Coverage Report for Multilevel_inverter_PD

Table of Contents

Analysis Information

Coverage Data Information

Collected in version	(R2022a)

Model Information

Model version	1.26
Author	Admin
Last saved	Sun Mar 27 00:11:48 2022

Simulation Optimization Options

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

Coverage Options

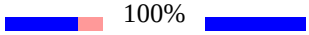
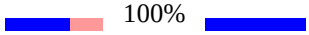
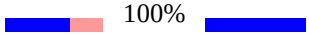
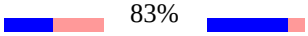
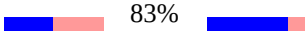
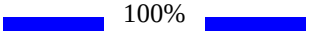
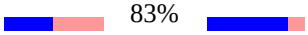
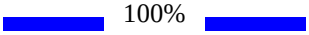
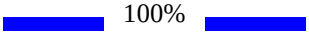
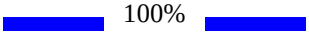
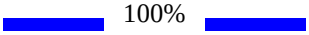
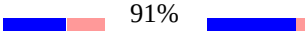
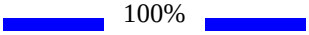
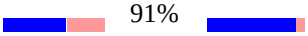
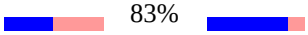
Analyzed model	Multilevel_inverter_PD
Logic block short circuiting	off

Tests

Test	Started execution	Ended execution
Run 1	06-Apr-2022 23:03:56	06-Apr-2022 23:05:09

Summary

Model Hierarchy/Complexity	Run 1				
		Decision		Execution	
1. Multilevel_inverter_PD	145	67%		95%	
2. . . .	48	67%		95%	
3. . . . . DC Voltage Source4		NA		100%	
4. . . . . Model		NA		100%	
5. . . . . DC Voltage Source5		NA		100%	
6. . . . . Model		NA		100%	
7. . . . . DC Voltage Source6		NA		100%	
8. . . . . Model		NA		100%	
9. . . . . Mosfet13	4	75%		100%	
10. . . . . Diode	3	67%		100%	
11. . . . . Model	3	67%		100%	
12. . . . . Ideal Switch	1	100%		100%	
13. . . . . Model	1	100%		100%	
14. . . . . Mosfet14	4	63%		91%	
15. . . . . Diode	3	50%		83%	
16. . . . . Model	3	50%		83%	
17. . . . . Ideal Switch	1	100%		100%	
18. . . . . Model	1	100%		100%	
19. . . . . Mosfet15	4	63%		91%	
20. . . . . Diode	3	50%		83%	
21. . . . . Model	3	50%		83%	
22. . . . . Ideal Switch	1	100%		100%	
23. . . . . Model	1	100%		100%	
24. . . . . Mosfet16	4	63%		91%	
25. . . . . Diode	3	50%		83%	
26. . . . . Model	3	50%		83%	
27. . . . . Ideal Switch	1	100%		100%	
28. . . . . Model	1	100%		100%	
29. . . . . Mosfet17	4	75%		100%	
30. . . . . Diode	3	67%		100%	
31. . . . . Model	3	67%		100%	
32. . . . . Ideal Switch	1	100%		100%	
33. . . . . Model	1	100%		100%	
34. . . . . Mosfet18	4	75%		100%	
35. . . . . Diode	3	67%		100%	

36. . . . . Model	3	67%	100%	
37. . . . . Ideal Switch	1	100%	100%	
38. . . . . Model	1	100%	100%	
39. . . . . Mosfet19	4	75%	100%	
40. . . . . Diode	3	67%	100%	
41. . . . . Model	3	67%	100%	
42. . . . . Ideal Switch	1	100%	100%	
43. . . . . Model	1	100%	100%	
44. . . . . Mosfet20	4	63%	91%	
45. . . . . Diode	3	50%	83%	
46. . . . . Model	3	50%	83%	
47. . . . . Ideal Switch	1	100%	100%	
48. . . . . Model	1	100%	100%	
49. . . . . Mosfet21	4	63%	91%	
50. . . . . Diode	3	50%	83%	
51. . . . . Model	3	50%	83%	
52. . . . . Ideal Switch	1	100%	100%	
53. . . . . Model	1	100%	100%	
54. . . . . Mosfet22	4	63%	91%	
55. . . . . Diode	3	50%	83%	
56. . . . . Model	3	50%	83%	
57. . . . . Ideal Switch	1	100%	100%	
58. . . . . Model	1	100%	100%	
59. . . . . Mosfet23	4	63%	91%	
60. . . . . Diode	3	50%	83%	
61. . . . . Model	3	50%	83%	
62. . . . . Ideal Switch	1	100%	100%	
63. . . . . Model	1	100%	100%	
64. . . . . Mosfet24	4	63%	91%	
65. . . . . Diode	3	50%	83%	
66. . . . . Model	3	50%	83%	
67. . . . . Ideal Switch	1	100%	100%	
68. . . . . Model	1	100%	100%	
69. . . . . Repeating Sequence1		NA	100%	
70. . . . . Repeating Sequence4		NA	100%	
71. . . . . Repeating Sequence5		NA	100%	
72. . . . PMSM Motor		NA	100%	
73. . . . . Permanent Magnet Synchronous Machine		NA	100%	
74. . . . . Electrical model		NA	100%	

