

Personal Computer User Guide for DE5900 series



Disposal Instruction (US)

For better protection of our earth, please don't throw this electronic device into municipal trash bin when discarding.

To minimize pollution and ensure utmost protection of the global environment, please recycle the product. For more information about the collection and recycling of Waste Electrical and Electronic Equipment (WEEE), you are invited to visit our homepage at www.aopen.com under “Green Products”

廃棄上の指示

より良い地球保護のために、電子機器を廃棄処分にする時は、ゴミ箱に捨てないで下さい。汚染を最小限に抑え、地球環境の最大限の保護のために、製品をリサイクルして下さい。 廃電気電子機器 (WEEE) の回収とリサイクルについての情報は、弊社ホームページ www.aopen.com の “Green Products” (環境に優しい製品) をご覧下さい。

廢棄及回收處理

為了保護環境，請勿將本產品當作一般廢棄物處理。為減少環境污染，維護地球資源，本產品報廢時，請回收本產品。

Instruktion til bortskaffelse (Danish)

Af hensyn til vores miljø bedes De ikke bortskaffe denne elektroniske enhed i en almindelig affaldsspand. For at mindske forurening og sikre beskyttelse af miljøet bedes De genbruge produktet. For yderligere information vedrørende indsamling og genbrug af elektronik-affald (Waste Electrical and Electronic Equipment (WEEE)) er De velkommen til at besøge vores website www.aopen.com og læse nærmere under "Green Products".

Verwijderingsinstructie (Dutch)

Om mogelijke schade aan het milieu of de menselijke gezondheid door ongecontroleerde afvalverwijdering te voorkomen, moet u dit elektronisch product scheiden van andere soorten afval en op een verantwoorde manier recyclen. Verwijder dit product dan ook alstublieft niet samen met ander huishoudelijk afval. Voor meer informatie over de verzameling en recycling van elektrisch afval en elektronische apparatuur (WEEE), nodigen we u uit om onze homepage te bezoeken www.aopen.com onder "Green Products".

Instruction de Disposition (French)

Pour une meilleure protection de la terre, ne jetez pas ce dispositif électronique dans la poubelle municipale lors de la disposition. Pour éliminer la pollution et assurer la plus grande protection de l'environnement global, réutilisez s'il vous plaît le produit. Pour plus d'informations sur la gestion des déchets d'Equipements Electriques et Electroniques (DEEE ou WEEE), vous êtes invité à visiter notre site à www.aopen.com sous " Green Products".

Entsorgungsanleitung (German)

Zum besseren Schutze unseres Planeten, schmeissen Sie elektrische Geräte bitte nicht in öffentliche Mülleimer. Zur Verringerung der Verschmutzung und zur Sicherstellung grösstmöglichen Schutzes der Umwelt recyceln Sie bitte das Produkt. Für mehr Informationen zum Sammeln und Recyceln von elektrischen und elektronischen Müll (WEEE) besuchen Sie bitte unsere Homepage unter www.aopen.com unter dem Punkt "Green Products".

Istruzioni per lo smaltimento (Italian)

Per una migliore salvaguardia del nostro pianeta, si prega di non gettare questo dispositivo elettronico nei normali rifiuti al momento dell'eliminazione. Per ridurre al minimo l'inquinamento ed assicurare la massima protezione dell'ambiente, si prega di riciclare il prodotto. Per maggiori informazioni riguardanti la raccolta ed il riciclaggio delle apparecchiature elettriche ed elettroniche residue (WEEE), siete invitati a visitare la nostra homepage www.aopen.com alla voce "Green Products".

Instruksjoner for Resirkulering og Oppsamling (Norwegian)

For å beskytte vår planet, kast ikke dette elektroniske utstyret sammen med vanlig avfall. For å beskytte vår natur og miljø, vennligst resirkuler dette produktet. For mer informasjon om oppsamling og resirkulering i henhold til Waste Electrical and Electronic Equipment (WEEE), se vår hjemmeside på www.aopen.com under "Green Products".

