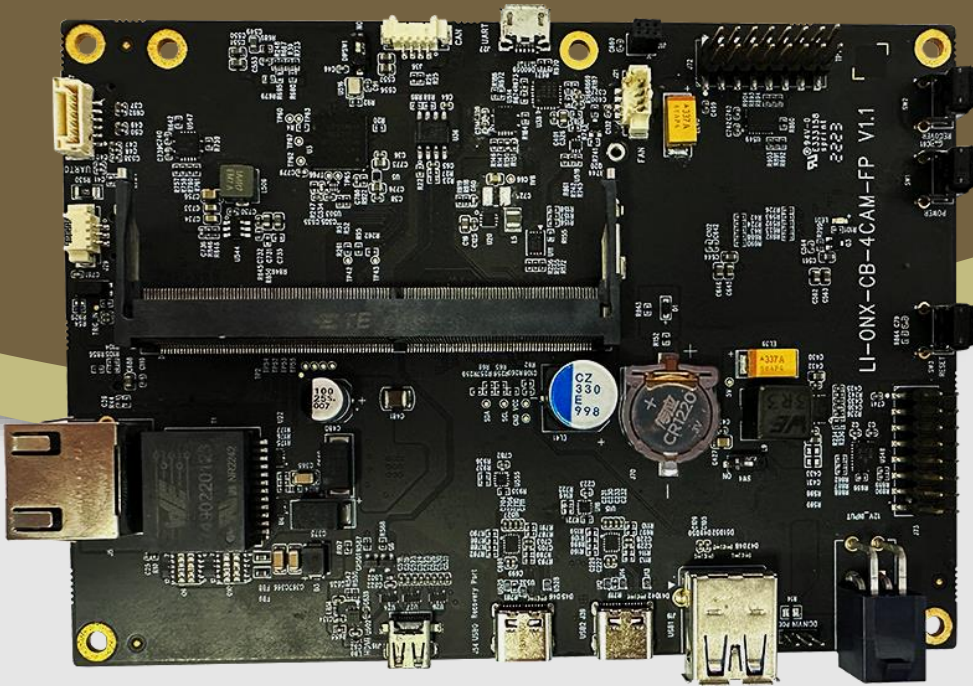




LI-ONO-CB-4CAM-FP



Address:

910 Auburn Ct
Fremont, CA 94538
USA



Phone:

+1 (408)263-0988

Fax:

+1 (408)217-1960



Sales:

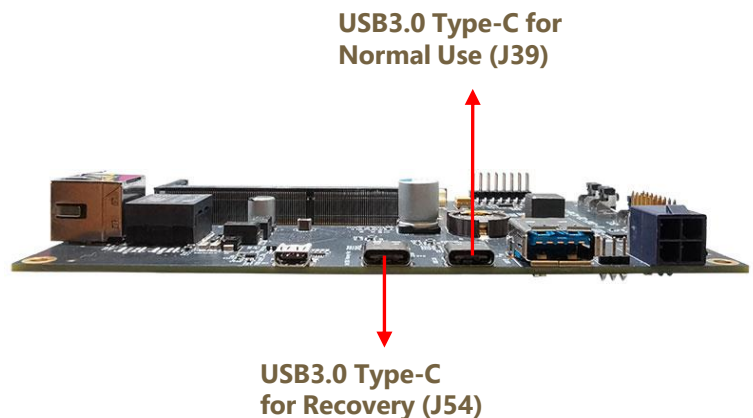
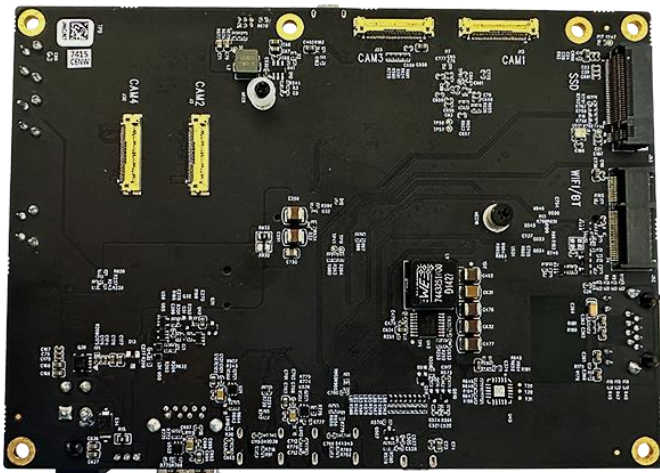
sales@leopardimaging.com

