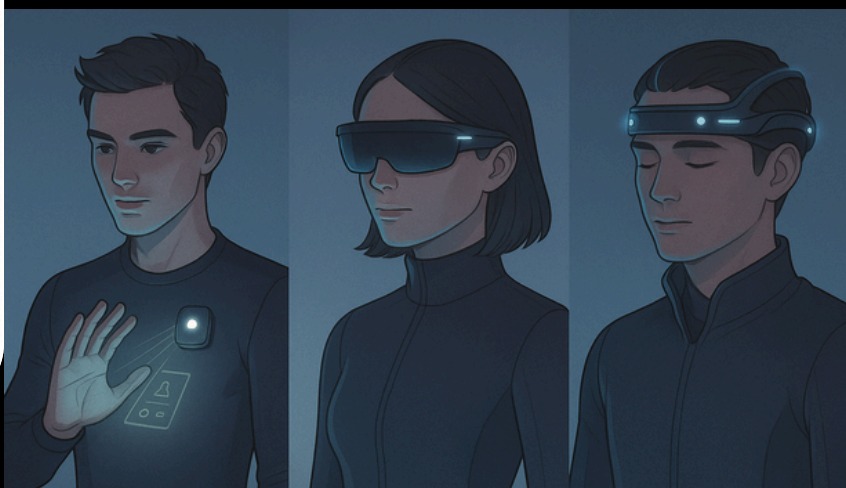
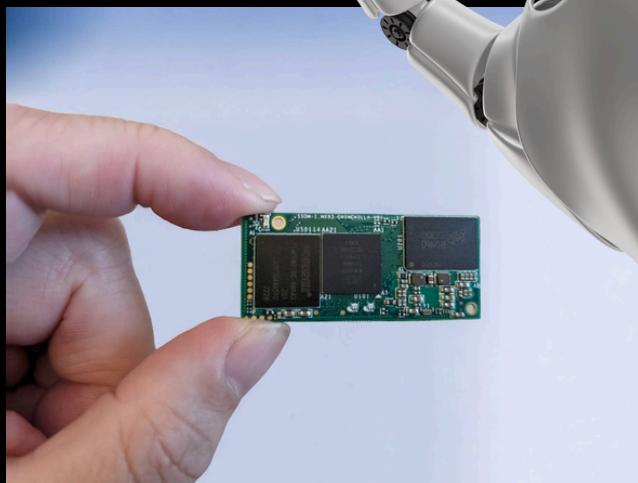
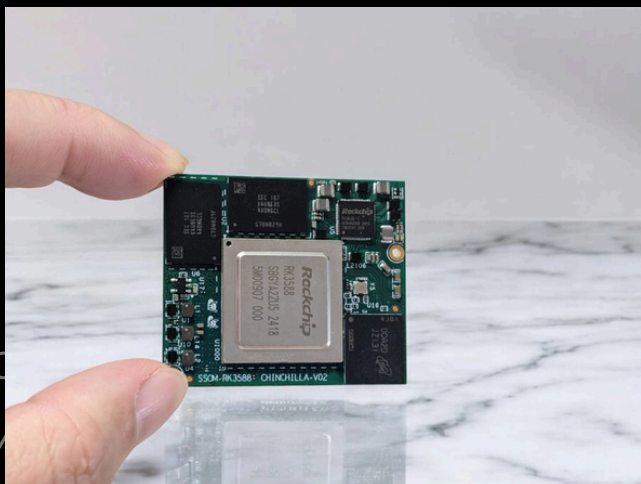
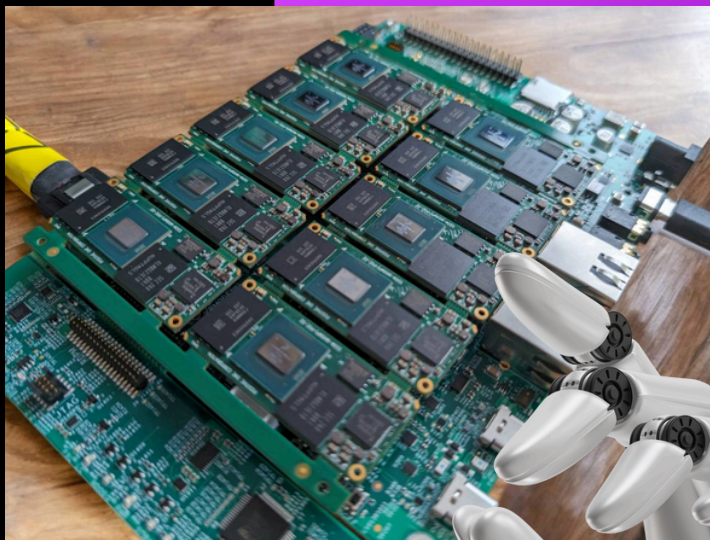
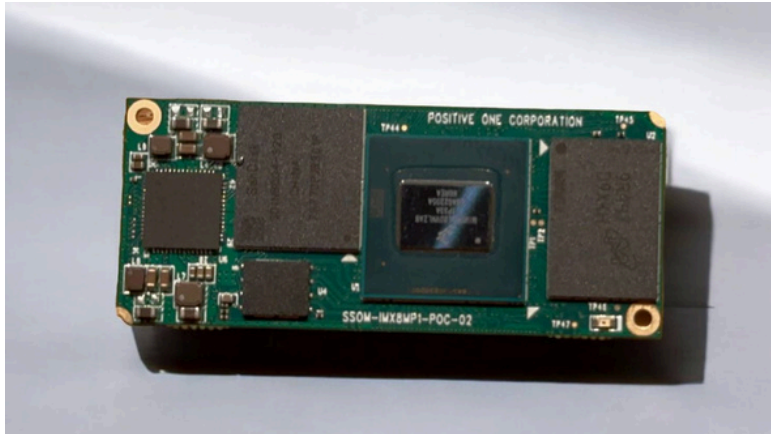




SSOM-i.MX8MP-CHINCHILLA

Data Analysis & Data Visualization, Vision system, Advanced multimedia capabilities, and industrial automation with high reliability.



Product Summary

Measuring only 20×50 mm, the SSOM-i.MX8MP-CHINCHILLA is the world's smallest System on Module (SoM) designed by a Japanese company. This SoM focuses on neural processing unit (NPU) and vision system, Advanced multimedia capabilities, and industrial automation with high reliability

Why Choose this SoM?

Accelerate your time-to-market in mass production by integrating this module into your design.



The world's smallest SoM

"Optimize your SoC performance with a compact design and streamlined connectors for seamless system integration.. Design your Carrier Board with this compact CPU module, optimizing signal use for peak performance in a sleek, minimalist design."



Ideal for rapid software prototyping and deployment

Our SoM comes with the OS pre-installed, allowing your team to begin application development immediately and in parallel with carrier board verification. This streamlines the entire process from prototyping to mass production, significantly reducing your time-to-market.



Already operational with Bootloader and OS

This CPU module is working with carrier board. You can start software development. Also, when you need custom interface function, You can develop a custom carrier board faster than using a traditional SBC.

Product Highlight

SoC – NXP i.MX8M Plus

- Quad Arm® Cortex®-A53, up to 1.6GHz
- NPU of 2.3TOPS
- Arm® Cortex®-M7 800 MHz

Memory and Storage

- RAM 2GB (4GB or 6GB)
- eMMC32GB(Up to 128GB)
- SD slot
- SATA

Multimedia function

- Video Decoding: 1080p60, H.265, H.264, VP9, VP8
- Video Encoding: 1080p60, H.265, H.264
- GPU: 16 GFLOPS (high precision), OpenGL® ES 3.1/3.0, Vulkan®, OpenCL™ 1.2 FP, OpenVG™ 1.1

Interface

- Dual Giga Ethernet x 2
- USB 3.0
- PCIe
- HDMI
- MIPI-DSI
- MIPI-CSI
- SD
- CAN-FD
- UART, I2S, I2C, GPIO
- Audio

Operating System

- Yocto
- Android

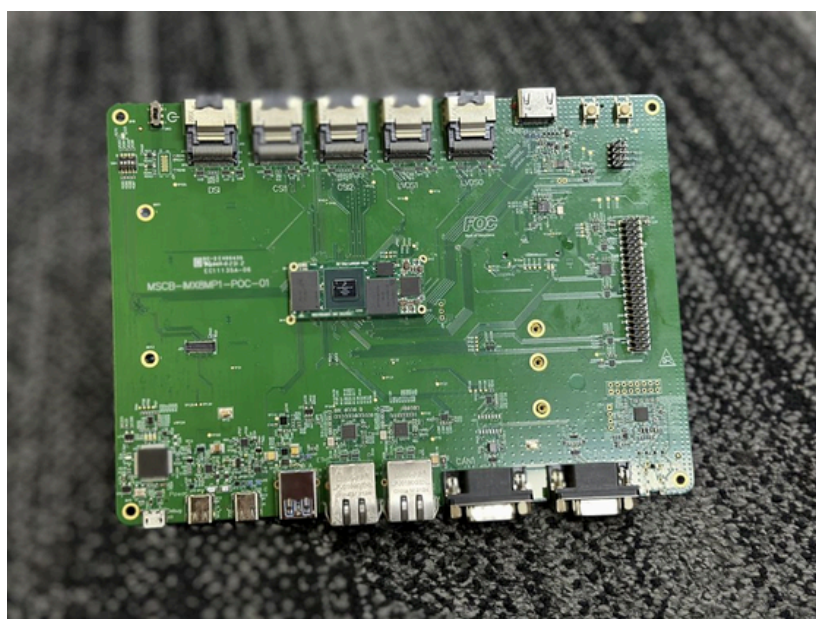


SSOM-i.MX8MP-CHINCHILLA

i.MX8M Plus SoC Black

Security Arm® TrustZone® DRM Ciphers Secure Clock eFuse Key Storage Random Number 32 KB Secure RAM	Main CPU Platform 4 x Arm Cortex®-A53 32 KB I-cache 32 KB D-cache Arm NEON™ FPU 512 KB L2 Cache (ECC) Secondary Cores HIFI4 DSP Cortex-M7 768 KB On-chip RAM (ECC)	Display HDMI 2.0a Tx (eARC) with PHY MIPI-DSI (4-lane) with PHY 1 x LVDS Tx (4 or 8-lane) with PHY Audio 18 x PS TDM 32 bit at 768 kHz SPDIF Tx and Rx eARC (HDMI) ASRC 8-ch. PDM Microphone Input
System Control Smart DMA x3 XTAL PLLs Watchdog x3 PWM x4 Timer x6 Secure JTAG Temperature Sensor	Machine Learning Machine Learning Accelerator: 2.3 TOPS Graphics 3D Graphics: GC7000UL 2D Graphics: GC520L Video 1080p60 H.265, H.264, VP9, VP8 decoder 1080p60 H.265, H.264 encoder Vision Dual Camera ISP (2x HD/1x 12MP) HDR, dewarp 2 x MIPI-CSI (4-lane) with PHY	Connectivity and I/O 2 x USB 3.0/2.0 OTG with PHY 2 x Gbit Ethernet with IEEE® 1588, AVB (One also supports TSN) 2 x CAN FD 1 x PCIe® Gen 3 – 1-lane L1 Substates 4 x UART 5 Mbit/s 5 x PC, 3 x SPI External Memory x16/x32 LPDDR4/DDR4/DDR3L (inline ECC) 3 x SDIO3.0/MMC5.1 Dual-ch. QuadSPI (XIP) or 1 x OctalSPI (XIP) NAND Controller (BCH62)

Carrier board



- Ethernet x 2(RJ45)
- CAN Bus(DB9) x 2
- USB 3.0 Type A x1
- USB 3.0 Type-C
- USB Type-C(Power Supply)
- Micro USB(USB to Serial)
- MIPI-DSI
- MIPI-CSI
- LVDS
- Micro-HDMI
- 40-pin(I2S, UART, I2C, GPIO)
- JTAG
- Switch PIN
- OS : Yocto Linux, Android, FreeRTOS
- Size : 142.24mm x 199.84mm

Application

AI vision System

Powerful quad Arm® Cortex®-A53 processor with speed up to 1.6GHz integrated with a NPU of 2.3TOPS that greatly accelerate machine learning inference. The vision engine is composed of two camera inputs and a HDR-capable Image Signal Processor (ISP) capable of 375MPixels/s.

Advanced multimedia capabilities

1080p60 video encode and decode H.265 and H.264. A 3D and 2D graphic acceleration supporting 1GPixel/s, OpenVG1.1, OpenGL ES3.1, Vulkan, and OpenCL1.2 FP. Multiple audio interfaces for Immersive Audio Voice systems.

industrial application

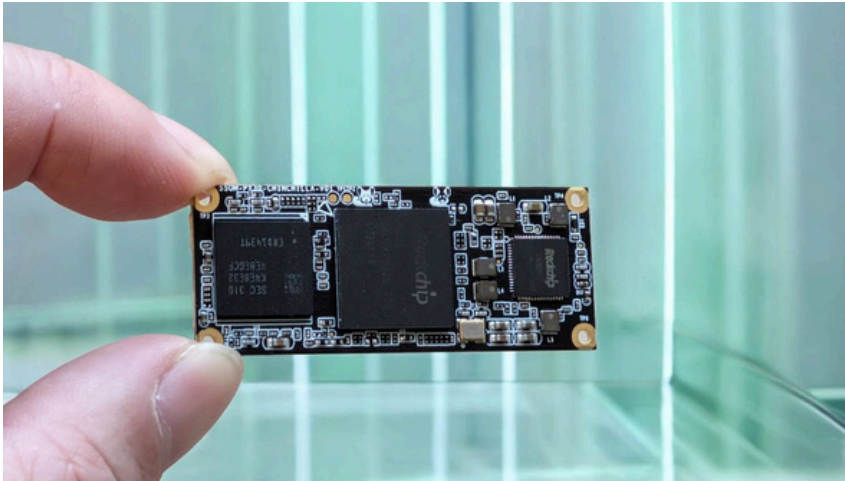
For Industrial Application is enabled by an integrated 800 MHz Arm® Cortex®-M7. Robust control is possible via CAN-FDs

Time Sensitive Networking/TSN

A dual Gb Ethernet, one supporting Time Sensitive Networking (TSN), drives gateway applications with low latency. High industrial system reliability for safety is leveraged by DRAM Inline ECC as well as ECC support on internal software-accessible SRAMs

SSOM-PX30-CHINCHILLA

Data Analysis & Data Visualization, Vision system, Advanced multimedia capabilities, and industrial automation with high reliability.



Product Summary

Measuring only **20mm x 50 mm**, SSOM-PX30-CHINCHILLA Designed by a Japanese company, is the smallest System on Module (SoM) based on the Rockchip PX30. This high-performance quad-core application processor is designed for Quad-core application processor designed for personal mobile internet device and other digital multimedia applications.

Why Choose this SoM?

Accelerate your time-to-market in mass production by integrating this module into your design.



The world's smallest SoM

"Optimize your SoC performance with a compact design and streamlined connectors for seamless system integration.. Design your Carrier Board with this compact CPU module, optimizing signal use for peak performance in a sleek, minimalist design."



Ideal for rapid software prototyping and deployment

Our SoM comes with the OS pre-installed, allowing your team to begin application development immediately and in parallel with carrier board verification. This streamlines the entire process from prototyping to mass production, significantly reducing your time-to-market.



Already operational with Bootloader and OS

This CPU module is working with carrier board. You can start software development. Also, when you need custom interface function, You can develop a custom carrier board faster than using a traditional SBC.

Product Highlight

SoC – Rockchip PX30

- Quad Arm® Cortex®-A35, up to 1.6GHz
- TrustZone technology support ARMv8 Cryptography Extensions"

Memory and Storage

- RAM 1GB (Up to 2GB)
- eMMC32GB(Up to 32GB)
- SD slot

Advanced multimedia capabilities

- 1080P video encoding for H.264,VP8
- RGB/LVDS/MIPI-DSI, resolution up to 1920*1080
- 1080P H.265/H.264/VC-1/MPEG/VP8 video decoder
- Mali-G31 MP2 GPU
- OpenGL ES3.2, Vulkan 1.0, OpenCL 2.0

Interface

- Ethernet x 1
- USB2.0 HOST&OTG
- HDMI(Extension)
- MIPI-DSI/LVDS/RGB
- Dual VOP
- MIPI-CSI
- SD
- CAN-FD(Carrier Board)
- SDIO3.0, 4xI2C, 6xUART, 2xSPI, 8xPWM
- Audio