75. . . . . Hall effect sensor		NA		100%
76. . . . . Angle converter		NA		100%
77. . . . . abc2qd		NA		100%
78. . . . . iq,id		NA		100%
79. . . . . id		NA		100%
80. . . . . iq		NA		100%
81. . . . . qd2abc		NA		100%
82. . . . . Mechanical model		NA		100%
83. . . . . Coulomb & Viscous Friction		NA		100%
84. . . . . Three-Phase V-I Measurement		NA		100%
85. . . . . Model		NA		100%
86. . . . . U AB:		NA		100%
87. . . . . U BC:		NA		100%
88. . . . . U CA:		NA		100%
89. . . Subsystem	48	67%		95%
90. . . . . DC Voltage Source4		NA		100%
91. . . . . Model		NA		100%
92. . . . . DC Voltage Source5		NA		100%
93. . . . . Model		NA		100%
94. . . . . DC Voltage Source6		NA		100%
95. . . . . Model		NA		100%
96. . . . . Mosfet13	4	75%		100%
97. . . . . Diode	3	67%		100%
98. . . . . Model	3	67%		100%
99. . . . . Ideal Switch	1	100%		100%
100. . . . . Model	1	100%		100%
101. . . . . Mosfet14	4	63%		91%
102. . . . . Diode	3	50%		83%
103. . . . . Model	3	50%		83%
104. . . . . Ideal Switch	1	100%		100%
105. . . . . Model	1	100%		100%
106. . . . . Mosfet15	4	63%		91%
107. . . . . Diode	3	50%		83%
108. . . . . Model	3	50%		83%
109. . . . . Ideal Switch	1	100%		100%
110. . . . . Model	1	100%		100%
111. . . . . Mosfet16	4	63%		91%
112. . . . . Diode	3	50%		83%
113. . . . . Model	3	50%		83%

114. . . . . Ideal Switch	1	100%	100%	
115. . . . . Model	1	100%	100%	
116. . . . . Mosfet17	4	75%	100%	
117. . . . . Diode	3	67%	100%	
118. . . . . Model	3	67%	100%	
119. . . . . Ideal Switch	1	100%	100%	
120. . . . . Model	1	100%	100%	
121. . . . . Mosfet18	4	75%	100%	
122. . . . . Diode	3	67%	100%	
123. . . . . Model	3	67%	100%	
124. . . . . Ideal Switch	1	100%	100%	
125. . . . . Model	1	100%	100%	
126. . . . . Mosfet19	4	75%	100%	
127. . . . . Diode	3	67%	100%	
128. . . . . Model	3	67%	100%	
129. . . . . Ideal Switch	1	100%	100%	
130. . . . . Model	1	100%	100%	
131. . . . . Mosfet20	4	63%	91%	
132. . . . . Diode	3	50%	83%	
133. . . . . Model	3	50%	83%	
134. . . . . Ideal Switch	1	100%	100%	
135. . . . . Model	1	100%	100%	
136. . . . . Mosfet21	4	63%	91%	
137. . . . . Diode	3	50%	83%	
138. . . . . Model	3	50%	83%	
139. . . . . Ideal Switch	1	100%	100%	
140. . . . . Model	1	100%	100%	
141. . . . . Mosfet22	4	63%	91%	
142. . . . . Diode	3	50%	83%	
143. . . . . Model	3	50%	83%	
144. . . . . Ideal Switch	1	100%	100%	
145. . . . . Model	1	100%	100%	
146. . . . . Mosfet23	4	63%	91%	
147. . . . . Diode	3	50%	83%	
148. . . . . Model	3	50%	83%	
149. . . . . Ideal Switch	1	100%	100%	
150. . . . . Model	1	100%	100%	
151. . . . . Mosfet24	4	63%	91%	
152. . . . . Diode	3	50%	83%	

153. . . . . Model	3	50%	83%	
154. . . . . Ideal Switch	1	100%	100%	
155. . . . . Model	1	100%	100%	
156. . . . . Repeating Sequence3		NA	100%	
157. . . . . Repeating Sequence4		NA	100%	
158. . . . . Repeating Sequence5		NA	100%	
159. . . . Subsystem2	48	67%	95%	
160. . . . . DC Voltage Source4		NA	100%	
161. . . . . Model		NA	100%	
162. . . . . DC Voltage Source5		NA	100%	
163. . . . . Model		NA	100%	
164. . . . . DC Voltage Source6		NA	100%	
165. . . . . Model		NA	100%	
166. . . . . Mosfet13	4	75%	100%	
167. . . . . Diode	3	67%	100%	
168. . . . . Model	3	67%	100%	
169. . . . . Ideal Switch	1	100%	100%	
170. . . . . Model	1	100%	100%	
171. . . . . Mosfet14	4	63%	91%	
172. . . . . Diode	3	50%	83%	
173. . . . . Model	3	50%	83%	
174. . . . . Ideal Switch	1	100%	100%	
175. . . . . Model	1	100%	100%	
176. . . . . Mosfet15	4	63%	91%	
177. . . . . Diode	3	50%	83%	
178. . . . . Model	3	50%	83%	
179. . . . . Ideal Switch	1	100%	100%	
180. . . . . Model	1	100%	100%	
181. . . . . Mosfet16	4	63%	91%	
182. . . . . Diode	3	50%	83%	
183. . . . . Model	3	50%	83%	
184. . . . . Ideal Switch	1	100%	100%	
185. . . . . Model	1	100%	100%	
186. . . . . Mosfet17	4	75%	100%	
187. . . . . Diode	3	67%	100%	
188. . . . . Model	3	67%	100%	
189. . . . . Ideal Switch	1	100%	100%	
190. . . . . Model	1	100%	100%	
191. . . . . Mosfet18	4	75%	100%	

