

Coverage Report for FBFunctions

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Analysis Information

Model Information

Model version	1.63
Author	hiterd
Last saved	Fri Feb 01 22:40:00 2019

Harness information

Harness model(s)	FBFunctions_Harness_OR
Harness model owner	FBFunctions

Simulation Optimization Options

Default parameter behavior	tunable
Block reduction	forced off
Conditional branch optimization	on

Coverage Options

Analyzed model	FBFunctions_Harness_OR/OR_DUPLEX
Logic block short circuiting	off
MCDC mode	masking
Filter filename	slcov_output\FBFunctions_Harness_OR\FBFunctions_Harness_OR_covfilter

Objects Filtered from Coverage Analysis

Model Object

Logic block "[Logical Operator](#)"

Switch block "[Switch1](#)"

[J3.](#) Logic block "[Logical Operator1](#)"

[J4.](#) Logic block "[Logical Operator1](#)"

Rationale

execComplete is always True. Therefore the AND has both inputs high always

execComplete is always True. Therefore the switch is never false

AND FB When DataType 1 and DataType2 are equal, the following combinations cannot occur (1) Type 1 is not Bool/Safebool and Type2 is Bool (2) Type1 is not Bool/Safebool and Type2 is both Bool and SafeBool (3) Type1 is Bool and Type2 is neither Bool nor Safebool (4)Type1 is both Bool and Safebool and Type2 is neither Bool nor Safebool

AND FB When DataType 1 and DataType2 are equal, the following combinations cannot occur (1) Type 1 is not Bool/Safebool and Type2 is Bool (2) Type1 is not Bool/Safebool and Type2 is both Bool and SafeBool (3) Type1 is Bool and Type2 is neither Bool nor Safebool (4)Type1 is both Bool and Safebool and Type2 is neither Bool nor Safebool

Tests

Test# Started execution Ended execution

Test 1 01-Feb-2019 23:13:15 01-Feb-2019 23:16:32

Summary

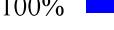
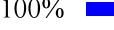
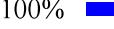
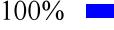
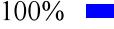
Model Hierarchy/Complexity

Model Hierarchy/Complexity	Test 1							
	Decision	Condition	MCDC	Execution				
1. OR DUPLEX	23 100%		100%		100%		99%	
2. OR	11 100%		100%		100%		100%	
3. 2_val_shift_register	4 NA	NA	NA	NA	100%		100%	
4. Data 1	1 NA	NA	NA	NA	100%		100%	
5. Unit Delay Enabled Resettable	1 NA	NA	NA	NA	100%		100%	
6. Data 2	1 NA	NA	NA	NA	100%		100%	
7. Unit Delay Enabled Resettable	1 NA	NA	NA	NA	100%		100%	
8. Type 1	1 NA	NA	NA	NA	100%		100%	
9. Unit Delay Enabled	1 NA	NA	NA	NA	100%		100%	

