

AI Inference / DeviceEdge

Jetson System AIB-MX13/23-1-A2



Features

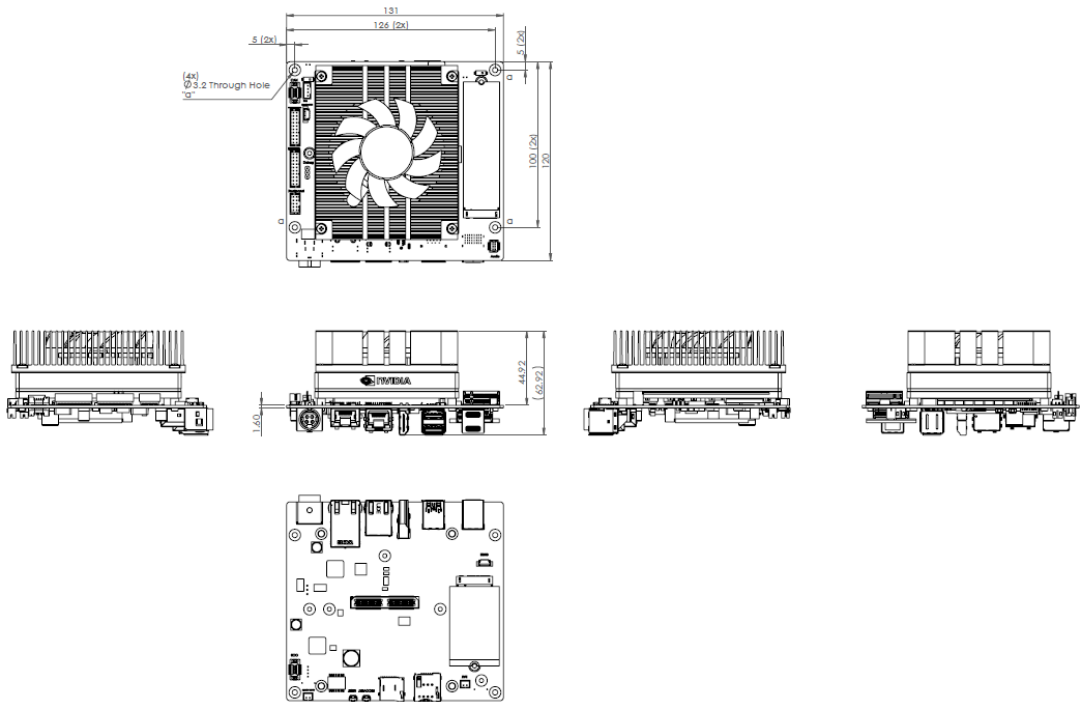
- Supports NVIDIA Jetson AGX Orin Series
- 1 x B-Key, 1 x E-Key, 1 x M-Key slot
- 1 x GbE port, 1 x 10GbE port
- Wide Power Input Range 9 to 36V DC
- Operating Temperature -25°C ~ +80°C
- Supports OOB (out-of-band) powered by Innodisk (optional)



