

**EN50155 Intel® 6th Gen Skylake-U Processor Industrial Network System, 802.3 at/af PoE + port, Serial port, SATA, mSATA, mini-PCIe slot, USB, GPS, G sensor, AMT, dual power inputs, bypass**

# COMING SOON

## Features

- Compliant with EN 50121-4 and EN 50155 specifications
- Up to 4 802.3 af PoE+ GbE ports
- Wide temperature operating range -40 to 70°C
- Strong anti-vibration design for transportation/in-vehicle application
- Isolated redundant power input supply
- Flexible communication modules support



## Description

The PL-80970 series are fanless rugged designed Wall-mount/VESA-mount type 802.3 at/af PoE/PoE+ hardware platforms. Designed specifically for industrial automation, transportation and potentially PoE/PoE+ demand environments. The PL-80970 series feature isolated protection design on Serial, Ethernet, power input and DI/DO ports to provide support in harsh industrial environments. The system provides a power input range from 9 to 48 VDC that enables you to use the same type of power source at different system voltages around the network. In addition, the power module supports dual isolated redundant functionality to increase the reliability of your communications systems and to save on cabling costs.

The PL-80970 series consists of two models with different CPU performances and AMT demands. The PL-8097A is based on the Intel® 6th Skylake-U i3-6100U SoC and PL-8097B is based on Intel® 6th Skylake-U i7-6600U SoC. The PL-80970 series provides up to four 802.3 at/af PoE+ GbE ports. Each PoE+ port is capable of providing 30W power at maximum; two more GbE ports with one pair bypass function for network redundancy and crash prevention. The system provides high flexibility in a variety of communication modes via four with easy accessibility mini-PCIe slots and two of mini-PCIe slots dedicates to 3G/LTE module purposes. SIM card slots with lockable covers are featured on the chassis. On-board GPS and G sensors increase system stability for transportation and in-vehicle applications.

Additionally, PL-80970 offers remote management function through Intel® Active Management Technology (AMT). This is a hardware-based technology built into system with Intel® vPro technology. Models with an extended operating temperature range of -40 to 70°C are available. The PL-80970 series are compliant with a number of industrial standards such as UL-508, EN50155, EN50121-3-2, Emark and MIL-STD 810G. These standards cover operating temperature, power input voltage, surge, ESD and vibration, making the system suitable for a variety of industrial environments.

### Processor System

|             |                                |
|-------------|--------------------------------|
| <b>CPU</b>  | Intel® 6th Skylake-U Processor |
| <b>BIOS</b> | AMI® UEFI BIOS                 |

### Memory

|                   |  |
|-------------------|--|
| <b>Technology</b> | Dual-channel, Non-ECC, un-buffered, DDR4 2133 MHz memory |
| <b>Capacity</b>   | 2 x SO-DIMM sockets, up to 32GB                          |

### Ethernet

|                     |  |
|---------------------|--|
| <b>GbE Ethernet</b> | <ul style="list-style-type: none"> <li>• 4 x 802.3 at/af PoE(15.4W) /PoE+ (30W) RJ45 GbE ports, Intel I210-IT</li> <li>• 2 x RJ45 GbE ports, Intel® I210-IT with one pair bypass</li> <li>• 1 x RJ45 GbE port, Intel® I218-LM for AMT function (PL-80970-D26)</li> </ul> |
| <b>LAN Bypass</b>   | One pair bypass  |

### Storage

|              |                                     |
|--------------|-------------------------------------|
| <b>SATA</b>  | 2 x Removable 2.5" SATA HDD/SSD bay |
| <b>mSATA</b> | 1 x mSATA slot                      |

### I/O

|                      |   |
|----------------------|---|
| <b>USB</b>           | 2 x USB 2.0 ports<br>2 x USB 3.0 ports            |
| <b>Serial</b>        | 4 x RS-232/422/485 DB9 ports                      |
| <b>GPIO</b>          | 4 x DI (Digital Input)<br>4 x DO (Digital Output) |
| <b>SIM card slot</b> | 2 x accessible SIM card slots                     |

### Expansion

|                   |                     |
|-------------------|---------------------|
| <b>PCI-E slot</b> | 4 x mini-PCIe slots |
|-------------------|---------------------|

### Power Supply

|             |                                    |
|-------------|------------------------------------|
| <b>Watt</b> | 24VDC/240W Power supply (Optional) |
|-------------|------------------------------------|

\* Note: Specifications subject to change without prior notice

**Mechanical and Environment**

|                               |  |
|-------------------------------|--|
| <b>Form Factor</b>            | Wallmount & VESA-mount   |
| <b>LED</b>                    | 1 x Power LED (Green)<br>1 x Status LED (Green/Red)<br>2 x HDD LED (Yellow)<br>1 x Bypass LED (Red)<br>4 x PoE LED (Green) |
| <b>Dimensions (W x D x H)</b> | 240mm (W) x 180mm (D) x 80mm (H)<br>(9.45"W x 7.09" D x 3.15" H)   |
| <b>Operating Temperature</b>  | -40 ~ 70°C ( -40 ~ 158°F )   |
| <b>Storage Temperature</b>    | -40 ~ 80°C (-40 ~ 176°F)   |
| <b>Humidity</b>               | 5 ~ 95% relative humidity, non-operating, non-condensing   |
| <b>Weight</b>                 | 1pc/Box, 4.5kgs  |
| <b>Certification</b>          | CE/FCC   |

**Packing List**

- One PL-80970 unit
- One CD (Manual, Quick installation guide, Utility driver)

**Ordering Information**

| Standard        |   |
|-----------------|---|
| <b>PL-8097A</b> | Fanless System with Intel® i3-6100U, DDR4, 2 RJ45 GbE, 4 PoE+ RJ45 GbE ports, 4 Serial ports, SATA, mSATA, mini-PCIe, USB, GPS, G sensor, dual power inputs, bypass |
| <b>PL-8097B</b> | Fanless System with Intel® i7-6600U, DDR4, 2 RJ45 GbE, 4 PoE+ RJ45 GbE ports, 4 Serial ports, SATA, mSATA, mini-PCIe, USB, GPS, G sensor, dual power inputs, bypass |

| Optional  |   |
|-----------|---|
| <b>DK</b> | Cable development kit<br>CB-CO5204-00 Cross over cable, 2M<br>CB-DB9200-01 NULL modem cable, 2M<br>CB-EC5200-00 Ethernet cat. 5 cable, 2M<br>CB-IVGA01-00 VGA cable, 20CM<br>3G/LTE mini-PCIe SIM card module<br>CAN Bus mini-PCIe module dual ports<br><br>Optional power supply<br>24VDC/240W output power supply |

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