

# JETBOX-STEVIE Compact Carrier for NVIDIA Jetson AGX Xavier



## FEATURES

Complete system with Jetson AGX Xavier module and Linux OS installed

2 gigabit Ethernet ports

2 HDMI 2.0a/b ports

2 USB 3.0 ports with type A connectors

2 USB 2.0 ports

4 serial ports with RS-232/422/485 (depending on model)

Camera module connector supporting up to 12 lanes CSI

2 optional CAN ports

1 Mini PCIe socket with PCIe and USB support

1 M.2 2280 PCIe x1 socket

Input voltage 9-20VDC; 12VDC universal AC adapter included

Operating temperature -25 to +70°C

Steel enclosure with aluminum heat sink

Dimensions: 150 x 112 x 72mm / 5.9 x 4.4 x 2.8"



## ◆ Overview

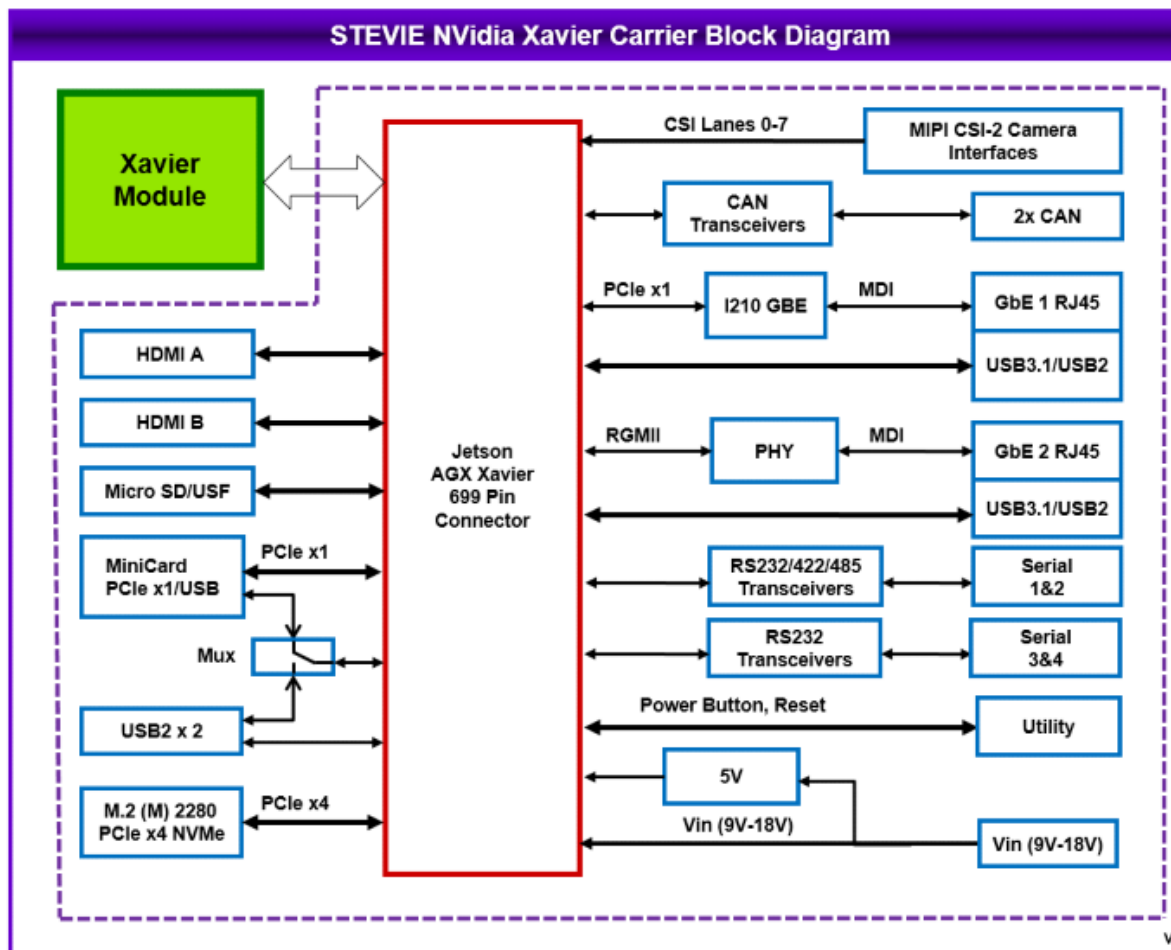
JETBOX-STEVE is a compact Nvidia Jetson AI computing platform ready to deploy. It includes the high performance Jetson AGX Xavier embedded computing module installed on our [STEVE](#) carrier board with a Linux OS installed and preconfigured to support all the I/O on Stevie. Jetbox-Stevie offers the highest performance Jetson computing platform in the smallest available size.

