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| **Test Specification** |

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| Nr. : | 01 |
| Title: | Test Software Specification |

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# Introduction

The main goals of these rules are to:

* Standardise the way of naming so the “language” is the same for all the developers
* Minimise the adaptation period for new readers : the software is quickly understandable
* Clarify the writing / reading of the source file
* Clarify the architecture of the software

# Macros and type definitions

The macros and type definitions will be written in capital letters. If possible try to minimize exported macros and constants for visibility.

Macros must use a prefix “CNF\_” at the beginning if the macros will be used for configuration propouses.

To define the type of a variable, we used « typedef » to bypass the C compiler default size definition.

The following tables list the type used:

|  |  |  |  |
| --- | --- | --- | --- |
| **Type** | **Definition** | **Size** | **Range** |
| u8 | unsigned char | 1 | 0..255 |
| u16 | unsigned short | 2 | 0..65535 |
| u32 | unsigned long | 4 | 0.. 4294967295 |
| s8 | signed char | 1 | -127.. 127 |
| s16 | short | 2 | -32767.. 32767 |
| s32 | long int | 4 | -2147483647.. 2147483647 |

# Naming rules for variables

Variables must start with a prefix of their layer according with Autosar following with their Module name and then a short description of their function.

All variables will be written with an initial lower case letter

**<AutosarLayer\_AutosarModule\_VariableName>**

For example:

A new variable will be created for the Microcontroller Abstraction Layer in the module of Microcontroller Drivers.

mcal\_mcu\_<variable\_description>

# 

# Naming rules for functions

Function’s names will be created using the Autosar’s Module following with an underscore and a short description of the function. The first letter of every word must be upper case and the rest of the word lower case.

**return <AutosarModule>\_<Description>(params)**

For example:

A new function is created for the Microcontroller Driver module of Autosar, the the function could be defined as the following:

return **M**cu\_**V**ariable**N**ame(params)