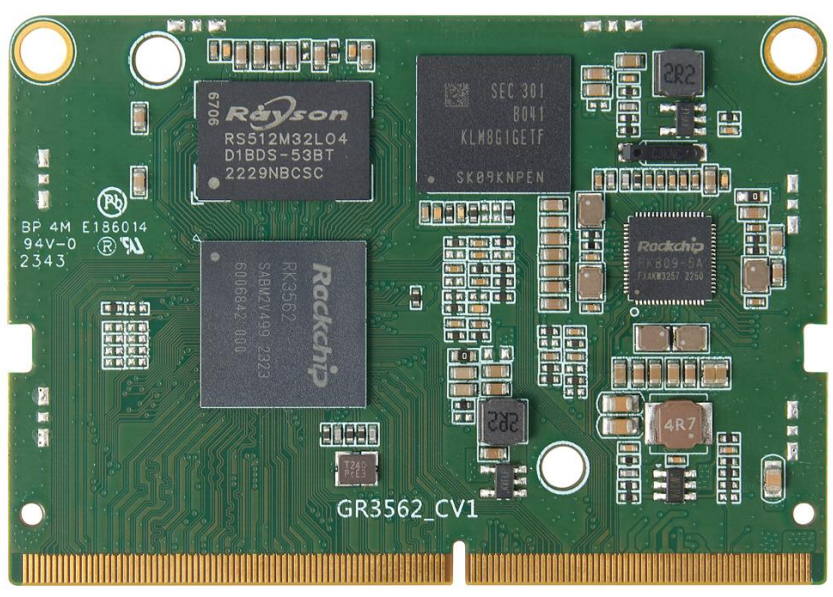


G3562 System on Module



Graperain

Shenzhen Graperain Technology Co. Ltd.
www.graperain.com

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Release Notes

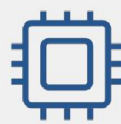
Version	Release date	Author	Description
v1.0	2024-3-7	RXS	Revision

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G3562 SOM Introduction

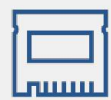
G3562 System on Module

G3562 system on module takes 64 bit Cortex-A53 CPU. The main frequency can reach up to 2GHz, built-in Mali-G52 GPU, 1T computing power NPU, low power consumption and high performance. G3562 SOM DDR can be up to 8GB memory. It supports PCIe2.1, 4K 30fps H.265/H.264/VP9 video decoding. Graperain provides complete technical information and reference design. Users can develop efficiently based on G3562 SOM.



Quad core 64 bit A53 RK3562

Frequency up to 2GHz
Mali-G52 2EE GPU



Support 8GB DDR

Meeting the needs of large memory applications
support 128GB EMMC



Support PCIe2.1

Expandable SSD/HDD



Rich Expansion Interfaces

Support UART, I2C, ADC, PWM, GPIO,
USB2.0, USB3.0,
MIPI CSI, MIPI DSI, I2S etc.



OS

Android, Ubuntu, Debian,
Buildroot+QT



Develop efficiency

Provide technical reference design

Features

Features	
SOC	Rockchip RK3562
CPU	Quad core 64 bit Cortex-A53, frequency up to 2GHz
GPU	ARM G52 2EE GPU, support OpenGL ES 1.1/2.0/3.2, OpenCL 2.0, Vulkan 1.1, integrate high-performance dedicated 2D processor
NPU	Build-in RKNN NPU AI acceleration engine, 1Tops computing power Deep learning frameworks: Caffe/TensorFlow/TF-Lite/ONNX/MXNet/PyTorch/Keras/Darknet
Video Codec	1080P 60fps H.264 encoder 4K 30fps H.265/VP9, 1080P 60fps H.264 decoder
DDR	2GB/4GB/8GB LPDDR4/LPDDR4X
eMMC	8GB/16GB/32GB/64GB/128GB eMMC
Hardware Parameters	
Ethernet	1x 1000Mbps Ethernet(RJ45) 1x 100Mbps Ethernet(RJ45)
WIFI	Expandable WiFi+Bluetooth 2-in-1 module via SDIO interface: - support 2.4GHz / 5GHz dual band WiFi, 802.11a/b/g/n/ac protocol - support Bluetooth5.0 Supports extended 4G LTE/3G wireless networks
Display	1 x RGB, support 2048x1080@60Hz 1 x MIPI DSI, single channel support 2048x1080@60Hz 1 x LVDS, up to 800x1280@60Hz
Audio	2 x I2S(8 channel input/output), 1 x I2S (2 channel input/output)

