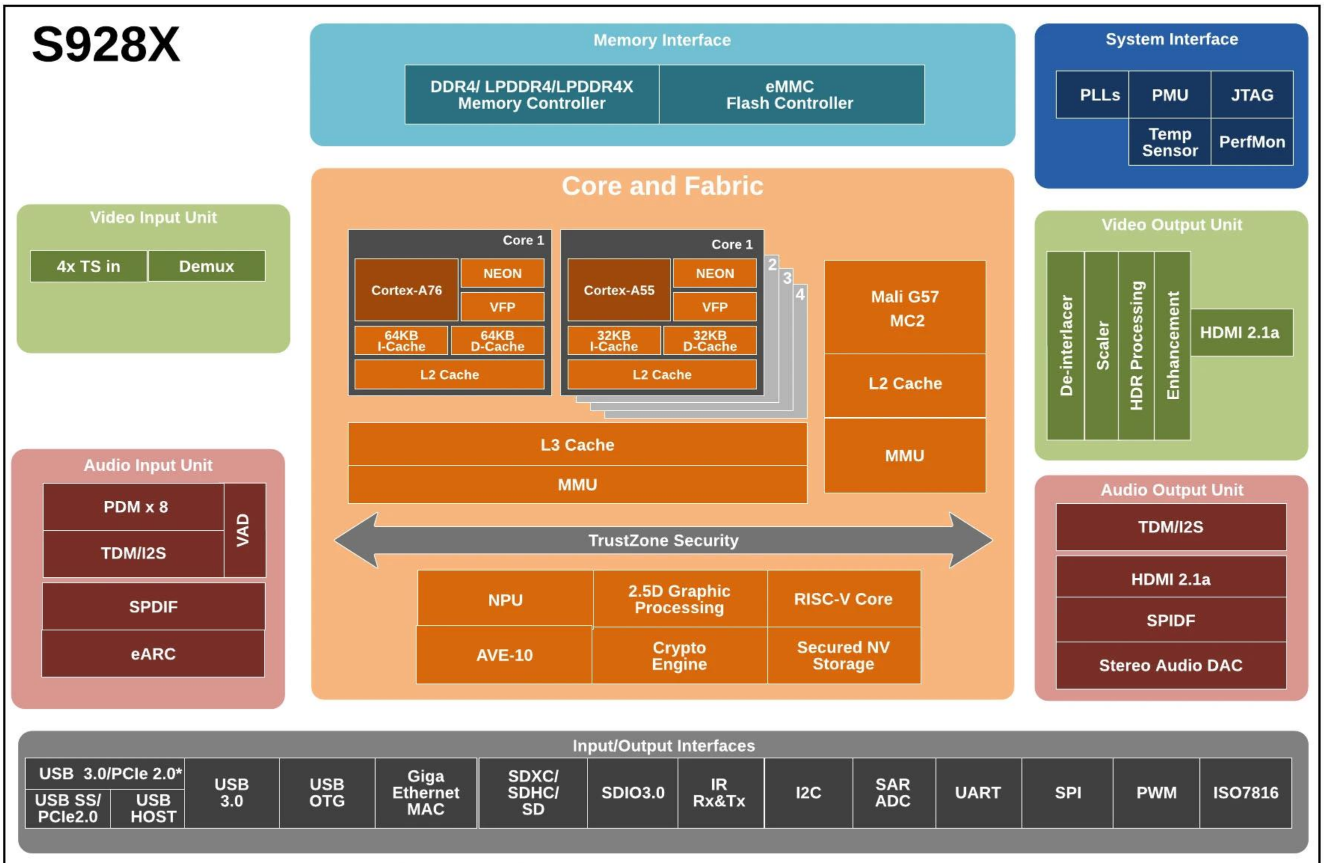
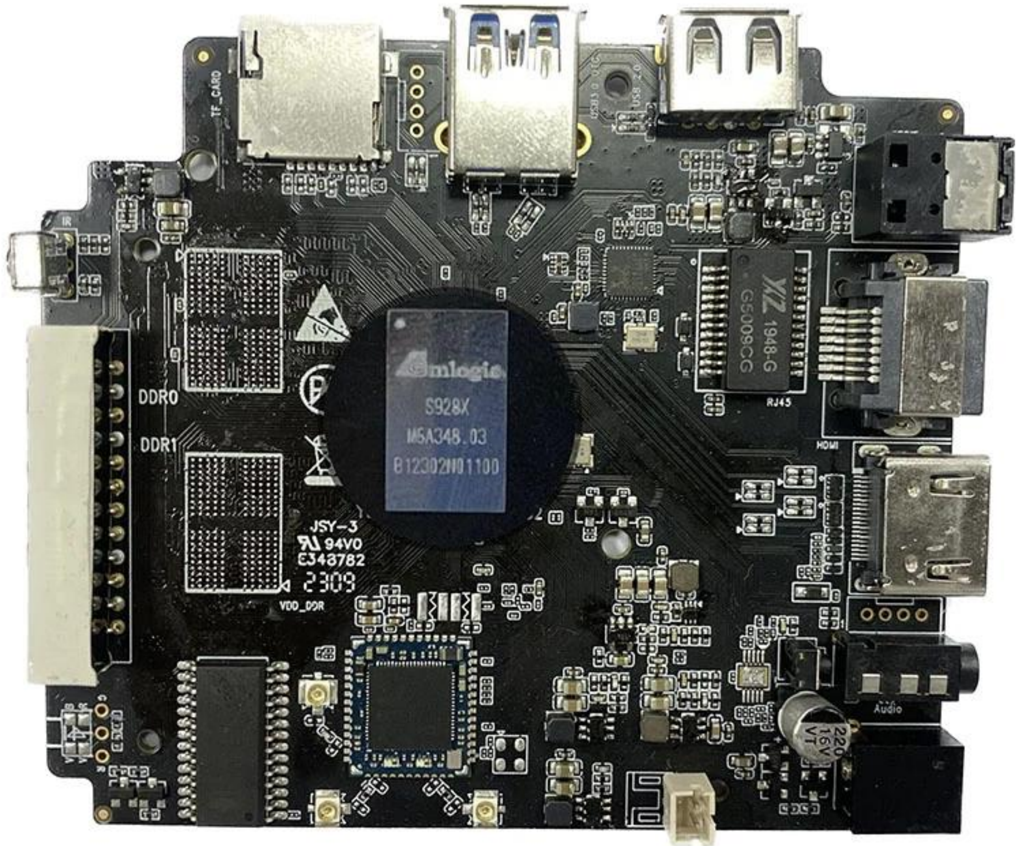
[illegible]4K [illegible] - [illegible]

