

演示板說明

此 Demo 板由福州新拓電子科技有限公司設計製造。演示了 silego 的 GreenFET3 和 GreenPAK2 產品如何應用於 LED 調光驅動器。產品外觀如下圖所示。

通過 microUSB 插口接入 5V 電源。電源開關為自鎖開關，控制 GreenFET3 的導通和關斷；導通時，電源指示燈（紅色）亮起，5V 電源輸出至 GreenPAK2。旋轉亮度旋鈕（順時針為增大），可以控制 LED 燈的亮度，3 個亮度檔位燈（綠色）指示當前亮度值。注：由於 LED 燈光線很強，請勿直視，以免傷害眼睛。



图 1. LED 調光驅動器

GreenFET3 演示

SLG59M301V，是一款集成電荷泵與 N-MOSFET 的晶片，本演示板，演示了如何用 N-MOSFET 代替 P-MOSFET, 用於低電壓控制開關中。

特點：

N-MOSFET 成本比 P-MOSFET 低

N-MOSFET 的導通電阻比 P-MOSFET 低，帶來更少的損耗

集成電荷泵，可用較低電壓控制導通關斷，使用方便。

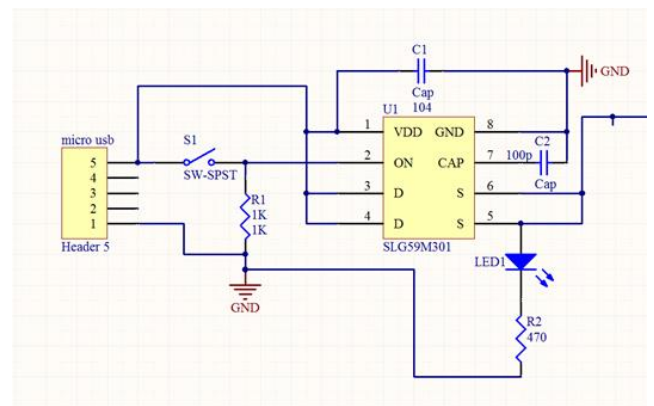


图 2. GreenFET 演示板

GreenPAK2 演示

GreenPAK2 是一款可程式設計混合信號陣列，內部包含 PWM、ADC、比較器、運算放大器、電壓基準源、時鐘發生器等功能模組。具有成本低、開發簡單、運行速度快、可靠性高等特點。

該演示板，演示利用晶片內部的時鐘發生器、計數器、ADC、PWM、比較器、電壓基準、數位門電路等，實現 LED 軟啟動功能。通過 GreenPAK2 開發平臺，以所見即所得的方式快速開發。無需編寫複雜代碼，可靠性高，難於破解等。

