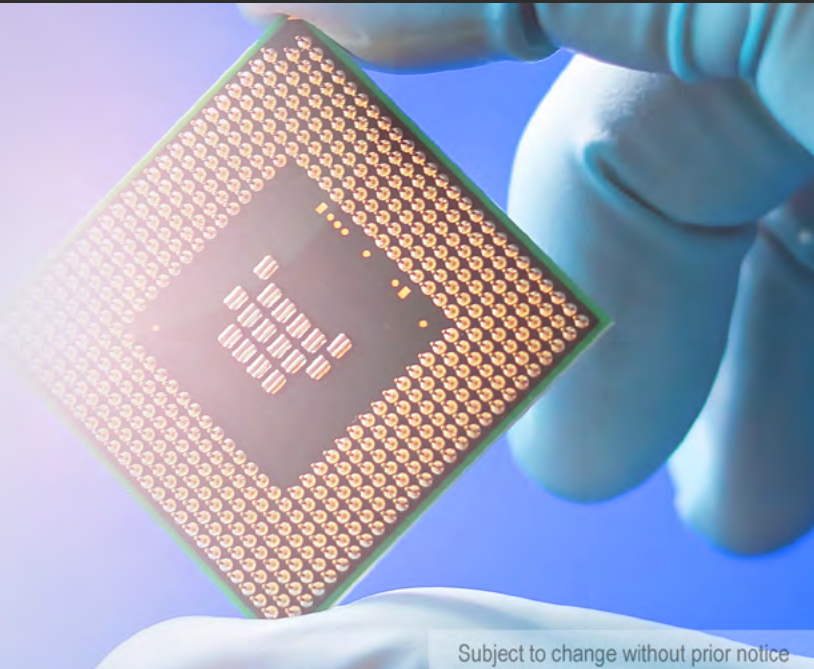


Aikri QCS405 System On Module (SoM)

Based on the Qualcomm® QCS405 SoC



Subject to change without prior notice

About eInfochips

eInfochips is product engineering services company offering technology consulting and product design services in multiple industry verticals like aerospace & defense, security and surveillance, medical and healthcare, industrial and home Automation, consumer electronics and more.

eInfochips being a Qualcomm Snapdragon Technology Partner (STP) offers turnkey product designs on multiple Snapdragon and other SoCs of Qualcomm® and have enabled global customers with Qualcomm based product designs.

eInfochips Advantages

- **28** Years of experience in system design
- **10** Design centers worldwide
- **500+** Product designs
- **35+** Product designs on Qualcomm
- **15M+** Product deployments across globe
- **ISO 9001, ISO13485, AS9100/EN9100, ISO26262** and **CMMi L3** compliant processes

eInfochips Aikri QCS405 SoM

The Aikri-40X-5LS-1 System on Module (SoM) is powered by Qualcomm® QCS405 SoC, which is designed specifically for smart audio applications. The QCS405 supports features such as Multi-mic Qualcomm® Noise and Echo Cancellation that isolates noisy environments from voice, simultaneous multi-keyword detection to aid voice services like Amazon Alexa and Google assistant, Qualcomm® DDFA™ amplifier technology, Qualcomm® aptX™ audio and Dolby Atmos.

QCS405 integrates a 64-bit Quad-core Arm Cortex-A53-1.4 GHz CPU, Qualcomm® Adreno™ 306 GPU/display and a dedicated high-performance audio DSP with hardware enhancement capable of up to 32 channels of audio post processing. The Aikri-40X-5LS-1 SoM integrates 2x2 11ac Wi-Fi and Bluetooth 5.0 connectivity and supports a mic array, multi-speaker connection via Wi-Fi/BT, PCIe, HDMI 1.4a and multi-room audio streaming.

The production-ready SoM has a Yocto Linux BSP pre-loaded and helps manufacturers easily create complex, feature-rich, and voice-supported smart audio applications such as Smart speakers, Soundbars, Home cinema, Smart assistants, Home Hubs etc.