REEE - Programa de Tratamento de Resíduos de Equipamentos Eléctricos e Electrónicos (Portuguese)

Para melhor protecção ambiental do nosso planeta terra, não coloque o dispositivo electrónico no receptáculo de lixo municipal. Para minimizar a poluição e garantir protecção máxima do ambiente global, recicle o produto. Para mais informações sobre acerca da recolha e reciclagem de Equipamento Eléctrico e Electrónico (WEEE), convidamos-lhe a visitar nossa página na Internet em www.aopen.com sobre "Green Products".

Instrucciones para depositar los productos electrónicos (Spanish)

Para proteger mejor el medio ambiente, por favor, no deposite los productos electrónicos en los contenedores de basura tradicionales. Para reducir la contaminación y proteger el medio ambiente se recomienda que los recicle. Para más información acerca de dónde depositar y cómo reciclar Equipos Electrónicos y Desperdicios Electrónicos (WEEE), por favor, visite la página web www.aopen.com y entre en la sección Productos Ecológicos (“Green Products”).

Kassering (Swedish)

För att bättre värna om vår jord bör denna elektroniska utrustning ej kasseras tillsammans med vanligt avfall. För att minimera mängden föroreningar och så långt som möjligt skydda den globala miljön bör produkten återvinnas. För vidare information om insamling och återvinning av uttjänta elektriska och elektroniska produkter (Waste Electrical and Electronic Equipment, WEEE), besök avsnittet "Green Products" på vår hemsida, www.aopen.com.

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Safety Instructions

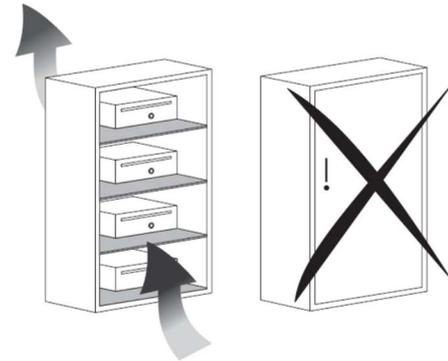
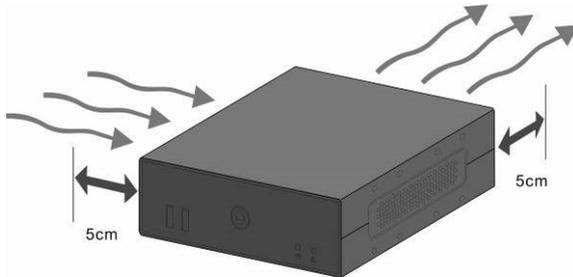
1. Please read these safety instructions carefully.
2. Please keep this User's Manual for later reference.
3. Please disconnect this equipment from connector before cleaning. Don't use liquid or sprayed detergent for cleaning.
Use moisture sheet or cloth for cleaning.
4. Make sure the equipment is connected to the power source with the correct voltage, frequency, and ampere.
5. All cautions and warnings on the equipment should be noted.
6. Never pour any liquid into opening; this could cause fire or electrical shock.
7. Never open the equipment. For safety reason, the equipment should only be opened by qualified service personnel.
8. If one of the following situations arises, get the equipment checked by a service personnel :
 - a. Liquid has penetrated into the equipment.
 - b. The equipment has been exposed to moisture.
 - c. The equipment has not work well or you cannot get it work according to user's manual.
 - d. The equipment has dropped and damaged.
 - e. If the equipment has obvious sign of breakage.
9. Caution on use of battery: Use the battery recommended by the manufacturer or the same type of battery installed by the manufacturer. If incorrect battery is used, it may cause explosion or fire hazard. Recycle or discard used batteries according the manufacturer's instruction or your local authority.



