



New Single-Pair-Ethernet-Switch on ModBlox7™



Hamm, 09-04-2024: EKF is presenting its first ModBlox7™-based product at Embedded World: The 7L600 is a robust single-pair Ethernet switch that combines modularity with high computing power and state-of-the-art interfaces. The cost-effective switch is particularly suitable as a multifunctional gateway in a wide range of IIoT or retrofit applications, but can also serve as an edge computer for (real-time) data pre-processing and data collection thanks to the on-board ARM CPU.

ModBlox7™ meets SPE

Standardized modularity, high computing power at an affordable price and the use of the modern, IP-based single-pair Ethernet (SPE) transmission standard - these are the ingredients that EKF is looking for. The company played a key role in the standardization of the new PICMG standard ModBlox7™, which combines the advantages of modular standards such as CompactPCI® and CompactPCI® Serial with the typical box PC requirements such as cost efficiency, small form factor and low weight. The subdivision into different functional units enables a flexible system structure - even with modules from different manufacturers.

With the single-pair Ethernet standard, the switch fulfills another company focus that offers SPE-based switches in a wide variety of form factors and will continue to expand this product family.



7L600 – Single-Pair-Ethernet-Switch or Edge Computer?

The 7L600 is equipped with seven 100 BASE-T1 ports and two 1000BASE-T uplinks in accordance with IEC 63171-6. The SPE ports are hi-pot isolated and fully compatible with the Open Alliance BroadReach standard. Inside the switch is the 88Q5072 Ethernet controller from Marvell, which supports AVB and TSN and also enables uncomplicated configuration via local or remote management functions.

Optionally, the switch can be extended by an ARM-based mezzanine controller card, which is suitable for additional protocol support, switch management and real-time data processing, for example, and thus transforms the switch into an edge computer.

Technical data sheet 7L600:

<https://ekf.de/product/7l600>

Visit us in Hall 1, Stand 406 and discover the 7L600 and other ModBlox7 products from our partner Ci4Rail!



About EKF:

EKF Elektronik GmbH is a leading manufacturer of modular, ruggedised embedded boards and systems for demanding industrial sectors such as transport and traffic, IIoT and Industry 4.0, robotics, energy, industrial automation and medical technology.

From the high-performance CompactPCI® serial standard to modular and cost-effective box and board-level assemblies (EKF Embedded Blue®/Gold series and PICMG ModBlox7 standard), EKF offers flexible embedded solutions that are precisely tailored to customer requirements.

With product designs based on the latest CPU platforms from Intel, NVIDIA and ARM, cloud-based software solutions and modular product families that build on each other, the company manages the balancing act between innovation and long-term availability.

Development and production take place exclusively at the company's own headquarters in Hamm, Germany. A three-year guarantee on all products emphasises the company's quality standards.

EKF is an active member of renowned technology partners such as the Intel Partner Alliance, PICMG, PCI-SIG, EtherCat Technology Group and Single Pair Ethernet Industrial Partner Network, where it actively promotes the development of the latest product standards.