[illegible]	
[illegible]	[illegible] Amlogic S928X
CPU	Amlogic S928X ARM Cortex-A76[illegible] ARM Cortex-A55
GPU	ARM Mali-G57 MC2[illegible]4K GUI OpenGL ES 3.2[illegible]Vulkan 1.2 [illegible] OpenCL 2.0
NPU	3.2 [illegible]
[illegible]	64 [illegible] DDR4[illegible]LPDDR4/4X [illegible] 8GB DDR4266
eMMC	eMMC 5.1[illegible]SLC NAND [illegible]
[illegible]	Amlogic [illegible] (AVE) [illegible] [illegible] AV1 MP-10 @ L6.1 [illegible] 8Kp60 VP9 Profile-2 @ 6.1 [illegible] 8Kp60 H.265 HEVC MP-10 @ L6.1 [illegible] 8Kp60 AVS3 [illegible] 1 [illegible] 8Kp60 AVS2-P2 [illegible] 8Kp60 H.264 AVC HP @ L5.2 [illegible] 4Kp60 MPEG-4[illegible]WMV/VC-1[illegible]AVS[illegible]MPEG-2[illegible]MPEG-1 [illegible] 1080p60 MJPEG [illegible] JPEG [illegible] (ISO/IEC-10918) [illegible] 4x 4Kp60 [illegible] [illegible] JPEG [illegible] 4Kp60 H.265 [illegible] 4Kp60[illegible] H.264 [illegible] 4Kp60[illegible] [illegible] 8 [illegible] Amlogic TruLife [illegible] Dolby Vision[illegible]HDR10[illegible]HDR10[illegible]HLG [illegible] HDR Vivid [illegible]
[illegible]	[illegible] 3.2 TOPS [illegible] (NNA)[illegible] (TPU) [illegible] TensorFlow [illegible] Caffe
[illegible]	HDMI 2.1a [illegible] PHY[illegible] CEC[illegible] HDR [illegible] HDCP 2.2/2.3[illegible] 8Kp60[illegible] eARC[illegible]VRR[illegible]QMS[illegible]QFT[illegible]ALLM[illegible]DSC [illegible] SBTM
[illegible]	[illegible] MP3[illegible]AAC[illegible]WMA[illegible]RM[illegible]FLAC[illegible]Ogg Vorbis[illegible]Opus[illegible]SRS Truvolume[illegible]Dolby Audio[illegible]DTS[illegible] 7.1/5.1 [illegible] [illegible] VAD [illegible] SPDIF [illegible]/[illegible] 192KHz 16/24/32 [illegible] 3 [illegible] TDM/PCM/I2S [illegible]TDM/PCM [illegible] 48kHz x 32bits x 32ch [illegible] 192kHz x 16bits x 16ch[illegible]I2S [illegible] 384kHz x 32bits x 16ch [illegible] CIC[illegible]LPF[illegible]HPF [illegible] PDM [illegible] 8 [illegible] DMIC [illegible] DAC
[illegible]	10/100/1000 MAC
USB2.0[illegible]	1x USB XHCI OTG 2.0[illegible]2x USB 2.0 [illegible]1x USB 3.0 (5 Gbps) [illegible] PCIe 2.0 [illegible]


