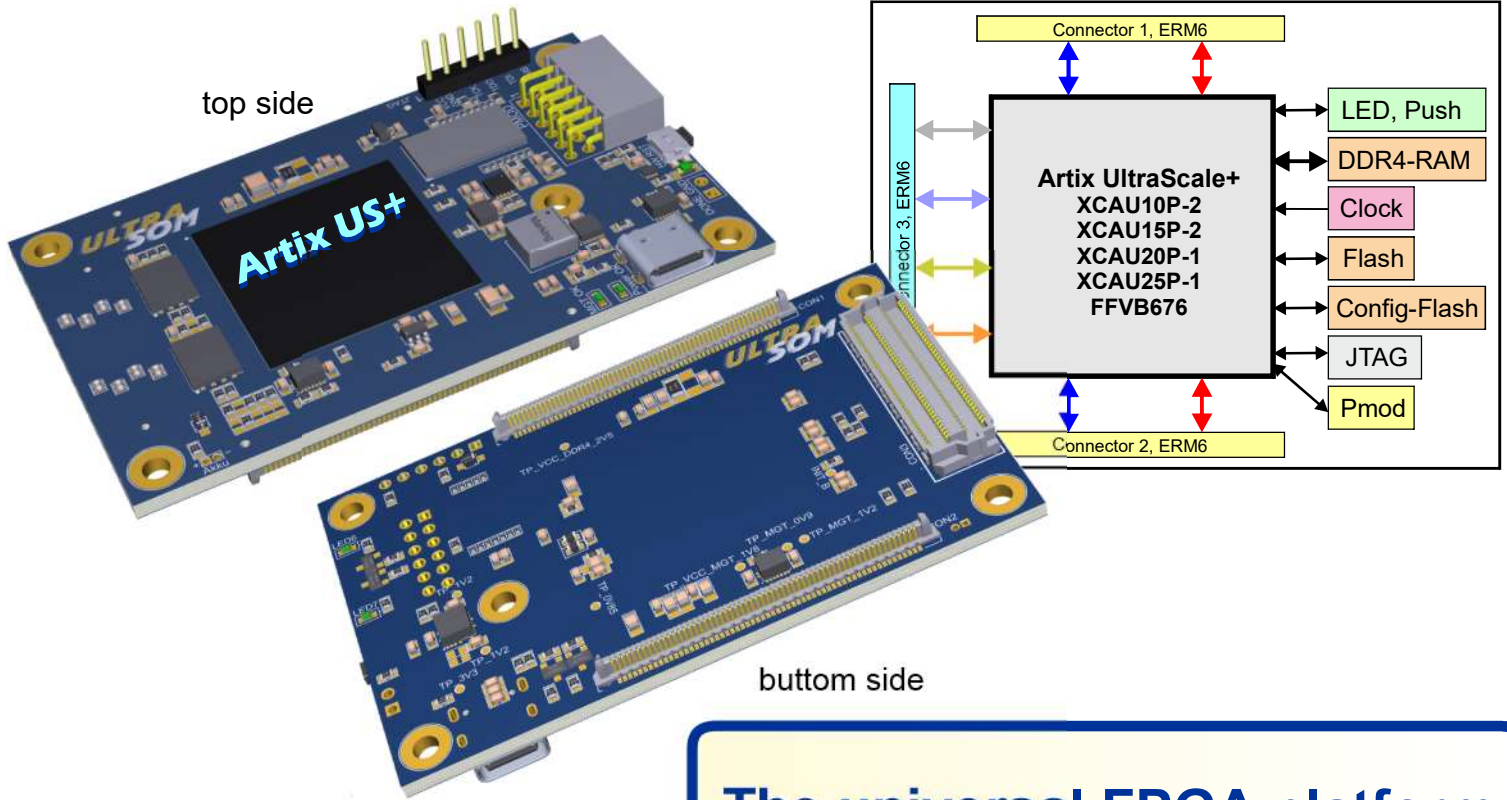


Artix UltraScale+ SOM for development and series products



The universal FPGA platform

- ⇒ **SOM** for development and series products
- ⇒ Latest cost-optimized Artix UltraScale+ architecture
- ⇒ Up to **220 GPIOs** (max. 148 HP, 64 HD, 8 Pmod IOs)
- ⇒ **Scalable** FPGA selection (96 000 ... 308 000 system logic cells)
- ⇒ 12 Gigabit-Transceiver **up to 16 Gbit/s**
- ⇒ PCI Express **Gen3** and **Gen4** 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 Kintex UltraScale+ available on same SOM board size

MADE IN GERMANY

Ordering informations

UltraSOM - Axx - 01 - 01

System On Module
Ultrascale+

Aritix US+ type
10: XCAU10P-FPGA
15: XCAU15P-FPGA
20: XCAU20P-FPGA
25: XCAU25P-FPGA

Version
01: Version 01

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

Example: UltraSOM-A20-01-03

Technical Specifications

FPGA	AU10P-2	AU15P-2	AU20P-1	AU25P-1
System Logic Cells (k)	96	170	238	308
CLB Flip-Flop (k)	88	156	218	282
CLB LUTs (k)	44	78	109	141
Dist. RAM (Mb)	1,0	2.5	3.2	4.7
Total Block RAM (Mb)	3,5	5.1	7.0	10.5
36k Block RAM Blocks	100	144	200	300
Clock Management Tiles (CMTs)	3	3	3	4
DSP Slices	400	576	900	1200
PCI Express	Gen4 x4, Gen3 x8	Gen4 x4, Gen3 x8	Gen 3 x8	Gen 3 x8
Transceivers	12 GTH	12 GTH	12 GTY	12 GTY
Connectors				
Connector 1	48 HD / 0 HP	48 HD / 0 HP	48 HD / 0 HP	48 HD / 52 HP
Connector 2	16 HD / 96 HP	16 HD / 96 HP	16 HD / 96 HP	16 HD / 96 HP
Connector 3	12 GTH	12 GTH	12 GTY	12 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	15 W			
Dimensions				
Length	80 mm			
Width	50 mm			
Height	tbd			
Weight	tbd			

Contact

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Subject to errors and changes.

