8-Megapixel OEM Smart Camera Module with Removable Storage
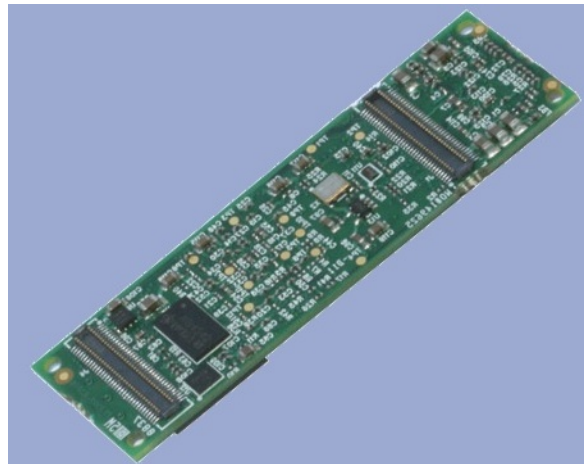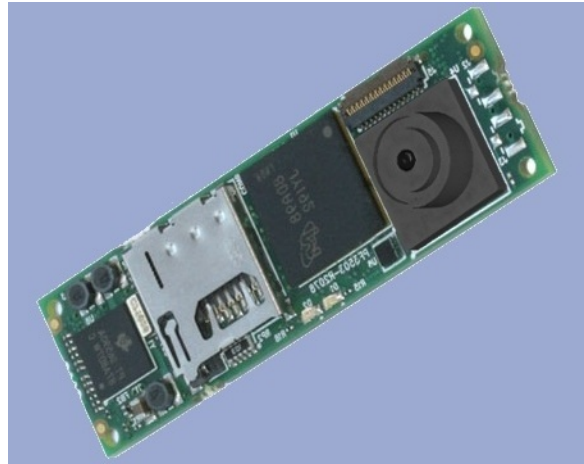
(Preliminary)

This OEM module integrates an 8 MP CMOS camera, a 600 MHz ARM core processor, a TI C64 DSP core, and removable MicroSD storage into a rugged, compact, lightweight form factor. Flexible I/O and interface options facilitate integration into a variety of applications, including:

- Machine vision and image analysis in tight, space-constrained locations.

- Imaging, compression, and storage aboard small airframes and UAVs with limited weight and power budgets.

- Autonomous and robotic platforms.

The module's open-source software architecture and embedded Linux operating system simplify customizations and enhancements, both for embedded applications, and for kernel and peripheral driver components as well.

Engineering assistance is available to support imaging-related applications, including both the integration of preexisting machine vision and image processing libraries, and the design and implementation of more specialized algorithms.

Commercial and OEM inquiries welcome.

Features and Specifications

- 600 MHz OMAP 3530 processor

- ARM Cortex-A8 CPU + C64x DSP core

- Up to 1200 Dhrystone MIPS

- MicroSD removable storage

- 256MB RAM; 256MB Flash

- Flexible I/O: I2C, PWM, A/D, UART, SPI

- USB OTG + USB Host

- Optional 802.11(g) and Bluetooth

- Sophisticated integral power management

- Camera resolution: 3264×2448 (8 MP)

- Color image sensor, Bayer-pattern mosaic

- Interchangeable lenses; multiple FL options

- 10 FPS at full resolution; 60 FPS at VGA

- Embedded Linux 2.6.x

- Application support available for embedded image processing and machine vision

- Dimensions: 17 mm × 58 mm × 4.2 mm

- Weight: 13 grams