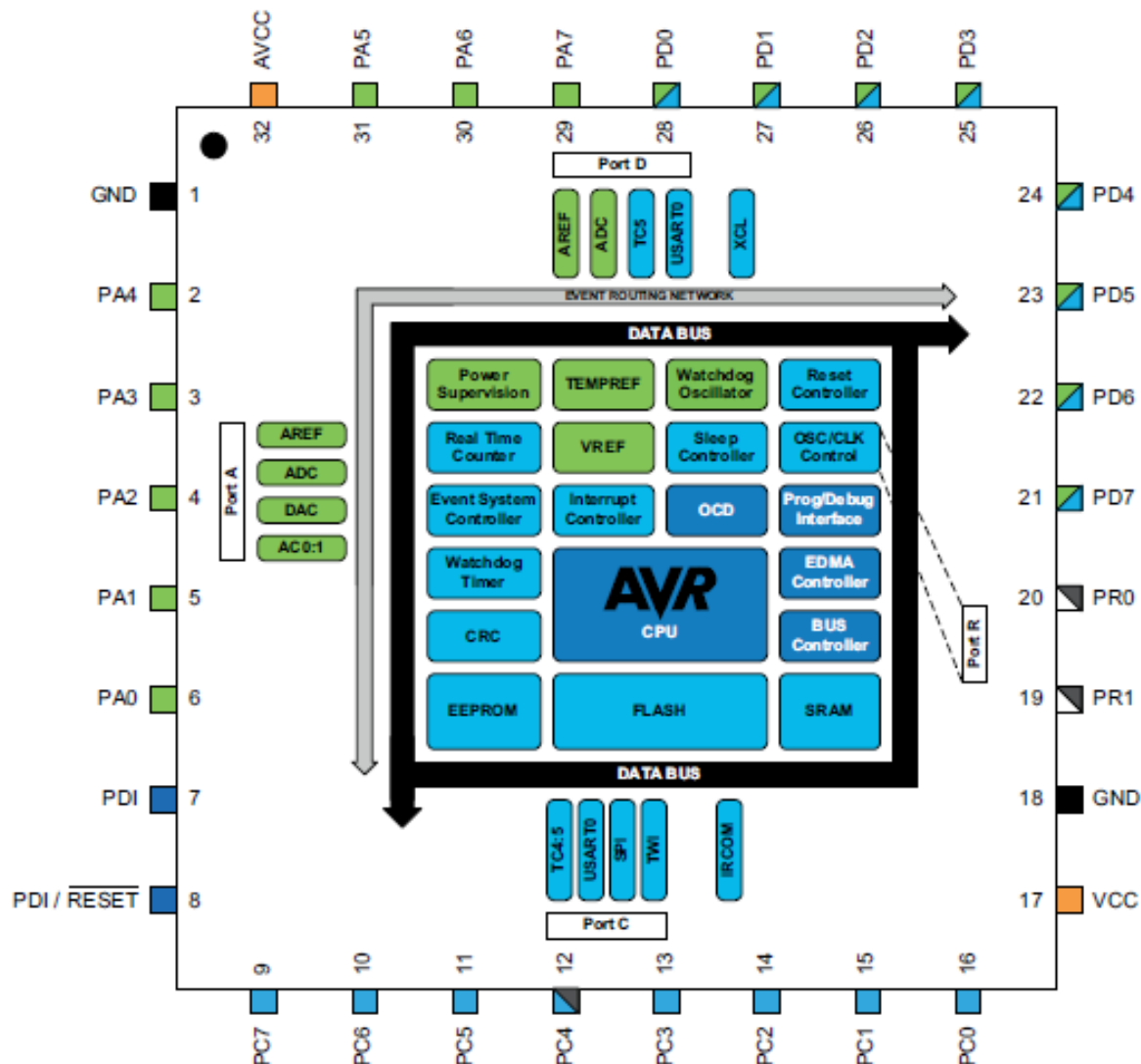


U Atmela sa v ponuke objavila ďalšia rada procesorov ATxmega E, obsahujúca programovateľnú logiku - XCL a vylepšený WeX modul.

Blokové zapojenie



V rade E, sú zatiaľ v ponuke nasledujúce čipy:

- [ATxmega16E5](#) - 8/16-bit AVR XMEGA E5 Microcontroller, 16KB Flash, 32-pin
- [ATxmega32E5](#) - 8/16-bit AVR XMEGA E5 Microcontroller, 32KB Flash, 44-pin
- [ATxmega8E5](#) - 8/16-bit AVR XMEGA E5 Microcontroller, 8KB Flash, 32-pin

Vlastnosti

- Atmel picoPower technology
- XMEGA Custom Logic (XCL) (viz [application note](#))
- WeX Timer/Counter Extension
- Enhanced DMA

