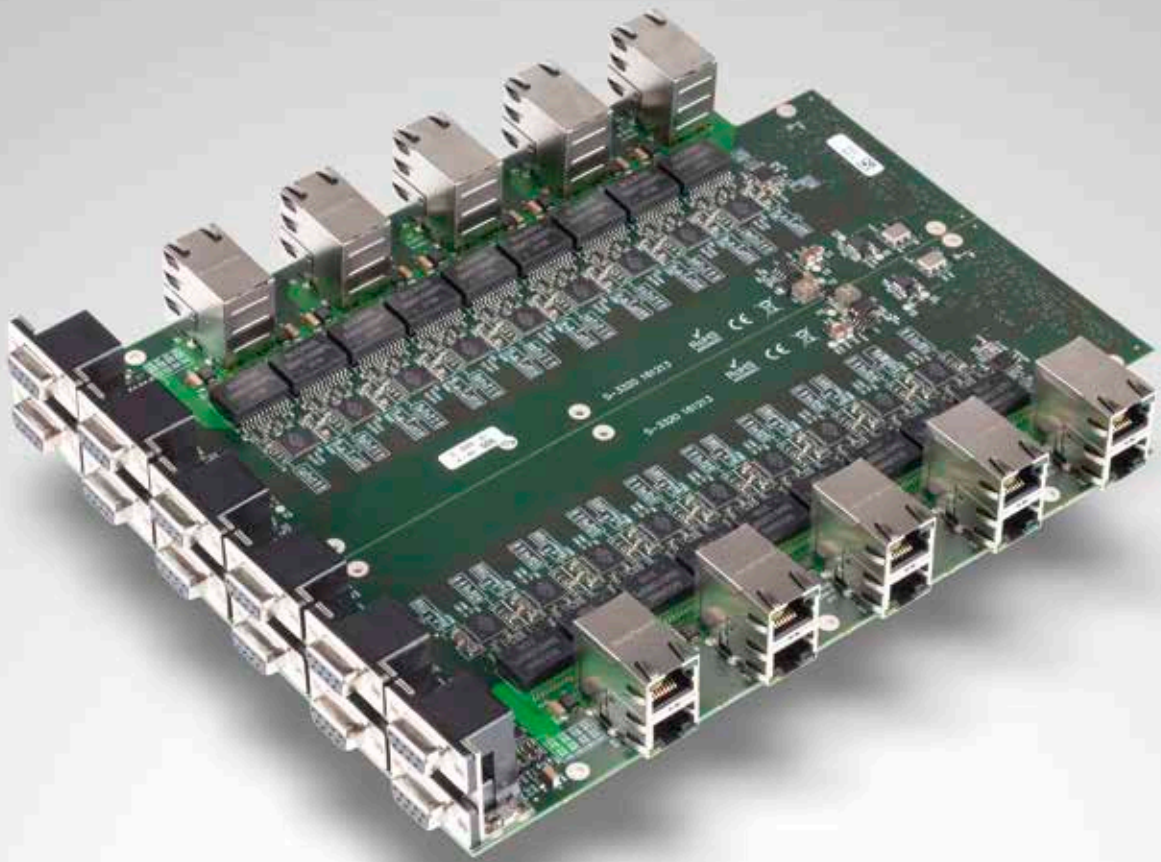


# SocTek® Modules



High density GigE, LIN and CAN-FD interfaces  
in a single, pluggable FMC expansion board

## Multiport FMC expansion board

# Overview

Multiport FMC is an expansion board that provides multiple Ethernet, CAN-FD and LIN hardware interfaces to any FPGA based platform that is compatible with FPGA Mezzanine Card (FMC). FMC is an ANSI/VITA 57.1 standard that defines I/O for mezzanine modules.

Multiport FMC is an excellent choice for customers that require multiple Ethernet / CAN-FD / LIN interfaces in a FPGA based platform, typically for development and testing purposes. It is specifically well fitted

for automotive applications, as it provides all the typical interfaces expected in this context.

It requires High Pin Count (HPC) FMC sizes are required in order to make use of the 100% of the board interfaces. Some of the compatible and tested (but not limited to) development platforms are:

- AMD/Xilinx Zynq UltraScale+ MPSoC ZCU102 Evaluation Kit
- AMD/Xilinx Zynq UltraScale+ MPSoC ZCU106 Evaluation Kit

## Key Features

- Multiple PHY's in a single board: High added value for any use case that requires high density communication interfaces in a single platform. There is no other solution like this in the market.
- Compatible with SOC-E Ethernet networking IP Cores: Enables a fast implementation of multiple port (18x) Ethernet switches. Time-Sensitive Networking is also compatible with this platform.
- Modular design: The board (PCB) can be splitted into 2x smaller FMC boards, each one using 1x FMC (HPC) port and featuring half of the total interfaces (9x Ethernet, 4x CAN-FD and 4x LIN ports).

## Technical Specifications

### Communication Interfaces

- Up to 18x GbE ports (2x HPC FMC) over RJ45 connectors
  - 16x SGMII interface to MAC
  - 2x RGMII interface to MAC
  - Copper (10BASE-T, 100BASE-TX, 1000BASE-T) supported
- Up to 8x CAN-FD (2x HPC FMC) ports over DB9 connectors
- Up to 8x LIN (2x HPC FMC) ports over DB9 connectors

### Physical & Electrical Characteristics

- VCC\_VIN: compatible with 3.3V
- FMC connectors pinout compatible with the standard
- Dimensions: 256,60mm(L) x 196,11mm(W) x 34mm(H), Weight: ~498g
- Component temperature range: -40°C to +85°C
- Operating temperature range: depends on the thermal dissipation system installed by customer (-40°C to +55°C recommended)
- Storage temperature range: -40°C to +85°C

### Warranty

- 2 years

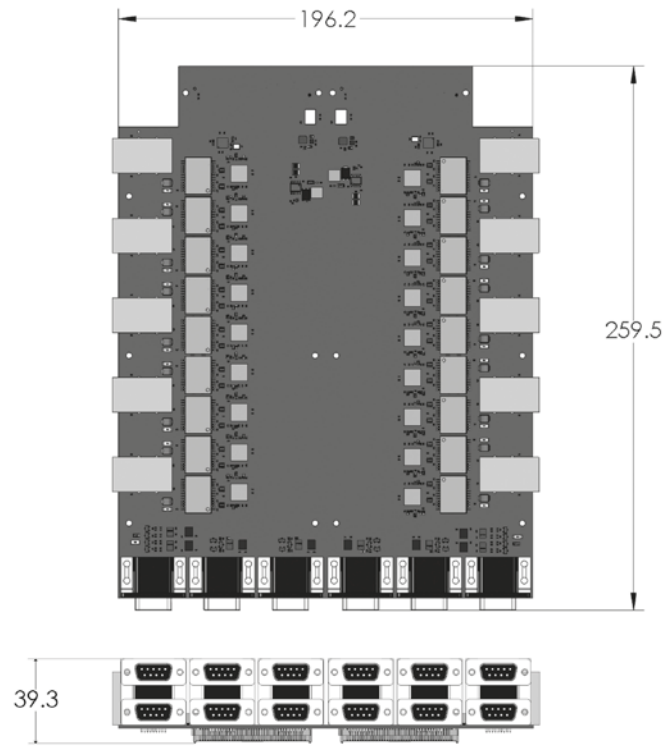
### Ordering Code

#### Ordering code

EV000.20-ID1 (Multiport FMC expansion board)

To know more  other available references, please contact your sales representative.

# Dimensions



# SocTek<sup>®</sup> By

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# SOC<sup>®</sup>E

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