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KIT_XMC_LED_DALI_20_RGB

Overview

XMC 3 channels RGB LED Lighting Shield with XMC1302

Hardware Compatible with Arduino

Order Nr : KITXMCLEDDALI20RGBTOBO1

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

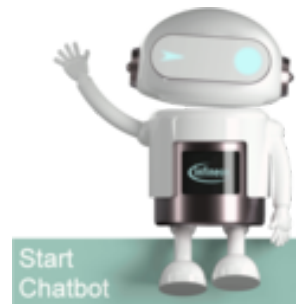
XMC 32-bit ARM® MCU (/cms/en/product/microcontroller/32-bit-industrial-microcontroller-based-on-arm-registered-cortex-tm-m/channel.html?channel=db3a30433c1a8752013c3e221b9d004f)

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

Benefits



- 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
- 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** (/cms/en/product/evaluation-boards/kit_xmc_link_segger_v1/) needed)

Potential Applications

- LED lighting
- home appliances
- Building Automation

Related Products:



XMC1000 family (/cms/en/product/microcontroller/32-bit-industrial-microcontroller-based-on-arm-registered-cortex-tm-m/32-bit-xmc1000-industrial-microcontroller-arm-registered-cortex-tm-m0/channel.html?

- channel=db3a30433c1a8752013c1aa35a6a0029)

XMC1100 Boot KIT (/cms/en/product/evaluation-boards/KIT_XMC11_BOOT_001/productType.html?

- productType=db3a30443b360d0e013b8f5163c46f62)

DAVE™ IDE (https://www.infineon.com/cms/en/product/microcontroller/32-bit-industrial-microcontroller-based-on-arm-registered-cortex-tm-m/32-bit-xmc1000-industrial-microcontroller-arm-registered-cortex-tm-m0/dave-tm-13-free-development-platform-for-code-generation/channel.html?

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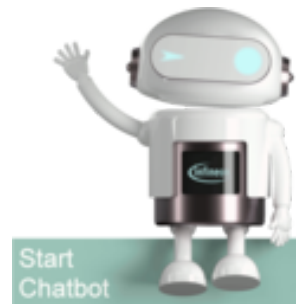
BSR606N (/cms/en/product/power/mosfet/power-mosfet/n-channel-small-signal-

