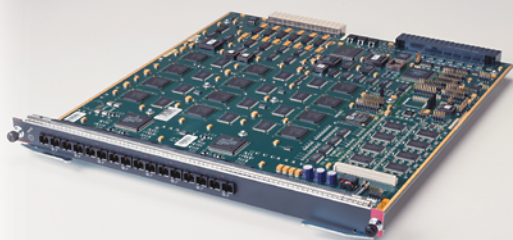


## Catalyst 5500/8500 Fabric Integration Module Data Sheet

THE 5500/8500 FABRIC INTEGRATION MODULE (FIM) INTERNALLY CONNECTS THE CATALYST 5500 SWITCH FABRIC TO THE CATALYST 8510 SWITCH FABRIC. THIS MODULE ALSO PROVIDES EIGHT EXTERNAL 100BASEFX FAST ETHERNET PORTS.

Figure 1 The Fabric Integration Module Provides High-Speed Connectivity between the 5500 and 8500 Switch Fabrics



### Flexible Catalyst 5500 Architecture

In addition to supporting all of the Catalyst® 5500 series line cards, the flexible Catalyst 5500 switch architecture supports the line cards and Switch Route Processor (SRP) of the Catalyst 8510. When both types of line cards are deployed in a 5500 chassis, the 5500/8500 FIM internally connects the Catalyst 5500 switch fabric to the Catalyst 8510 switch fabric. This internal connection is an 800-Mbps full-duplex pipe composed of a Fast EtherChannel® bundle. The internal connection supports up to 1024 VLANs using ISL or 802.1Q. The internal connection supports all of the Catalyst 5500 and 8510 Fast Ethernet features. Network administrators can configure this internal connection with IP or IPX® addresses.

### IP and IPX Switching at Millions of Packets-per-Second

By deploying Catalyst 8510 line cards in a Catalyst 5500 chassis, users create a feature-rich campus switch router with a full Cisco IOS® implementation. The Catalyst 8500 series supports all the routing protocols that are used today in enterprise and Internet environments. These routing protocols include: Interior Gateway Routing Protocol (IGRP), Enhanced IGRP (EIGRP), Open Shortest Path First

(OSPF), Border Gateway Protocol Version 4 (BGP4), Routing Information Protocol (RIP) Versions 1 and 2, Static routes, and route redistribution. In addition to these routing protocols, the Catalyst 8510 series supports all the additional Cisco IOS features and protocols necessary to build scalable and reliable IP networks.

The Catalyst 8510 also supports wirespeed IPX routing. The Catalyst 8500 provides services such as Novell RIP and Service Advertising Protocols (SAPs), value-added routing protocols such as NetWare Link Services Protocol (NLSP) and Novell Enhanced IGRP, as well as route distribution among all of these protocols. In addition, the Catalyst 8510 supports all of the Cisco IOS features that scale large Novell networks.

### IP Multicast Switching and Routing

The Catalyst 5500 and 8500 series support wirespeed IP multicast. As multicast applications such as Microsoft NetShow and NetMeeting become more widely deployed, end-to-end multicast support becomes increasingly important. The Catalyst 8500 supports both Protocol Independent Multicast (PIM) sparse and dense modes, and Distance Vector Multicast Routing Protocol (DVMRP) interoperability for legacy applications. The Catalyst 5500 and 8500 support IGMP and CGMP capabilities for integrating IP multicast support. By receiving and reading IGMP messages, Catalyst switches become intelligent multicast devices and forward only multicast streams to the appropriate user end stations.

Features supported on the eight external 100BaseFX ports:

- Fast EtherChannel technology
- ISL VLAN trunking
- 802.1Q VLAN trunking
- Distributed multilayer switching functionality or Inline Rewrite
- Uplink Fast Convergence for rapid STP Convergence on wiring closet links

- Backbone Fast Convergence for optimum STP Convergence on backbone links
- 802.3x flow control
- Broadcast, multicast, and unicast suppression
- Wire-speed performance
- Superior traffic management with large per-interface buffers (256 KB) and trilevel priority queues on the switching backplane to accommodate bursty traffic
- Supports multiple active Media Access Control (MAC) addresses (up to 16,000) on any switching port
- Spanning-Tree algorithm on logical VLANs for fault-tolerant connectivity
- Four groups of RMON on each port

### Catalyst 5500/8500 Fabric Integration Module Specifications

#### Physical Specifications

- Occupies one slot in the Catalyst 5500 platform (should be deployed in slots 9-12)
- Provides 8 100BaseFX ports
- Dimensions (H x W x D): 1.2 in. x 14.4 in. x 16 in. (3 x 35.6 x 40.6 cm)
- Weight: 3 lb/0.65 kg

#### Environmental Conditions

- Operating temperature: 32 to 104 F (0 to 40 C)
- Storage temperature: -40 to 167 F (-40 to 75 C)
- Relative humidity: 10 to 90%, noncondensing

#### Buffer Memory

- RAM: 256 KB per interface

#### Network Management

- Ethernet Management Information Base (MIB) (RFC 1643)
- Interface table (RFC 1573)
- Bridge MIB (RFC 1493)
- Cisco workgroup MIB
- VLAN Trunking Protocol
- Cisco Discovery Protocol
- RMON MIB (RFC 1757)

#### Maximum Station-to-Station Cabling Distance

- 100BaseFX Fast Ethernet: 62.5 or 50 micron multimode fiber: 400m half duplex, 2 km full duplex
- Status: Green (operational)/Red (faulty)
- Link Good: Green (good)/Orange (disabled)/Off (not connected)
- 100BaseFX: SC (female, multimode)

#### Safety Certifications

- UL 1950
- CSA 950
- EN60950
- CE Marking
- TUV GS
- IEC 950
- AS/NZS 3260

#### Electromagnetic Emissions Certifications

- FCC Part 15 (CFR 47) Class A
- VCCI Class B
- EN55022 Class B
- CISPR 22 Class B
- CE Marking
- AS/NZS 3548 Class B



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