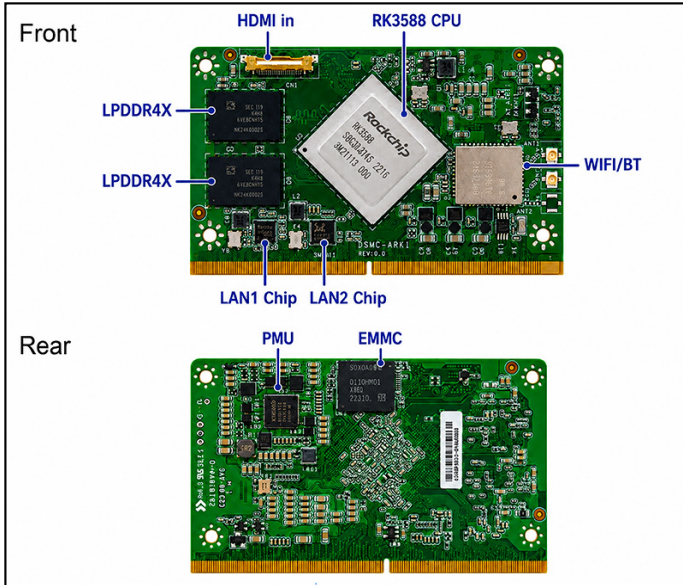


Rockchip® ARM Cortex A76 + A55 RK3588, SMARC Core Board



Specifications

SYSTEM	
MB FORM FACTOR	SMARC
CPU	Rockchip® RK3588 ARM Cortex A76+A55(4-Cortex-A76 @ 2.4GHz + 4-Cortex-A55 @ 1.8GHz) 6 TOPS NPU Rockchip® RK806-1 PMU
MEMORY	Onboard LPDDR4x 4266MT/s 8GB (Max 16GB)
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
DIMENSION (W X D)	82.0 (W) x 50.0 (D) mm (3.2" x 2.0")
OS SUPPORT	Android 12.0, Linux Debian 11.0, Harmony, Ubuntu 22.04
DISPLAY	
GPU	Mali-G610 MC4 @ 1GHz Support OpenGL ES 1.1/2.0/3.2, OpenCL 2.2, Vulkan 1.2
LAN	
ETHERNET	1 x Realtek RTL8211F GbE 1 x RJ45 for Realtek® RTL8111HS GbE 1 x AMPAK AP6398SV Wi-Fi and BT-V5.0
STORAGE	
eMMC	Onboard 64GB eMMC, Optional Up to 128GB
ENVIRONMENT & CERTIFICATION	
OPERATING TEMPERATURE	0°C - 60°C (32°F - 140°F)
STORAGE TEMPERATURE	-20°C - 70°C (-4°F - 158°F)

