# M100PF System on Module

M100PF is based on the PolarFire FPGA family by Microchip. The SoM targets demanding industrial and medical applications and offers the full flexibility of the populated FPGAs. The populated FPGAs deliver the industry's lowest power at mid-range densities with exceptional security and reliability. The FPGA SoM for Embedded Applications spans from 100K logic elements (LEs) to 300K LEs, features 12.7G transceivers and offers up to 50% lower power than competing mid-range FPGAs.



### M100PF featureset:

- Microchip PolarFire FPGA
- 109kLE, 192kLE or 300kLE FPGA size
- 256 Mbit Coniguration Device
- 512 MiB / 1GiB / 2GiB DDR3 RAM
- 4GiB ... 64GiB eMMC memory
- 8 SERDES Lanes, 250Mbps to 12.5Gbps
- 2 PCIe Gen2 End Points/Root Ports
- rich user I/O
- 2 x Samtec QSH-090-01-F-D-A board-to-board connectors
- Size: 72mm x 40mm
- commercial (0°C...+70°C) / industrial (-40°C...+85°C) temperature range



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## M100PFEVP Evaluation Platform

The M100PFEVP offers a good functionality for evaluation the M100PF SoM. As many customers target to use M100PF in an industrial environment the M100PFEVP can easily be used as a platform for fast prototyping.



#### M100PFEVP featureset:

- 2x Gigabit Ethernet
- 2x RS232 on DSub9
- 2x CAN on DSub9
- P-mod extension connectors
- HSMC extension connector
- microSD-card slot

#### M100PFEVP kit contents:

- M100PF-1DB featuring MPF100-1FCG484I, 1GB DDR3 RAM, 4GB e.MMC NAND Flash
- M100PFEVP baseboard
- 17,7cm (7") LCD with touchscreen (optional)
- power supply



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