Design Fully Integrated Switched Capacitor

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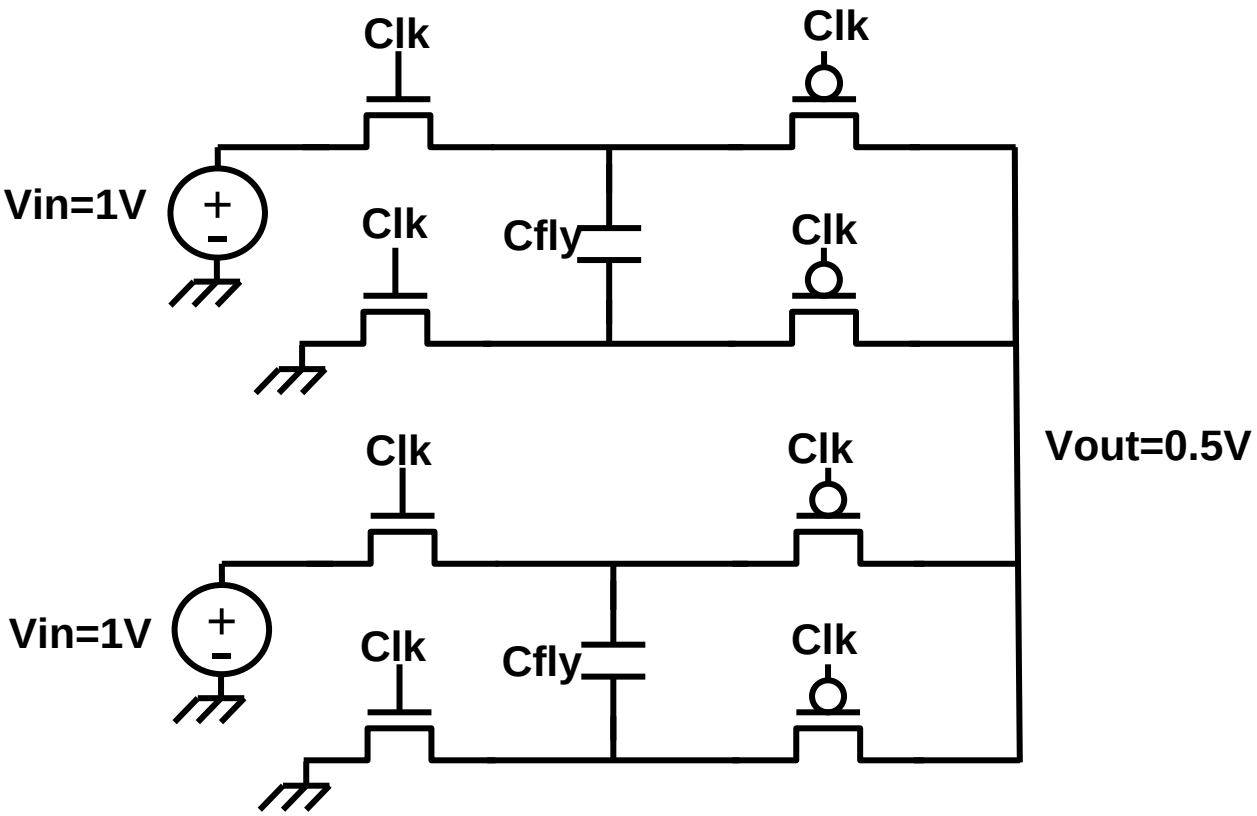
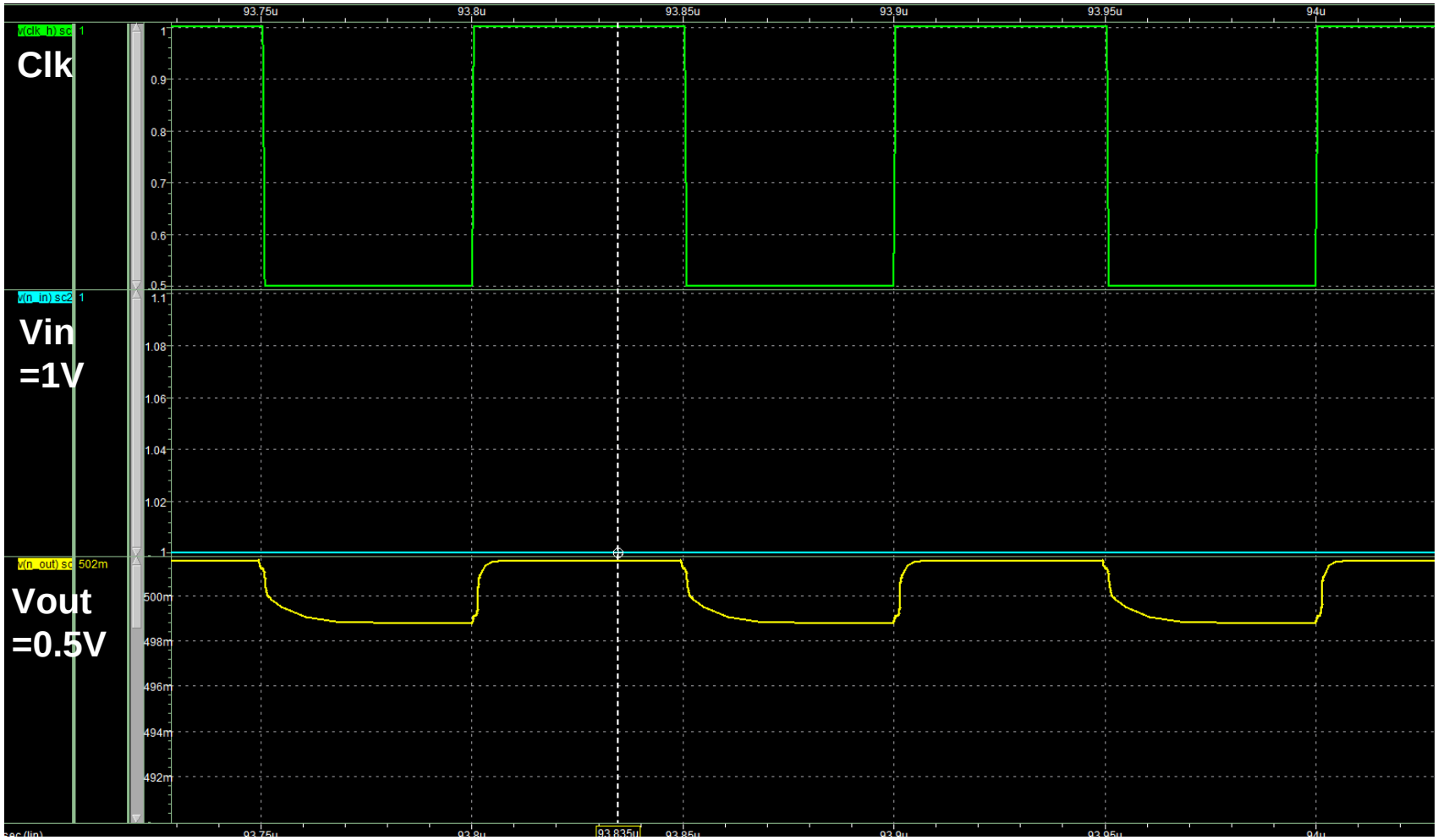
Switched Capacitor 2:1 Topology



Switched Capacitor Simulation



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Simulation Result

- Convert Vin=1V to Vout=0.5V
- Ripple= 4.5mV
- Cfly capacitor= 100fF
- Frequency= 10Mhz
- Efficiency= 81.2%

未來展望

- Add non-overlaping
- Add level shift,to reduce Switching loss
- Complete 3:1 & 3:2 topology
- Higher performance