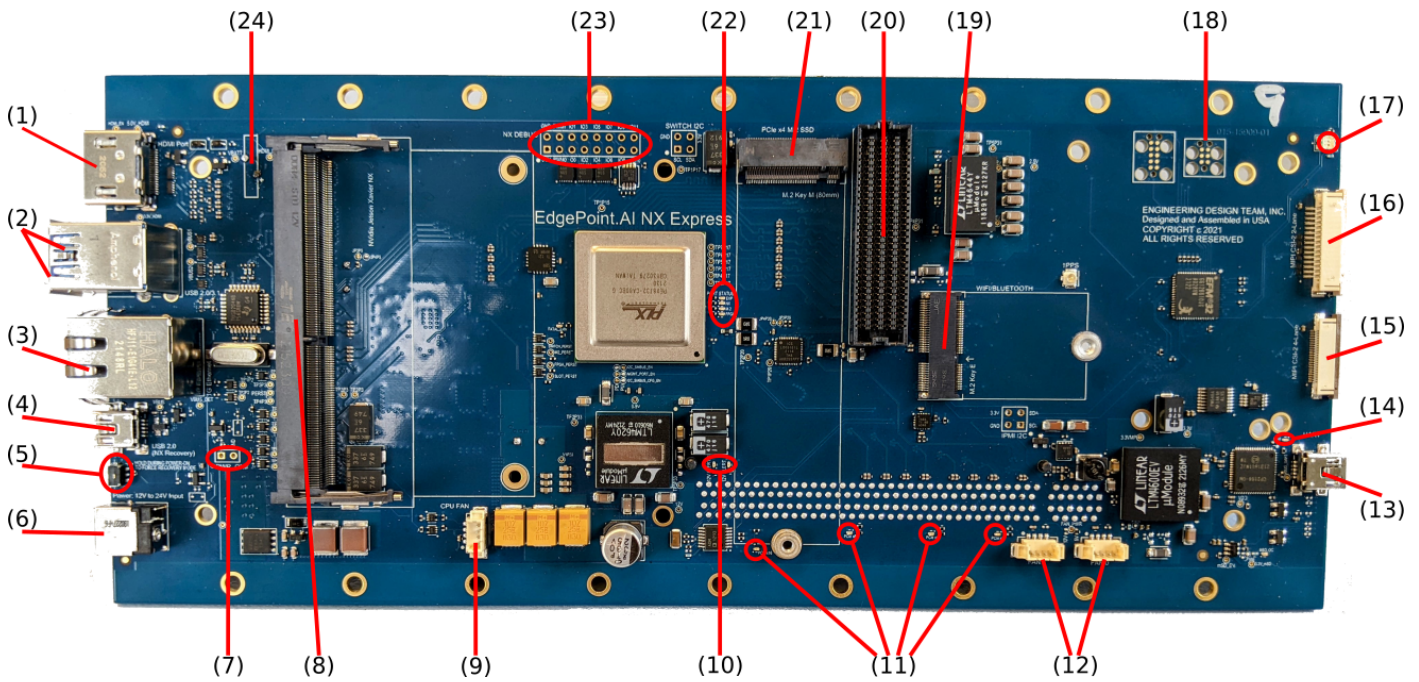# Edgepoint AI Quick Start Reference
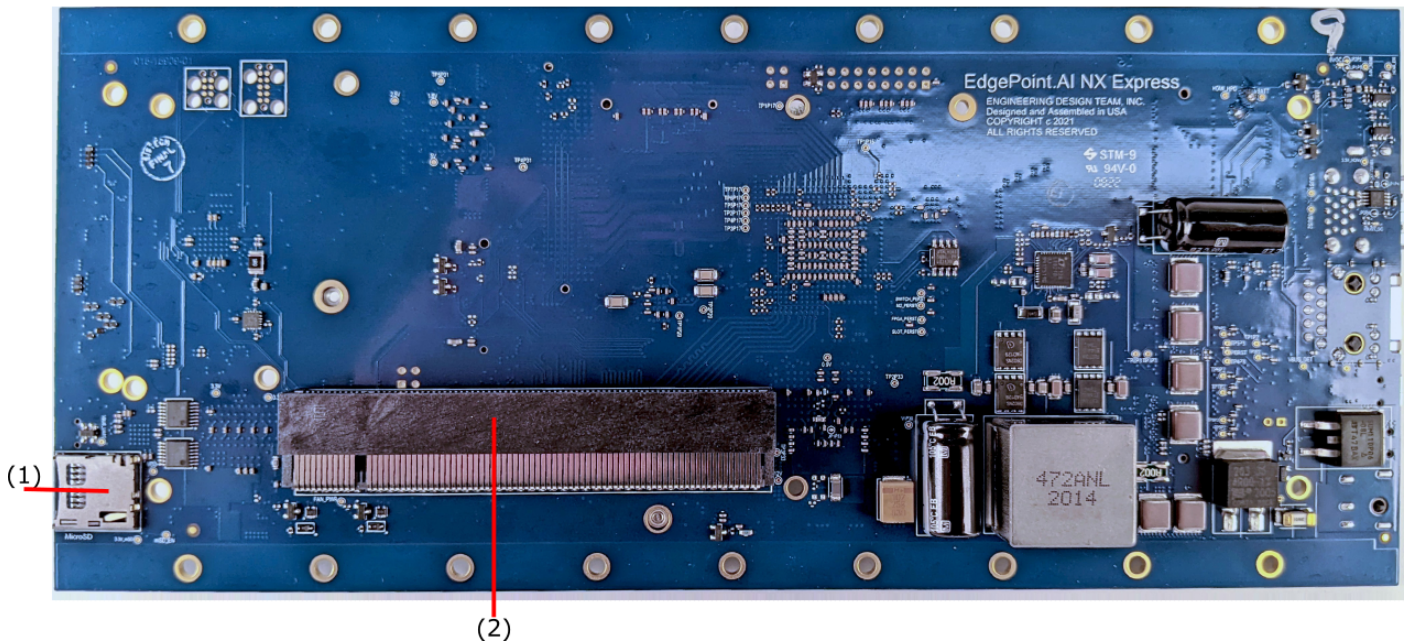
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Introduction

Edgepoint AI is a carrier board for NVIDIA™ Jetson Xavier™ and Orin™ NX, designed to be a highly configurable and open platform. Edgepoint AI supports multiple use cases and ingest options for the development and deployment of AI/ML models and stream processing pipelines at the edge. This includes the ability to easily pair with EDT's I/O interfaces via the PCIe Gen 3x8 slot for RF, VITA-49, optical, and industrial vision (CameraLink) applications.

Hardware Overview

(1) HDMI Port	(13) System Fan
(2) USB A 2.0 (top), USB A 3.0 (bottom)	(14) Serial Console Ports
(3) 1GbE RJ45	(15) Serial Console Power Indicator
(4) NVIDIA NX Flashing / Recovery Port	(16) MIPI CSI-2, 4-Lane, 22pin, 0.5mm Pitch
(5) NX Force Recovery (FRC) Button	(17) MIPI CSI-2, 2-Lane, 15pin, 1.0mm Pitch
(6) DC Barrel Jack	(18) EDT MCU Status LED
(7) "Power ON" Pushbutton	(19) EDT MCU Programming Connector
(8) NVIDIA Jetson NX Connector	(20) M.2 Key E
(9) CPU Fan	(21) SEAF "External Module" Connector
(10) 12V Rail Alert Indicators	(22) M.2 Key M
(11) PCIe x16 (on the back) Link Indicators	(23) NX GPIO Header
(12) System Fan	(24) RTC Battery

(1) Micro SD Card Slot	(2) PCIe x16 Connector (only x8 electrical)

Storage

- M.2 NVMe storage is optional for Xavier™ NX systems.
- M.2 NVMe storage is required for Orin™ NX systems.

Getting Started

Use the steps below to get started with your Edgepoint AI. See the sections titled Stands and Enclosure for instructions on using the provided stands or for printing a 3D enclosure if your Edgepoint did not come with one.

