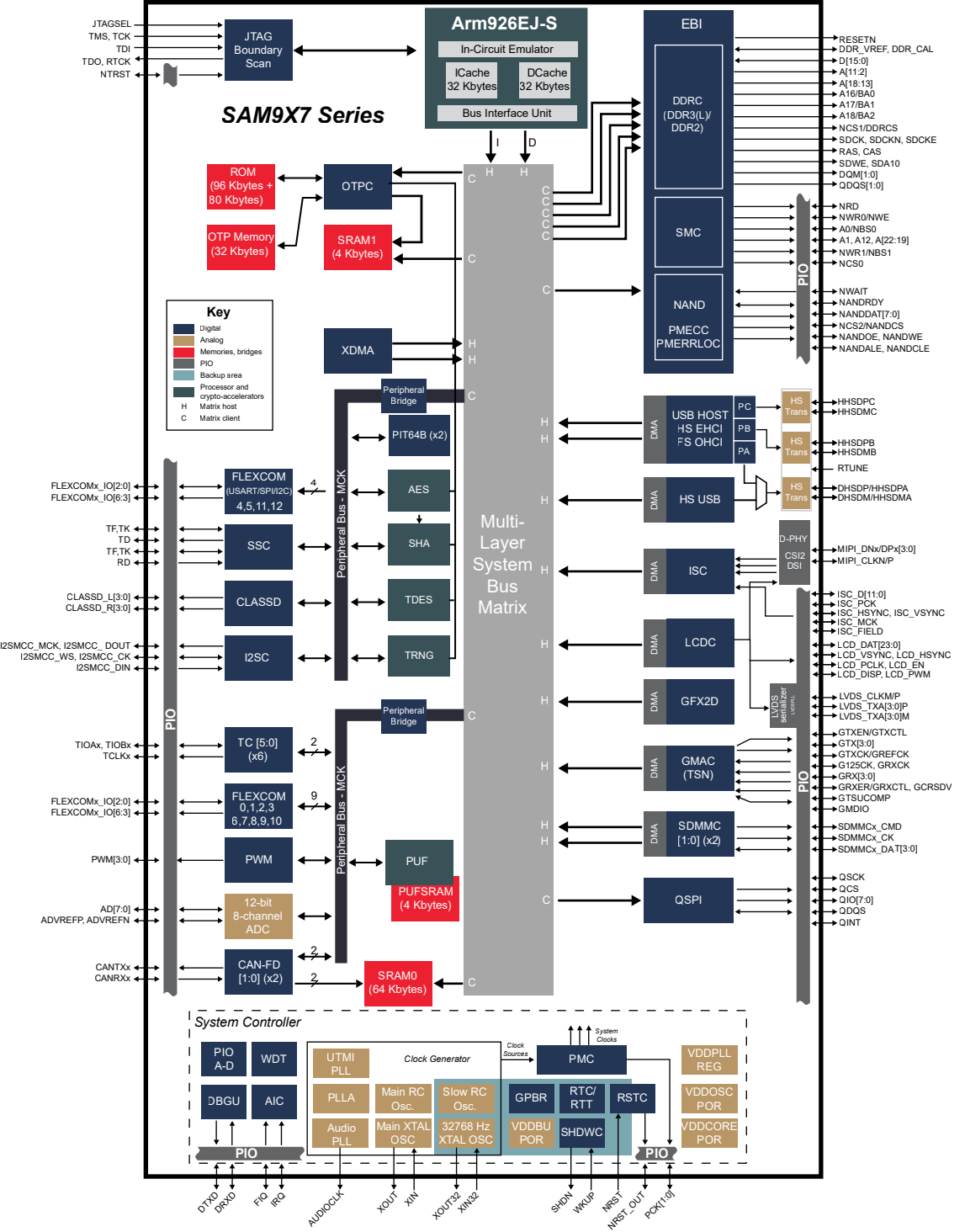
SAM9X7 Series
JTAGSEL
TMS, TCK
TDI
TDO, RTCK
NTRST
JTAG Boundary Scan
Arm926EJ-S
In-Circuit Emulator
ICache 32 Kbytes
DCache 32 Kbytes
Bus Interface Unit
EBI
DDRC (DDR3(L)/ DDR2)
SMC
NAND
PMECC
PMERRLOC
RESETN
DDR_VREF, DDR_CAL
D[15:0]
A[11:2]
A[18:13]
A16/BA0
A17/BA1
A18/BA2
NCS1/DDRCS
SDCK, SDCKN, SDCKE
RAS, CAS
SDWE, SDA10
DQM[1:0]
QDQS[1:0]
NRD
NWR0/NWE
A0/NBS0
A1, A12, A[22:19]
NWR1/NBS1
NCS0
NWAIT
NANDRDY
NANDDAT[7:0]
NCS2/NANDCS
NANDOE, NANDWE
NANDALE, NANDCLE
ROM (96 Kbytes + 80 Kbytes)
OTPC
OTP Memory (32 Kbytes)
SRAM1 (4 Kbytes)
Key
Digital
Analog
Memories, bridges
PIO
Backup area
Processor and crypto-accelerators
H Matrix host
C Matrix client
XDMA
Peripheral Bridge
PIT64B (x2)
FLEXCOM (USART/SPI/I2C) 4,5,11,12
AES
SHA
TDES
TRNG
SSC
CLASSD
I2SC
Peripheral Bus - MCK
Multi-Layer System Bus Matrix
USB HOST HS EHCI FS OHCI
PC
PB
PA
HS Trans
HS USB
DMA
HHSDPC
HHSDMC
HHSDPB
HHSDMB
RTUNE
DHSDP/HHSDPA
DHSDM/HHSDMA
D-PHY CSI2 DSI
ISC
MIPI_DNx/DPx[3:0]
MIPI_CLKN/P
ISC_D[11:0]
