

JETBOX OSBOURNE NVIDIA Jetson AGX Orin system solution with I/O and camera expansion



FEATURES

- Choice of AGX Orin 32GB / 64GB / 64GB Industrial module
- M.2 M-Key SSD with Linux OS installed; up to 2GB capacity
- 2x Ethernet: 1 10Gbe + 1 1Gbe on RJ-45
- 3X USB 3.2 with USB 2.0 fallback on Type A
- 1x dedicated USB 2.0 on Type A (4 USB ports total)
- 2 RS-232/422/485 on DB9
- 8x GPIO 3.3V muxed on DB9
- 2x CAN + 2x RS-232 muxed on dual RJ-12
- 1 HDMI on Type A
- 1 PCIe/USB minicard + 1 USB minicard socket for I/O expansion
- 1 M.2 E-Key 2230 socket
- Support for up to 8 GMSL cameras
- 7-20VDC input voltage
- 25 to 70C operation, fanless (-40 to 70 with Industrial module)
- DIN rail and shelf mounting
- Dimensions: 180 W x 85 H x 198 D (mm) / 7.1 W x 3.3 H x 7.8 D (in)

Top view

Jetbox-Osbourne provides a compact and economical solution for commercial / industrial grade applications based on the NVIDIA Jetson AGX Orin high-performance GPU module. The system can be configured with any AGX Orin module including 32GB, 64GB, and 64GB Industrial. Read more about the AGX Orin module [here](#).

JetBox-Osbourne is based on Diamond's **Osbourne** carrier board together with its commercial I/O breakout board. This combination offers a multitude of I/O including:

- 1 10Gbps and 1 1Gbps Ethernet port using RJ-45 jacks
- 3 USB 3.2 ports with USB 2.0 fallback on Type A connectors
- 1 additional fixed USB 2.0 port on Type A connector
- 2 RS-232/422/485 serial ports using DB9 male connectors
- 2 CAN ports using RJ-12 connectors
- 8 GPIO ports (muxed with one serial port on a DB9 connector)
- 1 HDMI display on a type A (standard size) connector

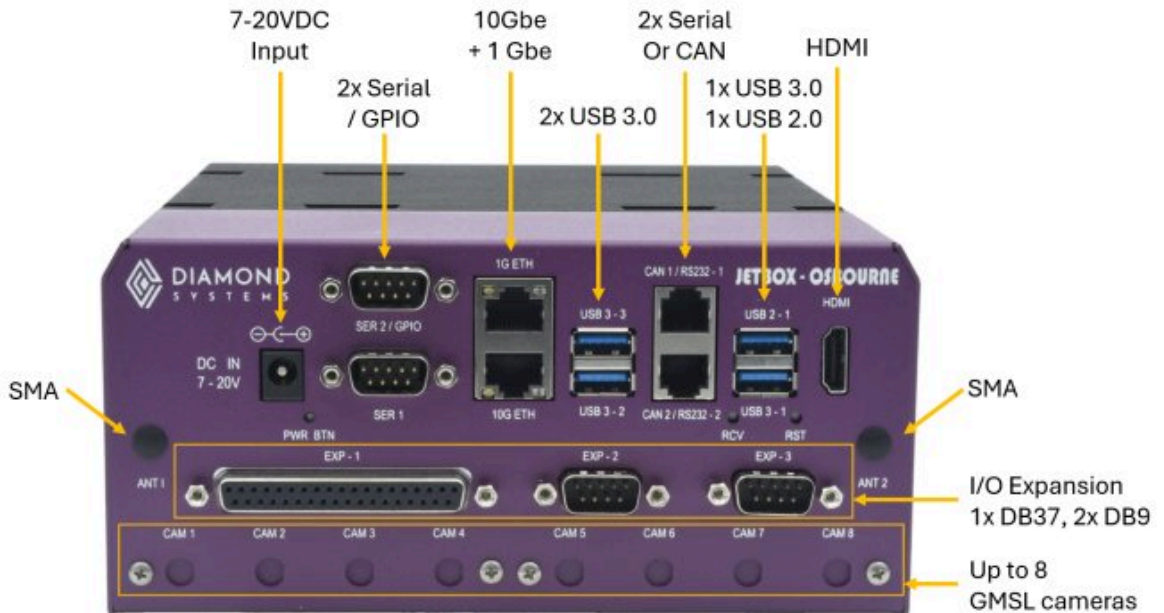
The JetBox-Osbourne system has been tested to confirm full CPU and GPU performance up to 65 degrees C without any throttling when used with the Industrial module at 100% loading, and up to 75C with throttling. The system will support operation down to -40C with the Industrial module and -25C with the 32GB and 64GB modules.



