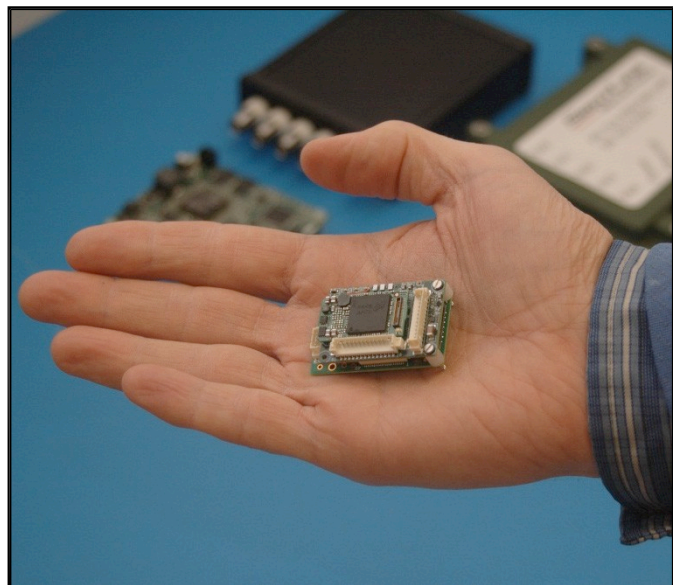# Micro Video Processing Platform

The **SPI MVP/9959** is a <u>very small</u>, low power, single-channel on-board video processor for unmanned airborne or ground vehicles in ISR applications.

The supported software library provides a powerful suite of video processing functions that are key to a wide variety of ISR applications:

- **Micro Gimbals**
- **Fixed Cameras + Moving Vehicles**
- **Perimeter Security**
- **Convoy Following**

This product is designed to add advanced capabilities in even the smallest unmanned vehicles and operates on video right at the source which is key for object tracking performance and video quality.
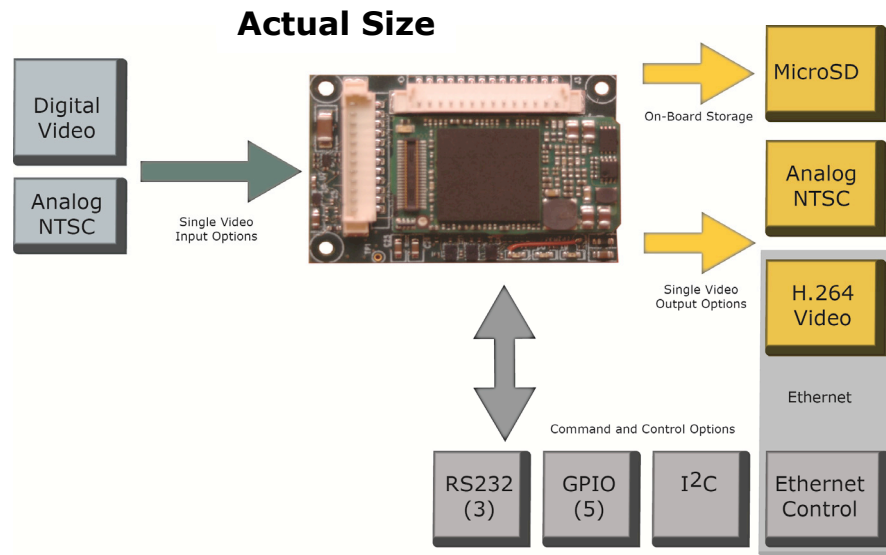

Hardware Overview:

- **Small Size: 27 x 38 mm, < 8 grams**
- **Single SD NTSC or SD/HD Digital Input**
- **Analog NTSC Video Output**
- **Digital Compressed Ethernet Video Output**
- **RS-232 or Ethernet Command and Control**
- **On-board Video Recording to MicroSD**
- **High-Performance TI DSP ® Technology**
- **Direct interface to FLIR Tau ® IR camera**
- **Ribbon Cable interface to Sony FCB EH6300 camera**

Video Processing Functions:

- **Video Stabilization**
- **Moving Target Detection**
- **Object Tracking**
- **Video Enhancement**
- **H.264 / M-JPEG**

Actual Size

Adaptor Board Options

A number of adaptor boards are available to facilitate providing addition of SPI MVP/9959 stabilization and video enhancement for fixed camera applications.

Thermal Camera FLIR Interface	• Interface board which allows direct connection to Thermal cameras.
Visual Camera EO Interface	• Interface board which allows single ribbon cable connection to Visual EO camera.
Analog Interface	• Provides laboratory / development interface with standard DB-9, RJ45 and RCA connectors.

Specifications

Video Input *	• Single NTSC analog • Digital Camera	Control Interfaces *	• 10/100 BASE-T Ethernet PHY • RS-232 (3 channels) • I^{2}C • GPIO (x 5)
Video Output *	• SD analog output • Compressed Ethernet • H.264 / M-JPEG		
Storage	Any sized MicroSD	Input Voltage	5 V DC
Operating Temperature	- 40° to + 85°C	Power Consumption	3 W (max)
Size	1.04 x 1.48 inches (26.5 x 37.7 mm)	Weight	0.27 ounces (7.6 grams)

* *Configuration dependent interface option. Contact us at sales@x20.org for details.*