Resettable

10.....	Type 2	1	NA	NA	NA	100%				
11.....	Unit Delay Enabled	1	NA	NA	NA	100%				
<u>Resettable</u>										
12.....	TypeCheck2T2D	1	100%		100%		100%		100%	
13.....	code type bit		NA	NA	NA	100%				
14.....	cond_generate_error_code	1	100%		NA	NA	100%			
15.....	code_no_error		NA	NA	NA	100%				
16.....	isType1		NA	100%		NA	100%			
17.....	isType		NA	100%		NA	100%			
18.....	typeMask		NA	NA	NA	100%				
19.....	isType1		NA	100%		NA	100%			
20.....	typeMask		NA	NA	NA	100%				
21.....	isType2		NA	100%		NA	100%			
22.....	isType		NA	100%		NA	100%			
23.....	typeMask		NA	NA	NA	100%				
24.....	isType1		NA	100%		NA	100%			
25.....	typeMask		NA	NA	NA	100%				
26.....	isTypeMatch2		NA	100%		NA	100%			
27.....	typeMask		NA	NA	NA	100%				
28.....	typeMask1		NA	NA	NA	100%				
29.....	Unit Delay Enabled Resettable Synchronous8	1	NA	NA	NA	100%				
30.....	Unit Delay Enabled Resettable	1	NA	NA	NA	100%				
31.....	Unit Delay Enabled Resettable Synchronous9	1	NA	NA	NA	100%				
32.....	Unit Delay Enabled Resettable	1	NA	NA	NA	100%				
33.....	bool type		NA	NA	NA	100%				
34.....	boolToSafebool	1	100%		NA	NA	100%			
35.....	safebool false		NA	NA	NA	100%				
36.....	safebool true		NA	NA	NA	100%				
37.....	isType		NA	100%		NA	100%			
38.....	typeMask		NA	NA	NA	100%				
39.....	safebool type		NA	NA	NA	100%				
40.....	safebool type1		NA	NA	NA	100%				
41.....	safeboolToBool1		NA	100%		NA	100%			
42.....	safebool true		NA	NA	NA	100%				
43.....	safeboolToBool2		NA	100%		NA	100%			

44. safebool true	NA	NA	NA	100%			
45. OR1	11	100%		100%		100%	
46. 2_val_shift_register	4	NA	NA	NA	100%		
47. Data 1	1	NA	NA	NA	100%		
48. Unit Delay Enabled Resettable	1	NA	NA	NA	100%		
49. Data 2	1	NA	NA	NA	100%		
50. Unit Delay Enabled Resettable	1	NA	NA	NA	100%		
51. Type 1	1	NA	NA	NA	100%		
52. Unit Delay Enabled Resettable	1	NA	NA	NA	100%		
53. Type 2	1	NA	NA	NA	100%		
54. Unit Delay Enabled Resettable	1	NA	NA	NA	100%		
55. TypeCheck2T2D	1	100%		100%		100%	
56. code_type_bit	NA	NA	NA	100%			
57. cond_generate_error_code	1	100%		NA	NA	100%	
58. code_no_error	NA	NA	NA	100%			
59. isType1	NA	100%		NA	100%		
60. isType	NA	100%		NA	100%		
61. typeMask	NA	NA	NA	100%			
62. isType1	NA	100%		NA	100%		
63. typeMask	NA	NA	NA	100%			
64. isType2	NA	100%		NA	100%		
65. isType	NA	100%		NA	100%		
66. typeMask	NA	NA	NA	100%			
67. isType1	NA	100%		NA	100%		
68. typeMask	NA	NA	NA	100%			
69. isTypeMatch2	NA	100%		NA	100%		
70. typeMask	NA	NA	NA	100%			
71. typeMask1	NA	NA	NA	100%			
72. Unit Delay Enabled Resettable Synchronous8	1	NA	NA	NA	100%		
73. Unit Delay Enabled Resettable	1	NA	NA	NA	100%		
74. Unit Delay Enabled Resettable Synchronous9	1	NA	NA	NA	100%		
75. Unit Delay Enabled Resettable	1	NA	NA	NA	100%		
76. bool type	NA	NA	NA	100%			

77..... boolToSafebool	1	100%	 NA	NA	100%	
78..... safebool false		NA	NA	NA	100%	
79..... safebool true		NA	NA	NA	100%	
80..... isType		NA	100%	 NA	100%	
81..... typeMask		NA	NA	NA	100%	
82..... safebool type		NA	NA	NA	100%	
83..... safebool type1		NA	NA	NA	100%	
84..... safeboolToBool1		NA	100%	 NA	100%	
85..... safebool true		NA	NA	NA	100%	
86..... safeboolToBool2		NA	100%	 NA	100%	
87..... safebool true		NA	NA	NA	100%	
88.... State Comparator		NA	100%	 NA	75%	
89..... Compare To Zero		NA	100%	 NA	100%	
90.... combine_error_codes		NA	NA	NA	100%	

