

**PRODUCT BULLETIN NO. 2602** 

# CISCO PERFORMANCE ROUTING ENGINE 2 FOR THE CISCO uBR10012 UNIVERSAL BROADBAND ROUTER

### OVERVIEW

Cisco Systems<sup>®</sup> is pleased to announce the new Cisco<sup>®</sup> Performance Routing Engine 2 (PRE-2) for the Cisco uBR10012 Universal Broadband Router. This component offers increased performance and processing power needed to support next-generation IP data, voice, and video services over cable.

The Cisco PRE-2 performs Layer 2 and Layer 3 packet processing for the Cisco uBR10012, as well as routing and system management functions. It effectively doubles the bandwidth available to each slot on the Cisco uBR10012 as supported by cable interface line cards or Cisco broadband processing engines (BPEs) over the Cisco PRE-1. The Cisco PRE-2 continues to use an advanced parallel architecture called Cisco Parallel Express Forwarding (PXF), which separates control-plane processing from the data plane. The Cisco PXF architecture supports high-performance throughput with IP services enabled on every port.

The Cisco PRE-2 offers the following features:

- Processes up to 6.2 million packets per second (mpps) and eight concurrent flows in the Cisco uBR10012
- Supports up to 6.4-Gbps full duplex per WAN and 3.2-Gbps full duplex per RF slot
- · Uses Cisco PXF patented technology to provide maximum IP services performance
- Supports processor redundancy, helping enable 99.999-percent network uptime
- Offers 500-MHz Reduced Instruction Set Computer (RISC) processor handling route and Simple Network Management Protocol (SNMP) processing

#### **ORDERING INFORMATION**

Table 1 lists Cisco PRE-2 part numbers.

Table 1. Part Numbers for Cisco PRE-2

Part Number	Description
ESR-PRE2	Cisco Performance Routing Engine for the Cisco uBR10012 and Cisco 10000 Series, 1-GB DRAM and 64-MB Flash memory
ESR-PRE2=	Spare Cisco Performance Routing Engine for the Cisco uBR10012 and Cisco 10000 Series, 1-GB DRAM and 64-MB Flash memory
ESR-PREMEMFD64	Cisco Performance Routing Engine for the Cisco uBR10012 and Cisco 10000 Series, 64-MB Flash disk (default on Cisco PRE-2)
ESR-PREMEMFD64=	Spare Cisco Performance Routing Engine for the Cisco uBR10012 and Cisco 10000 Series, 64-MB Flash disk (default)
ESR-PRE-MEM-FD128	Cisco Performance Routing Engine for the Cisco uBR10012 and Cisco 10000 Series, 128-MB Flash disk
ESR-PRE-MEM-FD128=	Spare Cisco Performance Routing Engine for the Cisco uBR10012 and Cisco 10000 Series, 128-MB Flash disk

## AVAILABILITY

The Cisco PRE-2 is orderable now, with shipments beginning in October 2004. To obtain pricing or to order, go to: http://www.cisco.com/en/US/ordering/or13/order\_customer\_help\_high\_level\_listing.html.

The Cisco PRE-2 requires Cisco IOS® Software Release 12.3(9)BC minimum, due to release in late September 2004.

#### **PRODUCT DOCUMENTATION**

For detailed information about specifications, installation, and replacement procedures on the Cisco PRE-2 for the Cisco uBR10012, go to:

http://www.cisco.com/en/US/products/hw/cable/ps2209/tsd\_products\_support\_install\_and\_upgrade.html

#### FOR MORE INFORMATION

For business issues or general questions regarding this bulletin, send an e-mail to Adam Corkins, product manager, at acorkins@cisco.com. For specific orderability questions, contact your customer service representative or Cisco account manager.



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