# PRESS RELEASE

**Würth Elektronik presents LEDs with integrated controllers**

**Easier Realization of Intelligent LED Control**

Waldenburg (Germany), March 27, 2024 – Würth Elektronik now offers [WL-ICLED](https://www.we-online.com/en/components/products/WL-ICLED), a new series of RGB LEDs with integrated controller (IC). The components, controllable as pixels, combine a red, green and blue LED with a programmable contoller IC. The intelligent LEDs, available in four designs, are individually controllable in their pixel color and brightness levels from 0 to 100 percent.

Over 16 million different color and brightness levels can be set with the new RGB LEDs. They are compatible with open source libraries such as FastLED. As fewer components (such as series resistors) are required, display solutions with intelligent LEDs are not only quicker to implement, they are more compact than solutions with separate LEDs. Applications for the components include signal control systems, full-color matrix displays, audio and gaming systems, indoor lighting and displays on e-mobility charging stations. The following designs are now available: 2020 Chip LED compact, 3210 Chip LED Side View, 2121 PLCC6 with bypass and 5050 PLCC4.

Moisture protection

In contrast to comparable solutions already on the market, Würth Elektronik’s intelligent LEDs with an MSL3 moisture sensitivity level (rather than MSL5a or MSL6 commonly found) are less moisture sensitive during assembly. Some of the components comply with protection class IPx7, so they can even be submerged for a short time without damage. Another quality feature of the LED chipsets is their gold coating on the ‘Chip LED’ models and silver coating for PLCC models, which leads to better solderability. Available in 8-bit and 12-bit versions, the intelligent LEDs offer more options for PWM resolution.

Standardized qualification

Photobiological test reports in accordance with EN 62471:2008 and IEC 62471:2006 are available for all models in the product group. This may be relevant if the intelligent LEDs are used in toys. Würth Elektronik does not target the automotive market with the new product – but the tests and qualifications were carried out in accordance with AEC Q102-003 in order to provide customers with objectively comparable specifications.

The LEDs with integrated controllers can now be ordered from stock without a minimum order quantity. Developers can receive free samples.

**Available images**

The following images can be downloaded from the Internet in printable quality: <https://kk.htcm.de/press-releases/wuerth/>

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| Image source: Würth Elektronik **WL-ICLED: Würth Elektronik offers its RGB LEDs integrated with controllers in various designs.** |

About the Würth Elektronik eiSos Group

Würth Elektronik eiSos Group is a manufacturer of electronic and electromechanical components for the electronics industry and a technology company that spearheads pioneering electronic solutions. Würth Elektronik eiSos is one of the largest European manufacturers of passive components and is active in 50 countries. Production sites in Europe, Asia and North America supply a growing number of customers worldwide.

The product range includes EMC components, inductors, transformers, RF components, varistors, capacitors, resistors, quartz crystals, oscillators, power modules, Wireless Power Transfer, LEDs, sensors, radio modules, connectors, power supply elements, switches, push-buttons, connection technology, fuse holders and solutions for wireless data transmission. The portfolio is complemented by customized solutions.

The unrivaled service orientation of the company is characterized by the availability of all catalog components from stock without minimum order quantity, free samples and extensive support through technical sales staff and selection tools.

Würth Elektronik is part of the Würth Group, the global market leader in the development, production, and sale of fastening and assembly materials, and employs 7,900 people. In 2023, the Würth Elektronik Group generated sales of 1.24 Billion Euro.

Würth Elektronik: more than you expect!

Further information at [www.we-online.com](http://www.we-online.com)

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