LI-ONX-CB-GMSL2-8CAM

Address:

910 Auburn Ct

Fremont, CA 94538

USA

Phone:

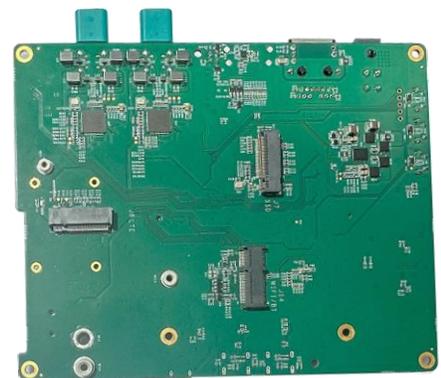+1 (408)263-0988

Fax:

+1 (408)217-1960

Sales:

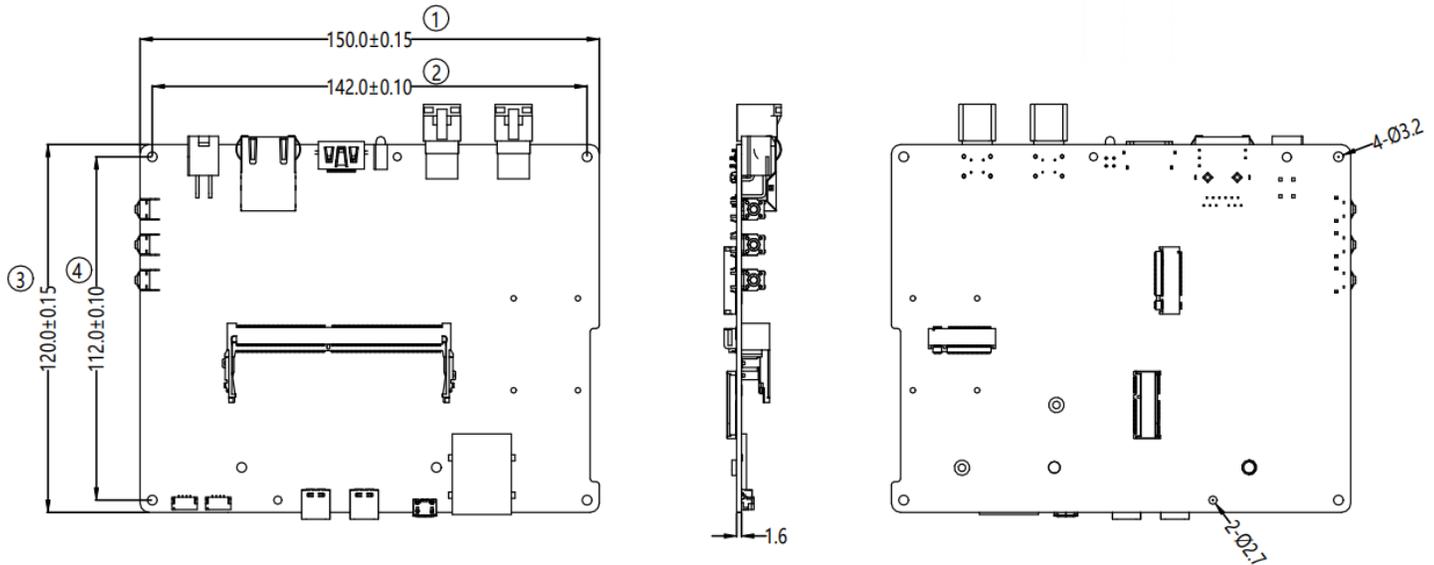sales@leopardimaging.com

Support:

support@leopardimaging.com

TECHNICAL FEATURES

- Carrier board for NVIDIA® Jetson Orin™ NX / Jetson Orin™ NANO SOM
- Supports up to 8x Leopard Imaging FAKRA cameras
   Mini Quad connector: 1206161400
- DeSerializer: 2x Maxim MAX96724
- 1 x Power interface
- 1 x HDMI connector
- 2 x USB Type-C interfaces：
   1 x USB 3.0 Type-C (data)
   1 x USB 2.0 Type-C (flashing port)
- 1 x USB2.0 Micro B debug interface
- 1 x RS485 interface
- 1 x CAN interface
- 1 x FAN interface
- 1 x RJ45 Gigabit Ethernet interface
- 1 x M.2 Key-M connector for SSD
- 1 x M.2 Key-E connector for WiFi
- 1 x M.2 Key-B connector for LTE, with MINI Sim card socket
- 1 x FPC connector for GNSS Extension board
- STATUS and PWR LED indicators included
- Recovery, RST and PWR buttons included
- Power supply range: 9 ~ 48 VDC
   Note: 12 VDC in default and auto power on.
- Operating temperature: TBD
- Weight: ~144 g (Without SOM)