192. . . . . Diode	3	67%	100%	
193. . . . . Model	3	67%	100%	
194. . . . . Ideal Switch	1	100%	100%	
195. . . . . Model	1	100%	100%	
196. . . . . Mosfet19	4	75%	100%	
197. . . . . Diode	3	67%	100%	
198. . . . . Model	3	67%	100%	
199. . . . . Ideal Switch	1	100%	100%	
200. . . . . Model	1	100%	100%	
201. . . . . Mosfet20	4	63%	91%	
202. . . . . Diode	3	50%	83%	
203. . . . . Model	3	50%	83%	
204. . . . . Ideal Switch	1	100%	100%	
205. . . . . Model	1	100%	100%	
206. . . . . Mosfet21	4	63%	91%	
207. . . . . Diode	3	50%	83%	
208. . . . . Model	3	50%	83%	
209. . . . . Ideal Switch	1	100%	100%	
210. . . . . Model	1	100%	100%	
211. . . . . Mosfet22	4	63%	91%	
212. . . . . Diode	3	50%	83%	
213. . . . . Model	3	50%	83%	
214. . . . . Ideal Switch	1	100%	100%	
215. . . . . Model	1	100%	100%	
216. . . . . Mosfet23	4	63%	91%	
217. . . . . Diode	3	50%	83%	
218. . . . . Model	3	50%	83%	
219. . . . . Ideal Switch	1	100%	100%	
220. . . . . Model	1	100%	100%	
221. . . . . Mosfet24	4	63%	91%	
222. . . . . Diode	3	50%	83%	
223. . . . . Model	3	50%	83%	
224. . . . . Ideal Switch	1	100%	100%	
225. . . . . Model	1	100%	100%	
226. . . . . Repeating Sequence1		NA	100%	
227. . . . . Repeating Sequence4		NA	100%	
228. . . . . Repeating Sequence5		NA	100%	
229. . . . powergui		NA	100%	
230. . . . . EquivalentModel1		NA	100%	

231. . . . . Sources NA 100%

Details

1. Model "Multilevel_inverter_PD"

Child Systems: , PMSM Motor, Subsystem, Subsystem2, powergui

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	145
Decision	NA	67% (192/288) decision outcomes
Execution	NA	95% (500/524) objective outcomes

2. SubSystem block " "

Justify or Exclude

Parent: /Multilevel_inverter_PD

Child Systems: DC Voltage Source4, DC Voltage Source5, DC Voltage Source6, Mosfet13, Mosfet14, Mosfet15, Mosfet16, Mosfet17, Mosfet18, Mosfet19, Mosfet20, Mosfet21, Mosfet22, Mosfet23, Mosfet24, Repeating Sequence1, Repeating Sequence4, Repeating Sequence5

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	48
Decision	NA	67% (64/96) decision outcomes
Execution	NA	95% (148/156) objective outcomes

Full Coverage

Model Object	Metric
Logic block "Logical Operator1"	Execution
Logic block "Logical Operator10"	Execution
Logic block "Logical Operator6"	Execution
Logic block "Logical Operator7"	Execution

Logic block "Logical Operator8"	Execution
Logic block "Logical Operator9"	Execution
Gain block "Gain3"	Execution
Gain block "Gain4"	Execution
Gain block "Gain5"	Execution
RelationalOperator block "Relational Operator10"	Execution
RelationalOperator block "Relational Operator11"	Execution
RelationalOperator block "Relational Operator6"	Execution
RelationalOperator block "Relational Operator7"	Execution
RelationalOperator block "Relational Operator8"	Execution
RelationalOperator block "Relational Operator9"	Execution
Sin block "Sine Wave3"	Execution
Sin block "Sine Wave4"	Execution
Sin block "Sine Wave5"	Execution

3. SubSystem block "DC Voltage Source4"

Justify or Exclude

Parent: Multilevel_inverter_PD/
Child Systems: Model

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

4. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /DC Voltage Source4

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 "DC"	Execution

5. SubSystem block "DC Voltage Source5"

Justify or Exclude

Parent: Multilevel_inverter_PD/
Child Systems: Model

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

6. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /DC Voltage Source5

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 "DC"	Execution

7. SubSystem block "DC Voltage Source6"

Justify or Exclude

Parent: Multilevel_inverter_PD/

Child Systems: Model

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

8. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /DC Voltage Source6

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 "DC"	Execution

9. SubSystem block "Mosfet13"

Justify or Exclude

Parent: Multilevel_inverter_PD/
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	75% (6/8) decision outcomes
Execution	NA	100% (11/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

10. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet13
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

11. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet13/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet13/Diode/Model

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
Gain block "Gain"	Execution
Sum block "Sum"	Execution

Constant block "0 1"	Execution
Constant block "eee"	Execution

12. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet13

Child Systems: Model

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

13. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet13/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution

Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

14. SubSystem block "Mosfet14"

Justify or Exclude

Parent: Multilevel_inverter_PD/
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

15. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet14
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

16. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet14/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet14/Diode/Model

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet14/Diode/Model
Uncovered Links:

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude
Parent: Multilevel_inverter_PD/ /Mosfet14/Diode/Model
Uncovered Links:

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

17. SubSystem block "Ideal Switch"

Justify or Exclude
Parent: Multilevel_inverter_PD/ /Mosfet14

Child Systems: Model

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

18. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet14/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

19. SubSystem block "Mosfet15"

Justify or Exclude

Parent: Multilevel_inverter_PD/

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

20. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet15

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

21. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet15/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3

Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet15/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet15/Diode/Model

Uncovered Links:

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet15/Diode/Model

Uncovered Links:

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

22. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet15

Child Systems: Model

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

Execution	NA	100% (4/4) objective outcomes

23. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet15/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

24. SubSystem block "Mosfet16"

Justify or Exclude

Parent: Multilevel_inverter_PD/

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes

Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

25. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet16

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

26. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet16/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet16/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet16/Diode/Model

Uncovered Links:

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet16/Diode/Model

Uncovered Links: 

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

27. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet16

Child Systems: Model

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

28. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet16/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

29. SubSystem block "Mosfet17"

Justify or Exclude

Parent: Multilevel_inverter_PD/

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	75% (6/8) decision outcomes
Execution	NA	100% (11/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

30. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet17

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

31. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet17/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet17/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
Gain block "Gain"	Execution
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

32. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet17
Child Systems: Model

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

33. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet17/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

34. SubSystem block "Mosfet18"

Justify or Exclude

Parent: Multilevel_inverter_PD/

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	75% (6/8) decision outcomes
Execution	NA	100% (11/11) objective outcomes

Full Coverage

Model Object	Metric

Sum block "Add"	Execution

35. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet18

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

36. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet18/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet18/Diode/Model

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes

Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
Gain block "Gain"	Execution
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

37. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet18

Child Systems: Model

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

38. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet18/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

39. SubSystem block "Mosfet19"

Justify or Exclude

Parent: Multilevel_inverter_PD/

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	75% (6/8) decision outcomes
Execution	NA	100% (11/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

40. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet19

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

41. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet19/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet19/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2

Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
Gain block "Gain"	Execution
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

42. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet19
Child Systems: Model

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

43. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet19/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

44. SubSystem block "Mosfet20"

Justify or Exclude

Parent: Multilevel_inverter_PD/

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

45. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet20

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

46. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet20/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet20/Diode/Model

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001 
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001 

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet20/Diode/Model

Uncovered Links: 

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001 

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet20/Diode/Model

Uncovered Links: 

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

47. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet20

Child Systems: Model

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

48. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet20/Ideal Switch

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

Cyclomatic Complexity	0	1
Decision	NA	100% (2/2) decision outcomes
Execution	NA	100% (4/4) objective outcomes

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

49. SubSystem block "Mosfet21"

Justify or Exclude

Parent: Multilevel_inverter_PD/

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

50. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet21

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

51. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet21/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet21/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001

	
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001 

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet21/Diode/Model

Uncovered Links: 

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001 

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet21/Diode/Model

Uncovered Links: 

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

52. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet21

Child Systems: Model

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

53. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet21/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

54. SubSystem block "Mosfet22"

Justify or Exclude

Parent: Multilevel_inverter_PD/
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

55. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet22
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3

Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

56. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet22/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet22/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet22/Diode/Model

Uncovered Links: 

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

Decisions analanalyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001 

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet22/Diode/Model

Uncovered Links: 

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution

Constant block "eee"	Execution

57. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet22

Child Systems: Model

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

58. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet22/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution

Constant block "0 1"	Execution

59. SubSystem block "Mosfet23"

Justify or Exclude

Parent: Multilevel_inverter_PD/
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

60. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet23
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

61. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet23/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet23/Diode/Model

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet23/Diode/Model

Uncovered Links: 

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet23/Diode/Model

Uncovered Links:

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

62. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet23

Child Systems: Model

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

63. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet23/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

64. SubSystem block "Mosfet24"

Justify or Exclude

Parent: Multilevel_inverter_PD/

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

65. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet24

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

66. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet24/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes

Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet24/Diode/Model

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet24/Diode/Model

Uncovered Links: 

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

Decisions analyzed

trigger >= threshold	50%

false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet24/Diode/Model

Uncovered Links:

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

67. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet24

Child Systems: Model

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

68. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/ /Mosfet24/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

69. SubSystem block "Repeating Sequence1"

Justify or Exclude

Parent: Multilevel_inverter_PD/

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

Full Coverage

Model Object	Metric
SignalConversion block "Output"	Execution

70. SubSystem block "Repeating Sequence4"

Justify or Exclude

Parent: Multilevel_inverter_PD/

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

Full Coverage

Model Object	Metric
SignalConversion block "Output"	Execution

71. SubSystem block "Repeating Sequence5"

Justify or Exclude

Parent: Multilevel_inverter_PD/

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

Full Coverage

Model Object	Metric
SignalConversion block "Output"	Execution

72. SubSystem block "PMSM Motor"

Justify or Exclude

Parent: /Multilevel_inverter_PD

Child Systems: Permanent Magnet Synchronous Machine, Three-Phase V-I Measurement

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (54/54) objective outcomes

Full Coverage

Model Object	Metric
Step block "Step"	Execution

73. SubSystem block "Permanent Magnet Synchronous Machine"

Justify or Exclude

Parent: Multilevel_inverter_PD/PMSM Motor

Child Systems: Electrical model, Mechanical model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (48/48) objective outcomes

