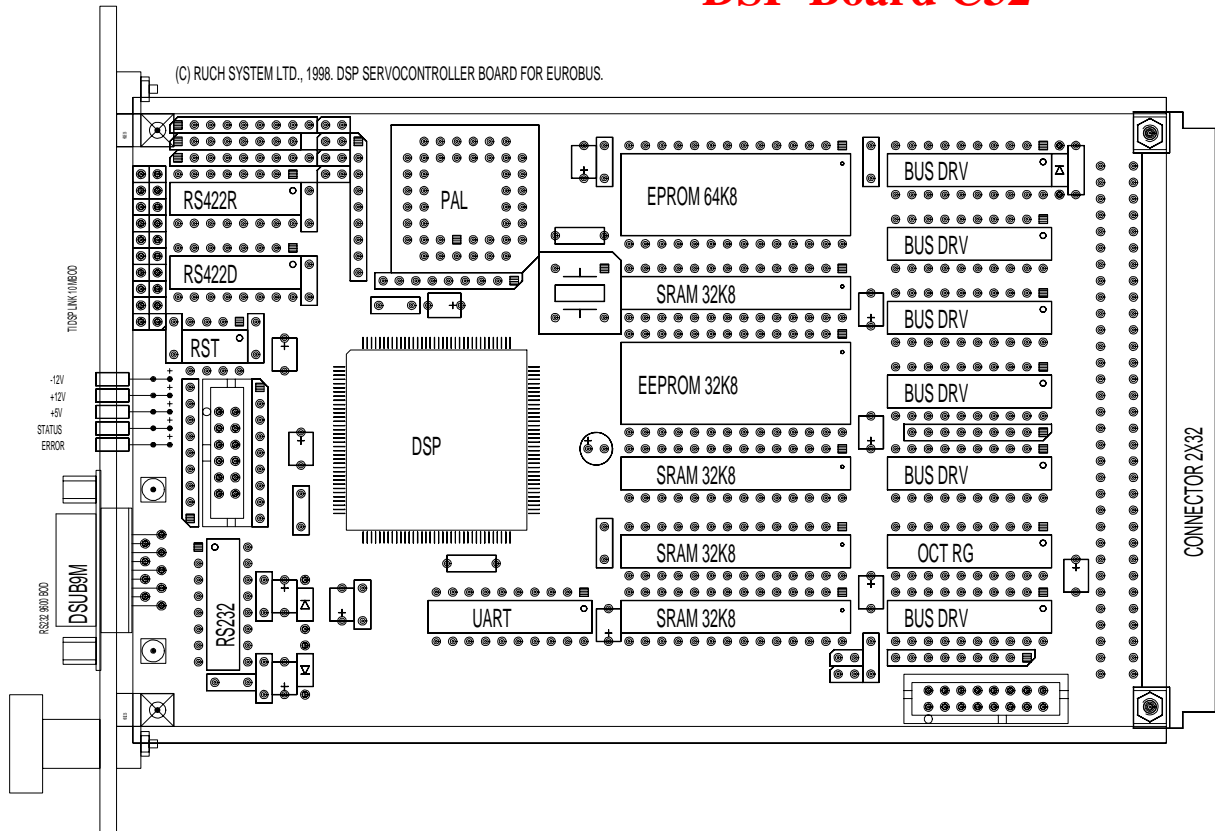


NEW

ROOKH LTD

DSP-Board C32



- **Features for DSP Board C32**

- Euro-board 160 x 100 mm, Eurobus connection with 64 pin connector
- DSP TMS320C32, 50 MHz, 25 Mflops, Float Point commands, 2 Timers, 2 DMA, programmable Wait States, Boot from ROM, Boot from Link.
- 64 K x 8 Bit Boot ROM, 32K x 8 Bit EEPROM, 32K x 32 Bit RAM, 64K x 16 Bit Ports
- EEPROM can be replaced to additional 64K x 8 Bit Boot ROM
- Serial interface RS232, D-Sub-9 connector on front panel
- Serial synchronous interface RS422 TI 10 Mbod for connecting multiple boards C32
- 8 TTL Inputs, 6 TTL Outputs
- Watchdog
- LEDs for Status, Error, power supply 5V, 12V on front panel
- Multiple boards on one Bus possible
- Timer signal on Bus
- ROM-Software for linear and circle interpolation, 3 Axes, DIN/ISO or HPGL

