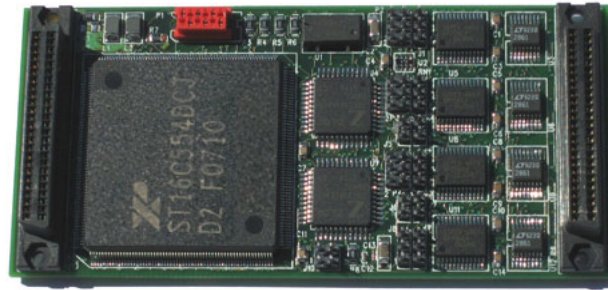## Summary

The IP512-16-XX module is a quad channel Serial Communication Controller with 16-Byte Fifo per Line (optional 128-Byte), with error Flag on the receive line. The IP512-16-XX module is based on the four channels UARTs ST16C554/854, with larger FIFOs. This module provides four asynchronous ports up to 1.5Mbps. Software programmable baud rate generator using external oscillator that features user selectable Frequency .
Internal Loopback capability allows on board diagnostic.
Four selectable receive FIFO interrupt trigger levels. Allows Standard Modem Interface capability.

Quad Isolated Serial I/O Industry Pack
EIA-485

IP-512-16-XX (NOT AN ACTUAL PICTURE)

Features

- ST16C554 Enhanced Controller
- Quad Synchronous Serial ports
- 16/128-byte FIFO per Line (TX and RX)
- 1.5 Mbps transmit/receive operation (24MHz)
- Serial port independently isolated for high-Voltage.
- Individual baud rate generators per port
- Software selectable Baud Rate Generator
- 230 Kbits Async. Upto 2 Mbits Sync.
- Full handshake control line
- Selectable Socketed Termination Resistors
- Standard Modem Interface

Applications
Ideally suited to work with high speed modems and shared network environments, that require fast data processing time, the IP512-16-XX is found in:

- Process Control and Industrial Automation
- Precision Instrumentation
- Direct Digital Waveform Generation
- Software-Controlled Gain Adjustment
- Automatic Test Equipment
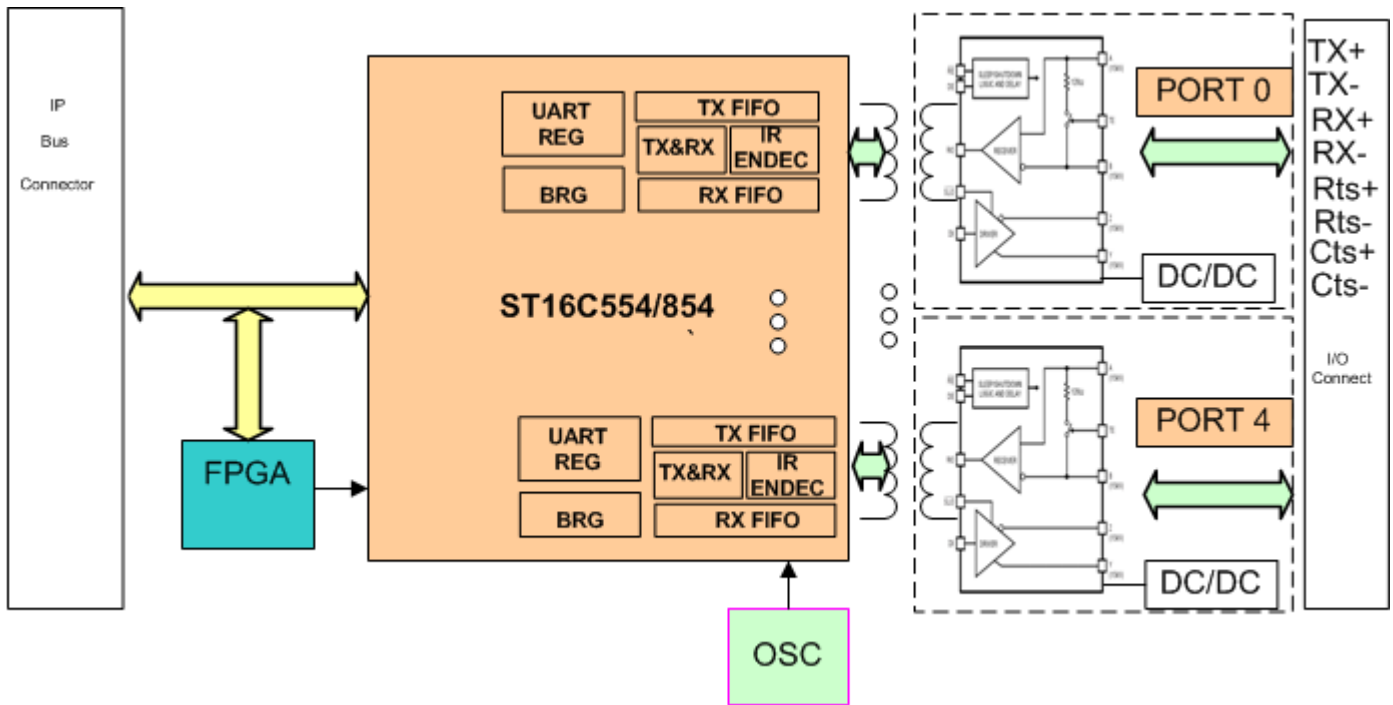- Many other applications

IP interface

- Compatible with Industry Pack Bus specification
- Identification EEPROM
- 8/32 MHz clock
- 16 bit data

Operating: Environmental

- Operating temperature
     Commercial: 0 to +70 °C
     Optional: -25°C to +80°C
- Non-operating: -40°C to 85 °C
- Airflow requirement: .5 CFM
- Humidity: 5 to 90% (non-condensing)
- Altitude: 0 to 10'000 ft

Mechanical: Environmental
- Size: Vita 4 Type 1 IP
     1.8" x 3.9"
- Power: +5, +12, -12 volts
- 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: IP512-16-XX   4 Ch RS-422/RS-485 Module
                                           XX Clock Desired for Baud Rate

Optional Accessories

Part Number :   TB-50-HDR   50 pin terminal block and 1meter flat ribbon cable
                      CBL-50-HDR   50 pin, 1 meter flat ribbon cable, IDC header connector

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