

P05D00091-03

Rockchip RK3568

Front View



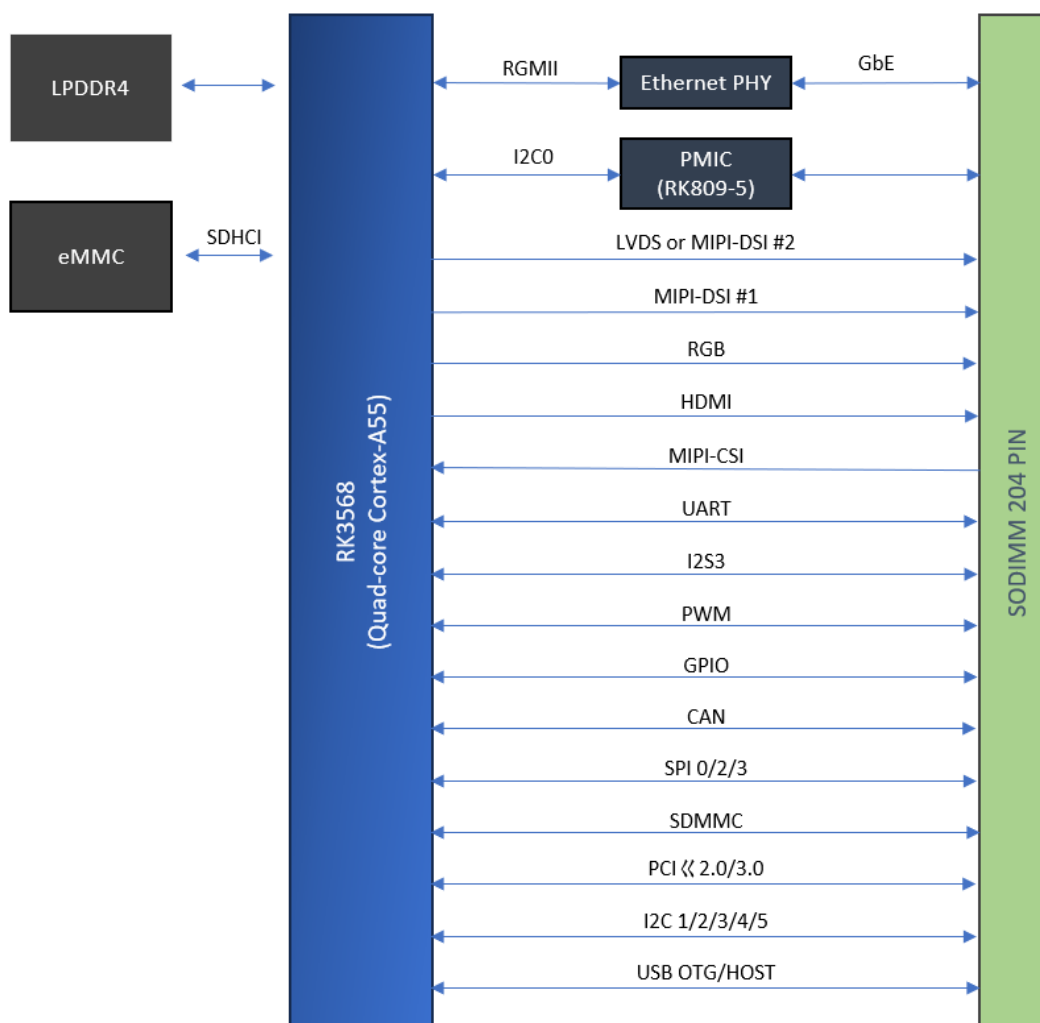
Features

- High-performance Quad-core application processor and GPU for portable devices and digital multimedia applications
- Integrated NPU for AI acceleration, supporting lightweight deep learning inference such as face detection, object recognition, and voice processing
- Suitable applications: Industrial, Medical, Kiosks, PoS, and other multimedia

Specifications

Hardware			
CPU	RK3568	Quad-Core ARM Cortex-A55	
GPU	ARM G52 2EE	OpenGL ES 1.1/2.0/3.2, OpenCL 2.0, Vulkan 1.1	
NPU	RKNN	Accelerator with processing performance up to 1.0 TOPS	
Memory	On Board RAM	2GB LPDDR4 SDRAM (up to 4GB)	
	On Board Flash (Default Boot Device)	16GB eMMC Flash (Optional: 32GB/64GB)	
I/O	Display (Up to three)	1 x MIPI#1 DSI ^{*1} 1 x 24 bits Parallel RGB	1 x HDMI 2.0 1 x LVDS (or 1 x MIPI#2 DSI)
	USB	1 x USB 2.0 OTG (Optional: USB 3.0 OTG) ^{*1} 2 x USB 2.0 Host + 1 x USB 3.0 Host (Optional) ^{*1}	
	Ethernet	10/100/1000 Mbps	
	Default Peripheral (maximum)	10 x UART (One for Debug Used) 4 x I ² C (up to 5) 2 x SPI (up to 3) 1 x I ² S (up to 3) 1 x CAN (up to 2)	2 x SDMMC 1 x PCIe 2.0 (or 1 x SDMMC) 1 x PCIe 3.0 GPIOs PWM
Software			
OS	Linux	Buildroot, Yocto, Debian	
	Android		

Block Diagram



Dimensions