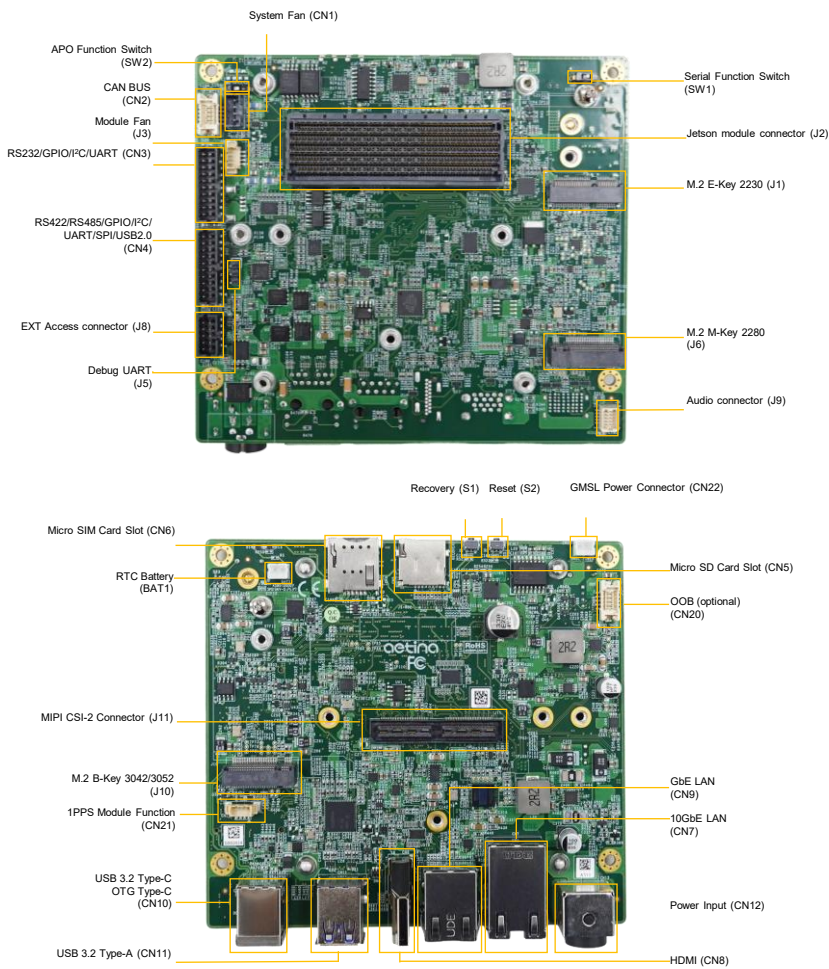
Specifications

Model Number	AIB-MX13-1-A2		AIB-MX23-1-A2	
Module Compatibility	NVIDIA Jetson AGX Orin 32GB		NVIDIA Jetson AGX Orin 64GB	
AI Performance	200 TOPS		275 TOPS	
GPU	1792-core NVIDIA Ampere GPU with 56 Tensor Cores		2048-core NVIDIA Ampere GPU with 64 Tensor Cores	
CPU	8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3		12-core Arm® Cortex®-A78AE v8.2 64-bit CPU 3MB L2 + 6MB L3	
Memory	32GB 256-bit LPDDR5 204.8 GB/s		64GB 256-bit LPDDR5 204.8 GB/s	
Storage	64GB eMMC 5.1			
Display	1 x HDMI 2.0 Type-A			
TPM	TPM v2.0			
RTC	RTC battery CR2032			
Audio	Line-out, Line-in, Mic (optional, requires daughter board)			
Camera Input	1x 16-Lane MIPI Expansion Connector			
LAN	1 x RJ-45 GbE port, 1 x RJ-45 10GbE port			
USB	2 x USB 3.2 Gen1, Type-A 1 x USB 3.2 Gen2, Type-C 1 x OTG, USB 2.0, Type-C			
I/O Interfaces	1 x USB 2.0 2 x UART 1 x UART (debug only) 1 x RS-232 1 x RS-422/485 (2-in-1) 2 x CAN 2.0b (isolated) 2 x I²C		1 x I²S 1 x SPI 5 x GPIO 2 x 3.3V DC / 0.5A 1 x 5V DC / 0.5A 1 x 5V DC / 0.5A (standby) 1 x 12V DC / 0.5A	
Expansion	1 x M.2 B-Key 3042/3052 (LTE/4G/5G) 1 x M.2 E-Key 2230 (Wi-Fi/BT) 1 x M.2 M-Key 2280 (NVMe, PCIe Gen4 x4) 1 x micro-SD card slot 1 x micro-SIM card slot 1 x OOB (out-of-band, optional) 1 x GMSL power connector 1 x 1PPS module function			
MISC. Function	1 x Power button, 1 x Recovery button, 1 x Reset button			
Power Consumption	Idle: 6.655 W Full Loading: 62.722 W *For more test condition information, please refer to user manual		Idle: 6.655 W Full Loading: 82.722 W *For more test condition information, please refer to user manual	
Power Input / Connector	DC-in 9–36V DC, 4-pin DC jack power connector			
Dimension (W x D x H)	131 x 120 x 62.9 mm (5.16 x 4.72 x 2.47 in)			
Net Weight	0.701 kg (1.54 lb) w/ Fansink			
Vibration	1 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis			
Shock	10 G, IEC 60068-2-27, half sine, 11 ms duration			
Temperature	Operating Temp.: -25°C ~ +80°C (-13°F ~ +176°F) Storage Temp.: -40°C ~ +85°C (-40°F ~ +185°F)			
Humidity	95% @ 40°C (104°F) (non-condensing)			
Software Support	Linux (supports NVIDIA Jetpack™ 6.2 and above)			
Certification	CE, FCC Class A, UKCA			

System & Mounting Dimensions



Carrier Board Layout



Ordering Information

Model name	Description
AIB-MX13-1-A2	AGX Orin 32GB, 1 x HDMI, 1 x GbE, 1 x 10GbE, 3 x USB, B/E/M Key, 9 to 36 VDC input, -25°C ~ +80°C
AIB-MX23-1-A2	AGX Orin 64GB, 1 x HDMI, 1 x GbE, 1 x 10GbE, 3 x USB, B/E/M Key, 9 to 36 VDC input, -25°C ~ +80°C

Packing List

Item/Part Number	Description
92-6BMX13-400A	AIB-MX13 carrier board w/ AGX Orin 32GB
92-6BMX23-4004	AIB-MX23 carrier board w/ AGX Orin 64GB
53-0FG160-1200	85~264V 138W 12V 11.5A power adaptor

Accessories (Optional)

Part Number	Description
3102000153N000	US power cord
32-010000-0006	EU power cord
32-010000-0008	JP power cord
3102000037N000	UK power cord
20-100000-0000	Battery wire Panasonic CR2032 3V/225mA L=45mm
53-0DEV3F-0000	Innodisk 2D GMSL2 EV3F-ZSM1-RXCF
53-0V1S8F-0001	Innodisk GMSL ADAPTER INNODISK:EB120-1S8F-12
53-0DZEDX-0000	Stereolabs 3D GMSL2 Camera ZED X
53-0DZEDX-0001	Stereolabs 3D GMSL2 Camera ZED X Mini
53-0DZEDX-0002	Stereolabs 3D GMSL2 Camera ZED X ONE
53-0NZEDQ-0000	CAPTURE BOARD STEREO LABS:ZED Link QUAD CAPTURE CARD Note: The selected capture card is not compatible with the wide-temperature SSD option.
53-0NZEDD-0000	CAPTURE BOARD STEREO LABS:ZED Link DUO CAPTURE CARD
53-0NZEDM-0000	CAPTURE BOARD STEREO LABS:ZED Link MONO CAPTURE CARD
53-0DA2BN-0010	ONSEMI AR0234 MIPI-4Lane FFC 36PIN 10cm
53-0DA2BN-0013	ONSEMI AR0234 MIPI-4Lane FFC 22PIN 10cm -30°C~85°C
53-0DA2BN-0012	ONSEMI AR0234 MIPI-4Lane FFC 15PIN 12cm -30°C~85°C
53-0VA2BN-0000	36PIN MIPI ADAPTER 6 TO 1 DAUGHTER BOARD