Features of the analog I/O F series

1. Multi-function

Equipped with analogue input, analogue output, digital input, digital output and counter function, it allows a PC with limited number of expansion slots to configure complicated systems.

2. Diverse sampling control using event controller

Since the start/stop/clock control of analogue input/output operation is centrally managed by hardware through the event controller capable of freely combining the event of each function and external control signal input, high level synchronous control not dependent on software can be achieved between each function. It is also possible to individually operate each function.

■**Description of event controller**
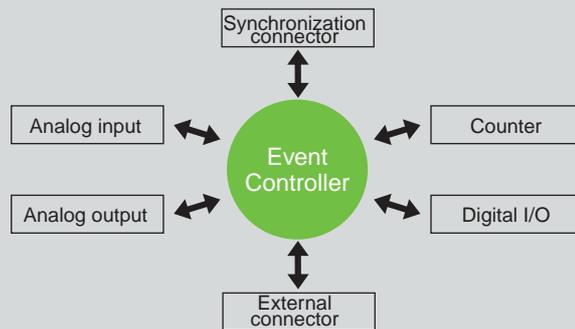
The arrow in the diagram indicates the flow of control signals. Major control signals include operation start signals, operation stop signals and clock signals.

Ex.1: Conducting analogue input and analogue output in the same timing using the external clock signals
Ex.2. Starting the analogue input operation every time the counter reading reaches the specified value

3. Bus master transfer and complex data input

Analogue input and analogue output are capable of either individually or concurrently transferring the bus master, allowing bulk data to be transferred between the PC and the board without applying additional load on CPU. When transferring the analogue input data using bus master transfer, analogue input, digital input, digital output and count data that are synchronized with analogue input clock signals can be transferred simultaneously. This function allows for the synchronization between data in the system.

4. Equipped with buffer memory capable of performing background processing independently of the software

Both the analogue input and the analogue output are equipped with buffer memory that can be used when bus master transfer is not conducted. Because of this, analogue input/output in the background can be performed without depending on the operation status of the software or the PC.

5. Setup and adjustment can be completed on the software

Setup and adjustment such as those concerning the range of analogue input and analogue output can be conducted entirely on the software, thus eliminating the need for troublesome jumper setting. It is also capable of memorizing the adjustment information different from the one set at the factory in order to optimally suit the environment in which it is used. However, range setting is possible only with PCI bus board.

6. Equipped with synchronous control connector capable of synchronous operation (ADA16-32/2(PCI)F)

Equipped with synchronous control connector capable of synchronously controlling more than one board, it enables channel expansion simply by increasing the number of boards.
Furthermore, synchronous operation with a board equipped with a CONTEC synchronous control connector can be easily achieved.

7. Equipped with filtering function that facilitates the connection of external signals

External signals of analogue input/output, digital input/output signals and counter input/output signals are provided with digital filter that can prevent chattering.