



## XC27x2X Series

### 16/32 bit Powertrain Microcontroller

The XC27x2X series expands the XC27000 family towards ultra low end powertrain applications. With a memory size of 64kB Flash and 8kB RAM, and two package variants (TSSOP-38 and VQFN-48) these microcontrollers are perfectly suited for advanced aggregates solutions

#### Targeted Automotive Powertrain Applications:

##### Advanced Machinery

- Pumps
- Ventilation
- Power operated systems
- Small engines

##### Highlights:

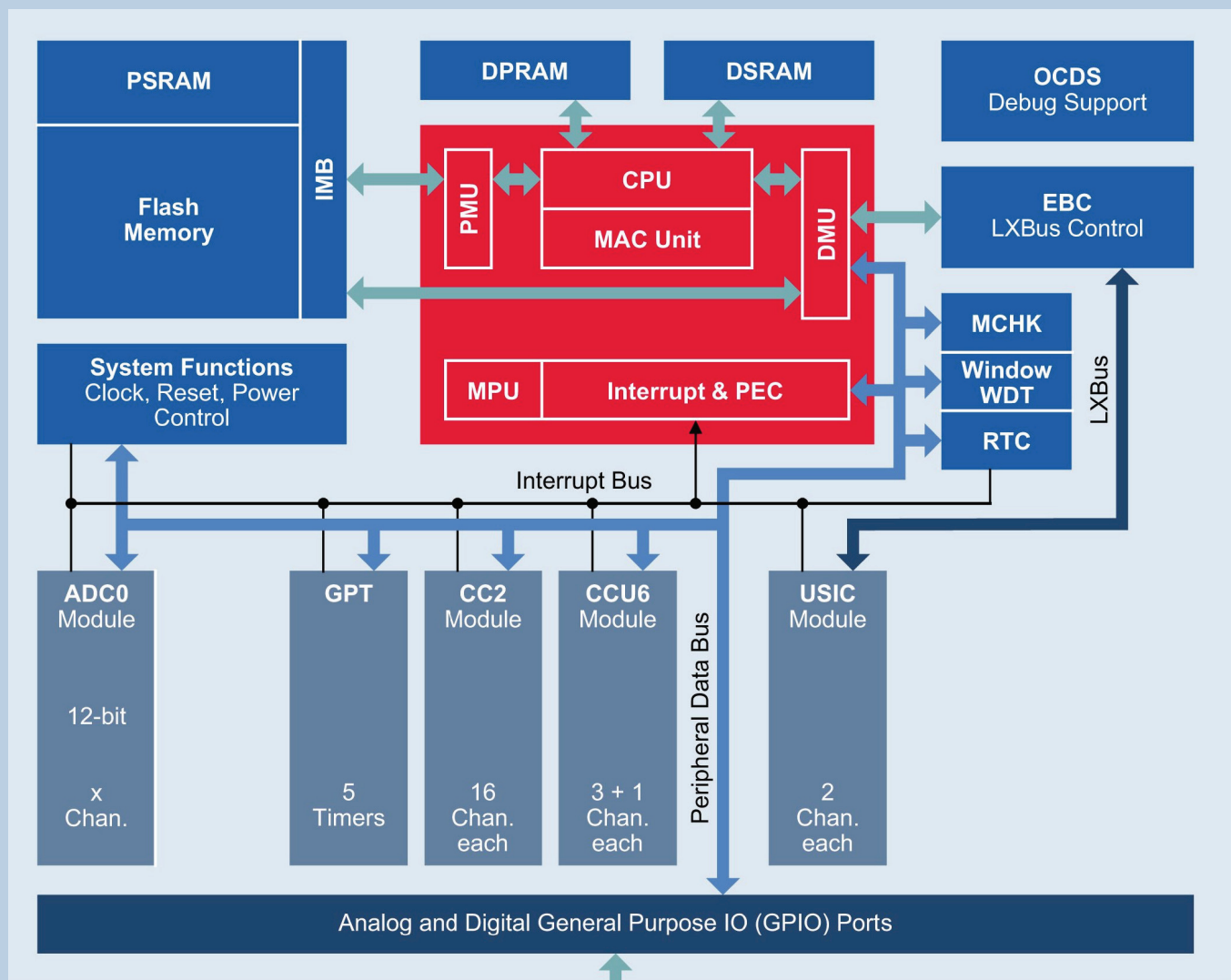
- High performance 16-/32-bit C166SV2 CPU with 5-stage pipeline
- Single clock cycle instruction execution with 10ns instruction time
- Up to 40 MIPS peak performance @ 40MHz CPU clock
- 64kB Flash
- Single voltage supply (core supply over embedded voltage regulator)
- Small 38pin and 48pin packages

#### Features

- High-performance CPU with five-stage pipeline and MPU
- 16 priority levels providing 96 interrupt nodes
- 8-channel interrupt-driven data transfer facilities via peripheral event controller (PEC)
- Up to 64kB Flash, up to 8kB SRAM
- Memory content protection through Error Correction Code (ECC or PARITY)
- Up to 10-channel 12-bit A/D converter, optional data preprocessing (data reduction, range check), open wire detection, conversion time ~0.675µs
- One 16-channel general purpose capture/compare units (CC2)
- Multi-functional general purpose timer unit with 5 timers
- 2 serial interface channels to be used as UART, LIN, SPI, I2C, I2S
- On-chip system timer and on-chip real time clock
- Programmable watchdog timer and oscillator watchdog
- Up to 33 general purpose I/O lines with flexible pin assignment
- On-chip bootstrap loader
- On-chip debug support via Device Access Port (DAP) or JTAG interface
- Single voltage supply of 3.3 to 5V
- 38 pin green TSSOP, 48 pin green VQFN package
- Temperature range: -40 to +125°C
- Supported by a large range of development tools

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## 16/32 bit Powertrain Microcontroller



Type	Frequency [MHz]	eFlash [kByte]	RAM [kByte]	USIC* Channels	CCU* Modules	ADC Channels	Package
XC2712X-8F40R	40	64	8	2	2	8	TSSOP-38
XC2722X-8F40V	40	64	8	2	2	10	VQFN-48

\* Configurable Module: LIN, UART, SSC/SPI, I2C, I2S

\*\*Capture Compare Units: CC2

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