Overview

This chapter contains the following topics:

Overview

The Cisco UCS X10c Front Mezzanine GPU module is a passive PCIe Gen 4 front mezzanine option for Cisco UCS X-Series compute nodes. The module is a mixed mode assembly that provides both storage and GPU acceleration.
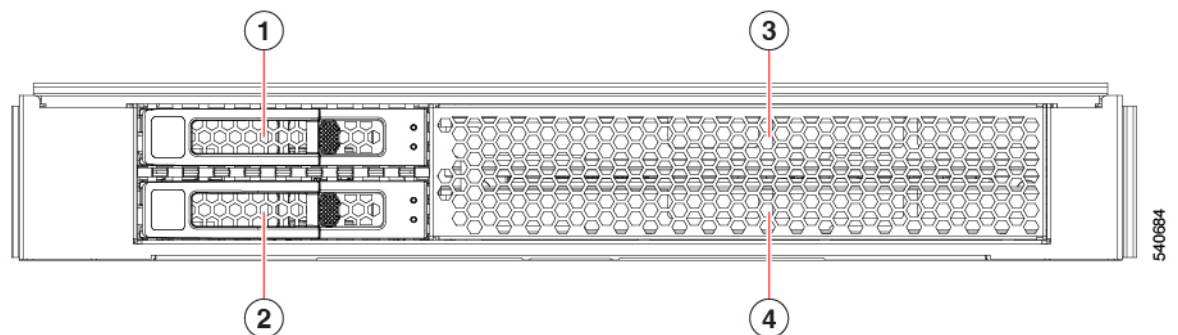
Each Cisco UCS X10c front mezzanine GPU module consists of the following components:

- A GPU adapter card supporting zero, one or two, Cisco T4 GPUs (UCSX-GPU-T4-MEZZ).

  Each GPU is connected directly into the GPU adapter card by a x8 Gen 4 PCI connection.

- A storage adapter and riser card supporting zero, one, or two U.2 NVMe drives. NVMe RAID is supported through Intel VROC key.

Front Panel

The front mezzanine GPU module supports up to 2 U.2 NVMe drives and up to 2 GPUs.

In the following illustration, the top row of the module is slot 1 and the bottom row of the module is slot 2.
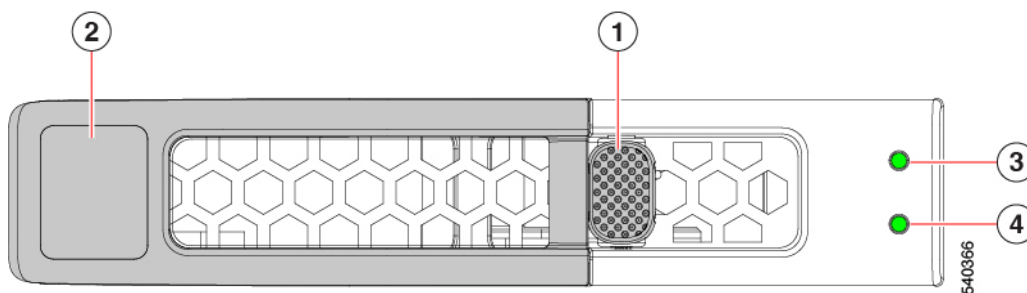
1	U.2 NVMe drive slot 1	3	GPU slot 1
2	U.2 NVMe drive slot 2	4	GPU slot 2

Drive Bays

Each Cisco UCS X10c Front Mezzanine GPU Module has a front mezzanine slot that can support a maximum of two 2.5-inch U.2 NVMe drives. A drive blank panel (UCSC-BBLKD-S2) must cover any empty drive bays.

Drives and Drive LEDs

Each U.2 is a front-loading drive that slides into and out of the front mezzanine module's storage cage.

1	Drive Ejector button	2	Drive Ejector
3	Drive Activity LED	4	Drive Status LED

Each U.2 drive also has a pair of LEDs that indicate drive health and activity.

Table 1: Drive LEDs

LED	Color	Description
Drive Activity	Off	Inactive.
	Flashing Green	I/O activity.
	Flashing Green	If this LED is flashing green and the Drive Health LED is simultaneously flashing amber, a drive rebuild is in progress.
Drive Health	Off	No fault detected, the drive is not installed, or it is not receiving power.
	Amber	Fault detected
	Flashing Amber 4 Hz	If this LED is flashing amber and the Drive Activity LED is flashing green simultaneously, a drive rebuild is in progress.