Support:

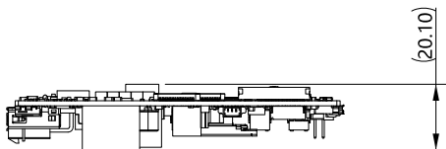
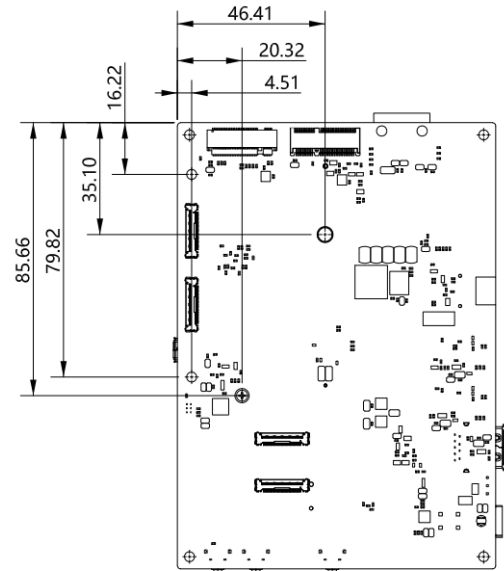
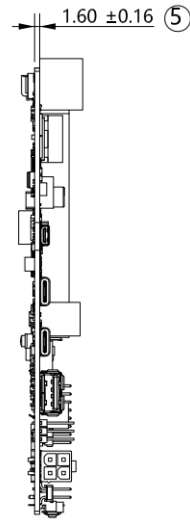
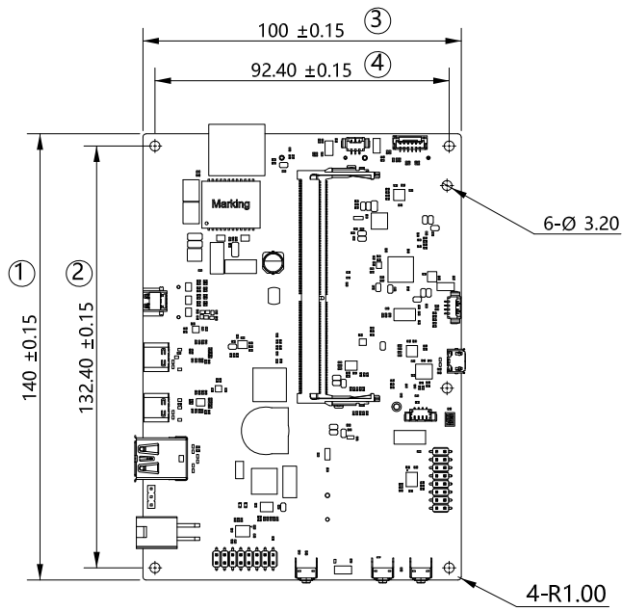
support@leopardimaging.com