S928X
Memory Interface
DDR4/ LPDDR4/LPDDR4X Memory Controller
eMMC Flash Controller
System Interface
PLLs
PMU
JTAG
Temp Sensor
PerfMon
Video Input Unit
4x TS in
Demux
Core and Fabric
Core 1
Cortex-A76
NEON
VFP
64KB I-Cache
64KB D-Cache
L2 Cache
Core 1
2
3
4
Cortex-A55
NEON
VFP
32KB I-Cache
32KB D-Cache
L2 Cache
Mali G57 MC2
L2 Cache
MMU
L3 Cache
MMU
TrustZone Security
NPU
2.5D Graphic Processing
RISC-V Core
AVE-10
Crypto Engine
Secured NV Storage
Video Output Unit
De-interlacer
Scaler
HDR Processing
Enhancement
HDMI 2.1a
Audio Input Unit
PDM x 8
TDM/I2S
VAD
SPDIF
eARC
Audio Output Unit
TDM/I2S
HDMI 2.1a
SPIDF
Stereo Audio DAC
Input/Output Interfaces
USB 3.0/PCIe 2.0*
USB SS/ PCIe2.0
USB HOST
USB 3.0
USB OTG
Giga Ethernet MAC
SDXC/ SDHC/ SD
SDIO3.0
IR Rx&Tx
I2C
SAR ADC
UART
SPI
PWM
ISO7816