10. Ambient operation temperature: 0 ~ 40 degrees C.

11. Risk of overheating!

- Do not install DE5900 in a closed space. Be sure the ventilation holes in the DE5900 side for at least 1 to 2 inches or 2 to 5 cm of space for ventilation. To ensure that other objects do not cover the ventilation holes on DE5900



In right side and rear side keep space at least 5cm

Don't put operating device inside closed space.

FCC notice

This device has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Connect the device into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help

Notice: Shielded cables

All connections to other computing devices must be made using shielded cables to maintain compliance with FCC regulations.

Notice: Peripheral devices

Only peripherals (input/output devices, terminals, printers, etc.) certified to comply with Class B limits may be attached to this equipment. Operation with non-certified peripherals is likely to result in interference to radio and TV reception.

Caution

Changes or modifications not expressly approved by the manufacturer could void the user's authority, which is granted by the Federal Communications Commission, to operate this computer.

Operation conditions

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Notice: Canadian users

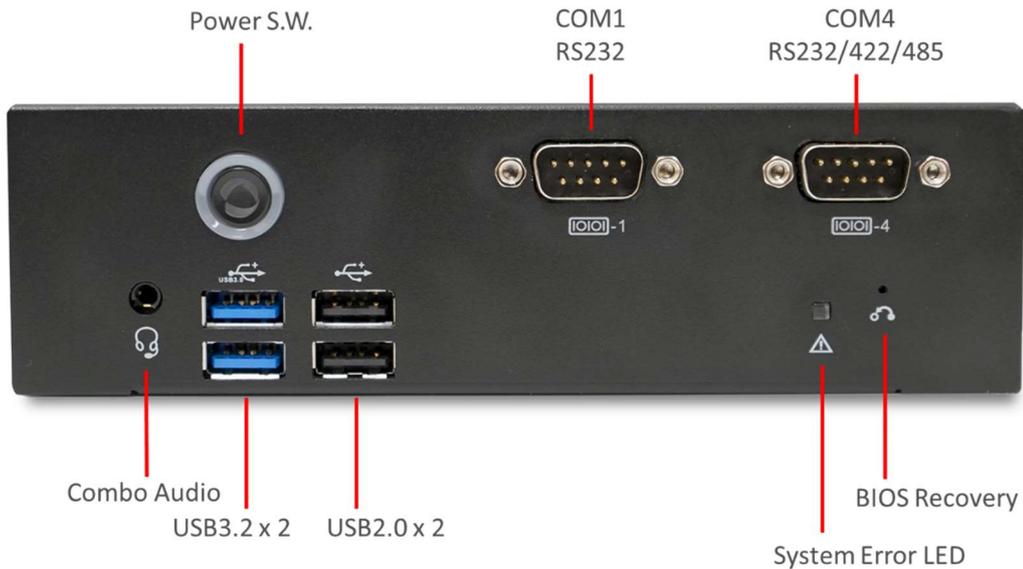
This Class B digital apparatus complies with Canadian ICES-003

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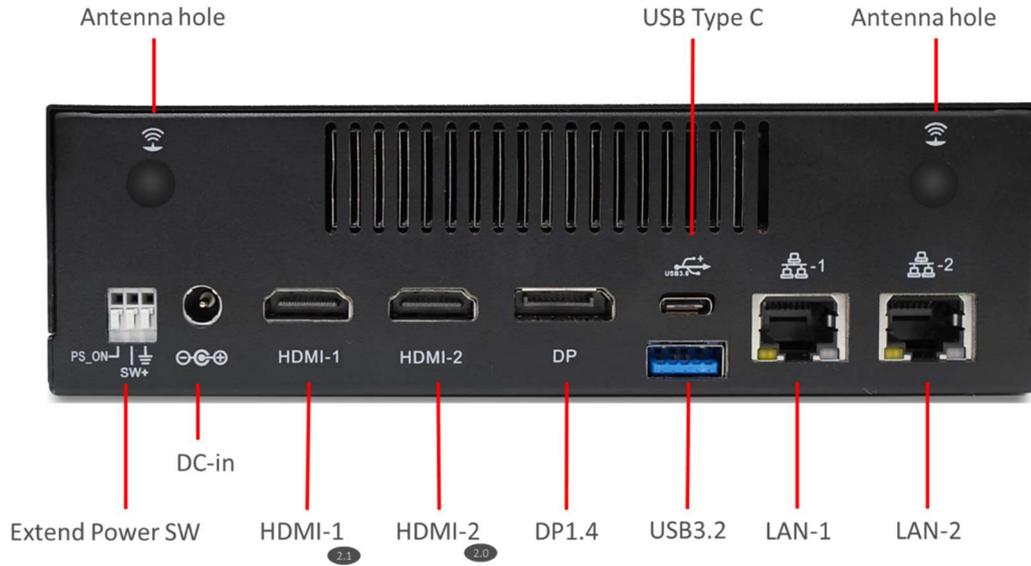
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1. Outlook

