

# IEEE 1394 Physical Layer Controller (MD8402)

## General Descriptions

The MD8402 is a controller for the high-speed serial bus physical layer that conforms to the IEEE 1394 - 1995. It can be connected to peripherals in a free configuration because it has the functions required for the physical layer and can control the three connected ports with a single chip. It has a direct interface with the link layer controller MD8412/13, so it is ideal for applications in which devices are built into peripherals or terminals.

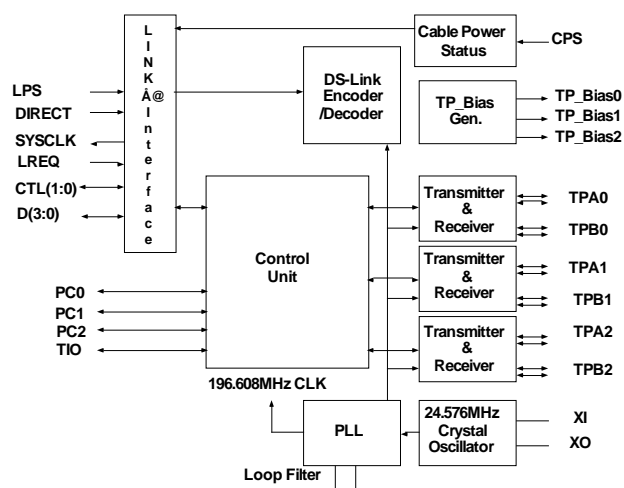
## Features

- Differential type transceiver conforming to IEEE 1394 - 1995
- Cable condition detection function
- Supports transfer speeds of 200 or 100 Mbits/sec.
- Automatic shutdown function for unused ports
- 3 ports provided for connection
- Cable feed voltage detecting function
- DS Link Encoding / Decoding
- 24.576 MHz crystal oscillator and multiplying PLL built in
- Can support multiplex transmission rate between connected ports
- Support of both AC and DC coupling connections with Link Interface

## Applications

- |                                  |               |                 |           |
|----------------------------------|---------------|-----------------|-----------|
| ■ Digital camera                 | ■ Digital VTR | ■ Digital audio |           |
| ■ Electronic musical instruments |               | ■ Scanner       | ■ Printer |
| ■ Various storages               | ■ DVD         | ■ Set-top box   |           |

## Internal block diagram



## Package Outline

100 pin LQFP

## Power Voltage

3.3 volts