

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.

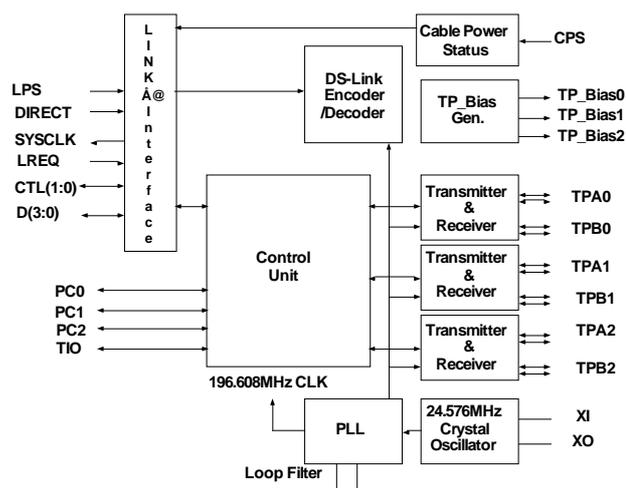
Features

- 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