

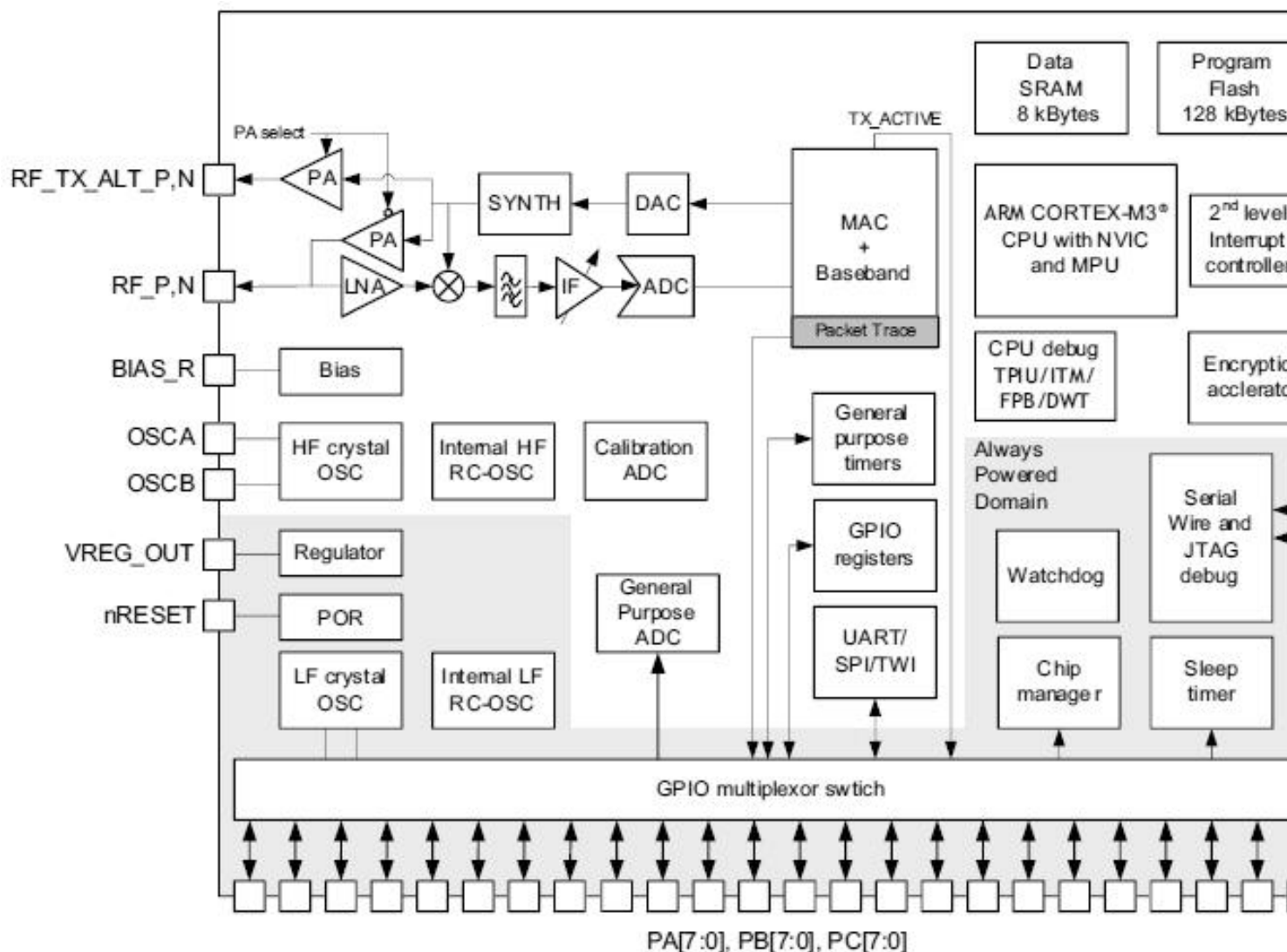
Firma STMicroelectronics rozšírila ponuku mikroprocesorov o rodinu STM32W. Ide o MCU s jadrom ARM® Cortex-M3, doplnené o transceiver 2.4 GHz IEEE 802.15.4.

Predstaviteľom tejto novej rodiny, je čip STM32W108xxx.

Vlastnosti

- Complete system-on-chip
 - 32-bit ARM® Cortex™-M3 processor
 - 2.4 GHz IEEE 802.15.4 transceiver & lower MAC
 - 128-Kbyte Flash, 8-Kbyte RAM memory
 - AES128 encryption accelerator
 - Flexible ADC, SPI/UART/TWI serial communications, and general-purpose timers
 - 24 highly configurable GPIOs with Schmitt trigger inputs
- Industry-leading ARM® Cortex™-M3 processor
 - Leading 32-bit processing performance
 - Highly efficient Thumb®-2 instruction set
 - Operation at 6, 12 or 24 MHz
 - Flexible nested vectored interrupt controller
- Low power consumption, advanced management
 - Receive current (w/ CPU): 27 mA
 - Transmit current (w/ CPU, +3 dBm TX): 31 mA
 - Low deep sleep current, with retained RAM and GPIO: 400 nA/800 nA with/without sleep timer
 - Low-frequency internal RC oscillator for low-power sleep timing
 - High-frequency internal RC oscillator for fast (100 µs) processor start-up from sleep
- Exceptional RF performance
 - Normal mode link budget up to 102 dB; configurable up to 107 dB
 - -99 dBm normal RX sensitivity; configurable to -100 dBm (1% PER, 20 byte packet)
 - +3 dB normal mode output power; configurable up to +7 dBm
 - Robust WiFi and Bluetooth coexistence
- Innovative network and processor debug
 - Non-intrusive hardware packet trace
 - Serial wire/JTAG interface
 - Standard ARM debug capabilities: Flash patch & breakpoint; data watchpoint & trace; instrumentation trace macrocell
- Application flexibility
 - Single voltage operation: 2.1-3.6 V with internal 1.8 V and 1.25 V regulators
 - Optional 32.768 kHz crystal for higher timer accuracy
 - Low external component count with single 24 MHz crystal
 - Support for external power amplifier
 - Small 7x7 mm 48-pin VFQFPN package or 6x6 mm 40-pin VFQFPN package

Blokové zapojenie



Vývojové nástroje

STM32W108B-SK: application board + Primer2 + network analyzer and IAR compiler

STM32W108B-KEXT: set of 4 additional application boards to build a mesh network

Oba budú dostupné v 4Q roku 2009. Zatiaľ sú bez bližších špecifikácií.

Odkazy

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