Report Generated by Test Manager

Title: Test

Author: MCBTI

Date: 30-Sep-2025 09:04:30

Test Environment

Platform: GLNXA64 MATLAB: (R2025a)

Summary

Name	Outcome	Duration (Seconds)
Results: 2025-Sep-30 08:55:50	3 🗷	9.218
MOT_CTRL_PWM_FUN	3 🗸	8.914
MOT_CTRL_PWM_FUN_001	•	1.602
MOT CTRL PWM FUN 002	Ø	6.609
MOT_CTRL_PWM_FUN_003	⊘	0.481

Results: 2025-Sep-30 08:55:50

Result Type: Result Set Parent: None

Start Time: 30-Sep-2025 08:55:51 End Time: 30-Sep-2025 08:56:00 Outcome: Total: 3, Passed: 3

Back to Report Summary

MOT CTRL PWM FUN

Test Result Information

Result Type: Test Suite Result

Parent: Results: 2025-Sep-30 08:55:50

Start Time: 30-Sep-2025 08:55:51 End Time: 30-Sep-2025 08:56:00 Outcome: Total: 3, Passed: 3

Test Suite Information

Name: MOT_CTRL_PWM_FUN

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MOT_CTRL_PWM_FUN_001

Test Result Information

Result Type: Test Case Result

Parent: <u>MOT CTRL PWM FUN</u>
Start Time: 30-Sep-2025 08:55:51
End Time: 30-Sep-2025 08:55:52

Outcome: Passed

Description:

Teste do gerador de sinal PWM, de acordo com os requisitos MOT_CTRL_PWM_FUN_001 . Este teste vaida a precisão do sinal PWM.

Test Case Information

Name: MOT_CTRL_PWM_FUN_001

Type: Baseline Test

Test Case Requirements

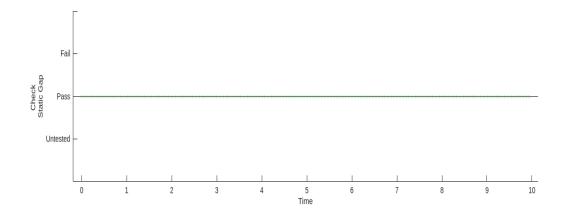
Description: MOT_CTRL_PWM_FUN_001 Geração PWM

Document: MOT_CTRL_PWM.slreqx

Verify Result

Name	Link to Plo
✓ Check	Link
Static Gap	<u>Link</u>

	Name
Check	
Static Gap	



Logical and Temporal Assessments

Name	Assessment
DataTypeVerificat ion	At any point in time, whenever true is true then, with a delay of at most 0.0001 seconds, (re sult_simulation == true) must be true REQUIREMENTS Description: MOT_CTRL_PWM_FUN_001 Geração PWM Document: MOT_CTRL_PWM.slreqx

Simulation

System Under Test Information

Model: PwmGenerator

Harness: MOT_CTRL_PWM_FUN_001

Harness Owner: PwmGenerator

Release: Current Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: Configuration1

Start Time: 0 Stop Time: 10

Checksum: 1378972331 3600151409 2748184173 2179167049

Simulink Version: 25.1 Model Version: 1.10

Model Author: tecnicomcbti

Date: Tue Sep 30 08:07:28 2025

User ID: tecnicomcbti

Model Path: /home/tecnicomcbti/cursoMBD/

model_based_design_with_real_time_hardware_t

esting/Tests/PwmGeneration/ MOT_CTRL_PWM_FUN_001.slx

Solver Name: FixedStepDiscrete

Solver Type: Fixed-Step Fixed Step Size: 0.0001

 Simulation Start Time:
 2025-09-30 08:55:51

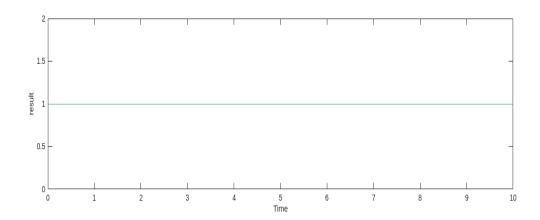
 Simulation Stop Time:
 2025-09-30 08:55:52

Platform: GLNXA64

Simulation Output

Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plo t
result	boolean		0.0001	zoh	union	<u>Link</u>

Name	Data Type	Units	Sample Time	Interp	Sync
result	boolean		0.0001	zoh	union



Simulation Logs:
Sample time of 'MOT_CTRL_PWM_FUN_001/Repeating Sequence Stair/Out'
'Output Port 1' and the sample time specified for this signal by

'MOT_CTRL_PWM_FUN_001/Input Conversion Subsystem/SigSpec_1' must match.

Back to Report Summary

Test Logs:

No baseline criteria evaluation performed as no baseline data is available for this test.

Back to Report Summary

MOT_CTRL_PWM_FUN_002

Test Result Information

Result Type: Test Case Result

Parent: <u>MOT_CTRL_PWM_FUN</u>
Start Time: 30-Sep-2025 08:55:53
End Time: 30-Sep-2025 08:55:59

Outcome: Passed

Description:

Teste do gerador de sinal PWM de acordo com os requisitos MOT_CTRL_PWM_FUN_002. Este teste vaida a frequência do sinal de PWM, com tolerância de 2%. Escolheu-se um valor de ciclo de trabalho fixo em 50%, que é suficiente para validar a análise no espectro da frequência, pois a onda é de período fixo em 1 [ms]. Adiciou-se um delay de 1 segundo para que o processador de sinal responda.

