Direction	Function	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	Description
Downstream: router to core	Execution ("run")	1	1	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Reset	Run	Reset simulation and/or next algorithm time step
	Execution ("run")	1	1	0	*Axon row value*												*Axon row address*																Set (future) axon row value
	Configuration ("set")	1	0	1	x	x	x	0	0	0	x	x	x	x	x	x	*Number of axons*																Set global core parameter: number of axons in a specific core
	Configuration ("set")	1	0	1	x	x	x	0	0	1	x	x	x	*Neuron model*			*Number of neurons*																Set global core parameter: neuron model and number of neurons in a specific core
	Configuration ("set")	1	0	1	x	x	x	0	1	0	x	x	x	x	x	x	x	*Neuron threshold potential*															Set global core parameter: neuron threshold potential in a specific core
	Configuration ("set")	1	0	1	x	x	x	0	1	1	x	x	x	x	x	x	*Neuron reset potential*																Set global core parameter: neuron reset potential in a specific core
	Configuration ("set")	1	0	1	x	x	x	1	0	0	*HBM row address*																						Set synapse value in a specific core (part 1/2)
	Configuration ("set")	*HBM synapse data*																															Set synapse value in a specific core (part 2/2)
	Data retrieval ("get")	1	0	0	x	x	x	0	0	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Get global core parameter: number of axons in a specific core
	Data retrieval ("get")	1	0	0	x	x	x	0	0	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Get global core parameter: neuron model and number of neurons in a specific core
	Data retrieval ("get")	1	0	0	x	x	x	0	1	0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Get global core parameter: neuron threshold potential in a specific core
	Data retrieval ("get")	1	0	0	x	x	x	0	1	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Get global core parameter: neuron reset potential in a specific core
	Data retrieval ("get")	1	0	0	x	x	x	1	0	0	x	x	x	x	x	x	x	*Axon row address*															Get (future) axon row value in a specific core
	Data retrieval ("get")	1	0	0	x	x	x	1	0	1	x	x	x	x	x	x	*Neuron address*																Get neuron potential value in a specific core
	Data retrieval ("get")	1	0	0	x	x	x	1	1	0	*HBM row address*																						Get synapse value in a specific core (upstream may be too complicated)

Direction	Function	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	Description
Upstream: core to router	Execution ("run")	0	0	x	x	x	*Core cluster*		*Core mask*									*On-board axon event*																Intra-FPGA axon event
(router will append Core ID)	Execution ("run")	0	1	x	x	x	*FPGA cluster*		*FPGA mask*									*Off-board axon event*																Inter-FPGA axon relay event
	Data retrieval ("get")	1	0	0	0	0	x	x	x	x	x	x	x	x	x	x	*Number of axons*																Return number of axons in a specific core
	Data retrieval ("get")	1	0	0	0	1	x	x	x	x	x	x	x	*Neuron model*			*Number of neurons*																Get global core parameter: neuron model and number of neurons in a specific core
	Data retrieval ("get")	1	0	0	1	0	x	x	x	x	x	x	x	x	x	x	*Neuron threshold potential*																Get global core parameter: neuron threshold potential in a specific core
	Data retrieval ("get")	1	0	0	1	1	x	x	x	x	x	x	x	x	x	x	*Neuron reset potential*																Get global core parameter: neuron reset potential in a specific core
	Data retrieval ("get")	1	0	1	0	0	x	x	x	x	x	x	x	x	x	x	*Axon row value*																Get (future) axon row value in a specific core
	Data retrieval ("get")	1	0	1	0	1	x	x	x	x	x	x	x	x	x	x	*Neuron potential*																Get neuron potential value in a specific core