ISC_PCK
ISC_HSYNC, ISC_VSYNC
ISC_MCK
ISC_FIELD
LCDC
LCD_DAT[23:0]
LCD_VSYNC, LCD_HSYNC
LCD_PCLK, LCD_EN
LCD_DISP, LCD_PWM
GFX2D
LVDS serializer
LVDS_CLKM/P
LVDS_TXA[3:0]P
LVDS_TXA[3:0]M
GMAC (TSN)
GTXEN/GTXCTL
GTX[3:0]
GTXCK/GREFCK
G125CK, GRXCK
GRX[3:0]
GRXER/GRXCTL, GCRSDV
GTSUCOMP
GMDIO
SDMMC [1:0] (x2)
SDMMCx_CMD
SDMMCx_CK
SDMMCx_DAT[3:0]
QSPI
QSCK
QCS
QIO[7:0]
QDQS
QINT
PIO
FLEXCOMx_IO[2:0]
FLEXCOMx_IO[6:3]
TF,TK
TD
TF,TK
RD
CLASSD_L[3:0]
CLASSD_R[3:0]
I2SMCC_MCK, I2SMCC_ DOUT
I2SMCC_WS, I2SMCC_CK
I2SMCC_DIN
TC [5:0] (x6)
TIOAx, TIOBx
TCLKx
FLEXCOM 0,1,2,3 6,7,8,9,10
PWM[3:0]
PWM
PUF
PUFSRAM (4 Kbytes)
AD[7:0]
ADVREFP, ADVREFN
12-bit 8-channel ADC
CANTXx
CANRXx
CAN-FD [1:0] (x2)
SRAM0 (64 Kbytes)
System Controller
PIO A-D
WDT
DBGU
AIC
UTMI PLL
Clock Generator
PLLA
Main RC Osc.
Slow RC Osc.
Audio PLL
Main XTAL OSC
32768 Hz XTAL OSC
Clock Sources
System Clocks
PMC
GPBR
RTC/ RTT
RSTC
VDDBU POR
SHDWC
VDDPLL REG
VDDOSC POR
VDDCORE POR
DTXD
DRXD
FIQ
IRQ
AUDIOCLK
XOUT
XIN
XOUT32
XIN32
SHDN
WKUP
NRST
NRST_OUT
PCK[1:0]