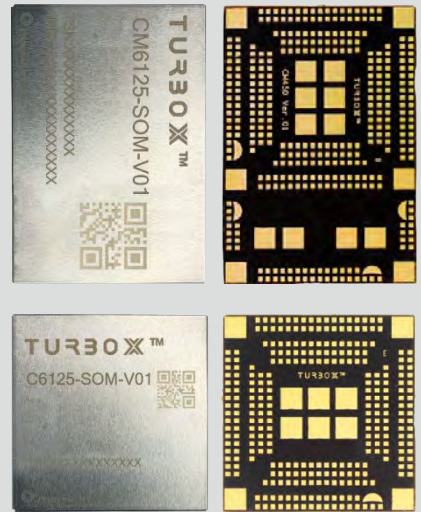


TURBO X CM6125/C6125 SOM

Cost-effective AI compute module to provide highly intelligent experiences for IoT products



The CM6125/C6125 SOM (System On Module) is designed based on the Qualcomm® QCM6125/ QCS6125 platform which can be seen as a successor of Snapdragon 660 platform. Powered by the third generation Qualcomm AI Engine: Adreno 610 GPU and Hexagon 686 DSP(dual-HVX512), the 6125 platform can provide advanced on-device imaging and computing like Smart Cropping, 3D Face Recognition , Object Detection . It is ideal platform for customers to design smarter, more engaging products to the market .

Applications



High-end
Dash Cams



Video Conference



Robotics



New Retail
Devices



Handheld Devices

Features

On-device AI

AI Engine with improved Adreno 610 GPU and Hexagon 686 DSP(dual-HVX512)

High Precision Positioning

Gen 9 VT2; GPS, GLONASS, BeiDou, Galileo, QZSS, and SBAS

Staggered HDR

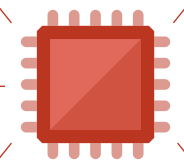
Super LTE Connectivity

LTE Cat13 supporting 2 × 20MHz CA at 400Mbps DL & 150Mbps UL

Video Processing

4K@30fps H.265/H.264 Encode & Decode

Quick Charge 3.0 Technology



CM6125/C6125 SOM

Specifications

Category	CM6125	C6125
Platform	Snapdragon™ QCM6125 Kryo260 CPU: 4xGold @ 2.0GHz + 4xSilver @ 1.8GHz Qualcomm® Adreno™ 610 GPU,Adreno DPU 851 Qualcomm Compute DSP with Hexagon Vector eXtensions (dual-HVX512), Audio DSP	Snapdragon™ QCS6125 Kryo260 CPU: 4xGold @ 2.0GHz + 4xSilver @ 1.8GHz Qualcomm® Adreno™ 610 GPU,Adreno DPU 851 Qualcomm Compute DSP with Hexagon Vector eXtensions (dual-HVX512), Audio DSP
Memory	LPDDR4x 3GB/2GB + eMMC 5.1 32GB, LPDDR4x 4GB+ eMMC 5.1 64G	LPDDR4x 3GB/2GB + eMMC 5.1 32GB, LPDDR4x 4GB+ eMMC 5.1 64GB, LPDDR4x 8GB+ UFS 256GB
Connectivity	WIFI 1 × 1 802.11a/b/g/n/ac, Bluetooth 5.0	WIFI 1 × 1 802.11a/b/g/n/ac, Bluetooth 5.0
WWAN (CM6125 Only)	LTE Cat13 2 × 20 CA at 400 Mbps DL and 150 Mbps UL capability LTE FDD:B1,B2,B3,B4,B5,B7,B8,B12,B13,B17,B18,B19,B20,B25, B26,B28(A+B),B66,B71 LTE TDD: B34,B38,B39,B40,B41 WCDMA:B1,B2,B4,B5,B6,B8,B19 GSM:850/900/1800/1900MHz	NA
GNSS (CM6125 only)	Gen 9 VT2; GPS, GLONASS, BeiDou, Galileo, QZSS, and SBAS	NA
Encode	4K@30fps/1080@120fps (H.265/H.264/VP8)	4K@30fps/1080@120fps (H.265/H.264/VP8)
Decode	4K@30fps/1080P@120fps (H.265/H.264/VP8/VP9)	4K@30fps/1080P@120fps (H.265/H.264/VP8/VP9)
Display Interfaces	One 4-lane; DSI D-PHY 1.2, Split link supported, Up to FHD+ (1080 × 2520)@60fps; One DisplayPort 1.4 over USB-C (external)	One 4-lane; DSI D-PHY 1.2, Split link supported, Up to FHD+ (1080 × 2520)@60fps; One DisplayPort 1.4 over USB-C (external)
Camera Interfaces	2x ISP 14 bit: 16 + 16 MP, and 25 MP @30 fps ZSL MIPI combination D-PHY 1.2 /C-PHY 1.0 configurable in 4/4/4 or 4/4/2/1	2x ISP 14 bit: 16 + 16 MP, and 25 MP @30 fps ZSL MIPI combination D-PHY 1.2 /C-PHY 1.0 configurable in 4/4/4 or 4/4/2/1
Other Interfaces	1 x Slimbus; 1 x Soundwire; 1 x USB 3.0/USB2.0 supporting DP; 1 x SD Card; 5 x I2S; 10 x QUP; 2 x UIM; GPIOs	1 x Slimbus; 1 x Soundwire; 1 x USB 3.0/USB 2.0 supporting DP; 1 x SD Card; 5 x I2S; 10 x QUP; 2 x UIM; GPIOs
Operating Environment	Operation Temperature: -20°C ~ 70°C Operation Humidity: 5%~95%, non-condensing	Operation Temperature: -20°C ~ 70°C Operation Humidity: 5%~95%, non-condensing
Voltage	3.2V ~ 4.6V	3.2V ~ 4.6V
Dimensions	CM6125: 35 x 51 x 3.05 mm, Modem	C6125: 35 x 34 x 3.05 mm, Wi-Fi version
OS Support	Android 10	Android 10