Pin assignment for DSP Board C32

P1 64 pin Connector, Front view

| | | C | | | A | |
|--------------------------------|------------|-----------|---|---|-----------|--|
| +5V supply voltage | +5V | 01 | ⊙ | ⊙ | 01 | +5V +5V supply voltage |
| +12V supply voltage | +12V | 02 | ⊙ | ⊙ | 02 | +12V +12V supply voltage |
| -12V supply voltage | -12V | 03 | ⊙ | ⊙ | 03 | -12V -12V supply voltage |
| Data bus bit D01 | <i>D01</i> | 04 | ⊙ | ⊙ | 04 | <i>D00</i> Data bus bit D00 |
| Data bus bit D03 | <i>D03</i> | 05 | ⊙ | ⊙ | 05 | <i>D02</i> Data bus bit D02 |
| Data bus bit D05 | <i>D05</i> | 06 | ⊙ | ⊙ | 06 | <i>D04</i> Data bus bit D04 |
| Data bus bit D07 | <i>D07</i> | 07 | ⊙ | ⊙ | 07 | <i>D06</i> Data bus bit D06 |
| Address bus bit A01 | <i>A01</i> | 08 | ⊙ | ⊙ | 08 | <i>A00</i> Address bus bit A00 |
| Address bus bit A03 | <i>A03</i> | 09 | ⊙ | ⊙ | 09 | <i>A02</i> Address bus bit A02 |
| Address bus bit A05 | <i>A05</i> | 10 | ⊙ | ⊙ | 10 | <i>A04</i> Address bus bit A04 |
| Address bus bit A07 | <i>A07</i> | 11 | ⊙ | ⊙ | 11 | <i>A06</i> Address bus bit A06 |
| Address bus bit A09 | <i>A09</i> | 12 | ⊙ | ⊙ | 12 | <i>A08</i> Address bus bit A08 |
| Address bus bit A11 | <i>A11</i> | 13 | ⊙ | ⊙ | 13 | <i>A10</i> Address bus bit A10 |
| Address bus bit A13 | <i>A13</i> | 14 | ⊙ | ⊙ | 14 | <i>A12</i> Address bus bit A12 |
| Address bus bit A15 | <i>A15</i> | 15 | ⊙ | ⊙ | 15 | <i>A14</i> Address bus bit A14 |
| Data bus bit D09 | <i>D09</i> | 16 | ⊙ | ⊙ | 16 | <i>D08</i> Data bus bit D08 |
| Data bus bit D11 | <i>D11</i> | 17 | ⊙ | ⊙ | 17 | <i>D10</i> Data bus bit D10 |
| Data bus bit D13 | <i>D13</i> | 18 | ⊙ | ⊙ | 18 | <i>D12</i> Data bus bit D12 |
| Data bus bit D15 | <i>D15</i> | 19 | ⊙ | ⊙ | 19 | <i>D14</i> Data bus bit D14 |
| Not connected | <i>NC</i> | 20 | ⊙ | ⊙ | 20 | <i>NC</i> Not connected |
| Clock DSPCLK/2 | <i>C20</i> | 21 | ⊙ | ⊙ | 21 | <i>EXT</i> External address, active low |
| Write strobe, active low | <i>IOW</i> | 22 | ⊙ | ⊙ | 22 | <i>C05</i> Clock DSPCLK/5 |
| Read strobe, active low | <i>IOR</i> | 23 | ⊙ | ⊙ | 23 | <i>DTA</i> Valid data, active low |
| Reset output, active low | <i>RST</i> | 24 | ⊙ | ⊙ | 24 | <i>RSI</i> Reset input, active low |
| Read high, write low | <i>RW</i> | 25 | ⊙ | ⊙ | 25 | <i>VMA</i> Valid address, active low |
| Not connected | <i>NC</i> | 26 | ⊙ | ⊙ | 26 | <i>NC</i> Not connected |
| Not connected | <i>NC</i> | 27 | ⊙ | ⊙ | 27 | <i>NC</i> Not connected |
| Not mask interrupt, active low | <i>NMI</i> | 28 | ⊙ | ⊙ | 28 | <i>IRQ</i> Interrupt request, active low |
| Not connected | <i>NC</i> | 29 | ⊙ | ⊙ | 29 | <i>NC</i> Not connected |
| Timer pulse positive | <i>TBP</i> | 30 | ⊙ | ⊙ | 30 | <i>TBM</i> Timer pulse negative |
| Not connected | <i>NC</i> | 31 | ⊙ | ⊙ | 31 | <i>NC</i> Not connected |
| Ground | <i>GND</i> | 32 | ⊙ | ⊙ | 32 | <i>GND</i> Ground |

DSP C32 Board bus timing, Zero Wait-State Read and Write Sequence

