

# High Sensitivity 2.5 Gbps CMOS TIA For APD Application

## 1. Introduction

### 1.1 Description & Features

The i7621 is a high sensitivity transimpedance amplifier (TIA) with automatic gain control (AGC) manufactured in a pure CMOS process. The AGC enables over 28 dB of dynamic operating range, resulting in a high performance TIA suitable for fiber optic applications such as GPON and OC-48 SONET.

The i7621 is pad compatible with all popular 2.5Gbps TIAs whilst offering superior performance and additional features. The i7621 can be used in new applications or as a drop-in replacement for existing TIAs without major re-design effort.

Featuring photodiode monitor and monitor invert functions the i7621 offers the most flexible, high performance receiver solution for 2.5 Gbps applications available.

### 1.2 Applications

- GPON ONT/ONU Transceivers
- 2.5 Gbps SFF/SFP Modules
- APD Long reach receivers

## 2. Die Pin configuration and Definition

