

# AT-SBx31CFC960

## 960GBPS CENTRAL FABRIC CONTROLLER CARD



The CFC960 central fabric controller card used in the Allied Telesis SwitchBlade® x3100 family of chassis is a new advancement in controller card capability, supporting 40Gbps per slot and 960Gbps aggregation capability.

With quad core central processing units, the AT-SBx31CFC960 provides unmatched flexibility for access and aggregation of bandwidth-intensive applications and services. As network bandwidth continues to grow, service providers find increasing bandwidth demands farther in the local loop. The ability to maintain a single IP infrastructure to address mid-mile network transport bandwidth as well as last mile access bandwidth is pivotal for any network operator.

### Carrier-Grade Controller

Enhanced processing power positions the AT-SBx31CFC960 for expanded support of services and functionality as the capabilities of the SwitchBlade x3100 family continue to expand.

When deployed as dual CFCs in any of the SwitchBlade x3100 Series chassis, the bandwidth-per-channel unit slot is increased to 80 Gigabits. The CFCs in a dual configuration not only provide exceptional bandwidth, but also provide

live backup for each other, so a CFC failure will not result in the loss of traffic.

Whether dual or single CFCs are deployed, each CFC also supports four 10 Gigabit SFP+ ports for use as uplink and transport functions. Dual CFCs allow an additional two channel unit slots to be used for the delivery of services in the various SwitchBlade x3100 Series of chassis switches. For example, with the additional slots, the SwitchBlade x3112 chassis can now support up to 400 symmetrical one Gigabit FTTP services — an increase of 25% from the previous 320 FTTP services.

Unprecedented capabilities and switching capacity of more than a terabit are provided by the AT-SBx31CFC960 for the delivery of user services as well as network traffic aggregation. The AT-SBx31CFC960 is ideally suited for delivering GbE or 10GbE services to any residential or business location. With advanced features, including per VLAN rate limiting on ingress and per queue rate limiting on egress, the 10GbE ports can be used as network interfaces for subtended remote locations, aggregation into metro routers (provider edge) or for point-to-point connectivity to a business. This is in addition to allowing the service provider to have up to ten service modules

## Key Features

- » SNMP management
- » Fully functional CLI
- » Inband management
- » Out-of-band management
- » Support for EPSR 50ms resiliency
- » 32K MAC addresses
- » MLD snooping
- » IPv6 transparency
- » Upward Forwarding Only (UFO)
- » Private VLANs
- » VLAN translation
- » Storm control
- » Egress port / queue rate limiting
- » Port authentication
- » Easy setup

### QoS

- » Eight queues
- » Strict priority scheduling
- » VLAN stacking

### Security

- » Upstream forwarding only
- » Extensive ACL support

### Supported Services

- » High-speed Internet
- » VoIP
- » IPTV
- » Business VPN
- » Network element subtending

in the SwitchBlade x3112 for delivering value-add next-generation broadband services and applications.

The AT-SBx31CFC960 provides all of these capabilities along with wirespeed non-blocking switching capabilities to insure high quality delivery of voice, video, and data services and will become a key component of any IP Triple Play and carrier Ethernet network design.



**SwitchBlade® 3100 Series**

ACCESS EDGE LAYER 2+ CHASSIS SWITCHES

# AT-SBx31CFC960 | 960Gbps Central Fabric Controller Card

## Part of the Allied Telesis IP Broadband Access Family

Whether for metro Ethernet, broadband FTTH, or end of the isle aggregation of services, the AT-SBx31CFC960 provides ideal features and functionality that allow the SwitchBlade x3100 Series to support these services.

The AT-SBx31CFC960 in the SwitchBlade x3100 Series, along with

the iMAP family of products, makes it a perfect choice for networks requiring high flexibility and carrier capabilities.

Provisioning, management, and diagnostics of subscriber ports can be accomplished from either the Command Line Interface or via the Allied Telesis AlliedView™ NMS. The AT-SBx31CFC960 also supports a full SNMP interface and all the major MIBs.

In addition, the AT-SBx31CFC960 supports easy setup — simply plug any computer with a web browser into the management Ethernet port. The browser interface allows for managing basic network and security settings without having to type in any commands, making the system accessible for advanced configuration by the AlliedView NMS.

## Specifications

### Port Specifications

Number of VLANs per port 4095  
Priority queues 8  
Dropped packet counter  
Full traffic classifier support  
Full traffic classifier action support

### Protocols

IEEE 802.1Q VLAN bridging  
IEEE 802.1p Prioritization  
IETF RFC 1112 IP multicasting/IGMP snooping v1  
IETF RFC 2236 IP multicasting/IGMP snooping v2  
DHCP relay agent option 82 (RFC 3046)  
IEEE 802.1d,w Rapid Spanning-Tree  
IEEE 802.1Q MEV (double tagging)  
IEEE 802.3ad Link aggregation  
IETF RFC 3619 EAPS w/Allied Telesis extensions for EPSR  
IETF RFC 2131 DHCP  
IETF RFC 1350 TFTP  
Radius  
TACACS+  
BFD

### Power Requirements

Maximum power 75W

### Environmental

Operating temp: -0°C to 40°C  
Storage temp: -25°C to 70°C  
Relative humidity: 5% to 95%, non-condensing

### Regulatory Approvals

Safety marking UL60950-1  
CAN/CSA – C22.2 No 60950-1  
EN60950-1 (TUV)  
CE  
Emissions FCC Class A  
EN55022  
VCCI  
C-TICK  
Immunity EN55024  
EN61000-3-2  
EN61000-3-3  
Safety agency approvals C- RoHS compliant

## Ordering Information

### Central Fabric Control Card

**CFC960 (AT-SBx31CFC960)**  
960Gbps Central Fabric Control card

### SwitchBlade x3100 Series Chassis

**SwitchBlade x3112 (AT-SBx3112)**  
12-slot chassis group without filler plates

**SwitchBlade x3106 (AT-SBx3106)**  
6-slot chassis group without filler plates

### Supported SwitchBlade x3100 Series Line Cards and Accessories

**GT24 (AT-SBx31GT24)**  
24-port, 10/100/1000T Ethernet line card

**GT40 (AT-SBx31GT40)**  
40-port, 10/100/1000T Ethernet line card

**GP24 (AT-SBx31GP24)**  
24-port, 10/100/1000T PoE Ethernet line card

**GS24 (AT-SBx31GS24)**  
24-port, 100FX/BX or 1000SX/LX SFP line card

**GC40 (AT-SBx31GC40)**  
40/20-port, 1000LX (CSFP) or 1000SX/LX SFP line card

**XZ4 (AT-SBx31XZ4)**  
4-port, 10 Gigabit SFP line card

**XS6 (AT-SBx31XS6)**  
6-port, 10 Gigabit SFP+ line card

**AC Power (AT-SBxPWRYSYSI-xx)**  
1200 Watt AC power supply

**PoE Power (AT-SBx31PWRPoE1-xx)**  
1200 Watt AC power supply for PoE

**DC Power (AT-SBxPWRYSYSI-80)**  
1200 Watt DC power supply



the solution : the network

**Americas Headquarters** | 19800 North Creek Parkway | Suite 100 | Bothell | WA 98011 | USA | T: +1 800 424 4284 | F: +1 425 481 3895

**Asia-Pacific Headquarters** | 11 Tai Seng Link | Singapore | 534182 | T: +65 6383 3832 | F: +65 6383 3830

**EMEA & CSA Operations** | Incheonweg 7 | I437 EK Rozenburg | The Netherlands | T: +31 20 7950020 | F: +31 20 7950021

[alliedtelesis.com](http://alliedtelesis.com)

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