Test Case Information

Name: MOT_CTRL_PWM_FUN_002

Type: Baseline Test

Test Case Requirements

Description: MOT_CTRL_PWM_FUN_002 Frequência do sinal PWM

Document: MOT_CTRL_PWM.slreqx

Logical and Temporal Assessments

Name	Assessment
	At any point in time, whenever (flag == true) is true then, with no delay, (result_simulation == true) must be true
FrequencyAnalysi s	•

Simulation

System Under Test Information

Model: PwmGenerator

Harness: MOT_CTRL_PWM_FUN_002

Harness Owner: PwmGenerator

Release: Current Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: Configuration1

Start Time: 0 Stop Time: 10

Checksum: 1712715897 2432939688 1546082188 3598526386

Simulink Version: 25.1 Model Version: 1.5

Model Author: tecnicomcbti

Date: Tue Sep 30 08:12:56 2025

User ID: tecnicomcbti

Model Path: /home/tecnicomcbti/cursoMBD/

model_based_design_with_real_time_hardware_t

esting/Tests/PwmGeneration/ MOT_CTRL_PWM_FUN_002.slx Solver Name: FixedStepDiscrete

Solver Type: Fixed-Step
Fixed Step Size: 0.0001

 Simulation Start Time:
 2025-09-30 08:55:53

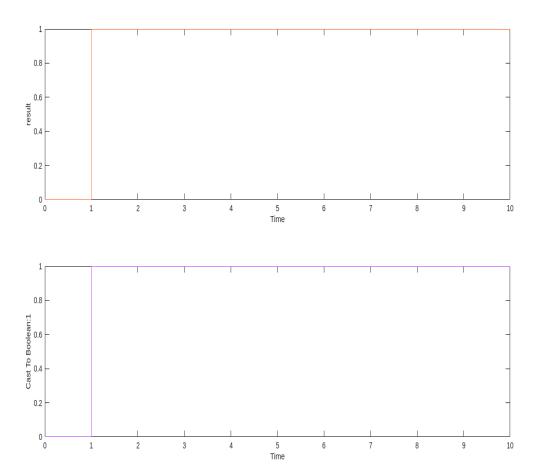
 Simulation Stop Time:
 2025-09-30 08:55:59

Platform: GLNXA64

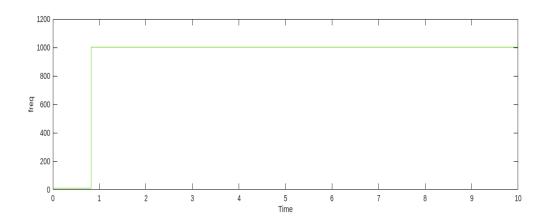
Simulation Output

	Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plo t
resu	ılt	boolean		0.0001	zoh	union	<u>Link</u>
Cast	To Boolean:1	boolean		0.0001	zoh	union	<u>Link</u>
freq	[double	 	0.0001	zoh	union	<u>Link</u>

Name	Data Type	Units	Sample Time	Interp	Sync
result	boolean		0.0001	zoh	union
Cast To Boolean:1	boolean		0.0001	zoh	union



Name	Data Type	Units	Sample Time	Interp	Sync
freq	double	İ	0.0001	zoh	union



Test Logs: No baseline criteria evaluation performed as no baseline data is available for this test.

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MOT_CTRL_PWM_FUN_003

Test Result Information

Result Type: Test Case Result

Parent: <u>MOT CTRL PWM FUN</u>
Start Time: 30-Sep-2025 08:55:59
End Time: 30-Sep-2025 08:56:00

Outcome: Passed

Description:

Teste para verificar se o nível de tensão para a saída PWM está de acordo com o intervalo do nível de tensão TTL.

Test Case Information

Name: MOT_CTRL_PWM_FUN_003

Type: Baseline Test

Test Case Requirements

Description: MOT_CTRL_PWM_FUN_003 SInal compativel com nível TTL

Document: MOT_CTRL_PWM.slreqx

Logical and Temporal Assessments

Name	Assessment
	At any point of time, (result_simulation == true) must be true
CheckTTLVoltage	REQUIREMENTS
Level	Description: MOT_CTRL_PWM_FUN_003 SInal compativel com nível TTL
	Document: MOT_CTRL_PWM.slreqx

Simulation

System Under Test Information

Model: PwmGenerator

Harness: MOT_CTRL_PWM_FUN_003

Harness Owner: PwmGenerator

Release: Current Simulation Mode: normal

Override SIL or PIL Mode: 0

Configuration Set: Configuration1

Start Time: 0 Stop Time: 10

Checksum: 2179236991 4004264220 2984926077 480457920

Simulink Version: 25.1 Model Version: 1.3

Model Author: tecnicomcbti

Date: Tue Sep 30 08:16:59 2025

User ID: tecnicomcbti

Model Path: /home/tecnicomcbti/cursoMBD/

model_based_design_with_real_time_hardware_t

esting/Tests/PwmGeneration/ MOT_CTRL_PWM_FUN_003.slx

Solver Name: FixedStepDiscrete

Solver Type: Fixed-Step Fixed Step Size: 0.0001

 Simulation Start Time:
 2025-09-30 08:55:59

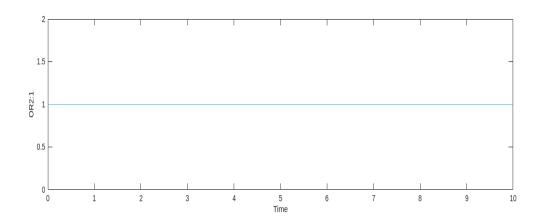
 Simulation Stop Time:
 2025-09-30 08:56:00

Platform: GLNXA64

Simulation Output

Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plo t
OR2:1	boolean		0.0001	zoh	union	<u>Link</u>

Name	Data Type	Units	Sample Time	Interp	Sync
OR2:1	boolean		0.0001	zoh	union



Test Logs: No baseline criteria evaluation performed as no baseline data is available for this test.

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