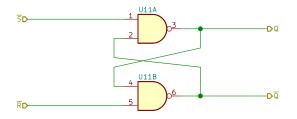
## **RS Latch**



R S Q Q 0 0 1 1 (illegal state!) 0 1 0 1 1 0 1 0 1 1 Q (no change)

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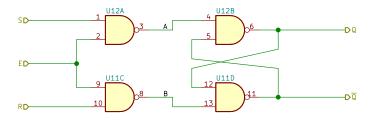
Sheet: /

File: 21-latches.sch

Title: RS Latch

Size: USLetter	Date: 2020-02-18	Rev: 1.5
KiCad E.D.A. kid	ad 5.1.5+dfsg1-2build2	ld: 1/4

## Gated RS Latch



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

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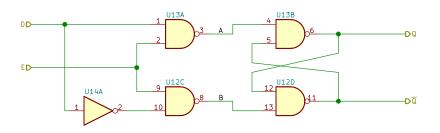
Sheet: /GatedRS/ File: GatedRS.sch

Title: Gated RS Latch

 Size: USLetter
 Date: 2020-02-18
 Rev: 1.6

 KiCad E.D.A. kicad 5.1.5+dfsg1-2build2
 Id: 2/4

## D Latch



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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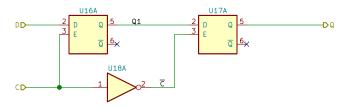
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Sheet: /DLatch/ File: DLatch.sch

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	i+I	le:	n	91	-	h

Size: USLetter	Date: 2020-02-18	Rev: 1.5
KiCad E.D.A. kid	ad 5.1.5+dfsg1-2build2	ld: 3/4

## D Flip Flop (Edge Triggered)



Q can only change at the point in time when C transitions from high to low.
We say "Q changes on the falling/trailing edge of C"



Symbol for a D Flip Flop

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Sheet: /DFlipFlop/ File: DFlipFLop.sch

Title: D Flip Flop (Edge Triggered)

Size: USLetter	Date: 2020-02-18		Rev: 1.5	
KiCad E.D.A. kid	ad 5.1.5+dfsg1-2build2		ld: 4/4	
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