

Dear Partners:

Powertip is introducing our SOM P05D00091-01, a system-on-module which you can simply integrate into your end system as a MPU base control board. With the standard carrier board and various size of displays, customer can easily find an embedded solution to meet the design request.

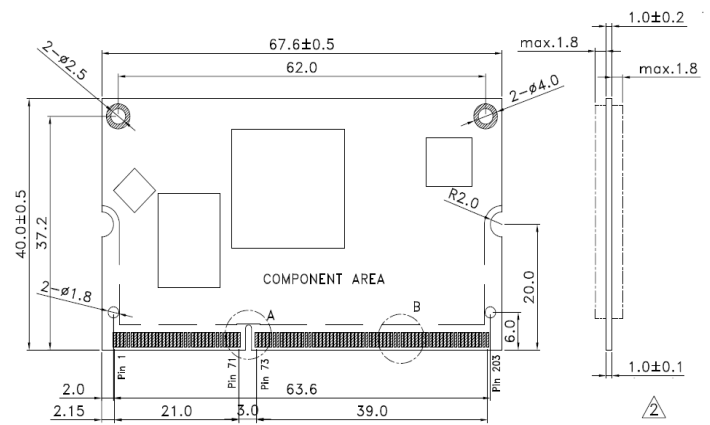
This product offers perfect solution for smart home controller, automation devices, vending machines and industrial IoT domains.

Please visit our website to learn more about our products or contact with your sales representative for pricing and more information.

## ■ SOM P05D00091-01

Item	Description		
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 1.0TOPS	
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 × MIPI DSI* <sub>1</sub> 1 × 24 bits Parallel RGB	1 × HDMI 2.0 1 × eDP
	USB	1 × USB 2.0 OTG (Optional: USB 3.0 OTG) * <sub>1</sub> 2 × USB 2.0 Host + 1 × USB 3.0 Host (Optional) * <sub>1</sub>	
	Ethernet	10/100/1000 Mbps	
	Default Peripheral (maximum)	10 × UART (One for Debug Used) 4 × I2C (up to 5) 2 × SPI (up to 3) 1 × I2S (up to 3) 1 × CAN (up to 2)	2 × SDMMC 1 × PCIe 2.0 (or 1 × SDMMC) 1 × PCIe 3.0 GPIOs PWM
OS	Linux	Buildroot, Yocto, Debian	
	Android		

Note 1: MIPI#1 DSI and USB 3.0 OTG/HOST could be alternated by BOM selection.



- Application:
- Smart home controller
- Automation devices
- Vending machines
- Industrial IoT domains

