IN			STATE	OUT			NXT	
valid	sink_rdy	src_rdy		valid	sink_give	src_take		
0	-	-	U	0	0	0	U	HOLD (sink !ready)
0	-	-	L	0	0	0	L	HOLD (sink !ready)
1	0	0	U	1	0	0	U	HOLD (sink !ready)
1	0	0	L	1	0	0	L	HOLD (sink !ready)
1	0	1	U	1	0	0	U	HOLD (sink !ready)
1	0	1	L	1	0	0	L	HOLD (sink !ready)
1	1	0	U	1	0	1	U	HOLD (source !ready)
1	1	0	L	1	1	0	U	ADVANCE
1	1	1	U	1	1	1	L	ADVANCE
1	1	1	L	1	1	0	U	ADVANCE