

Infineon Technologies rozširuje ponuku 8-bitových MCU v rade XC800 o dve ďalšie série: **XC82x** a **XC83x**.

Obe série obsahujú štandardné 8-bitové jadro 8051 a periférie, optimalizované pre vyššie úspory energie a nižšie náklady na implementáciu.

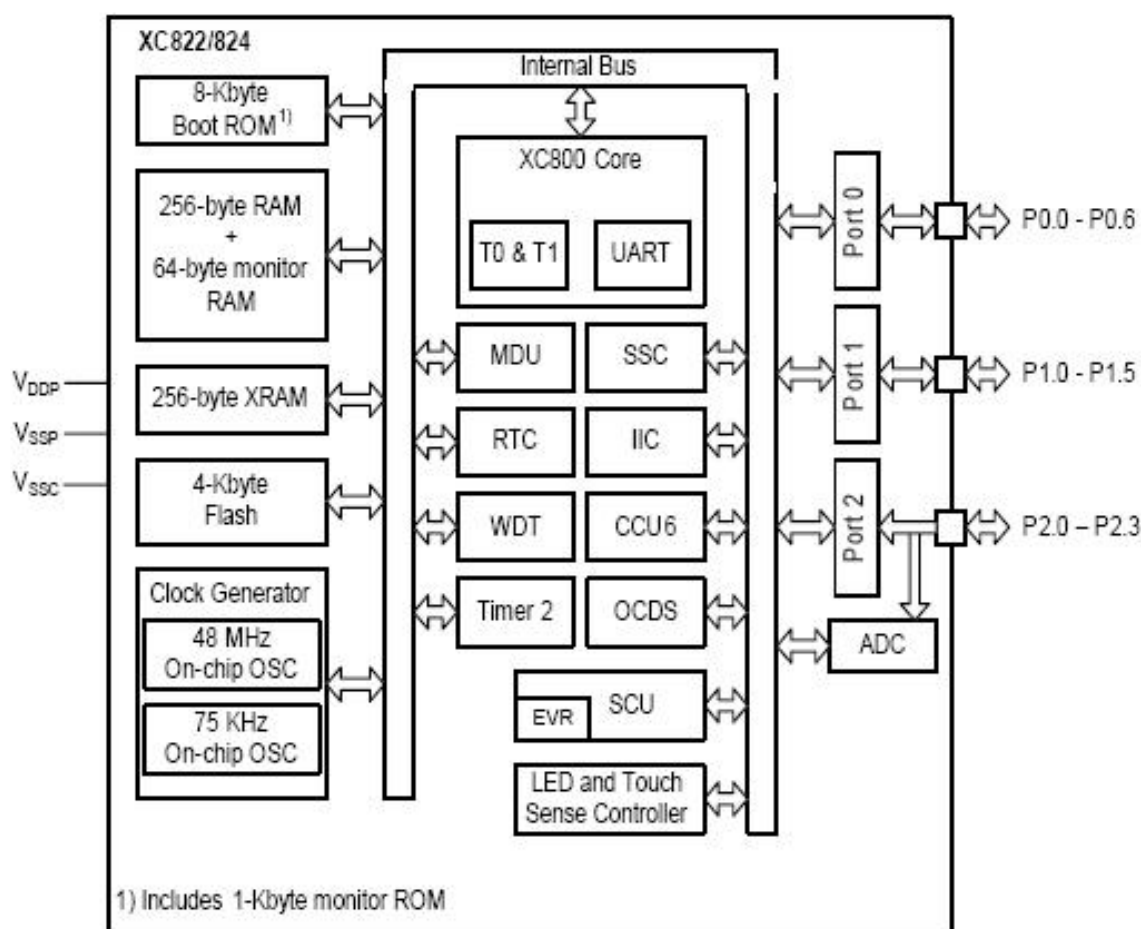
Niektoré MCU v týchto sériách budú obsahovať špeciality pre uľahčenie a zlepšenie návrhu užívateľských prístupov pre aplikácie s dotykovými panelmi a LED displejmi.

Vlastnosti

- High-performance XC800 Core
 - compatible with standard 8051 processor
 - two clocks per machine cycle architecture (for memory access without wait state)
 - two data pointers
- On-chip memory
 - 8 Kbytes of Boot ROM, Library ROM and User routines
 - 256 bytes of RAM
 - 256 bytes of XRAM
 - 4 Kbytes of Flash (includes memory protection strategy)
- I/O port supply at 2.5 V - 5.5 V and core logic supply at 2.5 V (generated by embedded voltage regulator)
Power-on reset generation
- Brownout detection for IO supply and core logic supply
- 48 MHz on-chip OSC for clock generation
 - Loss-of-Clock detection
- Power saving modes
 - idle mode
 - power-down mode with wake-up capability via real-time clock interrupt
 - clock gating control to each peripheral
- Programmable 16-bit Watchdog Timer (WDT) running on independent oscillator with programmable window feature for refresh operation and warning prior to overflow
- Three ports
 - Up to 17 pins as digital I/O
 - 4 pin as digital/analog input
- 4-channel, 10-bit ADC
 - support up to 3 differential input channel
 - results filtering by data reduction or digital low-pass filter, for up to 13-bit results
- Up to 4 channels, Out of range comparator
- Three 16-bit timers
 - Timer 0 and Timer 1 (T0 and T1)
 - Timer 2 (T2)
- Periodic wake-up timer
- Multiplication/Division Unit for arithmetic operations (MDU)
- Capture and Compare unit for PWM signal generation (CCU6)
- A full-duplex or half-duplex serial interface (UART)
- Synchronous serial channel (SSC)
- Inter-IC (IIC) serial interface

- LED and Touch-sense Controller (LEDTSUCU)
- On-chip debug support via single pin DAP interface (SPD)
- Packages:
 - PG-DSO-20
 - PG-TSSOP-16
- Temperature range TA:
 - SAF (-40 to 85 °C)
 - SAK (-40 to 125 °C)

Blokové zapojenie



Cena, dostupnosť

Cena sa pohybuje od 0,55 USD do 1,01 USD (@100k ks).

Vzorky série XC82x sú už dostupné, ale zo série XC83X sa budú môcť návrhári potešiť až v 04.2010.

Odkazy

[Series XC800 Homepage](#)

[XC83x Series Homepage](#)

[XC822/824 8-Bit Single-Chip Microcontroller Datasheet](#)

Distribúcia

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