LUMISSIL Microsystems
A Division of ISSI

T31N

4MP H.265 video processor

T31N is a smart video application processor targeting Non Battery-powered video devices like consumer camera, security camera, web camera, video analysis and so on. This SoC introduces a kind of innovative architecture to fulfill both high performance computing and high quality image and video encoding requirements addressed by video devices. T31N provides high-speed CPU computing power, excellent image signal process, fluent 4MP resolution video encoding. T31N is one of the world well know cost-effective video processor. There are plenty successful applications in variety video markets, and endorsed by many famous brands.

FEATURES

- 1.4 GHz XBurst1 CPU with 64KB+128KB cache
- SIMD128 ISA
- 700MHz lite MCU core
- Professional ISP, extremely low light enhanced
- Advanced 2D/3D de-noise, 3A, DRC
- Maximum 5M(2592*1900)@25fps H.265/H.264 video encoder, JPEG encoder
- 512Mb(64MB) DDR inside
- AES/RSA/SHA/TRANG
- Rich interfaces, I2C/I2S/SPI/USB/SDIO/DMIC/LCD/RMII/ADC
- Internal audio codec
- 400mW power consumption at typical application
- QFN88 package
- Typical AI algorithms available: smart tracking, person detection, baby cry detection …
- Mature solution and reference design ready for: IPCamera, home camera, web camera …

BENEFITS

- Cost-effective – world well known cost-effective video processor, endorsed by many famous brands.
- Professional video quality – starlight vision, low bitrate live video stream.
- Lite-AI capability – lite neural network algorithms powered by SIMD128 ISA.
- Low power consumption – 22nm process, long term on-chip consumption optimization.

APPLICATION/SOLUTIONS

Non Battery-Powered devices like:

- Consumer/home/IoT camera – All IPcamera based products, smart phone watch
- Surveillance camera – security cameras, IPC&NVR
- Web camera – Usb cameras, video conferencing cameras
- Car recorder – single lens vehicle driving video recorders

ORDERING INFORMATION

SAMPLES

Order Part #	Package
T31N	QFN88

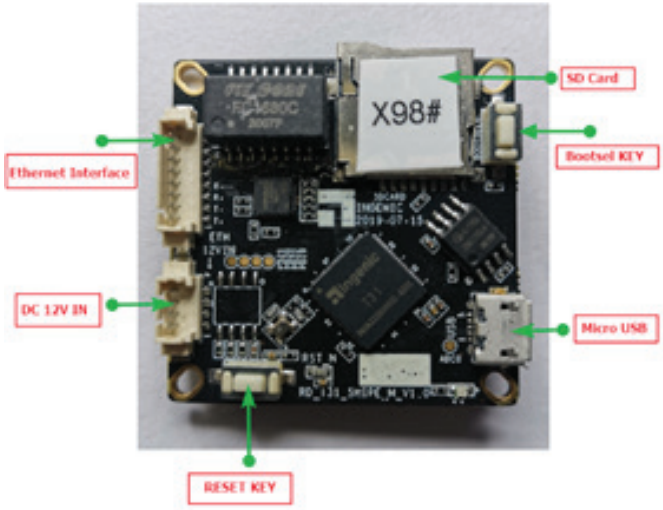
EVALUATION BOARD

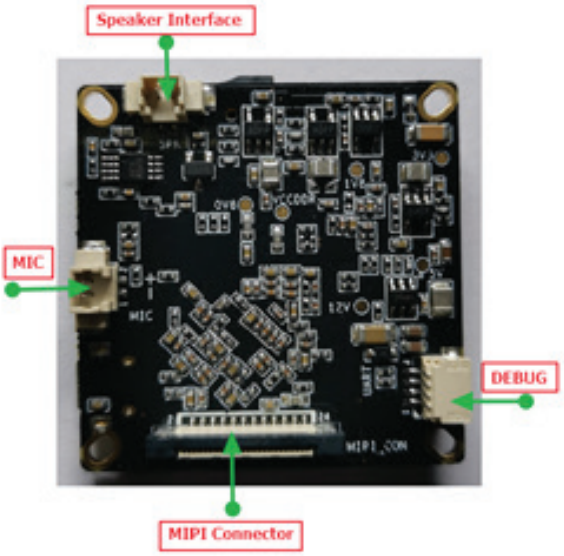
Part Number
SNIPE-EB

CHIP IMAGE

Please reference to datasheet.

EVALUATION BOARD

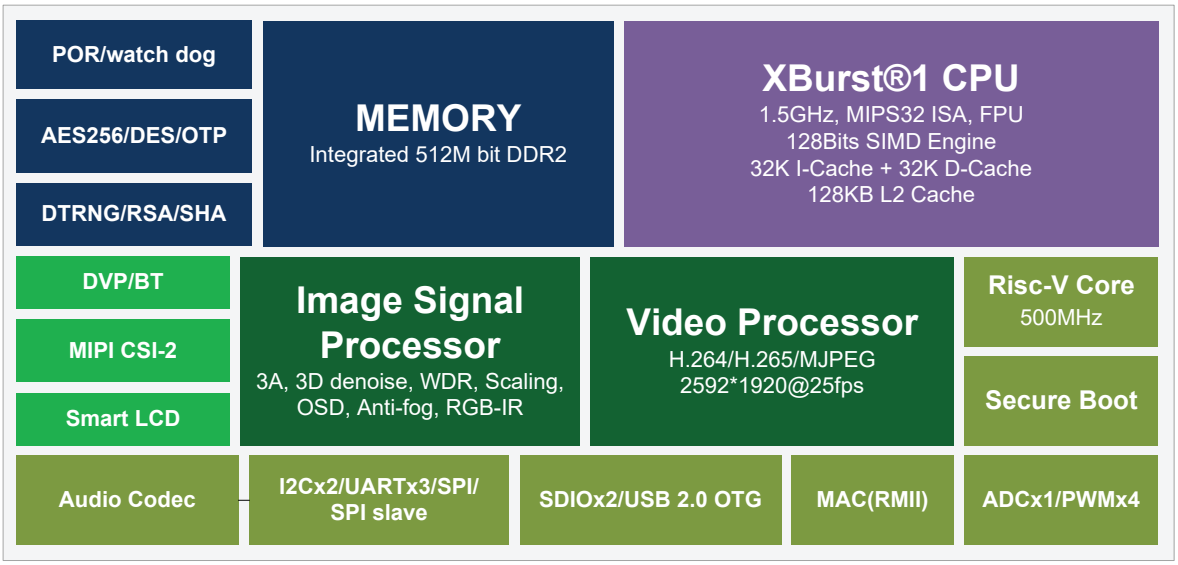




SYSTEM DIAGRAM

Please see hardware reference design.

BLOCK DIAGRAM



Questions or feedback may be sent to:
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