

Wipers subsystem

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Model - wipers_subsystem

Full Model Hierarchy

1. wipers_subsystem
1. Wiper Subsystem
1. First wiper
1. If Action Subsystem
2. If Action Subsystem1
3. If Action Subsystem2
4. If Action Subsystem3
2. Second wiper
1. If Action Subsystem
2. If Action Subsystem1
3. If Action Subsystem2
4. If Action Subsystem3

Simulation Parameter	Value
Solver	VariableStepAuto
RelTol	1e-3
Refine	1
MaxOrder	5
ZeroCross	on

[\[more info\]](#).

System - wipers_subsystem

Table 1. Constant Block Properties

Name	Value	Out Data Type Str	Lock Scale	Sample Time	Frame Period
Input	2	Inherit: Inherit from 'Constant value'	off	inf	inf
Input1	2	Inherit: Inherit from 'Constant value'	off	inf	inf

Table 2. Display Block Properties

Name	Format	Decimation	Floating
Display		1	off
Display1	short	1	off

System - wipers_subsystem/Wiper Subsystem

Table 3. Inport Block Properties

Name	Port	Defined In Blk
In1	1	Inport
In2	2	Inport1

Table 4. Outport Block Properties

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Un Connected	Output When Unconnected Value	Vector Params As 1DFor Out When Unconnected	Used By Blk
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0	on	Display
Out2	2	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0	on	Display1

System - wipers_subsystem/Wiper Subsystem/First wiper

Table 5. Constant Block Properties

Name	Value	Out Data Type Str	Lock Scale	Sample Time	Frame Period
Constant1	0	Inherit: Inherit from 'Constant value'	off	inf	inf
Constant2	20	Inherit: Inherit from 'Constant value'	off	inf	inf
Constant3	30	Inherit: Inherit from 'Constant value'	off	inf	inf
Constant4	50	Inherit: Inherit from 'Constant value'	off	inf	inf

Table 6. Gain Block Properties

Name	Gain	Multiplication	Param Data Type Str	Out Data Type Str	Lock Scale	Rnd Meth	Saturate On Integer Overflow
Input Gain	20	Element-wise(K.*u)	Inherit: Inherit via internal rule	Inherit: Inherit via internal rule	off	Floor	off

Table 7. If Block Properties

Name	Num Inputs	If Expression	Else If Expressions	Show Else	Zero Cross
If else block	1	u1<=20	u1<=40,u1<=60	on	on

Table 8. Inport Block Properties

Name	Port	Defined In Blk
In1	1	Inport

Table 9. Merge Block Properties

Name	Inputs	Allow Unequal Input Port Widths
merging the data	4	off

Table 10. Outport Block Properties

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Un Connected	Output When Unconnected Value	Vector Params As 1DFor Out When Unconnected	Used By Blk
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0	on	Display

System - wipers_subsystem/Wiper Subsystem/First wiper/If Action Subsystem

Table 11. ActionPort Block Properties

Name	Initialize States	Propagate Var Size
Action Port	held	Only when execution is resumed

Table 12. Inport Block Properties

Name	Port	Defined In Blk
In1	1	Constant1

Table 13. Outport Block Properties

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Un Connected	Output When Unconnected Value	Vector Params As 1DFor Out When Unconnected	Used By Blk
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0	on	merging the data

System - wipers_subsystem/Wiper Subsystem/First wiper/If Action Subsystem1

Table 14. ActionPort Block Properties

Name	Initialize States	Propagate Var Size
Action Port	held	Only when execution is resumed

Table 15. Inport Block Properties

Name	Port	Defined In Blk
In1	1	Constant2

Table 16. Outport Block Properties

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Un Connected	Output When Unconnected Value	Vector Params As 1DFor Out When Unconnected	Used By Blk
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0	on	merging the data

System - wipers_subsystem/Wiper Subsystem/First wiper/If Action Subsystem2

Table 17. ActionPort Block Properties

Name	Initialize States	Propagate Var Size
Action Port	held	Only when execution is resumed

Table 18. Inport Block Properties

Name	Port	Defined In Blk
In1	1	Constant3

Table 19. Outport Block Properties

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Un Connected	Output When Unconnected Value	Vector Params As 1DFor Out When Unconnected	Used By Blk
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0	on	merging the data

System - wipers_subsystem/Wiper Subsystem/First wiper/If Action Subsystem3

Table 20. ActionPort Block Properties

Name	Initialize States	Propagate Var Size
Action Port	held	Only when execution is resumed

Table 21. Inport Block Properties

Name	Port	Defined In Blk
In1	1	Constant4

Table 22. Outport Block Properties

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Un Connected	Output When Unconnected Value	Vector Params As 1DFor Out When Unconnected	Used By Blk
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0	on	merging the data

