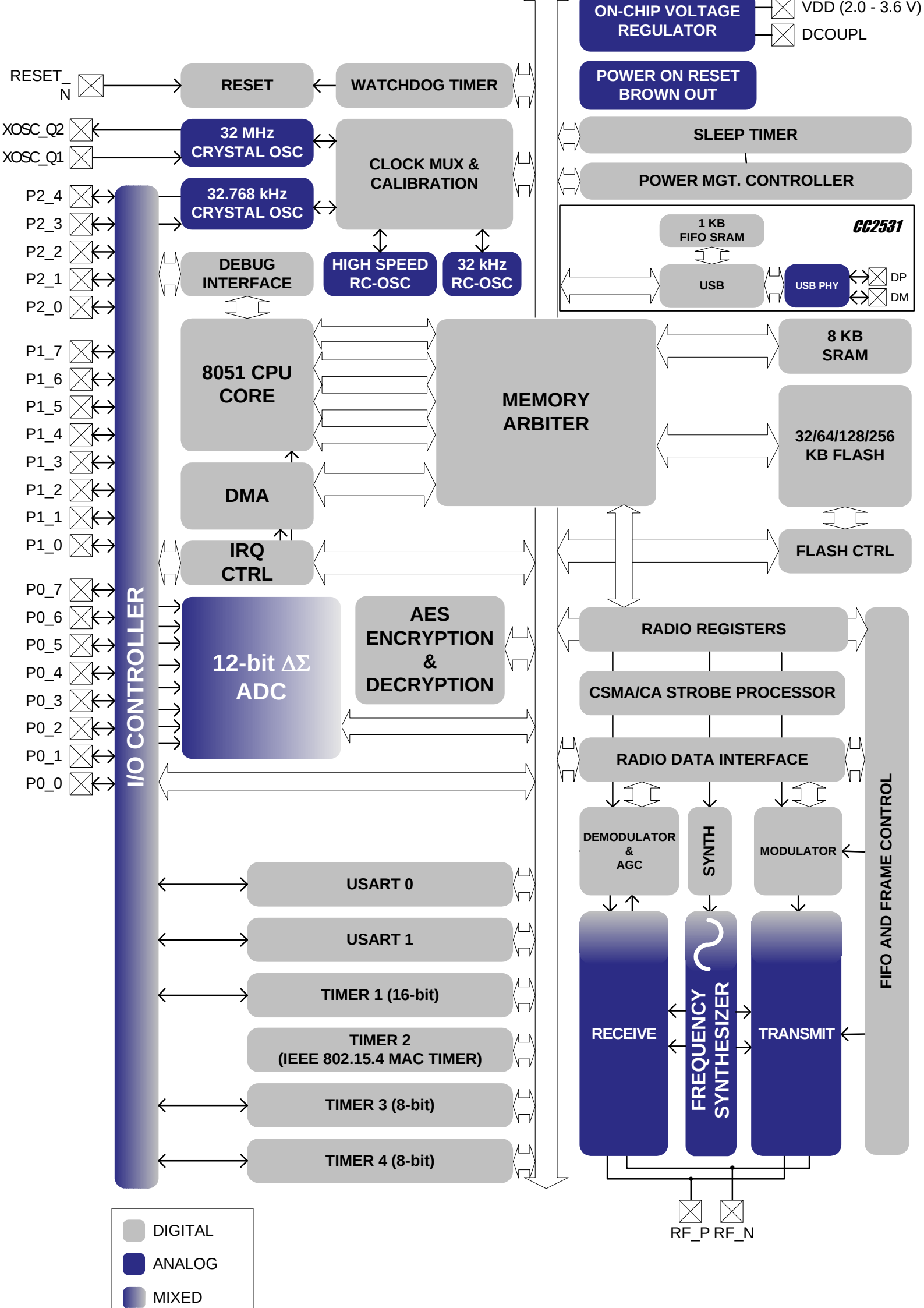
ON-CHIP VOLTAGE REGULATOR
VDD (2.0 - 3.6 V)
DCOUPL
RESET_N
RESET
WATCHDOG TIMER
POWER ON RESET BROWN OUT
XOSC_Q2
XOSC_Q1
32 MHz CRYSTAL OSC
CLOCK MUX & CALIBRATION
SLEEP TIMER
POWER MGT. CONTROLLER
P2_4
P2_3
P2_2
P2_1
P2_0
32.768 kHz CRYSTAL OSC
1 KB FIFO SRAM
CC2531
USB
USB PHY
DP
DM
DEBUG INTERFACE
HIGH SPEED RC-OSC
32 kHz RC-OSC
P1_7
P1_6
P1_5
P1_4
P1_3
P1_2
P1_1
P1_0
8051 CPU CORE
MEMORY ARBITER
8 KB SRAM
32/64/128/256 KB FLASH
DMA
IRQ CTRL
FLASH CTRL
P0_7
P0_6
P0_5
P0_4
P0_3
P0_2
P0_1
P0_0
I/O CONTROLLER
12-bit ΔΣ ADC
AES ENCRYPTION & DECRYPTION
RADIO REGISTERS
CSMA/CA STROBE PROCESSOR
RADIO DATA INTERFACE
DEMODULATOR & AGC
SYNTH
MODULATOR
FIFO AND FRAME CONTROL
USART 0
USART 1
TIMER 1 (16-bit)
TIMER 2 (IEEE 802.15.4 MAC TIMER)
TIMER 3 (8-bit)
TIMER 4 (8-bit)
RECEIVE
FREQUENCY SYNTHESIZER
TRANSMIT
RF_P
RF_N
DIGITAL
ANALOG
MIXED