Coverage Report for FBFunctions

Table of Contents

Analysis Information

Model Information

Model version	1.73
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Last saved	Mon Feb 04 22:27:15 2019

Harness information

Harness model(s)	FBFunctions_Harness_BXOR
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_BXOR/BXOR_DUPLEX
Logic block short circuiting	off
MCDC mode	masking

Tests

Test#	Started execution	Ended execution
Test 1	04-Feb-2019 22:29:04	04-Feb-2019 22:32:07

Summary

Model Hierarchy/Complexity	Test 1							
		Decision		Condition		MCDC		Execution
1. BXOR_DUPLEX	20	93%		98%		64%		99%
2. . . . BXOR	9	100%		100%		70%		100%
3. . . . . 2_val_shift_register	4	NA		NA		NA		100%
4. . . . . Data 1	1	NA		NA		NA		100%
5. . . . . Unit Delay Enabled Resettable	1	NA		NA		NA		100%
6. . . . . Data 2	1	NA		NA		NA		100%
7. . . . . Unit Delay Enabled Resettable	1	NA		NA		NA		100%
8. . . . . Type 1	1	NA		NA		NA		100%
9. . . . . Unit Delay Enabled Resettable	1	NA		NA		NA		100%
10. . . . . Type 2	1	NA		NA		NA		100%
11. . . . . Unit Delay Enabled Resettable	1	NA		NA		NA		100%
12. . . . . TypeCheck2T1D	1	100%		100%		0%		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. . . . . isType		NA		100%		NA		100%
17. . . . . typeMask		NA		NA		NA		100%
18. . . . . isType1		NA		100%		NA		100%
19. . . . . typeMask		NA		NA		NA		100%
20. . . . . isTypeMatch2		NA		100%		NA		100%
21. . . . . typeMask		NA		NA		NA		100%
22. . . . . typeMask1		NA		NA		NA		100%
23. . . . . Unit Delay Enabled Resettable Synchronous8	1	NA		NA		NA		100%
24. . . . . Unit Delay Enabled Resettable	1	NA		NA		NA		100%
25. . . . . Unit Delay Enabled Resettable Synchronous9	1	NA		NA		NA		100%
26. . . . . Unit Delay Enabled Resettable	1	NA		NA		NA		100%
27. . . . . int type		NA		NA		NA		100%
28. . . . BXOR1	9	100%		100%		70%		100%
29. . . . . 2_val_shift_register	4	NA		NA		NA		100%
30. . . . . Data 1	1	NA		NA		NA		100%
31. . . . . Unit Delay Enabled Resettable	1	NA		NA		NA		100%
32. . . . . Data 2	1	NA		NA		NA		100%
33. . . . . Unit Delay Enabled Resettable	1	NA		NA		NA		100%
34. . . . . Type 1	1	NA		NA		NA		100%
35. . . . . Unit Delay Enabled Resettable	1	NA		NA		NA		100%

36. . . . . Type 2	1	NA		NA		NA		100%
37. . . . . Unit Delay Enabled Resettable	1	NA		NA		NA		100%
38. . . . . TypeCheck2T1D	1	100%		100%		0%		100%
39. . . . . code_type_bit		NA		NA		NA		100%
40. . . . . cond_generate_error_code	1	100%		NA		NA		100%
41. . . . . code_no_error		NA		NA		NA		100%
42. . . . . isType		NA		100%		NA		100%
43. . . . . typeMask		NA		NA		NA		100%
44. . . . . isType1		NA		100%		NA		100%
45. . . . . typeMask		NA		NA		NA		100%
46. . . . . isTypeMatch2		NA		100%		NA		100%
47. . . . . typeMask		NA		NA		NA		100%
48. . . . . typeMask1		NA		NA		NA		100%
49. . . . . Unit Delay Enabled Resettable Synchronous8	1	NA		NA		NA		100%
50. . . . . Unit Delay Enabled Resettable	1	NA		NA		NA		100%
51. . . . . Unit Delay Enabled Resettable Synchronous9	1	NA		NA		NA		100%
52. . . . . Unit Delay Enabled Resettable	1	NA		NA		NA		100%
53. . . . . int type		NA		NA		NA		100%
54. . . . State Comparator	1	50%		100%		NA		80%
55. . . . . Compare To Zero		NA		100%		NA		100%
56. . . . combine_error_codes		NA		NA		NA		100%

Details

1. SubSystem block "BXOR_DUPLEX"

Child Systems: BXOR, BXOR1, State Comparator, combine_error_codes

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	20
Condition	NA	98% (86/88) condition outcomes
Decision	NA	93% (13/14) decision outcomes
MCDC	NA	64% (14/22) conditions reversed the outcome
Execution	NA	99% (70/71) objective outcomes

