

Zynq-7000 APSoC

Chip number: XC7Z020-1CLG484C

667 MHz dual-core Cortex-A9 processor

DDR3L memory controller with 8 DMA channels and 4 High Performance AXI3 Slave ports

High-bandwidth peripheral controllers: 1G Ethernet, USB 2.0, SDIO

Low-bandwidth peripheral controllers: SPI, UART, CAN, I2C

Programmable from JTAG, Quad-SPI flash, and microSD card

Programmable logic equivalent to Artix-7 FPGA

Memory

1 GiB DDR3L with 32-bit bus @ 1066 MT/s

16 MB Quad-SPI Flash with factory programmed 128-bit random number and 48-bit globally unique EUI-48/64 compatible identifier

microSD card slot

Zmod Ports

2 ports following the SYZYGY Standard interface specification

Compatible with a variety of SYZYGY pods, allowing for a wide variety of applications

Dedicated differential clocks for input and output

8 differential I/Os per port

16 single-ended I/Os per port

DNA interfaces connected to Platform MCU allowing for various auto-negotiated power supply configurations

Pmod Ports

2 twelve-pin ports for a total of 16 FPGA-connected I/Os

High speed voltage translation and protection circuitry