

Thundercomm TurboX™ S820 SOM General SPEC

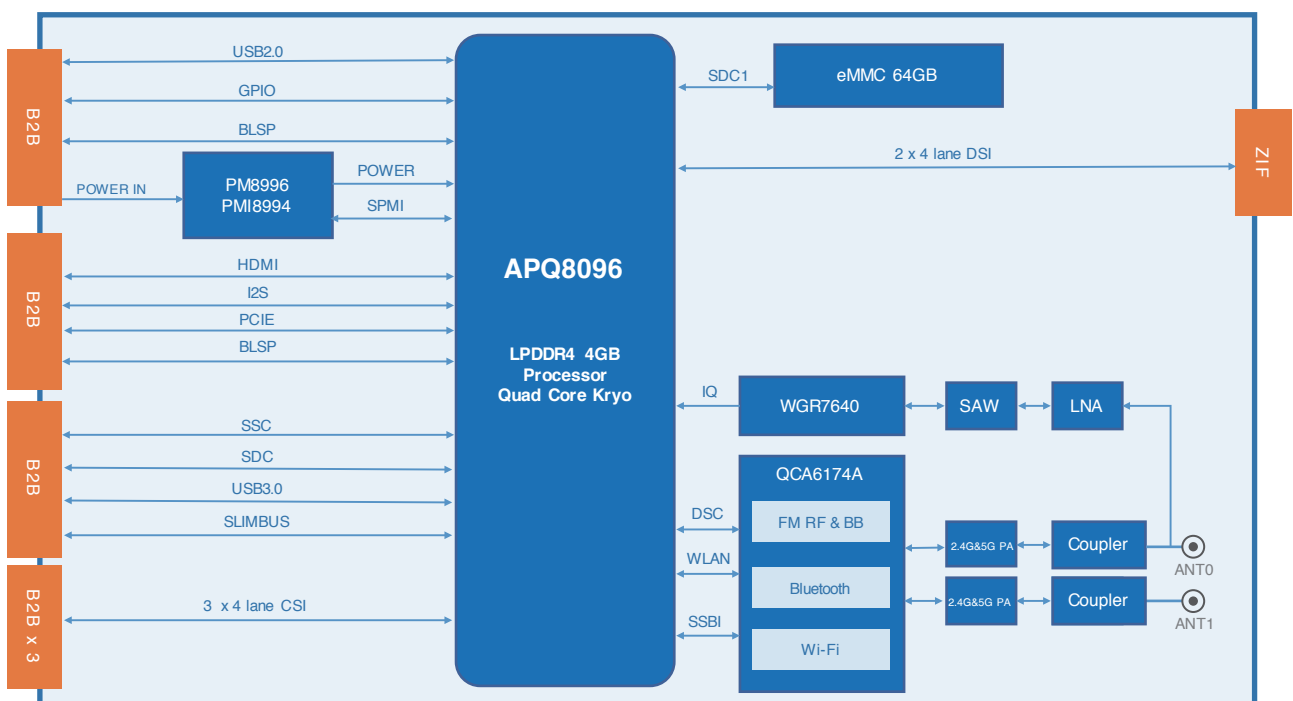
Thundercomm TurboX™ S820 SOM is a board to board connected, small size (40mm x 55mm), production ready, pre-certified (CE, FCC, RoHS) module, powered by the next-gen ARM®v8 64-bit Quad-core Qualcomm® Snapdragon™ 820 applications processor (APQ8096).

The TurboX S820 SOM is suitable for products requiring high computing power. It supports SNPE and high-quality video. It provides pre-tested HW and SW OS/BSP, powerful computing resource, rich interface and valid AVL, and reference IO board. It supports Android and Linux. It can accelerate your product development.

Major Target Markets



HW Block



S820 SOM General SPEC

Category	Item	Description
Platform	Chipset	Snapdragon™ 820 processor (APQ8096 SoC)
	CPU	Qualcomm® Kryo™ CPU, Quad-Core, 64-bit, 2.2GHz
	GPU	Adreno™ 530 GPU with 64 bit addressing and support for OpenGL ES 3.1, OpenCL 2.0
	DSP	Hexagon™ 680 DSP with dual -Hexagon vector processor (HVX512)@825MHz
	OS	Android 7.0
	Memory and Storage	LPDDR4 4GB + eMMC 64GB
Multimedia	Display	2 x MIPI-DSI 4-lane, up to 4K@60fps 1x HDMI out v2.0 up to 4K@60fps
	Camera	Dual 14-bit Spectra™ ISP, 3x MIPI-CSI 4-lane, up to 28MP
	Decode	1080p@240fps/4K@60fps/8x1080p@30fps (H.264, VP8, HEVC8/10-bit, VP9)
	Encode	1080p@120fps/4K@30fps/4x1080p@30fps (H.264, VP8, HEVC)
Connectivity	Wi-Fi/BT	BT 4.2 LE and dual band WLAN 2x2 MIMO
Interface	Interface	1 x USB2.0; 1 x USB3.0; 1 x PCIe 2.1; 4 x I2C; 4 x UART; 2 x SPI; 1 x I2S; 1 x SDIO 3.0; 1 x TF card; GPIOs x 4+
Dimension	Size	40mm x 55mm x 5.5mm
System Environment	Power	+3.8V/3A Input
	Operating Temperature	-20°C to 70°C
	Storage Temperature	-20°C to 80°C
	Relative Humidity	5% to 95% non-condensing

Carrier Board For TurboX S820

Audio

- 1 x 3.5mm ANC headset
- 5 x analog MIC
- 3 x digital MIC in
- 2 x speaker out
- Audio codec on board

Power

- DC-IN +12V

Other Interfaces

- 1 x UART debug
- 2 x USB 2.0 host Type A
- 1 x USB 3.0 client, Micro-B
- 1 x HDMI OUT
- 1 x HDMI IN



Shop for SOM:
<https://www.thundercomm.com/>