* Supported configuration: PCIe 2.0 port + USB 2.0 Host, or USB3.0 port without PCIe.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JSY-3
94V0
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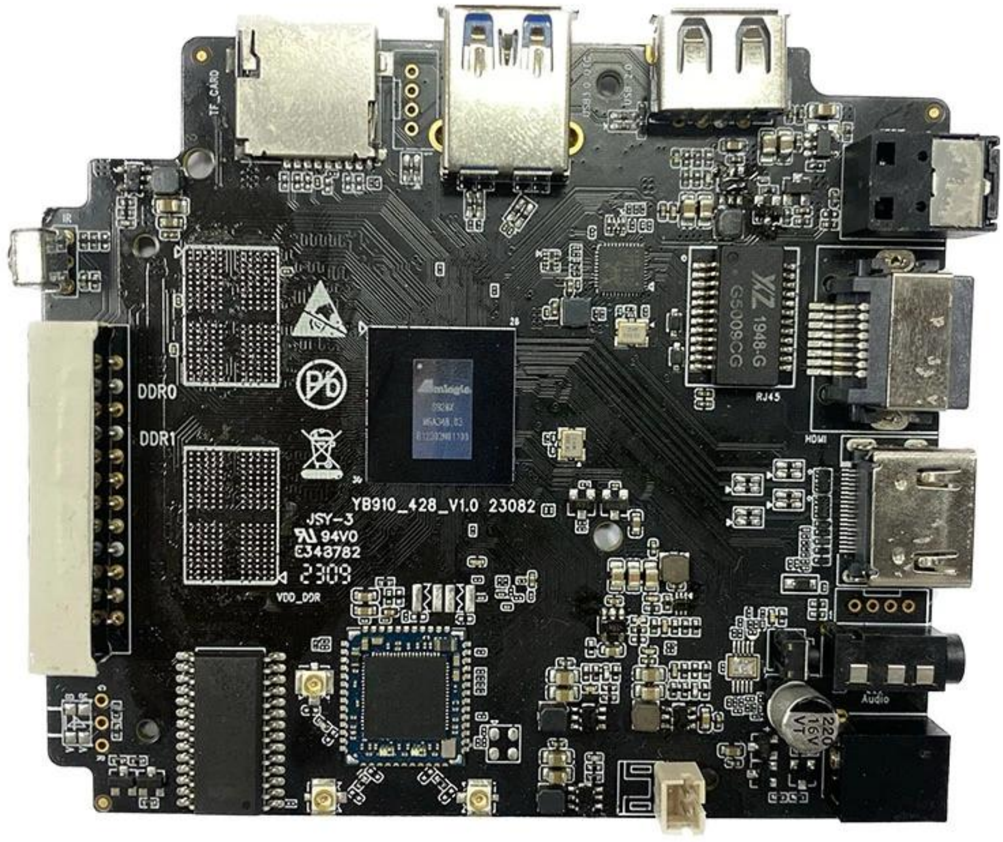
VDD_DDR
1948-G
G5009CG
RJ45
HDMI
Audio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DDR1
YB910_428_V1.0 23082
JSY-3
94V0
E348782
2309
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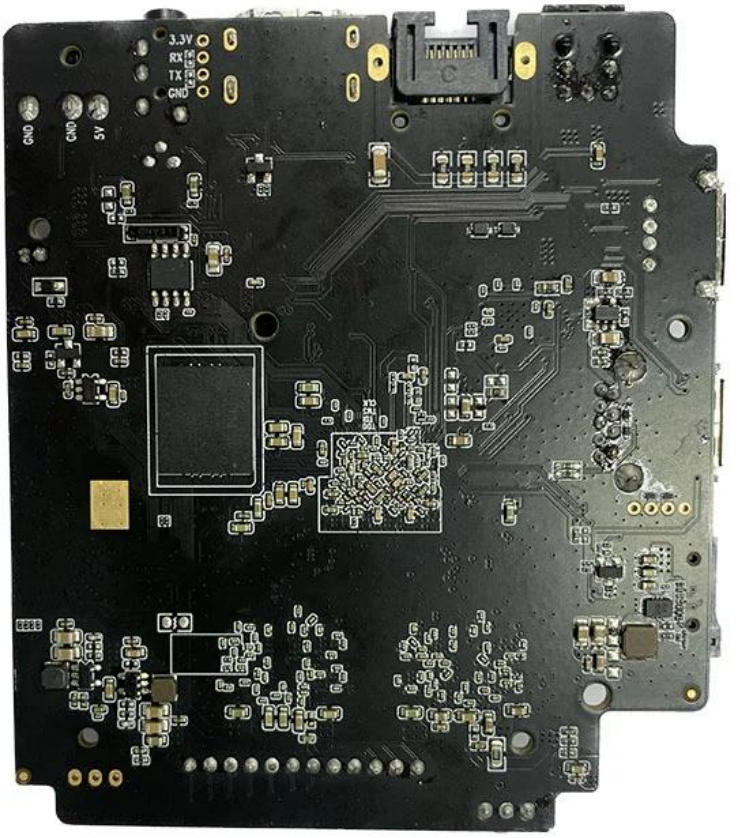
1948-G
G5009CG
220
16V



Amlogic S928X□□□□□ARM Cortex-A76□ARM Cortex-A55□□□□□□□□□□□8K□□□□□□□□SoC□□□□□□□□□□□——AV1□H.265□VP9□AVS3□AVS2□8Kp60□□□□□□□□□□□□4K GUI□□□SR□□□□□□□□□□□□□□□□□□□□□□□□

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S928X□□□□□□□□□□□□□□□□□□□□□□□□□ ARM Cortex-A53 CPU□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ 4K □□□□□□□□□□□□□□□□□□□□□S928X □□□□□□□□□□□□□□□□□□□

S928X□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ 60 □□□□ 4K □□□ HDR10 □ HLG □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

S928X□□□□□□□□□□□□□□□□□□□□□□□□□ Mali-G31 MP2 GPU□□□□□□□□□□□□□□□ OpenGL ES3.2□Vulkan 1.1 □ OpenCL 2.0□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

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S928X [illegible]Wi-Fi[illegible]5.0[illegible] HDMI[illegible]USB [illegible]

[illegible]Amlogic S928X [illegible]S928X [illegible]

8K [illegible] Amlogic S928X [illegible] Wi-Fi [illegible] HDR [illegible] 8K [illegible] USB 3.0 [illegible] 5.0[illegible]

[illegible] 4K [illegible] [illegible] 4K [illegible]