Front IO



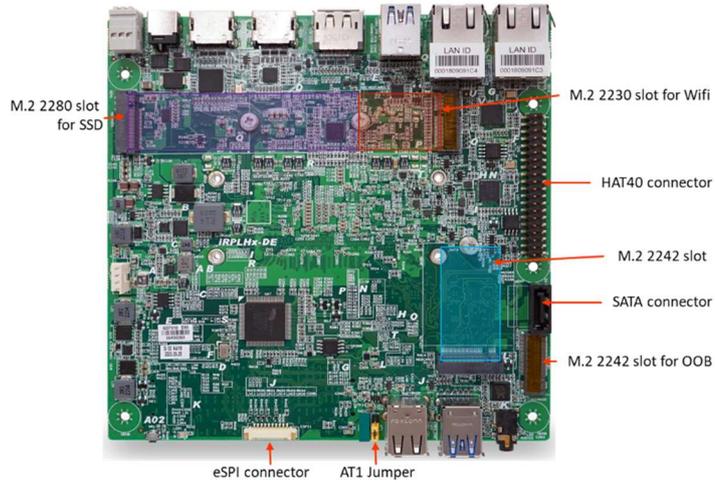
Rear IO



2. Product Specification

CPU	Intel 13th Gen Raptor Lake-P Core i processor TDP $\leq 28W$
Chipset	NA
Memory	Dual Channel Mode, SO-DIMM DDR5 x 2, 4800/5200, Max memory size : 64GB
Graphics	Intel Iris Xe Graphics (Gen13)
Expansion Slot	M.2 2230 x 1(key E for wifi), M.2 2242 x 1(key B for 4G LTE) M.2 2280 x 1(key B for NVMe/SATA SSD)
Audio	Realtek HD Audio CODEC on-Board.
LAN	Intel 2.5G LAN x 2 (i226LM/i226V)
Front Panel IO	Power Button x 1 (with Power indicator (Blue) & HDD indicator (Blue) x 1), USB3.2 Port x 2, USB 2.0 Port x 2, RS232 x 1, RS232/422/485 x 1, HD Audio Combo x 1
Rear Panel IO	DC 19V Jack x 1, HDMI2.1 Port x 1, HDMI 2.0 Port x 1, DisplayPort 1.4 x 1, RJ45 LAN Jack x 2, USB 3.0 Port x 1, USB Type C w/DP x 1, extend power S.W x 1.
Adapter	90W (19V, 4.74A) AC Power Adapter
Input Voltage	AC 100 ~ 240V

