



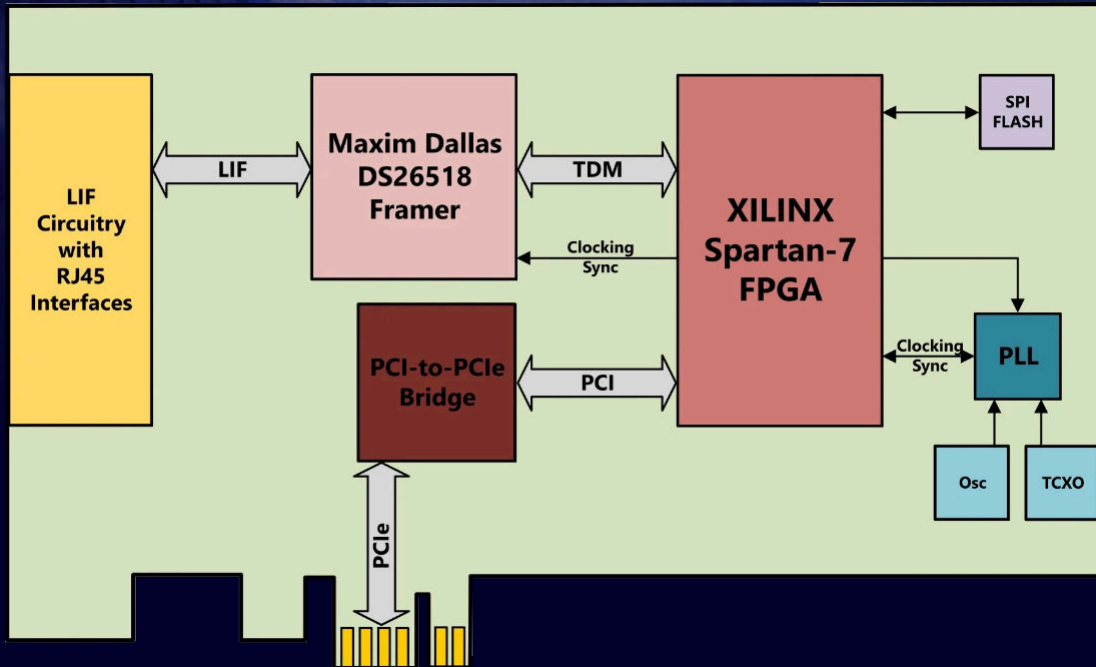
NAT-PCIe-8E1T1

The **NAT-PCIe-8E1T1** is a PCI Express (PCIe) add-in card with Line Interfaces (LIF) via RJ45 connectors. Thus, the module processes data between E1 / T1 digital data transmission formats on one side and the PCIe interface on the other.

A Xilinx Spartan-7 FPGA with dedicated security features provides processing power. Its PCI interface connects with the PCI-to-PCIe Bridge, which interfaces towards the PCIe interface of the carrier e.g., PC mainboard. TDM data from the FPGA is linked to the Maxim Dallas DS26518 framer, converted to E1/T1, and vice versa.

Clock is generated by a Texas Instruments LMK05028 PLL, which is supplied by a TCXO and a standard oscillator.

Typical field of application for the **NAT-PCIe-8E1T1** may be converting between PSTN and VoIP networks.



Key Features

- Standard height, half-length PCIe x1 add-in card
- Xilinx Spartan-7 FPGA
- Maxim/Dallas DS26518 E1/T1 framer
- Diodes Incorporated PI7C9X112SL PCIe-to-PCI bridge
- Texas Instruments LMK05028 PLL with TXCO and standard oscillator
- 32 MB SPI flash
- 8x E1 via RJ45 towards front panel
- Micro-USB at front panel