Details

1. SubSystem block "[OR_DUPLEX](#)"

Child Systems: [OR](#), [OR1](#), [State Comparator](#), [combine_error_codes](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	23
Condition	NA	100% (140/140) condition outcomes
Decision	NA	100% (20/20) decision outcomes
MCDC	NA	100% ((24+8)/32) conditions reversed the outcome
Execution	NA	99% (108/109) objective outcomes

Full Coverage

Model Object	Metric
RelationalOperator block " Relational Operator "	Condition, Execution
Constant block " Num Ins "	Execution
Constant block " Num Outs "	Execution
Constant block " fb_num_constant "	Execution

2. SubSystem block "[OR](#)"

[Justify or Exclude](#)

Parent:

[FBFunctions_Harness_OR/OR_DUPLEX](#)

Child Systems:

[2_val_shift_register](#), [TypeCheck2T2D](#), [Unit Delay Enabled Resettable Synchronous8](#), [Unit Delay Enabled Resettable Synchronous9](#), [bool type boolToSafebool](#), [isType](#), [safebool type](#), [safebool type1](#), [safeboolToBool1](#), [safeboolToBool2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	11
Condition	NA	100% (62/62) condition outcomes
Decision	NA	100% (10/10) decision outcomes
MCDC	NA	100% ((12+4)/16) conditions reversed the outcome
Execution	NA	100% (50/50) objective outcomes

Logic block "[Logical Operator3](#)"

[Justify or Exclude](#)

Parent:

[FBFunctions_Harness_OR/OR_DUPLEX/OR](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (4/4) condition outcomes
MCDC	see Logical Operator
Execution	100% (1/1) objective outcomes

Full Coverage

Model Object

- Logic block "[Logical Operator](#)"
- Logic block "[Logical Operator1](#)"
- Logic block "[Logical Operator2](#)"
- Logic block "[Logical Operator4](#)"
- Logic block "[Logical Operator5](#)"

Metric

- Condition, MCDC, Execution

Logic block " Logical Operator6 "	Condition, Execution
Switch block " Switch "	Decision, Execution
Switch block " Switch1 "	Decision, Execution
Switch block " Switch2 "	Decision, Execution
Constant block " Constant "	Execution
Constant block " Constant1 "	Execution

3. SubSystem block "[2_val_shift_register](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR](#)

Child Systems: [Data 1](#), [Data 2](#), [Type 1](#), [Type 2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Execution	NA	100% (4/4) objective outcomes

4. SubSystem block "[Data 1](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/2_val_shift_register](#)

Child Systems: [Unit Delay Enabled Resettable](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Execution	NA	100% (1/1) objective outcomes

5. SubSystem block "[Unit Delay Enabled Resettable](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/2_val_shift_register/Data 1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Delay block " Enabled Resettable Delay "	Execution

6. SubSystem block "[Data 2](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/2_val_shift_register](#)

Child Systems: [Unit Delay Enabled Resettable](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Execution	NA	100% (1/1) objective outcomes

7. SubSystem block "[Unit Delay Enabled Resettable](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/2_val_shift_register/Data 2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Delay block " Enabled Resettable Delay "	Execution

8. SubSystem block "[Type 1](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/2_val_shift_register](#)

Child Systems: [Unit Delay Enabled Resettable](#)

Metric	Coverage (this object)	Coverage (inc. descendants)

Cyclomatic Complexity	0	1
Execution	NA	100% (1/1) objective outcomes

9. SubSystem block "Unit Delay Enabled Resettable"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/2_val_shift_register/Type 1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Delay block " Enabled Resettable Delay "	Execution

10. SubSystem block "Type 2"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/2_val_shift_register](#)

Child Systems: [Unit Delay Enabled Resettable](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Execution	NA	100% (1/1) objective outcomes

11. SubSystem block "Unit Delay Enabled Resettable"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/2_val_shift_register/Type 2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Delay block " Enabled Resettable Delay "	Execution

