

NET-AIO11

High Performance Signal Processing Board



INTRODUCTION

The NET-AIO11 is a board having the function of analog input and digital output. To adapt a TI TMS320C55xx DSP, it process a data that convert 8-ch analog signals to digital data(A/D) for high speed through USB2.0 and Ethernet Interface.

GENERAL DESCRIPTION

- ◆ USB 2.0 Full Speed Interface
- ◆ 8-Ch 16-Bit Sigma-Delta ADC
- ◆ 8-Bit Digital Output
- ◆ 10/100Mbps Ethernet Interface

APPLICATION

- ◆ Laboratory Instrumentation
- ◆ Process Control Systems

SOFTWARE

- **Operating System**
 - Windows 2000 SP4/XP/7 32-Bit
- **Recommended Software**
 - Kernel Mode WDM Driver/User mode DLL

SPECIFICATION

- **General**
 - USB2.0 Specification
 - Full Speed Device 12Mbps
- **Interface**
 - USB Mini-B Type Connector
 - RJ-45 Ethernet Connector
 - Header Socket Connector for Analog Input

- Header Pin Connector for Digital Input/Output
- 5VDC Adapter Power Connector

■ Analog Input (ADC)

- Channel : 8
- Max. Input Range : $\pm 10V$
- Resolution : 16-Bit
- Max. Sampling :
 - Ethernet 32,768 Samples/sec
 - USB 16,384 Samples/sec

■ Digital Input/Output

- Channel : 8 Inputs, 8 Outputs
- In/Out Signal Level : 12/24VDC Isolation

■ Ethernet

- 10/100Mbps Support
- Automatic Cable Detection
- Configurable Board Network Information(IP)
- Only Fixed IP Support

■ DSP

- Chip : TI TMS320C55xx
- Main Function : On-chip USB 2.0

■ PoE (Power over Ethernet)

PHYSICAL/ENVIRONMENTAL

■ Dimensions

- Dimension (not including connectors)
: 160mm x 100mm

■ Temperature

- 0 to 70°C, operating
- -20 to + 80°C storage

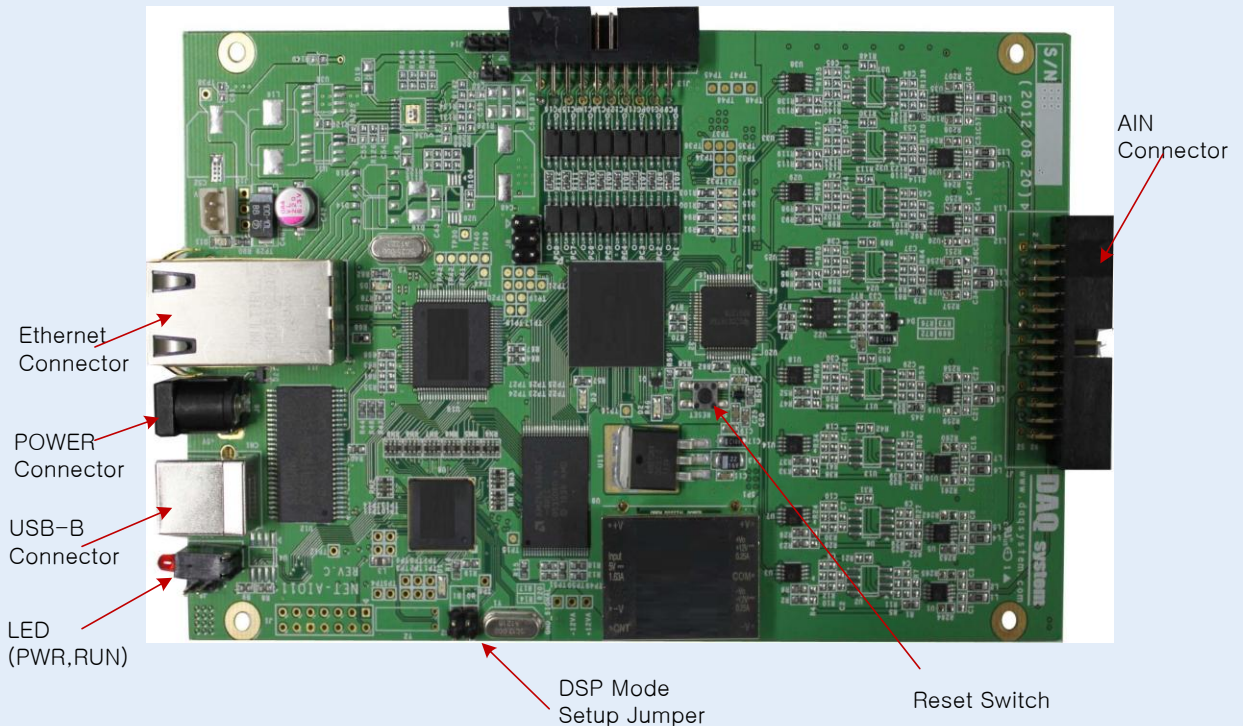
■ Board Feature

■ Relative Humidity

- 20 to 80 percent, Non-condensing

■ Power Requirement

- +3.3V Operation
- +1.2V FPGA core supply, Max. 6A



BLOCK DIAGRAM

