## 56 Gbaud Single-Channel, Single-Ended Input, Linear Transimpedance/Variable-Gain Amplifier

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>IN5661TA</td>
<td>The IN5661TA is a single-channel, single-ended input, linear transimpedance/variable-gain amplifier (TIA/VGA) for 100G optical receivers.</td>
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<td>The IN5661TA operates in automatic gain mode. It can adjust its single-ended input transimpedance and delivers an output voltage in AGC mode.</td>
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<td>The IN5661TA supports a very wide input optical power range. It has extremely low input referred noise current density and provides linear amplification.</td>
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<td>The IN5661TA provides an RSSI function to monitor and report average optical input power.</td>
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<td>The IN5661TA operates from a single +3.3 V power supply and is available in die form.</td>
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### Features
- Supports baud rates up to 56 Gbaud
- Single-channel monolithic TIA/VGA
- Wide differential electrical gain
- High electrical bandwidth
- Adjustable AGC output amplitude
- Low noise
- Low power consumption
- I2C serial interface supported
- Available in die form

### Product Type
Transimpedance Amplifiers

### Market Segments
Inside Data Centers

### Applications
100G Optical Receivers