

Current State	Input	Next State	Output
STATE_RESET (4'd0)	flush_last_q	STATE_LOOKUP	-
	-	STATE_RESET	-
STATE_FLUSH_ADDR (4d'1)	-	STATE_FLUSH	-
STATE_FLUSH (4d'2)	tag_dirty_any_m_w && evict_way_w	STATE_EVICT	-
	flush_last_q	STATE_LOOKUP	-
	-	STATE_FLUSH_ADDR	-
STATE_LOOKUP (4d'3)	((mem_rd_q    (mem_wr_m_q != 4'b0)) && !tag_hit_any_m_w) && evict_way_w	STATE_EVICT	-
	((mem_rd_q    (mem_wr_m_q != 4'b0)) && !tag_hit_any_m_w)	STATE_REFILL	-
	mem_writeback_i && mem_accept_o	STATE_WRITEBACK	-
	mem_flush_i && mem_accept_o	STATE_FLUSH_ADDR	-
	mem_invalidate_i && mem_accept_o	STATE_INVALIDATE	-
	-	STATE_LOOKUP	-
STATE_REFILL (4d'4)	(pmem_ack_w && pmem_last_w) && (mem_wr_m_q != 4'b0)	STATE_WRITE	-
	pmem_ack_w && pmem_last_w	STATE_READ	-
	-	STATE_REFILL	-
STATE_WRITE (4d'5)	-	STATE_LOOKUP	-
STATE_READ (4d'6)	-	STATE_LOOKUP	-
STATE_EVICT (4d'7)	pmem_accept_w && pmem_last_w	STATE_EVICT_WAIT	-
	-	STATE_EVICT	-
STATE_EVICT_WAIT (4d'8)	pmem_ack_w && mem_writeback_m_q	STATE_LOOKUP	-
	pmem_ack_w && flushing_q	STATE_FLUSH_ADDR	-
	pmem_ack_w	STATE_REFILL	-
	-	STATE_EVICT_WAIT	-
STATE_WRITEBACK (4d'9)	tag_hit_and_dirty_m_w	STATE_EVICT	-
	-	STATE_LOOKUP	-
STATE_INVALIDATE (4d'10)	-	STATE_LOOKUP	-