PMDK DSP-based Professional Motion Development Kit



Features:

- DSP-based control card with PCI interface
- Capable for 6-axis motion control or other control applications
- Developing DSP programs by users
- Integrate users' DSP programs with ICP DAS provided code and libraries
- Maximum pulse output frequency: 4 Mpps
- Maximum Encoder input frequency: 12 Mpps
- High-speed position latch and compare trigger
- Home sensor, positive and negative limit sensors accepted for each axis
- Manual-pulse-generator interface
- Expandable distributed I/O: 128 DI & 128 DO via twowired FRnet interface

Applications:

- Signal processing
- Robots
- I/O logical control
- Advanced motion control
- Training and education purposes
- Coordinate measurement machine
- High speed encoder interface for laser encoders

Introduction:

PMDK is suitable for professional motion development. It integrates a high-speed floating DSP (TI C672x), FPGA (Field Programmable Gate Array), I/ O buffering circuitries, and application software samples for users to implement their applications. It has plenty of different I/O interfaces. There are six channels of pulse inputs and outputs, six channels of analog inputs and outputs, and many digital inputs and outputs on this card for users to realize their own control algorithms for motion control, process control, I/O logical control, digital processing, and other domain applications.

Specifications:

- DSP: TI TMS320C6720 floating-point DSP with 200MHz/1600MIPS 32-bit/33MHz universal PCI-Bus 6 controllable axes
- Fach axis supports:
- - 16-bit +/-10V analog output
 - 16-bit +/-10V analog input High speed pulse output
 - High speed 32-bit quadrature encoder (A. B. Z) interface
 - Digital input signal:
 - Positive and negative limit
 - Home
 - Slow down
 - Servo alarm
 - Servo in-position
 - Servo ready
 - High speed position latch
 - Digital output signal:
 - Servo on
 - Deviation counter clear
 - Servo alarm reset
 - High speed auto incremental compare
- Emergency stop input
- 1 general purpose inputs and 3 general purpose outputs
- FRnet real-time/high-speed serial interface for I/O expansion
- Operating Temp 0 ~ + 60°C
- Storage Temp -20 ~ +80°C
- Departing Humidity 10 ~ 85% non-condensing
- Storage Humidity 5 ~ 95% non-condensing
- External Power supply(Input) 24V DC (connect to terminal board)

Ordering Information:

Model No.	Product Description
PMDK	DSP-based Professional Motion Development Kit
DN-8368GB *	Three axis terminal board for general purpose servo motor
DN-8368MB **	Three axis terminal board for Mitsubishi J2S servo motor
DN-20M	Daughter board for FRnet connector and Full function Manual-
	Pule-Generator
CA-SCSI15	1.5M, 68-pin, Male Connector, Mini SCSI-II cable
CA-SCSI20-M1	SCSI II 20-pin & 20-pin Male connector cable 1 m,
	for Mitsubishi motor
CA-SCSI20-M3	SCSI II 20-pin & 20-pin Male connector cable 3 m,
	for Mitsubishi motor
CA-SCSI20-M5	SCSI II 20-pin & 20-pin Male connector cable 5 m,
	for Mitsubishi motor
CA-2P4C-0100	2P4C cable For FRNet-Modules, Length:100M

Note: (*) Two boards are needed for 4 axis, 5 axis or 6 axis control. (**) Two cables are required for 4 axis, 5 axis or 6 axis control