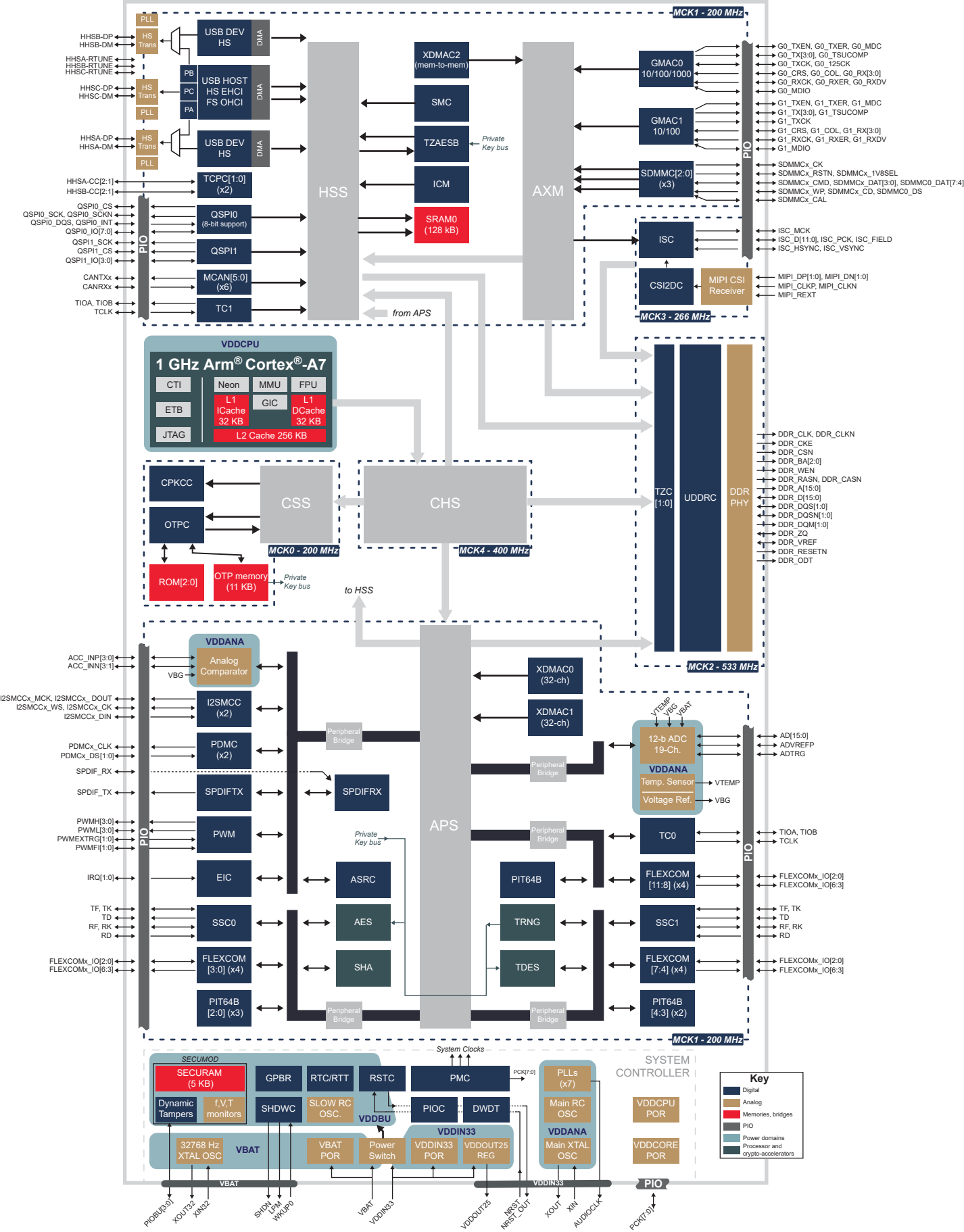
MCK1 - 200 MHz
HHSB-DP
HHSB-DM
HHSA-RTUNE
HHSB-RTUNE
HHSC-RTUNE
HHSC-DP
HHSC-DM
HHSA-DP
HHSA-DM
HHSA-CC[2:1]
HHSB-CC[2:1]
QSPI0_CS
QSPI0_SCK, QSPI0_SCKN
QSPI0_DQS, QSPI0_INT
QSPI0_IO[7:0]
QSPI1_SCK
QSPI1_CS
QSPI1_IO[3:0]
CANTXx
CANRXx
TIOA, TIOB
TCLK
PIO
PLL
HS Trans
USB DEV HS
DMA
PB
PC
PA
USB HOST HS EHCI FS OHCI
TCPC[1:0] (x2)
QSPI0 (8-bit support)
QSPI1
MCAN[5:0] (x6)
TC1
HSS
XDMAC2 (mem-to-mem)
SMC
TZAESB
Private Key bus
ICM
SRAM0 (128 kB)
AXM
GMAC0 10/100/1000
GMAC1 10/100
SDMMC[2:0] (x3)
G0_TXEN, G0_TXER, G0_MDC
G0_TX[3:0], G0_TSUCOMP
G0_TXCK, G0_125CK
G0_CRS, G0_COL, G0_RX[3:0]
G0_RXCK, G0_RXER, G0_RXDV
G0_MDIO
G1_TXEN, G1_TXER, G1_MDC
G1_TX[3:0], G1_TSUCOMP
G1_TXCK
G1_CRS, G1_COL, G1_RX[3:0]
G1_RXCK, G1_RXER, G1_RXDV
G1_MDIO
SDMMCx_CK
SDMMCx_RSTN, SDMMCx_1V8SEL
SDMMCx_CMD, SDMMCx_DAT[3:0], SDMMC0_DAT[7:4]
SDMMCx_WP, SDMMCx_CD, SDMMC0_DS
SDMMCx_CAL
ISC
ISC_MCK
ISC_D[11:0], ISC_PCK, ISC_FIELD
ISC_HSYNC, ISC_VSYNC
CSI2DC
MIPI CSI Receiver
MIPI_DP[1:0], MIPI_DN[1:0]
MIPI_CLKP, MIPI_CLKN
MIPI_REXT
MCK3 - 266 MHz
from APS
VDDCPU
1 GHz Arm® Cortex®-A7
CTI
ETB
JTAG
Neon
MMU
FPU
GIC
L1 ICache 32 KB
L1 DCache 32 KB
L2 Cache 256 KB
TZC [1:0]
UDDRC
DDR PHY
DDR_CLK, DDR_CLKN
DDR_CKE
DDR_CSN
DDR_BA[2:0]
DDR_WEN
DDR_RASN, DDR_CASN
DDR_A[15:0]
DDR_D[15:0]
DDR_DQS[1:0]
DDR_DQSN[1:0]
DDR_DQM[1:0]
DDR_ZQ
DDR_VREF
