## Thundercomm

# T U R 3 O XX C404/C405 SOM



A unique end-to-end solution designed specifically for creating smart speaker and smart home assistant products.

The C404/C405 SOM is built around the Qualcomm Smart Audio QCS400 SoC series with a powerful combination of superior sound quality, onboard Artificial Intelligence(AI) Engine and cloud-based smart assistant services. The pre-integrated software of SOM includes far-field voice and noise cancellation, multi-room audio streaming, the 3rd party voice services, Qualcomm DDFA and Dollby Digital technology.

The C404/C405 SOM is ready for mass-production and help manufacturers easily create differentiated smart speaker products.

#### **Applications**







Home Cinema

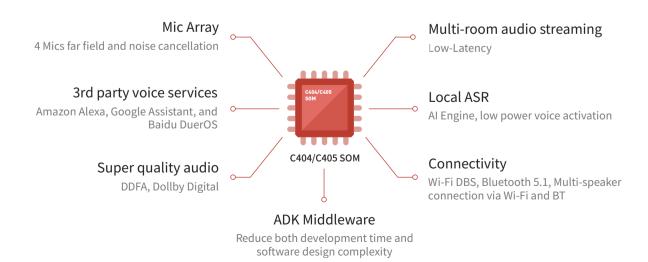


Sound bar



**AVR** 

#### **Features**



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### **Specifications**

Category	Description
CPU	Quad-core Arm Cortex-A53 ,64-bit , 1.4 GHz
GPU (C405 Only)	Qualcomm® Adreno™ 306 GPU with 64-bit addressing; 600 MHz
DSP	2 x Hexagon™ QDSP6 v66: Low Power Audio Subsystem & Audio Compute DSP
Memory	eMCP:LPDDR3 1GB + eMMC 8GB
Connectivity	WCN3999: 2x2 WLAN802.11 a/b/g/ac & Bluetooth 5.0 & FM
Audio	SLIMBus,5x I2S(C404), 6x I2S(C405), 8x DMIC, Soundwire
Display Interfaces (C405 Only)	One 4-lane MIPI DSI ports,DSI support up to 720P, HDMI support up to 1080p@30fps
Other Interfaces	1xUSB3.0; 1xUSB2.0; 6xBLSP; 1xTFCard; 1xPCle; 2x/3xSPDIF; RGMII; GPIOs
Operating Environment	Operation Temperature:20°C $\sim$ 70°COperation Humidity: 5% $\sim$ 95%, non-condensing
Dimension	33.8 x 33.8 x 2.5mm
OS Support	Linux

#### **Dev Kit**

#### Sensor

• Gyro

#### Display(C405 Only)

- HDMI Out(ARC)
- Mipi Display

#### Peripheral

- Ethernet
- USB 3.0/USB 2.0
- Micro-SD Card
- Expansion Connector: I2S, Uart

#### Audio

- WCD9335 Codec: Line in/out, Dual Speaker, Headset, SPDIF
- Expansion Connector for Mic Array Board

#### Connectivity

- Wi-Fi & BT
- NFC