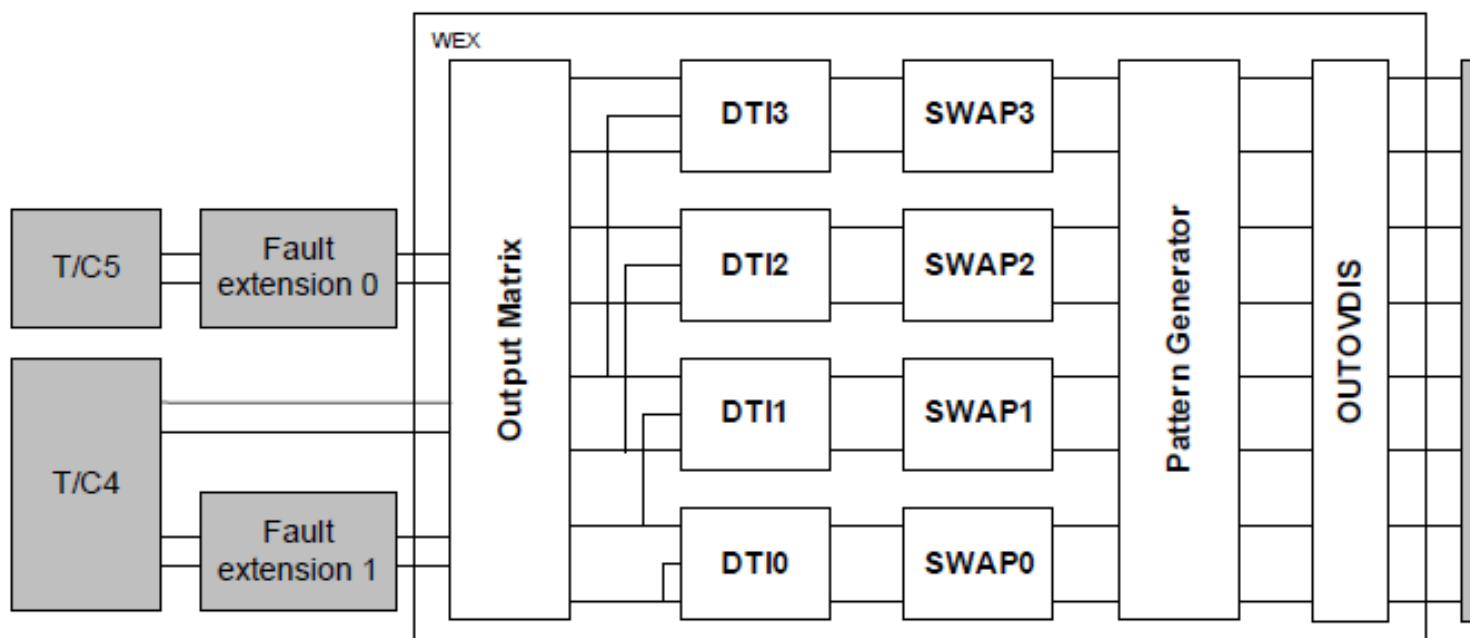
- 12-bit 1MSPS DAC, 2 channels
- 12-bit 300kSPS ADC, 16 channels
- Asynchronous Event System
- Enhanced timer/counters
- Fast mode+ 1MHz support on TWI
- Fast wake-up from internal oscillators
- System wake-up from USART

XMEGA Custom Logic (XCL) — The AVR XMEGA E devices feature an innovative XMEGA Custom Logic module (XCL) consisting of two independent 8-bit timers/counters and two lookup tables used for defining glue logic. It is designed to reduce bill of material (BOM) and PCB size as the XCL can replace external circuitry such as delay elements, RS-latches, D-latches, D-flip-flops chip-select logic, AND, NAND, OR, NOR, XOR, XNOR, NOT, MUX AND/OR/XOR logic gates. In addition, it can, together with the USART, enable customized communication protocols.

WeX - Waveform Extension

New Output Matrix sub-function has been developed in WeX for Power control systems (such as SMPS) and Lighting applications.

The waveform extension (WEX) provides extra functions to the timer/counter in waveform generation (WG) modes. It is primarily intended for motor control, ballast, LED, H-bridge, power converters, and other types of power control applications. The WEX consist of five independent and successive units, as shown in Figure:



Vylepšený WeX modul, má oproti predchádzajúcemu AWeX modulu, používanom v predchádzajúcich sériach Megy tieto vylepšenia:

Nové funkcie:

- Output Matrix
- Swap

- Output Disable

Vylepšenia:

- Pattern generator
- Dead-time insertion (DTI)
- Fault

Ďalšie zmeny:

- FAULT extension is a new standalone extension with improved features versus the Fault function included in standard AWeX description.

Cena

Cena podľa neoficiálnych zistení, by mala byť okolo 0,72 Eur @10k ks

Odkazy

[Datasheets \(Preliminary\)](#)

[Atmel AVR XMEGA E Manual](#)

Application note

- [Atmel AT01084: How to use XCL?](#)
- [Atmel AT01616: Using the WeX Timer/Counter Extension](#)
- [Atmel AT01617: Using the FAULT Timer/Counter extension](#)
- [Atmel AT02667: AVR XMEGA-E5 Xplained Hardware User Guide](#)
- [Atmel AT02657: AVR XMEGA-E5 Xplained Software User Guide](#)

Distribúcia

[viď. Adresár](#)