

# Product Specification

Model Name: TG5241

(Use Broadcom GPON solution BCM68782 platform)

GPON 4GE + Dual band Wi-Fi



Version: 1.0

## 1. Product Descriptions

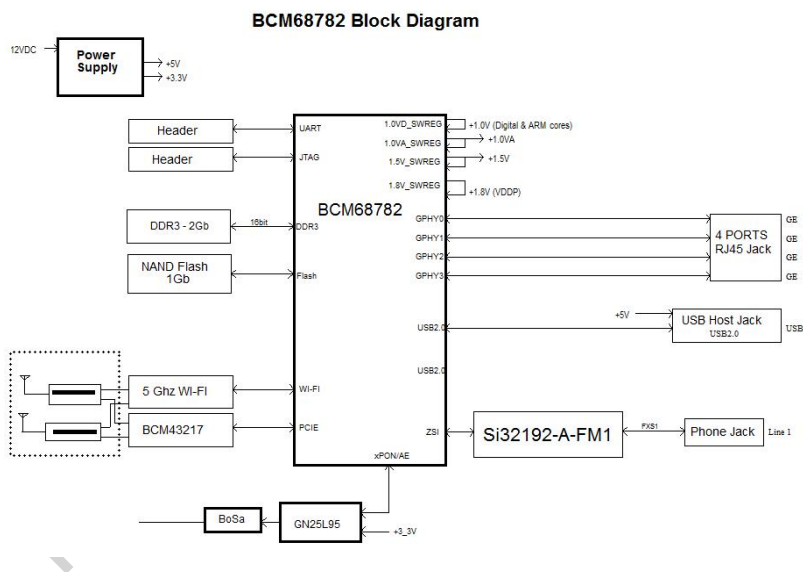
TG5241 ONU is a highly integrated GPON integrated access equipment. The device provides high performance Data, Voice and Video services for individual users, SOHO (small office or family office), small businesses, etc.

TG5241 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.

TG5241 ONU complies with the ITU-T G.984 standard, provides 2.488Gbps downlink and 1.244Gbps uplink at network side, and provides four GE ports, one POTS port, dual band Wi-Fi (2T2R 802.11n@2.4G Hz and 2T2R 802.11ac@5GHz), and one USB2.0 interface at user side.

## 2. Product Specifications and Features

### 2.1.H/W Features



### 2.2.Specification

Key Components/Connectors/Performance	
GPON Chipset	BCM68782
2.4G Wi-Fi chipset	BCM43217
5G Wi-Fi chipset	BCM68782
Flash	128MB Nand Flash

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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 Range: 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
2.4G Wi-Fi	External 2 * 5dBi antennas; IEEE 802.11n, backward Compatible with 802.11b/g; Up to 300Mbps PHY rate;
5G Wi-Fi	External 2 * 5dBi antennas; IEEE 802.11ac, backward Compatible with 802.11a/n; Up to 866Mbps PHY rate;
FXS	1 * FXS
USB	1 * USB 2.0
<b>Buttons</b>	
Reset	Reset to factory default by pushing button for 5 sec.
Wi-Fi	Push button to turn on/off WLAN.
WPS	Push button to connect to STA without WiFi Key
<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
GPON	Green	Green on	ONU has been authenticated by OLT (O5)
		Flashing	ONU is not authenticated yet.
		Off	No optical signals
LOS	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
USB	Green	Green on	USB storage device is connected to ONU.
		Flashing	Receiving or sending traffic through USB.
		Off	No storage device detected.
2.4G	Green	Green on	ONU has successful WLAN function.
		Flashing	Receiving or sending WLAN traffic.
		Off	WLAN is disabled.
5G	Green	Green on	ONU has successful WLAN function.
		Flashing	Receiving or sending WLAN traffic.
		Off	WLAN is disabled.
LAN1~4	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.

### 2.3.S/W Features

Feature Item	Feature	Detailed Description
GPON Compliance	ITU-T G.984	
	Support 40 TCONTs and 256 GEM Ports	
	Support for Multicast GEM Port	
Network Protocol	PPPoE	
	PPPoE passthrough	
	IGMP v1/v2/v3 Proxy	
	IGMP v1/v2/v3 snooping	
	DHCP server/client/relay	
	DNS Proxy/Relay	
ALGs	FTP	
	TFTP	
	RTSP	
	Port Triggering	
	PPTP	
	IPSec/VPN and IPSec/L2TP	
Firewall/Filtering	Stateful Inspection Firewall	
	Stateless Packet filtering	
	TCP/IP/Port/Interface Filtering Rules	

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	support Both Incoming and Outgoing Filtering	
NAT/PAT	NAT Loopback	
	Full Cone NAT	
	Port Triggering	
	Port Forwarding (Virtual Server)	
	DMZ	
QoS	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
TR-069	TR-098	
	TR-111 (part 1)	
	TR-104	
	TR-140	
Other Features	Dynamic DNS	
	UPnP	
	SNTP	
Wi-Fi	WPA/WPA2	
	MAC Filter base on each SSID	
	Multiple SSID	
	Support SSID hidden	
	SSID User Isolation	

### 3. Mechanic & ID Design

#### 3.1.Outlook

(TBD)

#### 3.2.Case

(TBD)

### 3.3. Power Adapter

- Input: 110-220VAC, 50/60Hz
- Output: 12V DC, 1.5A

### 3.4. Physical & Environment

#### 3.4.1. Temperature

- Operation: 32°F to 113°F (0°C to 45°C)
- Storage: -40°F to 158°F (-40°C to 70°C)

#### 3.4.2. Humidity

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