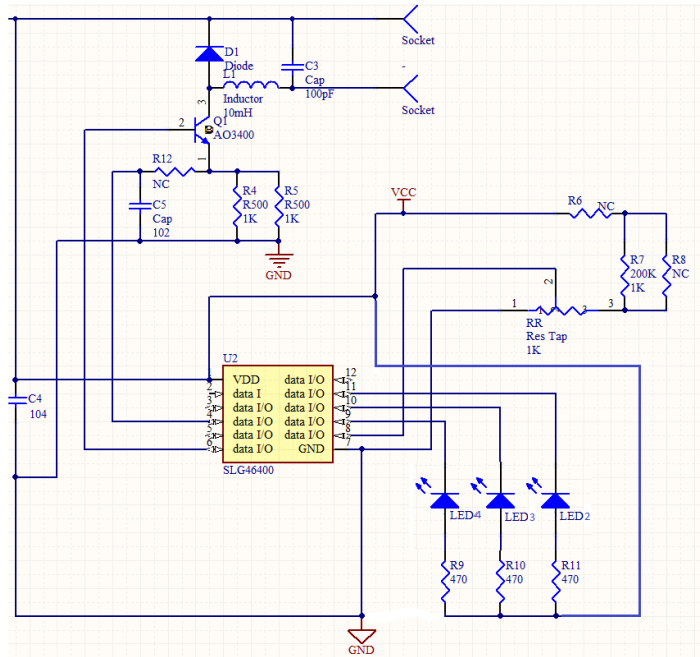


图 3. GreenPAK 演示

下圖是 GreenPAK2 開發平臺

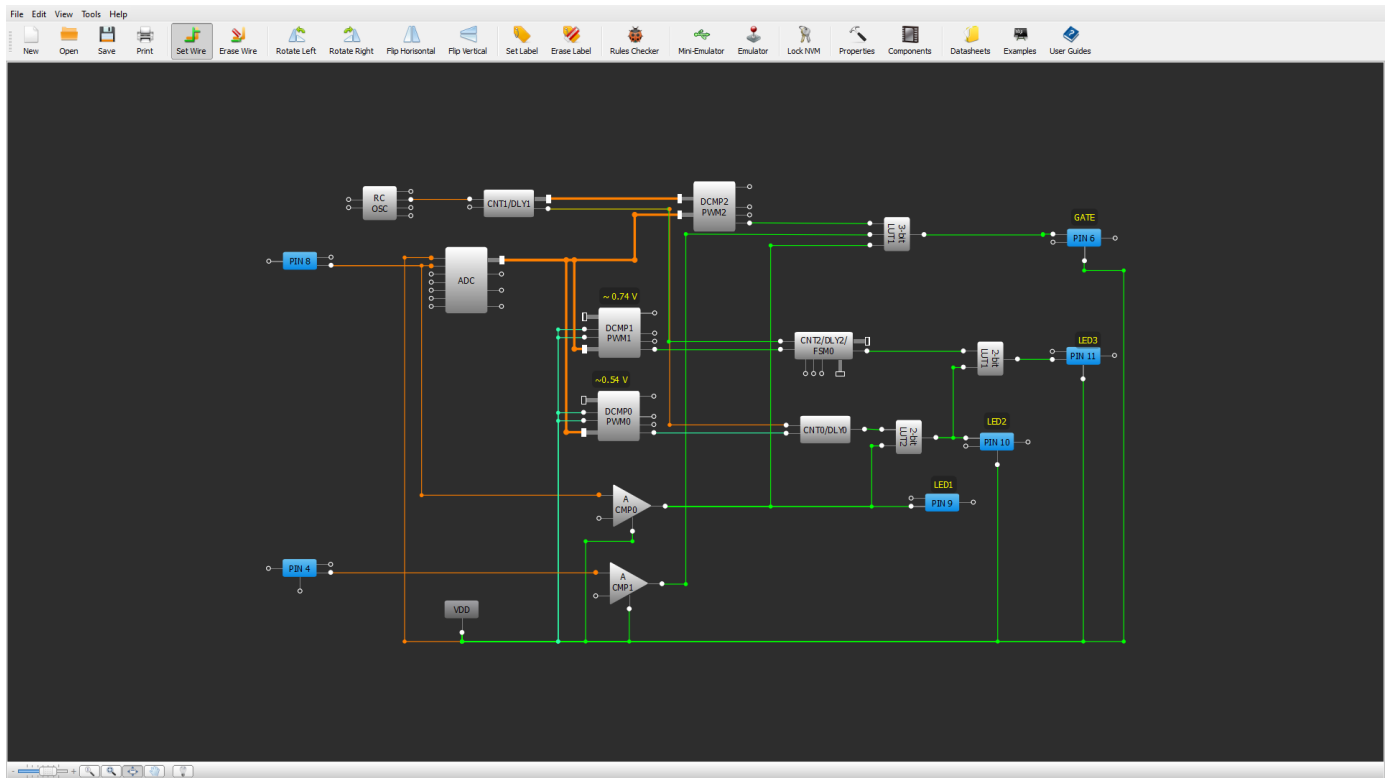


图 4. GreenPAK2 開發平臺

文档历史

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A	Peter Zheng	12/5/2013	新应用实例

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