



The indigenously designed Labview/VEEPRO compatible USB Data Acquisition system has a base board with provision for Two pluggable add on ADC , DAC & DIO boards.

### Features :

- \* USB TMC Standards
- \* 16 digital inputs & 16 digital output (32 digital I/O)
- \* 6 PWM Outputs
- \* Two 32 bit Timer/Counter
- \* High speed connector to interface ADC/DAC Piggyback board
- \* ADC/DAC signals and I/O lines are terminated at a screw type connector
- \* Two or Four channel pre defined function generator
- \* Remote Interface
  - # Hi-Speed USB 2.0 (480 Mbps)
  - # USB TMC Class Device



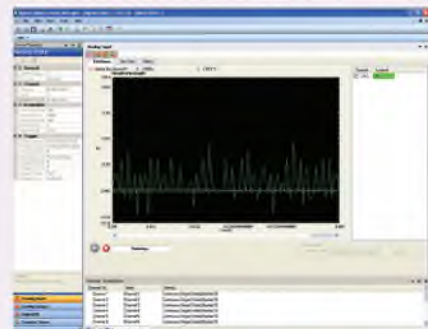
compatible Popular development environments and tools

- Agilent VEEPRO
- Microsoft Visual Studio.NET, C/C++ and Visual Basic 6.0
- LabVIEW

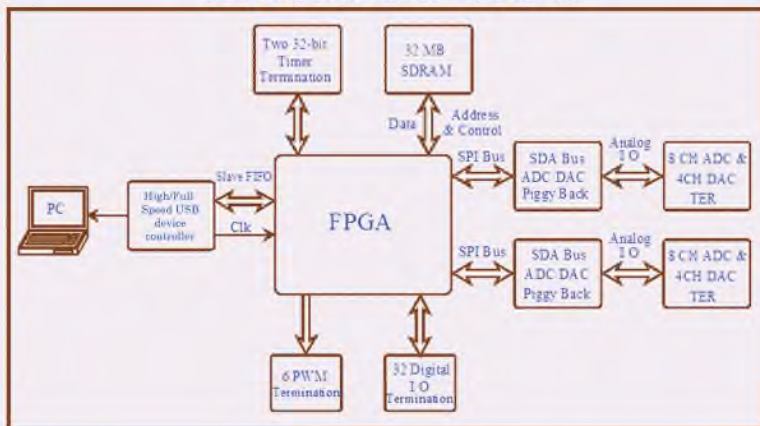
Two Nos of SPI bus terminated at the base board, as SDA Bus, so that AD, DA boards can be plugged into the base board for easy expansion of no. of Analog input channels, Analog output channels.

AD / DA devices are added as add on small form factor cards, so that currently available powerful ADC & DAC devices of any manufacturer can be used which will be great advantage for the users.

### Vee Pro Application User Interface



BLOCK DIAGRAM OF VUDAS-100



### APPLICATIONS

1. PC based Data Acquisition
2. PC based Process Controller
3. Transducer Study kit
4. DAS for VEEPRO & Labview



## Types of Signal Conditioner

### Signal Conditioner for AC / DC Current & Voltage



- \* To measure AC / DC current 0 - 5 A or any specified range
- \* To measure AC / DC voltage 0 - 300 V / 600 V or any specified range
- \* Low Ohmic current sensing resistor provided for current sensing
- \* Resistor divider circuit provided for voltage sensing
- \* Screw type connector provided for current and voltage input

### V to I & I to V Converter



- \* Single channel current to voltage converter of
  - Input : (4 - 20) mA      Output : (0 - 5)V DC
- \* Single channel voltage to current converter of
  - Input : (0 - 5)V DC      Output : (4 - 20) mA
- \* Operating Voltage :  $\pm 12$  V DC
- \* Zero and Span adjustment provided for calibration purpose

### 3 Axis Accelerometer



- \* Sensor : MMA7260Q
- \* Analog output : 0 - 3.3V
- \* It detects x,y,z axis of the object

### Motion Sensor



- \* Sensor : AMN23111
- \* Range : 0 - 10 m
- \* Analog output : 0 - 3.3 V
- \* It is used for automatic door open & Theft identification

## PLUGGABLE ADC & DAC ADDON BOARDS

### 14 bit ADC & 16 bit DAC card [VSDA-01]

- Analog Input : 6SE/6DI
- No of ADC : 3 Nos of Dual ADC
- Sampling : 6 channel simultaneous
- Resolution : 14 bit
- Speed : 1.5 MSPS
- Analog output : 4 Channel
- Resolution : 16 bit
- Speed : 2 MSPS



### 12 bit ADC & 14 bit DAC [ VSAD - 03 ]

- Analog Input : 8SE/4DI
- No of ADC : 1 Nos of Dual ADC
- Sampling : 2 channel simultaneous
- Resolution : 12 bit
- Speed : 2 MSPS
- Analog output : 4 Channel
- Resolution : 14 bit
- Speed : 2 MSPS

### 18 bit ADC & 16 Bit DAC [ VSAD- 02 ]

- Analog Input : 8SE / 4DI
- No of ADC : 2 Nos
- Sampling : 2 channel simultaneous
- Resolution : 18 bit
- Speed : 1 MSPS
- Analog output : 4 Channel
- Resolution : 16 bit
- Speed : 2 MSPS