74. SubSystem block "Electrical model"

Justify or Exclude

Parent:	Multilevel_inverter_PD/PMSM Motor/Permanent Magnet Synchronous Machine
Child Systems:	Hall effect sensor, abc2qd, iq,id, qd2abc

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (41/41) objective outcomes

Full Coverage

Model Object	Metric
Fcn block "Te "	Execution

75. SubSystem block "Hall effect sensor"

Justify or Exclude

Parent:	Multilevel_inverter_PD/PMSM Motor/Permanent Magnet Synchronous Machine/Electrical model
Child Systems:	Angle converter

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (21/21) objective outcomes

Full Coverage

Model Object	Metric
Logic block "Logical Operator"	Execution
Logic block "Logical Operator1"	Execution
Logic block "Logical Operator2"	Execution
DataTypeConversion block "Data Type Conversion"	Execution

DataTypeConversion block "Data Type Conversion1"	Execution
DataTypeConversion block "Data Type Conversion2"	Execution
RelationalOperator block "Relational Operator1"	Execution
RelationalOperator block "Relational Operator2"	Execution
RelationalOperator block "Relational Operator3"	Execution
RelationalOperator block "Relational Operator4"	Execution
RelationalOperator block "Relational Operator5"	Execution
RelationalOperator block "Relational Operator6"	Execution
Constant block "Constant"	Execution
Constant block "Constant1"	Execution
Constant block "Constant2"	Execution
Constant block "Constant3"	Execution
Constant block "Constant4"	Execution
Constant block "Constant5"	Execution

76. SubSystem block "Angle converter"

Justify or Exclude

Parent: Multilevel_inverter_PD/PMSM Motor/Permanent Magnet Synchronous Machine/Electrical model/Hall effect sensor

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

Full Coverage

Model Object	Metric
Gain block "rad2deg"	Execution
Trigonometry block "Trigonometric Function"	Execution
Trigonometry block "Trigonometric Function2"	Execution

77. SubSystem block "abc2qd"

Justify or Exclude

Parent: Multilevel_inverter_PD/PMSM Motor/Permanent Magnet Synchronous Machine/Electrical model

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

Full Coverage

Model Object	Metric
Fcn block "Fcn2"	Execution
Fcn block "Fcn3"	Execution
Trigonometry block "Elementary Math"	Execution

78. SubSystem block "iq,id"

Justify or Exclude

Parent: Multilevel_inverter_PD/PMSM Motor/Permanent Magnet Synchronous Machine/Electrical model

Child Systems: id, iq

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

Execution	NA	100% (13/13) objective outcomes

79. SubSystem block "id"

Justify or Exclude

Parent: Multilevel_inverter_PD/PMSM Motor/Permanent Magnet Synchronous Machine/Electrical model/iq,id

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (6/6) objective outcomes

Full Coverage

Model Object	Metric
DiscreteIntegrator block "Discrete-Time Integrator"	Execution
Gain block "1/Ld"	Execution
Gain block "Lq/Ld"	Execution
Gain block "R/Ld"	Execution
Product block "Product"	Execution
Sum block "Sum"	Execution

80. SubSystem block "iq"

Justify or Exclude

Parent: Multilevel_inverter_PD/PMSM Motor/Permanent Magnet Synchronous Machine/Electrical model/iq,id

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

Execution	NA	100% (7/7) objective outcomes

Full Coverage

Model Object	Metric
DiscreteIntegrator block "Discrete-Time Integrator"	Execution
Gain block "1/Lq"	Execution
Gain block "Ld/Lq"	Execution
Gain block "R/Lq"	Execution
Gain block "lam/Lq"	Execution
Product block "Product1"	Execution
Sum block "Sum1"	Execution

81. SubSystem block "qd2abc"

Justify or Exclude

Parent: Multilevel_inverter_PD/PMSM Motor/Permanent Magnet Synchronous Machine/Electrical model

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

Full Coverage

Model Object	Metric
Fcn block "Fcn"	Execution
Fcn block "Fcn1"	Execution
Sum block "Sum"	Execution

82. SubSystem block "Mechanical model"

Justify or Exclude

Parent: Multilevel_inverter_PD/PMSM Motor/Permanent Magnet Synchronous Machine

Child Systems: Coulomb & Viscous Friction

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (7/7) objective outcomes

Full Coverage

Model Object	Metric
DiscreteIntegrator block "Discrete-Time Integrator"	Execution
DiscreteIntegrator block "Discrete-Time Integrator1"	Execution
Fcn block "Fcn"	Execution
Gain block "Gain"	Execution
Gain block "Gain2"	Execution
Sum block "Sum"	Execution

83. SubSystem block "Coulomb & Viscous Friction"

Justify or Exclude

Parent: Multilevel_inverter_PD/PMSM Motor/Permanent Magnet Synchronous Machine/Mechanical model

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

Execution	NA	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution

84. SubSystem block "Three-Phase V-I Measurement"

Justify or Exclude

Parent: Multilevel_inverter_PD/PMSM Motor
Child Systems: Model

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

Full Coverage

Model Object	Metric
Gain block "Kv"	Execution
Gain block "Kv1"	Execution

85. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/PMSM Motor/Three-Phase V-I Measurement
Child Systems: U AB:, U BC:, U CA:

