Introduction
PCI-1245/65/85 is a 4/6/8-axis universal PCI card designed for applications which need to control interpolation, synchronization among multiple axes, continuous contouring, and high speed triggering. PCI-1245/65/85 utilizes high-performance DSP and FPGA to calculate motion trajectories, synchronization timing control for multiple axes, and input/output handling to offer functionality, such as 4/6 axis linear interpolation, 2- axis circular interpolation, helical interpolation, T/S-curve acceleration/deceleration rates and so on. In addition, Advantech supplies a Common Motion API library, graphical utility, and user-friendly examples to help decrease programming works.

Specifications

### Pulse Type Motion Control
- **Motor Driver Support**
  - Pulse-type servo/stepping
- **Number of Axes**
  - PCI-1245: 4
  - PCI-1265: 6
  - PCI-1285: 8
- **Interpolation**
  - Linear: 2/3-axis circular interpolation, 3-axis helical interpolation
- **Max. Output Speed**
  - 5 Mpps
- **Step Count Range**
  - ±2, 147, 483, 646
- **Position Counter**
  - Range of command and actual position
- **Velocity Profiles**
  - T-Curve, S-Curve
- **Local I/O**
  - Machine Interfaces: LMT, LMT+, ORG, ALM, INP, CMP
  - Servo Driver Interfaces: RDY/LTC-dedicated input channels & SVON/CMP/CAM-DO/ERC-dedicated output channels are switchable for general input and output purposes
- **Analog Input**
  - 20-pin DIN-rail Flat Cable Wiring Board
- **Encoder Interface**
  - **Input Type**: Quadrature (A/B phase) or up/down
  - **Counts per Enc. Cycle**: x1, x2, x4 (A/B phase only)
  - **Input Range**: 0~10V
  - **Isolation Protection**: 2,500 Vdc
  - **Max. Input Frequency**: 10 MHz under 4xAB mode

### General
- **Bus Type**
  - Universal PCI V2.2
- **Connectors**
  - PCI-1245: 1 x 100-pin SCSI female connector
  - PCI-1265: 1 x 100-pin SCI female connector & 1 x 50-pin SCI female connector
  - PCI-1285: 2 x 100-pin mini-SCI female connector
- **Dimensions (L x H)**
  - PCI-1245/65/85: 175 x 100 mm (6.9" x 3.9")
- **Power Consumption**
  - PCI-1245: 1.2 A
  - PCI-1265: 1.5 A
  - PCI-1285: 1.2 A
- **Humidity**
  - 5 ~ 95% RH, non-condensing (IEC 60068-2-3)
- **Operating Temperature**
  - -20 ~ 85°C (–4 ~ 185°F)
- **Storage Temperature**
  - -20 ~ 85°C (–4 ~ 185°F)

### Ordering Information
- **PCI-1245-AE**
  - 4-axis Stepping/Servo Control Universal PCI Card
- **PCI-1265 AE**
  - 6-axis Stepping/Servo Control Universal PCI Card
- **PCI-1285-AE**
  - 8-axis Stepping/Servo Control Universal PCI Card

**Accessories**
- **ADAM-3956-AE**
  - 100-pin DIN-rail SSI 4-axis Motion Wiring Board
- **ADAM-3955-AE**
  - 50-pin DIN-rail SSI 2-axis Motion Wiring Board
- **ADAM-3952-AE**
  - 50-pin DIN-rail SSI and Box Header Board
- **ADAM-3925-AE**
  - 20-pin DIN-rail Flat Cable Wiring Board
- **PCL-10120-E2E**
  - 10-pin SSI Cable, 1m/2m/3m (PCI-1245/65/85)
- **PCL-10251-E2E/3E**
  - 10-pin SSI Cable to Two 50-pin SSI Cable, 1m/2m/3m (PCI-1245/65/85 only)
- **PCL-101100SB-E2E/3E/5E**
  - Mini-SSI-100 Shielded Cable, 1m/2m/3m (PCI-1285)
- **PCL-10153PA5-2E**
  - 50-pin Cable to Panasonic A4/A5 Servo, 2 m
- **PCL-10153SS5-2E**
  - 50-pin Cable to Yaskawa Sigma V7 Servo, 2 m
- **PCL-10153MJ3-2E**
  - 50-pin Cable to Mitsubishi J3/J4 Servo, 2 m
- **PCL-10153DA2-2E**
  - 50-pin Cable to Delta A2 Servo, 2 m

All product specifications are subject to change without notice. Last updated: 27-Jun-2018