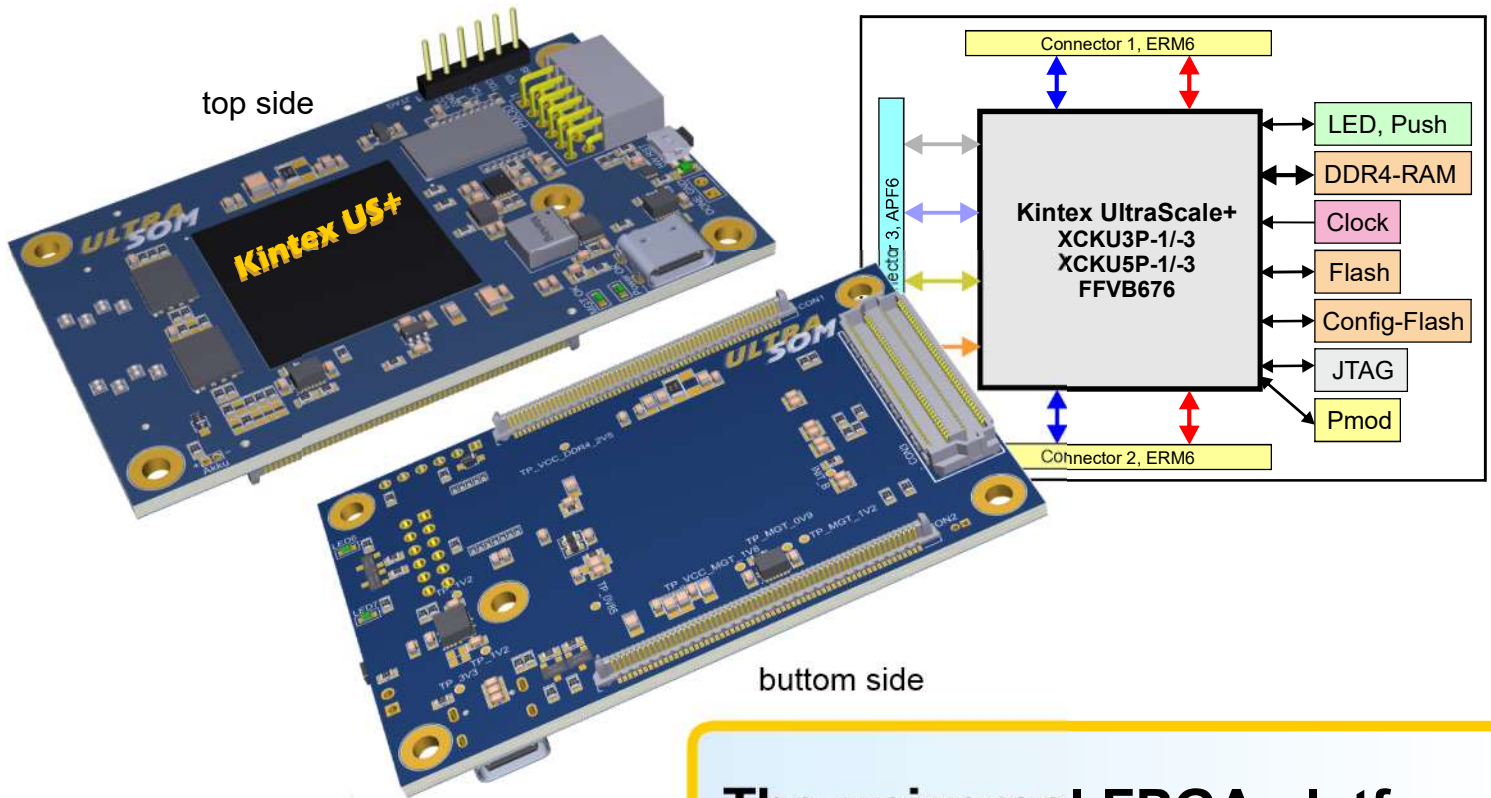


Kintex Ultrascale+ SOM for development and serial products



The universal FPGA platform

- ⇒ **SOM** for development and series products
- ⇒ Latest powerful Kintex UltraScale+ architecture
- ⇒ Up to **220 GPIOs** (max. 148 HP, 64 HD, 8 Pmod IOs)
- ⇒ **Scalable** FPGA selection (356 000 ... 475 000 system logic cells)
- ⇒ 16 Gigabit-Transceiver **up to 32 Gbit/s**
- ⇒ PCI Express **Gen3** support
- ⇒ 2500 Mbit/s **MIPI** support
- ⇒ **DDR4-RAM** 2400 Mbit/s onboard
- ⇒ **2x 128 Mbit** SPI-Flash onboard (config and general purpose)
- ⇒ **Small SOM** board size (80 mm x 50 mm)

Options:

- ⇒ Base board examples available
- ⇒ UltraSOM also as Artix Ultrascale+ available on same SOM board size

MADE IN GERMANY

Ordering informations

UltraSOM - Kx - 01 - 01

System On Module
Ultrascale+

Kintex US+ type
3: XCKU3P-FPGA
5: XCKU5P-FPGA

Version
01: Version 01
Speedgrade 1

Additional
01: with all accessories
02: with power supply
03: without accessories

Example: UltraSOM-K3-01-03

Technical Specifications

FPGA	KU3P-1/-3	KU5P-1/-3
System Logic Cells (k)	356	475
CLB Flip-Flop (k)	325	434
CLB LUTs (k)	163	217
Ultra RAM (Mb)	13.5	18.0
Total Block RAM (Mb)	12.7	16.9
36k Block RAM Blocks	363	483
Clock Management Tiles (CMTs)	4	4
DSP Slices	1368	1824
PCI Express	Gen 3 x8	Gen 3 x8
Transceivers (Speedgrade -1/-3)	16 GTY (up to 25,78/32,7 Gbps)	16 GTY (up to 25,78/32,7 Gbps)
Connectors		
Connector 1	48 HD / 52 HP	48 HD / 52 HP
Connector 2	16 HD / 96 HP	16 HD / 96 HP
Connector 3	16 GTY	16 GTY
On-board		
RAM	DDR4-2400, 16 bit data, 38.4 Gb/s	
Flash	128 Mb Config Flash + 128 Mb Custom Flash	
Clock	200 MHz LVDS	
Connector type on SOM	2x ERM6-60-01.5-L-DV-A-K, 1x APF6-040-03.5-L-04-2-A	
Connector type on base board	2x ERF6-60-03.5-L-DV-A-K, 1x APM6-040-01.5-L-04-2-A	
Electrical Specifications		
Power supply (ext. conn. or ERM6)	5 V DC	
max. power	20 W	
Dimensions		
Length	80 mm	
Width	50 mm	
Height	tbd	
Weight	tbd	

Contact

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Subject to errors and changes.

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