System - wipers_subsystem/Wiper Subsystem/Second wiper

Table 23. Constant Block Properties

Name	Value	Out Data Type Str	Lock Scale	Sample Time	Frame Period
Constant1	0	Inherit: Inherit from 'Constant value'	off	inf	inf
Constant2	20	Inherit: Inherit from 'Constant value'	off	inf	inf
Constant3	30	Inherit: Inherit from 'Constant value'	off	inf	inf
Constant4	50	Inherit: Inherit from 'Constant value'	off	inf	inf

Table 24. Gain Block Properties

Name	Gain	Multiplication	Param Data Type Str	Out Data Type Str	Lock Scale	Rnd Meth	Saturate On Integer Overflow
Input Gain	20	Element-wise(K.*u)	Inherit: Inherit via internal rule	Inherit: Inherit via internal rule	off	Floor	off

Table 25. If Block Properties

Name	Num Inputs	If Expression	Else If Expressions	Show Else	Zero Cross
If else block	1	u1<=20	u1<=40,u1<=60	on	on

Table 26. Inport Block Properties

Name	Port	Defined In Blk
In1	1	Inport1

Table 27. Merge Block Properties

Name	Inputs	Allow Unequal Input Port Widths
merging the data	4	off

Table 28. Outport Block Properties

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Un Connected	Output When Unconnected Value	Vector Params As 1DFor Out When Unconnected	Used By Blk
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0	on	Display1

System - wipers_subsystem/Wiper Subsystem/Second wiper/If Action Subsystem

Table 29. ActionPort Block Properties

Name	Initialize States	Propagate Var Size
Action Port	held	Only when execution is resumed

Table 30. Inport Block Properties

Name	Port	Defined In Blk
In1	1	Constant1

Table 31. Outport Block Properties

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Un Connected	Output When Unconnected Value	Vector Params As 1DFor Out When Unconnected	Used By Blk
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0	on	merging the data

System - wipers_subsystem/Wiper Subsystem/Second wiper/If Action Subsystem1

Table 32. ActionPort Block Properties

Name	Initialize States	Propagate Var Size
Action Port	held	Only when execution is resumed

Table 33. Inport Block Properties

Name	Port	Defined In Blk
In1	1	Constant2

Table 34. Outport Block Properties

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Un Connected	Output When Unconnected Value	Vector Params As 1DFor Out When Unconnected	Used By Blk
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0	on	merging the data

System - wipers_subsystem/Wiper Subsystem/Second wiper/If Action Subsystem2

Table 35. ActionPort Block Properties

Name	Initialize States	Propagate Var Size
Action Port	held	Only when execution is resumed

Table 36. Inport Block Properties

Name	Port	Defined In Blk
In1	1	Constant3

Table 37. Outport Block Properties

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Un Connected	Output When Unconnected Value	Vector Params As 1DFor Out When Unconnected	Used By Blk
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0	on	merging the data

System - wipers_subsystem/Wiper Subsystem/Second wiper/If Action Subsystem3

Table 38. ActionPort Block Properties

Name	Initialize States	Propagate Var Size
Action Port	held	Only when execution is resumed

Table 39. Inport Block Properties

Name	Port	Defined In Blk
In1	1	Constant4

Table 40. Outport Block Properties

Name	Port	Storage Class	Icon Display	Lock Scale	Unit	Var Size Sig	Signal Type	Ensure Output Is Virtual	Source Of Initial Output Value	Output When Disabled	Must Resolve To Signal Object	Output When Un Connected	Output When Unconnected Value	Vector Params As 1DFor Out When Unconnected	Used By Blk
Out1	1	Auto	Port number	off	inherit	Inherit	auto	off	Dialog	held	off	off	0	on	merging the data

Appendix

Table 41. Block Type Count

BlockType	Count	Block Names
Outport	12	Out1 , Out1 , Out1 , Out1 , Out1 , Out1 , Out1 , Out1 , Out1 , Out1 , Out1 , Out1
Inport	12	In1 , In1 , In1 , In1 , In1 , In1 , In1 , In1 , In1 , In1 , In1 , In1
SubSystem	11	Wiper Subsystem , First wiper , If Action Subsystem , If Action Subsystem1 , If Action Subsystem2 , If Action Subsystem3 , Second wiper , If Action Subsystem , If Action Subsystem1 , If Action Subsystem2 , If Action Subsystem3
Constant	10	Input , Input1 , Constant1 , Constant2 , Constant3 , Constant4 , Constant1 , Constant2 , Constant3 , Constant4
ActionPort	8	Action Port , Action Port , Action Port , Action Port , Action Port , Action Port , Action Port , Action Port
Merge	2	merging the data , merging the data
If	2	if else block , if else block
Gain	2	Input Gain , Input Gain
Display	2	Display , Display1