Smart displays are a rapidly growing segment that build on headless voice assistants to provide not only visual feedback, but also higher levels of Artificial Intelligence (AI) and vision based use cases. The Qualcomm Smart Display Platforms are designed to integrate the necessary technologies, with support for voice, display, audio and camera interfaces, along with enhanced AI capabilities in a cost-effective platform.

Our purpose-built Smart Display 200 Platform is based on the Qualcomm® APQ8053-Lite System-on-Chip (SoC) and integrates power management ICs, audio codec support and Wi-Fi/Bluetooth connectivity to support cost savings on BOM, as well as on commercialization efforts to integrate several subsystems. The APQ8053-Lite SoC is built to support either Android Things or Android as the operating system (OS). The Android Things platform is designed to help OEMs and developers solve development challenges with comprehensive solutions based on Qualcomm Technologies processors in order to quickly and cost-effectively develop smart displays featuring Google services such as Google Duo and Google Maps.

To further facilitate fast and cost-effective development of AI-enabled smart displays, we have worked with third-party distributors to design and make available certified System-On-Modules (SoMs), development boards and full form factor reference devices. In addition, we have collaborated with several popular AI solution providers to demonstrate the extensibility of the platform to support a host of machine learning solutions.
Features

- Heterogeneous architecture includes 64-bit, quad and octa-core CPU solutions ranging from 1.8GHz to 2.2GHz per core
- Dual ISP ideal for supporting intelligent camera features for use cases like video telephony, security and machine learning
- Qualcomm® Adreno™ GPU with 64-bit addressing @ up to 650MHz with latest API support
- Qualcomm® Hexagon™ 646 DSP designed to provide battery-efficient audio, video, and computer vision use cases
- Low power Qualcomm® Snapdragon™ sensor core helps support always-on use cases at reduced power levels
- Integrated Wi-Fi 802.11ac, Bluetooth and GPS support
- Worldwide ecosystem of vendors, customers, developers and embedded device OEMs

Software

- Support for Android and Android Things Operating Systems (OS)
- Android Things OS: Comprehensive solutions to help OEMs and developers solve development challenges by providing turnkey end to end use cases and services pre-integrated on Qualcomm Technologies processors.
- Qualcomm® Neural Processing SDK: optimizing deep learning processing performance across available resources to achieve superior edge computing experience.
- Video Analytic Manager: enabling easy integration of 3rd party video analytic solution.

Platform Specifications

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Platform Block Diagram

Software

- Support for Android and Android Things Operating Systems (OS)
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- Qualcomm® Neural Processing SDK: optimizing deep learning processing performance across available resources to achieve superior edge computing experience.
- Video Analytic Manager: enabling easy integration of 3rd party video analytic solution.
Feature-rich, Android powered, production ready module based on the Qualcomm Smart Display 200 Platform with APQ8053-Lite application processor

- Octa-Core 64-bit Arm Cortex A53 1.8 GHz
- Adreno 506 GPU
- Hexagon DSP
- 2GB LPDDR3 RAM, 4GB eMMC Flash
- Pre-certified Wi-Fi/Bluetooth module – 802.11a/b/g/n/ac, 2x2 MU-MIMO, 2.4/5 GHz, Bluetooth Low Energy v4.2
- Extensive peripheral I/O make it ideal for devices that require cloud connectivity and edge compute capabilities
- Multimedia, HD video camera, and touch display capabilities, along with extensive audio features for creating next-gen smart display products requiring tasks such as video conferencing, remote video monitoring, movie and video streaming
- SoM dimensions: 50mm x 46.5mm
- Available from Intrinsyc Technologies
  www.intrinsyc.com

For additional product information visit:
Qualcomm® Developer Network
www.developer.qualcomm.com

Createpoint
www.createpoint.qti.qualcomm.com
Go to Product Kits: Smart Display

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