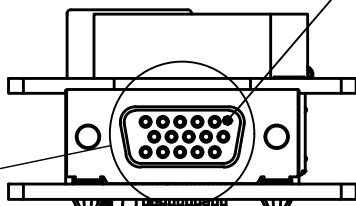
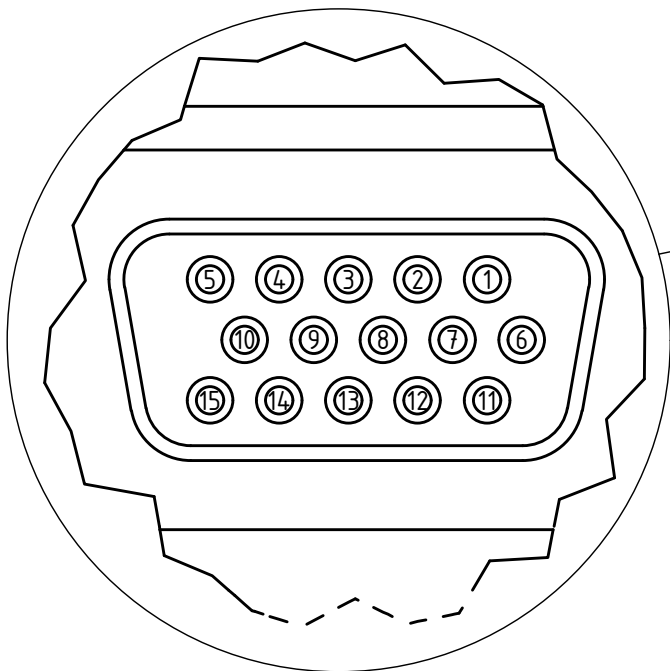




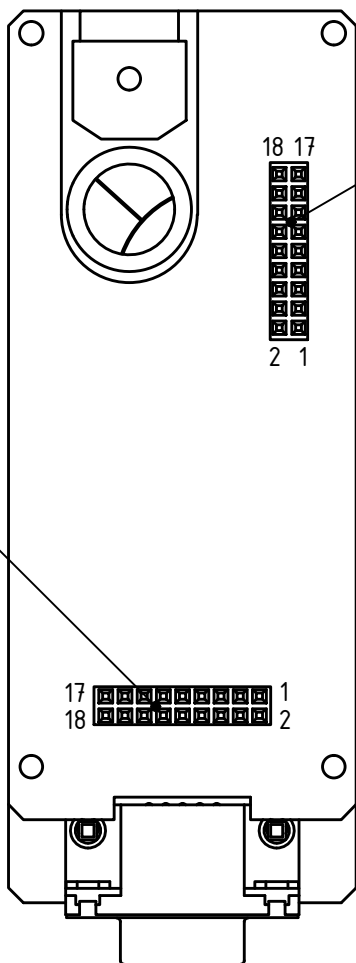
Circuit Card Assembly  
Wiring Diagram

8SMC5-USB



Connector HDB15(F)

| Pin | Function  |
|-----|---|
| 1   | Not phase B of SM or - DC of the motor                                      |
| 2   | Phase B of SM or + DC of the motor  |
| 3   | Not phase A of SM or - DC of the motor                                      |
| 4   | Phase A of SM or + DC of the motor  |
| 5   | 5V / 500mA - stabilized output for encoder power supply                     |
| 6   | One-wire interface for positioner identification (for Standa hardware only) |
| 7   | Logic ground for limit switches, encoder, etc.                              |
| 8   | 2nd limit switch  |
| 9   | 1st limit switch  |
| 10  | Encoder channel A   |
| 11  | Encoder channel B   |
| 12  | Revolution sensor input   |
| 13  | Inverted Encoder channel A  |
| 14  | Inverted Encoder channel B  |
| 15  | Inverted revolution sensor input  |



Connector BPC (18 pin)

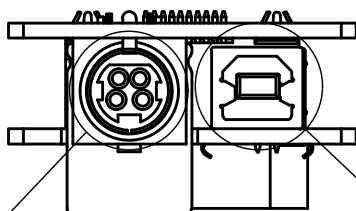
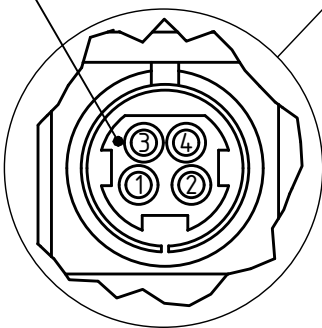
| Pin | Function   |
|-----|--|
| 1   | Reserved   |
| 2   | RX, serial port, 3.3V logic                                |
| 3   | Reserved   |
| 4   | TX, serial port, 3.3V logic                                |
| 5   | EN0RXI_P, Ethernet TX +                                    |
| 6   | A Direction signal for external driver control, 3.3V logic |
| 7   | Reserved   |
| 8   | A Clock signal for external driver control, 3.3V logic     |
| 9   | Reserved   |
| 10  | Synchronization output, 3.3V logic                         |
| 11  | Reserved   |
| 12  | Synchronization input, 3.3V logic                          |
| 13  | An output for magnetic brake control, 3.3V logic           |
| 14  | Not used   |
| 15  | BUT_R, an external "Right" button                          |
| 16  | 5V output  |
| 17  | BUT_L, an external "Left" button                           |
| 18  | Digital GND for 3.3V and 5V                                |

Connector BPC (18 pin)

| Pin | Function  |
|-----|---|
| 1   | Power GND   |
| 2   | Joy, an analog 0-3 V input used for external joystick connection                      |
| 3   | Power GND   |
| 4   | Pot, an analog 0-3 V input used for general purpose                                   |
| 5   | Power GND   |
| 6   | A common input/output (or an Enable signal if an external driver is used), 3.3V logic |
| 7   | Power +12V...+48V   |
| 8   | U_LED, A LED Power output displaying 3.3V power supply for controller                 |
| 9   | Power +12V...+48V   |
| 10  | L_LIM, A LED output for left limit switch   |
| 11  | Power+12V...+48V  |
| 12  | R_LIM, A LED output for right limit switch  |
| 13  | USB_SEL, selecting USB device in Multi-axis system                                    |
| 14  | A common input/output EXTGPIO1, 3.3V logic  |
| 15  | USB_D0_N, negative out of USB Slave   |
| 16  | H_USB_D0_N, negative out of USB Master  |
| 17  | USB_D0_P, positive out of USB Slave   |
| 18  | H_USB_D0_P, positive out of USB Master  |

KPPX-4P DC power connector

| Pin | Function |
|-----|----------|
| 1   | + 12-48V |
| 2   | Ground   |
| 3   | + 12-48V |
| 4   | Ground   |



USB Type B Connector

| Pin | Name | Wire color | Function |
|-----|------|------------|----------|
| 1   | VCC  | Red        | +5 VDC   |
| 2   | D-   | White      | Data -   |
| 3   | D+   | Green      | Data +   |
| 4   | GND  | Black      | Ground   |

