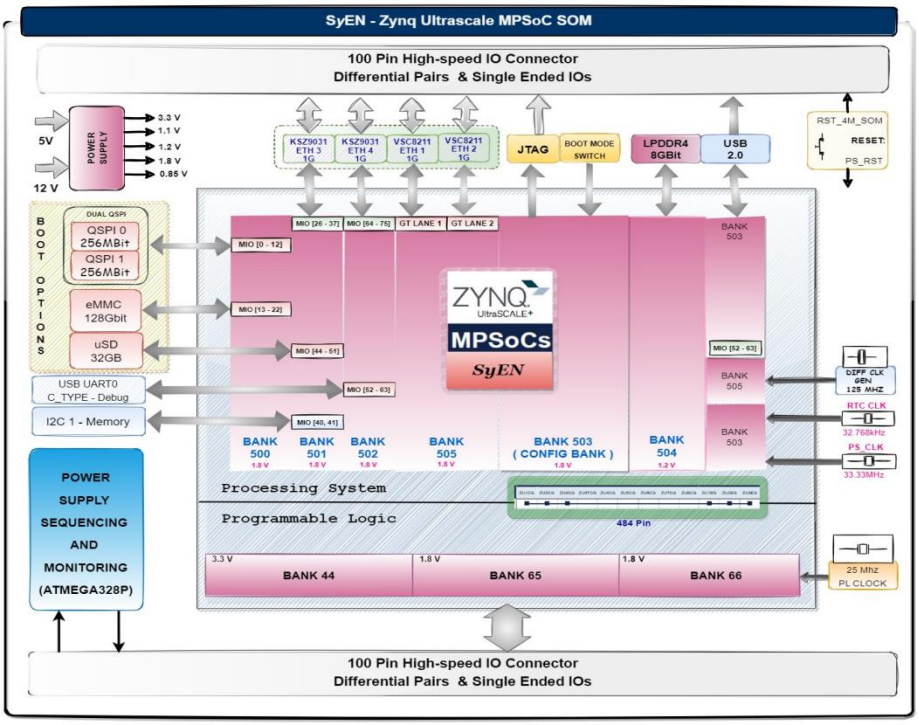
SiEN (Falcon)

Xilinx® Zynq™ MpSoC 1/2/3 CG/EG Series

High Performance, Compact SBC



- ✧ Powered by ARM® Quad-Core Cortex™A53 MP Core
- ✧ Based on Xilinx's high-end Zynq MpSoC Series All-Programmable SoC
- ✧ Support Zynq devices ZU1, ZU2, ZU3 CG / EG series 484 Pin package devices
- ✧ 95 mm x 75 mm board size Compact form factor
- ✧ Available in Production ready with industrial temperature range
- ✧ Linux BSP, tool chain and 24x7 Technical Support

Rezonet Technologies India Private Limited, No.4 Sitai, Right Bhusari Colony, Kothrud, Pune, Maharashtra, India – 411038.
Email - Marketing@rezonet.in

Xilinx Zynq SOC advantages

- ✧ Combines Flexibility of SBC with the FPGA configurability
- ✧ Industrial Grade, Rugged platform to optimize overall BOM cost
- ✧ On module required power supplies for efficient power management
- ✧ Linux board support package along with Root file system enables seamless integration
- ✧ Customized Carrier boards for instant board bring-up and quick prototyping

Key Specs

Processor

- EG - Quad-core Arm Cortex-A53 MPCore up to 1.5GHz and Dual-core ARM Cortex-R5 MPCore up to 600MHz
- CG -Dual-core Arm® Cortex®-A53 MPCore™up to 1.3GHz and Dual-core Arm Cortex-R5F MPCore up to 533MHz
- Enhanced NEON Extension and Single & double precision FPU
- 32KB Instruction and Data L1 cache
- 64KB Unified L2 Cache
- 256KB On-chip Memory for application core

FPGA

- Xilinx ZynqMP Advanced low power FPGA fabric
- Up to 154K Logic Cells (approximately 141K Flops)
- Upto 360 programmable DSP slices

Additional Interfaces

- CAN 2.0 / UART (Optional on IOs assignments)
- 170 FPGA IO's
- Analog Inputs (Multiplex and Shared)

Power Supply

- 12V
- 7W (Max)

Boot Support

- JATG / QSPI / uSD/eMMC

On Board RTC, Battery Support on Carrier Card

Memory

- 4 / 8GB LPDDR4 Support
- 16Gb/32Gb eMMC
- 16MB/32MB QSPI support

Ethernet - 4 Nos

- 2 x 1Gbps VSC8211 Optical Ethernet Modules
- 4 x 10/100/1000 BASE-T KSZ9031 Ethernet module

USB

- 1 x USB 2.0 OTG

uSD

- 1 x uSD support upto 32GB

Display

- Through LVDS Interface / Display Port

Power supply sequencer

- ATMEGA328P Power supply sequencing & monitoring

Form Factor

- 90 mm x 70 mm
- 2 x 100 Pin High Speed Connectors

Software Support

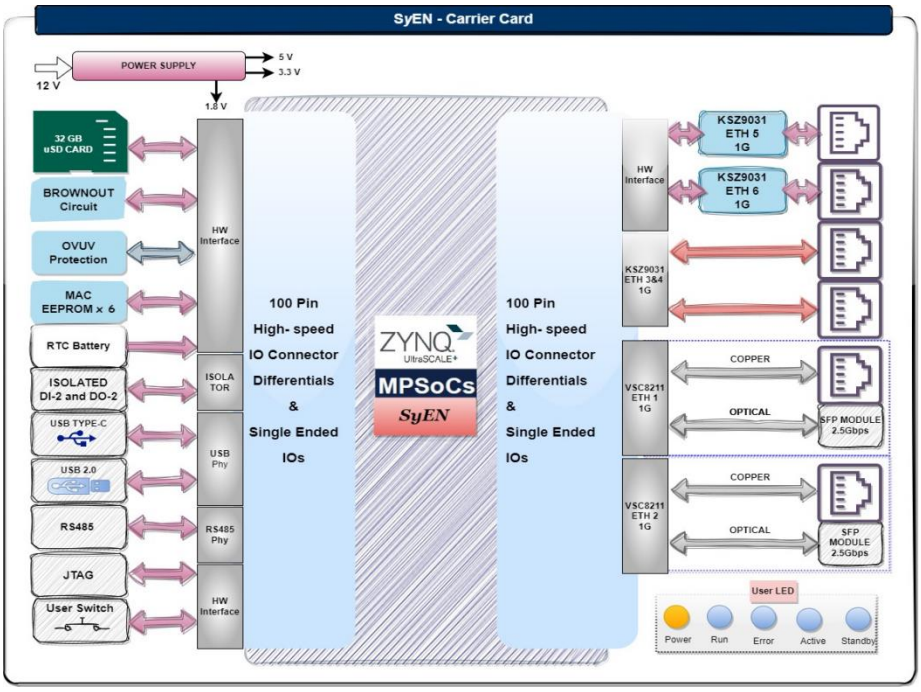
- Linux, BSP

On Board Unique Encryption ID support

On Board Unique MAC ID support

Rezonet Technologies India Private Limited, No.4 Sitai, Right Bhusari Colony, Kothrud, Pune, Maharashtra, India – 411038.
Email - Marketing@rezonet.in

SiEN - Carrier Card



Key Specs

- User GPIO Monochrome LEDs
- On board RS485 interface
- On Board isolated 2 x DI and 2 x DO
- On Board RTC, Battery
- On Board additional GPIO interface
- On Board Unique MAC ID support
- On board 4 x RJ45 & 2 x SFP Connector
- On-board JTAG and UART debug interface
- User Slide Switch and Push Button I/O

Additional Interfaces

- CAN 2.0 / UART (Optional on IOs assignments)
- 170 FPGA IO's
- Analog Inputs (Multiplex and Shared)

