

Infineon Technologies

Special edition of New Product Introduction



XMC4300 Microcontroller with EtherCAT®

Part of your life.
Part of tomorrow.

XMC4300 Microcontroller with EtherCAT®



The new XMC4300 microcontroller series further reduces complexity in EtherCAT® implementation and cost in factory automation, industrial motor control, I/O modules and robotics. The XMC4300 series was specifically developed for EtherCAT industrial applications, where cost pressure places a premium on design flexibility, connectivity and performance without compromise to EtherCAT communication features. Like the XMC4800 the XMC4300 offers the EtherCAT® node on an ARM® Cortex®-M controller with on-chip flash and analog/mixed signal capabilities. There is no need for a dedicated EtherCAT® ASIC, external memory and crystal resulting in exceptional BOM cost and PCB space savings.

Features

- > Cortex®-M4 @ 144 MHz
- > EtherCAT®
- > Outstanding Flash RAM ratio with 256 kB Flash and 128 kB RAM
- > 2 CAN nodes with 64 message objects
- > Rich industrial and external media connectivity
- > 125°C extended temperature range
- > Long-term availability with more than 15 years
- > Free DAVE™ IDE and DAVE™ Apps

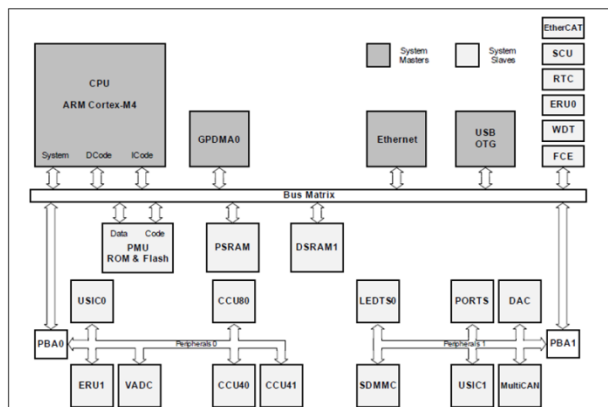
Benefits

- > Most compact EtherCAT® design – no additional external components required
- > Bill of material (BOM) cost and PCB space savings
- > Seamless cost and performance migration paths between XMC4300 and XMC4800 devices
- > Enablement of EtherCAT® technology in harsh environments with 125°C ambient temperatures
- > Supports very long product lifetimes through long time availability at least until 2031

Target applications

- > Medium-end Industrial Control
- > Industrial Communication

Block diagram



NEW Completing products (P2S)

Excellent system solution with the following Infineon products:

- > OptiMOS™/ StrongIRFET™ - A powerful combination with an expanded product portfolio 20 V - 300 V able to address a broad range of requirements like SMPS, motor control and drives, inverters and computing.
- > CIPOS™ - transfer-mounted intelligent power module enabling cost efficient designs
- > CoolMOS™ P6 - ease-of-use and superior efficiency for your SMPS solutions (PFC + LLC)
- > EiceDRIVER™ 2EDL (Compact/ Enhanced) - feature-rich Gate Driver's for compactness and high efficiency

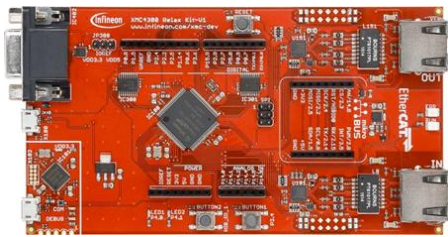
Support/tools/software

- > [DAVE™ \(Version 4\)](#) – Development Platform for XMC™ Microcontrollers
- > [XMC4300 Relax EtherCAT® Kit](#)

Product collaterals/online support

- > [Product page](#)
- > [Product brief](#)

Evaluation boards: XMC4300 Relax EtherCAT ® Kit



OPN	SP Number	Distribution USD
KITXMC43RELAXECATV1TOBO1*	SP001495558	44

* Price for distributors includes 20% discount from recommended resale price

Product overview

OPN	SP Number	MOQ	Registrable	Package	Distribution USD
XMC4300F100F256AAXQMA1	SP001410668	540	Y	LQFP-100	6,33
XMC4300F100K256AAXQMA1	SP001410674	540	Y	LQFP-100	6,96