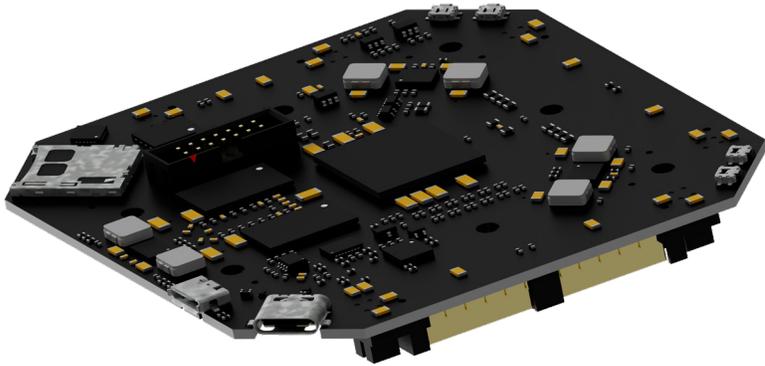


# Ocelot - Zynq 7000 Module System on Module



Ocelot is a high-speed, ultra customizable, System-on-Module (SoM) based upon the Xilinx Zynq®-7000 All Programmable System-on-Chip (SoC). Designed with multi-processor footprint compatibility, the Ocelot offers Single-core ARM® Cortex®-A9 performance with the XC7Z007S or XC7Z014S Zynq®-7000 All Programmable SoC, or Dual-core ARM® Cortex®-A9 performance with the XC7Z010 or XC7Z020 Zynq®-7000 All Programmable SoC.

With Altium Design Files available, the Ocelot SoM integrates all of the required system components for operation. Power, processing, memory, storage, and connectivity are all placed into Ocelots 85x85mm form factor. The Ocelot SoM can operate in both a standalone mode with power supplied from on-board USB Type-C or Micro-USB AB, or in a full function mode with power supplied from its breakout connectors.

Designed with a focus on user customization, the Ocelot allows for both core modifications to the I/O structure. Enabling access to all 38 ARM® Cortex®-A9 MIO pins as well as 100 Artix™-7 FPGA pins, custom design breakout interfaces can meet any requirement.

Provided are the Ocelot Schematics, PCB Layout, Mechanical Drawings, Layer Stackup, and Thermal Design.

## Feature List

- Xilinx Zynq®-7000 All Programmable SoC (XC7Z007S, XC7Z014S, XC7Z010, XC7Z020)
- ARM® Cortex®-A9 MIO Breakout Flexibility (GigE, USB, CAN, SD/SDIO, SPI, UART, I2C, GPIO)
- Artix™-7 FPGA Breakout Flexibility (100 High Range I/O, 48 LVDS Pairs, 16 Analog-to-Digital Pairs)
- 4Gbit DDR3/DDR3L 32-Bit Memory
- On-board microSD Card Slot and 128/256 Mbit Quad SPI Flash
- USB Type-C and Micro-USB AB (SoM Power and USB to Serial)
- Artix™-7 FPGA External Bank Power Control
- Linear Technology LT6656 External Analog-to-Digital Reference Power Supply

Specifications	
Connectivity	USB Type-C Micro-USB AB microSD Card ARM I/O (SAMTEC QFSS) FPGA I/O (Dual SAMTEC QFSS)
USB	USB 2.0 Only
ARM	38 ARM I/O Pins
FPGA	100 High Range I/O (Configurable as 48 LVDS Pairs or 16 Analog-to-Digital Pairs)
Program Interface	Custom TAG Connect Interface JTAG-HS3 Programming Cable
Input Power	+5V DC Input
Internal Power	Linear Technology LTC3633A Linear Technology LTC3634 Linear Technology LT6656 ADC Reference
Mechanical	85mm x 85mm
Thermal	Custom Thermal Solution Available