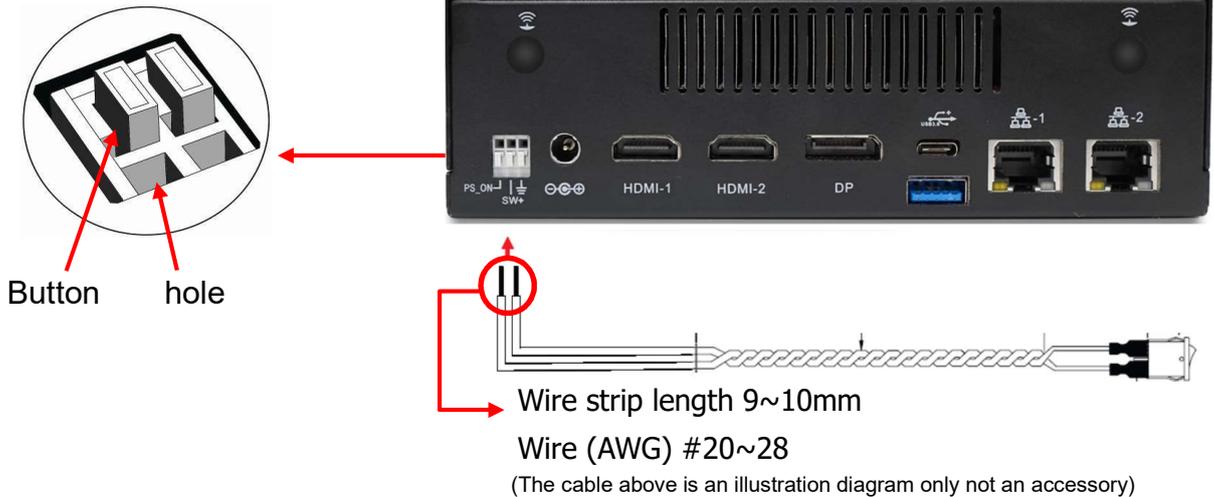
3. Internal Connectors



4. Function Introduction

4.1 Terminal Block - Extend power switch

Extend power switch at rear IO of DE5900 can allow customer to extend the power switch by their demand, and customer can decide their own switch specification and cable length just follow the wire gauge and strip length.



Ground & SW+ are for connection to extend power switch, and PS_ON is a signal to present the system power on/off status, when PS_ON signal is low, then system is in power on status when PS_ON signal is high, then system is in power off status

This is a screwless type spring clamp pluggable terminal block, you can insert a wire by press the button on the terminal, please refer to the procedure below.

Step 1 please prepare a pin or rod that hard enough for pushing the button on the terminal block

Step 2 push the button in the end and hold it

Step 3 insert the wire into the hole and make sure the stripped portion is fully inserted

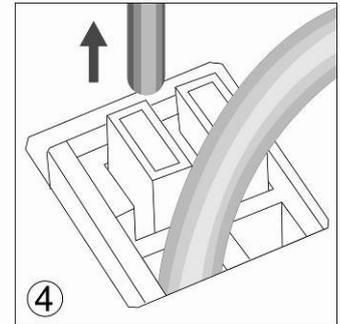
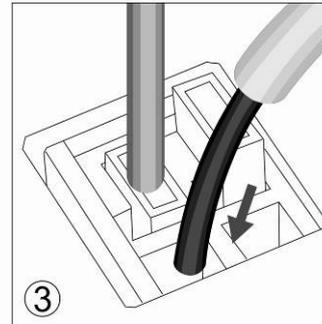
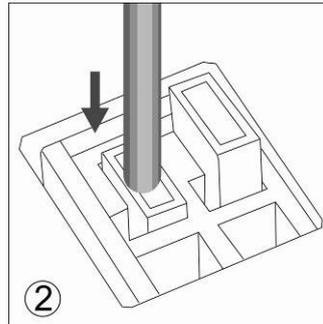
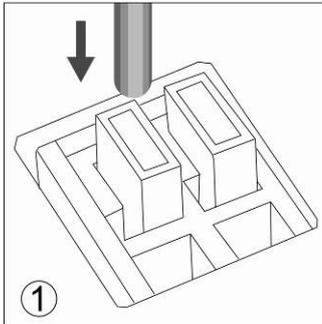
Step 4 release the pin or rod then the wire will clamp by the terminal block

