



# How to Save Power on LED Drivers for LED Traffic Signs and Message Signs

By Tiger Yen, RD Engineer of Macroblock

## Foreword

The worldwide energy shortage has raised public awareness on energy saving issues, and the revolutionary LED light source has therefore been widely adopted for its low power consumption, long life, environmental protection, and fast turn-on time features. As the LED brightness is adjusted by current, a constant current LED driver is necessary to keep uniform LED brightness. Furthermore, an LED driver with power saving functions becomes popular in order to meet the energy efficiency requirements in LED traffic sign and message sign applications.

## Market Trend and Application

In LED traffic sign and message sign applications, only partial LEDs are turned on in a fixed area during a specific time period. As illustrated in Figure 1, the LEDs of the speed limit sign are turned off in the dark area, and the other LEDs are turned on in the red and white area. However, at the dark area, even if the LEDs are turned off, the LED drivers still keep working, which will consume unnecessary power over a long period of time and shorten the lifecycle of LED drivers.

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