

全積體化切換電容電路

Fully-integrated switched capacitor circuit

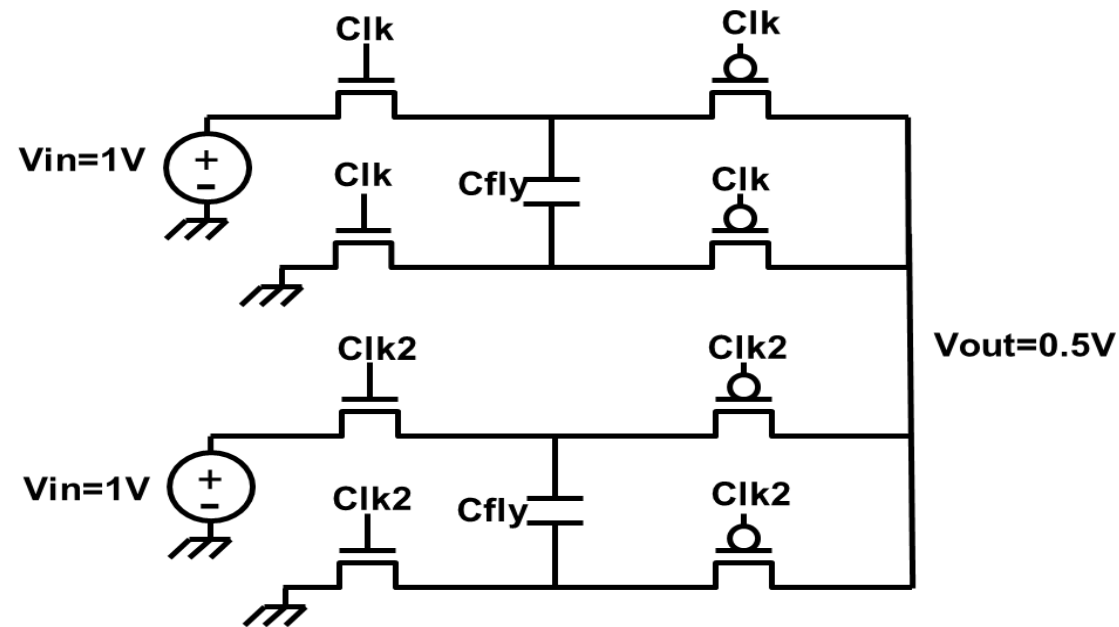
鑽石計畫-維基夥伴獎學金
醫療電子系統實驗室

吳季儒

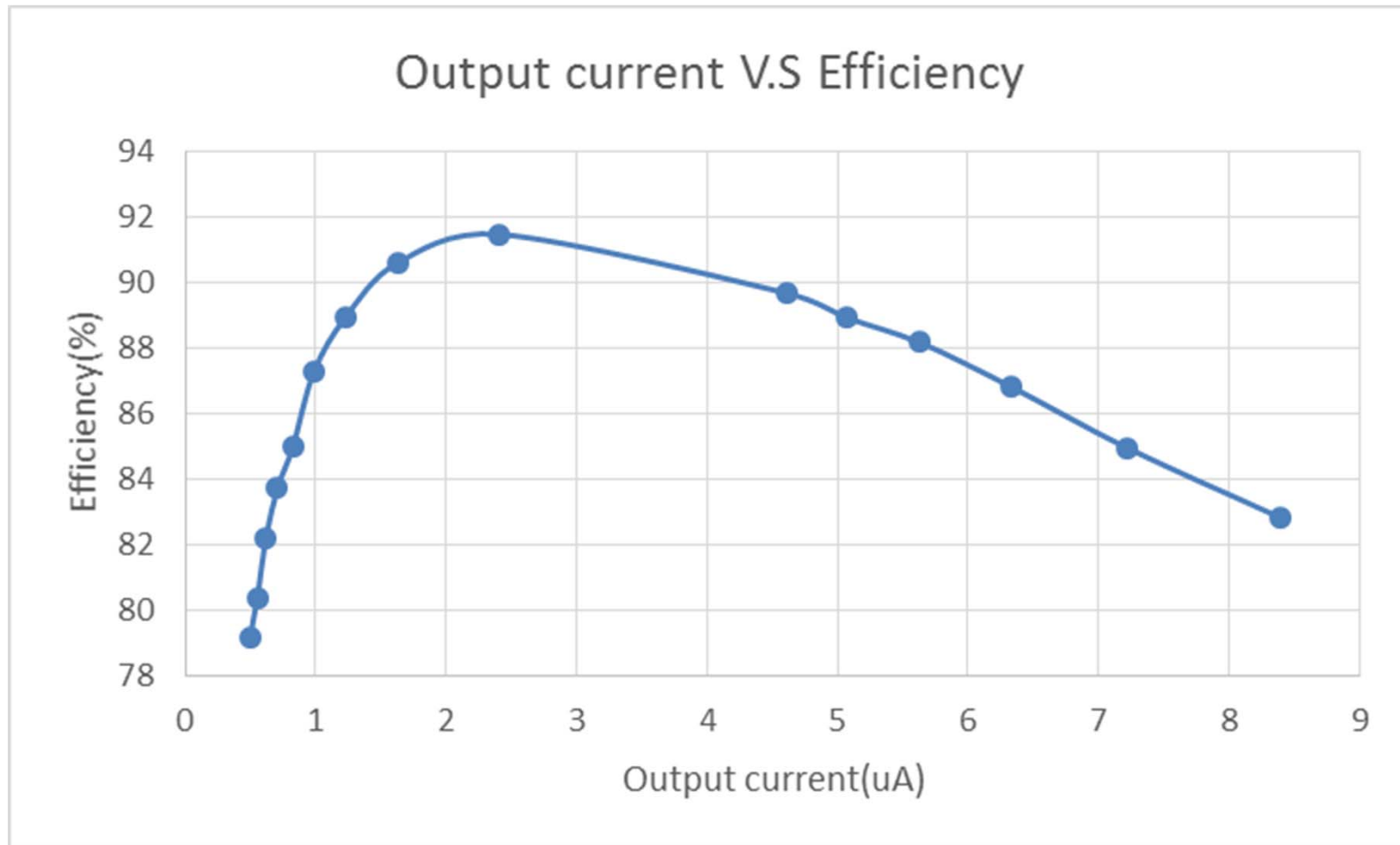


Switch Capacitor

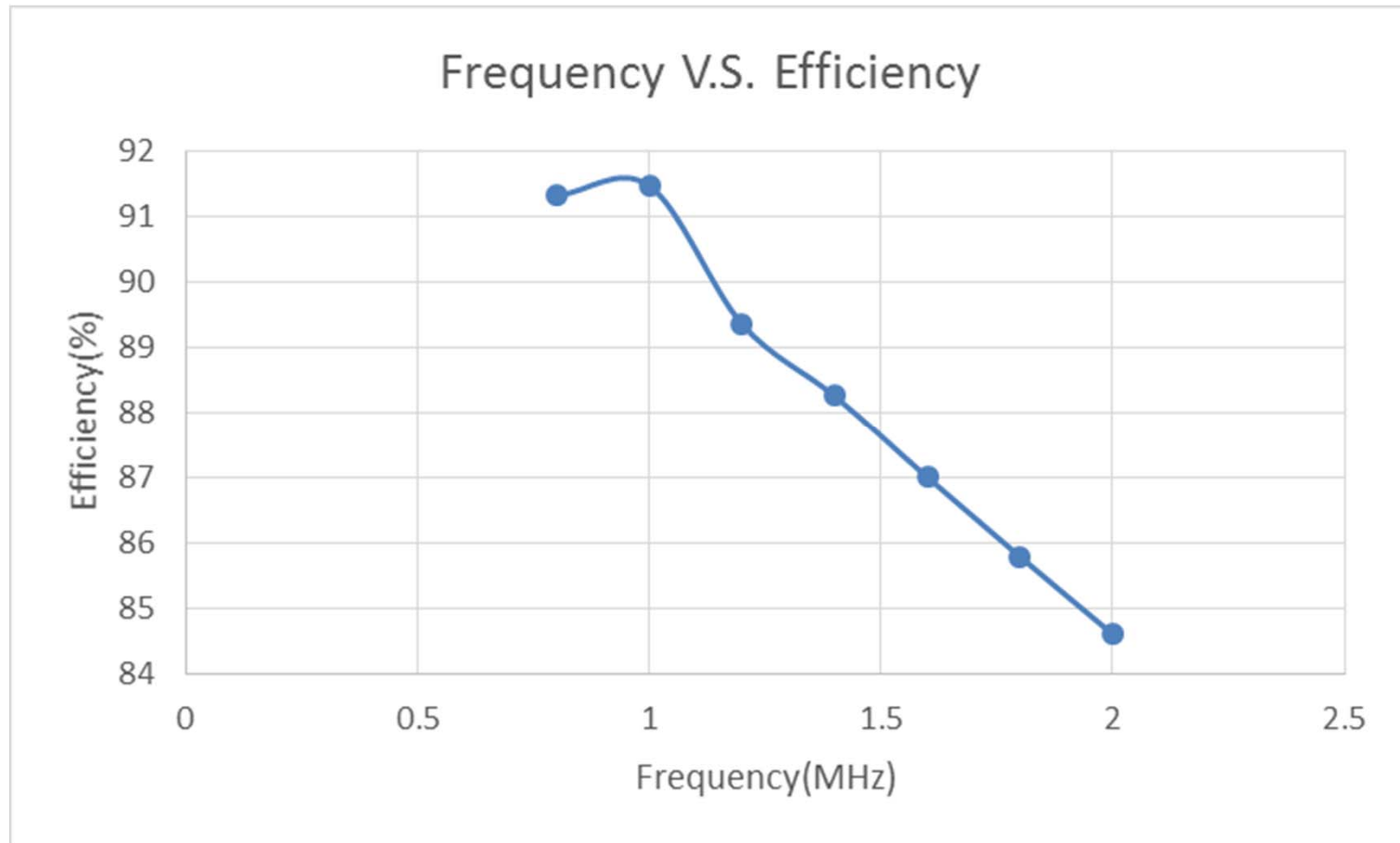
- (1) Phase Interleaving
- (2) MIM (Metal-Insulator-Metal) 電容
- (3) Non-overlapping 電路



Output Current V.S Efficiency



Frequency V.S. Efficiency



模擬結果 & Layout佈局圖

Work	This work
Technology	65nm
Topology	1/2 step-down
Capacitor Technology	MIM
Interleaved Phases	2
C_{out}	0
Converter Area	8.262mm ²
Efficiency	91.4%