DDR_RESETN
DDR_ODT
MCK2 - 533 MHz
CPKCC
OTPC
CSS
CHS
MCK0 - 200 MHz
MCK4 - 400 MHz
ROM[2:0]
OTP memory (11 KB)
Private Key bus
to HSS
VDDANA
Analog Comparator
VBG
ACC_INP[3:0]
ACC_INN[3:1]
I2SMCCx_MCK, I2SMCCx_DOUT
I2SMCCx_WS, I2SMCCx_CK
I2SMCCx_DIN
I2SMCC (x2)
PDMCx_CLK
PDMCx_DS[1:0]
PDMC (x2)
SPDIF_RX
SPDIF_TX
SPDIFTX
SPDIFRX
PWMH[3:0]
PWML[3:0]
PWMEXTRG[1:0]
PWMFI[1:0]
PWM
IRQ[1:0]
EIC
TF, TK
TD
RF, RK
RD
SSC0
FLEXCOMx_IO[2:0]
FLEXCOMx_IO[6:3]
FLEXCOM [3:0] (x4)
PIT64B [2:0] (x3)
Peripheral Bridge
APS
Private Key bus
ASRC
AES
SHA
XDMAC0 (32-ch)
XDMAC1 (32-ch)
PIT64B
TRNG
TDES
VTEMP
VBG
VBAT
12-b ADC 19-Ch.
VDDANA
Temp. Sensor
Voltage Ref.
TC0
FLEXCOM [11:8] (x4)
SSC1
FLEXCOM [7:4] (x4)
PIT64B [4:3] (x2)
AD[15:0]
ADVREFP
ADTRG
TIOA, TIOB
TCLK
FLEXCOMx_IO[2:0]
FLEXCOMx_IO[6:3]
TF, TK
TD
RF, RK
RD
FLEXCOMx_IO[2:0]
FLEXCOMx_IO[6:3]
MCK1 - 200 MHz
System Clocks
SECUMOD
SECURAM (5 KB)
Dynamic Tampers
f,V,T monitors
GPBR
RTC/RTT
RSTC
PMC
PCK[7:0]
SHDWC
SLOW RC OSC.
VDDBU
PIOC
DWDT
PLLs (x7)
Main RC OSC
VDDANA
Main XTAL OSC
SYSTEM CONTROLLER
VDDCPU POR
VDDCORE POR
32768 Hz XTAL OSC
VBAT
VBAT POR
Power Switch
VDDIN33
VDDIN33 POR
VDDOUT25 REG
Key
Digital
Analog
Memories, bridges
PIO
Power domains
Processor and crypto-accelerators
VBAT
VDDIN33
PIO
PIOBU[3:0]
XOUT32
XIN32
SHDN
LPM
WKUP0
VBAT
VDDIN33
VDDOUT25
NRST
NRST_OUT
XOUT
XIN
AUDIOCLK
PCK[7:0]