

6. Functional explanation

Extension function

Add the board with this notation to a basic input-and-output function, and it carries the convenient following function

● Digital filter function

The digital filter which can set up a frequency band is carried in all input terminals.

Incorrect operation by the electrical noise or the chattering of relay contact is prevented on a hardware level.

● Echo back function of output data

The state (ON/OFF) of all output terminals can be read at any time.

● Handshake function

Handshake communication by the STB/ACK signal can be performed easily. (Interruption is generated by the STB signal from the outside.)

● Interruption edge setting function

Logic reversal of an interruption incoming signal and control of a gate (momentary input prohibition) can be performed.

● Input-and-output function of a bit unit

Arbitrary 1-bit the input and output which accept it can be performed on a hardware level.

Interrupt input function

The board with this function connects a specific input to IRQ of a personal computer, and carries the function to make a personal computer generate IRQ from the external.

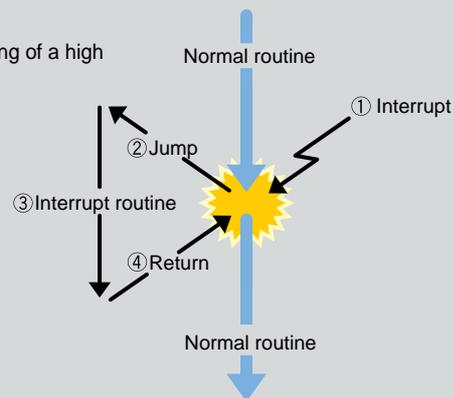
By external signal as the instructions from the outside, urgent processing of a high priority is executed.

This function is slight difference in some board.

Type and description are as follows.

It is the type to use only one IRQ level that is connected from many inputs. For example, even when connecting four inputs to IRQ of a personal computer, only one IRQ level is used. Moreover, by the signal from which input terminal IRQ occurred reads and checks the status information on a board.

Connection with IRQ is possible respectively in X inputs. It is the type which uses IRQ of one level for every one input. For example, when connecting four inputs to IRQ of a personal computer, the opening of four IRQ levels is required.



Common constitution

The group division of the what point input-and-output circuit of a common composition digital input-and-output board is electrically carried out in that unit, and the ground between groups has been mutually independent. Type and description are as follows.

● X point / [1 common]

It has been independent into the unit group of X point / what [1 common] point. 16 points / 1 -- when common, operation circuit voltage can be changed into condition of "being 16 points at DC12V system", and "being 16 points at DC24V system" [for example.]

● Common to all points

The points of input and output are common. The apparatus by which the voltage and the grand level of an operation circuit differ from each other is not connectable with the same board.

● All points independence

Every input circuit becomes independent electrically.

The apparatus by which the voltage and the grand level of an operation circuit differ from each other for every point is connectable.