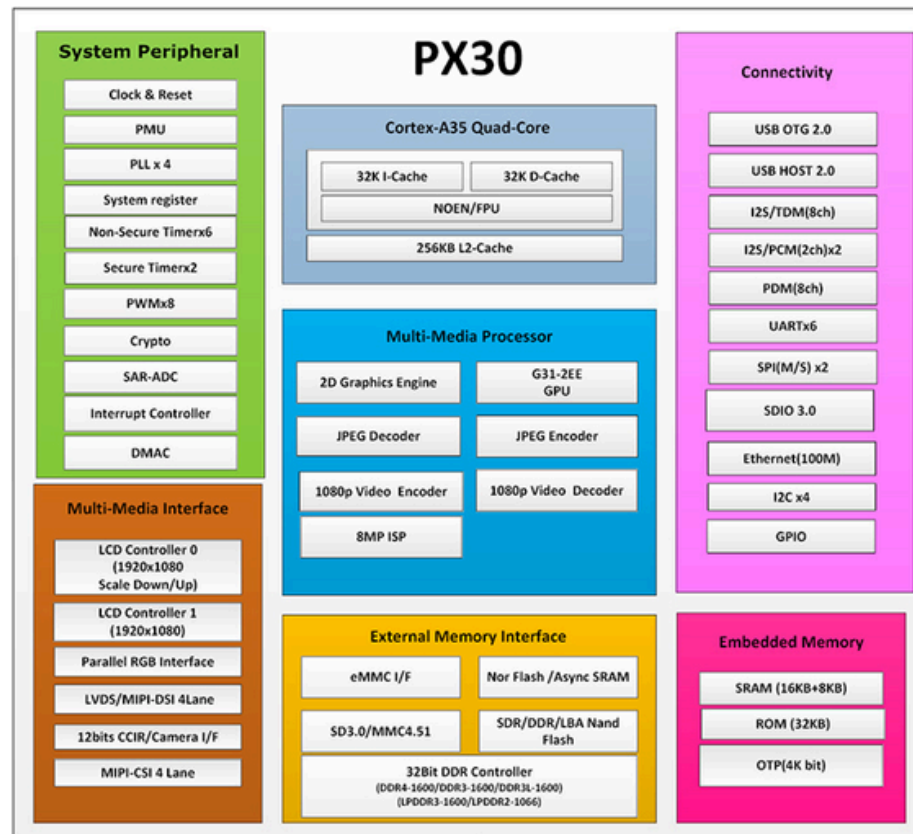
Operating System

- Debian
- Android 12.0



SSOM-PX30-CHINCHILLA

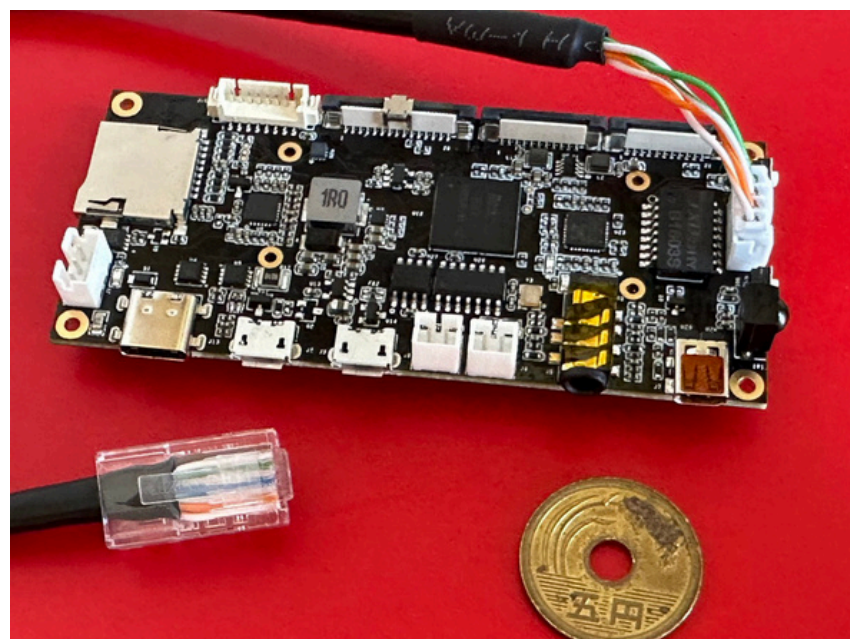
PX30 SoC Black



Application

PX30 is a high-performance Quad-core application processor designed for personal mobile internet device and other digital multimedia applications. In fact, this is an ARM processor between legacy ARM and high-end modern ARM. If the device replace same function or small update from ARM7/9/11 Cortex-A8/9, if the device does not need high-end modern and standard interface and function, PX30 fits the specification. Many embedded powerful hardware engines are provided to optimize performance for high-end application. PX30 supports almost full-format H.264 decoder by 1080p@60fps, H.265 decoder by 1080p@60fps, also support H.264 encoder by 1080p@30fps, high quality JPEG encoder/decoder. Embedded ARM G31-2EE GPU makes PX30 completely compatible with OpenGL ES 1.1/2.0/3.2, DirectX 11 FL9_3, OpenCL 2.0 and Vulkan 1.0 Special 2D hardware engine will maximize display performance and provide very smoothly operation.

Carrier board



Back

- RJ45(Ethernet) connector
- CAN Bus(DB9) x 1
- Micro USB 2.0 x 1
- USB2.0 Type-C(Power Supply & USB2.0)
- LED(Power 5V)
- Audio
- MIPI-DSI
- MIPI-CSI/LVDS
- TP-COB
- SD Slot
- VBAT CON
- CAN-FD pin
- Speaker pin
- Headphone
- Micro HDMI
- irDA
- Batten(Rest / Revoverly)

Front

- SOM connectors
- Batten(Power ON/OFF)
- ESC/Menu/Home/Vol pin
- LEDs(Status1, Status2, PG)
- WiFi/Bluetooth

Size 40.0mm x 89.9mm

OS Debian(BSP), Android(BSP)

Contact Us



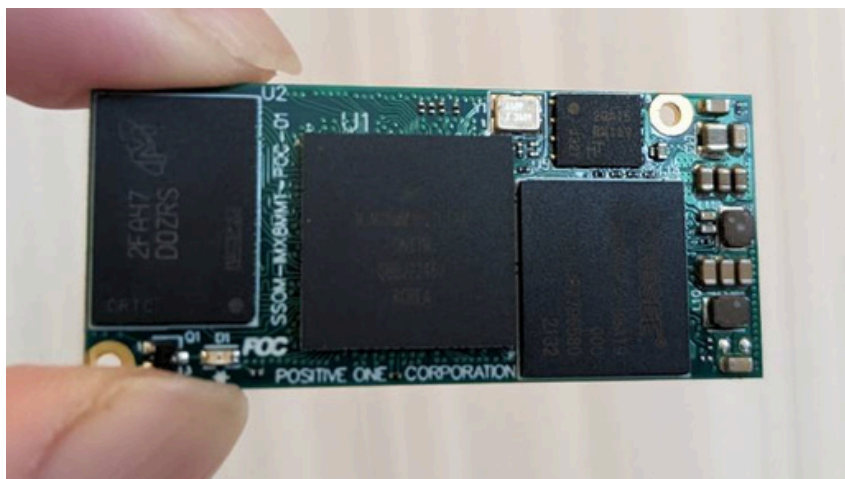
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SSOM-i.MX8MM-CHINCHILLA

Data Analysis & Data Visualization, Vision system, Advanced multimedia capabilities, and industrial automation with high reliability.



Product Summary

Measuring only **20mm x 46mm**, SSOM-i.MX8MM1-CHINCHILLA Designed by a Japanese company, is the smallest System on Module (SoM) based on the NXP i.MX 8M Mini. This SoM is designed for embedded multicore applications in industrial and IoT environments, offering higher performance and improved power efficiency.

Why Choose this SoM?

Accelerate your time-to-market in mass production by integrating this module into your design.



The world's smallest SoM

"Optimize your SoC performance with a compact design and streamlined connectors for seamless system integration.. Design your Carrier Board with this compact CPU module, optimizing signal use for peak performance in a sleek, minimalist design."



Ideal for rapid software prototyping and deployment

Our SoM comes with the OS pre-installed, allowing your team to begin application development immediately and in parallel with carrier board verification. This streamlines the entire process from prototyping to mass production, significantly reducing your time-to-market.



Already operational with Bootloader and OS

This CPU module is working with carrier board. You can start software development. Also, when you need custom interface function, You can develop a custom carrier board faster than using a traditional SBC.