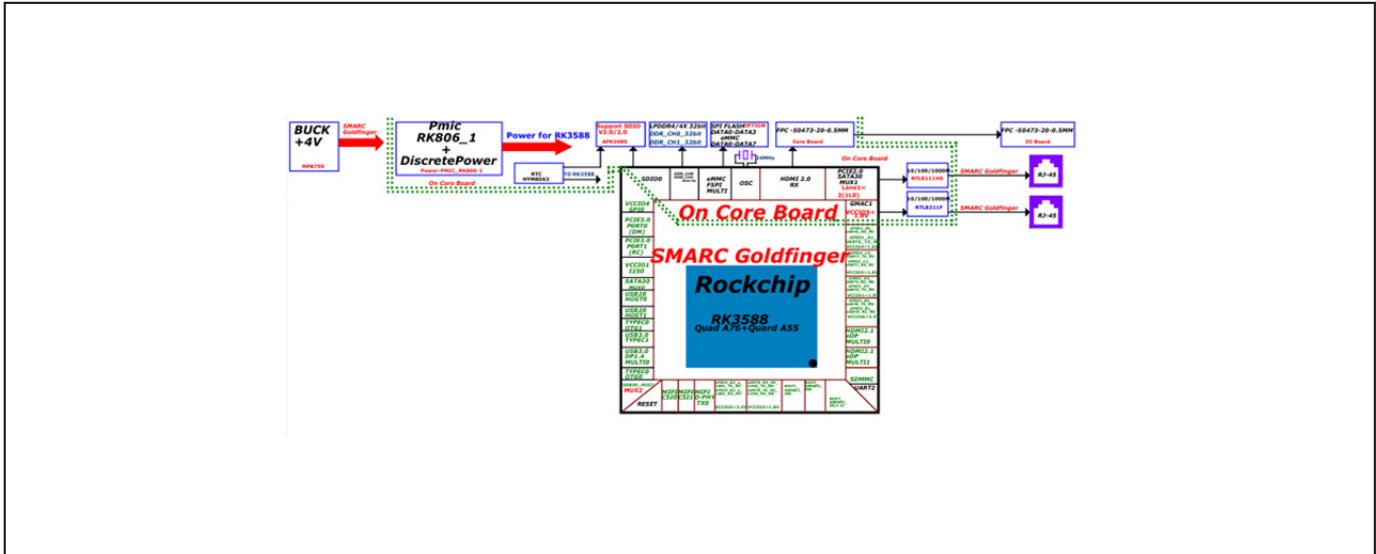
Features

- Rockchip® RK3588 processor with Quad-Core ARM Cortex-A76 up to 2.4GHz and Quad-Core Cortex-A55 up to 1.8GHz
- Onboard 8GB LPDDR4x SDRAM at 4266MT/s
- Onboard 64GB Flash ROM, up to 128GB
- Supports Wi-Fi and Bluetooth
- 2 x Realtek® GbE LAN ports
- 1 x HDMI input via I-PEX connector
- Supports Android 12.0 and Debian 11 with Linux 5.10

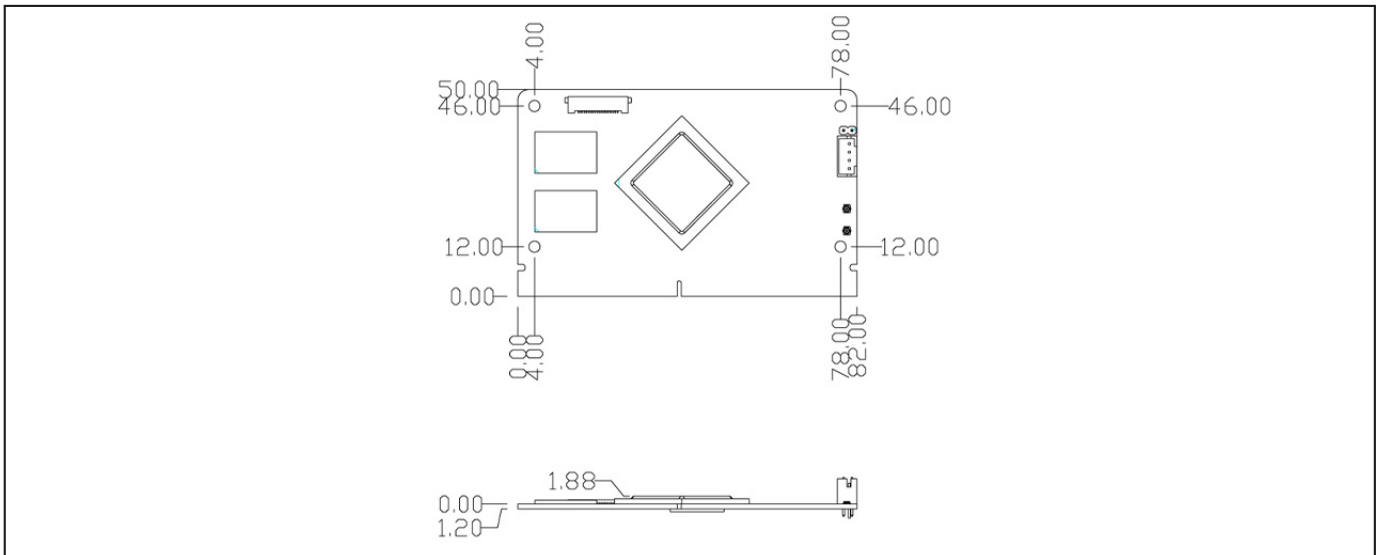
Packing List

PART NUMBER	DESCRIPTION	QTY
Part Number	Description	QTY per Board
—	SMC-ARK1-358886A1 M/B	1

Block Diagram



Dimension Unit: mm



Ordering Information

PART NUMBER	SMC-ARK1-358886A1
CPU	Rockchip® RK3588
MEMORY	Onboard LPDDR4x 4266MT/s 8GB, up to 16GB
GPU	Mali-G610 MC4 GPU @ 1GHz
ETHERNET	2 x GbE
ETHERNET	1 x WiFi/BT
eMMC	eMMC 64GB
OPERATING TEMPERATURE	0°C - 60°C (32°F - 140°F)