Video Image Processing Unit

PRODUCT DESCRIPTION

The Video Image Processing Unit is a standalone system which performs algorithm processing. The unit is architected as a camera back solution for remote deployment and monitoring. It is capable of accepting multiple video inputs for processing. The unit features two FPGAs for implementation of custom video processing algorithms.

KEY FEATURES

- Turnkey product with hardware, RTL, embedded & host-PC software
- Wi-Fi transceiver supports upto 300m range
- Host PC GUI based control for
  - Input selection for multi-channel video inputs
  - Algorithms selection
- Multiple selectable algorithms for
  - Pre processing
  - Target localization
  - Target detection and classification
  - Target tracking
  - Image restoration
- Health monitoring for temperature and voltage

SPECIFICATIONS

FPGA / Processor
- Xilinx Virtex-6 LX240T FPGA
- Xilinx Virtex-5 FX70T FPGA
- Onboard hardware video encoders and decoders

Interfaces
- Video input interfaces
  - Three RCA connector
- Streaming output over
  - Wi-Fi 802.11n
  - Gigabit Ethernet
- Video output
  - Two RCA connector
- JTAG interface
- RS 232 interfaces for
  - PTZ camera control
  - Board debug
Software / IP
- Linux OS

Additional Information
- Real Time Counter (RTC)
- Four 2 Gb DDR2 memory (32-bit)
- Six 16 Mb SRAMs (16-bit)

MECHANICAL
- Custom form factor air cooled cards with enclosure

POWER CONSUMPTION
- The unit consumes 40W
- Input voltage is 12V

PART NUMBER(S)

| CB10M0 | Video Image Processing Unit |