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			120 < X≤400	±10'
120 < X≤400	±0.5				
400 < X≤1000	±0.8	X > 30	±2	X > 400	±5'
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

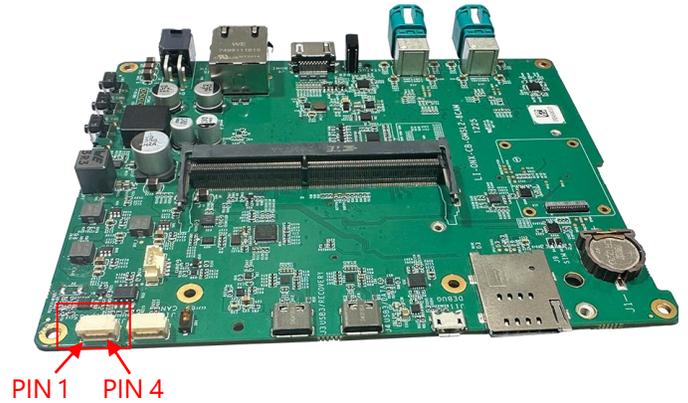| #	Items	QTY	Unit
1	LI-ONX-CB-GMSL2-8CAM	1	Piece
2	12 VDC power supply: 1 x 12V power adapter + 1 x cable adapter	1	Set

NOTE:

1. The 12 VDC power supply is for testing only.
2. The Mini Quad FAKRA cable is not included. You can purchase via the following address:
https://www.leopardimaging.com/product/accessories/cables/li-fcb-4t1-ss-2m-np-t1/

RS485 Interface (J2)

- Part#: SM04B-GHS-TB
- Number of Positions: 4

PIN 1   PIN 4

PINOUT

Pin No	Pin Name	Description	Pin Type	Voltage Level
1	A+	Differential output +	signal	-7V ~ 12V
2	B-	Differential output -	signal	-7V ~ 12V
3	Y+	Differential input +	signal	-7V ~ 12V
4	Z-	Differential input -	signal	-7V ~12V

CAN Interface (J12)

- Part#: SM04B-GHS-TB
- Number of Positions: 4

PIN 1   PIN 4

PINOUT

Pin No	Pin Name	Description	Pin Type	Voltage Level
1	VCC_5V	Power supply	Power	5V
2	CAN_H	Differential Input/output +	signal	0V ~ 5V
3	CAN_L	Differential Input/output -	signal	0V ~ 5V
4	GND	GND	-	-

FAN Interface

- Part#: 53398-0471//533980471
- Number of Positions: 4
- Pitch: 1.25 mm

PIN 1

PINOUT

Pin No	Pin Name	Pin Type	Description	Voltage Level
1	GND	-	-	-
2	VDD_5V	POWER	5V Power Supply	5V
3	FAN_Tach	IO	Monitor the fan speed signal	1.8V
4	FAN_PWM	IO	Adjust the duty cycle to control the speed of fan	5V

Indicator Interface (D28)

Interface	LED Indicator
Logo	STATUS / PWR
Description	**STATUS**: Constant shining in default. Blinking = Something wrong. **PWR**: Constant shining after power on.

STATUS
PWR
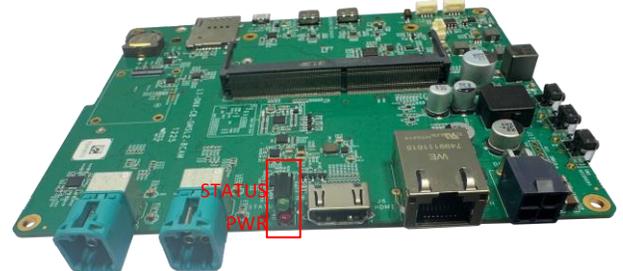
Power Supply Interface (J13)

- Part#: 1724480004
- Number of Positions: 4
- Power supply range: 9 ~ 48 VDC
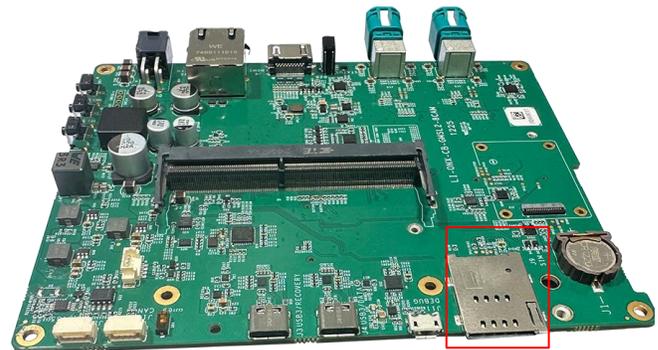
Note: 12 VDC in default and auto power on.