12. SubSystem block "[TypeCheck2T2D](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR](#)

Child Systems: [code_type_bit](#), [cond_generate_error_code](#), [isType1](#), [isType2](#), [isTypeMatch2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Condition	NA	100% (30/30) condition outcomes
Decision	NA	100% (2/2) decision outcomes
MCDC	NA	100% ((1+4)/5) conditions reversed the outcome
Execution	NA	100% (20/20) objective outcomes

Logic block "[Logical Operator](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (2/2) condition outcomes
MCDC	see Logical Operator1
Execution	100% (1/1) objective outcomes

Logic block "[Logical Operator1](#)"

Justified J3.

AND FB When DataType 1 and DataType2 are equal, the following combinations cannot occur
(1) Type 1 is not Bool/Safebool and Type2 is Bool (2) Type1 is not Bool/Safebool and Type2 is both Bool and SafeBool (3) Type1 is Bool and Type2 is neither Bool nor Safebool (4)Type1 is both Bool and Safebool and Type2 is neither Bool nor Safebool

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (6/6) condition outcomes
MCDC	100% ((1+4)/5) conditions reversed the outcome
Execution	100% (1/1) objective outcomes

MC/DC analysis (combinations in parentheses did not occur)

Includes 6 blocks

Decision/Condition	True Out	False Out
(~C1 ~(C2 C3)) ~(C4 C5)		
C1 (Logical Operator In1)	F TFFT	T TF T F
C2 (Logical Operator In1)	(T F FTF)	T T F TF
C3 (Logical Operator In2)	(T F FTT)	T F T FT
C4 (Logical Operator In1)	(TT F FF)	TT F T F
C5 (Logical Operator In2)	(TTT F F)	T FT F T

Logic block "Logical Operator2"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (2/2) condition outcomes
MCDC	see Logical Operator1
Execution	100% (1/1) objective outcomes

Logic block "Logical Operator3"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (2/2) condition outcomes
MCDC	see Logical Operator1

Execution 100% (1/1) objective outcomes

13. SubSystem block "[code_type_bit](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object

Constant block "[type1](#)"

Metric

Execution

14. SubSystem block "[cond_generate_error_code](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D](#)

Child Systems: [code_no_error](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Decision	NA	100% (2/2) decision outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object

Switch block "[Switch](#)"

Metric

Decision, Execution

15. SubSystem block "[code_no_error](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D/cond_generate_error_code](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Constant block " type1 "	Execution

16. SubSystem block "[isType1](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D](#)

Child Systems: [isType](#), [isType1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (8/8) condition outcomes
Execution	NA	100% (5/5) objective outcomes

Logic block "[Logical Operator](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D/isType1](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (4/4) condition outcomes
MCDC	see Logical Operator1
Execution	100% (1/1) objective outcomes

17. SubSystem block "[isType](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D/isType1](#)

Child Systems: [typeMask](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object

Metric

RelationalOperator block "[Relational Operator1](#)" Condition, Execution

18. SubSystem block "[typeMask](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D/isType1/isType](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object

Metric

S-Function block "[Apply Type Mask](#)" Execution

19. SubSystem block "[isType1](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D/isType1](#)

Child Systems: [typeMask](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object Metric

RelationalOperator block "[Relational Operator1](#)" Condition, Execution

20. SubSystem block "[typeMask](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D/isType1/isType1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object Metric

S-Function block "[Apply Type Mask](#)" Execution

21. SubSystem block "[isType2](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D](#)

Child Systems: [isType](#), [isType1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (8/8) condition outcomes
Execution	NA	100% (5/5) objective outcomes

Logic block "[Logical Operator](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D/isType2](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (4/4) condition outcomes
MCDC	see Logical Operator1
Execution	100% (1/1) objective outcomes

22. SubSystem block "[isType](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D/isType2](#)
Child Systems: [typeMask](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object

Metric

RelationalOperator block "[Relational Operator1](#)" Condition, Execution

23. SubSystem block "[typeMask](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D/isType2/isType](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object

