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# Cisco ASR 1000 Series Route Processor

#### PB443045

The Cisco<sup>®</sup> ASR 1000 Series Route Processor, the route processor for the Cisco ASR 1000 Series Aggregation Services Routers, addresses the route-processing requirements of carrier-grade IP and Multiprotocol Label Switching (MPLS) packet infrastructures. It is responsible for the following functions:

- Executing routing protocol stacks
- Performing all protocol communications with other routers
- Building and distributing forwarding information to all line cards
- Uploading the operating-system software system images to all installed line cards upon
  powering up
- Providing out-of-band system console and auxiliary ports, a universal serial bus (USB), and an Ethernet port for router configuration and maintenance; and monitoring and managing the power and temperature of system components such as line cards, power supplies, and fans

## **New Features**

The first-generation Cisco ASR 1000 Series Route Processor RP1 (RP1) and second-generation Cisco ASR 1000 Series Route Processor RP2 (RP2) offer the following new features:

- Integrate full range of industry-leading Cisco IOS<sup>®</sup> Software features and services
- Provide optional redundant-processor support and dual Cisco IOS Software support for single route-processor solutions for the industry's most compact, fully redundant, high-availability solution, improving network resiliency, management, and costs
- Provide hard disk drive for code storage, boot, configuration, logs, etc.
- Offer field-replaceable and hot-swappable module to help ensure minimal service disruption
- Offer Stratum-3 clock circuitry and input ports
- · Provide USB port for 1-GB Compact Flash memory support
- Offer memory scalability up to 4 GB for RP1 and 16 GB for RP2

## **Upgrade Paths**

The Cisco ASR 1000 Series Route Processor is not part of the Cisco Technology Migration Program (TMP) at this time. Refer to <u>www.cisco.com/go/TMP</u> and contact your local Cisco account representative, because there may be a TMP in the future.

## **Ordering Information**

To place an order, visit the Cisco Ordering Home Page at <u>www.cisco.com/en/US/ordering/index.shtml</u> and refer to Table 1.

To download software, visit the Cisco Software Center at www.cisco.com/kobayashi/sw-center.

Table 1.Ordering Information

Product Name	Part Number
Cisco ASR 1000 Series Route Processor 1	
Cisco ASR1000 Route Processor 1, 2GB DRAM	ASR1000-RP1
Cisco ASR1000 Route Processor 1, 2GB DRAM Spare	ASR1000-RP1=
Cisco ASR 1000 Series Route Processor 2	
ASR1000-RP2	Cisco ASR1000 Route Processor 2, 8GB DRAM
ASR1000-RP2=	Cisco ASR1000 Route Processor 2, 8GB DRAM, Spare
Cisco ASR 1000 RP1 Memory	
Cisco ASR1000 RP1 2GB DRAM	M-ASR1K-RP1-2GB
Cisco ASR1000 RP1 2GB DRAM, spare	M-ASR1K-RP1-2GB=
Cisco ASR1000 RP1 4GB DRAM	M-ASR1K-RP1-4GB
Cisco ASR1000 RP1 4GB DRAM, spare	M-ASR1K-RP1-4GB=
Cisco ASR1000 RP1 40GB HDD	M-ASR1K-HDD-40GB
Cisco ASR1000 RP1 40GB HDD, spare	M-ASR1K-HDD-40GB=
Cisco ASR 1000 RP2 Memory	
Cisco ASR1000 RP2 8GB DRAM	M-ASR1K-RP2-8GB
Cisco ASR1000 RP2 8GB DRAM, Spare	M-ASR1K-RP2-8GB=
Cisco ASR1000 RP2 16GB DRAM	M-ASR1K-RP2-16GB
Cisco ASR1000 RP2 16GB DRAM, Spare	M-ASR1K-RP2-16GB=
Cisco ASR1000 RP2 80GB HDD,spare	M-ASR1K-HDD-80GB=
Cisco ASR1000 RP2 2GB EUSB+ FLASH,SPARE	M-ASR1K-EUSB-2GB=
Cisco ASR 1000 Series USB Flash Memory Options	
1GB USB Flash Token for Cisco ASR 1000 Series	MEMUSB-1024FT
1GB USB Flash Token for Cisco ASR 1000 Series, spare	MEMUSB-1024FT =
Compatible Hardware	
Cisco ASR 1000 Series Router chassis (4RU or 6RU)	ASR1004 or ASR1006
Cisco ASR-1000 Embedded Services Processor 10Gbps	ASR1000-ESP10
Cisco ASR-1000 Embedded Services Processor 10Gbps Non Crypto	ASR1000-ESP10-N
Cisco ASR-1000 Embedded Services Processor 20Gbps	ASR1000-ESP20
Cisco ASR-1000 SPA Interface Processor 10	ASR1000-SIP1
Compatible Software	
Cisco ASR 1000 Series RP1 ADVANCED ENTERPRISE W/O CRYPTO	SASR1R1-AES
Cisco ASR 1000 Series RP1 ADVANCED ENTERPRISE SERVICES	SASR1R1-AESK9
Cisco ASR 1000 Series RP1 ADVANCED IP SERVICES W/O CRYPTO	SASR1R1-AIS
Cisco ASR 1000 Series RP1 ADVANCED IP SERVICES	SASR1R1-AISK9
Cisco ASR 1000 Series RP1 IP BASE W/O CRYPTO	SASR1R1-IPB
Cisco ASR 1000 Series RP1 IP BASE	SASR1R1-IPBK9
Cisco ASR 1000 Series RP2 ADVANCED ENTERPRISE W/O CRYPTO	SASR1R2-AES
Cisco ASR 1000 Series RP2 ADVANCED ENTERPRISE SERVICES	SASR1R2-AESK9

Cisco ASR 1000 Series RP2 ADVANCED IP SERVICES W/O CRYPTO	SASR1R2-AIS
Cisco ASR 1000 Series RP2 ADVANCED IP SERVICES	SASR1R2-AISK9
Cisco ASR 1000 Series RP2 IP BASE W/O CRYPTO	SASR1R2-IPB
Cisco ASR 1000 Series RP2 IP BASE	SASR1R2-IPBK9

#### **Cisco Services**

Cisco Services integrates closely with Corporate Marketing teams as an essential element of any technology solution. Please contact your Cisco Services manager if you have not already received targeted services content blocks for integration. Please send an e-mail message to <u>ca-mmarcom@cisco.com</u> if you are not sure of the appropriate contact.

Cisco Services makes networks, applications, and the people who use them work better together.

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#### For More Information

For more information about the Cisco ASR 1000 Series Route Processor, visit <u>www.cisco.com/go/asr1000</u> or contact your local Cisco account representative.

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