TECHNICAL FEATURES

- Carrier board for NVIDIA® Jetson Orin™ NANO SOM which power supply is 5V
NOTE: If you are looking for carrier board for Orin NX SOM, refer to:
<https://leopardimaging.com/product/platform-partners/nvidia/nvidia-jetson-orin/orin-nx-camera-kits/li-onx-cb-4cam-fp/>
- 4 x MIPI CSI-2 camera interfaces (4 x 2-lane)
- 1 x Power interface (DC 12V)
- 1 x USB3.0 Type-C interface for normal use (J39)
- 1 x USB3.0 Type-C interface for recovery function only (J54)
- 1 x USB3.0 Type-A interface
- 1 x RJ45 Ethernet interface
- 1 x UART interface (USB2.0 Micro-B)
- 1 x WIFI & Bluetooth interface
- 1 x SSD connection interface
- 1 x CAN connector
- 1 x Micro HDMI interface
- 1 x Fan connector
- Auto-Boot switcher
- PoE supported (Optional)
- Weight: ~ 112 g (Without NANO SOM)
- Operating temperature: TBD
- Part#: **LI-ONO-CB-4CAM-FP**



DIMENSIONS



TOLERANCE TABLE					
LENGTH TOLERANCE		CHAMFER TOLERANCE		ANGLE TOLERANCE	
Size X	Tolerance	Size X	Tolerance	Size X	Tolerance
0.5 < X ≤ 3	±0.1	0.5 < X ≤ 3	±0.2	X ≤ 10	±1°
3 < X ≤ 6	±0.1	3 < X ≤ 6	±0.5	10 < X ≤ 50	±30'
6 < X ≤ 30	±0.2	6 < X ≤ 30	±1	50 < X ≤ 120	±20'
30 < X ≤ 120	±0.3	X > 30	±2	120 < X ≤ 400	±10'
120 < X ≤ 400	±0.5			X > 400	±5°
400 < X ≤ 1000	±0.8				
X > 1000	±1.2				

NOTE:

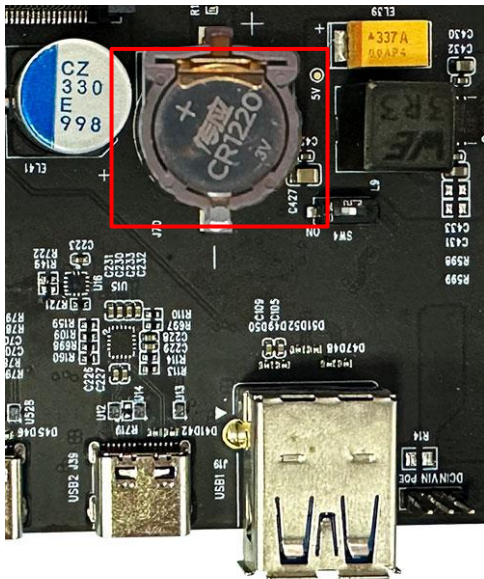
- ⊗ marked are important sizes.
- Tolerances for others unmarked - refer to the Tolerance Table.
- All materials are compliant with RoHS requirements.

Unit: mm

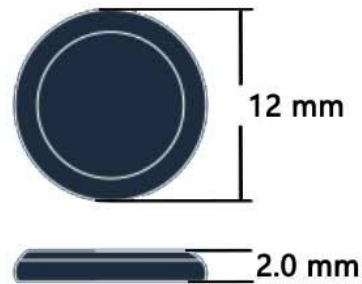
BOM

#	Items	QTY	Unit
1	LI-ONX-CB-4CAM-FP V1.1 board for NANO NOTE: The button cell on the board is not included	1	Piece
2	12 VDC power supply: 1 x 12V power adapter + 1 x cable adapter NOTE: The cable adapter is for testing only	1	Set

BUTTON CELL (NOT included in the Product)