Product Highlight

SoC - NXP i.MX8M Mini

- Quad Arm® Cortex®-A53, up to 1.8GHz
- Arm® Cortex®-M4 400 MHz

Memory and Storage

- RAM 2GB (Up to 6GB)
- eMMC16GB(Up to 128GB)
- 32MB QSPI Flash
- SD slot

Multimedia function

- 1080p60 VP9 Profile 0, 2 (10-bit) decoder, HEVC/H.265 decoder, AVC/H.264 Baseline, Main, High decoder, VP8 decoder 1080p60 AVC/H.264 encoder, VP8 encoder

Interface

- Giga Ethernet x1
- USB 2.0 x2
- PCIe 2.0
- MIPI-DSI x1
- MIPI-CSI x1
- SD
- UART, I2S, I2C, GPIO,
- 10Tx + 10Rx I2S Lanes

Operating System

- Yocto
- Android
- FreeRTOS



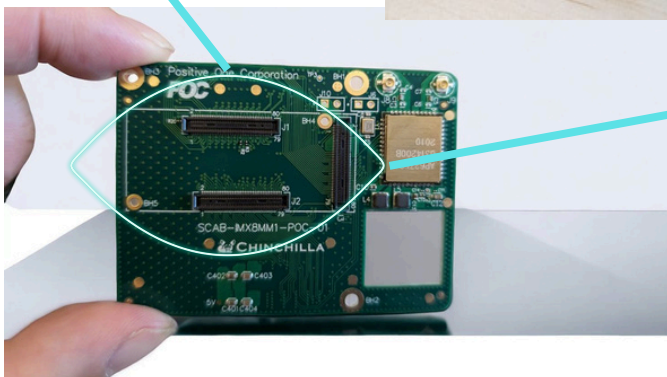
SSOM-i.MX8MM-CHINCHILLA

i.MX8M Mini SoC Black

Multimedia Graphics Processing Unit (GPU) 3D GPU - 1-shader, OpenGL ES 2.0, Open VG 1.1 2D GPU - BitBlit and Composition Engine Video Processing Unit (VPU) 1080p60 HEVC/H.265, H.264, VP9, VP8 Decoder 1080p60 H.264, VP8 Encoder Display Controller Display support up to 1080p Display and Camera I/O 1x MIPI-DSI (4-lanes) 1x MIPI-CSI (4-lanes) Audio I/O 20x IIS SPDIF Tx & Rx DSD512 8-ch. PDM Mic	Core Complex 1 1x/2x/4x Arm Cortex-A53 cores 32 KB L1 I-cache 32 KB L1 D-cache NEON FPU 512 KB L2 Cache Security HAB, SRTC, SJTAG, TrustZone AES256, RSA 4096, SHA-256, 3DES, DES, Elliptic Curve (ECQ), ARC4, MD5 Secure Real Time Clock (RTC) eFuse Key Storage True Random Number Generator (RNG) 32 KB Secure RAM System Control 2x Smart DMA 6x Timer, 3x Watch Dog Boot ROM Resource Domain Controller PMIC interface Temp Monitor/Sensor	Core Complex 2 1x Arm Cortex-M4 core 16 KB L1 I-cache 16 KB L1 D-cache 256 KB TCM (SRAM) Connectivity & I/O 1x PCIe 2.0 with I1 substates (1-lane) 2x USB2.0 Dual Role and PHY 1x Gb Ethernet (with IEEE 1588, EEE & AVB support) 4x UART 5Mbps 4x I2C 3x SPI 4x PWM External Memory x32/x16 LPDDR4/DDR4/DDR3L Up to 3000 MTps 3x SDIO3.0/eMMC5.1 NAND CTL (SLC/MLC) - BCH62 1x QuadSPI (XIP)
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Optional Capability

i.MX8M Mini EVK Carrier board with Adapter



Application

Adapter

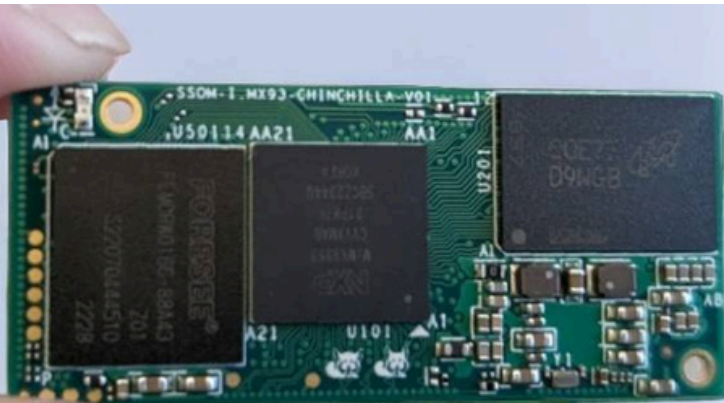
- SSOM-IMX8MM- SOM connector
- i.MX 8M Mini EVK BB connector
- WIFI/Bluetooth

i.MX 8M Mini EVK(Carrier board)

- System on module connectors
- Ethernet x1
- USB Type-C x2
- Micro USB(Debug port)
- Boot Switch
- MIPI-DSI
- JTAG
- Keys
- IR Receiver
- SD slot
- Power Switch
- Expansion Connector
- M.2(PCI)
- Audio board connector
- WIFI/BT Antenna
- MIPI-DSI
- MIPI-CSI

SSOM-i.MX935-CHINCHILLA

Built with NXP's innovative Energy Flex architecture. Offering a rich set of peripherals targeting automotive, industrial and consumer IoT market segments.



Product Summary

Measuring only 20mm x 50mm, SSOM-i.MX935-CHINCHILLA Designed by a Japanese company, is the smallest System on Module (SoM) supporting, SSOM-i.MX935-CHINCHILLA deliver efficient machine learning (ML) acceleration and advanced security with integrated EdgeLock® secure enclave to support energy-efficient edge computing.

Why Choose this SoM?

Accelerate your time-to-market in mass production by integrating this module into your design.

The world's smallest SoM



"Optimize your SoC performance with a compact design and streamlined connectors for seamless system integration.. Design your Carrier Board with this compact CPU module, optimizing signal use for peak performance in a sleek, minimalist design."

Ideal for rapid software prototyping and deployment



Our SoM comes with the OS pre-installed, allowing your team to begin application development immediately and in parallel with carrier board verification. This streamlines the entire process from prototyping to mass production, significantly reducing your time-to-market.

Already operational with Bootloader and OS



This CPU module is working with carrier board. You can start software development. Also, when you need custom interface function, You can develop a custom carrier board faster than using a traditional SBC.

Product Highlight

SoC - NXP i.MX935

- Dual Arm® Cortex®-A55, up to 1.7GHz
- NPU up to 1.0 TOPS (Arm Ethos-U65)
- Arm® Cortex®-M33 250 MHz
- Technical System Support

Memory and Storage

- RAM 2GB (Up to 6GB)
- eMMC32GB(Up to 128GB)
- SD slot
- SATA

Advanced multimedia capabilities

- Video decoding: 1080p60, h.265/4, VP9, VP8
- Video encoding: 1080p60, h.265/4
- GPU: 16 GF

Interface

- Dual Giga Ethernet x 2
- USB 2.0 x2
- MIPI-DSI (adapter transfer HDMI)
- MIPI-CSI x2
- SD/SDIO x3
- CAN-FD, I2C x2, I3C, UART, SPI, UART/USART, I2S, Secure JTAG

Operating System

- Yocto
- Android



SSOM-i.MX935-CHINCHILLA

i.MX935 SoC Black



Carrier board

Front

Ethernet x 2(RJ45)

