P05D00108-00

Rockchip RK3568

Front View



Features

- High-performance, low-power SoC for AIoT and mobile devices
- 4K@60 H.264/H.265 decode, 1080p@60 encode, JPEG codec
- NPU with INT8/INT16/FP16/BF16 hybrid operations
- AI frameworks: TensorFlow, MXNet, PyTorch, Caffe

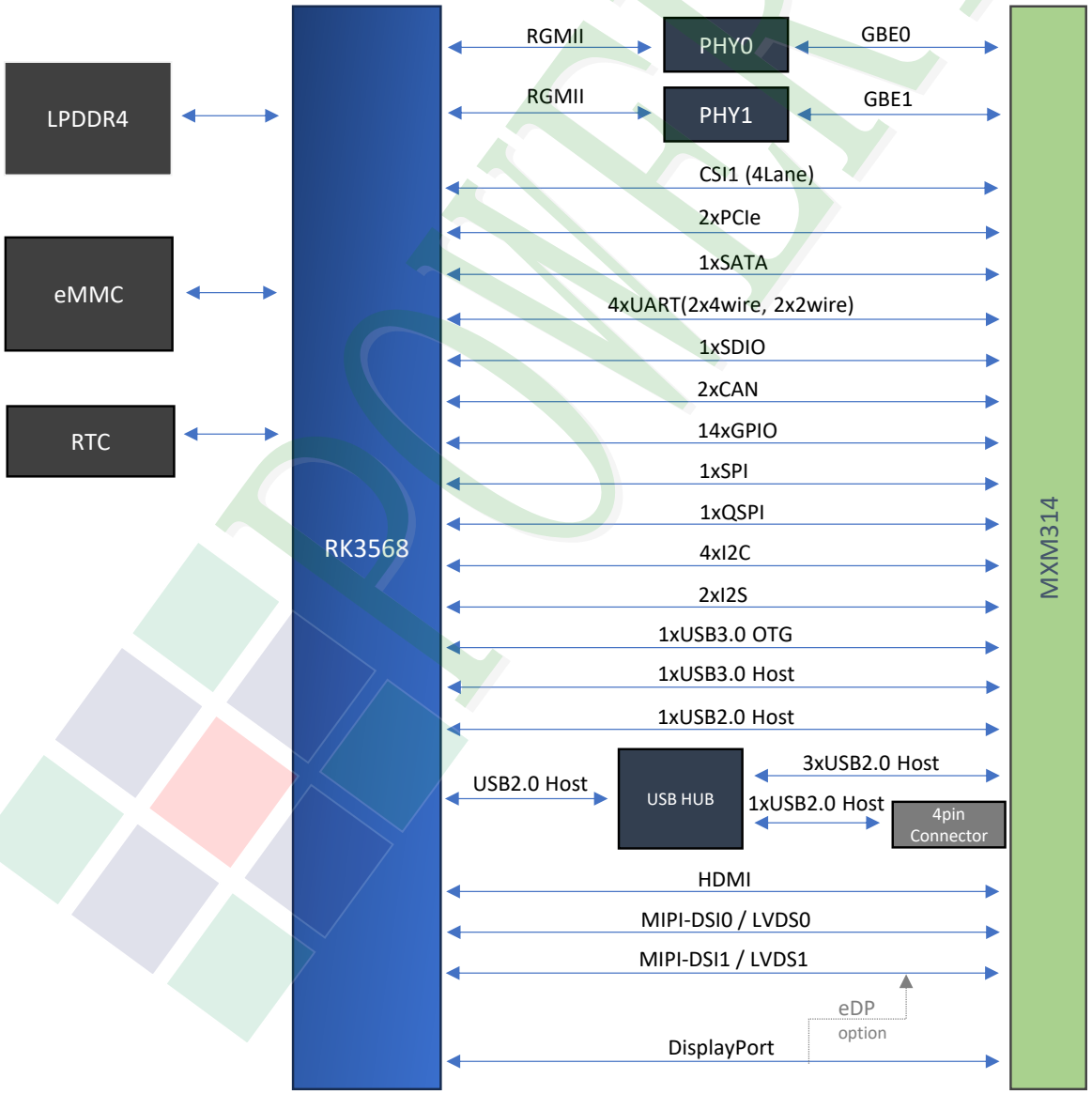
Specifications

Hardware		
CPU	RK3568B2	Quad-Core Arm Cortex-A55
GPU	Mali-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 TOPS
Memory	Onboard RAM	2GB LPDDR4 SDRAM
	Storage (Default Boot Device)	16GB eMMC Flash (Optional: 32GB/64GB)
I/O	Display	LVDS0 / MIPI-DSI0 (4-lane) LVDS1 / MIPI-DSI1 (4-lane) 1 × HDMI 2.0 1 × Display Port
