



Introduction

The **PCIe-ENCODER300** contains a 3-axis encoder counter and each axis has a 32-bit, true counter with a Encoder Counting Rate of 4 MHz (Max.). The counting mode can be selected from three types: 1. Quadrant mode, 2. CW/CCW mode, and 3. PULSE/DIR mode. There are also three 3 kinds of counter reset modes provided: 1. Register Reset, 2. Index Reset, and 3. Hardware Reset. The "Index Reset" mode resets by using a C+/C- channel, which will reset the counter on each revolution. The "Hardware Reset" mode resets the counter using an external pin (HR1 ~ HR6). The HR1 ~ HR6 pins can also be used as digital input.

The **PCIe-ENCODER300** also provides 8-ch digital outputs. 2500 Vrms photo-couplers are used to isolate the digital I/O to prevent high voltages from affecting the system. Device drivers and function libraries for DOS, Windows 7 and Windows XP/2000 are provided.

Specifications

| Model | PCIe-ENCODER300 | |
|----------------|-----------------------------|--|
| General | | |
| No. of Axes | 3 | |
| Encoder Input | | |
| Mode | Quadrant, CW/CCW, PULSE/DIR | |
| Counting Rate | 4 MHz (Max.) | |
| Pulse Output | | |
| Counter Width | 32-bit | |
| Digital Input | | |
| Channels | 6 | |
| Isolation | 2500 Vrms optical isolation | |
| Digital Output | | |
| Channels | 8 | |
| Isolation | 2500 Vrms optical isolation | |
| PC Bus | | |
| Туре | PCI Express x 1 | |

| Model | PCIe-ENCODER300 | |
|-----------------------|--|--|
| Software | | |
| OS Support | Windows 7/10 32/64-bit Windows XP/2000 32-bit | |
| SDK | DOS 6.2, Linux 2.6 Labview 8.5 and above | |
| Hardware | | |
| Connector | 68-pin SCSI-II female connector | |
| Power | | |
| Consumption | 3.3 V @ 500 mA | |
| Mechanical | | |
| Dimensions (mm) | 120.4 mm x 90.8 mm | |
| Environment | | |
| Operating Temperature | 0 ~ +60°C | |
| Storage Temperature | -20 ~ +80°C | |
| Humidity | 5 ~ 85% RH, non-condensing | |

Ordering Information

| PCIe-ENCODER300 CR | PCI Express Bus, 3-axis Encoder Input Card (RoHS) |
|--------------------|---|
|--------------------|---|

Accessories

| DN-68 CR | Encoder Input Board for PISO-ENCODER300(U)/ PISO-ENCODER600(U) (RoHS) |
|-----------------|---|
| CA-SCSI15-H3 CR | SCSI-II 68-pin Cable, 1.5M (for high speed motion application) (RoHS) |
| CA-SCSI30-H3 CR | SCSI-II 68-pin Cable, 3M (for high speed motion application) (RoHS) |
| CA-SCSI50-H3 CR | SCSI-II 68-pin Cable, 5M (for high speed motion application) (RoHS) |