

VERSAL™ PORTFOLIO KIT SELECTION GUIDE

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VERSAL

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AMD Versal Platform Evaluation Board Portfolio & Features

	Versal™ Prime Series	Versal AI Core Series	Versal AI Edge Series	Versal AI Edge Series Gen 2
	VMK180	VCK190	VEK280	VEK385
	Entry point to Versal platform development	Designed for signal processing and compute intensive applications	Optimized for ML inference and power sensitive, compute intensive applications	Optimized for AI-ML inference with increased compute performance, low latency applications
AI Engines[1]	N/A	400 (AIE)	304 (AIE-ML)	144 (AIE-ML v2)
DSP Engines	1,968		1,312	2,064
DIMM Memory	8 GB, 72-bit DDR4		N/A	N/A
Component Memory	8 GB, 128-bit LPDDR4		12 GB, 192-bit LPDDR4	20 GB, 160-bit LPDDR5X
PCIe® (Endpoint)	Gen4 x8		Gen4 x16	Gen5 x4 Gen3/4 x8
FMC1 (GT, I/Os)	12 GTYs, 68 user-defined signals		8 GTYPs, 68 user-defined signals	4 GTYPs, 68 user-defined signals
FMC2 (GT, I/Os)	12 GTYs, 68 user-defined signals		N/A	N/A
Networking	SFP28 (2), QSFP28 (1)		SFP28 (1)	SFP28 (1), QDFP28 (1)
Additional Features	CAN HSDP RJ-45, USB-A		CAN HSDP RJ-45, USB-A	CAN (4), HSDP, RJ-45 USB 3.2 (C), USB 2.0/3.0 (A) PCIe RP,Video Codec (H.264/H.265)
Boot Modes	JTAG, MicroSD, QSPI		JTAG, MicroSD, OSPI	JTAG, MicroSD, OSPI, UFS
Video / Display Support	HDMI™ 1.4/2.0 In/Out		HDMI 2.1 In/Out	HDMI 2.1 In/Out, DisplayPort™ 1.4
Licensing Support	AMD Vivado™ Design Suite			

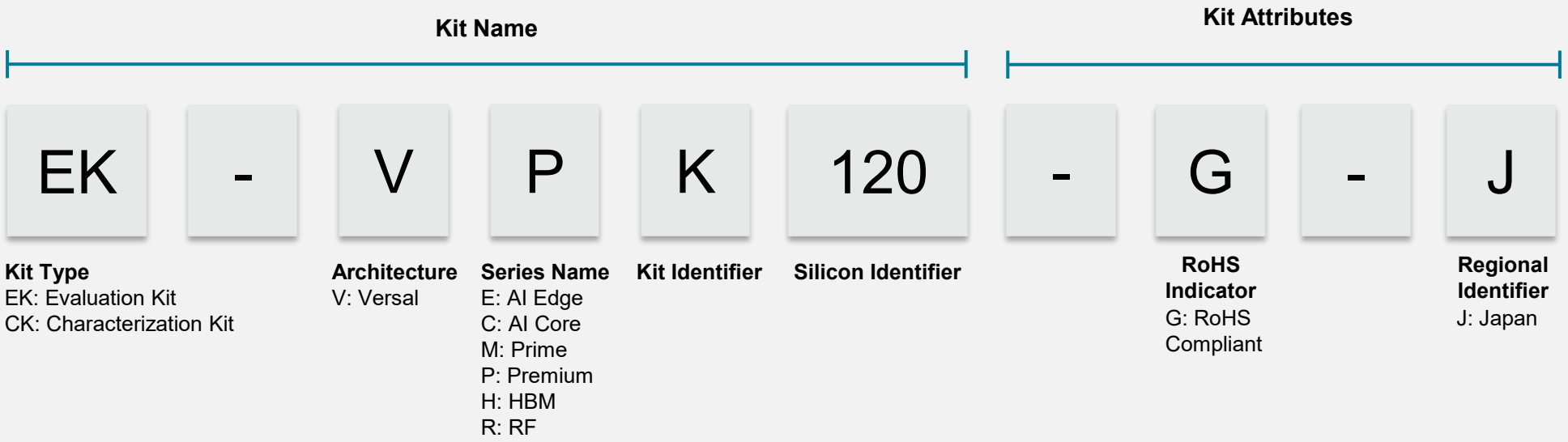
1. AMD offers various types of AI Engines, e.g., AIE and AIE-ML (AI Engine for Machine Learning). Learn more here.

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	Versal™ HBM Series	Versal Premium Series	
	VHK158	VPK120	VPK180
	Convergence of memory, compute, and connectivity with 32 GB HBM, 112G PAM4 transceivers	PCIe Gen5 evaluation platform and 100+ Gb/s PAM4 transceivers	Over 4 Tb/s of total aggregate bandwidth using 112G PAM4 transceiver and industry-standard connectors
AI Engines[1]	N/A	N/A	N/A
DSP Engines	7,392	3,984	14,352
DIMM Memory	32 GB, 72-bit DDR4	N/A	N/A
Component Memory	N/A	12 GB, 192-bit LPDDR4	12 GB, 192-bit LPDDR4
PCIe® (Endpoint)	Gen5 x8 Gen3/4 x16	Gen5 x8 Gen3/4 x16	N/A
FMC1 (GT, I/Os)	8 GTYPs, 68 user-defined signals	8 GTYPs, 68 user-defined signals	8 GTYPs, 68 user-defined signals
FMC2 (GT, I/Os)	N/A	N/A	N/A
Networking	QSFP28 (4), QSFP-DD (2)	QSFP-DD (2)	SFP-DD (4), QSFP-DD (6), OSFP (1)
Additional Features	32 GB HBM DRAM HSDP High-Speed Crypto Engine RJ-45, USB-A	High-Speed Crypto Engine RJ-45, USB-A	HSDP High-Speed Crypto Engine RJ-45, USB-A
Boot Modes	JTAG, MicroSD, OSPI	JTAG, MicroSD, QSPI	JTAG, MicroSD, QSPI
Video / Display Support	N/A	N/A	N/A
Licensing Support	AMD Vivado™ Design Suite		

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AMD Versal™ Portfolio Kit Ordering Information



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