

# Product Specification

Model Name: TG141

(Use Broadcom GPON solution BCM68461 platform)

GPON 4GE + 1FXS



Version: 1.0

# 1. Product Descriptions

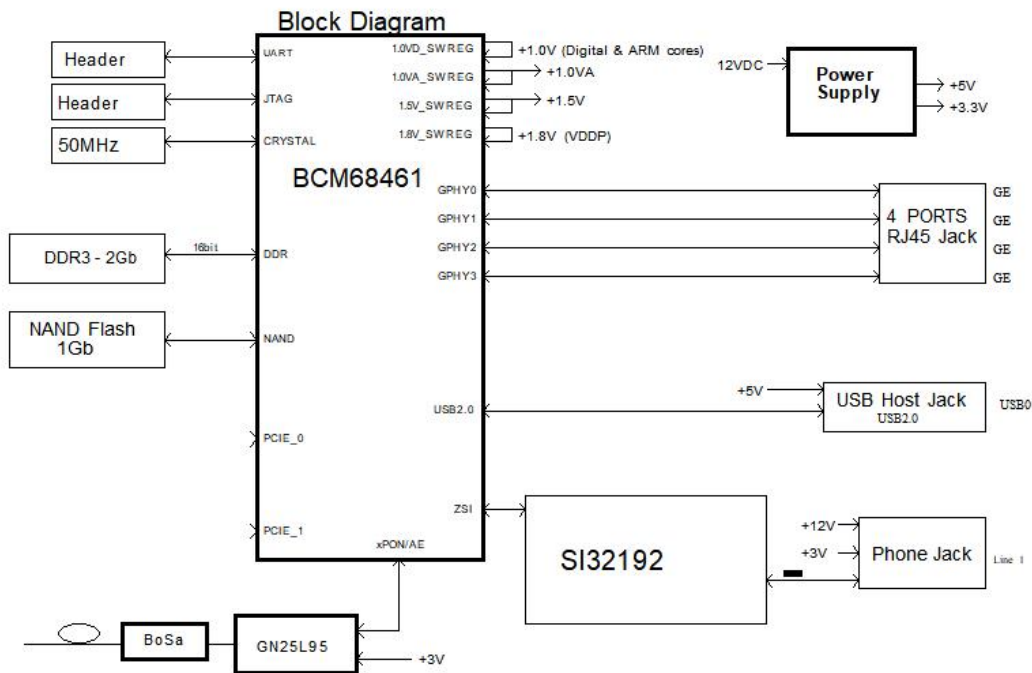
TG141 ONU is a highly integrated GPON integrated access equipment. The device provides high performance Data, Voice and Video services for individual users, SOHO (small office or family office), small businesses, etc.

TG141 ONU features intelligent routing functionality compare to ordinary CPEs. This user friendly device can easily allow the users to control the bandwidth, number of online users, online duration etc.

TG141 ONU complies with the ITU-T G.984 standard, provides 2.488 Gbps downlink and 1.244 Gbps uplink at network side, and provides four GE ports, one POTS port at user side.

# 2. Product Specifications and Features

## 2.1. Block Diagram



## 2.2. Specification

Key Components/Connectors/Performance	
GPON Chipset	BCM68461
Voice chipset	DXC101

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Flash	128MB Nand Flash
SDRAM	256MB DDR3
<b>Interfaces</b>	
WAN	1* GPON port (SC/APC); Data Rate: Downstream: up to 2.488Gbps; Upstream: up to 1.244Gbps; Receiving wavelength: 1,490 nm; Transmitting wavelength: 1,310 nm; Optical performances Class B+;
LAN	4 * 10/100/1000 Base-T MDI/MDIX RJ-45 port compliant with following standards: 1. IEEE 802.3/802.3u 2. Hardware based 10/100/1000, full/half, flow control auto negotiation 3. Non-blocking wire speed reception and transmission 4. Full duplex IEEE 802.3x flow control and half duplex back-pressure flow control
FXS	1 * FXS
USB	1 * USB2.0
<b>Buttons</b>	
Reset	Reset to factory default by pushing button for 5 sec.
<b>Others</b>	
Dying Gasp	Supported
Power Switch	Push button power on or off

