

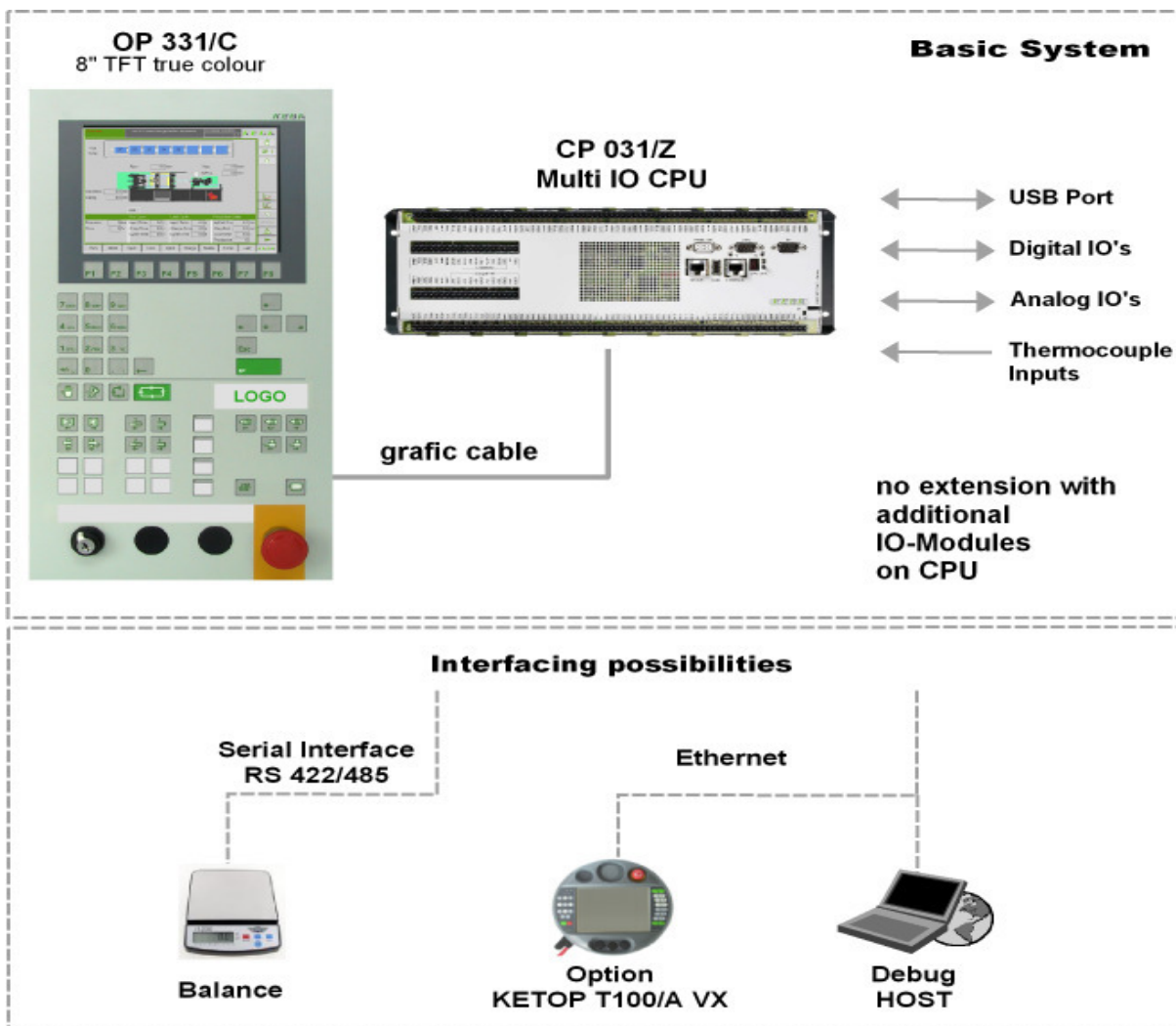
# Product Specification

## Technical specification of KePlast i1070-0000-00

Keplast i1070 is the lower end control system for usage in IMM's.

The injection process can be run with full closed loop control and a cycle time of  $\geq 2\text{ms}$ , depending on the application size.

## System Hardware



**KePlast i1070 system scheme**

Keplast i1070 is equipped with a high-resolution TFT-colour display 8,4", SVGA (800x600) and is designed as an operator interface based on IEC language. The functionality for displaying symbolic language is included.

