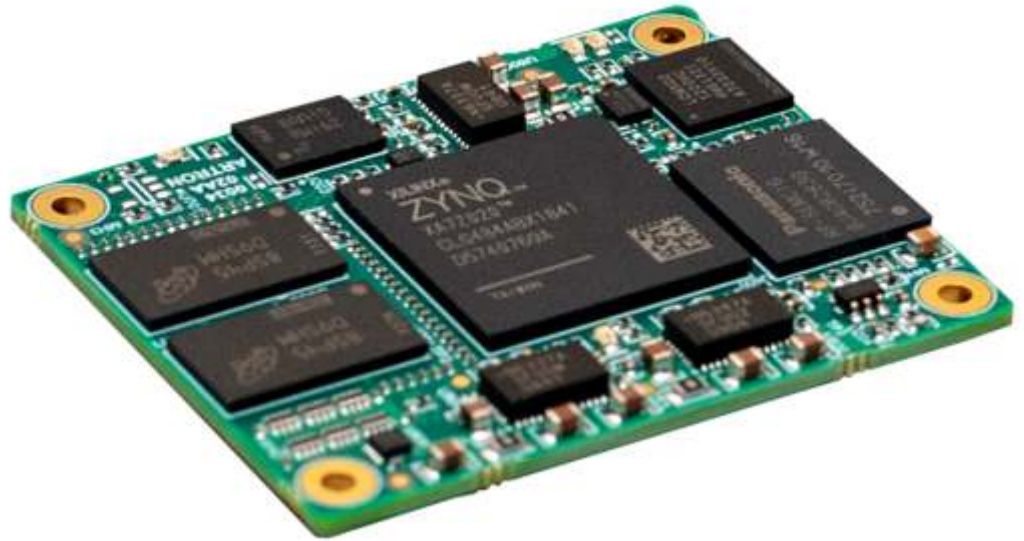


CYGNUS-ZN3 System-on-Module



Description

Artron Cygnus-ZN3 SoM is based on the Xilinx Zynq XA7Z020-1CLG484 SoC. The Xilinx Zynq family features a dual-core ARM Cortex processor-based processing system (PS) and programmable logic (PL) in a single integrated device. Cygnus-ZN3 SoM is populated entirely with industrial grade electronic components and is suitable for use in applications demanding harsh environmental requirements.

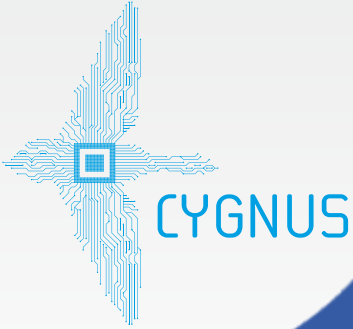
The particular model used here has PL size equivalent to 46.200 LUTs and includes 130 PS and 200 PL IO pins. The particular model used here includes 130 PS and 200 PL IO pins. 169 of the PL IOs are connected to the IO connectors, of which 50 pins are from Bank-13, 21 pins are from Bank-33, 48 pins are from Bank-34 and 50 pins are from Bank-35.

The 14 PS MIO pins are connected to the IO connectors for the RGMII Ethernet interface, 12 PS MIO pins for the USB PHY interface, 6 PS MIO pins for the MMC Flash Memory interface and 6 PS MIO pins for the QSPI Flash Memory interface.