Logic block "Logical Operator"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	0
Condition	50% (2/4) condition outcomes
MCDC	0% (0/2) conditions reversed the outcome
Execution	100% (1/1) objective outcomes

Conditions analyzed

Description	True	False
input port 1	110	0
input port 2	110	0

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

Decision/Condition	True Out	False Out
expression for output		
input port 1	**T**T	(**F**T)
input port 2	T**T**	(T**F**)

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 "BXOR"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX

Child Systems: 2_val_shift_register, TypeCheck2T1D, Unit Delay Enabled Resettable Synchronous8, Unit Delay Enabled Resettable Synchronous9, int type

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	9
Condition	NA	100% (34/34) condition outcomes

Decision	NA	100% (6/6) decision outcomes
MCDC	NA	70% (7/10) conditions reversed the outcome
Execution	NA	100% (30/30) objective outcomes

Logic block "Logical Operator3"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR

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	Metric
Logic block "Logical Operator"	Condition, MCDC, Execution
Logic block "Logical Operator1"	Condition, MCDC, Execution
Logic block "Logical Operator2"	Condition, MCDC, Execution
Switch block "Switch"	Decision, Execution
Switch block "Switch1"	Decision, Execution
S-Function block "Bitwise Operator"	Execution
Constant block "Constant"	Execution
Constant block "Constant1"	Execution

3. SubSystem block "2_val_shift_register"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR
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_BXOR/BXOR_DUPLEX/BXOR/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_BXOR/BXOR_DUPLEX/BXOR/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_BXOR/BXOR_DUPLEX/BXOR/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_BXOR/BXOR_DUPLEX/BXOR/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_BXOR/BXOR_DUPLEX/BXOR/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_BXOR/BXOR_DUPLEX/BXOR/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_BXOR/BXOR_DUPLEX/BXOR/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_BXOR/BXOR_DUPLEX/BXOR/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 "TypeCheck2T1D"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR

Child Systems: code_type_bit, cond_generate_error_code, isType, isType1, isTypeMatch2

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Condition	NA	100% (18/18) condition outcomes
Decision	NA	100% (2/2) decision outcomes
MCDC	NA	0% (0/3) conditions reversed the outcome
Execution	NA	100% (14/14) objective outcomes

Logic block "Logical Operator1"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR/TypeCheck2T1D

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (6/6) condition outcomes
MCDC	0% (0/3) conditions reversed the outcome
Execution	100% (1/1) objective outcomes

MC/DC analysis (combinations in parentheses did not occur)
Includes 4 blocks

Decision/Condition	True Out	False Out
(~C1 || ~C2) || ~C3		
C1 (Logical Operator4 In1)	(**F**TT)	**T**TT
C2 (Logical Operator2 In1)	(T**F**T)	T**T**T
C3 (Logical Operator3 In1)	(TT**F**)	TT**T**

Logic block "Logical Operator2"

Justify or Exclude
Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR/TypeCheck2T1D

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_BXOR/BXOR_DUPLEX/BXOR/TypeCheck2T1D

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

Logic block "Logical Operator4"

Justify or Exclude
Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR/TypeCheck2T1D

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_BXOR/BXOR_DUPLEX/BXOR/TypeCheck2T1D

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

14. SubSystem block "cond_generate_error_code"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR/TypeCheck2T1D
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	Metric
Switch block "Switch"	Decision, Execution

15. SubSystem block "code_no_error"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR/TypeCheck2T1D/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 "isType"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR/TypeCheck2T1D

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

17. SubSystem block "typeMask"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR/TypeCheck2T1D/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

18. SubSystem block "isType1"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR/TypeCheck2T1D
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

19. SubSystem block "typeMask"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR/TypeCheck2T1D/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

20. SubSystem block "isTypeMatch2"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR/TypeCheck2T1D

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

21. SubSystem block "typeMask"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR/TypeCheck2T1D/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

22. SubSystem block "typeMask1"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR/TypeCheck2T1D/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

23. SubSystem block "Unit Delay Enabled Resettable Synchronou..."

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR
Child Systems: Unit Delay Enabled Resettable

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

24. SubSystem block "Unit Delay Enabled Resettable"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR/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

25. SubSystem block "Unit Delay Enabled Resettable Synchronou..."

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR
Child Systems: Unit Delay Enabled Resettable

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

26. SubSystem block "Unit Delay Enabled Resettable"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR/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

