

XMC4300F100K256AAXQMA1

Data Sheet

RFO

MCU 32-bit ARM Cortex M4 RISC 256KB Flash 3.3V 100-Pin LQFP EP Tray

Manufacturers <u>Infineon Technologies Corporation</u>

Package/Case 100-LQFP

Product Type Embedded Processors & Controllers

RoHS

Lifecycle

Please submit RFQ for XMC4300F100K256AAXQMA1 or Email to us: sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

General Description

The XMC4300 devices are members of the XMC4000 family of microcontrollers based on the ARM Cortex-M4 processor core. The XMC4300 combines the extended functionality and performance of the ARM Cortex-M4 core with powerful on-chip peripheral subsystems and on-chip memory units. The XMC4300 family of microcontrollers take advantage of Infineon's decades of experience in the industrial market to provide an optimized solution to meet the performance challenges of today's embedded control applications.

EtherCAT ® node on an ARM ® Cortex ®-M microcontroller with on-chip flash and analog/mixed signal capabilities with outstanding Flash to RAM ratio.

>See full portfolio and find related EtherCAT® kits

Features A	Application
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ARM ® Cortex Guaranteed availability through 2031 or longer

®-M4@

144MHz Pin and code compatibility with the established XMC4000 microcontroller family

256kB Flash, I/O modules

128kB RAM

Sense, control, drive, communicate – these tasks are versatile and complex on the field level. But there is a perfect I/O module

Data and IP for every dedicated task. Typically, I/O modules form compact in size, thereby providing limited PCB space, but are demanding in relation to the microcontroller features needed to fulfill their tasks. In the event that the backbone bus requires

Flash more bandwidth than CAN or serial communication can provide, the XMC4300 is the right choice.

EtherCAT® node

2 x CAN nodes

Tempherub Clock

144 [MHZ]

EthernetMAC, USB-OTG, SD/MMC

4 channel USIC (configurable to SPI, UART, IIC, IIS)

2 x 12-bit ADC, 14 input channels, 2 x parallel sampling and conversion

2 channel 12bit DAC

12 x 16-bit special purpose timers, dead time generation

Watch Dog Timer, Real Time Clock

XMC4000 Functional Safety Package

Package: LQFP100

Temperature range: -40 - 125°C

Long-term availability with >15 years

Related Products



XMC4500F100K1024ACXQSA1

Infineon Technologies Corporation 100-LQFP



XMC4700E196K2048AAXQMA1

Infineon Technologies Corporation 196-LFBGA



XMC4500F144F1024ACXQMA1

Infineon Technologies Corporation 144-LQFP



XMC4500F144K1024ACXQMA1

Infineon Technologies Corporation 144-LQFP



XMC4300F100F256AAXQMA1

Infineon Technologies Corporation 100-LQFP



XMC4700F144K2048AAXQMA1

Infineon Technologies Corporation 144-LQFP



XMC4800E196K2048AAXQMA1

Infineon Technologies Corporation 196-LFBGA



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