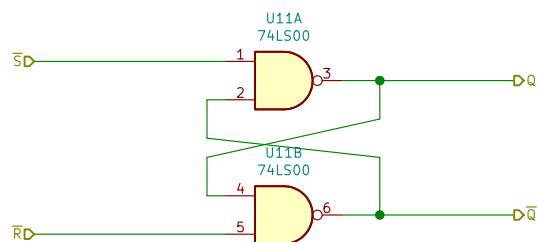


RS Latch

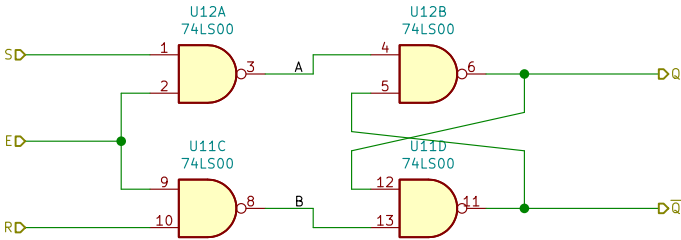


\overline{R}	\overline{S}	Q	\overline{Q}
0	0	1	1
0	1	0	1
1	0	1	0
1	1	Q	Q

(illegal state!)

(no change)

Gated RS Latch

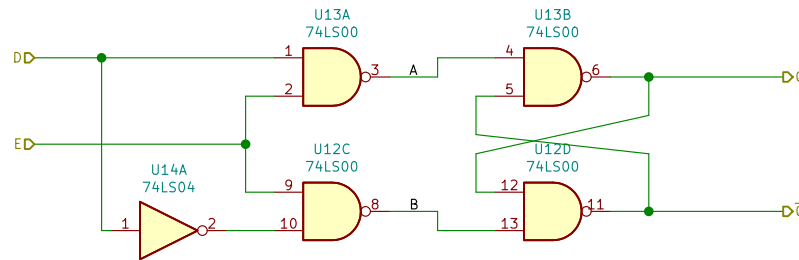


R	S	E	Q	\bar{Q}
X	X	0	Q	\bar{Q}
0	0	1	Q	\bar{Q}
0	1	1	1	0
1	0	1	0	1
1	1	1	1	1

(no change)
(no change)
(illegal state!)

Similar to RS but Q can only change when E is 1

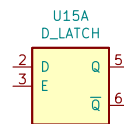
D Latch



D	E	Q	\bar{Q}
X	0	Q	\bar{Q}
1	1	1	0
0	1	0	1

(no change)

Similar to a gated RS but sets Q to D when E is 1.
(Sometimes called a 'transparent latch' because Q will track D as long as E is high.)



Symbol for a D Latch

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Sheet: /DLatch/
File: DLatch.sch

Title: D Latch

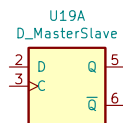
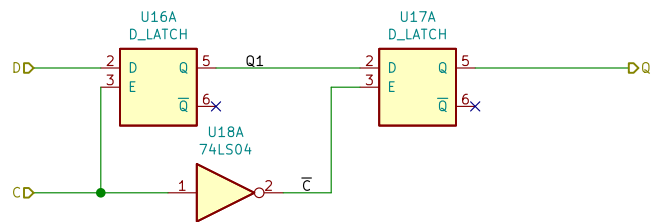
Size: USLetter Date: 2020-02-18

KiCad E.D.A. kicad 5.1.5+dfsg1-2build2

Rev: 1.5

Id: 3/4

D Flip Flop (Edge Triggered)



Symbol for a D Flip Flop

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Title: D Flip Flop (Edge Triggered)	
Size: USLetter	Date: 2020-02-18
KiCad E.D.A. kicad 5.1.5+dfsg1-2build2	Rev: 1.5 Id: 4/4