SYSTEM OVERVIEW & INTERFACE SPECIFICATION

Acorn Risc PC Eurocard 3U Slice 2 • Infineon XMC4500 ARM Cortex-M4F (120 MHz, 160 KB SRAM) •
74LVC245A Pegelwandler 3.3V <-> 5V • TI SN65HVD11P RS-485 Transceiver (Pin 6=A, 7=B, Pin 8=3.3V) •
4x galvanisch getrennte 24V Eingänge (ILQ620) • 4x 24V Ausgänge (ULN2803A).

CLACK-BUS INTERFACE & 3.3V/5V TRANSLATOR

74LVC245A Oktal-Transceiver zur 5V-Sicherung des 3.3V XMC4500 Mikrocontrollers.

- ◇VCC_5V
- ◇VCC_3V3
- ◇GND
- ◇READY_WAIT
- ◇BUS_STROBE
- ◇LV_DIR
- ◇LV_OE_n
- ◇XMC_D0
- ◇XMC_D1
- ◇XMC_D2
- ◇XMC_D3
- ◇XMC_D4
- ◇XMC_D5
- ◇XMC_D6
- ◇XMC_D7

INFINEON XMC4500 RELAX KIT HEADERS (X1 & X2)

80-Pin Doppelsteckleiste für ARM Cortex-M4F Mikrocontroller-Modul.

- ◇XMC_UART_TX
- ◇XMC_UART_RX
- ◇XMC_SPI_MOSI
- ◇XMC_SPI_MISO
- ◇XMC_SPI_CLK
- ◇XMC_SPI_CS
- ◇XMC_RESET_n
- ◇XMC_TICK_1200

ISOLATED RS-485 TRANSCEIVER (TI SN65HVD11)

Industrielle Modbus/Terminal-Schnittstelle zu Peters Relais-CPU (A/B Schraubklemme).

- ◇RS485_A
- ◇RS485_B
- ◇XMC_RS485_DIR
- ◇XMC_UART_TX
- ◇XMC_UART_RX
- ◇VCC_3V3_RS485
- ◇C_RS485_DECOUPLE

24V SPS INDUSTRIE-I/O & RELAIS-SEQUENZER

Optokoppler ILQ620 (4x 24V In) und ULN2803A Darlington-Treiber (4x 24V Out).

- ◇PLC_IN1_24V
- ◇PLC_IN2_24V
- ◇PLC_IN3_24V
- ◇PLC_IN4_24V
- ◇RELAY_OUT1_24V
- ◇RELAY_OUT2_24V
- ◇RELAY_OUT3_24V
- ◇RELAY_OUT4_24V

Standard: Acorn Risc PC Eurocard 3U (220x120 mm) • 40-Pin CLACK-BUS
Infineon XMC4500 (120 MHz ARM), 4x 24V SPS, RS-485 Modbus, Relais-Link
Workstation- & Labor-Ökosystem für Dipl.-Ing. (FH) Peter Prikaskys 16-Bit Relais-CPU
Entwickler: Ing. Christian Buchhas
Relay Computer Architecture Project

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Title: Slice 2: RTOS & Industrie-I/O Dock

Size: A3	Date: 2026-11-01	**Rev: v1.5**
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