

i7330 155Mbps to 4Gbps Low-Power Limiting Amplifier

General Description

The i7330/i7331 limiting amplifier with data rates from 155Mbps up to 4Gbps, are designed for high speed fiber-optic based communication receivers. They are pin-to-pin compatible with MAX3747X and SY88993V.

The i7330/i7331 also includes a programmable signal-level detector, allowing the user to set threshold at which the CML outputs are enabled. Typically 2.5 dB (Optical) of hysteresis is provided to prevent chattering when signal level is close to the threshold.

LOS and DISABLE can be used to implement a squelch function, which gives fixed logic levels at data outputs when the input signal is below the programmed threshold. The i7330/i7331 has a CMOS status outputs (pin LOS).

The i7330/i7331 is packaged in a small, 10-pin(3mm) MSOP and a 16-pin SSOP, It consumes only 18mA (typ), excluding the CML output current.

Applications

Gigabit Ethernet/SDH/SONET
Broadband Access Systems

Features

- Pin Compatible with MAX3747X and Micrel SY88993V
- Operation data rate 155Mbps to 4Gbps
- Fully Compliant with SFP and SFF-8472 MSAs
- Limiting Amplifier includes integrated DC offset cancellation circuit
- Chatter-free LOS with Programmable Threshold
- Open Collector TTL LOS output
- Output DISABLE function
- 4 mV input sensitivity (differential).

Ordering Information

Part No.	Package
i7330	10-pin MSOP(3mm)
i7331	16-pin SSOP