27. SubSystem block "int type"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR

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

28. SubSystem block "BXOR1"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX

Child Systems: 2_val_shift_register, TypeCheck2T1D, Unit Delay Enabled Resettable Synchronous8, Unit Delay Enabled Resettable Synchronous9, int type

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	9
Condition	NA	100% (34/34) condition outcomes
Decision	NA	100% (6/6) decision outcomes
MCDC	NA	70% (7/10) conditions reversed the outcome

Execution	NA	100% (30/30) objective outcomes

Logic block "Logical Operator3"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1

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	Metric
Logic block "Logical Operator"	Condition, MCDC, Execution
Logic block "Logical Operator1"	Condition, MCDC, Execution
Logic block "Logical Operator2"	Condition, MCDC, Execution
Switch block "Switch"	Decision, Execution
Switch block "Switch1"	Decision, Execution
S-Function block "Bitwise Operator"	Execution
Constant block "Constant"	Execution
Constant block "Constant1"	Execution

29. SubSystem block "2_val_shift_register"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1

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

30. SubSystem block "Data 1"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/2_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

31. SubSystem block "Unit Delay Enabled Resettable"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/2_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

32. SubSystem block "Data 2"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/2_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

33. SubSystem block "Unit Delay Enabled Resettable"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/2_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

34. SubSystem block "Type 1"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/2_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

35. SubSystem block "Unit Delay Enabled Resettable"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/2_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

36. SubSystem block "Type 2"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/2_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

37. SubSystem block "Unit Delay Enabled Resettable"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/2_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

38. SubSystem block "TypeCheck2T1D"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1

Child Systems: code_type_bit, cond_generate_error_code, isType, isType1, isTypeMatch2

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Condition	NA	100% (18/18) condition outcomes
Decision	NA	100% (2/2) decision outcomes
MCDC	NA	0% (0/3) conditions reversed the outcome
Execution	NA	100% (14/14) objective outcomes

Logic block "Logical Operator1"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/TypeCheck2T1D

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	0

Condition	100% (6/6) condition outcomes
MCDC	0% (0/3) conditions reversed the outcome
Execution	100% (1/1) objective outcomes

MC/DC analysis (combinations in parentheses did not occur)
Includes 4 blocks

Decision/Condition	True Out	False Out
(~C1 || ~C2) || ~C3		
C1 (Logical Operator4 In1)	(**F**TT)	**T**TT
C2 (Logical Operator2 In1)	(T**F**T)	T**T**T
C3 (Logical Operator3 In1)	(TT**F**)	TT**T**

Logic block "Logical Operator2"

Justify or Exclude
Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/TypeCheck2T1D

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_BXOR/BXOR_DUPLEX/BXOR1/TypeCheck2T1D

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

Logic block "Logical Operator4"

Justify or Exclude
Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/TypeCheck2T1D

Metric	Coverage

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

39. SubSystem block "code_type_bit"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/TypeCheck2T1D

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

40. SubSystem block "cond_generate_error_code"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/TypeCheck2T1D
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	Metric
Switch block "Switch"	Decision, Execution

41. SubSystem block "code_no_error"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/TypeCheck2T1D/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

42. SubSystem block "isType"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/TypeCheck2T1D
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

43. SubSystem block "typeMask"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/TypeCheck2T1D/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

44. SubSystem block "isType1"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/TypeCheck2T1D
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

45. SubSystem block "typeMask"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/TypeCheck2T1D/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

46. SubSystem block "isTypeMatch2"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/TypeCheck2T1D
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

47. SubSystem block "typeMask"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/TypeCheck2T1D/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

48. SubSystem block "typeMask1"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1/TypeCheck2T1D/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

49. SubSystem block "Unit Delay Enabled Resettable Synchronou..."

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1
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_BXOR/BXOR_DUPLEX/BXOR1/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

51. SubSystem block "Unit Delay Enabled Resettable Synchronou..."

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1
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_BXOR/BXOR_DUPLEX/BXOR1/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

53. SubSystem block "int type"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/BXOR1

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

54. SubSystem block "State Comparator"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX

Child Systems: Compare To Zero

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1
Condition	NA	100% (14/14) condition outcomes
Decision	NA	50% (1/2) decision outcomes
Execution	NA	80% (4/5) objective outcomes

Switch block "Switch1"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/State Comparator

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	1
Decision	50% (1/2) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

logical trigger input	50%
false (output is from 3rd input port)	0/110
true (output is from 1st input port)	110/110

Constant block "Constant1"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_DUPLEX/State Comparator

Uncovered Links: 

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

55. SubSystem block "Compare To Zero"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_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

56. SubSystem block "combine_error_codes"

Justify or Exclude

Parent: FBFunctions_Harness_BXOR/BXOR_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