



Same devices for many configurations

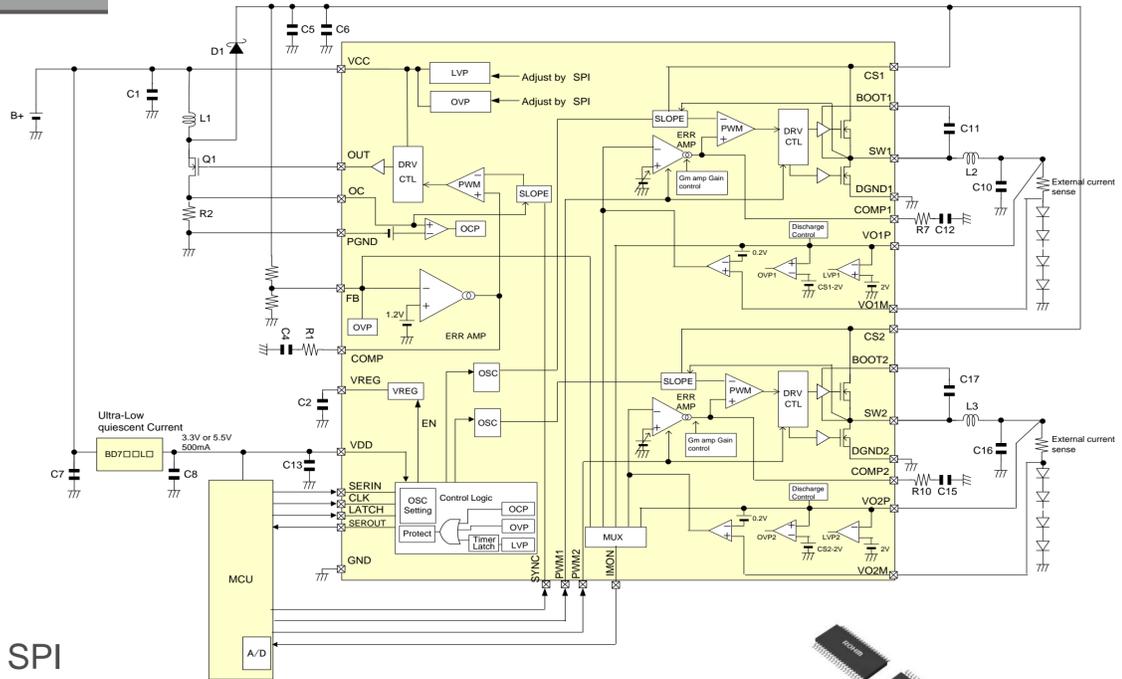
System LED Drivers for Lamps

BD1836xEFV-M / BD183xxEFV-M



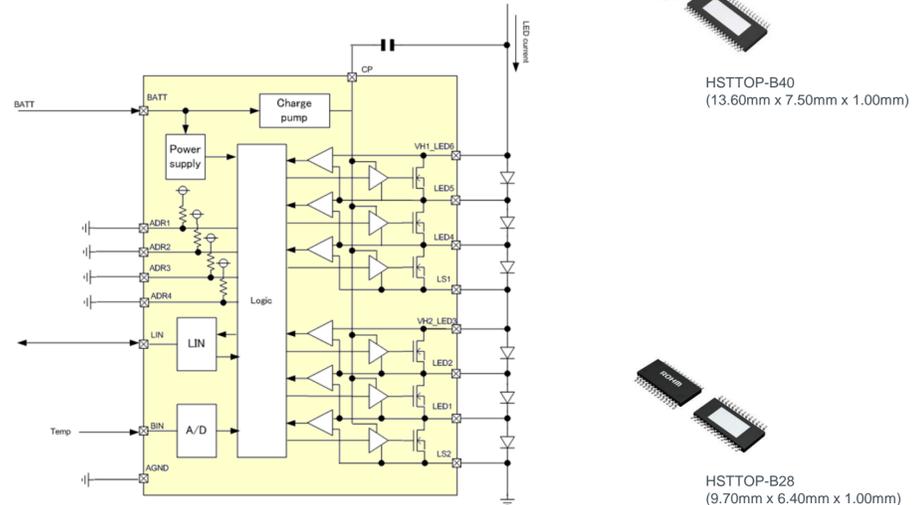
BD1836xEFV-M Features

- 1ch Boost and 2ch buck led driver
- Input voltage range : 4.5V~70V
- Boost operating voltage range : 20V~60V by SPI setting (2v step)
- Maximum current 1.6A / channel (integrated FETs) accuracy : $\pm 3\%$ ($T_a=25^\circ\text{C}$) programmable by SPI ($\pm 0.5\%$ step)
- PWM dimming without External FET
- Boost frequency range : 100kHz~1MHz
- Buck frequency range : 100kHz~2.2MHz programmable by SPI
- Diagnostic functions
- Actual LED current ($\pm 3\%$) and boost/buck voltage monitored by MCU
- Adjust switching slew rate with internal resistance by SPI



