

VPS-3100

Intel® N3160 Processor, 2-port GigE Vision Platform with Lighting Control



Features

- Intel® Celeron® Quad Core Processor 1.6 GHz
- Compact form factor, fanless vision system
- Built-in PWM lighting control
- Trigger-over-Ethernet support
- GigE Vision offload Engine (GoE)
- GenICam compliant
- IP40 rating

Introduction

Advantech's VPS-3100 is a rugged and compact embedded vision system equipped with an Intel® Celeron® N3160 Quad Core processor. The GoE feature offloads GigE Vision protocols to a dedicated coprocessor for image reconstruction. The system has two independent Gigabit Ethernet ports for multiple GigE Vision device connections with data transfer rates up to 2.0 Gb/s, offering greatly enhanced computing power and connectivity with a small footprint.

The VPS-3100 supports Power over Ethernet (PoE), which combines the power and signal supply into a single cable and thus facilitates multicamera simultaneous acquisition. With the VPS-3100, the number of cables is significantly reduced, system installation is simplified, and the total cost of ownership is notably lowered. The VPS-3100's powerful and flexible I/O configuration and compact size make it the perfect vision system for machine vision applications.

Specifications

▪ Processor	Intel® Celeron® N3160 Quad Core
▪ Frequency	1.6GHz
▪ Memory	4-GB DDR3L
▪ Storage	128-GB mSATA SSD
▪ Security	1-Kbit EEPROM
▪ Camera Interface	2-port GigE
▪ Camera Power Output	15.4 W per port
▪ PoE Standard	IEEE 802.3af
▪ Digital I/O	2 x isolated DI, 4 x isolated DO
▪ Digital I/O range	0-30 V, optically isolated
▪ DI Support	Wet contact (0-30 V) and dry contact
▪ DO Support	Source current type (11-35 V _{DC}) 0.7 A per channel
▪ Digital I/O Max. Frequency	1 KHz
▪ Strobe Control	2-channel
▪ Strobe Control, Output Current	0-500 mA per channel
▪ Dimming Resolution	128
▪ Strobe Out Frequency	Max. 100 KHz
▪ Ethernet	10/100/1000 Mbps
▪ Display	1 x VGA, 1 x DP++ (HDMI support)
▪ USB	4 x USB 3.0
▪ Serial Ports	1 x RS-232/422/485 (BIOS setting) 1 x RS-232
▪ Power Requirement	Input 24 V
▪ Operating Temperature	0-50 °C
▪ Operating Humidity	~95% @ 40 °C (noncondensing)
▪ Dimensions (W x H x D)	137 x 58 x 118 mm (5.39" x 2.28" x 4.65")
▪ Weight	1100 g (2.425lbs)
▪ Operating System	Windows 7/10, -32/64 bit

Ordering Information

- **VPS-3100I-10A** VPS-3100 system

Storage

- **96FD-M064-PLG2** mSATA, A19nm, 64GB, SATA 6GB/s, 0 ~ 70 °C
- **96FD-M128-PLG2** mSATA, A19nm, 128GB, SATA 6GB/s, 0 ~ 70 °C

Quartz Industrial Camera, Monochrome

- **QCAM-GM3800-007DE** 3856 x 2764 7 fps
- **QCAM-GM3800-010CE** 3856 x 2764 10 fps
- **QCAM-GM3000-018DE** 3072 x 2048 18 fps
- **QCAM-GM2500-020DE** 2592 x 2048 20 fps
- **QCAM-GM2500-014DE** 2592 x 1944 14 fps
- **QCAM-GM1920-040CE** 1920 x 1200 42 fps
- **QCAM-GM1600-060DE** 1600 x 1200 60 fps
- **QCAM-GM1300-060DE** 1280 x 1024 60 fps
- **QCAM-GM1300-030CE** 1296 x 966 30 fps
- **QCAM-GM1280-075DE** 1280 x 1024 75 fps
- **QCAM-GM0640-120DE** 640 x 480 120 fps

Quartz Industrial Camera, Color

- **QCAM-GC4600-007CE** 4608 x 3288 7 fps
- **QCAM-GC3000-018DE** 3072 x 2048 18 fps
- **QCAM-GC2500-014CE** 2592 x 1944 14 fps
- **QCAM-GC1300-060CE** 1280 x 1024 60 fps
- **QCAM-GC0640-120CE** 640 x 480 120 fps

Vision Software

- **EZB-EEV-10ID** EzBuilder Identification Software
- **EZB-EEV-10AL** EzBuilder Alignment Software
- **EZB-EEV-10IN** EzBuilder Inspection Software
- **EZB-EEV-10FU** EzBuilder Full Functions Software