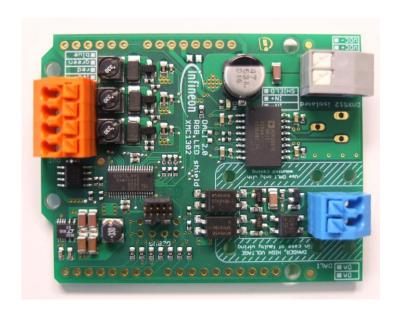


## KIT\_XMC\_LED\_DALI\_20\_RGB



# XMC 3 channels RGB LED Lighting Shield with XMC1302

### **Hardware Compatible with Arduino**

Order Nr: KIT\_LED\_XMC1302\_AS\_01

The RGB LED lighting shield from Infineon technologies is one of the first intelligent evaluation boards compatible with Arduino as well as Infineon's XMC1100 BOOT KIT. It is designed to be easily configurable and combinable for different LED light engines and lamps, for fast prototyping and in-expensive evaluation of LED lighting applications. The RGB LED Lighting Shield with XMC1302 uses a DC/DC buck topology and is able to drive up to 3 LED channels with constant current. The shield itself is powered by a programmable **XMC 32-bit ARM® MCU** with embedded Brightness Color Control Unit (BCCU, XMC1300 MCU series), for flicker-free LED dimming and color control.

The BCCU enables extreme low-cost but high quality LED lighting solutions, with minimal user code. The RGB LED lighting shield has also been designed to provide options for the evaluation of smooth, eye-friendly dimming, color mixing for different topologies, and it can be extended with for example DALI/DMX or radar.

#### Summary of Features:

- Compatible with Arduino Uno R3 and XMC1100 Boot Kit from Infineon
- Easy configurable for various light engines and any input voltage (within operating conditions)
- Wide DC input voltage range
- Simple I2C interface
- DALI and DMX interface

#### Benefits:

- Fast prototyping of 3 channels RGB LED lighting
- Flicker-free light thanks to high-speed pulse density modulation
- Easy-to-use dynamic dimming and color control
- Small size thanks to high-frequency current control (high power density)
- Backdoor access to on-board-microcontroller for advanced users and parameterization ( external debugger KIT\_XMC\_LINK\_SEGGER\_V1 needed)

#### Target Applications:

- LED lighting
- home appliances
- Building Automation

#### **Related Products:**

- XMC1000 family
- XMC1100 Boot KIT
- DAVE™ IDE
- BSR606N

## **Parametrics**

Parametrics	KIT_XMC_LED_DALI_20_RGB
Applications	Lighting; Building Automation, Home appliance
Family	Microcontroller
Product Description	The XMC 3 channels RGB LED Lighting Shield from Infineon technologies is one of the first intelligent evaluation boards compatible with Arduino as well as Infineon's XMC1100 BOOT KIT. It is designed to be easily configurable and combinable for different LED light engines and lamps, for fast prototyping and in-expensive evaluation of LED lighting applications. The RGB LED Lighting Shield with XMC1302 uses a DC/DC buck topology and is able to drive up to 3 LED channels with constant current. The shield itself is powered by a programmable XMC 32-bit ARM® MCU with embedded Brightness Color Control Unit (BCCU, XMC1300 MCU series), for flicker-free LED dimming and color control. The BCCU enables extreme low-cost but high quality LED lighting solutions, with minimal user code. The RGB LED lighting shield has also been designed to provide options for the evaluation of smooth, eye-friendly dimming, color mixing for different topologies, and it can be extended with for example DALI/DMX or radar.
Supply Voltage <b>min max</b>	12.0 V 48.0 V
Target Application	Industrial
Topology	Buck
Туре	Evaluation Board

## **Documents**

## **User Manual**

DALI 2.0 RGB Shield revCEN

01\_00 | 2019-06-06 | zip | 374 KB

DALI2.0 RGB Original Testing SWEN

01\_00 | 2019-06-06 | zip | 15 MB

## Order

Sales Product Name	KIT_XMC_LED_DALI_20_RGB
OPN	KITXMCLEDDALI20RGBTOBO1
Product Status	active and preferred
Package name	
Order online	Buy online
Completely lead free	
Halogen free	
RoHS compliant	yes
Packing Size	1
Packing Type	CONTAINER
Moisture Level	
Moisture Packing	DRY

https://www.infineon.com/cms/en/product/evaluation-boards/kit\_xmc\_led\_dali\_20\_rgb/11-19-19