

## **SWFMEA – Module M**

This Section documents the verification results for the files M.

The symbols for notes are used in the following sense:

- ✓ failure type does not occur for item
- NA failure type not relevant for item
- failure may occur but is not relevant to Verification Goals
- ! failure may occur and is relevant for Verification Goals

For Data-Related Failures, the following conventions are used to interpret the failure types:

- |           |   |
|-----------|---|
| absent    | C code: variables and parameters can not be absent unless the code does not compile; excluding these situations, the only relevant form of absence for such values is their use without initialization  |
| incorrect | use of incorrect value for variables or parameters or effect of returning incorrect value   |
| timing    | timing is only considered where it is explicitly mentioned; only relevant for data from interfaces.<br>exception: considerations how interrupts of functions may influence code execution. This can in the case of variables be reduced to the case where global values can be changed during such intermediate calculations. |
| duplicate | This can in the case of variables be reduced to the case where global values can be changed during intermediate calculations (due to switch to other task).   |

Data-Related Failures						
Function f		Failure Type		Description		Global Effect
Data Item				Local Effect		Note Id
x	absent	incorrect	incorrect value submitted to call			
	wrong timing					
	duplicate		value changes during calculation			
y	absent	incorrect	incorrect value submitted to call			
	wrong timing					
	duplicate		value changes during calculation			

Data-Related Failures						
Function g		Failure Type	Description	Local Effect	Global Effect	Note
Data Item	Id					
		absent	uninitialized use			
		incorrect	use of incorrect value			
		wrong timing				
		duplicate				

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Functional Failures				
Description	Failure Mode	Location	Local Effect	Global Effect
	omission			
	incorrect logic			

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