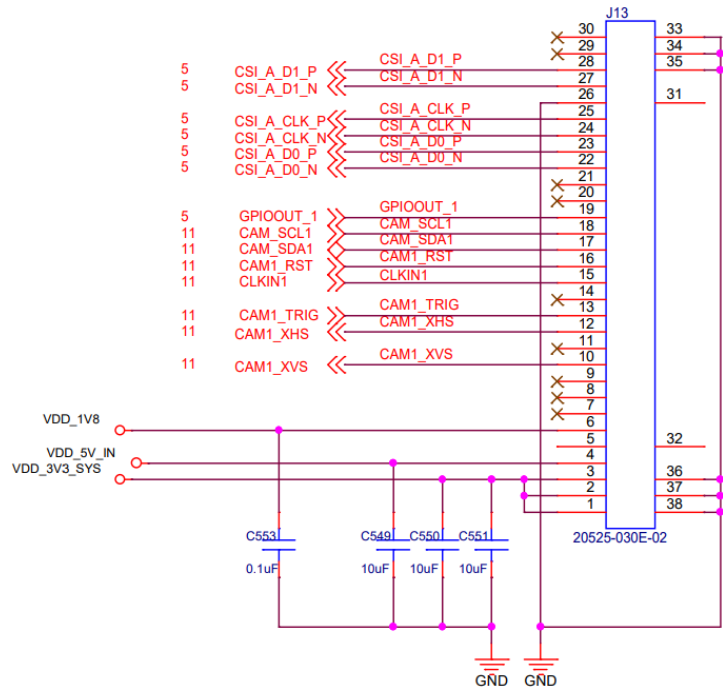
Power: 3V



NOTE: The button cell shown above is only for your reference. Please buy according to your actual requirements.

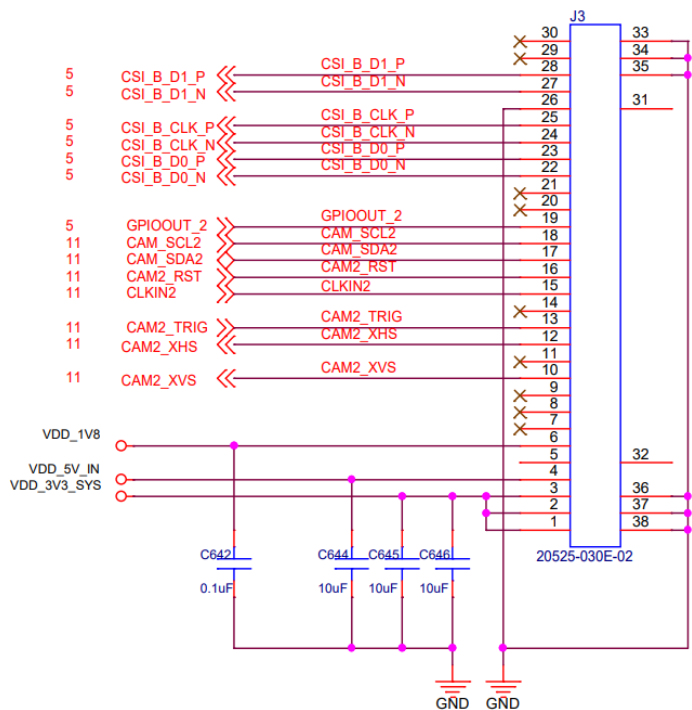
INTERFACE J13 (MIPI Channel 1)

- Part#: 20525-030E-02
- Number of Positions: 30
- Pitch: 0.4 mm
- Mating I-PEX Cable: FAW-1233-xx



