

# VL - KRIA : EDGE FPGA DEVELOPMENT BOARD

## Processor / Device

Device: AMD Zynq™ UltraScale+™ MPSoC (Kria K26 SOM)  
Processor Subsystem: Quad Arm® Cortex-A53 + Dual Cortex-R5F + Mali™-400 MP2 GPU  
Hardware Security: Hardware Root of Trust (RoT), Infineon TPM 2.0 for measured boot  
Primary Boot Memory: 512 Mb QSPI  
Secondary Boot Memory: SD Card (SDHC)

## Memory

DDR Memory: 4 GB DDR4 (4 × 512 Mb × 16 bit), non-ECC  
On-Chip Memory: Includes BRAM and URAM blocks for high-bandwidth processing

## Connectivity & Interfaces

Ethernet: 1 × 10/100/1000 Mb/s Gigabit Ethernet port  
USB: 4 × USB 3.0 / USB 2.0 ports

## Display Outputs:

1 × HDMI™ 1.4  
1 × DisplayPort™ 1.2a

## Camera Interfaces

2 × MIPI CSI-2 (ISP connected, auto-focus supported)  
1 × Raspberry Pi-compatible MIPI CSI interface  
Up to 8 total camera interfaces supported  
Image Signal Processor: OnSemi AP1302 ISP

## Expansion Interfaces

1 × 12-pin Pmod interface (Supports Digilent Pmods and custom I/O)

## System & Power

Form Factor: System-on-Module (SOM) + Carrier Card + Thermal Solution

Cooling: Active fan with heatsink included

Power Input: External DC supply (required, sold separately)

Power Consumption: Typically under 15 W (depending on design)

