

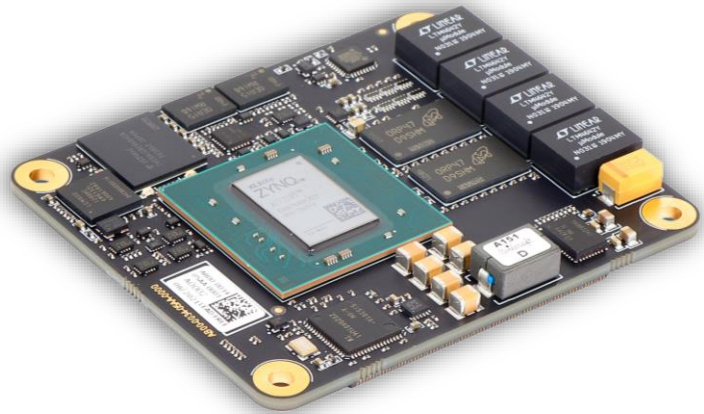


Design to function

www.artron.com.tr



CYGNUS®-ZN5 System-on-Module



Description

Artron Cygnus®-ZN5 SoM is based on Xilinx Zynq® XC7Z045-1FBG676 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®-ZN5 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 218,600 LUTs and includes 128 PS and 250 PL IO pins. 239 of the PL IOs are connected to the IO connectors, of which 50 pins are from Bank-12, 50 pins are from Bank-13, 40 pins are from Bank-33, 49 pins are from Bank-34 and 50 pins are from Bank-35.

The 12 PS MIO pins are connected to the IO connectors. There are one Ethernet PHY, one USB PHY, two SPI Flash, and one eMMC Flash Memory on Cygnus®-ZN5 SoM.

Features

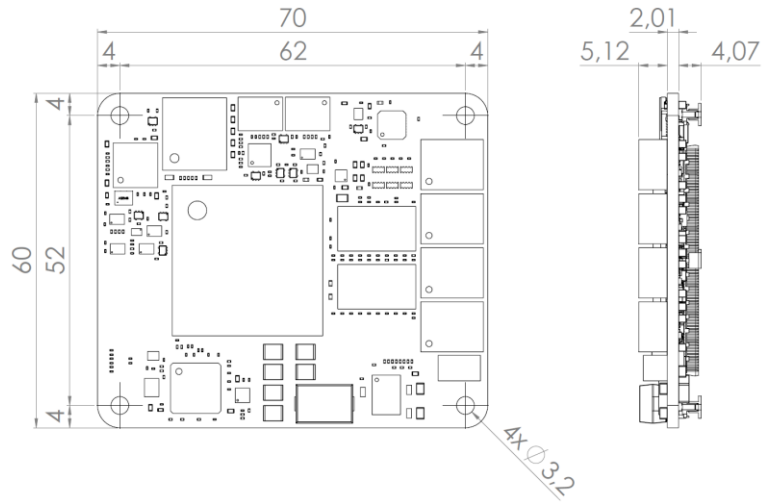
- Xilinx Zynq® XC7Z045 Programmable SoC (FBG676 Package)
- Dual-core ARM Cortex-A9 MPCore™ with CoreSight™
- NEON™ & Single / Double Precision Floating Point for each processor
- 218,600 LUTs; 437,200 Flip-Flops
- AES and SHA 256b for Boot Code and PL Configuration, Decryption, and Authentication
- 251 programmable I/O pins (12 PS + 239 PL)
- 8Gbit 1866MHz DDR3 RAM
- Dual 256Mbit QSPI Flash Memory
- Configurable boot options – QSPI or SD Card –
- 256Gbit eMMC NAND Flash Memory
- Gigabit Ethernet PHY (Marvell 88E1512)
- USB 2.0 PHY (Microchip 3320)
- Connectors: 3 x 160 pins (Samtec ST5 Series) –high mating cycle capable –
- Wide operating temperature range (-40°C to 85°C)



www.artron.com.tr



Mechanical Properties



Dimensions	
Size	70 x 60 mm
Top Height	5.12 mm
Bottom Height	4.07 mm
Mounting Holes	Ø 3.2 mm
Weight	36.5 g

Ordering Information

Part Number	Definition	Pricing
ART-CYG-ZN5-0745	SoM equipped with XC7Z045	Contact us.
ART-CYG-ZN5-CB	Carrier Board	

Block Diagram

