

LightStream 1010 New Processor Introduction

Cisco Systems, Inc., is announcing the introduction of a new processor for the LightStream® 1010 multiservice ATM switch. This product bulletin explains the features and benefits of the new processor and compares it with the existing processor.

Orderability for the L1010-ASP-C-FC1 and L1010-ASP-C-FCPFQ will be turned on Calendar Q4, '98. Two part numbers will be available that are consistent with the current shipping CPU platforms.

Table 1 LS1010 Product Description and Software Release

New CPU	Description	Minimum Software Release
L1010-ASP-C-FC1	ATM switch processor with FC-per-class queuing	WAS3-6 or WAS4-6
L1010-ASP-C-FCPFQ	Multiservice ATM switch route processor existing CPU	WAS4-6
L1010-ASP-B-FC1	ATM switch processor with FC-per-class queuing	WAS1-3
L1010-ASP-B-FCPFQ	ATM switch processor with FC-per-flow queuing	WAS4-2

Comparison of the L1010-ASP-B-FC1 and the L1010-ASP-C-FC1

The two versions of the ATM switch processor (ASP) with FC-1 are functionally equivalent. The modules have no differences in feature, functionality, or performance.

The ASP with FC-1 is ideally suited for campus backbone networks and workgroups where the need for enhanced traffic management is minimal.

Comparison of the L1010-ASP-B-FCPFQ and the L1010-ASP-C-FCPFQ

For ATM-only applications, the L1010-ASP-B-FCPFQ and L1010-ASP-C-FCPFQ are functionally equivalent. The modules have no differences in feature, functionality, or performance.

The ASP with FC-PFQ is ideally suited to the enterprise edge and alternative service provider backbones. Below is a table of the features and benefits associated with the FC-PFQ feature card. FC-PFQ is recommended for all low-speed interfaces such as T3, E3, and below and for any unit that interfaces to a WAN or service provider.

Table 2 NEED CAPTION

Feature	Benefit
TAG Switching (MPLS)	IP and ATM integration
VC Merge	Resource sharing, AAL5 Frame sequencing
Per-VC and-VP Queuing	Rate limiting to slow-speed destinations or to meet contract
Shaped VP Tunnels	Single service category over ATM WANs
Hierarchical-Shaped VP Tunnels	Multiservice applications over ATM WANs
Per-VC Snooping	Nondisruptive monitoring and troubleshooting
ABR Support (EFCI and RR)	Standards-based ABR support
Weighted Early Packet Discard	Differentiated service (up to 16)
Enhanced Clock Capabilities	Smooth switchover of clock source

Table 3 Future Hardware for which FC-PFQ is Required

Part Number	Description
C85MS-8E1-IMA-120	8-port E1 120-ohm IMA port adapter module
C85MS-8E1-IMA-75	8-port E1 75-ohm IMA port adapter module
C85MS-8T1-IMA	8-port T1 IMA port adapter module

The unique value that the L1010-ASP-C-FCPFQ brings is its ability with future platform enhancements to support both Layer 3 and ATM switching within a single platform. The ASP-B will not support Layer 3 interfaces.

The L1010-ASP-C-FCPFQ is identical to the C8515-MSRP, which will be the processor used in the Catalyst 8510 multiservice switch router (MSR). This Layer 3 and ATM integration will require an additional future hardware component that will utilize one entire slot in the LightStream 1010 or Catalyst® 8510 MSR.

Table 4 Layer 3 Capabilities

Processor	Platform	Layer 3 (Ethernet) and ATM Switching
L1010-ASP-B-FCPFQ	LightStream 1010, Catalyst 5500	No
L1010-ASP-C-FCPFQ	LightStream 1010, Catalyst 5500	Yes
C8515-MSRP	LightStream 1010, Catalyst 5500, Catalyst 8500	Yes

Most anticipated questions and answers follow:

- Q.** When will the hardware ship that enables the Layer 3 and ATM switching integration?
 - A.** See the Catalyst 8500 series FAQ.
- Q.** Which Catalyst 85xx campus switch router (CSR) interfaces can be deployed in the MSR?
 - A.** With future software and one-slot card, Catalyst 8510 CSR interfaces will be deployable in the Catalyst 8510 MSR. With future software and one-slot card, Catalyst 8540 CSR interfaces will be deployable in the Catalyst 8540 MSR.
- Q.** Can Catalyst 85xx CSR modules be deployed in the MSR prior to this hardware integration?

A. No.

Q. Will there be an upgrade path to the MSR technology from FC-1-based cards or from an L1010-ASP-B-FCPFQ?

A. Absolutely. Use the technology migration plan.

Q. Why is the silkscreen on the L1010-ASP-C-FCPFQ not consistent with previous ASP modules?

A. A LightStream 1010 with L1010-ASP-C-FCPFQ is functionally equivalent to a C8515-MSRP. Hence for ease of identification they have the same silkscreen. This setup enables Layer 3 and ATM-capable units to be easily identified in the field.

Q. Can a C8515-MSRP work in a LightStream 1010 or Catalyst 5500?

A. Yes, it is the same as an L1010-ASP-C-FCPFQ.

Q. Can an L1010-ASP-C-FCPFQ work in a Catalyst 8510 MSR?

A. Yes, it is the same as a C8515-MSRP.



Corporate Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters

Cisco Systems Europe s.a.r.l.
Parc Evolic, Batiment L1/L2
16 Avenue du Quebec
Villebon, BP 706
91961 Courtaboeuf Cedex
France
<http://www-europe.cisco.com>
Tel: 33 1 69 18 61 00
Fax: 33 1 69 28 83 26

Americas

Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-7660
Fax: 408 527-0883

Asia Headquarters

Nihon Cisco Systems K.K.
Fuji Building, 9th Floor
3-2-3 Marunouchi
Chiyoda-ku, Tokyo 100
Japan
<http://www.cisco.com>
Tel: 81 3 5219 6250
Fax: 81 3 5219 6001

Cisco Systems has more than 200 offices in the following countries. Addresses, phone numbers, and fax numbers are listed on the Cisco Connection Online Web site at <http://www.cisco.com/offices>.

Argentina • Australia • Austria • Belgium • Brazil • Canada • Chile • China • Colombia • Costa Rica • Croatia • Czech Republic • Denmark • Dubai, UAE Finland • France • Germany • Greece • Hong Kong • Hungary • India • Indonesia • Ireland • Israel • Italy • Japan • Korea • Luxembourg • Malaysia Mexico • The Netherlands • New Zealand • Norway • Peru • Philippines • Poland • Portugal • Puerto Rico • Romania • Russia • Saudi Arabia • Singapore Slovakia • Slovenia • South Africa • Spain • Sweden • Switzerland • Taiwan • Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela