

Thundercomm TurboX™ D845 SOM General SPEC

Thundercomm TurboX™ D845 is a small size (60mm x 37mm) with a board to board connector, production ready and pre-certified system on module powered by the top-tier Qualcomm® Snapdragon™ 845 processor. This processor introduces new Qualcomm® Hexagon™ 685 Vector DSP architecture, plus GPU and CPU optimizations, that together deliver up to three times faster processing of neural networks running on-device compared to the prior generation SoC.

TurboX D845 SOM supports new architectures for AI, premium 4K@60fps in HDR ,new security layers and immersive XR experiences.It offers both Andriod and Linux OS for developers to choose.This will be an ideal platform for high computing power required embedded IoT products.

Major Target Markets



Medical Image



Smart City



Robot

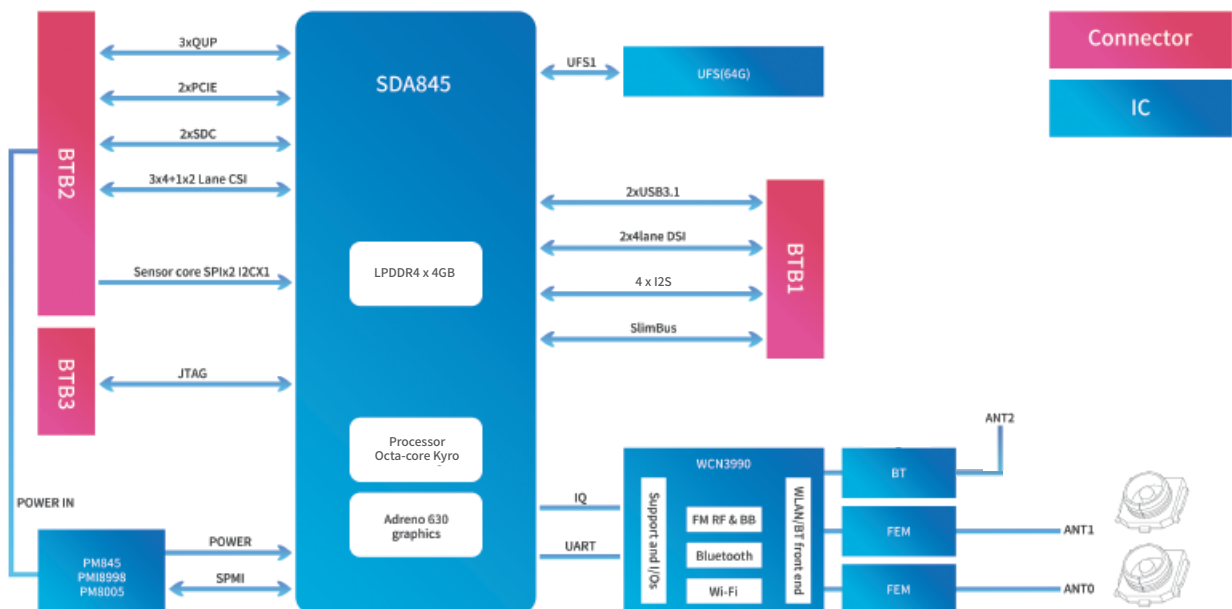


Digital Signage



VR/AR

HW Block



D845 SOM General SPEC

Category	Item	Description
Platform	Chipset	Snapdragon™ 845 processor
	CPU	64-bit applications processor (Kryo 385) with 2 MB L3 cache; Quad high-performance Kryo cores at 2.649 GHz – Kryo Gold cluster with 256 kB L2 cache per core, Kryo Gold single-core boost at 2.803 GHz; Quad low-power Kryo cores at 1.766 GHz – Kryo Silver cluster with 128 kB L2 cache per core
	GPU	Qualcomm® Adreno™ 630 graphics processing unit(GPU) 4K 60 fps or 2 × 2K 90 fps OpenGL ES 3.2 + AEP, DX next, Vulkan 2 OpenCL 2.0 full profile, RenderScript
	DSP	Compute DSP with Qualcomm® Hexagon™ Vector Extensions (HVX) processor
	OS	Android 8, Le and Ubuntu
	Memory + Storage	LPDDR4 x 4GB + UFS 64GB
	Multimedia	Display
Camera		Qualcomm® Spectra™ 280 ISP:Support 3 x 4-lane MIPI_CSI + 1 x 2-lane MIPI_CSI, Dual 14-bit ISP + one Lite ISP, up to 32MP
Decode		4K60 decode for H.264 High Profile, H.265 Main 10 Profile and VP9 Profile 2
Encode		4K60 encode for H.264 High Profile, H.265 Main 10 Profile 4K30 encode for VP8
Connectivity	WIFI/BT	802.11a/b/g/a/n/ac 2x2 MIMO& BT 5.0 with BLE
Interface	Interface	USB3.1 x 2;PCIe 2.1 x 1;PCIe 3.0 x 1;SDIO 3.0 x 1;TF card x 1; QUP for UART/I2C/SPI x 5,GPIO x8,MI2S x4
Dimension	Size	60mm x 37mm x 6.4mm
	Power	+3.8V/3A Input
System Environment	Operating Temperature	-20°C to 55°C
	Storage Temperature	-40°C to 70°C
	Relative Humidity	5% to 95% non-condensing

Carrier Board For TurboX D845

- 3 x 4lane MIPI_CSI
- 1 x USB 3.1 type C+1 x USB 3.0 type A
- 2 x USB2.0
- 1 x USB Debug
- 2 x Ethernet
- 1 x Mini PCIe Socket
- 2 x HDMI Output
- 1 x Fan Header
- 1 x Line Out Header
- 1 x I2S Header
- 1 x Mic board connector
- 1 x Speaker wafer connector
- 1 x CAN
- 1 x TF Card
- 2 x 4lane+2x2lane QUP
- 1 x 12V DC

