

# Red Mamba



## IP video streaming platform



- *Red Mamba* IP video encoding board has been specifically designed for compact embedded vision systems.

Used in conjunction with a iMX6 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

- i.MX6 Quad Core ARM Cortex™-A9
- Low latency h.264 encoding / decoding
- Video streaming over IP & Wi-Fi
- Video inputs : LVDS, MIPI, add-on connector
- Video output : HDMI 1.4 - up to 1080p60
- ONVIF Profile S compliant
- TTL, RS485
- Local storage: Micro SD Card
- Compact, low power consumption
- Embedded Linux
- Setup/update via custom Website

### ○ Main functionalities

*Red Mamba* is a powerful embedded vision module that integrates h.264 hardware encoder and enables video stream over Ethernet & Wi-Fi.

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

### ○ Customizable Platform

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

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

### ○ Flexible & cost effective solution

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

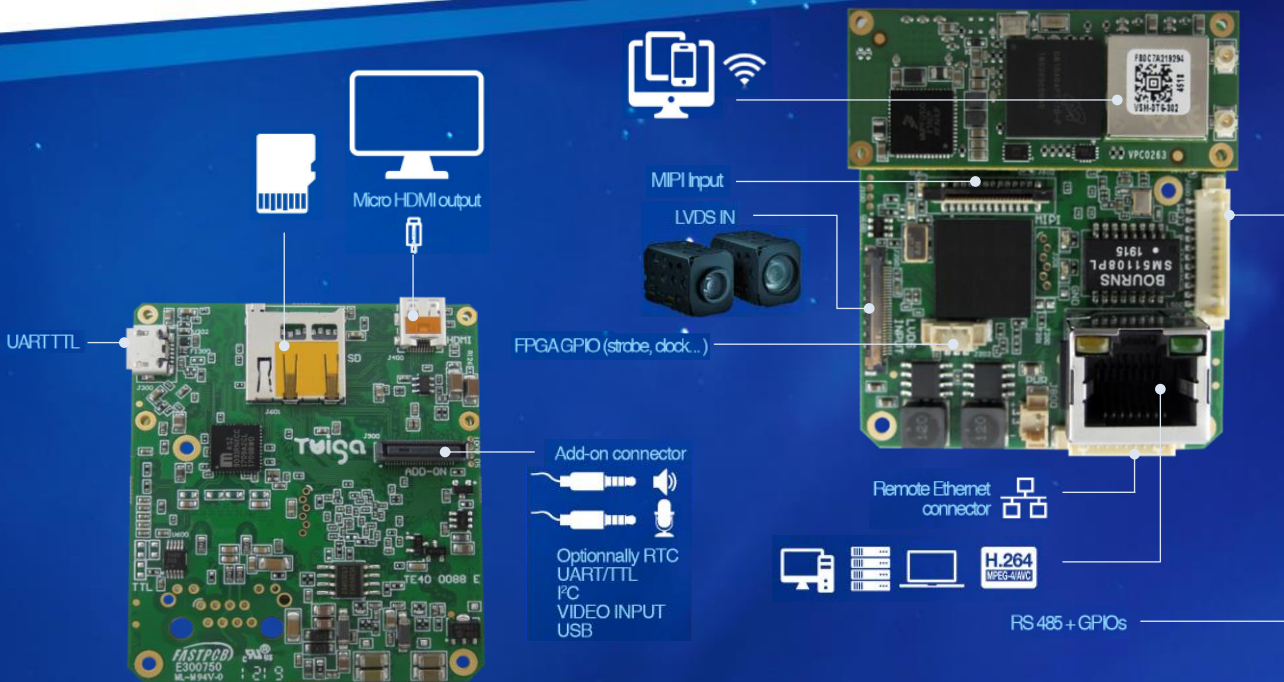
This smart video platform is ideal for customer to easily implement their video processing algorithms and develop their customized software application.

## 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 – IP Video streaming platform

Product code TV80 0060

### Multimedia

Video encoding h.264 Baseline Profile, MJPEG, MPEG4 – up to 1080p30

Video decoding h.264 Baseline, Main, High Profile – Up to 1080p60

Streaming RTSP stream (128 to 20000 Kbit/s) – RTSP Low FPS – 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

I2C via add-on connector

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

### 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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