

Summary

- Altera FPGA
- Options:
 Altera 10K50E
 Altera 10K100E
 Altera 10K130E
- 1 Mbyte SRAM
- SRAM is dual ported
- Separate logic for the IP interface
- Reconfigurable I/O
- 48 I/O lines, 24 pair
- RS-422/485 drivers
- User configurable IO by groups of 4, 2 pair
- 100 ohm termination software programmable
- Programmable via IP bus or bit/byte blaster
- Local serial Eprom
- Internal / External clock
- 8/32 Mhz IP clock support
- Vita 4 compliant



USER RECONFIGURABLE ALTERA FPGA, 1MBYTE DUAL-PORTED SRAM RS-422/485, TTL OR COMBINATION I/O DRIVERS



IP-ALTERA10K50E-PIO

Features

- Altera FPGA 10K50E, 10K100E or 10K130E
- Stand alone possibility
- Single wide Industry Pack
- 100Ω termination Max335
- Optional User clock oscillator

Memory

- 1 Mbyte external SRAM
- Dual ported between the Altera and IP bus with arbitration

I/O Level

- 24 pair RS-422/485 or 48 TTL or a combination
- Max1484
- Software-Selectable, Half-/Full-Duplex, Slew-Rate-Limited, 12Mbps, RS-485/RS-422 Transceivers in μMAX Package

Programmable via

- Bit / Byte Blaster
- Serial Eprom
- IP Bus
- Multiple example

IP interface

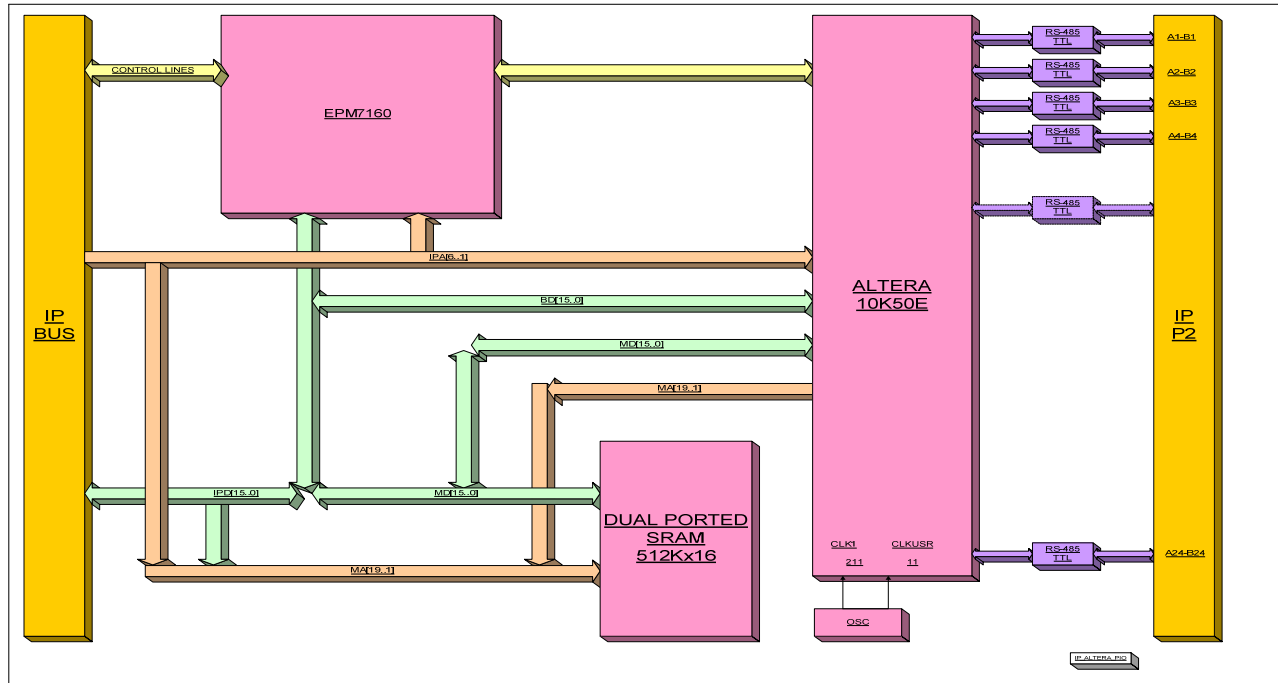
- 8/32 Mhz clock
- 16 bit address
- Interrupts

Operating: Environmental

- Operating temperature
 Commercial: 0 to +55 °C
 Optional: -25°C to +80°C
- Non-operating: -40°C to 85 °C
- Airflow requirement: .5 CFM
- Humidity: 5 to 90% (non-cond.)
- Altitude: 0 to 10'000 ft

Mechanical: Environmental

- Size: Vita 4 Type 1 IP
 1.8" x 3.9"
- Power: 1 watt
- Vibration: 0.5G RMS
 20-2000 Hz rand
- Shock: 20 G, 11 ms, ½ sine
- Weight: tbd
- MTBF: >250000 hours



Functional Block Diagram

Ordering Information

Part Number : IP-Altera-10K50E-PIO
 IP-Altera-10K100E-PIO
 IP-Altera-10K130E-PIO

RS-485/422 ALTERA 10K50E Industry Pack module
 RS-485/422 ALTERA 10K100E Industry Pack module
 RS-485/422 ALTERA 10K130E Industry Pack module

Optional Accessories

Part Number : TB-50-HDR
 Part Number : CBL-50-HDR

50 pin terminal block and 1meter flat ribbon cable
 50 pin, 1meter flat ribbon cable, IDC header connector

Alphi Technology Corporation
 6202 South Maple Ave, Suite 120
 Tempe, Arizona 85283, USA
 Tel: (480) 838 2428
 Fax: (480) 838 4477

For ordering information: sales@alphitech.com Please visit our web site at www.alphitech.com