

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
- 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).

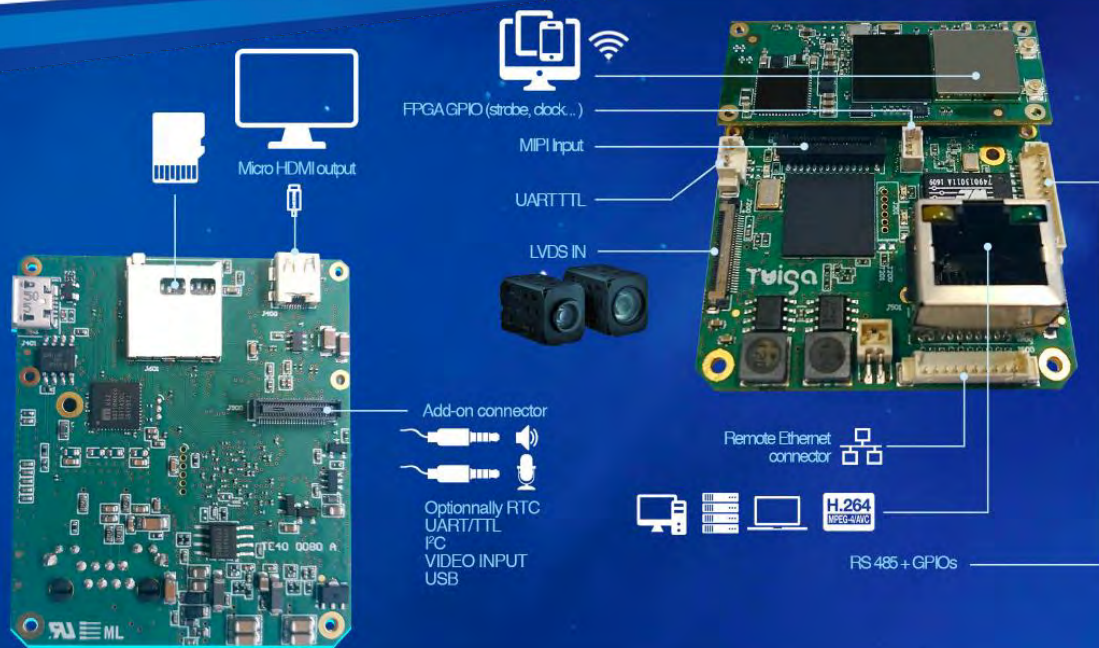
This smart video platform is ideal for customer to easily implement their video processing algorithms and develop their customized software application.

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
PC	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)