



## CHAPTER 13

# Cisco 7600 Series Ethernet Services 20G Line Cards

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This chapter describes the Cisco 7600 Series Ethernet Services 20G (ES20) line cards. It contains the following sections:

- [Cisco 7600 Series Ethernet Services 20G Line Cards, page 13-1](#)
- [Cisco 7600-ES20-10G Line Card LEDs, page 13-1](#)
- [Cisco 7600-ES20-GE Line Card LEDs, page 13-2](#)

## Cisco 7600 Series Ethernet Services 20G Line Cards

The Cisco 7600 Series Ethernet Services 20G (ES20) line cards are a multiple-fabric, fixed-port Ethernet line card for the Cisco 7600 series routers that are capable of 20 Gbps of traffic forwarding using a fixed port interface design. The two versions of the Cisco 7600 Series Ethernet Services 20G line card are:

- 2-port version: 7600-ES20-10G
- 20-port version: 7600-ES20-GE

The difference between the two versions are the link interface daughter cards that accept small form-factor pluggable (SFP or XFP) optical transceivers. Additionally, each of the two versions has a packet engine daughter card and a control processor daughter card.

The SFP and XFP modules allow the line cards to be configured for different media types (copper or fiber) and different optical requirements (single mode fiber or multimode fiber) as available.

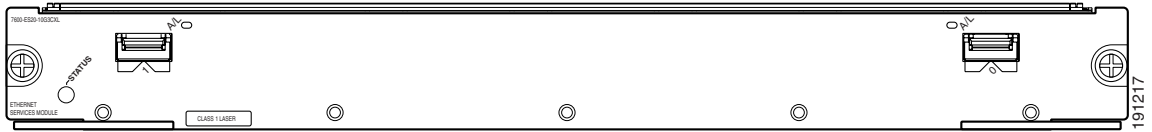
The 7600-ES20-10G uses a 2-port 10GE fixed interface daughter card that accepts pluggable XFP modules.

The 7600-ES20-GE uses a 20-port GE fixed interface daughter card that accepts pluggable SFP modules.

For information on configuring features supported on the ES20 line cards, refer to the *Cisco 7600-ES20 Ethernet Line Cards Configuration Guide*. For information on installing the ES20 line cards, see the *Cisco 7600-ES20 Ethernet Line Cards Hardware Installation Guide*.

## Cisco 7600-ES20-10G Line Card LEDs

The Cisco 7600-ES20-10G line card has three LEDs, as shown in [Figure 13-1](#). There is one Status LED and two A/L (Active Loopback) LEDs. [Table 13-1](#) provides LED descriptions.

**Figure 13-1** Cisco 7600-ES20-10G Faceplate

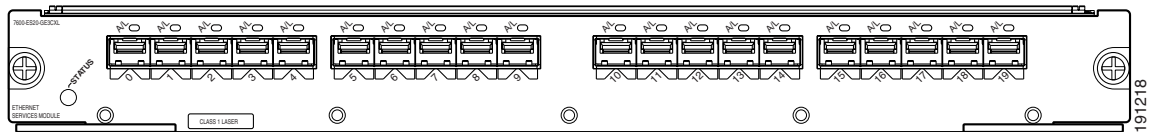
There is one line card Status LED and two port Status LEDs. [Table 13-1](#) provides LED descriptions.

**Table 13-1** Cisco 7600-ES20-10G LEDs

| LED Label | Color           | State | Meaning   |
|-----------|-----------------|-------|---|
| STATUS    | Red             | On    | The line card has encountered an error.                             |
|           | Green           | On    | The line card is online.  |
|           | Yellow          | On    | The line card is loading.   |
|           | Off             | Off   | The line card is powered off.                                       |
| A/L       | Amber           | On    | The port is enabled but there is not a valid Ethernet link.         |
|           | Green           | On    | The port is enabled and a valid Ethernet link has been established. |
|           | Green and Amber | On    | Undefined condition.  |
|           | Off             | Off   | The port is not enabled by software.                                |

## Cisco 7600-ES20-GE Line Card LEDs

The Cisco 7600-ES20-GE line card has 21 LEDs, as shown in [Figure 13-2](#).

**Figure 13-2** Cisco 7600-ES20-GE Line Card Faceplate

There is one line card STATUS LED and twenty A/L (Active Loopback) LEDs. [Table 13-2](#) provides LED descriptions.

**Table 13-2** Cisco 7600-ES20-GE Line Card LEDs

| LED Label | Color  | State | Meaning                                 |
|-----------|--------|-------|---|
| STATUS    | Red    | On    | The line card has encountered an error. |
|           | Green  | On    | The line card is online.                |
|           | Yellow | On    | The line card is loading.               |
|           | Off    | Off   | The line card is powered off.           |

**Table 13-2** Cisco 7600-ES20-GE Line Card LEDs (continued)

| <b>LED Label</b> | <b>Color</b>    | <b>State</b> | <b>Meaning</b>  |
|------------------|-----------------|--------------|---|
| A/L              | Amber           | On           | The port is enabled but there is not a valid Ethernet link.         |
|                  | Green           | On           | The port is enabled and a valid Ethernet link has been established. |
|                  | Green and Amber | On           | Undefined condition.  |
|                  | Off             | Off          | The port is not enabled by software.                                |

