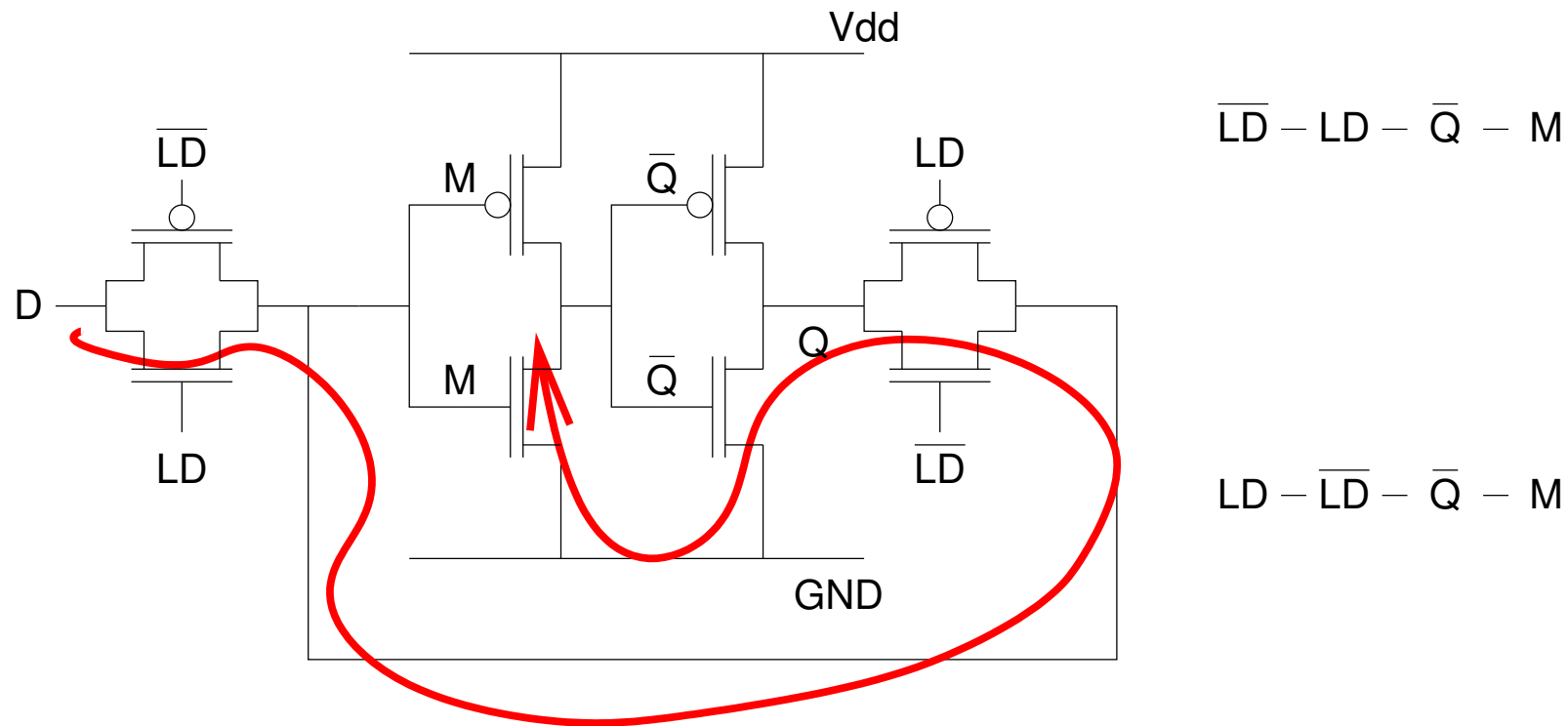


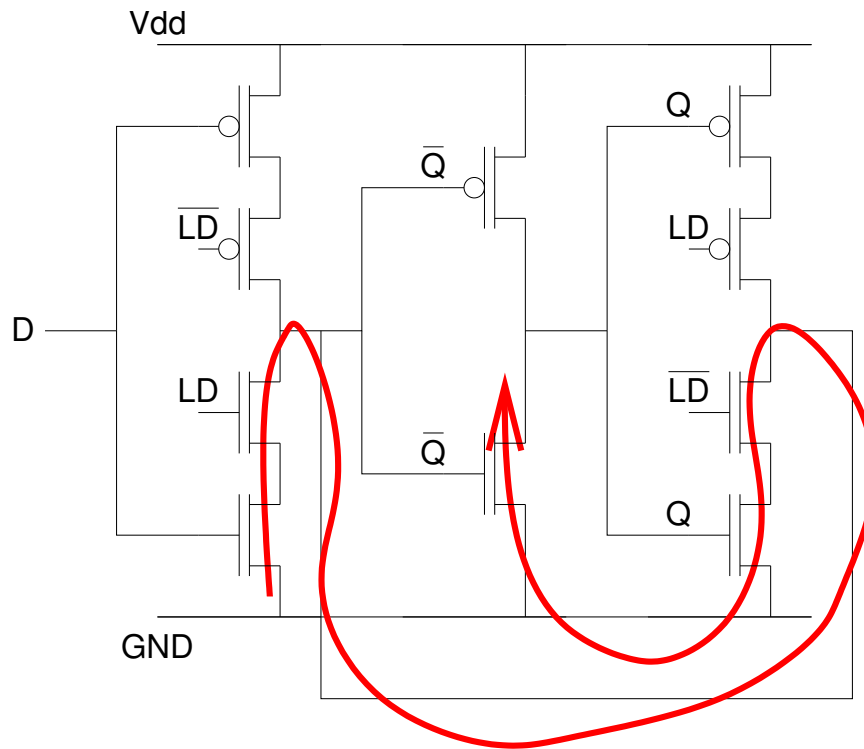
Latches and Flip-Flops

- Euler paths for transmission gate latch



Latches and Flip-Flops

- Euler paths for tristate inverter based latch

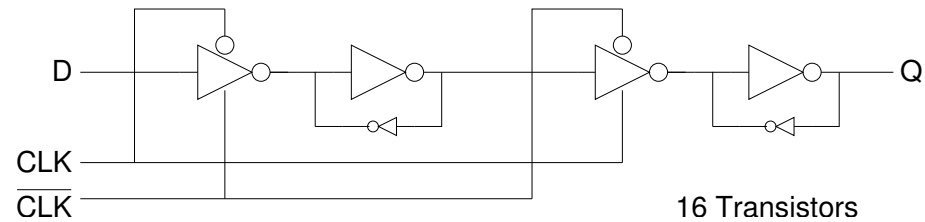


$D - \overline{LD} - LD - Q - \overline{Q}$

$D - LD - \overline{LD} - Q - \overline{Q}$

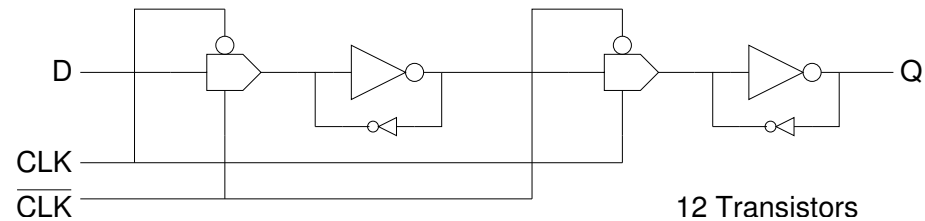
Latches and Flip-Flops