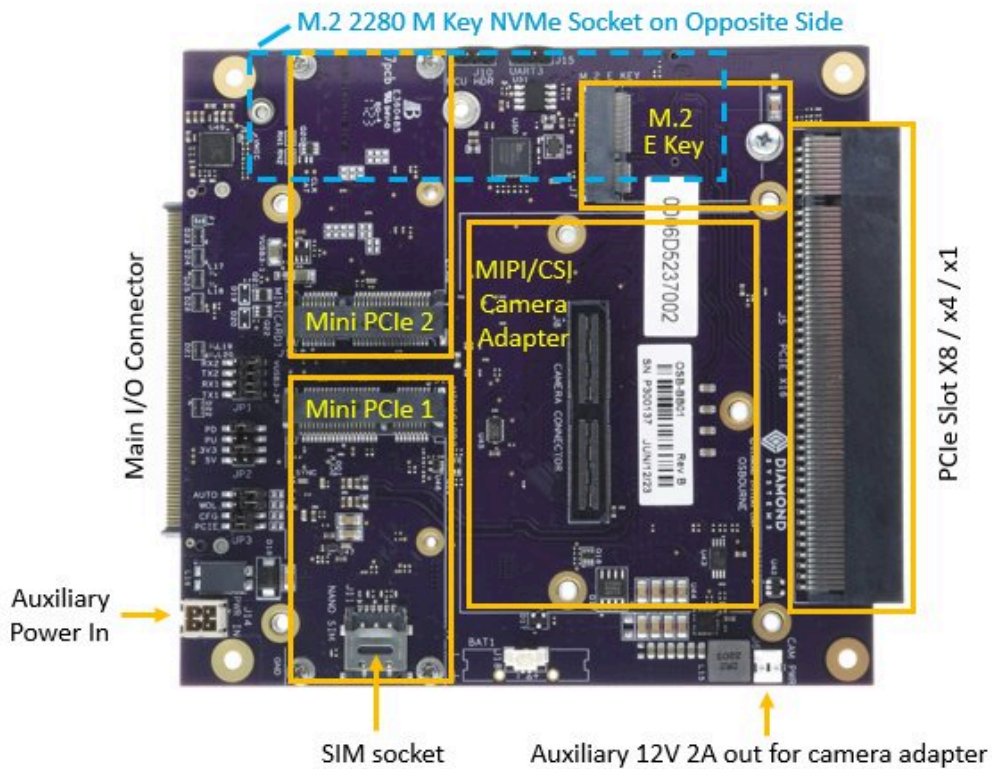
Osbourne carrier board with AGX Orin module and I/O connector board form the heart of JetBox-Osbourne.

◆ I/O Expansion

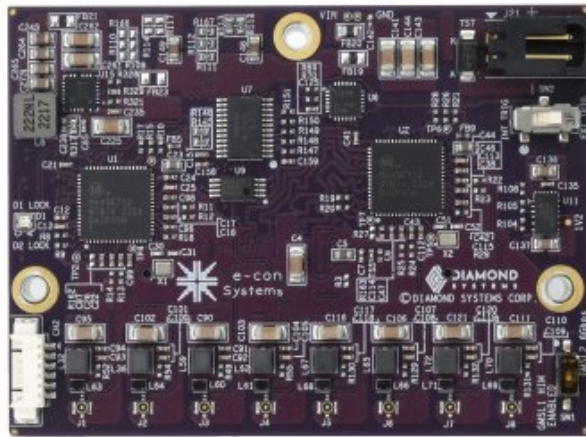
The system is expandable with a PCIe minicard and an M.2 E-key module. A series of Dsub and SMA cutouts are available on the front panel for access to the add-on modules' I/O.