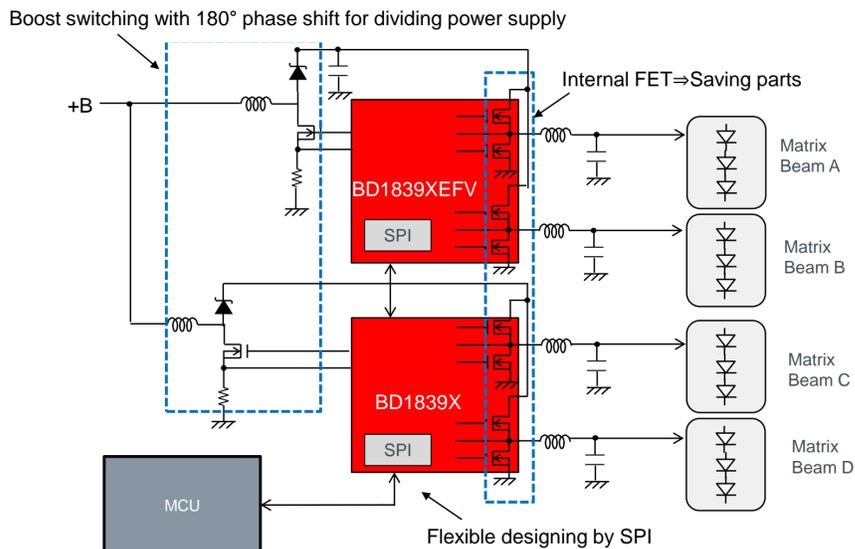
BD183xxEFV-M Features

- 6ch matrix switch
- Maximum current 1.4A ($T_a=85^\circ\text{deg}$)
- Integrated Nch MOS FET
- Each LED is Individual dimmed by LIN communication
- Charge pump for gate drivers
- 10bit A/D for monitoring temperature
- AECQ100 qualified

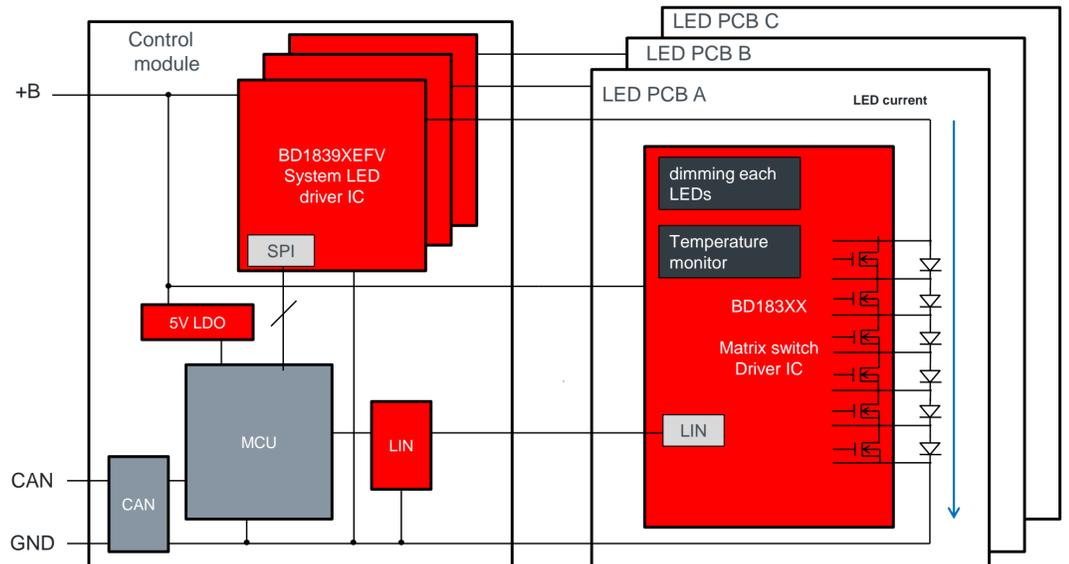


Configuration Examples

• Multi-Lines LED configurations



• Matrix LED configurations



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