PINOUT

Pin No	Pin Name	Description	Pin Type	Voltage Level
1	VCC_12V	Power supply	Power	12V
2	VCC_12V	Power supply	Power	12V
3	GND	GND	-	-
4	GND	GND	-	-

MINI SIM Card Interface (J9)
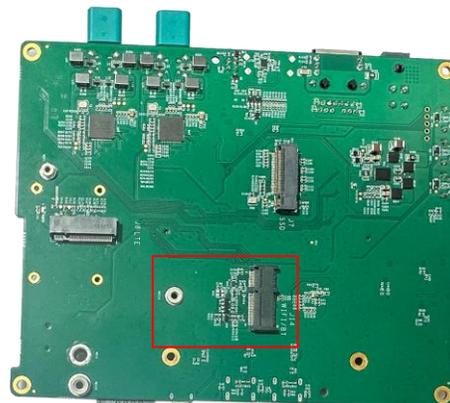
- Part#: SIM4065-8-1-15-00-A
- Card Type: Mini SIM

LTE Interface (J8)

- Part#: 2199230-3
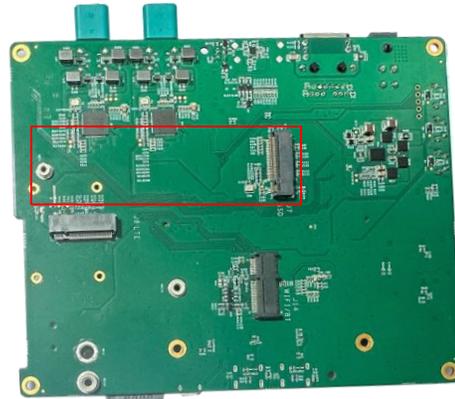- Card Type: M.2 (NGFF) Mini Card (M.2 B)
- LTE: 4G or 5G
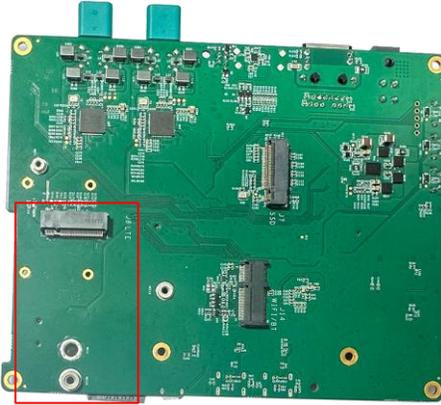
WIFI & Bluetooth Interface (J14)

- Part#: 246411067401894E
- Card Type: M.2 (NGFF) Mini Card (M.2 E)
- Number of Positions: 67
- WIFI & Bluetooth: Wi-Fi 2.4GHZ & 5GHz, BT 5.0

SSD Interface (J7)

- Part#: SM3ZS067U410AMR1000
- Card Type: M.2 (NGFF) Mini Card (M.2 M)
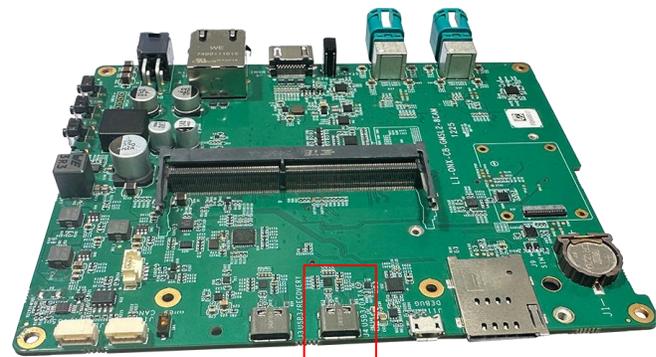- Number of Positions: 67
- SSD drive capacity: TBD

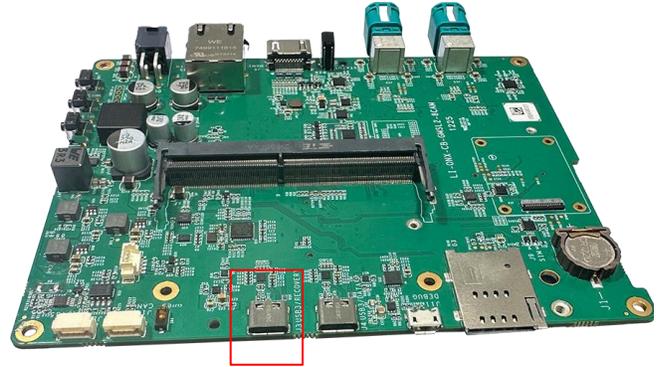# FPC connector for GNSS Extension board (J18)

- Part#: FH34SRJ-20S-0.5SH(99)

USB3.0 Type C Interface (J4)

- Part#: 12401899E412A
- Data port

USB3.0 Type C Interface (J3)

- Part#: 12401899E412A
- flashing port

MINI-FAKRA Quad Connector Interface (J15 / J16)

- Part#: 1206161400
- Number of Positions: 4

REVISION HISTORY

Revision	Description	Release Date
1.0	First release.	28 Feb 2026