

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

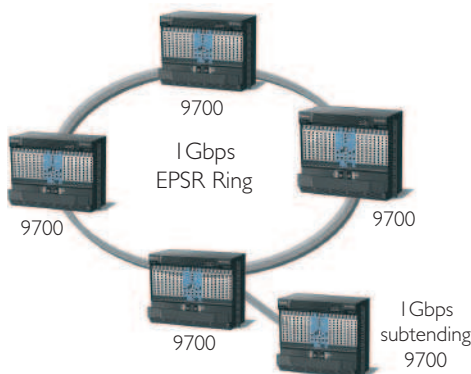
### The TN-401 Central Fabric Controller (CFC-24) is the heart of the Allied Telesyn 9400 and 9700 iMAP chassis and provides 24Gbps wirespeed Ethernet switching

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

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

## 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

USA Headquarters | 19800 North Creek Parkway | Suite 200 | Bothell | WA 98011 | USA | T: +1 800 424 4284 | F: +1 425 481 3895

European Headquarters | Via Motta 24 | 6830 Chiasso | Switzerland | T: +41 91 69769.00 | F: +41 91 69769.11

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

[www.alliedtelesyn.com](http://www.alliedtelesyn.com)

© 2005 Allied Telesyn Inc. All rights reserved. Information in this document is subject to change without notice. All company names, logos, and product designs that are trademarks or registered trademarks are the property of their respective owners. 617-00572-00 Rev.A