



DragonBoard 810 Embedded Development Kit

Based on the Qualcomm® Snapdragon™ 810 processor

**START DESIGNING
YOUR EMBEDDED
AND IOT DEVICES
TODAY**

Intrinsyc's DragonBoard 810 Embedded Development Kit is a versatile, easy-to-use exposed board platform providing the ideal starting point for creating the next generation embedded and IoT devices. The platform consists of Intrinsyc's Open-Q™ 810 System on Module, a carrier board exposing all the available IO, and a range of accessories to fast track your product development.

Technical Information



Open-Q 810 SOM	Snapdragon 810 Octa core ARM® Cortex® quad A57, quad A53 Qualcomm® Adreno™ 430 GPU Qualcomm® Hexagon™ v5.5 DSP 4GB LPDDR4 RAM (1600MHz) 16GB eMMC 5.0 Flash Wi-Fi 802.11b/g/n/ac 2.4 / 5.0 GHz dual stream, dual band Bluetooth 4.1 IZat™ Gen 8C GPS
Display	2x MIPI-DSI 4-lane, 60fps, up to 2560x1600 (single port), 4096x2160 (dual port) 1x HDMI 1.4a up to 3840x2160, 30fps
Camera	3x MIPI-CSI 4-lane, dual ISP, up to 28MP
Audio	3x 3.5mm Jack headset, line-in, line-out 24pin Digital audio expansion header 3x Analog audio 2x 2pin speaker header, 1x 10pin front panel header
Other Interfaces	1x UART debug header 1x USB OTG micro-AB 4x USB 2.0 host, 2x type-A, 2x front panel header 2x USB 3.0 host, type-A 1x PCIe v2.1 2x SATA 1x µSD Socket 4x Digital IO 3x 20pin, 1x 24pin, expansion header, I ² C, SPI, UART or GPIO
OS Support	Android 6.0 (Marshmallow)
Dimensions	SOM 82mm x 40mm Carrier board 170mm x 170mm
Power Supply	12V DC & ATX

DESIGN : DEVELOP : BUILD



Implement high definition audio playback and recording solutions with multi-codec support, noise cancellation, voice activation and surround sound



Capture and process high resolution images up to 28MP, with support for hardware based noise reduction and JPEG encoding. Easily support multiple concurrent cameras with the dual ISP architecture



Use the latest Gen 8C GPS technology. Track, tag and embedded additional information with real time device location data



Deliver a superior user experience with the advanced octa-core ARM Cortex A75/A53 CPU that is both 32bit and 64bit capable, the Hexagon DSP and Adreno 430 GPU. Includes support for OpenGL ES 3.1, OpenCL 1.2 and FastCV



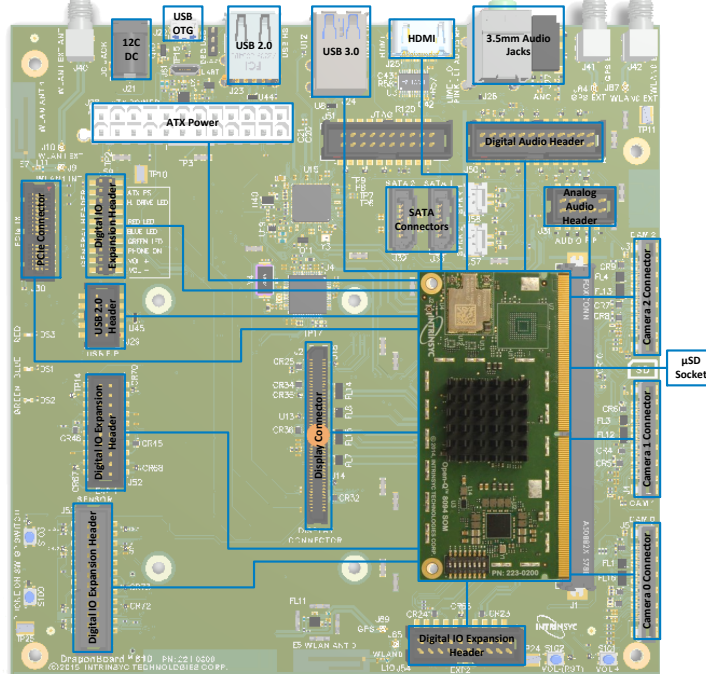
Design and develop smart connected devices with integrated wireless connectivity. Support for Bluetooth 4.1 LE as well as the latest 802.11ac dual band, dual stream Wi-Fi offering the fastest data transfer and streaming speeds



Record, stream and playback high quality multi-media video with H.265 (HEVC) encode and decode. Supporting 4K UHD displays, eye catching visuals can easily be integrated

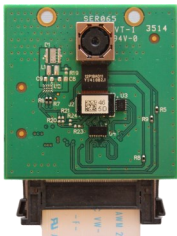


Add connections to external memory, sensors, and a host of other peripheral devices via the comprehensive list of configurable IO

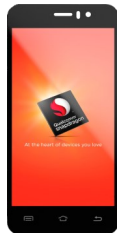


Optional Accessories

13MP Camera Module



4.5" FWVGA LCD Touch Display



For additional information and to order please visit

www.intrinsyc.com/db810

Datasheet: DragonBoard 810, June 2016, Rev. 1.2

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