- CAN Bus(DB9) x 2
- USB 3.0 Type A x1
- USB 3.0 Type-C

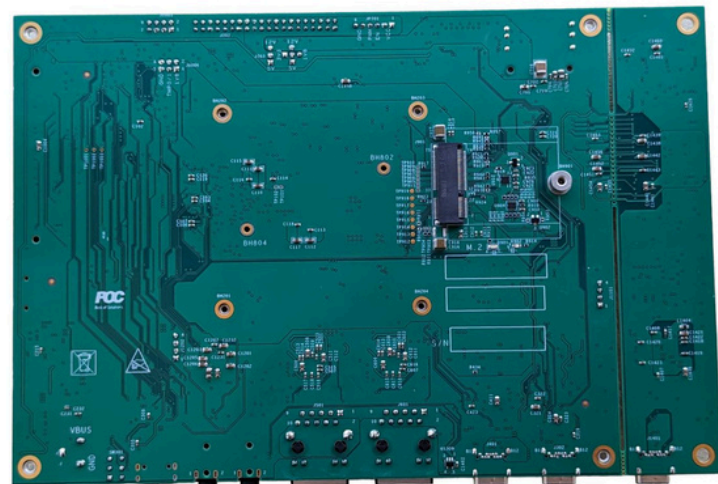
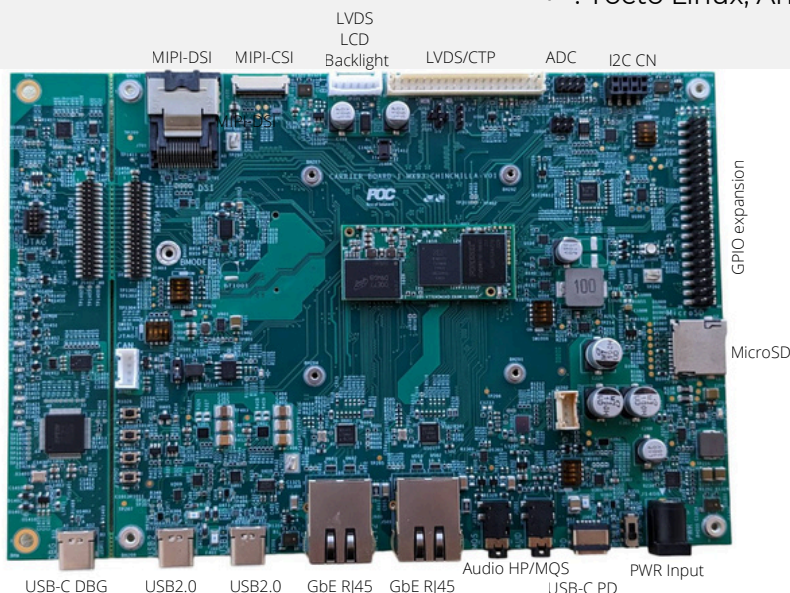
- USB Type-C(Power Supply)
- Micro USB(USB to Serial)
- MIPI-DSI
- MIPI-CSI
- LVDS
-

Operation System

- : Yocto Linux, Android

Back

- Micro-HDMI
- 40-pin (I2S, UART, I2C, GPIO)
- JTAG
- Switch PI
- Size :
142.24mm x 199.84mm



Contact Us



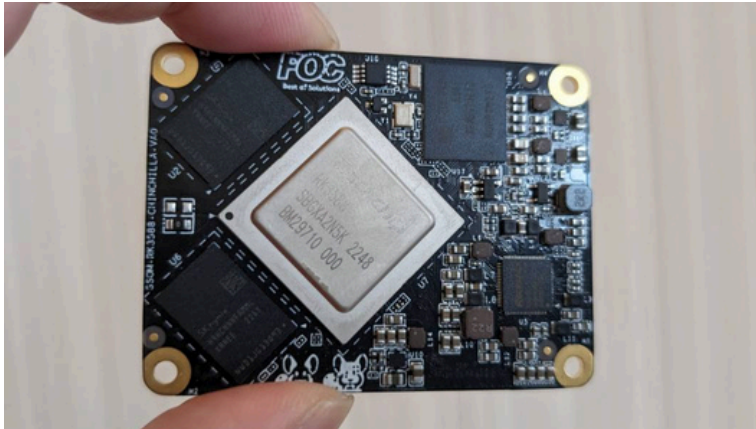
+81-3-3256-3933



www.CHINCHILLAsmart.com

SSOM-RK3588-CHINCHILLA

Data Analysis & Data Visualization, Vision system, Advanced multimedia capabilities, and industrial automation with high reliability.



Product Summary

Measuring only **60mm x 45mm**, SSOM-RK3588-CHINCHILLA Designed by a Japanese company, is the smallest System on Module (SoM) supporting, SSOM-RK3588-CHINCHILLA focuses one of the most anticipated processors for the year on Industry-leading small form factor with the octa-core processor features four Cortex-A76 cores, four Cortex-A55 cores, an NPU, and 8K video decoding support.

Why Choose this SoM?

When you plan and develop a new mass-production project, you can develop faster to use this module.



The world's smallest SoM

Delivering unparalleled performance density for Edge AI.. Design your Carrier Board with this compact SoC module, optimizing signal use for peak performance in a sleek, minimalist design."



Ideal for rapid software prototyping and deployment

Our SoM comes with the OS pre-installed, allowing your team to begin application development immediately and in parallel with carrier board verification. This streamlines the entire process from prototyping to mass production, significantly reducing your time-to-market.



Already operational with Bootloader and OS

This CPU module is working with carrier board. You can start software development. Also, when you need custom interface function, You can develop a custom carrier board faster than using a traditional SBC.

Product Highlight

SoC – Rockchip RK3588

- 4 x ARM Cortex-A76 at up to 2.6 GHz
- 4 x ARM Cortex-A55 at up to 1.8 GHz
- ARM Mali-G610 MP4 graphics
- NPU (Neural Processing Unit) with up to 6 TOPS of AI performance
- 3 x ARM Cortex-M0

Memory and Storage

- RAM 4GB (Up to 32GB)
- eMMC32GB(Up to 128GB)
- SD slot
- SATA
- M.2(e.g. 1TB, 2TB)

Advanced multimedia capabilities

- 8K/60Hz video decoding(H.265 and VP9)
- 8K/30fps video decoding(H.264)
- 4K/60Hz video encoding(AV1)
- 4K/30Hz video encoding(H.264 and H.265)
- High-quality JPEG encoder/decoder
- OpenGL ES 1.1, 2.0, and 3.2
- OpenCL up to 2.2 and Vulkan1.2. Special 2D hardware engine

Major interface

- Dual Giga Ethernet x 2
- USB 3.1/3.0/2.0
- PCIe 2.1/3.0
- SATA3
- SDIO3.0
- ADC
- HDMI in x 1
- HDMI out x 2
- MIPI-CSI x 6
- MIPI-DSI x 2
- eDP
- WatchDog x5

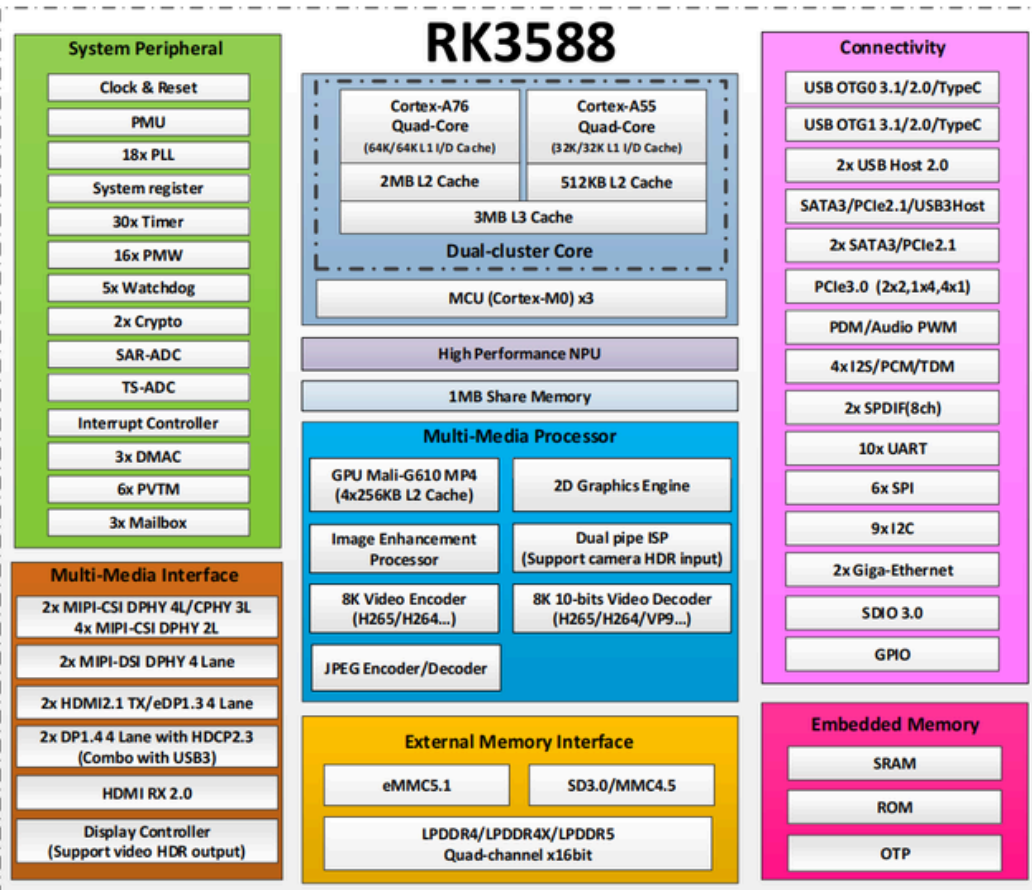
Operating System

- Yocto
- Android



SSOM-RK3588-CHINCHILLA

RK3588 SoC Block



Carrier board specification

Front

- Giga Ethernet x2
- USB Type-A x2
- USB Type C x 1
- Micro USB(Type B) x 1
- 40pins GPIO etc
- M.2
- Speaker jack
- HD Audio pin
- SATA x1
- Micro HDMI out x 2
- Micro HDMI in x 1
- Power Supply

