

state neighborhood	00	01	10	11
	00 ↑			
	00 →	00 →	00 →	11 ↑
	00 ↓	00 ↓	00 ↓	00 ↓
	11 ←			
	00 ↑	00 →	11 ←	10 ↑
	00 ↓	00 ↓	00 ↓	11 ↑
	01 ↓	01 ←	11 ←	10 ↓
	00 ↑			
	00 ↑	01 ↓	11 ←	10 ↑