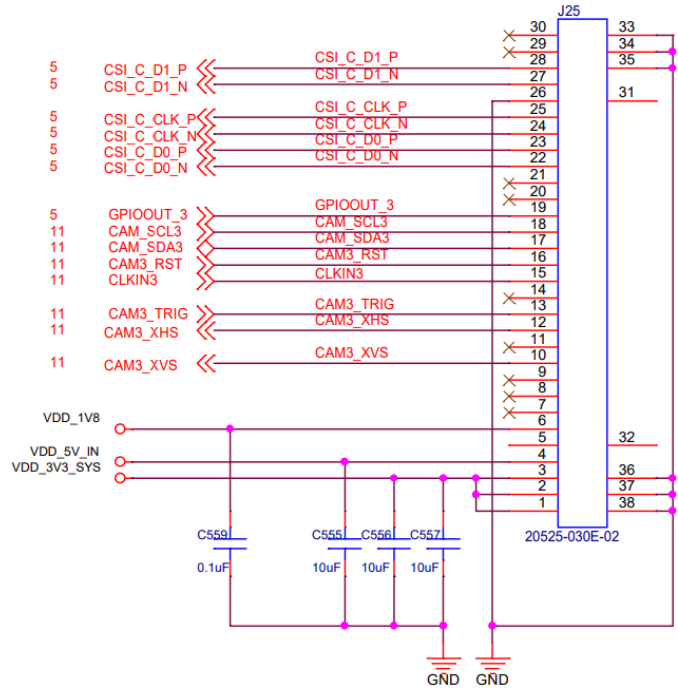
INTERFACE J3 (MIPI Channel 2)

- Part#: 20525-030E-02
- Number of Positions: 30
- Pitch: 0.4 mm
- Mating I-PEX Cable: FAW-1233-xx



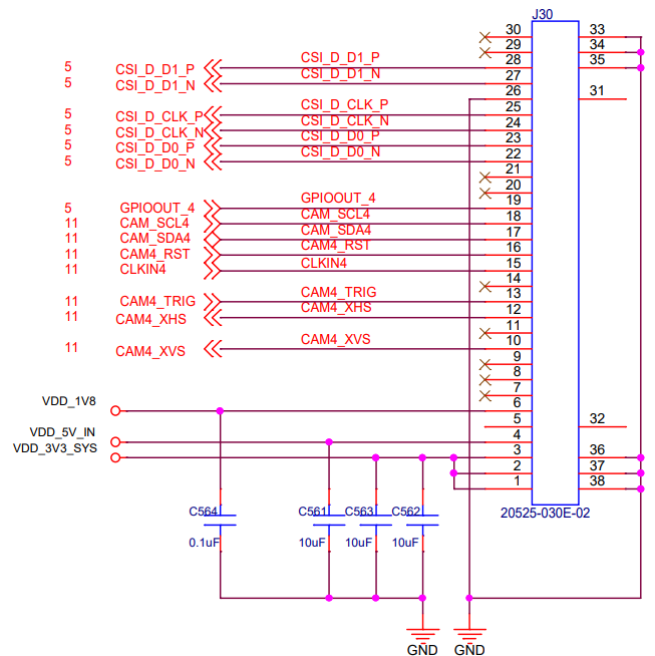
INTERFACE J25 (MIPI Channel 3)

- Part#: 20525-030E-02
- Number of Positions: 30
- Pitch: 0.4 mm
- Mating I-PEX Cable: FAW-1233-xx



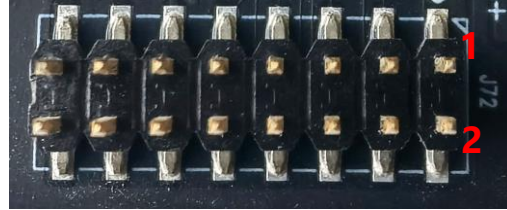
INTERFACE J30 (MIPI Channel 4)

- Part#: 20525-030E-02
- Number of Positions: 30
- Pitch: 0.4 mm
- Mating I-PEX Cable: FAW-1233-xx



IO CONNECTOR J72

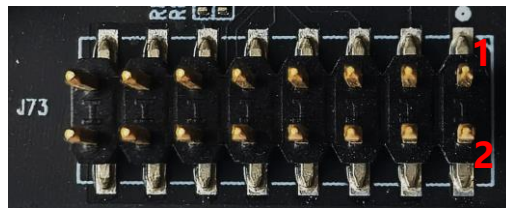
- Part#: M20-8760842P
- Number of Positions: 16
- Number of Rows: 2
- Pitch: 2.54 mm
- IO Voltage Level: 3.3V



