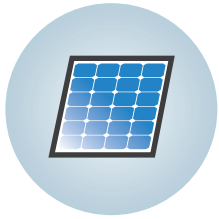


PE-PRO/F28335 STARTER KIT for Universities

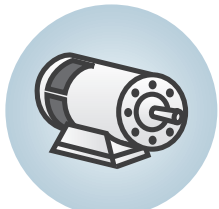
— Floating DSP Control Board / Software Development Environment / Control Libraries —



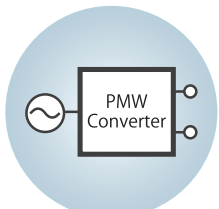
Solar Power Generation



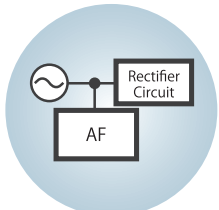
Wind Power Generation



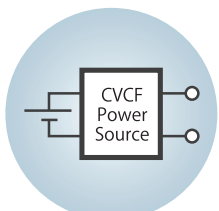
Motor Drive Control



AC Grid Control



Active Filter



Regulated AC Power Source

Abstract

The PE-PRO/F28335A is a 150MHz TI TMS320F28335 DSC based control board for evaluating power converter control system or motor control system. The PE-PRO/F28335A has useful functions on the board. And user can improve development efficiency with PE-VIEW9.

Features

- High-speed 32bit floating DSP TMS S320F28335 (150MHz)
- For car application function: CAN bus communication port
- For 2 motor control function: ABZ encoder signal input(32bit/2port)
- Easy to use: PE-View9/WAVE2 interface, 8 channels real time wave monitor.

Digital Control Board PE-PRO/F28335A

Items	Specifications
Processor	TMS320F28335PGFA
Clock	150MHz
On-Chip RAM	34k × 16bit
On-Chip Flash	256k × 16bit
Serial EEPROM	64k × 8bit(24LC32A)(12C)
3-phase PWM	2port(12outputs)
General PWM	2port
Digital Input	Photo coupler input:14 input/ CMOS:2 input
Digital Output	Photo coupler input: 12 input/ CMOS:2 input / Luminescence:2 input
ABZ counter	32bit / 2port
Interval timer	32bit / 3ch
Serial Communication Port	2ch / RS-232C (Insulated to DSP)
CAN Communication*	1ch / CAN standards 2.0B (Insulated to DSP)
Remote Debug Port	1ch / Optical connector (Using to the communication with PE-VIEW9)
A/D Input	12bit / 16ch / ±5V / Simultaneous sampling 2ch / Conversion time 80ns
D/A Output	4ch/12bit
JTAG I/F	1 ch
BUS Extension	Special Universal Board is supported
Board Size	170 × 155mm
Power Supply	+5V (2A max)

* Only hardware is available. CAN control software functions are not included in this kit.

Order

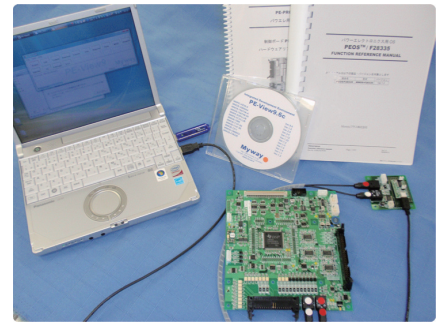
Model	Product Name	
MWPRO-F28335A	Digital Control Board PE-PRO/F28335A	
MWKIT-F28335-9	PE-PRO/F28335 STARTER Kits	
	-PE-PRO/F28335A -PE-View9-LMT -PEOS/F28335-LMT	-Insulated USB Interface board -Light Cable -USB

<Recommended Environment>

Minimum CPU spec : Pentium III 1GHz , must 2USB port, OS : Windows2000/XP/Vista, C Compiler : TMDSCCS-MCUN01(TI)

*C compiler is not included in this kit.

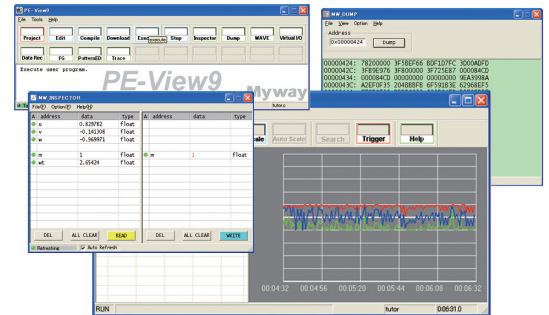
There is the possibility that the specification will changes without notice. TMS320F28335 is registered trademark of a Texas instrument company. Besides, the product name that is entered is the trademark of each company.



Integrated Development Environment

PE-View

- Project Management
- Edit/Compile/Download/Execute/Stop
- Inspector/Dump/Data Recorder/Function Generator
- Pattern Editor



Libraries for Power Electronics PEOS

- The function libraries are specialized to inverter controls and motor drive controls

Function Examples:

Interrupt functions/Timer functions/Inverter control functions/
Counter control functions/ AD DA control functions/ IO control
functions/ Watch Dog control functions

Coordinates Transformation Functions Examples:

uvw2ab()/ab2dq()/xy2ra()

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