



Zynq UltraScale+ MPSoC Kit Selection Guide



Zynq® UltraScale+™ MPSoC Boards & Kits Portfolio

Starter Kits & SOMs

Ultra96-V2

Embedded Linux
Starter Kit



ZU3EG

- Starter kit for embedded Linux users
- Design support from 96boards and Element14 community
- PYNQ support
- AES-ULTRA96-V2-G



UltraZed-EG

Rapid Prototyping
Starter Kit



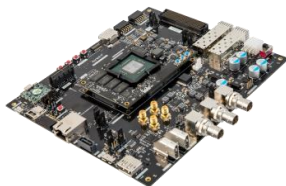
ZU3EG

- Ideal for rapid prototyping
- Quick time to production with SOM card
- AES-ZU3EG-1-SK-G



UltraZed-EV

Video Application
Starter Kit



ZU7EV

- Ideal for video applications
- Quick time to production with SOM card
- Supports VCU Targeted Reference Design
- AES-ZU7EV-1-SK-G



Full Evaluation Boards

ZCU104

Embedded Vision
Platform



ZU7EV

- Ideal for machine learning and computer vision development
- Leverages reVISION stack for ease of development
- Audio and Video processing
- EK-U1-ZCU104-G



ZCU106

Multimedia &
Connectivity Platform



ZU7EV

- Ideal for high performance video encode/decode
- Supports VCU Targeted Reference Design
- EK-U1-ZCU106-G



ZCU102

General-Purpose
Development



ZU9EG

- Ideal for evaluating a wide range of interfaces
- Highly expandable with multiple design examples
- EK-U1-ZCU102-G



Zynq® UltraScale+™ MPSoC Boards & Kits: Resources

Feature	Ultra96-V2	UltraZed-EG	UltraZed-EV	ZCU104	ZCU106	ZCU102	
Featured Silicon	Zynq UltraScale+ MPSoC	ZU3EG	ZU3EG	ZU7EV	ZU7EV	ZU9EG	
LUTs	154k	154k	504k	504k	504k	600k	
Applications / Reference Designs	TRD	Yes	-	Yes	Yes	Yes	
Boot / Code Storage	SD Boot	Yes	Yes	Yes	Yes	Yes	
	QSPI Boot	-	Yes	Yes	Yes	Yes	
	JTAG Boot	Yes	Yes	Yes	Yes	Yes	
	eMMC Boot	-	Yes	Yes	-	-	
Communications & Networking	PCIe®	-	Gen2 x1 Endpoint (PS)	Gen2 x1 Rootport (PS)	-	Gen4 x4 Endpoint (PS)	
	RJ-45	-	1x	1x	1x	1x	
	SFP+	-	-	2x	-	2x	
	WiFi	Yes	-	-	-	-	
	Bluetooth Low Energy (BLE)	Yes	-	-	-	-	
	USB	2x USB3	USB3 Mini	USB3 Mini	USB3	2x USB3	
	USB-UART	1x	2x	2x	2x	2x	
	USB-JTAG	1x	1x	1x	-	-	
	SPI	1x	-	-	-	2x	
	I2C	3x	2x	2x	2x	2x	
	CAN	-	-	-	1x	2x	
	Control & User Interaction	PMBus	Yes	Yes	Yes	Yes	Yes
		SMA	-	-	4x	-	6x
		DIP Switches	-	13x	4x	4x	8x
LEDs		Yes	Yes	Yes	Yes	Yes	
Push buttons		1x	8x	4x	4x	6x	
Debug & Trace	JTAG PC4 Header	1x	1x	1x	1x	1x	
	32-pin Mictor	-	-	-	-	1x	
Expansion Connectors	FMC	-	1x FMC HPC	1x FMC HPC	1x FMC LPC	2x FMC HPC	
	Pmod	-	13x	3x	3x	2x	
	Expansion	96board LS & HS	Arduino Header	-	-	-	
Tools	Vivado® Design Edition	✓	-	-	✓	✓	
	WebPACK™	-	✓	✓	-	-	
Memory	PS LPDDR4 (capacity / width)	2GB / x32	-	-	-	4GB DDR4 x8	
	PS DDR4 (capacity / width)	-	2GB / x32	4GB / x64	2GB / x16	4GB / x8	
	PL DDR	-	-	1GB DDR4 x16	Capable - Not included	4GB DDR4 x16	
	SD CARD	Yes	Yes	Yes	Yes	Yes	
	SATA Connector	-	Yes	Yes	M.2	Yes	
Video	HDMI	-	-	In/out	Gen2 in/out	Gen4 in/out	
	DisplayPort	Mini DP	Yes	Yes	Yes	Yes	
	Video Codec Unit	-	-	Yes	Yes	Yes	
	SDI	-	-	Yes	-	Yes	

Zynq UltraScale+ MPSoC Evaluation Board

Notes:

1. DDR SODIMM not included with the kit.

XMP458 (v1.0)