Pin	Definition	To SOM	Pin	Definition	To SOM
1	VDD_3V3_SYS	N/A	2	VDD_3V3_SYS	N/A
3	GEN2_I2C_SCL	I2C1_SCL	4	SPI2_SCK_LS	SPI1_SCK
5	GEN2_I2C_SDA	I2C1_SDA	6	SPI2_MISO_LS	SPI1_MISO
7	SYS_RST_IN	SYS_RESET	8	SPI2_MOSI_LS	SPI1_MOSI
9	SPI2_CS1_LS	SPI1_CS1	10	SPI2_CS0_LS	SPI1_CS0
11	GND	N/A	12	GND	N/A
13	N/A	N/A	14	N/A	N/A
15	N/A	N/A	16	N/A	N/A

IO CONNECTOR J73

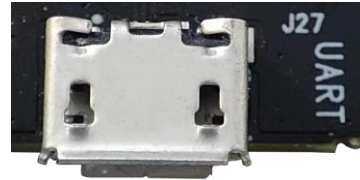
- Part#: M20-8760842P
- Number of Positions: 16
- Number of Rows: 2
- Pitch: 2.54 mm
- IO Voltage Level: 3.3V



Pin	Definition	To SOM	Pin	Definition	To SOM
1	VDD_3V3_SYS	N/A	2	VDD_3V3_SYS	N/A
3	I2S0_DOUT_LS	I2S0_DOUT	4	GPIO_OUT	GPIO14 (PWM)
5	I2S0_DIN_LS	I2S0_DIN	6	MOD_SLEEP_OUT	MOD_SLEEP
7	I2S0_FS_LS	I2S0_FS	8	N/A	N/A
9	I2S0_SCLK_LS	I2S0_SCLK	10	N/A	N/A
11	GND	N/A	12	GND	N/A
13	N/A	N/A	14	N/A	N/A
15	N/A	N/A	16	N/A	N/A

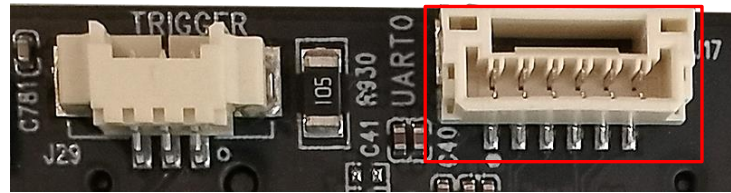
UART PORT J27 (USB2.0 Micro-B)

- USB2.0 UART bridge integrated



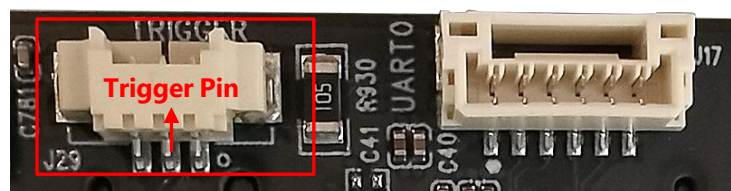
UART PORT J17

- Part#: BM06B-GHS-TB
- Number of Positions: 6
- Number of Rows: 1
- Pitch: 1.25 mm



INTERFACE J29 (External Trigger Input)

- Part#: 532610371
- Number of Positions: 3
- Number of Rows: 1
- Pitch: 1.25 mm



BOOT MODE (SW4)

Status	Boot Mode
On	Manual Mode
Off	Auto Mode

Buttons (Power, Recovery, Reset)

Buttons	Function
SW1	Power
SW2	Force recovery
SW3	System reset

INTERFACE J36 (CAN Connector)

- Part#: BM04B-GHS-TB
- Pin Assignment

Pin	Definition
Pin 1	5V power
Pin 2	CAN_H
Pin 3	CAN_L
Pin 4, 5, 6	GND

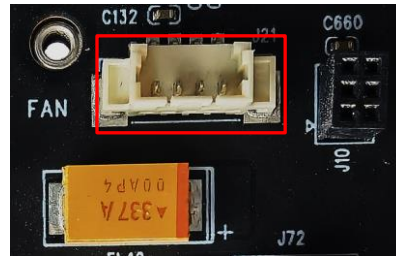
● INTERFACE J6 (Power Input Connector)

