



**ZNID-GPON-2427A1**



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## Introduction

The ZNID-GPON-2427A1 is a high-speed Gigabit PON. It provides sufficient bandwidth for high performance connection to the Internet.

The ZNID-GPON-2427A1 provides one Gigabit PON interface, 4 GE LAN port, 2 FXS port, 1 USB(2.0) port, 2.4G(802.11b/g/n)WIFI interface, 1 ups port, and a CATV port. The gigabit pon are used for connecting to computers, through which you can access the Internet.

## Application

- Network online gaming
- High Internet access sharing
- High rate broadband sharing
- Small enterprises application
- Home networking application
- VoIP service
- CATV service

## Parameters and Specifications

| Parameter                                    | Specifications                                                                                            |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| <b>System Specifications</b>                 |                                                                                                           |
| Chipset                                      | BCM68380IFSBBG+Le9540D+BCM43217T                                                                          |
| DRAM                                         | 1Gbit DDR3                                                                                                |
| Flash                                        | Nand Flash 1Gbit (4bit ECC)                                                                               |
| Optical module                               | LT9775M-CHG1 (Tirplexer)                                                                                  |
| <b>Features and Technical Specifications</b> |                                                                                                           |
| GPON Features                                | Upstream:<br>Speed:1.25Gbps<br>center wavelength : 1310nm<br>TX POWER(min):1.5dBm<br>TX POWER(max):4.5dBm |



| Parameter               | Specifications                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                         | Extinction ratio(min):10.5dB<br>Downstream(data):<br>Speed:2.488Gbps<br>Center wavelength :1490nm<br>Receiving sensitivity :<=-28.5dBm<br>Signal deassert (min):-40dBm<br>Signal Assert(max):-29dBm<br>SFF 8472 V9.5<br>Fiber:G652 single mode fiber<br>Connector:SC/APC<br>Downstream(CATV):<br>Band:analog channel 47MHz~870/1002MHz<br>Center wavelength :1550nm<br>Optical Input Power -8~2dBm<br>Connector:SC/APC |                                                                                                                                                                                                                                                                                                                                                                                  |
| Ethernet interface      | Standard:<br><ul style="list-style-type: none"> <li>● ITU-T G.984.5 Class B+</li> <li>● IEEE 802.11</li> <li>● IEEE 802.3-2005</li> <li>● IEEE 802.1D-2004</li> <li>● RFC2516</li> </ul> LAN:<br><ul style="list-style-type: none"> <li>● 10/100BASE-T</li> <li>● 1000 BASE-T</li> <li>● MDI/MDIX</li> <li>● Automatic negotiation</li> </ul>                                                                          |                                                                                                                                                                                                                                                                                                                                                                                  |
| Wireless Features(2.4G) | Standard                                                                                                                                                                                                                                                                                                                                                                                                               | IEEE802.11 b/g/n                                                                                                                                                                                                                                                                                                                                                                 |
|                         | Frequency band                                                                                                                                                                                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>● 802.11b: ISM band 2.400 GHz—2.484 GHz (according to the local regulations)</li> <li>● 802.11g: ISM band 2.400 GHz—2.484 GHz (according to the local regulations)</li> <li>● 802.11n draft:               <ul style="list-style-type: none"> <li>– ISM band</li> <li>– 2.400 GHz—2.484 GHz (channel BW=20/40 MHz)</li> </ul> </li> </ul> |



| Parameter           | Specifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     | Modulation schemes <ul style="list-style-type: none"> <li>● 802.11g: 64QAM, 16QAM, QPSK, BPSK, DSSS</li> <li>● 802.11b: CCK, DQPSK, DBPSK</li> <li>● HT20: 64 QAM, 16QAM, QPSK, BPSK</li> <li>● HT40: 64 QAM, 16QAM, QPSK, BPSK</li> </ul>                                                                                                                                                                                                                                                                                                                                                         |
|                     | Wireless data rate <ul style="list-style-type: none"> <li>● 802.11b: 11, 5.5, 2, 1 Mbps per channel, auto fallback for extended range</li> <li>● 802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps per channel, auto fallback for extended range</li> <li>● 802.11n: up to 140Mbps</li> </ul>                                                                                                                                                                                                                                                                                                             |
|                     | Operating channels <ul style="list-style-type: none"> <li>● 802.11b:               <ul style="list-style-type: none"> <li>– 4: France</li> <li>– 11: USA and Canada</li> <li>– 13: Most European countries</li> <li>– 14: Japan</li> </ul> </li> <li>● 802.11g:               <ul style="list-style-type: none"> <li>– 11: USA and Canada</li> <li>– 13: Most European countries</li> <li>– 14: Japan</li> </ul> </li> <li>● HT20/40:               <ul style="list-style-type: none"> <li>– 11: USA and Canada</li> <li>– 13: Most European countries</li> <li>– 14: Japan</li> </ul> </li> </ul> |
| External Connectors | <ul style="list-style-type: none"> <li>● 1 x RJ45 LAN Ethernet interfaces 10M/100M/1000M</li> <li>● 1 x Reset button</li> <li>● 1 x WPS button</li> <li>● 1 x WLAN button</li> <li>● 1 x power jack</li> <li>● 1 x RJ11</li> <li>● 1 x RF connector</li> <li>● 1 x on/off button</li> <li>● 1 x SC/APC connector</li> <li>● 1 x USB port</li> <li>● 1 x UPS port</li> <li>● 2 x 5dBi antenna</li> </ul>                                                                                                                                                                                            |
| Environment         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |



| Parameter                       | Specifications                  |
|---------------------------------|---------------------------------|
| <b>Requirement</b>              |                                 |
| Operating Temperature           | -5°C—45°C                       |
| Storage Temperature             | -20°C—70°C                      |
| Operating Humidity              | 10%—95%, non-condensing         |
| Storage Humidity                | 5%—95%, non-condensing          |
| Power Supply                    | 12VDC, 1.5 A                    |
| Consumption                     | 11.8W (including power Adapter) |
| <b>EMC and Safety</b>           |                                 |
| Regulation Compliance           | NA                              |
| Safety Regulations              | NA                              |
| Green Standard                  | RoHS                            |
| <b>Physical Characteristics</b> |                                 |
| Physical Dimension              | /                               |
| Weight                          | /                               |
|                                 |                                 |

## FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which



the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

### **Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