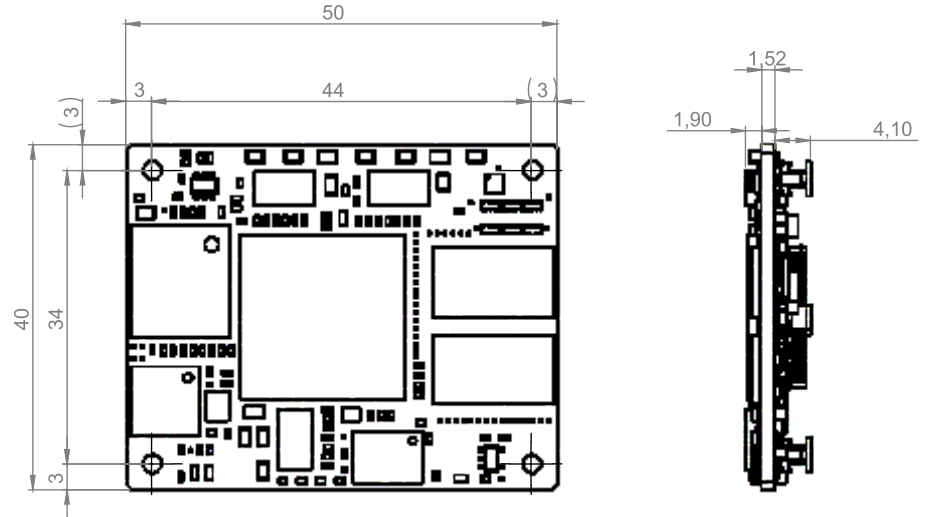
Features

- Xilinx Zynq® XA7Z020 Programmable SoC (CLG484 Package)
 - Dual-core ARM Cortex-A9 MPCore™ with CoreSight™
 - NEON™ & Single / Double Precision Floating Point for each processor
 - Xilinx Artix-7 FPGA with 46.200 LUTs, 92.400 Flip-Flops
 - AES and SHA 256b for Boot Code and PL Configuration, Decryption, and Authentication
- 200 programmable I/O pins
- 8Gbit 1066Mb/s DDR3 RAM
- 256Mbit QSPI Flash Memory
- Configurable boot options – QSPI or SD Card –
- 256Mbit QSPI Flash Memory
- 128Gbit eMMC NAND Flash Memory
- Gigabit Ethernet PHY (Marvell 88E1512)
- USB 2.0 PHY (Microchip 3320)
- 3 connectors, 2x100 pin, 1x50 pin, (Samtec ST5) – high mating cycle capable –
- Wide Operating Temperature Range (-40°C to 85°C)
- Petalinux compiled BSP and reference designs available on our website.

www.artron.com.tr



Mechanical Properties

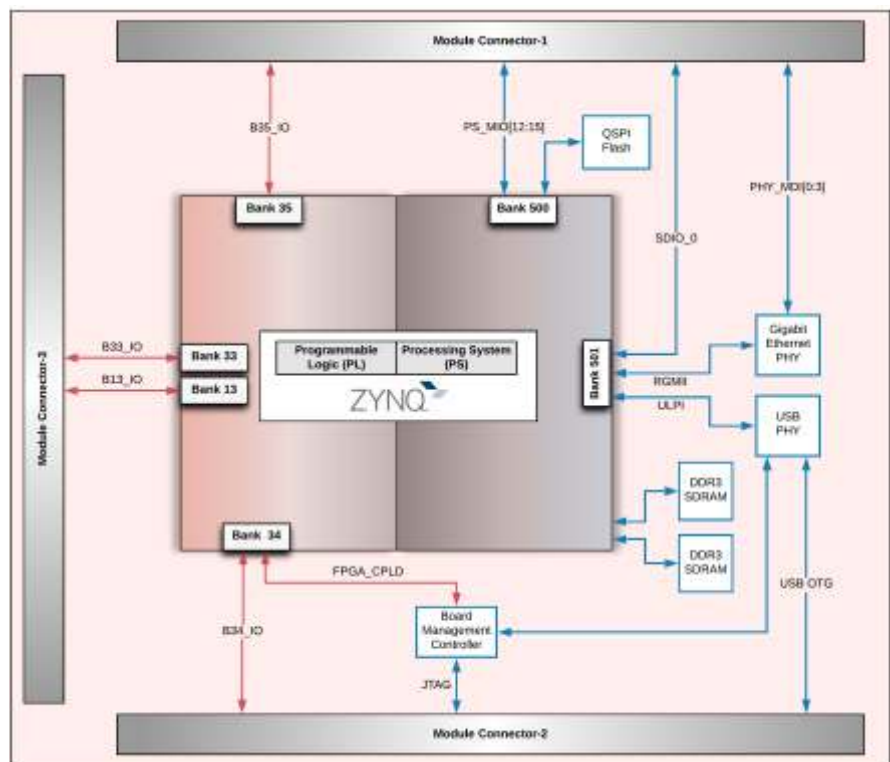


Dimensions	
Size	50 x 40 mm
Top Height	3.42 mm (incl.PCB)
Bottom Height	4.1 mm
Mounting Holes	Ø 3 mm
Weight	13.5 g

Ordering Information

Part Number	Definition	Pricing
ART-CYG-ZN3Q-0720	SoM equipped with XA7Z020	Contact us
ART-CYG-ZN3Q-0714	SoM equipped with XA7Z014s	
ART-CYG-ZN3-CB	Carrier Board	
ART-CYG-ZN3-HS	Heatsink	

Block Diagram



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