SWC_InpMgmt_AFE Test Report

Author: Eaton

09-Jun-2023

Table of Contents

Chapter 1. Overall Results

1.1. InpMgmt_AFE_Complex - Test Summary

Total Test Cases	Untested	Passed	Failed
8	0	5	3

1.2. InpMgmt_AFE_Complex - Test Coverage

Analyzed Model	SimMode	Complexity	Decision	Execution
SWC_InpMgmt_AFE	Normal	8	54%	100%

Chapter 2. Test Description

2.1. InpMgmt_AFE_Complex - Test Cases

Test Case Name	Description	Result
InMgmt_Grid_IR_rf	Test that outputs contains initial values till 40ms.	✅Passed
InMgmt_Grid_IY_rf	Test that outputs contains initial values till 40ms.	✅Passed
InMgmt_Grid_IB_rf	Test that outputs contains initial values till 40ms.	✅Passed
InMgmt_DCV_Act_rf	Test that outputs contains initial values till 200us.	✅Passed
InMgmt_AFE_RefDCV	Test that outputs contains initial values till 200us.	✅Passed
InMgmt_AFE_IGBTTemp	Test that outputs contains initial values till 200us.	❌Failed
InMgmt_BSWIn_AFE_GDR	Test that outputs contains initial values till 200us.	❌Failed
InMgmt_UART_Comm_Signal	Test that outputs contains initial values till 200us.	❌Failed

Chapter 3. Test Summary

3.1. InpMgmt_AFE_Complex- TEST CASES

3.1.1. Test Case: InMgmt_Grid_IR_rf

Test Step: InMgmt_Grid_IR_rf_VerifyOutputs	Result
Inputs:	
HWIn_Grid_I_R_ru=uint16(2149)	
Expected Results:	
InMgmt_Grid_IR_rf==uint16(3)	✅Passed

Go back to Test Description

3.1.2. Test Case: InMgmt_Grid_IY_rf

Test Step: InMgmt_Grid_IY_rf_VerifyOutputs	Result
Inputs:	
HWIn_Grid_I_Y_ru=uint16(2149)	
Expected Results:	
InMgmt_Grid_IY_rf==uint16(3)	✅Passed

Go back to Test Description

3.1.3. Test Case: InMgmt_Grid_IB_rf

Test Step: InMgmt_Grid_IB_rf_VerifyOutputs	Result
Inputs:	
HWIn_Grid_I_B_ru=uint16(2149)	
Expected Results:	
InMgmt_Grid_IB_rf==uint16(3)	✅Passed

Go back to Test Description

3.1.4. Test Case: InMgmt_DCV_Act_rf

Test Step: InMgmt_DCV_Act_rf_VerifyOutputs	Result
Inputs:	
HWIn_DCV_Act_ru=uint16(2149)	
Expected Results:	
InMgmt_DCV_Act_rf==uint16(1049)	✅Passed

Go back to Test Description

3.1.5. Test Case: InMgmt_AFE_RefDCV

Test Step: InMgmt_AFE_RefDCV_VerifyOutputs	Result
Inputs:	

Test Step: InMgmt_AFE_RefDCV_VerifyOutputs	Result
HWInCom_Requested_DCV_Ref_ru=uint16(25)	
Expected Results:	
InMgmt_Requested_DCV_Ref_rf==uint16(25)	✅Passed

Go back to Test Description

3.1.6. Test Case: InMgmt_AFE_IGBTTemp

Test Step: InMgmt_AFE_IGBTTemp_VerifyOutputs	Result
Inputs:	
HWIn_AFE_IGBTTemp=true	
Expected Results:	
InMgmt_AFE_IGBTTemp==false	❌Failed
Actual Results:	
InMgmt_AFE_IGBTTemp = 1	

Go back to Test Description

3.1.7. Test Case: InMgmt_BSWIn_AFE_GDR

Test Step: InMgmt_BSWIn_AFE_GDR_VerifyOutputs	Result
Inputs:	
BSWIn_AFE_GDR=true	
Expected Results:	
InMgmt_AFE_GDR==false	❌Failed
Actual Results:	
InMgmt_AFE_GDR = 1	

Go back to Test Description

3.1.8. Test Case: InMgmt_UART_Comm_Signal

Test Step: InMgmt_UART_Comm_Signal_VerifyOutputs	Result
Inputs:	
UART_Comm_Signal=true	
Expected Results:	
InMgmt_UART_Comm_Signal==false	❌Failed
Actual Results:	
InMgmt_UART_Comm_Signal = 1	

Go back to Test Description