Metric

S-Function block "[Apply Type Mask](#)" Execution

24. SubSystem block "[isType1](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D/isType2](#)
Child Systems: [typeMask](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object

Metric

RelationalOperator block "[Relational Operator1](#)" Condition, Execution

25. SubSystem block "[typeMask](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D/isType2/isType1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object

Metric

S-Function block "[Apply Type Mask](#)" Execution

26. SubSystem block "[isTypeMatch2](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D](#)

Child Systems: [typeMask](#), [typeMask1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (3/3) objective outcomes

Full Coverage

Model Object **Metric**

RelationalOperator block "[Relational Operator1](#)" Condition, Execution

27. SubSystem block "[typeMask](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D/isTypeMatch2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object **Metric**

S-Function block "[Apply Type Mask](#)" Execution

28. SubSystem block "[typeMask1](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/TypeCheck2T2D/isTypeMatch2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
S-Function block " Apply Type Mask "	Execution

29. SubSystem block "[Unit Delay Enabled Resettable Synchronous](#)..."

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR](#)

Child Systems: [Unit Delay Enabled Resettable](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Execution	NA	100% (1/1) objective outcomes

30. SubSystem block "[Unit Delay Enabled Resettable](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/Unit Delay Enabled Resettable Synchronous8](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Delay block " Enabled Resettable Delay "	Execution

31. SubSystem block "[Unit Delay Enabled Resettable Synchronous](#)..."

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR](#)

Child Systems: [Unit Delay Enabled Resettable](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Execution	NA	100% (1/1) objective outcomes

32. SubSystem block "Unit Delay Enabled Resettable"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/Unit Delay Enabled Resettable Synchronous9](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Delay block " <u>Enabled Resettable Delay</u> "	Execution

33. SubSystem block "bool type"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Constant block " <u>type1</u> "	Execution

34. SubSystem block "boolToSafebool"

Justify or Exclude

Parent:

[FBFunctions_Harness_OR/OR_DUPLEX/OR](#)

Child Systems:

[safebool false](#), [safebool true](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Decision	NA	100% (2/2) decision outcomes
Execution	NA	100% (3/3) objective outcomes

Full Coverage

Model Object

Switch block "[Switch](#)"

Metric

Decision, Execution

35. SubSystem block "[safebool false](#)"

Justify or Exclude

Parent:

[FBFunctions_Harness_OR/OR_DUPLEX/OR/boolToSafebool](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object

Constant block "[type1](#)"

Metric

Execution

36. SubSystem block "[safebool true](#)"

Justify or Exclude

Parent:

[FBFunctions_Harness_OR/OR_DUPLEX/OR/boolToSafebool](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Constant block " type1 "	Execution

37. SubSystem block "[isType](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR](#)
Child Systems: [typeMask](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object	Metric
RelationalOperator block " Relational Operator1 "	Condition, Execution

38. SubSystem block "[typeMask](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/isType](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
S-Function block " Apply Type Mask "	

Execution

39. SubSystem block "[safebool type](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object

Constant block "[type1](#)"

Metric

Execution

40. SubSystem block "[safebool type1](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object

Constant block "[type1](#)"

Metric

Execution

41. SubSystem block "[safeboolToBool1](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR](#)

Child Systems: [safebool true](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object	Metric
RelationalOperator block " Relational Operator "	Condition, Execution

42. SubSystem block "[safebool true](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/safeboolToBool1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Constant block " type1 "	Execution

43. SubSystem block "[safeboolToBool2](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR](#)
Child Systems: [safebool true](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object	Metric
RelationalOperator block " Relational Operator "	Condition, Execution

44. SubSystem block "[safebool true](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR/safeboolToBool2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Constant block " type1 "	Execution

