



AT-TN-401 24Gbps Central Fabric Controller for iMAP 9x00 Chassis

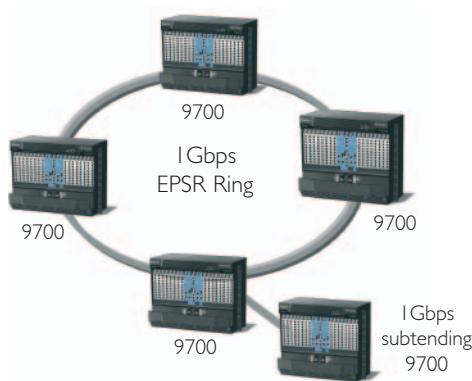
The TN-401 Central Fabric Controller (CFC-24) is the heart of the Allied Telesyn 9400 and 9700 iMAP chassis and provides 24Gbps wirespeed Ethernet switching

The CFC-24 is responsible for all chassis transport and administration.

The Allied Telesyn iMAP chassis is designed to provide the highest possible quality, reliability and performance to our customer's networks. The CFC is key to the 99.999% carrier grade reliability and is designed to operate in a redundant hot standby mode or simplex mode.

In the iMAP 9700 chassis the CFC supports up to 17 service cards. In the iMAP 9400 chassis the CFC-24 supports 7 service modules. The CFC-24 supports both 100Mbps or 1Gbps to each backplane slot allowing it to support all Allied Telesyn iMAP service modules.

The CFC-24 supports up to 6-1GE links for network interface, high reliability EPSR rings or subtending. While providing this transport, the iMAP CFC-24 continues to provide highly reliable service access.



When a network requires EPSR rings or subtending all management and control is completed on the CFC-24.

The CFC handles management, configuration and monitoring of all cards in the chassis. Operators may access the CLI via RS-232 or use 100Mbps or Inband for Telnet operation. The Allied Telesyn Network Management System (NMS) may access the CLI or SNMP interface via 100Mbps or Inband. Telnet and the NMS provide simple user interface for all operations, administration and performance monitoring. The CFC-24 maintains all card and shelf configuration in a local FLASH database. Performance monitoring information on all network and service interface is gathered, stored and available to the OAM interfaces. The CFC-24 supports Compact FLASH Type II. This FLASH may be used to install new software upgrades, logging information, etc. Service redundancy is provided through the TN-401. When redundant, the active CFC maintains the database and information on the "hot standby" CFC.

The unique design of the iMAP chassis, the CFC and CFC software allows the backup CFC to maintain current up to date information of all switching and forwarding decisions. This allows a CFC switchover between the active and backup to be instantaneous to minimize packet loss. This type of carrier grade design provides service providers the reliability they have come to expect.

Key Features

Layer 2+

- 4096 VLANs
- Double-tagging
- VLAN translation
- Multicasting
- IGMP Snooping/aggregation
- 512 Multicast Groups

QoS

- 4 & 8 Queues
- Flow Classifiers and Metering
- Per Port Egress Rate limiting

Service Modules

- xDSL services
- Ethernet services
- T1/E1
- VoIP

Network Interfaces

- 6-1GE
- 802.3ad (LAG)

Protection and redundancy

- Redundant in 9700 chassis
- STP/RSTP/MSTP
- EPSR

- EPSR+RSTP Inter-working

Network Configurations

- EPSR rings
- Daisy-Chaining (subtending)

Service Security

- Upstream Forwarding Only
- Access Control Lists
- DHCP Relay Option 82
- MAC Limiting on drops
- STB Mobility limiting on drops

OAM&P

- SNMP V1 and V2c, CLI
- Front-panel & In-band for OAM
- RADIUS authentication of CLI
- Statistics: PM, RMON
- Logging
- Software upgrades w/ FTP
- Compact Flash

Miscellaneous

- ACO and Audible Alarms
- Lamp Test
- Hardened for Outside Plant
- NEBS; UL

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Interface Specifications

Network: 2-TN-301 - 3-IGE ports
Backplane: 17 - 1Gbps to each service slot.
Faceplate: RS-232 - DB9 - CLI
100Base-Tx - RJ-45 for OAM
Compact Flash Type II
Physical Design: Front Access

Protocols & Specifications

802.1D - Bridging & Spanning Tree
802.1w - Rapid Spanning Tree
802.1s - Multiple Spanning Tree
802.1Q - VLAN Bridging
802.1p - Prioritization
802.3ah - OAM
802.3x - flow control
802.3ad - Link Aggregation

IGMPv1 and IGMPv2
RFC 3619 Extreme ring protection with
AT extensions for EPSR
Double Tagging - VMAN & Q-in-Q

RFC2131 - DHCP
RFC 3046 - DHCP Relay Agent Option 82

Redundancy
UFO (Upstream Forwarding Only)
ACL (Access Control List)
CLI - Command Line Interface

Telnet (RFC 854)
RFC 959 (FTP)
RFC 1155 (TCP/IP management)
RFC1901 (SNMPv2c)

Power Requirements

Maximum Power: 22 Watts avg.

Environmental Conditions

Operating Temperature: -40C to 65C
Storage Temperature: -40C to 75C
5% to 95% non-condensing
Per GR-63, GR-487

Regulatory Approvals

NEBS Level 3
GR-1089-CORE (Issue 3)
GR-63
FCC Part 15 Class A
EN 300386
UL/CUL 60950-1
VCCI

Ordering Information

AT-TN-401
CFC-24 for 9700 and 9400 iMAP

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