NOR SR Latch


NAND RS Latch


$$
\begin{aligned}
& \begin{array}{llll}
S^{\prime}=0 & S^{\prime}=1 & S^{\prime}=0 & S^{\prime}=1 \\
R^{\prime}=1 & R^{\prime}=0 & R^{\prime}=1 & R^{\prime}=0
\end{array} \\
& \mathrm{~S}^{\prime}=1 \\
& \mathrm{~S}^{\prime}=1 \\
& \mathrm{~S}^{\prime}=1 \\
& S^{\prime}=1 \\
& \mathrm{R}^{\prime}=1 \quad \mathrm{R}^{\prime}=1 \\
& \mathrm{R}^{\prime}=1 \\
& \mathrm{R}^{\prime}=1
\end{aligned}
$$

Clocked NOR RS Latch


Gated D Latch


## Master Slave D Flip Flop



Master Slave D Flip Flop