Back

- MIPI-CSI x2
- Micro SD slot x 1
- M.2 Type M (SSD) x1
- RTC battery connector x1

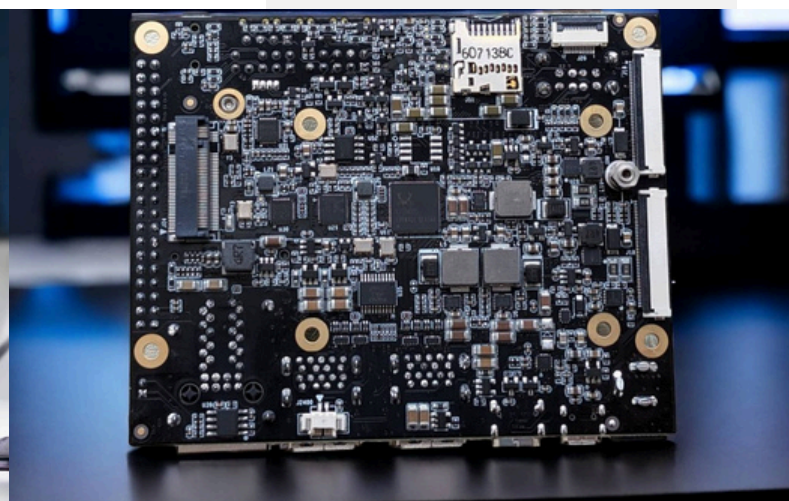
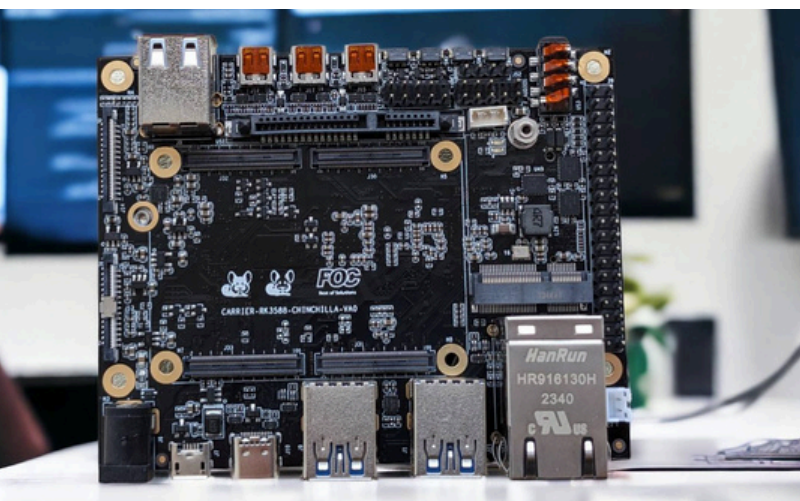
Operation System

- Debian
- Ubuntu
- Android

Size

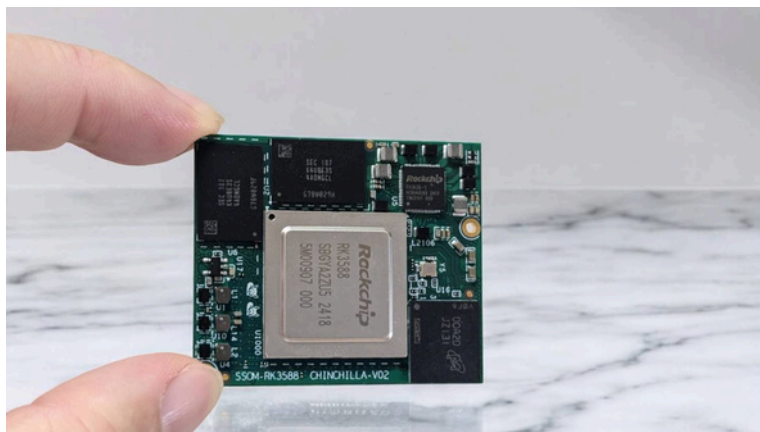
- 111mm x 111 mm

Carrier board



SSOM-RK3588-CHINCHILLA-V2

Data Analysis & Data Visualization, Vision system, Advanced multimedia capabilities, and industrial automation with high reliability.



Product Summary

Measuring only **39.4mm x 47mm**, SSOM-RK3588-CHINCHILLA-V2 Designed by a Japanese company, is the smallest System on Module (SoM) supporting, SSOM-RK3588-CHINCHILLA-V2 focuses on one of the most anticipated processors of the year, offering high-performance computing for edge AI, multimedia, and Industrial Applications with the octa-core processor features four Cortex-A76 cores, four Cortex-A55 cores, an NPU, and 8K video decoding support.

Why Choose this SoM?

When you plan and develop a new mass-production project, you can develop faster to use this module.



The world's smallest SoM

Delivering unparalleled performance density for Edge AI.. Design your Carrier Board with this compact CPU module, optimizing signal use for peak performance in a sleek, minimalist design."



Ideal for rapid software prototyping and deployment

Our SoM comes with the OS pre-installed, allowing your team to begin application development immediately and in parallel with carrier board verification. This streamlines the entire process from prototyping to mass production, significantly reducing your time-to-market.



Already operational with Bootloader and OS

This CPU module is working with carrier board. You can start software development. Also, when you need custom interface function, You can develop a custom carrier board faster than using a traditional SBC.

Product Highlight

SoC - Rockchip RK3588

- 4 x ARM Cortex-A76 at up to 2.6 GHz
- 4 x ARM Cortex-A55 at up to 1.8 GHz
- ARM Mali-G610 MP4 graphics
- NPU (Neural Processing Unit) with up to 6 TOPS of AI performance
- 3 x Arm Cortex-M0

Memory and Storage

- RAM 4GB (Up to 32GB)
- eMMC32GB(Up to 128GB)
- SD slot
- SATA
- M.2(e.g. 1TB, 2TB)

Advanced multimedia capabilities

- 8K/60Hz video decoding(H.265 and VP9)
- 8K/30fps video decoding(H.264)
- 4K/60Hz video encoding(AV1)
- 4K/30Hz video encoding(H.264 and H.265)
- High-quality JPEG encoder/decoder
- OpenGL ES 1.1, 2.0, and 3.2
- OpenCL up to 2.2 and Vulkan1.2. Special 2D hardware engine

Major interface

- | | |
|--------------------------|----------------|
| • Dual Giga Ethernet x 2 | • HDMI in x 1 |
| • USB 3.1/3.0/2.0 | • HDMI out x 2 |
| • PCIe 2.1/3.0 | • MIPI-CSI x 6 |
| • SATA3 | • MIPI-DSI x 2 |
| • SDIO3.0 | • eDP |
| • ADC | • WatchDog x5 |

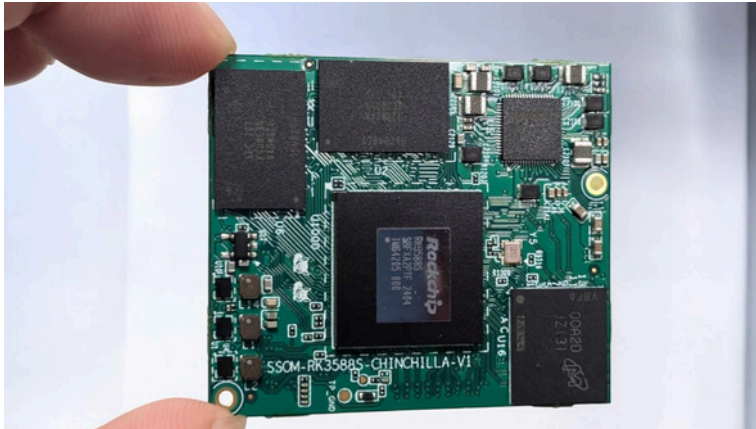
Operating System

- Yocto
- Android



SSOM-RK3588s-CHINCHILLA

Data Analysis & Data Visualization, Vision system, Advanced multimedia capabilities, and industrial automation with high reliability.