- Part#: 1724480004
- Number of Positions: 4
- Number of Rows: 2
- Pitch: 4.20 mm



● INTERFACE J21 (SoC Fan Header)

- Part#: 0533980471
- Number of Positions: 4
- Number of Rows: 1
- Pitch: 1.25 mm



● INTERFACE J11 (Jumper for Main Power)

- Part#: M22-2010305
- Number of Positions: 3
- Number of Rows: 1

Without Jumper:



With Jumper:



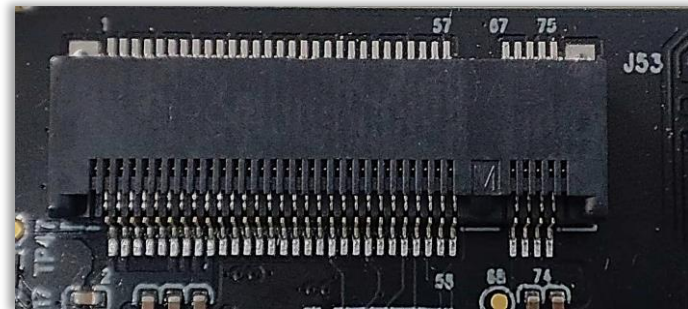
DCDC



POE

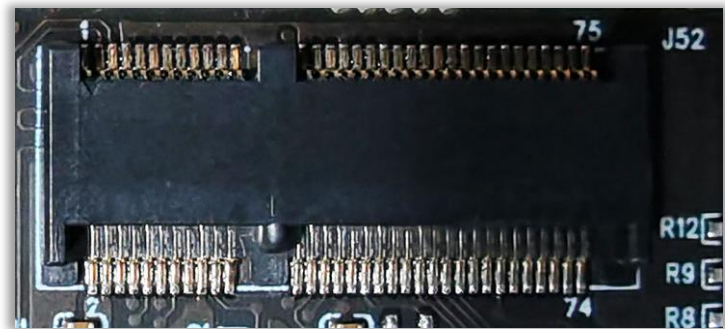
- INTERFACE J53 (PCIe x4 Based M.2 M Connector for SSD)

- Part#: SM3ZS067U410AMR1000
- Number of Positions: 67
- Number of Rows: 2
- Pitch: 0.50 mm



- INTERFACE J52 (M.2 Key E Connector for WIFI & Bluetooth)

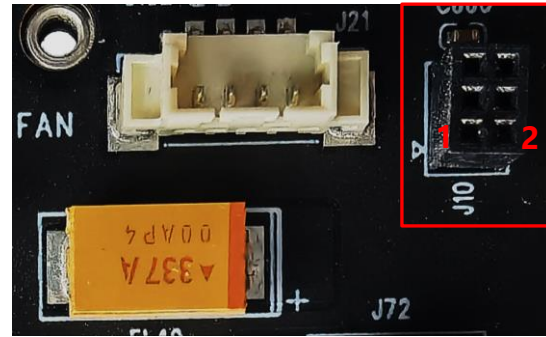
- Part#: 246411067401894E
- Number of Positions: 67
- Number of Rows: 2
- Pitch: 0.50 mm



