Qualcomm® Snapdragon™ 845 Mobile Hardware Development Kit

Comprehensive and expandable development and evaluation kit for the Snapdragon 845 Mobile Platform.

The Snapdragon 845 Mobile Hardware Development Kit provides an open-frame solution for technology companies to integrate and innovate devices based on the Snapdragon 845 Mobile Platform.

The Snapdragon 845 Mobile Hardware Development Kit is a feature-rich Android development platform that is designed to provide an ideal starting point for creating high-performance mobile devices and applications based on the Snapdragon 845 Mobile Platform. The kit includes the hardware, software tools and accessories needed to immediately begin your mobile development work.

With an advanced 10-nanometer design, Snapdragon 845 platform is engineered to support long battery life, immersive VR and AR experiences, cutting-edge camera capabilities, artificial intelligence, and Gigabit Class download speeds.

The Snapdragon 845 mobile development platform is designed to provide original equipment manufacturers (OEMs), hardware/software vendors, developers and engineers with next generation software technology and tools to accelerate development and testing of devices.

Solution Highlights

Kit Contents

- Processor Card with SDA845
- Mini-ITX carrier board
- 12V AC power adapter
- Battery
- Charger
- USB cable
- Setup guide

Display Adapter Card is an additional accessory

Development Platform
Snapdragon 845 Processor Card

The Snapdragon 845 Processor Card measuring 60mm x 70mm is where all the processing occurs. It is connected to the carrier via two 240-pin high speed board-to-board connectors. A top side heat sink and a bottom side heat conductive metal plate provide thermal protection.

The Processor Card provides the basic common set of features with minimal integration effort. It integrates the following:

- Snapdragon 845 main application processor
- LPDDR4X up to 1866MHz 6GB RAM (POP)
- PMi8998 + PM8998 – PMIC for Peripheral LDOs, Boost Regulators
- WCN3990 Wi-Fi+ BT+ FM combo chip
- 128 GB UFS 2.1
- WCD9341 Audio Code

Snapdragon 845 Specifications

Dimensions
170mm x 170mm Mini-ITX

CPU
Quad-core Qualcomm® Kryo™ 385 CPU
64-bit ARMv8-compliant processor at up to 2.2GHz

GPU
Qualcomm® Adreno™ 630 GPU
OpenGL ES 3.2, OpenCL 2.0 Full, Vulkan, DX12

DSP
Qualcomm® Hexagon™ 685 DSP

Memory and Storage
6GB LPDDR4X PoP memory
128GB UFS 2.1

Connectivity
Wi-Fi: 802.11a/b/g/n/ac 2.4/5GHz
Bluetooth 5.0 + HS (backward compatible)
GNSS (GPS/GLONASS/COMPASS/GALILEO)

Camera Support
3x MIPI CSI with support for 3D camera configuration

Display
2x MIPI dual 4-lane DSI + touch panel

Multimedia
HDMI 2.0 output - supports up to 4K UHD

I/O Interfaces
2x PCIe, 1x JTAG, HDMI 2.0, 1x USB 3.1 Type C,
2x USB 2.0 Type A, 1x USB 2.0 micro-B,
3x MIPI-CSI, 2x MIPI dual 4-lane DSI
4x expansion headers for additional features (NFC, sensors etc.)

LED
3x general purpose LED, PMIC driven

Battery
4.4V/2850mAh

Operating System
Android 8

Optional Accessories
Display: 5.7” TFT QHD (1440 x 2560)
with PCAP Touch Panel
Camera Daughter Card

To learn more visit:
developer.qualcomm.com