名称** | **类型** | **描述** | |
| [paraId] | [paraType] | [paraDesc] | |
| **输出参数** | **{{outputParams}}名称** | **类型** | **描述** | |
| [paraId] | [paraType] | [paraDesc] | |
| **返回值** | {{interfaceReturnDesc}} | | | |
| **备注** |  | | | |

{{/methods}}

{{/classs}}

{{/midWares}}

1. 报文设计
   1. 报文概述

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **{{messages}}功能码** | **报文名称** | **信源** | **信宿** | **描述** |
| [mesFunId] | [mesName] | [mesSource] | [mesDestination] | [mesDesc] |

* 1. 设备节点号分配

|  |  |  |  |
| --- | --- | --- | --- |
| **设备节点号** | **一级设备名** | **二级设备名** | **三级设备名** |
|  |  |  |  |

* 1. 以太网报文描述

{{?NetworkMessages}}

* + 1. {{mesName}}

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **名称** | {{mesName}} | | **标识** | {{mesId}} | |
| **描述** | {{mesDesc}} | | | | |
| **数据源** | {{mesSource}} | **目的地** | {{mesDestination}} | **报文ID** | {{mesIdNum}} |
| **{{mesDatas}}字节序号** | **数据名称** | **数据类型** | **数据长度** | **描述** | |
| [mesDataRange] | [mesDataName] | [mesDataType] | [mesDataLong] | [mesDataDesc] | |
| **备注** |  | | | | |

{{/NetworkMessages}}

* 1. CAN报文描述

{{?CANMessages}}

* + 1. {{mesName}}

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **名称** | {{mesName}} | | **标识** | {{mesId}} | |
| **描述** | {{mesDesc}} | | | | |
| **数据源** | {{mesSource}} | **目的地** | {{mesDestination}} | **报文ID** | {{mesIdNum}} |
| **{{mesDatas}}字节序号** | **数据名称** | **数据类型** | **数据长度** | **描述** | |
| [mesDataRange] | [mesDataName] | [mesDataType] | [mesDataLong] | [mesDataDesc] | |
| **备注** |  | | | | |

{{/CANMessages}}

* 1. USB报文描述

{{?USBMessages}}

* + 1. {{mesName}}

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **名称** | {{mesName}} | | **标识** | {{mesId}} | |
| **描述** | {{mesDesc}} | | | | |
| **数据源** | {{mesSource}} | **目的地** | {{mesDestination}} | **报文ID** | {{mesIdNum}} |
| **{{mesDatas}}字节序号** | **数据名称** | **数据类型** | **数据长度** | **描述** | |
| [mesDataRange] | [mesDataName] | [mesDataType] | [mesDataLong] | [mesDataDesc] | |
| **备注** |  | | | | |

{{/USBMessages}}