

SYSTEM OVERVIEW & INTERFACE SPECIFICATION

Unterflur-Docking Master für Acorn Risc PC Slices • 3M Textool ZIF Cartridge-Sockel für Apollo Rope ROM • 10x HDSP-7803 Reingrün 7-Segment-Displays • 4x Core Plane Sockelverbinder • DE10-Lite FPGA Timing-Port • USB-C 5V Stromversorgung.

CLACK-BUS 40-PIN HOST INTERFACE

Zentraler Systembus: 16 Adressbits, 16 Datenbits, Steuer- und Taktleitungen.

— ◇BUS_A0
 — ◇BUS_A1
 — ◇BUS_A2
 — ◇BUS_A3
 — ◇BUS_A4
 — ◇BUS_A5
 — ◇BUS_A6
 — ◇BUS_A7
 — ◇BUS_D0
 — ◇BUS_D1
 — ◇BUS_D2
 — ◇BUS_D3
 — ◇BUS_D4
 — ◇BUS_D5
 — ◇BUS_D6
 — ◇BUS_D7
 — ◇BUS_RW_n
 — ◇BUS_STROBE
 — ◇READY_WAIT
 — ◇RESET_n

APOLLO ROPE ROM ZIF-40 CARTRIDGE PORT

3M Textool ZIF-40 Sockelaufnahme für unverlierbare Boot- und Monitor-Software.

- ◇ ZIF_A0..A11
- ◇ ZIF_D0..D15
- ◇ ZIF_CS_n
- ◇ ZIF_OE_n
- ◇ ZIF_5V
- ◇ ZIF_GND

10x 7-SEGMENT DISPLAY BUS (HDSP-7803)

Oktal/Hex Adress- und Datenanzeigen (Preci-Dip DIP-10 Präzisionssockel).

- ◇ DISP_SEG_A
- ◇ DISP_SEG_B
- ◇ DISP_SEG_C
- ◇ DISP_SEG_D
- ◇ DISP_SEG_E
- ◇ DISP_SEG_F
- ◇ DISP_SEG_G
- ◇ DISP_DP
- ◇ DISP_DIGIT_0
- ◇ DISP_DIGIT_1
- ◇ DISP_DIGIT_2
- ◇ DISP_DIGIT_3
- ◇ DISP_DIGIT_4

CORE MATRIX INTERFACE & POWER DISTRIBUTION

X/Y Treiber-Routing, Sense-Verstärker-Eingänge und solide +5V/GND-Einspeisung.

- ◇VBUS_5V
- ◇GND_POWER
- ◇GND_ANALOG
- ◇CORE_X_BUS
- ◇CORE_Y_BUS
- ◇SENSE_AMP_IN
- ◇INHIBIT_DRV

Standard: Acorn Risc PC Eurocard 3U (220x120 mm) • 40-Pin CLACK-BUS
3M Textool ZIF-40 Cartridge, 10x 7-Segment, 40-Pin CLACK-BUS
Entwickler: Ing. Christian Buchhas & Dipl.-Ing. (FH) Peter Prikasky

Relay Computer Architecture Project

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Title: Controller Baseboard & Unterflur-Docking Master

Size: A3	Date: 2026-11-01	Rev: v1.5
KiCad E.D.A. 9.0.8		Id: 1/1