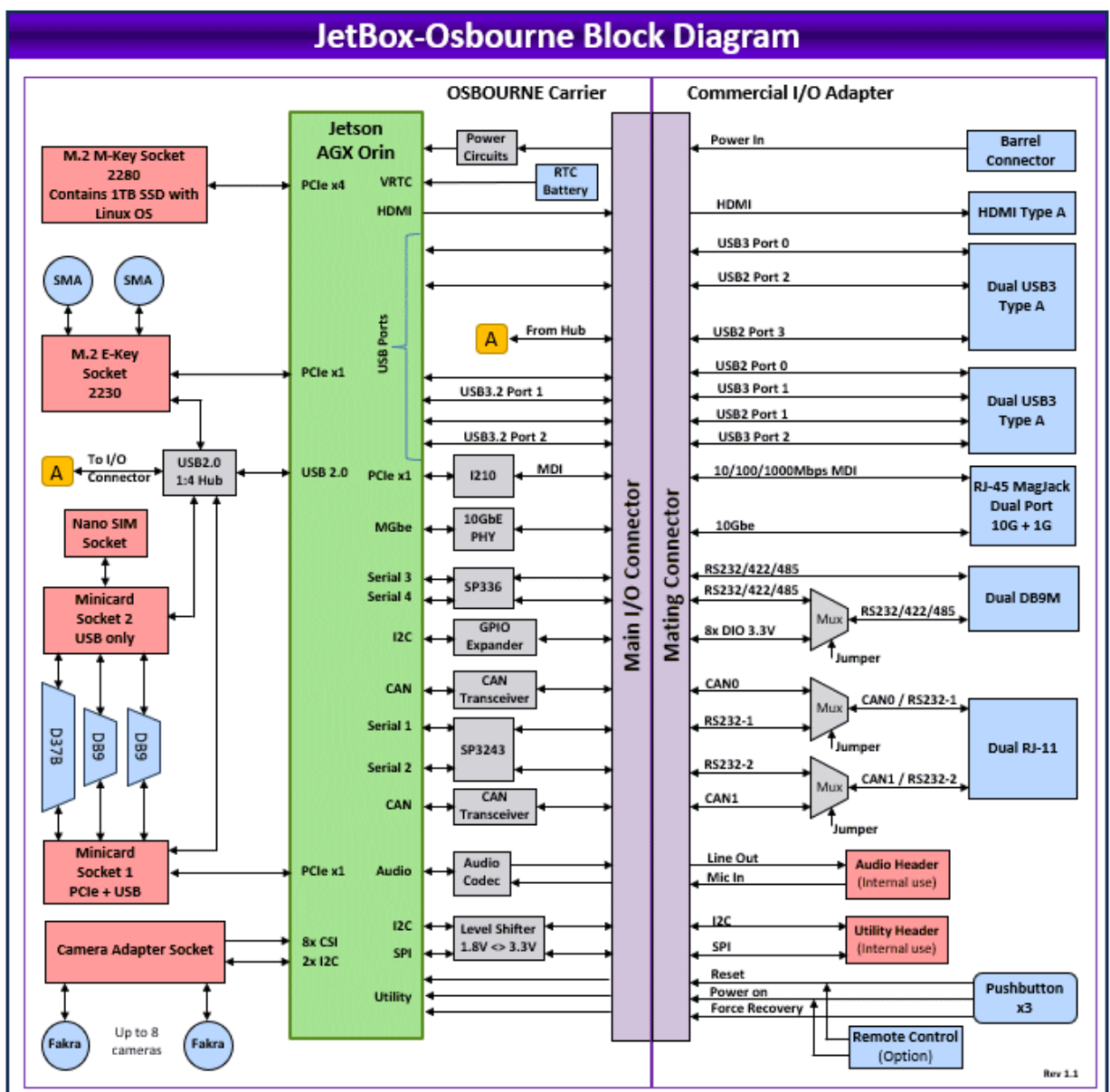
Installation of I/O expansion modules is easy by removing the bottom cover, which provides ready access to all expansion sockets on the Osbourne carrier board and the front panel.



Installation of our GMSL camera adapter board enables JetBox-Osbourne to support up to 8 GMSL cameras via Fakra connectors on the front panel. (Unused connector cutouts are plugged in the product photos.)



