



产品简介

BCR602

用于可调光 LED 应用的 60 V 线性 LED 控制器 IC

BCR602 采用小型模块封装设计, 成本低, 非常适用于 LED 驱动器应用, 如光引擎、模块和灯条。与 DC-DC buck IC 方案相比, 该控制器具有更高的集成度, BOM 成本低, LED 寿命长等诸多优点。

线性电流控制

BCR602 是一种线性 LED 控制器 IC, 可通过外部晶体管调节 LED 电流。BCR602 支持 NPN 双极晶体管或 N 通道 MOSFET, 可支持 LED 宽电流输出和高达几安培的电流输出。通过改变外部电流检测电阻的大小, LED 电流可实现扩展。

纹波抑制

BCR602 通过驱动恒定的 LED 电流抑制电源的电压纹波, 从而实现高品质的光和无闪烁的光。

多种调光选项

LED 电流可通过电阻器或者连接到多功能 MFIO 引脚的模拟电压或数字 PWM 信号将光调低至 1%。

热插拔能力

在不损坏 LED 的情况下, 嵌入式热插拔保护可在工作过程中插入和拔出任何 LED 负载。

过温保护

如果超过了结温阈值, 过温保护功能将使 LED 电流降低 30% 的标称电流。一旦结温降至温度保护点以下, 则恢复额定 LED 电流。

关键性能

- > 电源电压为 8V 到 60V
- > AC 纹波抑制
- > 支持广泛的电流范围, 具体取决于外部晶体管
- > 栅极驱动器电流为 10mA
- > LED 电流可通过 $R_{\text{设置}}$ 进行调整
- > MFIO 引脚提供各种调光选项
 - 模拟降至 3%
 - PWM 降至 1%
- > 热插拔能力
- > LED 电流精度 $\pm 3\%$
- > 过热保护

典型应用

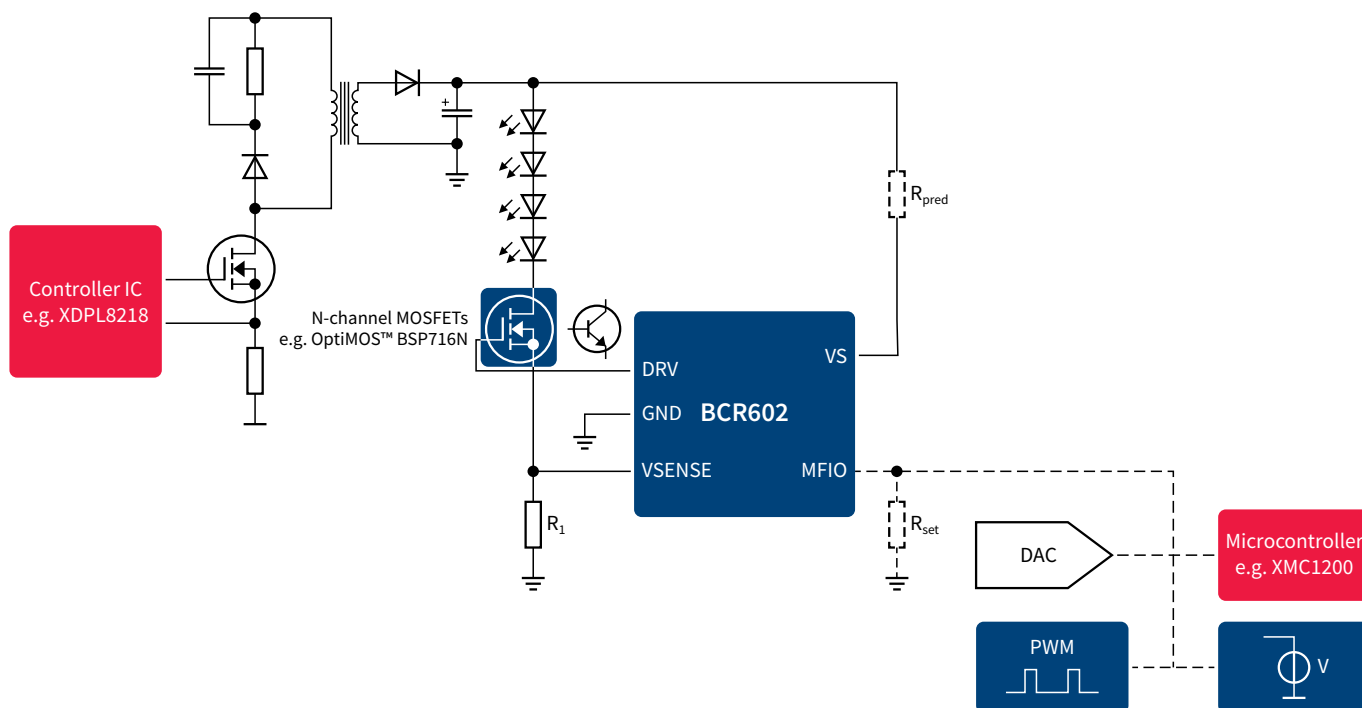
- > LED 光引擎
- > LED 模块
- > LED 灯条



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典型应用图



订购信息

类型	描述	订购信息
BCR602	60 V 线性 LED 控制器 IC	BCR602XTSA1
DEMO_BCR602_60V_ICTRL	60 V 演示板 BCR602, 200 mA, 配有 BSP716N OptiMOS™	DEMOBCR60260VICTRL

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