IGPCS-E140

Industrial 4-port PCIe unmanaged Gigabit PoE Ethernet switch card with 4x10/100/1000Base-T(X) P.S.E.

Features

- Provide 4x10/100/1000Base-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 of 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 10K Bytes Jumbo Frame
- Support auto-negotiation and auto-MDI/MDI-X
- Support store and forward transmission
- Support flow control



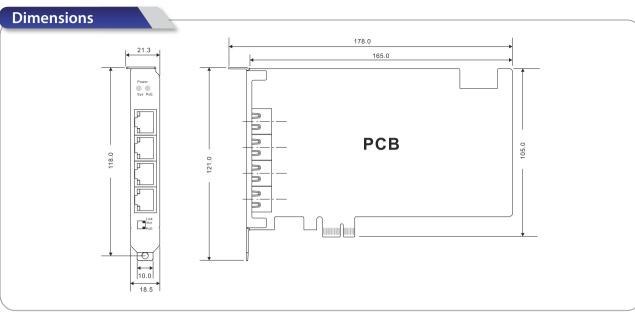
Introduction

IGPCS-E140 is a PCI-Express unmanaged Gigabit PoE Ethernet switch card with P.S.E. function, IGPCS-E140 supports 4x10/100/1000Base-T(X) P.S.E. (Power Sourcing Equipment) ports. P.S.E. is a device (switch or hub for instance) that will provide power in a PoE port. IGPCS-E140 could be installed on any IPC motherboard with PCI-E socket to make the IPC/embedded system able to communication with other Ethernet devices. Therefore, IGPCS-E140 is the best solution to IPC/embedded system to feature Ethernet network.

Practical Operation

IGPCS-E140 can be used in connecting several PoE P.D. Ethernet devices like IP-Camera or other Ethernet devices.





(Unit=mm)

PoE Pin Definition

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

| RJ-45 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

| | RJ-45 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- | | |

Specifications

| ORing Switch Model | IGPCS-E140 |
|---|--|
| Physical Ports | |
| 10/100/1000Base-T(X) Ports in RJ45 With P.S.E. | 4 |
| Technology | |
| Ethernet Standards | IEEE 802.3 for 10Base–T IEEE 802.3u for 100Base–TX IEEE 802.3ab for 1000Base–T IEEE 802.3x for Flow control IEEE 802.3at PoE specification (total power budget is 65Watts with maximum 30Watts per port) |
| MAC Table | 8K MAC addresses |
| Priority Queues | 4 |
| Processing | Store-and-Forward |

| LED Indicators | | | |
|--|--|--|--|
| Power Indicator | Green : Power LED x 1 | | |
| PoE Power Indicator | Green : PoE power LED x 1 | | |
| 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) / 12VDC of ATX power(for PoE) | | |
| 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 Characteristics | | | |
| Dimensions (W x D x H) | 21.3 (W) x 178 (D) x 121 (H)mm | | |
| Weight (g) | 150 g | | |
| Environmental | | | |
| Operating Temperature | -40 to 85°C (-14 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 | 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 | | |

Ordering Information

IGPCS-E1 A B

| Code Definition | 10/100B/1000ase-T(X) Port Number with P.S.E. | Additional Port Number |
|-----------------|--|------------------------|
| Option | - 4: 4 ports | - 0: 0 port |

| Available Model | Model Name | Description |
|---|------------|--|
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| Packing List • IGPCS-E140 • Quick Installation Guide • ORing Tool CD | | |