Power Supply

- 12V

USB

- 1 x USB 2.0 OTG

Ethernet - 4 Nos

- 2 x SFP Optical Ethernet Connector
- 4 x RJ45 Copper Connector

uSD

- 1 x uSD support upto 32GB
-

Display

- Through LVDS Interface / Display Port
-

Serial

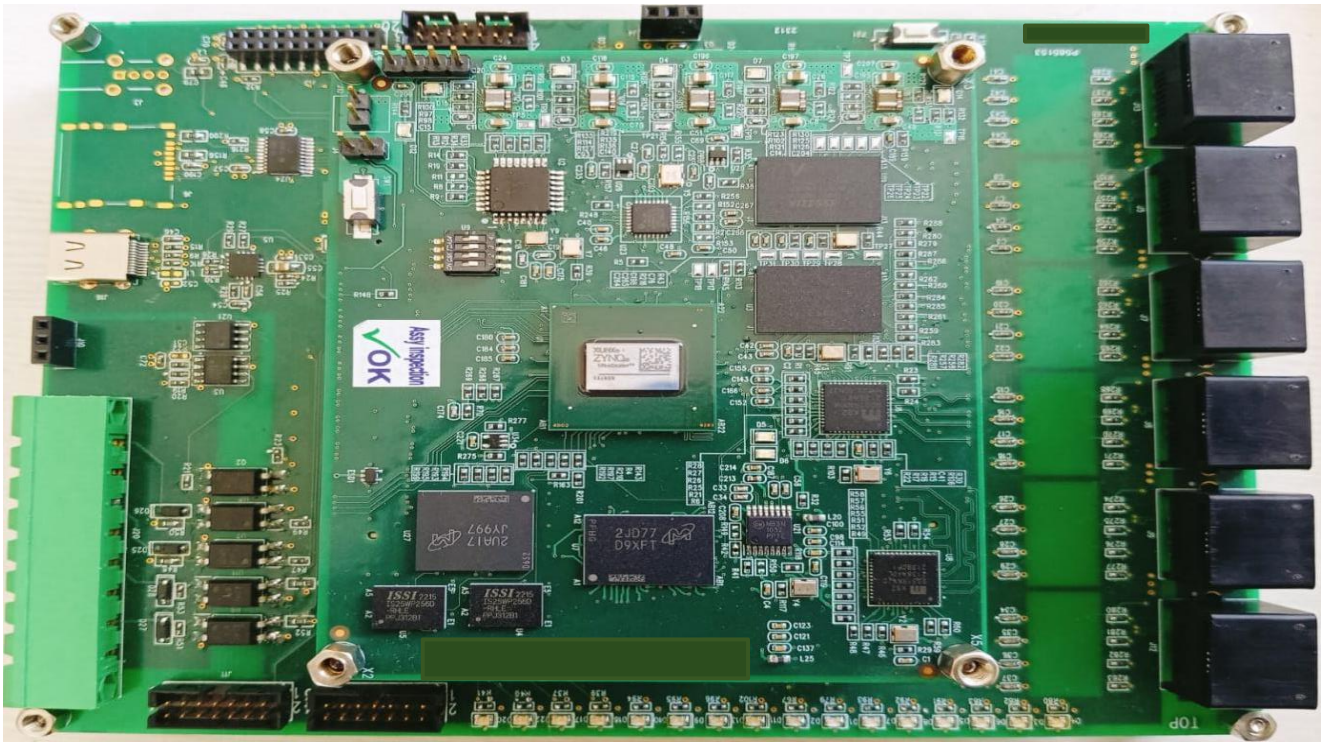
- 1 x UART, 1 x I2C, 1X CAN2.0

Form Factor

- 1600 mm x 125 mm
- 2 x 100 Pin High Speed Connectors

Rezonet Technologies India Private Limited, No.4 Sitai, Right Bhusari Colony, Kothrud, Pune, Maharashtra, India – 411038.
Email - Marketing@rezonet.in

SyEN with 6 Ethernet Carrier Card



Rezonet Technologies India Private Limited, No.4 Sitai, Right Bhusari Colony, Kothrud, Pune, Maharashtra, India – 411038.
Email - Marketing@rezonet.in