## Processing unit

The processing unit CP 031/Z is designed with a Motorola Power PC 400 MHz. The process interface on board of the processing unit is defined as follows:

- 5 analog inputs ,14 bit , thereof
  - 2 differential inputs 0-10V for pressure transducer
  - 3 potentiometer inputs 0-10V for position encoder (single ended, reference voltage 10V)
- 5 analog outputs +/-10V with 12 bit resolution, alternatively 3 ports useable as 0 – 1 A output for direct drive of valves
- 7 thermocouple inputs (J-type, K-type)
- 32 digital inputs including 2 counter inputs for screw speed measurement
- 40 digital outputs 2 A
- 256 MB RAM
- Interface to the display panel
- 1 RS 485 interface to the switch panel
- 1 Ethernet interface onboard
- 1 USB interface for printer, USB memory device and PC-keyboard
- 1 Flashcard slot for memory card , required: KEBA Type 68916.. (compact flash card not included in system price)
- 1 Switch panel OP 331/C including 8,4” display and keyboard for manual mode operation (customized design available for an extra charge, maximum 64 membrane keys, 32 LED’s and 5 rotary switches with LED’s for status display)

## Standard hardware configuration:

Pcs.	Product Name	Description of product
1	CP 031/Z	CPU 400 Mhz with integrated IO-interface
1	OP 331/C	Operating panel KePlast i1070 Series <ul style="list-style-type: none"><li>- Display: 8,4" TFT color, 65535 colors</li><li>- Resolution: 800x600 Pixel (SVGA)</li><li>- Interfaces: LVDS (graphic) and RS-485 (input)</li><li>- 58 Membrane keypad with tactile feedback, thereof:<ul style="list-style-type: none"><li>10 with red LED</li><li>12 with labeling strips</li></ul></li><li>- Recesses for emergency-off and 3 toggle switches</li><li>- 8 digital inputs for connection to rotary switches and push buttons.</li><li>- Configuration: Kemro.view.basic</li><li>- KEBA standard version</li><li>- excl. connector set for CP 031/Z (XT 390/A)</li></ul>
1	XW 041-050	Cable for OP3xx-Panels <ul style="list-style-type: none"><li>- 5m</li><li>- 1 cable for graphic and RS 485</li></ul>
1	CF Card	Kemro K2 CF card part no. 68916.(Excl. From package.)

## **System Software**

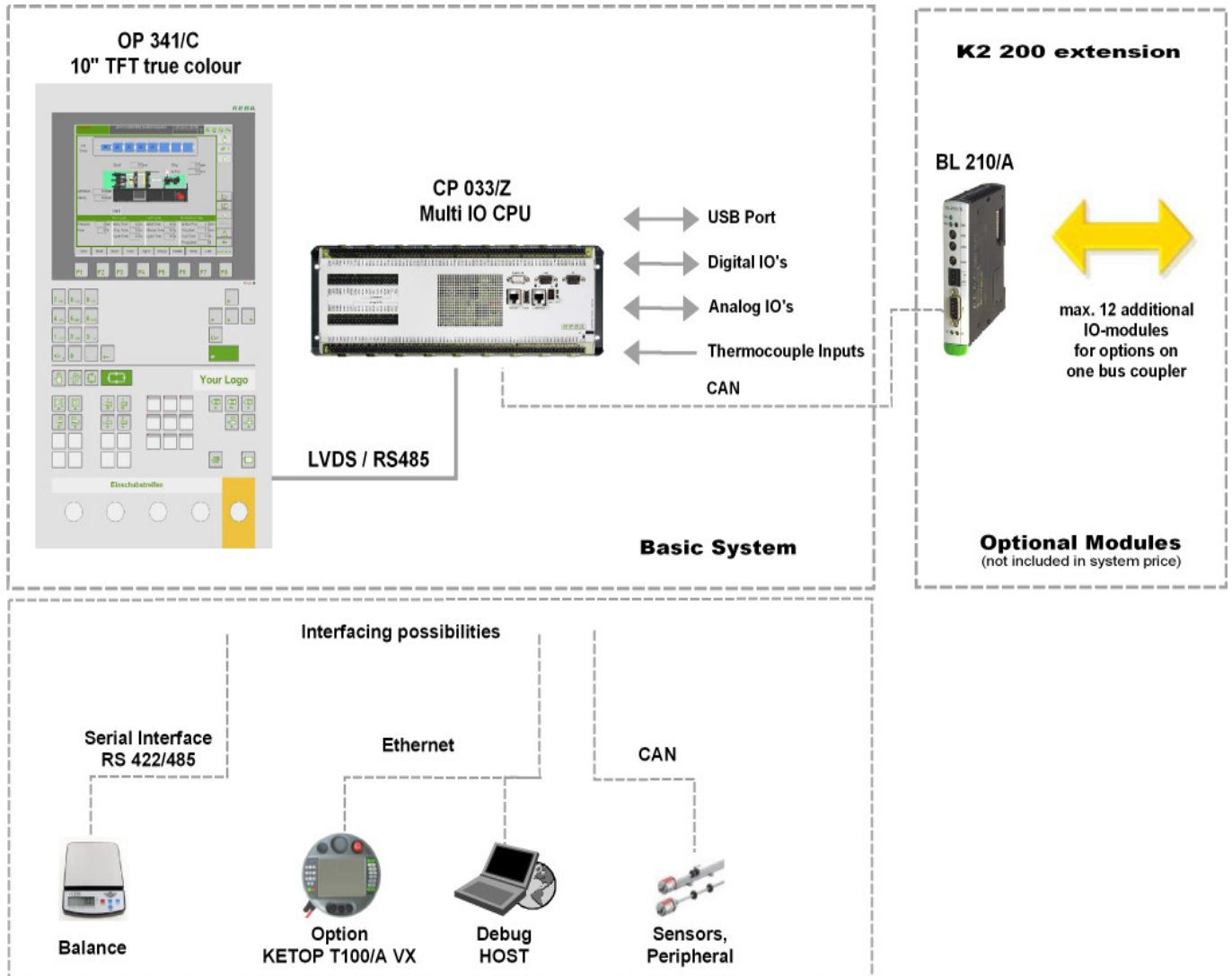
The system software supplied with Keplast i1070 will include:

