

Inputs		Flip Flop Input			Current State			Next state		
Tg	Ta	D2	D1	D0	Q2	Q1	Q0	Q2+	Q1+	Q0+
0	x	0	0	Tg	0	0	0	0	0	0
1	x	0	0	\overline{Ta}	0	0	0	0	0	1
x	0	0	Ta	Tg	0	0	1	0	0	1
x	1	0	Ta	\overline{Ta}	0	0	1	0	1	0
0	x	0	1	Tg	0	1	0	0	1	0
1	x	0	1	\overline{Ta}	0	1	0	0	1	1
x	0	Ta	\overline{Ta}	Tg	0	1	1	0	1	1
x	1	Ta	\overline{Ta}	\overline{Ta}	0	1	1	1	0	0
0	x	1	0	Tg	1	0	0	1	0	0
1	x	1	0	\overline{Ta}	1	0	0	1	0	1
x	0	1	Ta	Tg	1	0	1	1	0	1
x	1	1	Ta	\overline{Ta}	1	0	1	1	1	0
0	x	1	1	Tg	1	1	0	1	1	0
1	x	1	1	\overline{Ta}	1	1	0	1	1	1
x	0	\overline{Ta}	\overline{Ta}	Tg	1	1	1	1	1	1
x	1	\overline{Ta}	\overline{Ta}	\overline{Ta}	1	1	1	0	0	0