

AX650N

AX650N SoC

A55 CPU 72.0TOPs@INT4

18.0TOPs@INT8 NPU 8K@30fps

ISP H.264 H.265 VPU

AX650N 64bit LPDDR4x eMMC v5.1

/ SPI Flash MIPI 2 Ethernet

1 USB3.0 2 USB2.0 2 HDMI 2.0b

AX650N



CPU

Cortex A55 1.7GHz

32KB I-Cache

32KB D- Cache

NEON

FPU

NPU

72.0TOPs @ INT4

18.0TOPs@INT8

MAU

IVE

DSP

VDSP

32KB I-Cache

16KB D- Cache

ISP

8K@30fps 2DOL

3A AF AWB AE

AI-HDR

AI-3DNR NR

H.264 HP/MP/BP Level v5.1

H.265 MP Level v5.0

H.264/H.265 I/P

8K @30fps

H.264/H.265

7680*4320 @30fps+

1080p@30fps

JPEG

3840*2160@200fps

CBR/VBR/AVBR/CVBR/FIXQ

P/QPMAP

8 ROI

H.264 HP/MP/BP Level v5.2

H.265 MP Level v5.1

8K @60fps

32 1080p@30fps

JPEG

3840*2160@120fps

300Mbps

200Mbps

12

OSD



4 sensor

2x4 4x2Lane

MIPI

3.5Gbps

DDR

64bit

LPDDR4/LPDDR4x

4266Mbps

32GB

Ethernet

2 Ethernet

RGMII RMII

USB

1 USB 3.0 2 USB 2.0

Host Device

SPI Flash

SPI Nor Flash

SPI Nand Flash

PCIe SATA

2 PCIe 2.0 x2

4 SATA 3.0

RC/EP

SATA PM

eMMC

eMMC v5.1

2TB

I2S I2C SPI Uart



2 HDMI 2.0b

BT.1120/BT.656

2

4K@60fps+1

1080p@60fps

16bit RGB LCD



eMMC

SPI Nor Flash

SPI Nand Flash

PCIe

0.8V

LPDDR4(x) 1.1V / 0.6V

IO 1.8V/3.3V

16mm x16mm FC -CSP