1. **Connect peripherals** - Use the USB and HDMI ports to connect keyboard/mouse and monitor.

2. **Power on** - Connect the provided power supply to the DC barrel connector.

3. **Log in** - By default your Edgepoint AI comes with the following user credentials:

   - username: `test`

   - password: the serial number of the Edgepoint AI. with lowercase letters (e.g. edg00032)

Development Tools

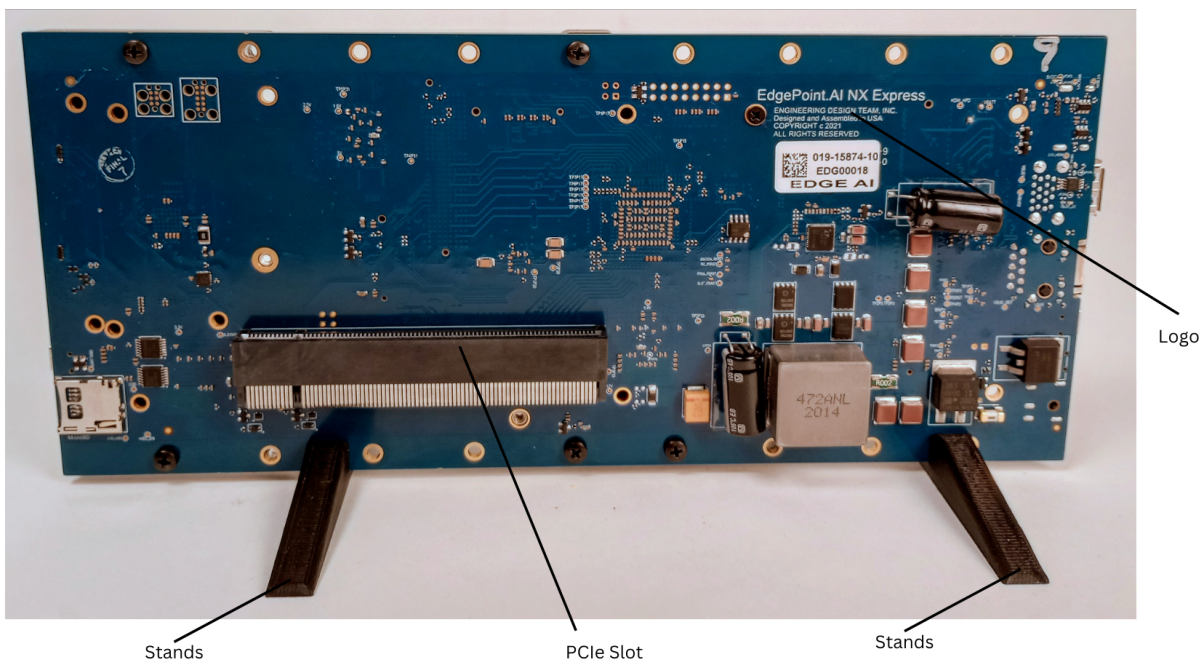The Edgepoint AI platform comes with NVIDIA JetPack™ SDK installed. This provides Jetson Linux (Ubuntu), developer tools, and access to CUDA-X accelerated libraries. See below for the JetPack™ versions that come installed on your Edgepoint AI.

- Jetson Xavier™ NX: 5.1.2 (locked)
- Jeston Orin™ NX: 5.1.2

The DeepStream SDK is also installed by default, and is used for AI/ML application development, stream processing pipelines, and base models. Deepstream is based on Gstreamer, a flexible plugin-based library for constructing graphs of media-handling components.

Stands

The image below can be used to demonstrate how to place the board in the 3D printed stands that were included with your Edgepoint AI. It is important to note that the PCIe slot and Edgepoint logo are upright to ensure proper placement.

Enclosure

EDT has designed a simple enclosure for the Edgepoint AI that can be purchased or 3D printed. If you are interested in purchasing or printing an enclosure please contact EDT for details.

Contact Information

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