

# Red Mamba Neo

## IP video streaming platform



Red Mamba Neo IP video encoding module has been specifically designed for compact embedded vision systems.

Combined with a iMX Quad core Cortex A9 processor, this tiny and powerful module offers a **h.264 hardware encoder** and enables low latency **video stream over Ethernet or WIFI**.

## FEATURES

- o i.MX Quad Core ARM Cortex™-A9
- o Low latency h.264 encoding
- o Video streaming over IP & Wi-Fi supporting several protocols: RTSP, RTP multicast, RTP MPEG2TS
- o Video inputs: LVDS, MIPI, add-on connector
- o Video output: HDMI 1.4 - up to 1080p60
- o Video format detection
- o Communication: RS485 or UART TTL
- o Record and snapshot available
- o Storage: local and micro-SD card slot
- o Embedded Linux
- o Setup and update via custom Website
- o ONVIF Profile S compliant

### o Easy configuration

**Red Mamba Neo** is a powerful embedded **video encoder** with its own custom website. It allows you to enable the features you need and setup all the system.

The possibility to **update by distance** the board via Ethernet is a big advantage for that evolving system.

### o Customizable platform

**Red Mamba Neo** offers a ready-to-use embedded solution that can be **easily integrated** to your new or existing system.

It is a scalable module that features a **board-to-board connector** dedicated to host an additional PCB to **fit custom specifications** (video inputs/outputs, sensors, RTC, audio, POE...)

### o Flexible & cost effective solution

Based on an embedded Linux OS, **Red Mamba Neo** offers **flexibility** to developers by using a solution which comes with a complete set of tools & libraries (**SDK**).

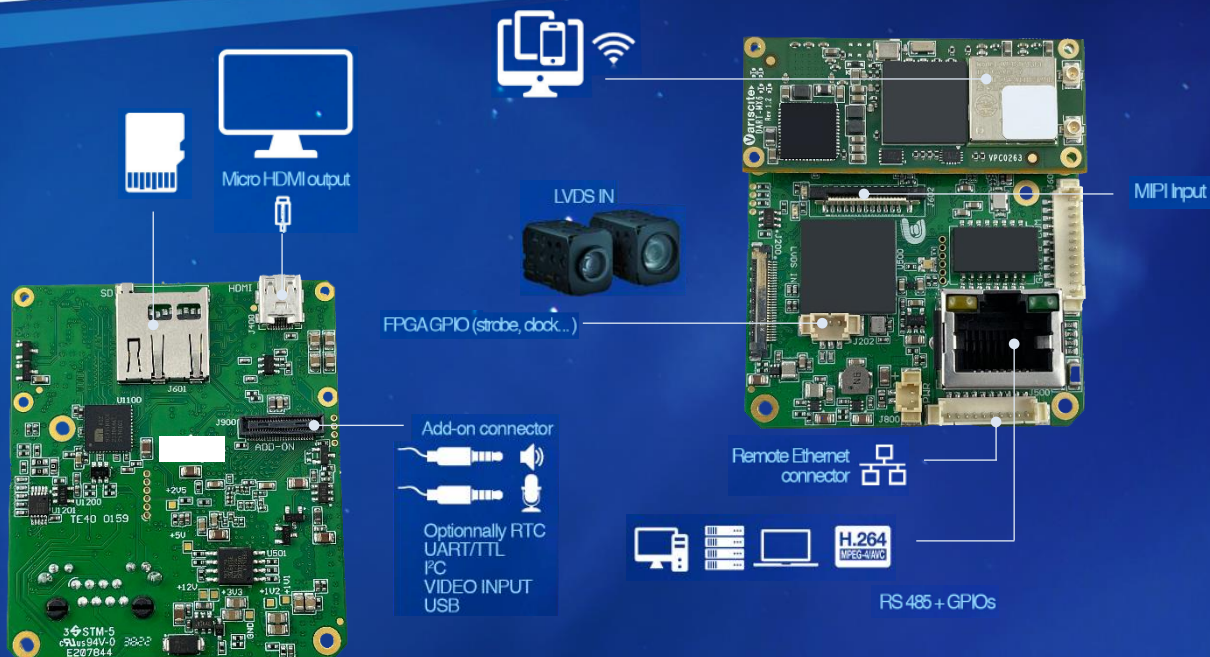
This pocket size streaming platform is ideal for a wide range of applications.

## TARGET APPLICATIONS



Medical / Video conferencing / Transport & surveillance / Automatic Number Plate recognition (ANPR)  
Unmanned Aerial Vehicles (UAVs) / Remotely Operated Underwater Vehicles (ROVs)  
Inspection / Industrial automation / Robotics / Low vision

# Onboard Connectors



## Red Mamba Neo – IP Video streaming platform

Product code

### Multimedia

Video encoding	h.264 Baseline Profile – up to 1080p30
Video decoding	h.264 Baseline, Main, High Profile – Up to 1080p60
Streaming	RTSP stream (128 to 20000 Kbit/s) – RTP multicast – RTP MPEG2TS

### Video Input

LVDS	x1
MIPI	x1
ADD-ON	x1

### Video Output

HDMI	x1 – 1.4a (1920x1080)
Ethernet	10/100 Mbit/s Ethernet (Remote RJ45)
WI-FI	802.11 a/b/g/n + MIMO

### Connectivity

RS485	up to 1 – VISCA/PELCO protocol
UART	up to 2
GPIO's	up to 8
SD Card slot	x1

### CPU

CPU Name/type	NXP/ Freescale i.MX6 Quad core ARM® CortexTM-A9 Core
CPU clock (Max) Memory	up to 800MHz

### Memory

LPDDR2 RAM	up to 1GB
eMMC NAND Flash (8bit) OS Support	up to 64GB eMMC storage

### OS Support

Linux	Yocto, Linux
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### Electronic specifications

Supply voltage	6 to 12VDC
Digital I/O voltage	3.3V

### Environmental specifications

Operating temperature range	0 °C to 60 °C
Storage temperature range	-20 °C to 60 °C

### Mechanical specifications

Dimensions (W x L x H)	50 mm x 57 mm x 15 mm (Remote RJ45 connector)
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