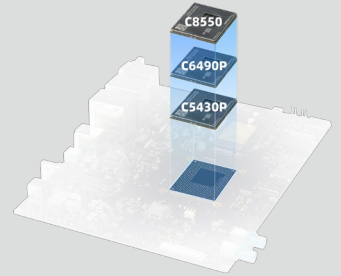


TURBO X

C6490P SOM



通用底板

TurboX C6490P SOM (智能模组) 集成了性能优越、低功耗、算力强大 (12.5 TOPS) 的高通 6 纳米 QCS6490 处理器。这款 SOM 支持 4K@60FPS 视频解码、4K@30FPS 视频编码、五个 MIPI CSI 以及丰富的外部接口 (GPIO、UART、I2C、I3C、SPI、USB 3.1、PCIe)。TurboX C6490P SOM 是一款可用于制造工业手持设备、工业平板电脑、服务型机器人、工业机器人、边缘计算的高性能物联网智能模组，客户可使用其硬件接口及软件 SDK 进行功能验证并快速建立产品原型。

TurboX C6490P SOM 与 TurboX C8550 SOM pin to pin 兼容，设计更加紧凑，尺寸更小，与 C8550 SOM 形成了高 AI 性能的模组系列矩阵，加速客户产品迭代周期，节省二次开发成本。

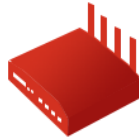
应用



工业手持设备



工业平板电脑



边缘计算

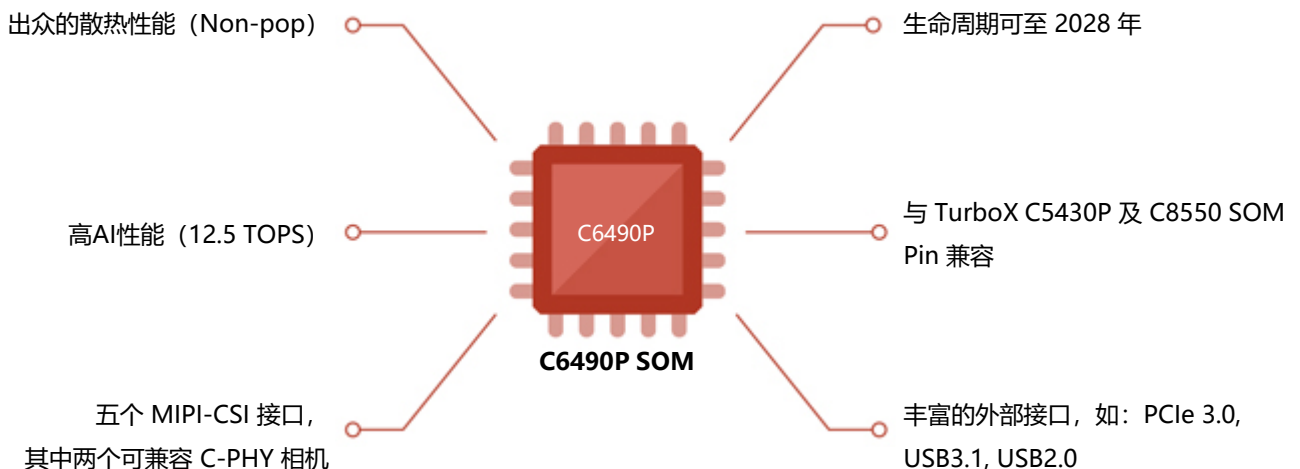


服务型机器人



工业机器人

特性



TurboX C6490P SOM 产品规格书

类别	C6490P SOM
平台	Qualcomm® QCS6490 Qualcomm® Kryo™ CPU 670 Kryo Gold plus: High-performance core up to 2.7 GHz Kryo Gold: Three high-performance cores at 2.4 GHz Kryo Silver: Four low-power cores at 1.9 GHz Qualcomm® Adreno™ GPU 643, Adreno 633 VPU, Adreno DPU 1075 Qualcomm® Compute Hexagon™ DSP with dual HVX, Hexagon Co-processor (Hexagon CP) 2.0 and Hexagon Tensor Accelerator Qualcomm® Spectra™ 570L image processing
内存	LPDDR4x 8GB + UFS2.x 128GB, uMCP
视频编码	4K@30FPS for H.264/H.265
视频解码	4K@60FPS for H.264/H.265/VP9
显示接口	1x MIPI-DSI 4-lane; FHD+ (1080×2520) 8L @144FPS
摄像头接口	5 x 4-lane MIPI CSI D-PHY (2 of them compatible to support C-PHY)
外围设备	1 x USB 3.1 with DP, 1 x USB2.0, 2x PCIe Gen 3 (1-lane, 2-lane), 2 x SoundWire, 2 x SDC (4-bit), 3 x DMIC interfaces, GPIOs, QUPs (UART/I2C/SPI)
工作环境	Operation Temperature: -35°C ~ +75°C # Operation Humidity: 5%~95%, non-condensing
封装类型	LGA
认证	RoSH*/REACH*
电压	3.4V~4.5V
尺寸	39mm x 33mm x 2.75mm (excluding height of the bottom shielding case)
操作系统	Android 13 & Ubuntu LE (Planning)

#: SOM运行温度不得超过相关IC温度范围。

*: 规划中

TurboX C6490P Development Kit 产品规格书

类别	C6490P Development Kit
SOM on board	TurboX C6490P SOM
显示接口	1 x HDMI OUT 1 x DP V1.4 (Over Type-C)
音频接口	1 x Speaker OUT 1 x HDMI IN with Audio (Over I2S interface) 1 x HDMI OUT with Audio (Over I2S interface)
摄像头接口	3 x 4-lane D-PHY Camera 2 x GMSL
主板上的通用接口	1 x USB 3.1 Type-C 7 x USB 3.0 Type-A 2 x Micro USB for debug (one for 5G/LTE module debug) 1 x SDIO Wi-Fi 5 module 2 x 1000M Ethernet Port 1 x M.2 for 5G/LTE 5G module 1 x HDMI OUT 1 x HDMI IN 2 x DMIC connector, support up to 6 DMICs 2 x DB9 connectors (for RS232 and RS485 respectively) 1 x CAN 1 x HS connector 1 x 3.5mm connector 1 x Fan connector
电源供应	12V DC in jack
工作环境	Operation Temperature: -35°C ~ + 75°C Operation Humidity: 5% ~ 95%, non-condensing
尺寸	150mm x 200mm
操作系统	Android 13 & Ubuntu



主板上的通用接口