Product Summary

Measuring only **39.4mm x 47mm**, SSOM-RK3588s-CHINCHILLA from a design by a Japanese company is the smallest System on Module (SoM) supporting the RK3588s processor. SSOM-RK3588s-CHINCHILLA focuses on one of the most anticipated processors for the year on Industry-leading small form factor with the octa-core processor featuring four Cortex-A76 cores, four Cortex-A55 cores, an NPU, and 8K video decoding support.

Why Choose this SoM?

When you plan and develop a new mass-production project, you can develop faster to use this module.



The world's smallest SoM

"Optimize your SoC performance with a compact design and streamlined connectors for seamless system integration.. Design your Carrier Board with this compact CPU module, optimizing signal use for peak performance in a sleek, minimalist design."



Ideal for rapid software prototyping and deployment

Our SoM comes with the OS pre-installed, allowing your team to begin application development immediately and in parallel with carrier board verification. This streamlines the entire process from prototyping to mass production, significantly reducing your time-to-market.



Already operational with Bootloader and OS

This CPU module is working with carrier board. You can start software development. Also, when you need custom interface function, You can develop a custom carrier board faster than using a traditional SBC.

Product Highlight

SoC – Rockchip RK3588s

- 4 x ARM Cortex-A76 at up to 2.6 GHz
- 4 x ARM Cortex-A55 at up to 1.8 GHz
- ARM Mali-G610 MP4 graphics
- NPU (Neural Processing Unit) with up to 6 TOPS of AI performance
- 3 x Arm Cortex-M0

Memory and Storage

- RAM 4GB (Up to 32GB)
- eMMC32GB(Up to 128GB)
- SD slot
- SATA
- M.2(e.g. 1TB, 2TB)

Advanced multimedia capabilities

- 8K/60Hz video decoding(H.265 and VP9)
- 8K/30fps video decoding(H.264)
- 4K/60Hz video encoding(AV1)
- 4K/30Hz video encoding(H.264 and H.265)
- High-quality JPEG encoder/decoder
- OpenGL ES 1.1, 2.0, and 3.2
- OpenCL up to 2.2 and Vulkan1.2. Special 2D hardware engine

Major interface

- Dual Giga Ethernet x 2
- USB 3.1/3.0/2.0
- PCIe 2.1/3.0
- SATA3
- SDIO3.0
- ADC
- HDMI out
- MIPI-CSI
- MIPI-DSI
- eDP
- WatchDog x5

Operating System

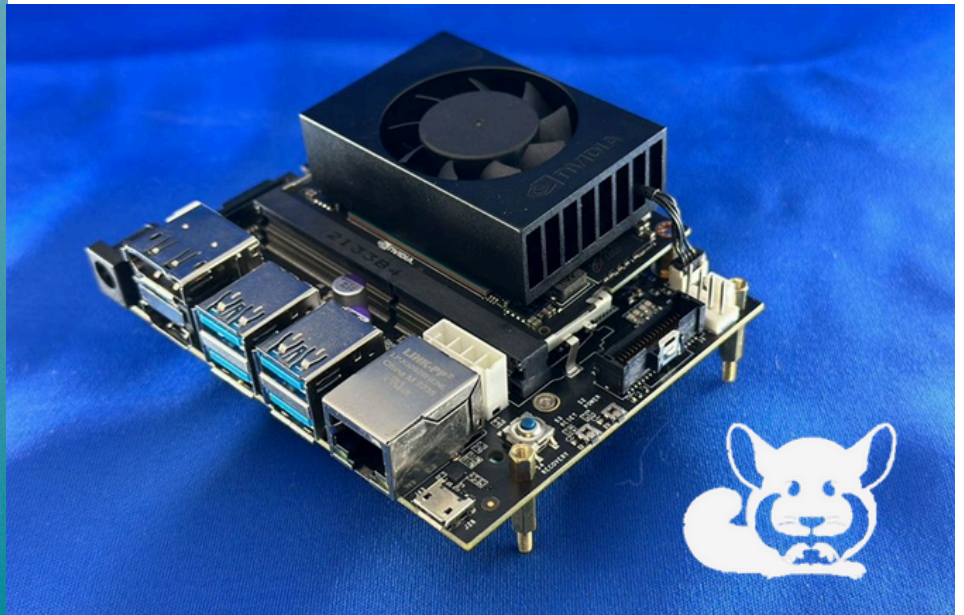
- Yocto
- Android



CHINCHILLA – Jetson 001

JETSON ORIN NX
JETSON XAVIEOR NX
JETSON TX2 NX
JETSON NANO NX

*"Universal
High-end ARM
Carrier Board
for you"*



interfaces

Front side

Back side

- SODIMM slot for Jetson
- USB Type-B x1
- Ethernet x1
- USB Type A x4
- HDMI x 2
- MIPI CSI x2
- SIM Slot
- SD Slot
- I2P IO
- CAN
- BAT
- FAN x2
- 40-pins
- M.2 Type-E
- Button1(Power ON OFF)
- Button2(Rest)
- Button3(Recovery)
- Power 19V@3A

- M.2 Type-B
- M.2 Type-M

size

- 104mm x 79mm

M.2 TYPE-B

The Carrier board can accommodate M.2 Type-B slot for adding LTE/5G/6G

M.2 TYPE-E

The Carrier board can accommodate M.2 Type-E slot for adding an WiFi and Bluetooth.

STANDARD

This platform designed with standard peripherals features from Nvidia Jetson, Raspberry Pi and x86 motherboards.

M.2 TYPE-M

The Carrier board can accommodate M.2 Type-M slot for adding NVMe SSD

WHY CHOOSE US



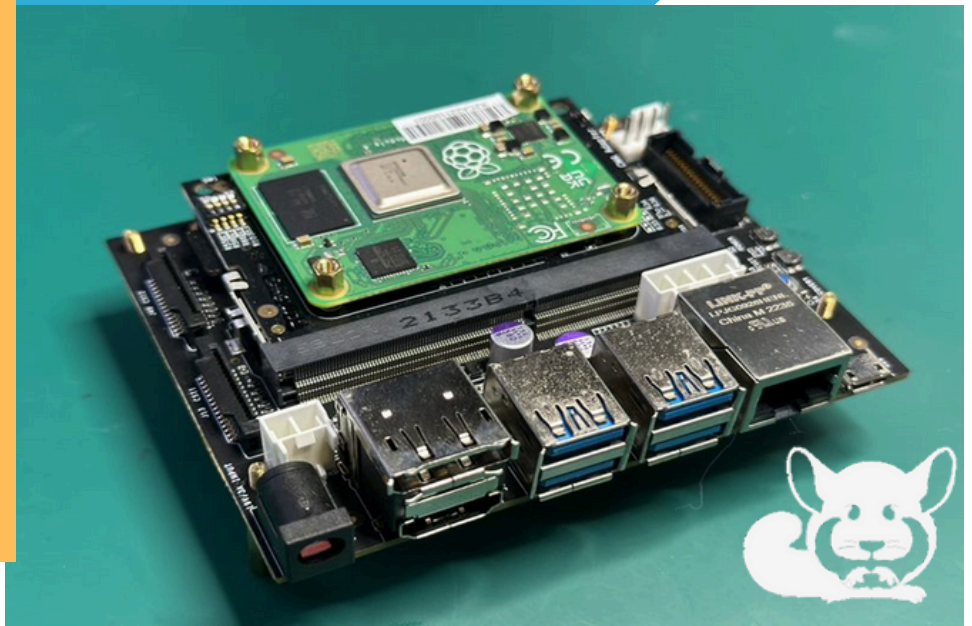
Our hardware platform streamlines collaboration across your company, from universal carrier boards and selected SoMs to software and integration services. Each component is strong individually, but together, the platform for your project unbeatable.



