# **Embedded Vision AI Platform Kit** with AMD Kria SoM



Get in the fast lane to AI embedded vision solutions!

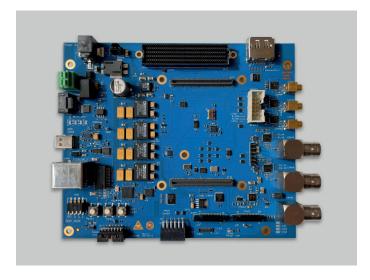
Take the fast and easy route to your embedded vision application with our modular and scalable embedded vision platform from hema electronic.

- Flexible and scalable performance
- Use of compatible FPGA modules from Xilinx
- 45+ hardware design building blocks from hema electronic
- IP ready

hema electronic has developed the world's first mainboard with the new Xilinx Kria SoM for industrial embedded vision developments. Based on this mainboard, you can develop individual solutions based on our proven platform technology using scalable FPGA modules. For different applications you choose the suitable combination of video and communication interfaces.

Linux based software, the extensive Xilinx Kria software environment and developer tools enable re-use of software efforts from prototyping to series production.

The hema embedded vision AI platform kit is ideal to bridge the gap between evaluation and series. You'll be faster to market and longer successful!



## Get your individual electronics in just 6 weeks:

- Specify demands and requirements
- We design your individual mainboard using the hema design library. Customer specific functionalities can also be included
- Receive your close-to-production electronics within 6 weeks

Send us your project idea\* and hardware specifications and you'll be among the first to receive your custom hema embedded vision mainboard with the AMD Kria SoM. Get in touch with us directly:



#### hema electronic GmbH

Röntgenstraße 31 73431 Aalen

Fon: +49 7361 9495-0 Web: www.hema.de



\*Please note: We can only provide support for start-up and development for individual projects with our customers. If you are interested in a general evaluation of the AMD Kria SoM, please use their standard Kria Al Starter Kit. We will be at your side to migrate from rapid prototyping with any other kit to an industrial-grade and series optimized solution with hema.

# World's first Mainboard with AMD Kria SoM



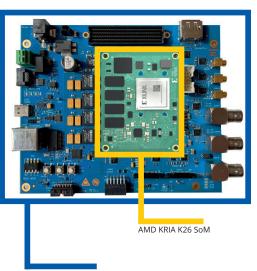
### hema Embedded Vision Al Mainboard

#### System overview:

The world's first mainboard with the new AMD Kria SoM for industrial embedded vision developments. It features a number of standard interfaces and can be utilized as a prototype for various embedded vision applications such as video distribution units, roundview applications, surveillance solutions and the likes.

#### **Features**

- Module slot for AMD Kria SoM K26
- 3x 3G-SDI video input/output (programmable)
- HD-SDI video input
- 3x MIPI-CSI input (2x RPi, 1x IAS)
- Display-Port 1.4
- 2x multi-format analog video input
- Multi-format analog video output
- USB 3.0 interface
- Gbit Ethernet
- CAN interface, galvanically isolated
- RS-232 interface, galvanically isolated
- Micro SD Card
- FMC slot: LPC
- PMOD interface
- EEPROM as configuration memory
- RTC
- Temperature range: -40°C to 85°C
- Dimensions: 130mm x 155mm



hema Mainboard EVB2

### AMD Kria K26 SoM

#### System overview:

Offered in Commercial and Industrial grades, the Kria K26 SOM features a custom-built Zynq® UltraScale+™ MPSoC device in a small form factor card ideal for producition deployment in Smart Camera, Embedded Vision, and other Security, Retail Analytics, Smart City, and Machine Vision applications.



Mainboard Features	Kria Starter-Kit	hema EVB2	hema EVBcustom
Video interface (11)	3	6	11
Communication (6)	4	5	6
Memory (2)	2	1	2
Other I/O (4)	1	2	4

#### hema electronic GmbH: Visual Intelligence We provide expertise and capacity for your projects

Vision systems for harsh environments need robust solutions. Our electronics have been deployed and proven their worth in applications such as vehicle control, surveillance (mobile and stationary), and vision control for defense, aviation, medical and industrial automation. We support our customers with hardware and software development and best-in-class solutions from the idea to series production.