45. SubSystem block "[OR1](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX](#)

Child Systems: [2_val_shift_register](#), [TypeCheck2T2D](#), [Unit Delay Enabled Resettable Synchronous8](#), [Unit Delay Enabled Resettable Synchronous9](#), [bool type](#), [boolToSafebool](#), [isType](#), [safebool type](#), [safebool type1](#), [safeboolToBool1](#), [safeboolToBool2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	11
Condition	NA	100% (62/62) condition outcomes
Decision	NA	100% (10/10) decision outcomes
MCDC	NA	100% ((12+4)/16) conditions reversed the outcome
Execution	NA	100% (50/50) objective outcomes

Logic block "[Logical Operator3](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (4/4) condition outcomes
MCDC	<u>see Logical Operator</u>
Execution	100% (1/1) objective outcomes

Full Coverage

Model Object

Logic block "[Logical Operator](#)"

Logic block "[Logical Operator1](#)"

Logic block "[Logical Operator2](#)"

Logic block "[Logical Operator4](#)"

Logic block "[Logical Operator5](#)"

Logic block "[Logical Operator6](#)"

Switch block "[Switch](#)"

Switch block "[Switch1](#)"

Switch block "[Switch2](#)"

Constant block "[Constant](#)"

Constant block "[Constant1](#)"

Metric

Condition, MCDC, Execution

Condition, Execution

Decision, Execution

Decision, Execution

Decision, Execution

Execution

Execution

46. SubSystem block "[2_val_shift_register](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1](#)

Child Systems: [Data 1](#), [Data 2](#), [Type 1](#), [Type 2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Execution	NA	100% (4/4) objective outcomes

47. SubSystem block "[Data 1](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/2_val_shift_register](#)

Child Systems: [Unit Delay Enabled Resettable](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Execution	NA	100% (1/1) objective outcomes

48. SubSystem block "[Unit Delay Enabled Resettable](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/2_val_shift_register/Data 1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object

Delay block "[Enabled Resettable Delay](#)"

Metric

Execution

49. SubSystem block "[Data 2](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/2_val_shift_register](#)

Child Systems: [Unit Delay Enabled Resettable](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Execution	NA	100% (1/1) objective outcomes

50. SubSystem block "[Unit Delay Enabled Resettable](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/2_val_shift_register/Data](#)
2

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Delay block " <u>Enabled Resettable Delay</u> "	Execution

51. SubSystem block "[Type 1](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/2_val_shift_register](#)
Child Systems: [Unit Delay Enabled Resettable](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Execution	NA	100% (1/1) objective outcomes

52. SubSystem block "[Unit Delay Enabled Resettable](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/2_val_shift_register/Type](#)
1

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Delay block " <u>Enabled Resettable Delay</u> "	

Execution

53. SubSystem block "[Type 2](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/2_val_shift_register](#)

Child Systems: [Unit Delay Enabled Resettable](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Execution	NA	100% (1/1) objective outcomes

54. SubSystem block "[Unit Delay Enabled Resettable](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/2_val_shift_register/Type 2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object **Metric**

Delay block "[Enabled Resettable Delay](#)" Execution

55. SubSystem block "[TypeCheck2T2D](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1](#)

Child Systems: [code_type_bit](#), [cond_generate_error_code](#), [isType1](#), [isType2](#), [isTypeMatch2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Condition	NA	100% (30/30) condition outcomes

Decision	NA	100% (2/2) decision outcomes
MCDC	NA	100% ((1+4)/5) conditions reversed the outcome
Execution	NA	100% (20/20) objective outcomes

Logic block "Logical Operator"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (2/2) condition outcomes
MCDC	see Logical Operator1
Execution	100% (1/1) objective outcomes

Logic block "Logical Operator1"

Justified J4.