CHINCHILLA001 with CM4

RASPBERRY PI CM4 COMPUTE MODULE 4

*"Universal
High-end ARM
Carrier Board
for you"*



About CM4

- Broadcom BCM2711 4x Cortex-A72 64-bit SoC @ 1.5GHz
- H.265 (HEVC) (up to 4Kp60 decode), H.264 (up to 1080p60 decode, 1080p30 encode)
- OpenGL ES 3.1, Vulkan 1.0
- RAM 1GB, 2GB, 4GB or 8GB LPDDR4-3200 SDRAM
- eMMC 0GB ("Lite"), 8GB, 16GB or 32GB eMMC Flash
- 2.4 GHz, 5.0 GHz IEEE 802.11 b/g/n/ac wireless;
- Bluetooth 5.0, BLE;

interfaces

Front side

- SODIMM slot for Jetson
- USB Type-B x1
- Ethernet x1
- USB Type A x4
- HDMI x 2
- MIPI CSI x2
- SIM Slot
- SD Slot
- I2P IO
- CAN
- BAT
- FAN x2
- 40-pins
- M.2 Type-E

- Button1(Power ON OFF)
- Button2(Rest)
- Button3(Recovery)
- Power 19V@3A/12V@3A

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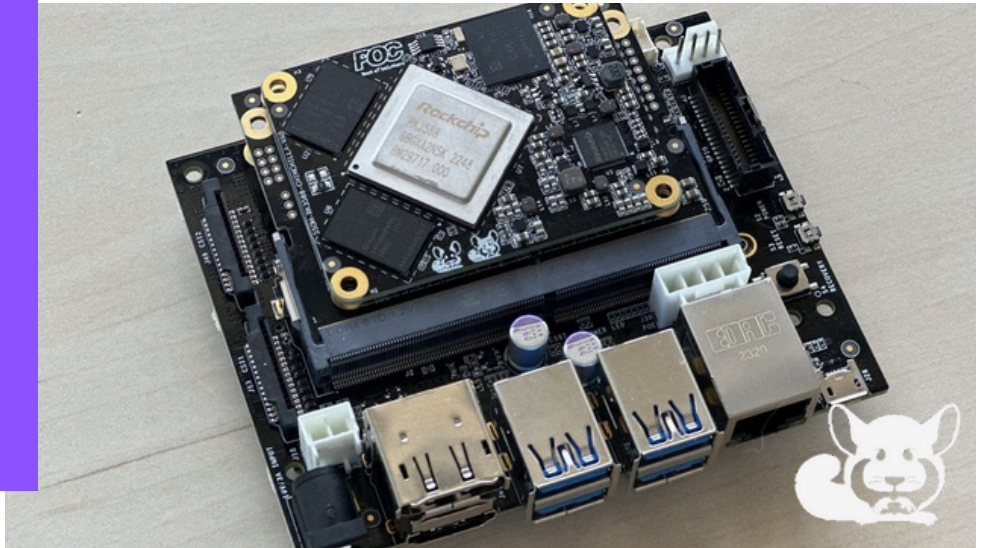
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CHINCHILLA001 with RK3588

SSOM- RK3588- CHINCHILLA

*"Universal
High-end ARM
Carrier Board
for you"*



SSOM-RK3588-CHINCHILLA

- Rockchip RK3588(4 x ARM Cortex-A76 at up to 2.6 GHz, 4 x ARM Cortex-A55 at up to 1.8 GHz, ARM Mali-G610 MP4 graphics, NPU (neural processing unit) with up to 6 TOPS of AI performance, 3 x Arm Cortex-M0)
- HDMI in x1(Adapter supported HDMI- connector)
- HDMI Out x 2
- HDMI out x2
- Giga Ethernet
- USB3
- SATA (Adapter supported SATA data connector)
- PCIe

interfaces

Front side

- SODIMM slots
- USB Type-B x1
- Ethernet x1
- UST Type A x4
- HDMI x 2
- MIPI CSI x2
- SIM Slot
- SD Slot
- I2P IO
- CAN
- BAT
- FAN x2

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SOM COMPARSION LIST

SPEC	SSOM- i.MX8MP CHINCHILLA	SSOM- PX30 CHINCHILLA	SSOM- i.MX8MM CHINCHILLA	SSOM- i.MX935 CHINCHILLA	SSOM- RK3588 CHINCHILLA V1	SSOM- RK3588 CHINCHILLA V2	SSOM- RK3588s CHINCHILLA
SoC (CPU)	NXP i.MX8M Plus (Quad Cortex- A53 @ 1.6GHz + Cortex- M7)	Rockchip PX30 (Quad Cortex- A35 @ 1.6GHz)	NXP i.MX8M Mini (Quad Cortex- A53 @ 1.8GHz + Cortex- M4)	NXP i.MX935 (Dual Cortex- A55 @ 1.7GHz + Cortex- M33)	Rockchip RK3588 (4x Cortex- A76 @ 2.4GHz + 4x Cortex- A55 @ 1.8GHz)	Rockchip RK3588 (4x Cortex- A76 @ 2.4GHz + 4x Cortex- A55 @ 1.8GHz)	Rockchip RK3588s (4x Cortex- A76 @ 2.4GHz + 4x Cortex- A55 @ 1.8GHz)
NPU (AI Performance)	2.3TOPS	None	None	0.5 to 1.0 TOPS	6TOPS	6TOPS	6TOPS
Memory (RAM)	2GB (Max6GB)	1GB (Max2GB)	2GB (Max6GB)	2GB (Max6GB)	4GB (Max32GB)	4GB (Max32GB)	4GB (Max32GB)
Storage	eMMC 32GB (Max 128GB), SD Slot, SATA	eMMC 32GB, SD Slot	eMMC 16GB (Max 128GB), QSPI Flash 32MB, SD Slot	eMMC 16GB (Max 128GB), SD Slot, SATA	eMMC 32GB (Max 128GB), SD Slot, SATA, M.2 (1TB, 2TB)	eMMC 32GB (Max 128GB), SD Slot, SATA, M.2 (1TB, 2TB)	eMMC 32GB (Max 128GB), SD Slot, SATA, M.2 (1TB, 2TB)
GPU	16 GFLOPS, OpenGL ES 3.1, Vulkan	Mali- G31 MP2, OpenGL ES 3.2, Vulkan	Vivante GC NanoUltra (OpenGL ES 2.0)	2D Graphics Accelerator	Mali- G610 MP4, OpenGL ES 3.2, Vulkan 1.2	Mali- G610 MP4, OpenGL ES 3.2, Vulkan 1.2	Mali- G610 MP4, OpenGL ES 3.2, Vulkan 1.2
Video Processing (Encode- Decode)	Decode: 1080p60 H.265- H.264 Encode: 1080p60 H.265- H.264	Decode: 1080p60 H.265- H.264 Encode: 1080p30 H.264	Decode: 1080p60 H.265- H.264 Encode: 1080p60 H.264	None	Decode: 8K@60fps (H.265- VP9), 4K@60fps (AV1) Encode: 8K@30fps (H.265- H.264)	Decode: 8K@60fps (H.265- VP9), 4K@60fps (AV1) Encode: 8K@30fps (H.265- H.264)	Decode: 8K@60fps (H.265- VP9), 4K@60fps (AV1) Encode: 8K@30fps (H.265- H.264)
PCIe	PCIe 3.0 x1	None	PCIe 2.0 x1	PCIe 2.0 x1	PCIe 3.0 (up to x4 lanes) + PCIe 2.1	PCIe 3.0 (up to x4 lanes) + PCIe 2.1	2x PCIe 2.1
Ethernet	GbE x2	Ethernet x1	GbE x1	GbE x2	GbE x2	GbE x2	GbE x1
USB	USB 3.0- 2.0 OTG x2	USB 2.0 Host x1, USB 2.0 OTG x1	USB 2.0 OTG x2	USB 2.0 OTG x2	USB 3.1 OTG x2, USB 3.1 Host x1, USB 2.0 Host x2	USB 3.1 OTG x2, USB 3.1 Host x1, USB 2.0 Host x2	USB 3.1 OTG x1, USB 3.0 Host x1, USB 2.0 Host x3
HDMI IN	None	None	None	None	HDMI- IN x1	HDMI- IN x1	None
Main Interfaces	HDMI, MIPI- DSI, MIPI- CSI, CAN- FD, UART, I2C, GPIO	HDMI (on carrier board), MIPI- DSI- LVDS- RGB, CAN- FD	PCIe 2.0, MIPI- DSI, MIPI- CSI, UART, GPIO	MIPI- DSI (HDMI transmission), MIPI- CSI, CAN- FD, UART, I2C	HDMI out x2, MIPI- CSI x6, MIPI- DSI x2, eDP, WatchDog x5	HDMI out x2, MIPI- CSI x6, MIPI- DSI x2, eDP, WatchDog x5	HDMI out x1, MIPI- CSI, MIPI- DSI, eDP, WatchDog x5
Supported OS	Yocto Android FreeRTOS	Debian Android 12	Yocto Android FreeRTOS	Yocto Android	Debian Ubuntu Android	Debian Ubuntu Android	Debian Ubuntu Android
Size	20mm x 50mm	20mm x 50mm	20mm x 46mm	20mm x 50mm	60mm x 45mm	39.4mm x 47mm	39.4mm x 47mm

