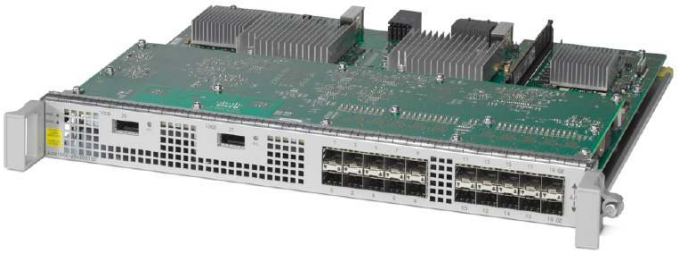
Cisco ASR 1000 Series Ethernet Line Card

Product Overview

The Cisco ASR 1000 Series Fixed Ethernet Line Card (ASR1000-2T+20X1GE) is a fixed-port Ethernet line card for the Cisco ASR 1000 Series Aggregation Services Routers. The line card is capable of 40-Gbps full-duplex traffic forwarding using a fixed-port interface design. This line card has twenty 1 Gigabit Ethernet ports and two 10 Gigabit Ethernet ports (Figure 1).

The Small Form-Factor Pluggable (SFP) and 10-Gbps SFP (XFP) modules allow you to configure the line card for different media types (copper or fiber) and different optical requirements (single- or multimode fiber), as available. The line cards have one power LED, one line-card status LED, and 22 port or link-status LEDs.

Figure 1. Cisco ASR 1000 Series Fixed Ethernet Line Card (ASR1000-2T+20X1GE)



Other aspects of the Cisco ASR 1000 Series Fixed Ethernet Line Card (ASR1000-2T+20X1GE) include:

- SyncE
- Low price per port
- Rich Ethernet Layer 2, Layer 3, IP, IPv6, and Multiprotocol Label Switching (MPLS) packet-processing capabilities as previously provided on Cisco ASR 1000 platforms
- Rich quality-of-service (QoS) functions:
  - Ingress and egress QoS as previously provided on Cisco ASR 1000 platforms
  - Egress queuing capability as previously provided on Cisco ASR 1000 platforms
  - High- and low-priority lanes to Cisco ASR 1000 Series Embedded Services Processor (ESP) for high-priority, low-latency forwarding

The Cisco ASR 1000 Series Fixed Ethernet Line Cards have the twenty 1 Gigabit Ethernet and two 10 Gigabit Ethernet ports built in, allowing the Cisco ASR 1000 Series Routers to achieve greater Ethernet density and a lower price per port. However, this fixed configuration means that the Ethernet line card is not compatible with the Shared Port Adapters (SPAs) that are currently used with the SPA Interface Processor (SIP). Instead, the Ethernet line card takes the slot of the SIP with the twenty 1 Gigabit Ethernet and two 10 Gigabit Ethernet ports built in. Table 1 lists the differences between the Cisco ASR 1000 Fixed Ethernet Line Card and the Cisco ASR 1000 SPA Interface Processor.

Table 1. Differences Between Cisco ASR 1000 Fixed Ethernet Line Card and Cisco ASR 1000 SPA Interface Processor

Feature Support	Cisco ASR 1000 Fixed Ethernet Line Card	Cisco ASR 1000 SPA Interface Processor
SPA support	No	Yes
SyncE	Yes	Yes; with SPA-2X1GE-SYNCE

Ordering Information

Tables 2 and 3 give ordering information for the line cards and hardware, respectively, and Table 4 gives the minimum Cisco IOS® XE Software version required.

Table 2. Ordering Information

Product Name	Part Number
Cisco ASR 1000 Fixed Ethernet Line Card, 2x10GE + 20x1GE	ASR1000-2T+20X1GE

Table 3. Cisco ASR 1000 Fixed Ethernet Line Card (ASR1000-2T+20X1GE) Compatible Hardware

Product Name	Part Number
Cisco ASR 1004 Router Chassis	ASR1004
Cisco ASR 1006 Router Chassis	ASR1006
Cisco ASR 1013 Router Chassis	ASR1013
Cisco ASR 1000 Route Processor 2	ASR1000-RP2
Cisco ASR 1000 Embedded Services Processor, 40G	ASR1000-ESP40 (Up to 4 ASR1000-2T+20X1GE on ASR1013 with ESP40)
Cisco ASR 1000 Embedded Services Processor, 100G	ASR1000-ESP100
Cisco ASR 1000 Embedded Services Processor, 200G	ASR1000-ESP200
Cisco ASR 1004 Power supply	ASR1004-PWR-AC ASR1004-PWR-DC
Cisco ASR 1000 1600W Power Supply (for Cisco ASR 1006 and ASR 1013 chassis)	ASR1013/06-PWR-AC ASR1013/06-PWR-DC

Refer to the Cisco ASR 1000 Series Fixed Ethernet Line Card Hardware Installation Guide for the latest compatibility details.

Table 4. Minimum Cisco IOS XE Software for Fixed Ethernet Line Card

Product Name	Product Number	Minimum Cisco IOS XE Software Release
Cisco ASR 1000 Fixed Ethernet Line Card (20x1GE + 2x10GE)	ASR1000-2T+20X1GE	Cisco IOS XE 3.10

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For More Information

For more information about the Cisco ASR 1000 Series Fixed Ethernet Line Card, visit http://www.cisco.com/en/US/docs/interfaces_modules/shared_port_adapters/configuration/ASR1000/fixed_ethernet_linecard/ASRoveth.html or contact your local Cisco account representative.

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