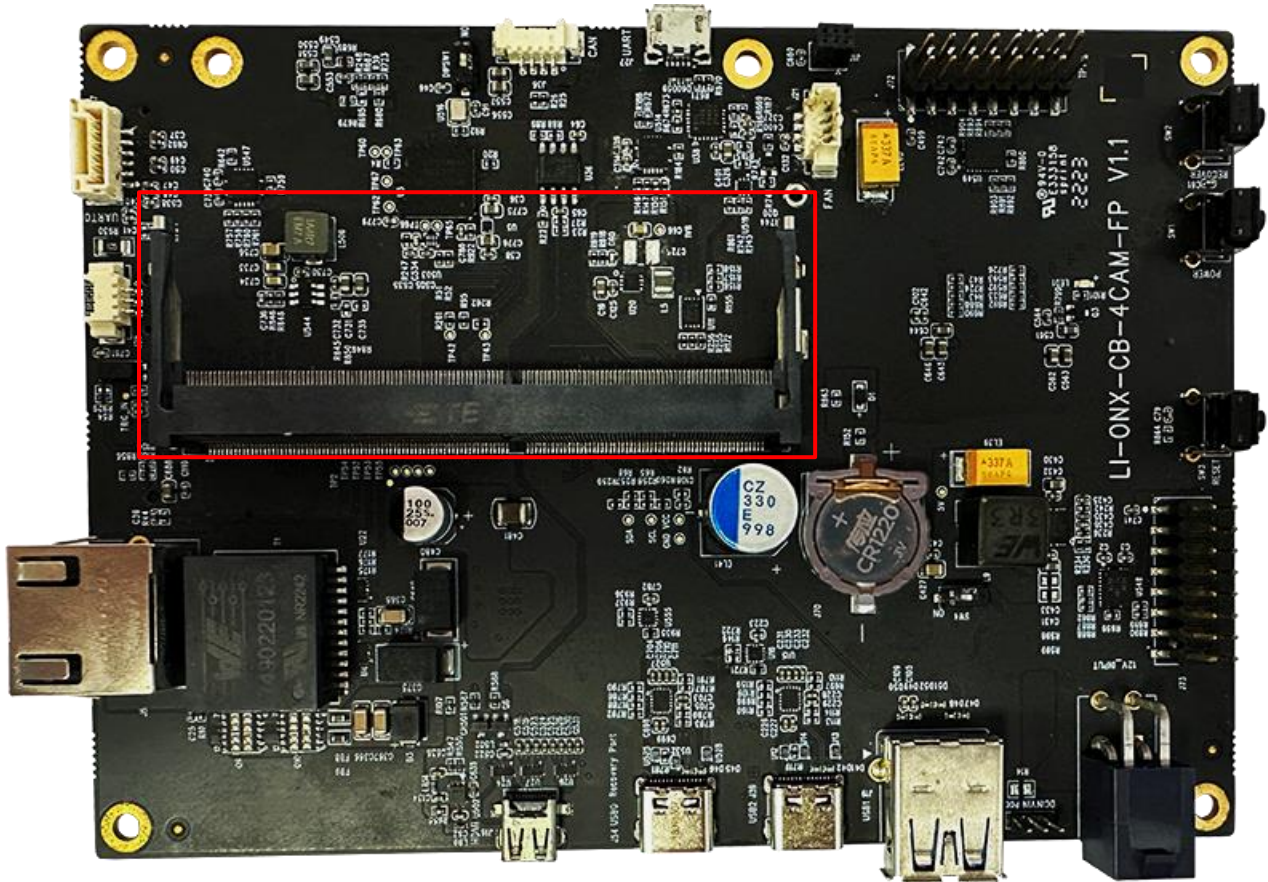
● INTERFACE J10 (JTAG Header)

- Part#: 20021311-00006T4LF
- Number of Rows: 2
- Pitch: 1.27 mm
- Number of Positions: 6
- Pin Assignment

Pin	Definition
Pin 1	JTAG_TDO
Pin 2	JTAG_TMS
Pin 3	JTAG_TDI
Pin 4	JTAG_TCK
Pin 5	VCCIO1
Pin 6	GND



Connector to NVIDIA® Jetson Orin™ NANO SOM



NOTE:

NVIDIA® Jetson Orin™ NANO SOM is not included

● REVISION HISTORY

Revision	Description	Release Date
0.1	Initial draft.	08 Oct 2023

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