Input Data		Control Signals	
Signal Name	Description	Signal Name	Description
"Number_of_levels"	Specifies the hierarchy's depth in terms of levels.	"Enable_shaping"	Indicates whether to use the "eligible time" of each packet for shaping.
"Flow_ID"	The flow ID of the enqueued packet.	"Enqueue"	Triggers the Enqueue operation within the packet scheduler.
"Level_ranks[]"	Represents the rank of the enqueued packet at each hierarchy level.	"Use_updated_rank"	Permits the packet scheduler to utilize updated ranks instead of old ranks when possible.
"Eligible_time"	Marks the time when an enqueued packet becomes eligible for dequeuing.	"Force_dequeue"	Activates the Force Dequeue operation within the packet scheduler.
"Arrival_time"	The arrival time of the enqueued packet.	"Enable_error_correction"	Allows the packet scheduler to take corrective action if a departure order error is detected.
"Packet_pointer"	The pointer assigned by the switch to the enqueued packet.		
"Force_dequeue_flow_ID"	The flow ID on which the scheduler should perform a force dequeue.		
"Update_flow_ID"	The flow ID for which rank updates are required.		
"Update_level_ranks[]"	Indicates the updated ranks corresponding to the "update_flow_ID".		