Jetbox-Stevie features multiple expansion sockets for additional I/O and storage capacity to meet a wide range of application needs. Dual SMA antenna cutouts support the installation of WiFi and cellular modem modules for network connectivity. The enclosure is DIN rail mountable or can be used in a "table top" scenario.

The front panel includes 4 DB9 connectors which provide access to the 4 multi-protocol serial ports on Stevie. Two ports can be converted to CAN by replacing one of the cables with the accessory CAN cable included with the system.

A 12VDC universal AC adapter with US plug is included with the system.

## ◆ Stevie Block Diagram



## ◆ I/O Expansion

Jetbox-Stevie includes several options for I/O and memory expansion:

- The M.2 2280 socket (located on the bottom side of Stevie between it and the Xavier module) may be used for additional flash storage using Diamond's flashdisks up to 2TB in capacity, or for I/O modules in M.2 2280 format. On 01 models the socket has a PCIe x1 interface, while on 02 models the interface is PCIe x4.
- The PCIe minicard socket (located on the top side of Stevie) accepts any full-size PCIe- or USB-based minicard. Check to be sure that drivers compatible with Nvidia Linux are available.
- A micro-SD card socket is also available for adding flash storage.

Note that all Jetson modules include built-in flash memory. Check the Jetson datasheets for specifics. This built-in flash contains Diamond’s customized Linux based on Nvidia Jetpack for the installed Jetson module.

### ◆ Using Cameras with Jetbox-Stevie

Connecting one or more cameras to Stevie can be accomplished in two ways. The simplest approach is to use a USB camera and connect to the two USB 3.0 connectors on the front panel. For CSI cameras, the standard Xavier CSI camera adapter socket is included on the Stevie carrier board. The adapter can be installed by opening up the bottom cover of the system, providing direct access to the socket. A knockout on the side of the enclosure can be used to pass the camera cables out the side of the enclosure. Visit the Nvidia partners page to find compatible camera vendors for Xavier and Stevie, or contact Diamond Systems Sales for a recommendation.

### ◆ Customization

Jetbox-Stevie can be customized to fit your application needs. Typical customizations include:

- Change of case size / shape to accommodate additional I/O or electronics
- Installation of flash memory modules, minicard I/O modules, or camera interface modules
- Switch 2 of the 4 serial ports to 2 CAN ports
- Change front panel design and connectors based on your I/O needs
- Branding with your color and logo
- Conformal coating of internal electronics
- Customization of the Linux OS or loading of your custom software

Please contact Diamond Systems Sales for further information.

### ◆ Ordering Information

#### ◆ Models and Accessories

JETBOX-STEVIE		
available models:		
<b>JB-STV-AGX32-01</b>	Jetbox-Stevie computer system with STV-BB01 baseboard, AGX Xavier 32GB module, and Linux installed	Available
<b>JB-STV-AGX32-02</b>	Jetbox-Stevie computer system with STV-BB02 baseboard, AGX Xavier 32GB module, and Linux installed	Available
<b>JB-STV-BASE-01</b>	Jetbox-Stevie Kit, includes Stevie baseboard, Enclosure, Cables, and AC adapter (no AGX Xavier module)	Available