	Camera	1 × MIPI-CSI (4-lane)
	Audio	2 × I^2S
	USB	1 × USB 3.0 OTG 6 × USB Host (1 × USB 3.0, 5 × USB 2.0)
	Ethernet	2 × 10/100/1000 Mbps
	PCIe	2 × PCIe 3.0 x1 or 1 × PCIe 3.0 x2
	SATA	1 × SATA
	SDIO	1 × SDIO
	Serial Port	4 × UART (SER3 for debug)
	CAN Bus	2 × CAN
	Low-speed Bus	4 × I^2C 1 × SPI 1 × QSPI

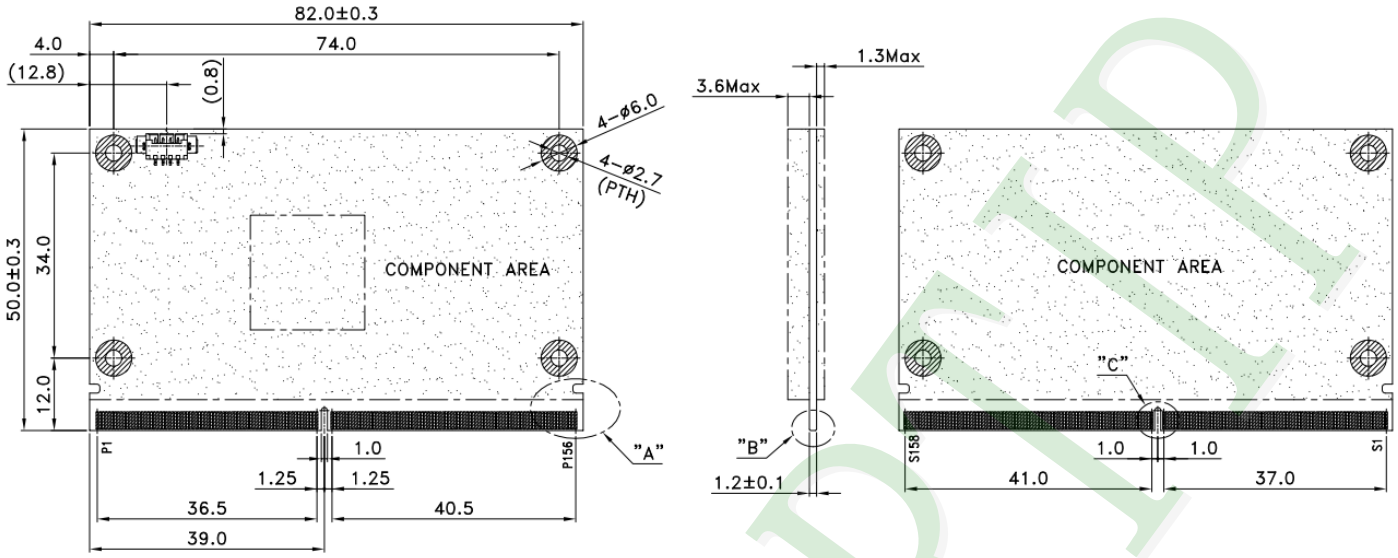
Hardware		
I/O	GPIO	14 × GPIOs
Environment	Operating Temp.	0 ~ 70 °C
	Storage Temp.	-30 ~ 85 °C
Mechanical	Form Factor	SMARC 2.2 Module [82 × 50 mm]

Software		
OS	Default	Yocto 4.X
	Optional	Buildroot, Debian, Android

Block Diagram



Dimensions



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