With the requirements of communication services increasing, the value-added services (VAS) including 3D network games, video conference/phone, Video on Demand (VoD) and IPTV are key means for operators to provide differential services to attract more subscribers, and gain income growth.

ZTE ZXA10 C320, a small size, full-service optical access convergent platform, provides carrier class QoS and reliable network to meet the requirements for small-scale implementation of FTTx services.

**Key Features**

- Unified platform for GPON, XG-PON1 and P2P
- Small size and compact design, flexible network and fast deployment
- 2U frame with 2 service slots, compatible with ZXA10 C300 line cards
- Abundant service support capability: IPTV, VoIP, HSI, VPN, mobile backhaul, etc
- Higher security assurance: ONT authentication, user ID identification, address binding, packet filtering, and broadcast packet suppression.
- High reliability: key parts redundancy; support Type B and Type C protection for PON downlink and LACP/ UAPS/STP/ERPS for uplink
- Service differentiation: Comprehensive QoS mechanisms for voice, video and high speed Internet services.
- Support DC input redundancy
- Support AC power supply
- Support 1:1 protection for PON interfaces
- Support 1:1 protection for SW (core card) card
- Support 1588V2 and Synchronous Ethernet
- Support embedded OTDR in SFP

**Technical Specifications**

**System Architecture**

- **Capacity**
  - GPON up to 32 ports
  - Uplink interfaces up to 4 *GE (Optical ) + 2*GE(Electronic) or 2*10GE(Optical ) + 2*GE(Optical ) + 2*GE(Electronic)
- **Chassis Configuration (19")**
  - Total 5 slots
  - 2 slots for universal line cards
  - 2 slots for switch & control cards
  - 1 slot for fan module
- **Subscriber Card Density**
  - GPON card: 8/16 ports per card
  - XG-PON1 card: 8 ports per card
  - P2P card: 24/48 ports per card
Uplink interface card
- 1*10GE optical port (Configurable 1*GE optical port)
- 1*GE optical port
- 1*10 M/100 M/1000 M electrical Ethernet port

Common interfaces
- 1*environment detecting interface
- 1*management interface
- 1*maintenance serial interface

PON Features
- GPON compliant with ITU G.984.x
- P2P compliant with ITU G.985/G.986
- XG-PON1 compliant with ITU G.987.x and G.988
- Support 1:128 optical split ratio for xPON
- Support OLS (Optical Laser Supervising)
- Max logical reach: 60km
- Max physical reach: 20km
- Max link difference: 20km
- High-efficient DBA: NSR-DBA, SR-DBA
- Synchronous Ethernet
- GPON Transceiver power: Class B+ or class C+
- XG PON1 Transceiver power: Class N1 and N2a
- Type B and type C optical uplink protection
- Support FEC
- Support AES128
- Support SCB
- GPON MCM (Multi-Copy Multicast)
- Support 1550nm for third party CATV broadcasting

L2/L3 Features
- 4K VLAN
- 1:1/N:1 VLAN
- 802.1ad, SVLAN, Selective QinQ, VLAN stacking
- Line-rate forwarding
- STP/RSTP/MSTP compliant to IEEE 802.1d/802.1w/802.1s
- UAPS/EAPS/LACP protection
- Link aggregation IEEE 802.3ad
- L3 routing:
  - 12K IPv4 routing forwarding entries
  - IPv4 and IPv6 statistic routing
- Multicast – IPTV
  - 1K Multicast groups
  - IGMP Snooping and proxy (v1/v2/3)
  - MLD V1/ V2, snooping/proxy
  - MVLAN: 256
  - Channel Access Control (CAC), Preview (PRV) and Call Detail Record (CDR) for IPTV
  - Less than 50ms channel zapping delay
- QoS
  - 8 queues per port
  - Queue & scheduling mechanism: SP, WRR, SP+WRR
  - IPv4 DSCP Diffserv
  - Stream classification, rate limiting, shaping and priority setting
• Traffic statistics
• WRED and triple color
• SLA: CIR, PIR, EIR

■ Security

➤ L2- L4 ACL
➤ IP and MAC source guard
➤ Resistance against DOS attacks
➤ MAC/IP anti-spoofing (MAC binding, IP binding, DHCP snooping)
➤ Anti-flooding: broadcast packet suppression, IGMP packet suppression, DHCP packet suppression
➤ MAC address number limit based on VLAN or GEM-port
➤ Port mirroring
➤ User port identification such as PPPOE+ and DHCP Option 82

■ O&M

• Operator security, Multi-privileged operator, SSH, FTP/TFTP, ACL
• Management protocol and interface: CLI, Telnet, SNMP V1/V2C/V3, MIBII
• Remote firmware download and upgrade
• Environment detecting, control and alarm

■ Environment

• Operating temperature: --40° C ~ 65° C
• Operating humidity: 5% ~ 95%
• Air pressure: 70 kPa - 106 kPa

■ Power Supply

• DC: -48V+/−20%, -60V+/−20%;
• AC: 100V~240V

■ Dimensions

• 86.1 mm (H) * 482.6 mm (W) * 270 mm (D) (19 inch shelf)
• 2200 mm (H) x 600 mm (W) x 300 mm ((D) (Rack)
• 1035 mm(H) x 770 mm(W) x 460 mm(D) (Outdoor Cabinet)