- Firmware (real time operating system, driver software for hardware and communication interfaces, IEC runtime system) for control system Keplast i1070.
- Application framework (basic application library) for standard IMM
- Runtime system for Keplast i1070 human machine interface (HMI)
- Integrated services:
  - Print-service
  - Basic application for alarm visualization
  - Process Data Protocol
  - Inject Graph
  - IO Monitor
  - Statusreport
  - User management

## Technical specification of KePlast i1075-0300-00 extended

Keplast i1075 can be extended with use of CP 033/Z, which includes CAN Port and additional IO's. The injection process can be run with full closed loop control and a cycle time of  $\cong 2\text{ms}$ , depending on the application size.

### System Hardware



**KePlast i1075 extended system scheme**

KePlast i1075 is equipped with a high-resolution TFT-colour display 10,4", SVGA (800x600) and is designed as an operator interface based on IEC language. The functionality for displaying symbolic language is included.

## Processing unit

The processing unit CP 033/Z is designed with a Motorola Power PC 400 MHz.

The process interface onboard of the processing unit is defined as follows:

- 8 analog inputs with 14 bit resolution, thereof
  - 4 differential inputs 0-10V for pressure transducer
  - 4 potentiometer inputs 0-10V for position encoder (single ended, reference voltage 10V)
- 6 analog outputs +/-10V with 12 bit resolution
  - thereof 4 ports alternatively useable as 0 – 1 A output for direct drive of valves
- 8 thermocouple inputs (J-type, K-type)
- Interface to connect to sensor for external compensation of cold junction (TE 220/A)
- 48 digital inputs including 2 counter inputs for screw speed measurement
- 56 digital outputs 2 A
- 256 MB RAM
- Interface to the display panel
- 1 RS 485 interface to the switch panel and touch
- 1 Serial interface (RS-232-C or RS-485-A)
- **1 CAN-Open field bus interface for additional IO extension or transducers**  
(max. 1Mbit/s)
- 1 Ethernet interface onboard
- 1 USB interface for printer, USB memory device and PC-keyboard
- 1 Flashcard slot for memory card , required: KEBA Type 68916.  
(compact flash card not included in system price)

## Standard hardware configuration:

Pcs.	Product Name	Description of product
1	CP 033/Z	CPU 400 Mhz with integrated IO-interface
1	OP 341/C-1100	Operating panel for KePlast i1075 <ul style="list-style-type: none"><li>- Display: 10,4" TFT color, 65535 colors</li><li>- Resolution: 800x600 Pixel (SVGA)</li><li>- Interfaces: LVDS (graphic) and RS-485 (input)</li><li>- Membrane keypad with tactile feedback</li><li>- 63 keys<ul style="list-style-type: none"><li>incl. 15 keys with red LED</li><li>incl. 17 keys labelling strips</li></ul></li><li>- Recesses for emergency-off and 4 toggle switches</li><li>- 16 digital inputs for connection to rotary switches</li><li>- Configuration: Kemro.view.basic</li><li>- KEBA standard version</li><li>- excl. connector XT 395/A</li></ul>
1	XW 041-050	Cable for OP3xx-Panels - 5m <ul style="list-style-type: none"><li>- 1 cable for graphic and RS 485</li></ul>

1	CF Card	Kemro K2 CF card part no. 68916.(Excl. From package.)
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### **Extension of standard system**

The additional extension of the system mentioned above is made by modules from our product line K2-200 .

### **System Software**

The system software supplied with Keplast i1075 extended will include:

- Firmware (real time operating system, driver software for hardware and communication interfaces, IEC runtime system) for control system Keplast i1075.
- Application framework (basic application library) for standard IMM
- Runtime system for Keplast i1075 human machine interface (HMI)
- Integrated services:
  - Print-service
  - Basic application for alarm visualization
  - Process Data Protocol
  - Inject Graph
  - IO Monitor
  - Statusreport
  - User management