

SXoM MS1-C5

System-on-Module
compliant with SMARC™ 1.1 specification

SXoM MS1-C5 is a complete System-on-Module (SoM) compliant with the SMARC™ (Smart Mobility ARChitecture) 1.1 specification by SGET. The board is designed to function as the system core for the Solectrix SoC-to-Go platform for high-performance DSP applications.

SXoM MS1-C5 Low Power

The core of SXoM MS1-C5 is an **Intel/Altera Cyclone® V SoC** (System-on-a-Chip) that combines a Cyclone® V FPGA fabric featuring up to 110K logic elements with an ARM-based dual-core hard processor system running at up to 925 MHz.

Applications

Motion capturing & analysis

Security and surveillance

Traffic monitoring

Medical & scientific imaging

High-end machine vision

Airborne imaging

Key Features

- + System-on-Module compliant with SMARC™ 1.1 specification by SGET
- + Ultra-compact form factor: 82 mm x 50 mm
- + Powered by Intel/Altera Cyclone® V SX SoC 5CSX C2/C4/C5/C6
- + Linux® board support package (BSP) available on request
- + FPGA IP cores and implementation support available on request



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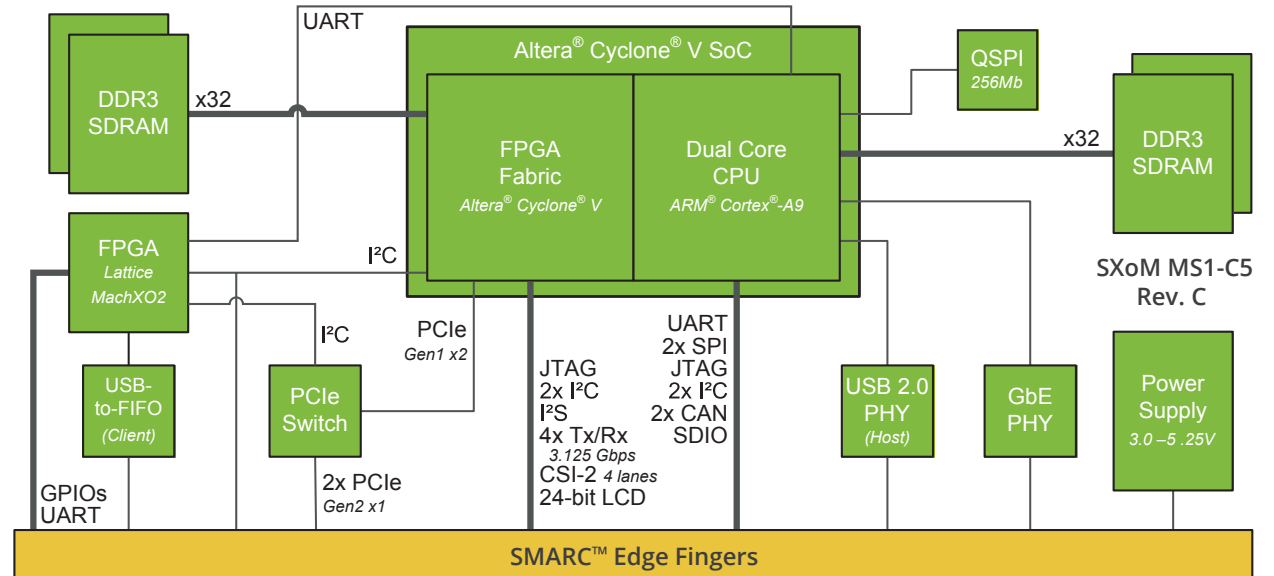
FPGA Fabric Features

Intel/Altera Cyclone® V FPGA fabric
25K – 110K logic elements
1.4 – 5.6 Mbit block memory
36 – 112 DSP blocks
up to 2 GByte DDR3 SDRAM x32 bits for the FPGA

CPU Features

Dual-core ARM® Cortex™-A9 MPCore™ processor, 700 – 925 MHz clock frequency
More than 4,000 MIPS (Dhrystone 2.1) for under 1.8 W
512 KByte of shared L2 cache
64 KByte of on-chip RAM
up to 2 GByte DDR3 SDRAM x32 bits for the CPU

Block Diagram & Interfaces



Designed as System Core for Modular DSP Platforms

- + Flexible heterogeneous many-core architecture
- + Ideal for real-time high-performance image processing and analysis tasks
- + FPGA and embedded software framework

Further available from Solectrix:

- + SMARC™ carrier board SXoM CBS2
- + Board support package (BSP)
- + FPGA IP cores and implementation support



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