

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
- Embedded Linux
- Low latency h.264 encoding / decoding
- Video streaming over IP & Wi-Fi
- LVDS, MIPI camera inputs
- HDMI 1.4 output -up to 1080p60
- ONVIF protocol
- TTL*, RS485
- Local storage: Micro SD Card
- Compact, low power consumption

*Need to implement a “transparent Bridge”

○ 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).

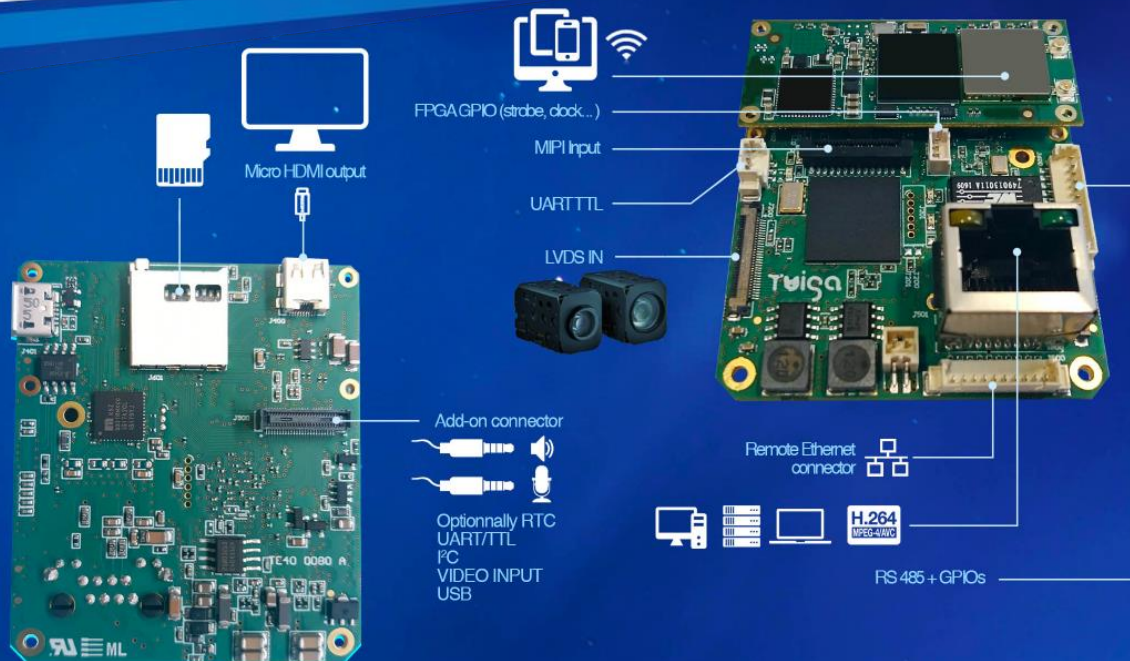
This smart video platform is ideal for customer to easily implement their video processing algorithms and develop their customized software application.

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) – RTP multicast

Video Input

LVDS x1

MIPI 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 – 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® Cortex™-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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