- Tristate inverter implementation based on "Jamb" latches



– the tristate inverter must be strong enough to override the weak inverter

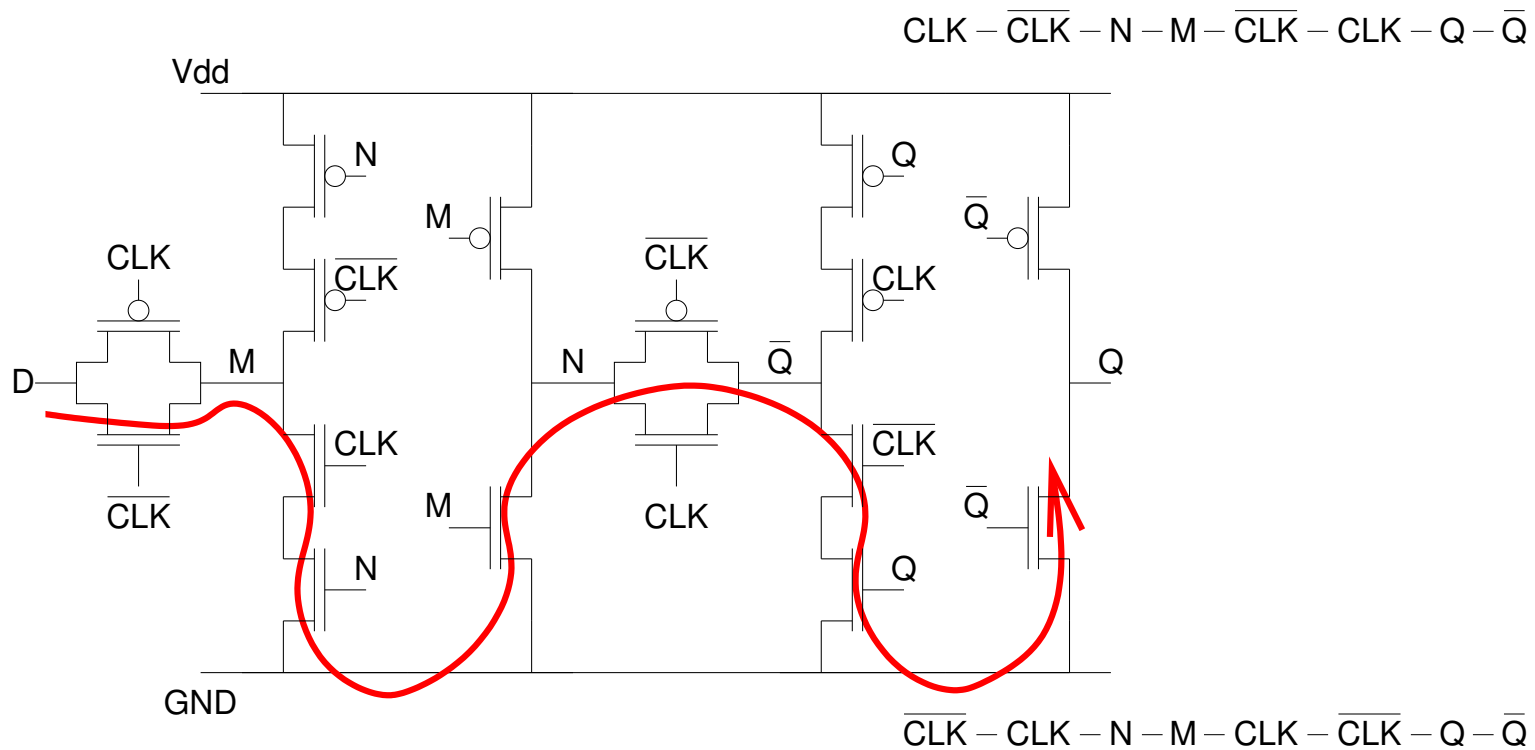
- Transmission gate implementation based on "Jamb" latches



– this is less useful since its functionality depends on the drive strength at D

Latches and Flip-Flops

- Euler paths for master slave D type



Latches and Flip-Flops

- Partial Euler paths for edge triggered D type