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

86. SubSystem block "U AB:"

Justify or Exclude

Parent: Multilevel_inverter_PD/PMSM Motor/Three-Phase V-I Measurement/Model

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

Full Coverage

Model Object	Metric
Gain block "do not delete this gain"	Execution

87. SubSystem block "U BC:"

Justify or Exclude

Parent: Multilevel_inverter_PD/PMSM Motor/Three-Phase V-I Measurement/Model

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

Full Coverage

Model Object	Metric
Gain block "do not delete this gain"	Execution

88. SubSystem block "U CA:"

Justify or Exclude

Parent: Multilevel_inverter_PD/PMSM Motor/Three-Phase V-I Measurement/Model

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

Full Coverage

Model Object	Metric
Gain block "do not delete this gain"	Execution

89. SubSystem block "Subsystem"

Justify or Exclude

Parent: /Multilevel_inverter_PD

Child Systems: DC Voltage Source4, DC Voltage Source5, DC Voltage Source6, Mosfet13, Mosfet14, Mosfet15, Mosfet16, Mosfet17, Mosfet18, Mosfet19, Mosfet20, Mosfet21, Mosfet22, Mosfet23, Mosfet24, Repeating Sequence3, Repeating Sequence4, Repeating Sequence5

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	48
Decision	NA	67% (64/96) decision outcomes

Execution	NA	95% (148/156) objective outcomes

Full Coverage

Model Object	Metric
Logic block "Logical Operator10"	Execution
Logic block "Logical Operator11"	Execution
Logic block "Logical Operator6"	Execution
Logic block "Logical Operator7"	Execution
Logic block "Logical Operator8"	Execution
Logic block "Logical Operator9"	Execution
Gain block "Gain3"	Execution
Gain block "Gain4"	Execution
Gain block "Gain5"	Execution
RelationalOperator block "Relational Operator10"	Execution
RelationalOperator block "Relational Operator11"	Execution
RelationalOperator block "Relational Operator6"	Execution
RelationalOperator block "Relational Operator7"	Execution
RelationalOperator block "Relational Operator8"	Execution
RelationalOperator block "Relational Operator9"	Execution
Sin block "Sine Wave3"	Execution
Sin block "Sine Wave4"	Execution
Sin block "Sine Wave5"	Execution

90. SubSystem block "DC Voltage Source4"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem
Child Systems: Model

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

91. SubSystem block "Model"

Justify or Exclude
Parent: Multilevel_inverter_PD/Subsystem/DC Voltage Source4

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 "DC"	Execution

92. SubSystem block "DC Voltage Source5"

Justify or Exclude
Parent: Multilevel_inverter_PD/Subsystem
Child Systems: Model

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

93. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/DC Voltage Source5

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 "DC"	Execution

94. SubSystem block "DC Voltage Source6"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem
Child Systems: Model

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

95. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/DC Voltage Source6

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 "DC"	Execution

96. SubSystem block "Mosfet13"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	75% (6/8) decision outcomes
Execution	NA	100% (11/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

97. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet13
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

98. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet13/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet13/Diode/Model

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001

true	0/60001

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
Gain block "Gain"	Execution
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

99. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet13
Child Systems: Model

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

100. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet13/Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1

Decision	NA	100% (2/2) decision outcomes
Execution	NA	100% (4/4) objective outcomes

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

101. SubSystem block "Mosfet14"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

102. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet14

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

103. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet14/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet14/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001

	
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001 

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet14/Diode/Model

Uncovered Links: 

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001 

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet14/Diode/Model

Uncovered Links: 

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

104. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet14
Child Systems: Model

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

105. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet14/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

106. SubSystem block "Mosfet15"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

107. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet15
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3

Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

108. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet15/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet15/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet15/Diode/Model

Uncovered Links: 

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001 

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet15/Diode/Model

Uncovered Links: 

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution

Constant block "eee"	Execution

109. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet15

Child Systems: Model

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

110. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet15/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution

Constant block "0 1"	Execution

111. SubSystem block "Mosfet16"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

112. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet16
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

113. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet16/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet16/Diode/Model

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet16/Diode/Model

Uncovered Links: 

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet16/Diode/Model

Uncovered Links:

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

114. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet16

Child Systems: Model

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

115. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet16/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

116. SubSystem block "Mosfet17"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	75% (6/8) decision outcomes
Execution	NA	100% (11/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

117. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet17

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

118. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet17/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet17/Diode/Model

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
Gain block "Gain"	Execution
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

119. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet17
Child Systems: Model

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

120. SubSystem block "Model"

Justify or Exclude
Parent: Multilevel_inverter_PD/Subsystem/Mosfet17/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

121. SubSystem block "Mosfet18"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	75% (6/8) decision outcomes
Execution	NA	100% (11/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

122. SubSystem block "Diode"

Justify or Exclude
Parent: Multilevel_inverter_PD/Subsystem/Mosfet18
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

123. SubSystem block "Model"

Justify or Exclude
Parent: Multilevel_inverter_PD/Subsystem/Mosfet18/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes

Execution	NA	100% (6/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet18/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
Gain block "Gain"	Execution
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

124. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet18

Child Systems: Model

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

125. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet18/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

126. SubSystem block "Mosfet19"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	75% (6/8) decision outcomes
Execution	NA	100% (11/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

127. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet19
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

128. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet19/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3

Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet19/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
Gain block "Gain"	Execution
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

129. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet19

Child Systems: Model

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

130. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet19/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

131. SubSystem block "Mosfet20"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

132. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet20
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

133. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet20/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet20/Diode/Model

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet20/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	1

Decision	50% (1/2) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet20/Diode/Model

Uncovered Links:

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

134. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet20

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	1

Decision	NA	100% (2/2) decision outcomes
Execution	NA	100% (4/4) objective outcomes

135. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet20/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

136. SubSystem block "Mosfet21"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4

Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

137. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet21
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

138. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet21/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet21/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet21/Diode/Model

Uncovered Links:

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet21/Diode/Model

Uncovered Links: 

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

139. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet21

Child Systems: Model

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

140. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet21/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

141. SubSystem block "Mosfet22"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

142. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet22
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

143. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet22/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet22/Diode/Model
Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes

Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet22/Diode/Model

Uncovered Links:

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet22/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	0

Execution	0% (0/1) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

144. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet22
Child Systems: Model

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

145. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet22/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

146. SubSystem block "Mosfet23"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

147. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet23
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

148. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet23/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet23/Diode/Model

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%

false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet23/Diode/Model

Uncovered Links:

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet23/Diode/Model

Uncovered Links:

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution

Constant block "0 1"	Execution
Constant block "eee"	Execution

149. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet23
Child Systems: Model

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

150. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet23/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution

Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

151. SubSystem block "Mosfet24"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

152. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet24
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

153. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet24/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet24/Diode/Model

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet24/Diode/Model
Uncovered Links:

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude
Parent: Multilevel_inverter_PD/Subsystem/Mosfet24/Diode/Model
Uncovered Links:

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

154. SubSystem block "Ideal Switch"

Justify or Exclude
Parent: Multilevel_inverter_PD/Subsystem/Mosfet24

Child Systems: Model

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

155. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem/Mosfet24/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

156. SubSystem block "Repeating Sequence3"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem

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

Full Coverage

Model Object	Metric
SignalConversion block "Output"	Execution

157. SubSystem block "Repeating Sequence4"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem

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

Full Coverage

Model Object	Metric
SignalConversion block "Output"	Execution

158. SubSystem block "Repeating Sequence5"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem

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

Full Coverage

Model Object	Metric
SignalConversion block "Output"	Execution

159. SubSystem block "Subsystem2"

Justify or Exclude

Parent: /Multilevel_inverter_PD

Child Systems: DC Voltage Source4, DC Voltage Source5, DC Voltage Source6, Mosfet13, Mosfet14, Mosfet15, Mosfet16, Mosfet17, Mosfet18, Mosfet19, Mosfet20, Mosfet21, Mosfet22, Mosfet23, Mosfet24, Repeating Sequence1, Repeating Sequence4, Repeating Sequence5

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	48
Decision	NA	67% (64/96) decision outcomes
Execution	NA	95% (148/156) objective outcomes

Full Coverage

Model Object	Metric
Logic block "Logical Operator10"	Execution
Logic block "Logical Operator11"	Execution
Logic block "Logical Operator6"	Execution
Logic block "Logical Operator7"	Execution
Logic block "Logical Operator8"	Execution

Logic block "Logical Operator9"	Execution
Gain block "Gain3"	Execution
Gain block "Gain4"	Execution
Gain block "Gain5"	Execution
RelationalOperator block "Relational Operator10"	Execution
RelationalOperator block "Relational Operator11"	Execution
RelationalOperator block "Relational Operator6"	Execution
RelationalOperator block "Relational Operator7"	Execution
RelationalOperator block "Relational Operator8"	Execution
RelationalOperator block "Relational Operator9"	Execution
Sin block "Sine Wave3"	Execution
Sin block "Sine Wave4"	Execution
Sin block "Sine Wave5"	Execution

160. SubSystem block "DC Voltage Source4"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2
Child Systems: Model

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

161. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/DC Voltage Source4

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 "DC"	Execution

162. SubSystem block "DC Voltage Source5"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2
Child Systems: Model

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

163. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/DC Voltage Source5

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 "DC"	Execution

164. SubSystem block "DC Voltage Source6"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2
Child Systems: Model

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

165. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/DC Voltage Source6

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 "DC"	Execution

166. SubSystem block "Mosfet13"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	75% (6/8) decision outcomes
Execution	NA	100% (11/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

167. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet13
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

168. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet13/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet13/Diode/Model

Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
Gain block "Gain"	Execution
Sum block "Sum"	Execution

Constant block "0 1"	Execution
Constant block "eee"	Execution

169. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet13
Child Systems: Model

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

170. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet13/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution

Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

171. SubSystem block "Mosfet14"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

172. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet14
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

173. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet14/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet14/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet14/Diode/Model
Uncovered Links:

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet14/Diode/Model
Uncovered Links:

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

174. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet14

Child Systems: Model

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

175. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet14/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

176. SubSystem block "Mosfet15"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

177. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet15

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

178. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet15/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3

Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet15/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet15/Diode/Model

Uncovered Links:

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet15/Diode/Model

Uncovered Links:

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

179. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet15

Child Systems: Model

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

Execution	NA	100% (4/4) objective outcomes

180. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet15/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

181. SubSystem block "Mosfet16"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes

Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

182. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet16
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

183. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet16/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet16/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet16/Diode/Model

Uncovered Links:

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet16/Diode/Model

Uncovered Links: 

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

184. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet16

Child Systems: Model

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

185. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet16/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

186. SubSystem block "Mosfet17"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	75% (6/8) decision outcomes
Execution	NA	100% (11/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

187. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet17
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

188. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet17/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet17/Diode/Model
Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
Gain block "Gain"	Execution
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

189. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet17
Child Systems: Model

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

190. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet17/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

191. SubSystem block "Mosfet18"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	75% (6/8) decision outcomes
Execution	NA	100% (11/11) objective outcomes

Full Coverage

Model Object	Metric

Sum block "Add"	Execution

192. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet18
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

193. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet18/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet18/Diode/Model
Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes

Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
Gain block "Gain"	Execution
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

194. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet18

Child Systems: Model

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

195. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet18/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

196. SubSystem block "Mosfet19"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	75% (6/8) decision outcomes
Execution	NA	100% (11/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

197. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet19
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

198. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet19/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	67% (4/6) decision outcomes
Execution	NA	100% (6/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet19/Diode/Model
Uncovered Links: 

Metric	Coverage
Cyclomatic Complexity	2

Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
Gain block "Gain"	Execution
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

199. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet19
Child Systems: Model

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

200. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet19/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

201. SubSystem block "Mosfet20"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

202. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet20

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

203. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet20/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet20/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet20/Diode/Model

Uncovered Links:

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet20/Diode/Model
Uncovered Links:

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

204. SubSystem block "Ideal Switch"

Justify or Exclude
Parent: Multilevel_inverter_PD/Subsystem2/Mosfet20
Child Systems: Model

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

205. SubSystem block "Model"

Justify or Exclude
Parent: Multilevel_inverter_PD/Subsystem2/Mosfet20/Ideal Switch

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

Cyclomatic Complexity	0	1
Decision	NA	100% (2/2) decision outcomes
Execution	NA	100% (4/4) objective outcomes

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

206. SubSystem block "Mosfet21"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

207. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet21

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

208. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet21/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet21/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001

	
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001 

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet21/Diode/Model

Uncovered Links: 

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001 

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet21/Diode/Model

Uncovered Links: 

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

209. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet21
Child Systems: Model

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

210. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet21/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

211. SubSystem block "Mosfet22"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

212. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet22
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3

Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

213. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet22/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet22/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet22/Diode/Model

Uncovered Links: 

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001 

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet22/Diode/Model

Uncovered Links: 

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution

Constant block "eee"	Execution

214. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet22
Child Systems: Model

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

215. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet22/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution

Constant block "0 1"	Execution

216. SubSystem block "Mosfet23"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2
Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

217. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet23
Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

218. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet23/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet23/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet23/Diode/Model

Uncovered Links:

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

Decisions analyzed

trigger >= threshold	50%
false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet23/Diode/Model

Uncovered Links:

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

219. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet23

Child Systems: Model

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

220. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet23/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

221. SubSystem block "Mosfet24"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2

Child Systems: Diode, Ideal Switch

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	4
Decision	NA	63% (5/8) decision outcomes
Execution	NA	91% (10/11) objective outcomes

Full Coverage

Model Object	Metric
Sum block "Add"	Execution

222. SubSystem block "Diode"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet24

Child Systems: Model

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes
Execution	NA	83% (5/6) objective outcomes

223. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet24/Diode

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	3
Decision	NA	50% (3/6) decision outcomes

Execution	NA	83% (5/6) objective outcomes

Saturate block "Saturation"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet24/Diode/Model

Uncovered Links:

Metric	Coverage
Cyclomatic Complexity	2
Decision	50% (2/4) decision outcomes
Execution	100% (1/1) objective outcomes

Decisions analyzed

input >= lower limit	50%
false	0/60001
true	60001/60001
input > upper limit	50%
false	60001/60001
true	0/60001

Switch block "Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet24/Diode/Model

Uncovered Links:

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

Decisions analyzed

trigger >= threshold	50%

false (output is from 3rd input port)	60001/60001
true (output is from 1st input port)	0/60001

Gain block "Gain"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet24/Diode/Model

Uncovered Links:

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

Full Coverage

Model Object	Metric
Sum block "Sum"	Execution
Constant block "0 1"	Execution
Constant block "eee"	Execution

224. SubSystem block "Ideal Switch"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet24

Child Systems: Model

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

225. SubSystem block "Model"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2/Mosfet24/Ideal Switch

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

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
DataTypeConversion block "Data Type Conversion"	Execution
Gain block "1/Rsw"	Execution
Constant block "0 1"	Execution

226. SubSystem block "Repeating Sequence1"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2

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

Full Coverage

Model Object	Metric
SignalConversion block "Output"	Execution

227. SubSystem block "Repeating Sequence4"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2

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

Full Coverage

Model Object	Metric
SignalConversion block "Output"	Execution

228. SubSystem block "Repeating Sequence5"

Justify or Exclude

Parent: Multilevel_inverter_PD/Subsystem2

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

Full Coverage

Model Object	Metric
SignalConversion block "Output"	Execution

229. SubSystem block "powergui"

Justify or Exclude

Parent: /Multilevel_inverter_PD
Child Systems: EquivalentModel1

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

230. SubSystem block "EquivalentModel1"

Justify or Exclude

Parent: Multilevel_inverter_PD/powergui
Child Systems: Sources

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

Full Coverage

Model Object	Metric
S-Function block "State-Space"	Execution

231. SubSystem block "Sources"

Justify or Exclude

Parent: Multilevel_inverter_PD/powergui/EquivalentModel1

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 "SwitchCurrents"	Execution