

PMIC**eMMC****LPDDR4****802.11ac 2x2****Bluetooth 5****Digi Microcontroller Assist™****Secure Element****CORE COMPLEX 1**

2-4 x ARM® Cortex®-A35
32 KB I-cache
32 KB D-cache
512 KB L2 cache with ECC

MULTIMEDIA**GPU**

1 x 2- or 4-Shader,
OpenGL ES 3.0 or 3.1
3.1, Vulkan® VX
Extensions

VPU

Video: h.265 dec 4k,
h.264 enc/dec 1080p

AUDIO**DSP CORE**

Tensilica® HiFi 4

32 KB I 48 KB D 64 KB
TSM

512 KB SRAM

DISPLAY AND CAMERA I/O

2 x MIPI-DSI/LVDS
Combo PHY*

1 x Parallel Display

1 x Parallel CSI

1 x MIPI CSI

CORE COMPLEX 2

Cortex-M4F	1 x I²C
16 KB I-cache	1 x UART
16 KB D-cache	6 x GPIO
256 KB SRAM	1 x TPM Timer

MEMORY

LPDDR4 @ 1200 MHz (no ECC)

2 x SDIO3.0/eMMC5.1

RAW NAND-BCH62

2 x Quad/1 x Octal SPI

SECURITY

HAB, SRTC, SJTAG, TrustZone®

AES256, RSA4096, SHA-256

3DES, ARC4, MD-5

Flashless SHE, ECC

Tamper, Inline Enc Engine

SYSTEM CONTROL

Power Control, Clocks, Reset

BootROMs

PMIC interface (dedicated I²C)

Domain Resource Partitioning

CONNECTIVITY

5 x UART

8 x I²C

4 x SPI

2x Gbit
Ethernet AVB

3.3 V/1.8 V GPIO

PCIe 3.0 with L1
Substate-1-lane
(wired only)

1 x USB3 OTG
w/PHY

1x USB2 OTG
w/PHY

3 x CAN/CAN FD

MOST 25/50

4 x 4 Keypad

4 x PWM

1 x 12-bit ADC

2 x ASRC, SPDIF

4 x SAI, ESAI, MQS