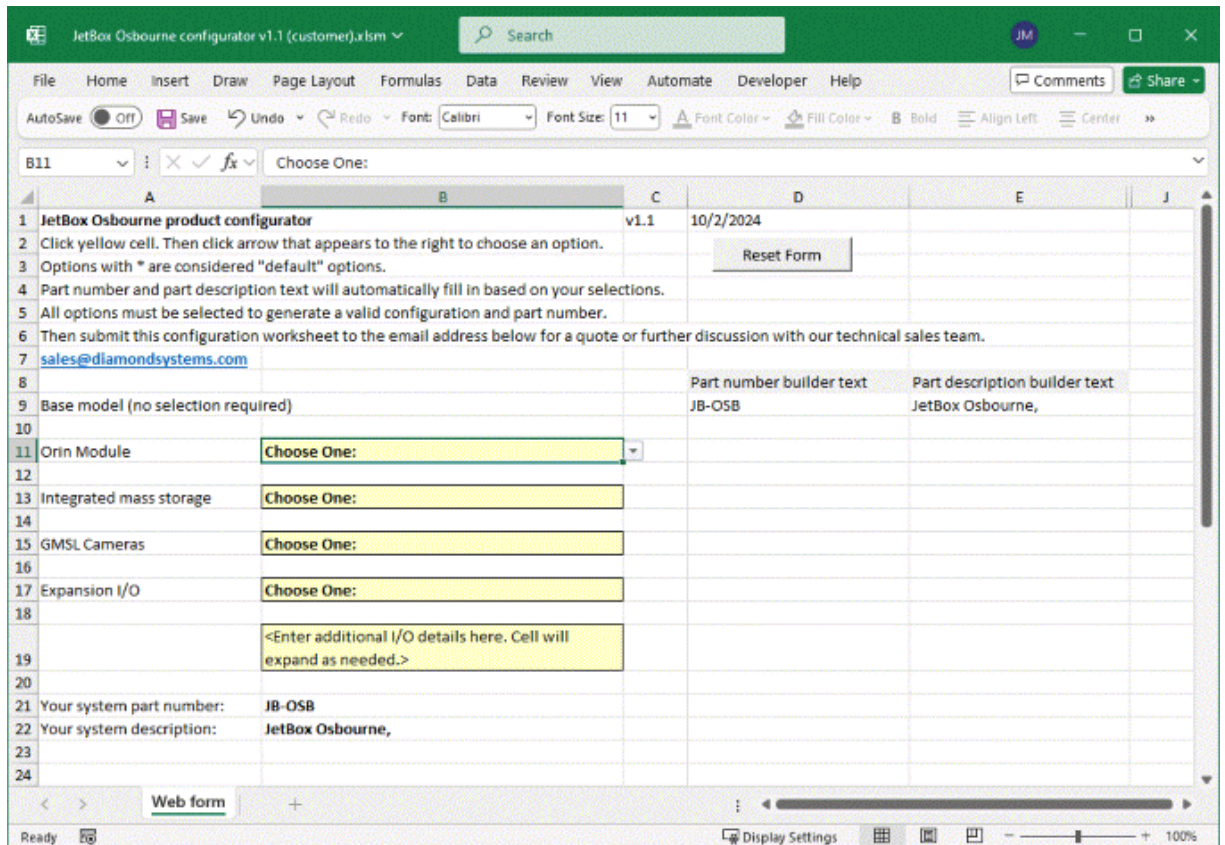
GMSL to CSI adapter module supports up to 8 GMSL cameras.



JetBox-Osbourne can be configured to include any combination of the following options:

- AGX Orin module
- Integrated M.2 NVMe mass storage
- GMSL cameras
- Custom I/O using PCIe minicards

Please [download our configuration spreadsheet](#) to select the configuration you want. The spreadsheet will generate a part number and description based on your selections. Then [contact Sales](#) with the resulting part number to obtain a quote. Some configurations are standard and can be ordered with existing part numbers as shown in the table below.



◆ Models and Accessories

✓ JetBox Osbourne

Available Models:

JB-OSB-32G-1T-G0-01	JetBox Osbourne, Orin 32GB, 1TB SSD, No GMSL	Coming Soon
JB-OSB-64G-1T-G0-01	JetBox Osbourne, Orin 64GB, 1TB SSD, No GMSL	Coming Soon
JB-OSB-64GIT-1T-G0-01	JetBox Osbourne, Orin 64GB Industrial, 1TB SSD, No GMSL	Coming Soon

Please [login](#) or [signup](#) for an online quote request.

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