AND FB When DataType 1 and DataType2 are equal, the following combinations cannot occur
(1) Type 1 is not Bool/Safebool and Type2 is Bool (2) Type1 is not Bool/Safebool and Type2 is both Bool and SafeBool (3) Type1 is Bool and Type2 is neither Bool nor Safebool (4) Type1 is both Bool and Safebool and Type2 is neither Bool nor Safebool

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (6/6) condition outcomes
MCDC	100% ((1+4)/5) conditions reversed the outcome
Execution	100% (1/1) objective outcomes

MC/DC analysis (combinations in parentheses did not occur)

Includes 6 blocks

Decision/Condition	True Out	False Out
(~C1 ~(C2 C3)) ~(C4 C5)		
C1 (Logical Operator In1)	F TTFF	T TF T F
C2 (Logical Operator In1)	(T FFTF)	T T F TF
C3 (Logical Operator In2)	(T FFTT)	T F TFT

C4 (Logical Operator In1)	(TTFFF)	TTFTF
C5 (Logical Operator In2)	(TTTFF)	TFTFT

Logic block "Logical Operator2"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (2/2) condition outcomes
MCDC	see Logical Operator1
Execution	100% (1/1) objective outcomes

Logic block "Logical Operator3"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (2/2) condition outcomes
MCDC	see Logical Operator1
Execution	100% (1/1) objective outcomes

56. SubSystem block "code_type_bit"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model ObjectConstant block "[type1](#)"**Metric**

Execution

57. SubSystem block "[cond_generate_error_code](#)"**Justify or Exclude****Parent:** [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D](#)**Child Systems:** [code_no_error](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Decision	NA	100% (2/2) decision outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage**Model Object**Switch block "[Switch](#)"**Metric**

Decision, Execution

58. SubSystem block "[code_no_error](#)"**Justify or Exclude****Parent:** [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D/cond_generate_error_code](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage**Model Object**Constant block "[type1](#)"**Metric**

Execution

59. SubSystem block "[isType1](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D](#)

Child Systems: [isType](#), [isType1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (8/8) condition outcomes
Execution	NA	100% (5/5) objective outcomes

Logic block "[Logical Operator](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D/isType1](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (4/4) condition outcomes
MCDC	see Logical Operator1
Execution	100% (1/1) objective outcomes

60. SubSystem block "[isType](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D/isType1](#)

Child Systems: [typeMask](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object

RelationalOperator block "[Relational Operator1](#)" Condition, Execution

Metric

61. SubSystem block "[typeMask](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D/isType1/isType](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object

S-Function block "[Apply Type Mask](#)"

Metric

Execution

62. SubSystem block "[isType1](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D/isType1](#)

Child Systems: [typeMask](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object

RelationalOperator block "[Relational Operator1](#)" Condition, Execution

63. SubSystem block "[typeMask](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D/isType1/isType1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
S-Function block " Apply Type Mask "	Execution

64. SubSystem block "[isType2](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D](#)
Child Systems: [isType](#), [isType1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (8/8) condition outcomes
Execution	NA	100% (5/5) objective outcomes

Logic block "[Logical Operator](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D/isType2](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (4/4) condition outcomes
MCDC	see Logical Operator1
Execution	100% (1/1) objective outcomes

65. SubSystem block "[isType](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D/isType2](#)
Child Systems: [typeMask](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes

Execution	NA	100% (2/2) objective outcomes
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Full Coverage

Model Object	Metric
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RelationalOperator block "[Relational Operator1](#)" Condition, Execution

66. SubSystem block "[typeMask](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D/isType2/isType](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
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S-Function block "[Apply Type Mask](#)" Execution

67. SubSystem block "[isType1](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D/isType2](#)

Child Systems: [typeMask](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object	Metric
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RelationalOperator block "[Relational Operator1](#)" Condition, Execution

68. SubSystem block "[typeMask](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D/isType2/isType1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object

S-Function block "[Apply Type Mask](#)"

Metric

Execution

69. SubSystem block "[isTypeMatch2](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D](#)

Child Systems: [typeMask, typeMask1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (3/3) objective outcomes

Full Coverage

Model Object

RelationalOperator block "[Relational Operator1](#)" Condition, Execution

Metric

70. SubSystem block "[typeMask](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D/isTypeMatch2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object