Camera	2 x MIPI-CSI (up to 13M)
USB	USB2.0x1, USB3.0 OTGx1
PCIE	Support PCIE 2.1
Others	UARTx10, I2Cx6, ADCx2, PWMx16, GPIOx108, I2Sx3, SPEAKx1, HPOUTx1

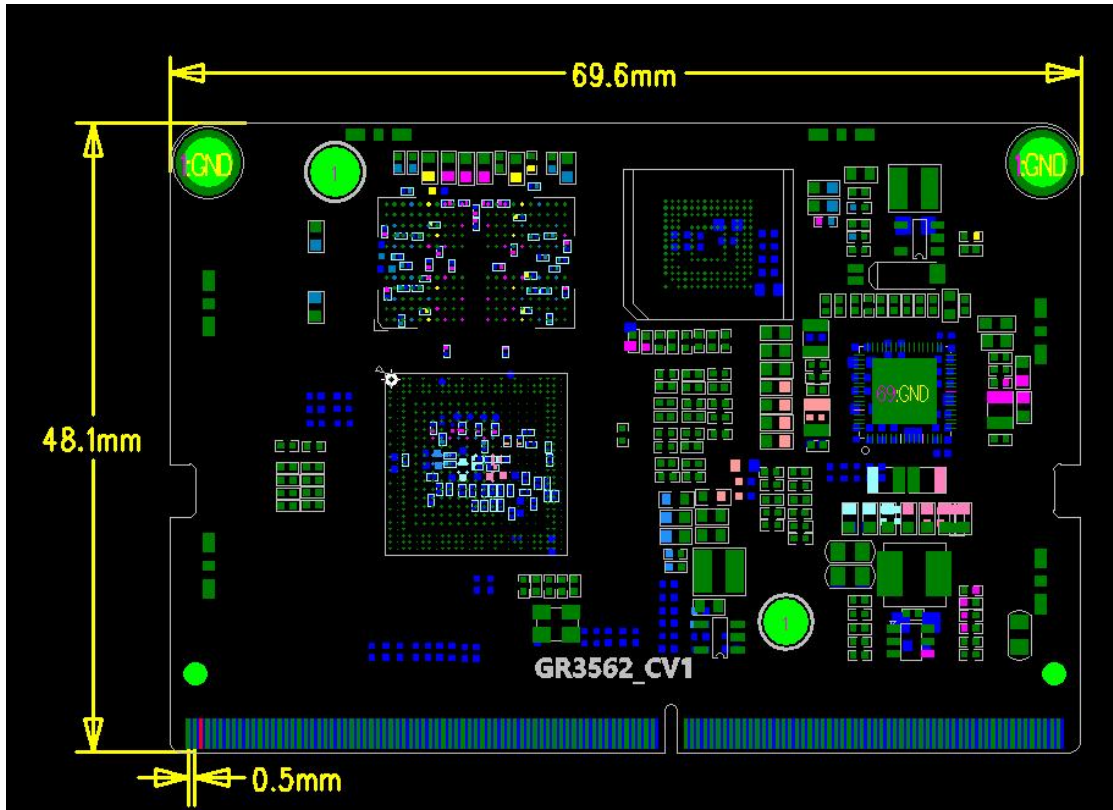
System Software

OS	Android13, Ubuntu, Buildroot+QT, Debian
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Other Parameters

Type	Gold finger
Size	69.6mm x 48.1mm
Environment	Operating Temperature: 0°C - 70°C Storage Temperature: -20°C - 80°C Storage humidity: 10%~80 %

G3562 SOM Size



Graperain

Company Introduction

GraperaIn is a solution company dedicated to ARM platform development. 80% of our employees are senior engineers with bachelor degree or above, who have been engaged in embedded technology development for many years. Based on the 64-bit ARM processor, which is widely used in the embedded industry, we have streamlined the circuit design and strictly controlled the hardware cost, combined with the popular Linux, Ubuntu, Android and other operating systems. GraperaIn launched a series of solutions to provide system on modules + hardware customization + software development + OEM/ODM services to provide quality support services for manufacturers and R&D institutions.

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