### 2.2.1. LED indicators

LED Indicator	Color	Status	Description
Power	Green	Green on	ONU is powered on
		Off	Power supply is cut off
PON	Green	Green on	ONU has been authenticated by OLT (O5)
		Flashing	ONU is not authenticated yet.
		Off	No optical signals
Optical	Red	Off	In case of optical power normal
		Red on	In case of LOS/LOF alarms
Internet	Green	Green on	IP connected and no traffic detected
		Flashing	Receiving or sending traffic
		Off	Internet offline
LAN1~LAN4	Green	Green on	Port has successful connection.
		Flashing	LAN Activity present
		Off	Port is not connected.
FXS	Green	Green on	ONU has successful voice connection.

		Flashing	ONU is using voice service.
		Off	The connection is down.
USB	Green	Green on	There is USB access to this device
		Flashing	Data transfer in progress
		Off	There is no USB connection

### 2.3.S/W Features

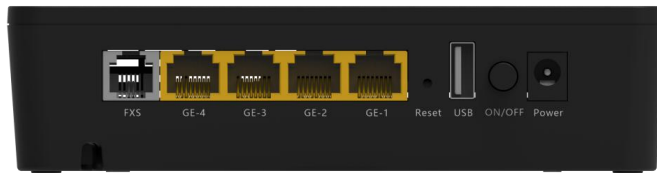
Feature Item	Feature	Detailed Description
GPON Compliance	Fully compatible with ITU-T G.984.1, G.984.2, G.984.3, G.984.4 and G.988 Amendment 3.	
	Support VEIP-based OMCI configuration.	
	Support 40 TCONTS and 256 GEM Ports	
	Support for Multicast GEM Port	
Network Protocol	Supports Bridge and Route mode	
	PPPoE	
	PPPoE passthrough	
	IGMP v1/v2/v3 Proxy	
	IGMP v1/v2/v3 snooping	
	DHCP server/client/relay	
ALGs	DNS Proxy/Relay	
	FTP	
	TFTP	
	RTSP	
	Port Triggering	
	PPTP	
Firewall/Filtering	IPSec/VPN and IPSec/L2TP	
	Stateful Inspection Firewall	
	Stateless Packet filtering	
NAT/PAT	TCP/IP/Port/Interface Filtering Rules support Both Incoming and Outgoing Filtering	
	NAT Loopback	
	Full Cone NAT	
	Port Triggering	
	Port Forwarding (Virtual Server)	
QoS	DMZ	
	IP/Bridge/802.1p	
	Rate Control on upstream traffic	

	Support SP, WRR, WFQ priority	
Routing	RIP v1/v2	
	Static Route	
IPv6	IPv6 Firewall	
	MLD	
	IPv6 capable apps	telnetd, ftpd, sshd, httpd
Management	TR-069, TR-098	
	Compatible with TR-101, TR-104, TR-156 and TR-157	
	TR-142	
Other Features	Dynamic DNS	
	UPnP	
	SNTP	
VoIP	Support SIP protocol to deliver voice service (SIP client allocation &Registration)	
	Multiple codec support on ONT ITU-T G.711, G.722, G.729 (A and B)&T.38 Call forwarding, Call waiting, Call block, 3-way conference call, etc	

### 3. Mechanic & ID Design

#### 3.1. Housing

Dimensions(L\*W\*H): 152mm\*100mm\*40mm



### 3.2. Power Adapter

- Input: 110-240VAC, 50/60Hz
- Output: 12V DC, 1A

### 3.3. Physical & Environment

#### 3.3.1. Temperature

- Operation: 32°F to 104°F (0°C to 40°C)
- Storage: -4°F to 158°F (-20°C to 70°C)

#### 3.3.2. Humidity

- Operation: 10% ~ 90% (non-condensing)
- Storage: Max. 5% ~ 95% (non-condensing)

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