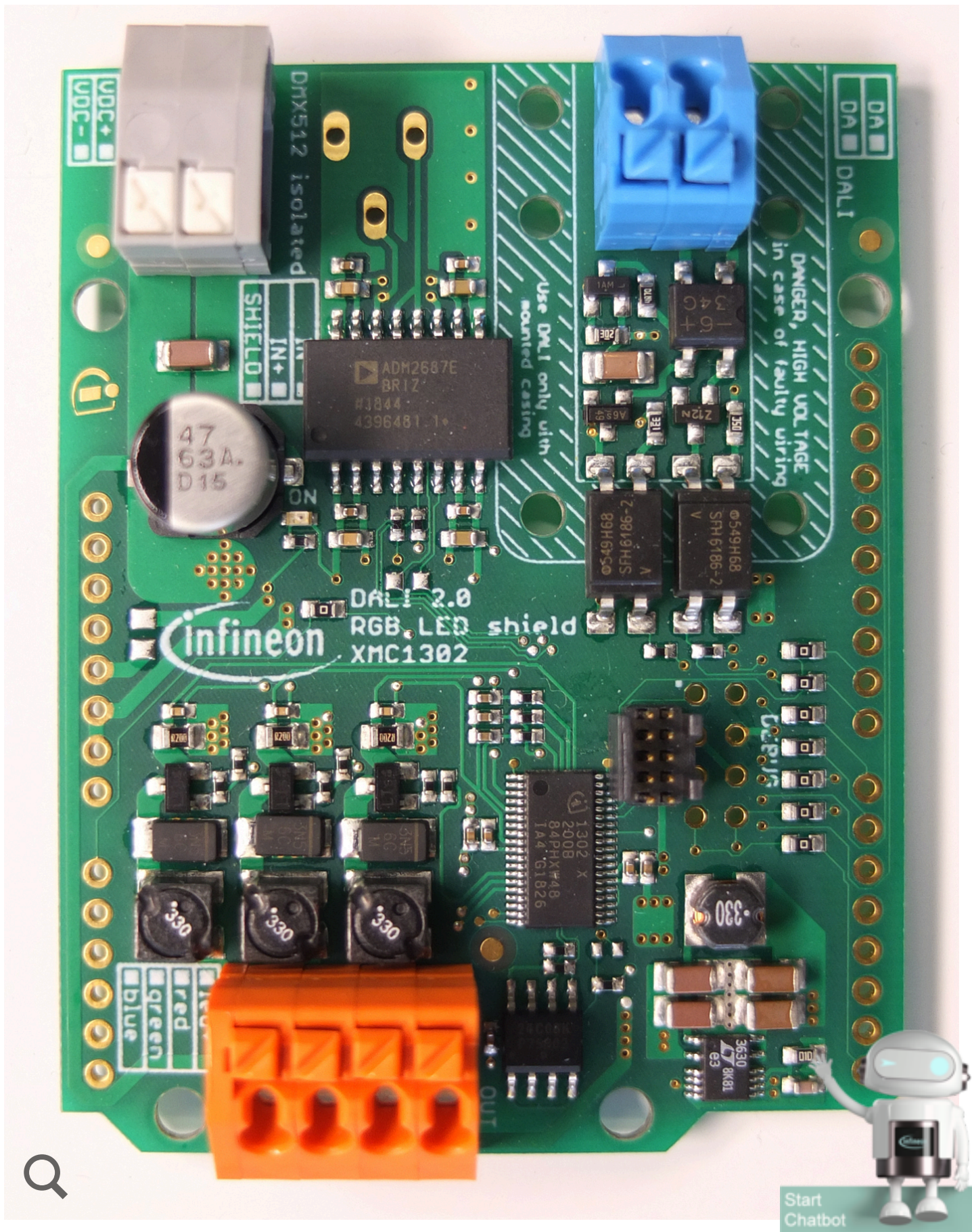


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Parametrics

Parametrics	KIT_XMC_LED_DALI_20_RGB
Applications	Lighting ; Building Automation , Home appliance
Bluetooth Standard	N/A
Board Type	Evaluation Kit
CapSense	No
Core	ARM Cortex-M0
External memory	None
Family	XMC1300 Industrial Microcontroller
Features	DALI, DMX interface
GPIOs/Shield Compatibility	Arduino Uno
Hardware Compatibility	KIT_XMC11_BOOT_001
Programmer/Debugger	External XMC Link Debugger
Sensors	None
Software Support	DAVE
Supply Voltage min max	12 V 48 V
Target Application	Industrial
Topology	Buck
WiFi Standard	N/A



Documents

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ret=https%3A%2F%2Fwww.infineon.com%2Fcms%2Fen%2Fproduct%2Fevaluation-boards%2Fkit_xmc_led_dali_20_rgb%2F%23!documents)
to myInfineon to see all documents available

+ User Manual



DALI 2.0 RGB Shield revC **NEW** (/dgd/Infineon- DALI_2.0_RGB_Shield_revC-UserManual-v01_00-EN.zip?fileId=5546d4626afcd350016b2ccdc53245b7)
> EN (/dgd/Infineon- DALI_2.0_RGB_Shield_revC-UserManual-v01_00-EN.zip?fileId=5546d4626afcd350016b2ccdc53245b7)

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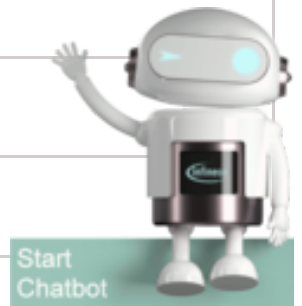
DALI2.0 RGB Original Testing SW (/dgd/Infineon- DALI2.0_RGB_Original_Testing_SW-UserManual-v01_00-EN.zip?fileId=5546d4626afcd350016b2cd8108b4d4c)
> EN (/dgd/Infineon- DALI2.0_RGB_Original_Testing_SW-UserManual-v01_00-EN.zip?fileId=5546d4626afcd350016b2cd8108b4d4c)

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Order

Sales Product Name	KIT_XMC_LED_DALI_20_RGB
OPN Info	KITXMCLEDDALI20RGBTOBO1
Product Status	active and preferred
Infineon Package name	
Standard Package name	



Sales Product Name	KIT_XMC_LED_DALI_20_RGB
Order online	
Completely lead free	
Halogen free	
RoHS compliant	yes
Packing Size	1
Packing Type	CONTAINER
Moisture Level	2
Moisture Packing	DRY

Support

🔍

Top 6 FAQs. Use the search bar above to show more!

How to get Technical Support?

The best way to reach out to our Applications Engineers is through our **Infineon Developer Community** (<https://community.infineon.com>) Our Applications Engineers modera...

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How to find a Partner to support on SW, HW, dev tools and...

Infineon’s global network of partners offer products and services that complement our semiconductor device solutions to accelerate your development efforts and time to market.

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