

Quick Installation Guide

Introduction

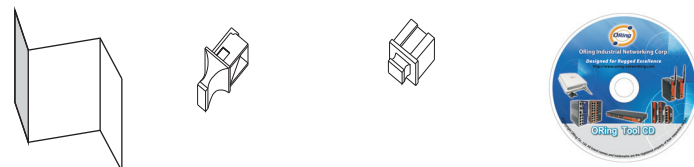
IGPCS-E131GP is a PCI-Express unmanaged Gigabit PoE Ethernet switch card with P.S.E. function. IGPCS-E131GP supports 3x10/100/1000Base-T(X) IEEE 802.3at P.S.E. (Power Sourcing Equipment) and 1x100/1000Base-X SFP ports. P.S.E. is a device (switch or hub for instance) that will provide power in a PoE port. IGPCS-E131GP could be installed on any IPC motherboard with PCIe socket to make the IPC/embedded system able to communication with other Ethernet devices. Therefore, IGPCS-E131GP is the best solution to IPC/embedded system to feature Ethernet network.

Features

- Provide 3x10/100/1000Base-T(X) PoE (P.S.E.) ports
- Supports IEEE 802.3at compliant PoE and total power budget is 65Watts with maximum 30Watts per port
- PoE power sourced from 12VDC input from ATX power
- Each LAN port supports both PoE and Non-PoE connections (Auto Detect & Classification)
- Supports PCIe x1 bus and compatible x4, x8 and x16 PCIe slots
- Compliant with PCIe Rev.1.1 Interface
- Supports 100Base-FX or 1000Base-X SFP port by DIP-switch
- Supports 10K Bytes Jumbo Frame
- Support auto-negotiation and auto-MDI/MDI-X
- Support store and forward transmission
- Support flow control

Accessory

- ① QIG
- ② Dust Cover (RJ-45)
- ③ Dust Cover (SFP)
- ④ CD



Packing list

| Model name | Model Description | Accessory |
|--------------|---|----------------------------|
| IGPCS-E131GP | Industrial 4-port PCIe unmanaged Gigabit PoE Ethernet switch card with 3x10/100/1000Base-T(X) P.S.E. and 1x100/1000Base-X, SFP socket | ① X 1, ② X 3, ③ X 1, ④ X 1 |

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IGPCS-E131GP

Specifications

| ORing Switch Model | IGPCS-E131GP |
|--|--|
| Physical Ports | |
| 10/100/1000Base-T(X) Ports in RJ45 With P.S.E. | 3 |
| 100/1000Base-X SFP port | 1 On board S1 dip-switch for SFP speed setting (ON : 100Base-FX, OFF : 1000Base-X) |
| Technology | |
| Ethernet Standards | IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-TX and 100Base-FX, IEEE 802.3ab for 1000Base-T, IEEE 802.3ab for 1000Base-X, IEEE 802.3x for Flow control, IEEE 802.3af PoE specification (total power budget is 65Watts with maximum 30Watts per port) |
| MAC Table | 8K MAC addresses |
| Processing | Store-and-Forward |
| LED Indicators | |
| Power Indicator | Green: LED x 1 |
| PoE power indicator | Green: PoE power LED x 1 |
| 100/1000Base-X SFP port indicator | Green for port Link/Act. |
| 10/100/1000Base-T(X) RJ45 Port Indicator and PoE Indicator | Green for port Link/Act. Green for PoE power injected |
| Power | |
| Input Power | PCIe bus-powered(for switch card system) |
| PoE Input Power | 12VDC of ATX power |
| Power consumption(Typ.) | 4.2 Watts (power device not included) |
| PoE Output Power | IEEE802.3at/af compliant, up to 30 Watts per port, totally 65 Watts maximum |
| Overload current protection | Present |
| Physical Characteristic | |
| Dimension (W x D x H) | 21.3 (W) x 178 (D) x 121 (H)mm (0.83 x 7 x 4.76 inch) |
| Weight (g) | 160g |
| Environmental | |
| Storage Temperature | -40 to 85°C (-40 to 185°F) |
| Operating Temperature | -10 to 60°C (14 to 140°F) |
| Operating Humidity | 5% to 95% Non-condensing |
| Regulatory Approvals | |
| EMI | FCC Part 15, CISPR (EN55022) class A |
| EMS | EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11 |
| Shock | IEC60068-2-27 |
| Free Fall | IEC60068-2-32 |
| Vibration | IEC60068-2-6 |
| Operating System Supports | |
| Microsoft System | DOS / Win98 / WinMe / WinXP / Win2000 / WinServer2003 / Vista / WinServer 2008 / Win7 / Win8 |
| Unix (Linux) | Linux for Kernel 3.x / 2.6.x / 2.4.x, FreeBSD for 7.x / 8.0, SCO OpenServer for 6 / UnixWare 7.1.x |
| Novell | Novell client for DOS (ODI driver) / Novell server driver (Support OS 5.x and 6.x) |
| Others | MacOS 10.4 / 10.5 / 10.6 / 10.7 |
| Warranty | 5 years |

PoE Pin Definition

10/100Base-T(X) P.S.E. RJ-45 port

| RJ45 Pin Definition | |
|---------------------|----------------------------|
| Pin No. | Description |
| # 1 | TD+ with PoE Power input + |
| # 2 | TD- with PoE Power input + |
| # 3 | RD+ with PoE Power input - |
| # 6 | RD- with PoE Power input - |

1000Base-T P.S.E. RJ-45 port

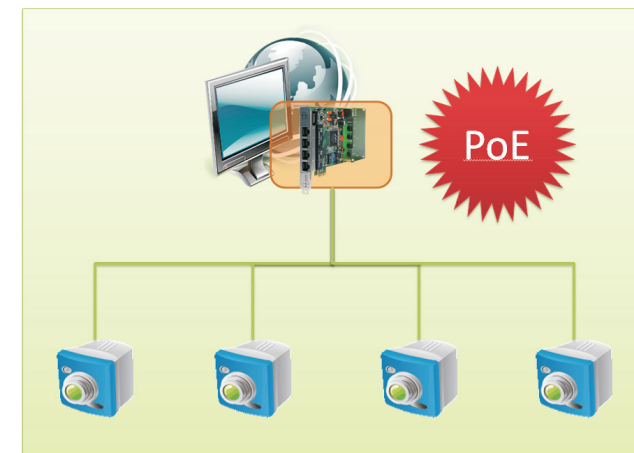
| RJ45 Pin Definition | |
|---------------------|-------------------------------|
| Pin No. | Description |
| # 1 | BI_DA+ with PoE Power input + |
| # 2 | BI_DA- with PoE Power input + |
| # 3 | BI_DB+ with PoE Power input - |
| # 4 | BI_DC+ |
| # 5 | BI_DC- |
| # 6 | BI_DB- with PoE Power input - |
| # 7 | BI_DD+ |
| # 8 | BI_DD- |

Industrial Unmanaged Gigabit PoE Switch Card

Practical Operation

IGPCS-E131GP can be used in connecting several PoE P.D. Ethernet devices like IP-Camera or other Ethernet devices.

Network connection



Front Panel