Smart Speakers

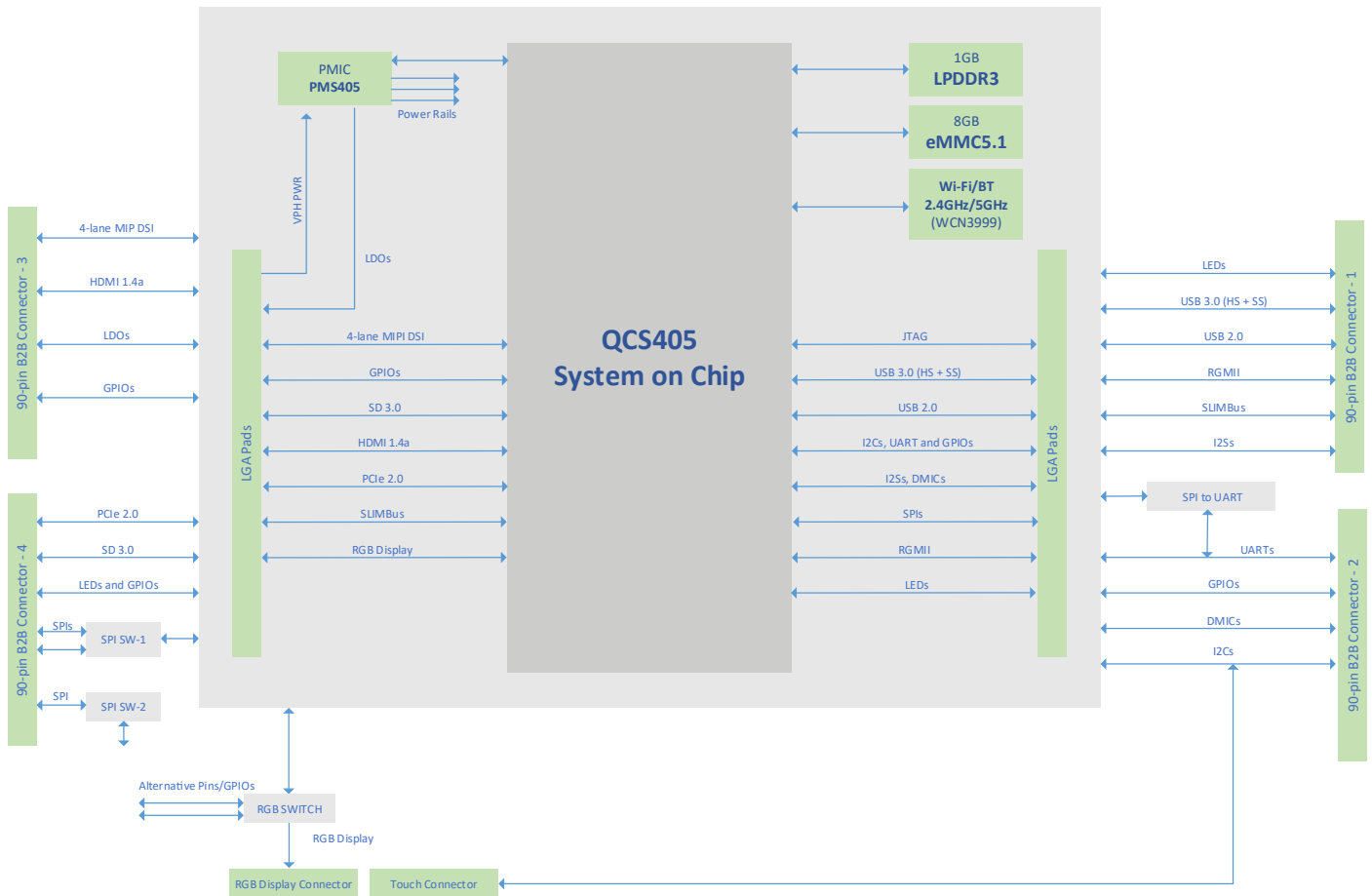
Smart Soundbars

Home Cinema

Premium Smart Speakers with Display

Smart Assistants

Home Hubs



Preliminary specification – subject to change

Processor

- Qualcomm® QCS405
- 64-bit Quad-core at 1.4 GHz
- Qualcomm® Adreno™ 306 GPU with 64-bit addressing; 600MHz
- 2x Qualcomm® Hexagon™ QDSP6 v66 with Low Power Island and Voice accelerators

Memory / Storage

- 1GB LPDDR3
- 8GB eMMC

Connectivity

Wi-Fi:

- Qualcomm® Wi-Fi via WCN3999 - 2x2 WLAN 802.11 a/b/g/n/ac

Bluetooth:

- Bluetooth 5.0

USB

- 1x USB3.0
- 1x USB2.0

Audio

Encode:

- PCM and AAC

Decode:

- PCM, AAC, MP3, AIFF, APE, DSF, FLAC and VORBIS

Interface Support

- WCD9335 Audio codec
- Soundwire, SLIMbus, I2S, TDM, DMIC

Display

- 1x 4-lane MIPI DSI port, support up to 720p60
- RGB display support (480x272@60fps) with touch panel
- HDMIv1.4a support up to 1080p full HD 60fps

Sensors

- SPI; I2C; GPIO connections to sensor core DSP

Others

- USB 3.0; SDIO 3.0; UART; PCIe Gen2; Ethernet RGMII
- GPIO

Operating Environment

- Input Voltage: 3.6V
- Operating Temperature: -20 to +55° C

Mechanical Specification

- SOM: 65.42mm X 57.82mm with 4x 90-pin board to board connectors

Operating System

- Linux, Yocto Thud, Kernel 4.14

Orderable Part

- System On Module (SoM): Aikri-40X-5LS-1

eInfochips, an Arrow company, is a leading global provider of product engineering and semiconductor design services. With over 500+ products developed and 40M deployments in 140 countries, eInfochips continues to fuel technological innovations in multiple verticals. The company's service offerings include digital transformation and connected IoT solutions across various cloud platforms, including AWS and Azure.

Qualcomm Adreno and Qualcomm Quick Charge are products of Qualcomm Technologies, Inc. Qualcomm, Snapdragon, Adreno and Quick Charge are trademarks of Qualcomm Incorporated, registered in the United States and other countries. Used with permission.

eInfochips reserves the right to make changes to the information, text, graphics or other items contained within this material at any time, without any prior notice. eInfochips will make their best effort, however cannot commit to keep this material up-to-date. To be assured that you have the latest material, you are encouraged to contact sales@einfochips.com. All brands, logos, product names and service names are trademarks or registered trademarks of their respective companies or organizations.

FOLLOW US



/einfochips



/einfochipsLtd



/einfochips



/einfochipsindia