

Summary

- Altera Cyclone II
- Altera EP2C20
Altera EP2C50
- Compatible upgrade of Alphi IP-10K50E
- 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
- 120 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-CYCLONE II-PIO

Features

- Altera Cyclone II FPGA EP2C20 or EP2C50
- Stand alone possibility
- Single wide Industry Pack
- 20 Mbps RS485
- Logic-Selectable 120Ω Termination Resistor
- 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
- 20 Mbps RS485
- High Input Impedance Supports 256 Nodes
- Software-Selectable, Half-/Full-Duplex
- Enhanced ESD protection allows to withstand ±15kV
- Logic-Selectable 120Ω Termination Resistor

Cyclone2 Programmable via

- Bit / Byte Blaster
- Serial EPROM
- IP Bus

IP interface

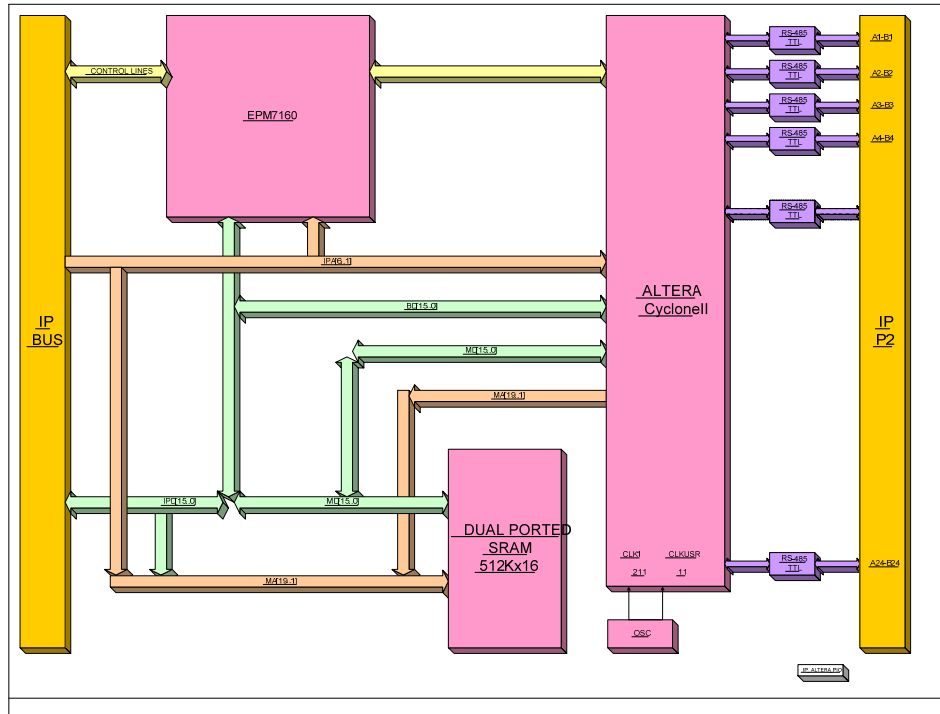
- 8/32 Mhz clock
- 16 bit address
- Interrupts

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-Cyclone II-C20-PIO
 IP-Cyclone II-C50-PIO

RS-485/422 ALTERA EP2C20 Industry Pack module
 RS-485/422 ALTERA EP2C50 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