

Kria™ KV260 Vision AI Starter Kit

OVERVIEW

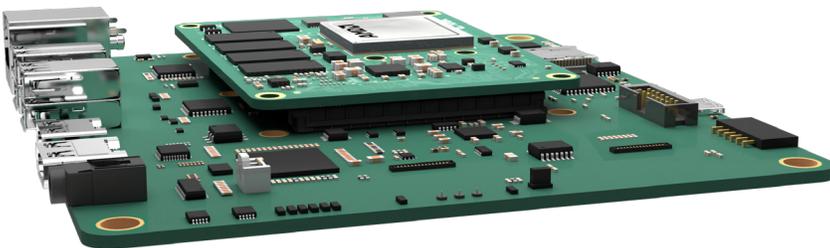
The first starter kit in the Kria™ portfolio, the KV260 Vision AI Starter Kit is an out-of-the-box platform for advanced vision application development. Priced at \$199, the KV260 is equipped with a non-production version of the production K26 SOM. This SOM and fansink are mounted to an evaluation carrier card optimized for vision applications, featuring multi-camera support via ON Semiconductor Imager Access System (IAS) and Raspberry Pi connectors.

Enabled by a growing ecosystem of accelerated applications for the KV260 Vision AI Starter Kit, developers of all types can get applications up and running in under 1 hour, with no FPGA experience needed. From there, customization and differentiation can be added via preferred design environments, at any level of abstraction—from application software to AI model to FPGA design.

With both hardware and software development requirements simplified, the KV260 Vision AI Starter Kit is the fastest and easiest platform for application development with the goal of volume deployment on Kria K26 SOMs.

OUT-OF-THE-BOX READY FOR APPLICATION DEVELOPMENT

1. Connect camera, cables, and monitor
2. Insert the programmed microSD card
3. Power-on the board
4. Load the accelerated application of your choice
5. Run the accelerated application



Vision Ready

- > Multi-Camera Support: Up to 8 interfaces
- > ON Semi IAS MIPI sensor interfaces
- > Raspberry Pi MIPI sensor interface
- > USB camera support
- > Dedicated ISP (ON Semi AP1302)
- > HDMI, DisplayPort Outputs

Flexible Connectivity

- > 1Gb Ethernet
- > USB 3.0 / 2.0

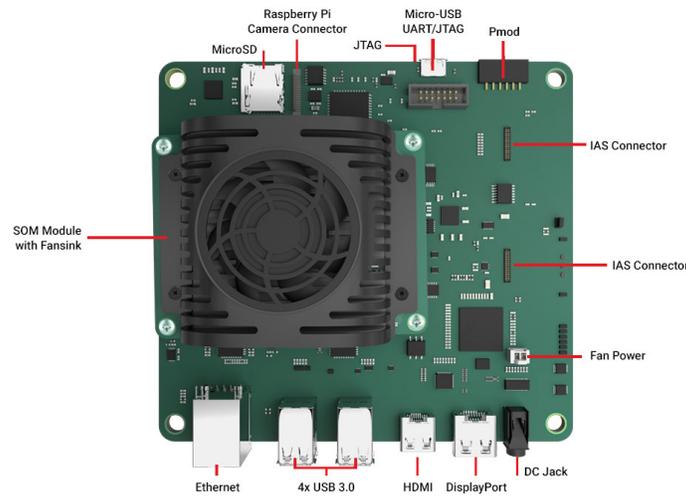
Expandable

- > Extend to any sensor or interface
- > Access Pmod ecosystem

Accessible

- > Low-cost, enabling design exploration
- > Available from AMD and distributors

SPECIFICATIONS



PARAMETER	KV260
Device	Zynq™ UltraScale+™ MPSoC
Form factor	SOM + Carrier Card + Thermal Solution
Starter kit dimensions	119mm x 140mm x 36mm
Thermal cooling solution	Active (Fan + Heatsink)
System logic cells	256K
Block RAM blocks	144
UltraRAM blocks	64
DSP slices	1.2K
Ethernet interface	One 10/100/1000 Mb/s
DDR memory	4GB (4 x 512Mb x 16-bit) [non-ECC]
Primary boot memory	512Mb QSPI
Secondary boot memory	SDHC card
Device security	Zynq UltraScale+ MPSoC hardware root of trust (RoT) in support of secure boot. Infineon TPM2.0 in support of measured boot.
Image sensor processor	OnSemi AP1302 13MP ISP
IAS MIPI sensor interfaces	x2
Raspberry Pi camera interface	x1
Pmod 12-pin interface	x1
USB3.0/2.0 interface	x4
DisplayPort 1.2a	x1
HDMI 1.4	x1

Power supply sold separately

TAKE THE NEXT STEP

For more information, documents, and reference designs, or to purchase, visit <https://www.xilinx.com/products/som/kria/kv260-vision-starter-kit.html>

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