5.4 Expansion module IT42

Order No. 6DD1606-4AB0

Description The IT42 expansion module provides analog and binary inputs and outputs
The expansion module is inserted on a CPU module (PM5, PM6). A maximum of 2 expansion modules ITxx can be inserted on a CPU module. An ITxx occupies 1 slot (in addition to the mounting slot of the CPU module itself).

Inputs and outputs

- 4 analog outputs
- 4 integrating, high-resolution analog inputs (V/fc voltage/frequency conversion)
- 4 analog inputs (ADU)
- 16 binary outputs
- 16 binary inputs

Block diagram

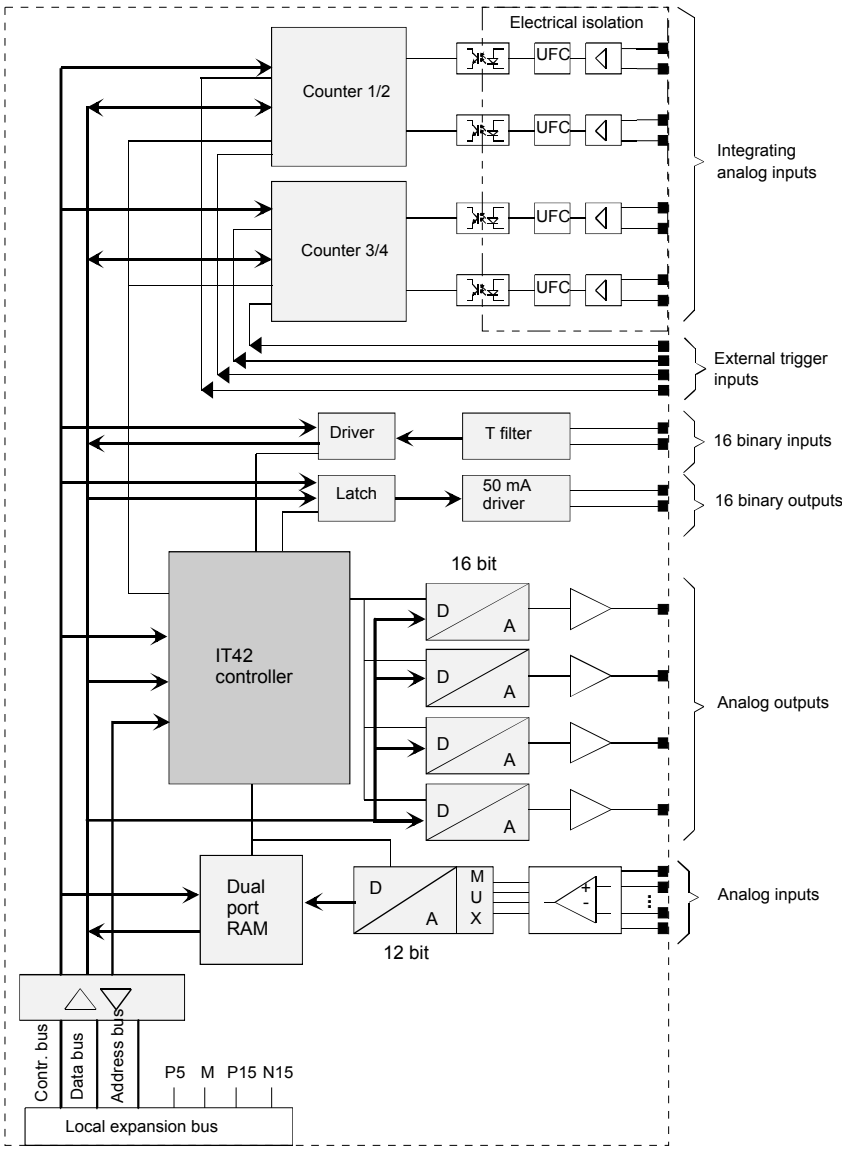

Fig. 5-8 Block diagram of IT42

5.4.1 Supplementary components

Interface modules with terminals

All of the cables for the input / output signals are not directly connected to the module, but are connected via interface modules. The interface modules serve as mechanical connection element (**screw/plug-in terminals**) and to electrically adapt the plant/system signals (optional).

Interface module	Function
SB10	Direct connection (1:1 connection) of 8 binary inputs/outputs, LED, no signal conversion
SB60	8 binary **inputs**, converted from 230V to 24V (signal level on the module), LED, electrical isolation (floating)
SB61	8 binary **inputs**, converted from 48V to 24V, LED, electrical isolation (floating)
SB70	8 binary **outputs**, converted from 24V to 230V (changeover relay), LED, electrical isolation (floating)
SB71	8 binary **outputs**, converted from 25V to 48V (transistor)
SU10	25 signals are directly connected, no signal conversion
SU12	10 signals are directly connected, no signal conversion

Table 5-26 Interface modules which can be connected to the module

Cables

The module is connected to the interface modules using the matching plug-in cables. The plug-in cables for large connectors have several cable ends, to which the appropriate number of matching interface modules can be connected.
Either interface modules with or without signal conversion (e. g. signal level conversion, electrical isolation) and LED display can be connected at connectors with binary inputs and outputs.
The selected cable depends on the type of interface module:

Connector IT42	Signals	Cable	Interface module
X6	Integrating analog inputs	SC50	SU10
X7	Analog outputs/inputs	SC51	SU10
X8	Binary outputs/inputs; trigger inputs for integrating analog inputs	SC49 or SC54	2 x SU10 or 5 x SB10 SB60 SB61 SB70 SB71 SU12

Table 5-27 Cables available for use with the module