S-Function block "[Apply Type Mask](#)"

Metric

Execution

71. SubSystem block "[typeMask1](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/TypeCheck2T2D/isTypeMatch2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object

S-Function block "[Apply Type Mask](#)"

Metric

Execution

72. SubSystem block "[Unit Delay Enabled Resettable Synchronou...](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1](#)

Child Systems: [Unit Delay Enabled Resettable](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Execution	NA	100% (1/1) objective outcomes

73. SubSystem block "[Unit Delay Enabled Resettable](#)"

[Justify or Exclude](#)

Parent:

[FBFunctions_Harness_OR/OR_DUPLEX/OR1/Unit Delay Enabled
Resettable Synchronous8](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object

Delay block "[Enabled Resettable Delay](#)"

Metric

Execution

74. SubSystem block "[Unit Delay Enabled Resettable Synchronou...](#)"

[Justify or Exclude](#)

Parent:

[FBFunctions_Harness_OR/OR_DUPLEX/OR1
Unit Delay Enabled Resettable](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Execution	NA	100% (1/1) objective outcomes

75. SubSystem block "[Unit Delay Enabled Resettable](#)"

[Justify or Exclude](#)

Parent:

[FBFunctions_Harness_OR/OR_DUPLEX/OR1/Unit Delay Enabled
Resettable Synchronous9](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Delay block " Enabled Resettable Delay "	Execution

76. SubSystem block "[bool type](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Constant block " type1 "	Execution

77. SubSystem block "[boolToSafebool](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1](#)

Child Systems: [safebool false](#), [safebool true](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Decision	NA	100% (2/2) decision outcomes
Execution	NA	100% (3/3) objective outcomes

Full Coverage

Model Object	Metric
Switch block " Switch "	Decision, Execution

78. SubSystem block "[safebool false](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/boolToSafebool](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Constant block " type1 "	Execution

79. SubSystem block "[safebool true](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/boolToSafebool](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Constant block " type1 "	Execution

80. SubSystem block "[isType](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1](#)

Child Systems: [typeMask](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object	Metric
RelationalOperator block " Relational Operator1 "	Condition, Execution

81. SubSystem block "[typeMask](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/isType](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
S-Function block " Apply Type Mask "	Execution

82. SubSystem block "[safebool type](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Constant block " type1 "	Execution

83. SubSystem block "[safebool type1](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object

Constant block "[type1](#)"

Metric

Execution

84. SubSystem block "[safeboolToBool1](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1](#)

Child Systems: [safebool true](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object

RelationalOperator block "[Relational Operator](#)" Condition, Execution

Metric

85. SubSystem block "[safebool true](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/safeboolToBool1](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
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Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Constant block " type1 "	Execution

86. SubSystem block "[safeboolToBool2](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1](#)

Child Systems: [safebool true](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object	Metric
RelationalOperator block " Relational Operator "	Condition, Execution

87. SubSystem block "[safebool true](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/OR1/safeboolToBool2](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Constant block " type1 "	Execution

88. SubSystem block "[State Comparator](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX](#)
Child Systems: [Compare To Zero](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Condition	NA	100% (14/14) condition outcomes
Execution	NA	75% (3/4) objective outcomes

Constant block "[Constant1](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/State Comparator](#)

Metric	Coverage
Cyclomatic Complexity	0
Execution	0% (0/1) objective outcomes

Full Coverage

Model Object	Metric
Sum block " Sum of Elements "	Execution
RelationalOperator block " Relational Operator "	Condition, Execution

89. SubSystem block "[Compare To Zero](#)"

[Justify or Exclude](#)

Parent: [FBFunctions_Harness_OR/OR_DUPLEX/State Comparator](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0

Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
RelationalOperator block " Compare "	Condition, Execution

90. SubSystem block "[combine_error_codes](#)"

Justify or Exclude

Parent: [FBFunctions_Harness_OR/OR_DUPLEX](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
S-Function block " Bitwise Operator "	Execution