step1

step2

step3

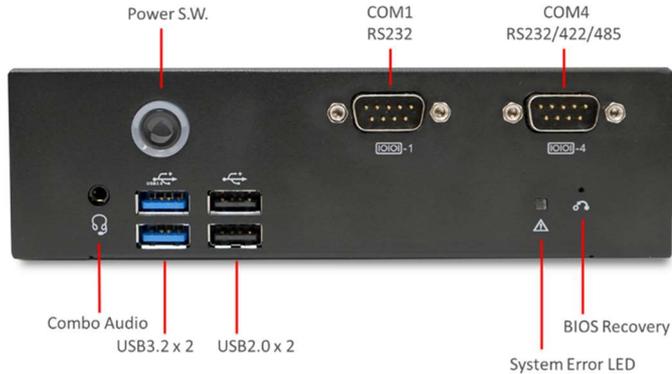
step4



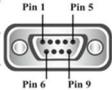
4.2 Terminal Block – pin definition

4.3 COM1 / COM4 – pin definition

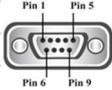
COM4 support RS232/422/485 and it can be set by BIOS.



COM1 Male DB9	Pin	RS232
	1	DCD
	2	RX
	3	TX
	4	DTR
	5	GND
	6	DSR
	7	RTS
	8	CTS
	9	RI



COM4 Male DB9	Pin	RS232	RS422	RS485
	1	DCD	TX(B)	Data-(B)
	2	RX	TX(A)	Data+(A)
	3	TX	RX(A)	
	4	DTR	RX(B)	
	5	GND	GND	
	6	DSR		
	7	RTS		
	8	CTS		
	9	RI		



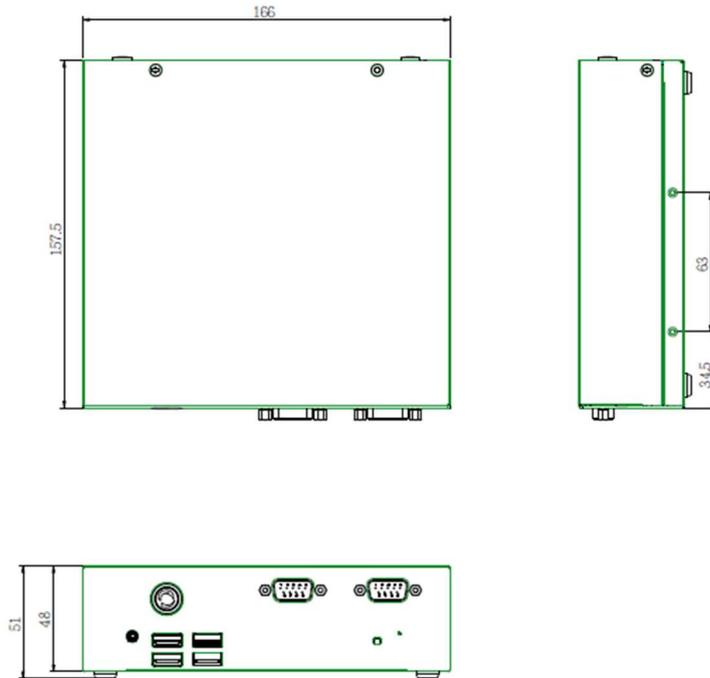
5. Packing List

DE5900

- 1 x DE5900 system
- 1 x insert page of driver download link
- 1 x 90W Adapter and Power Cord
- 1 x L-type holder and M3 screw
- 4 x Rubber foot

6. Chassis and Holder Dimension

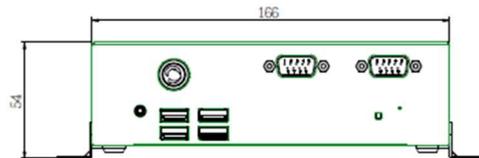
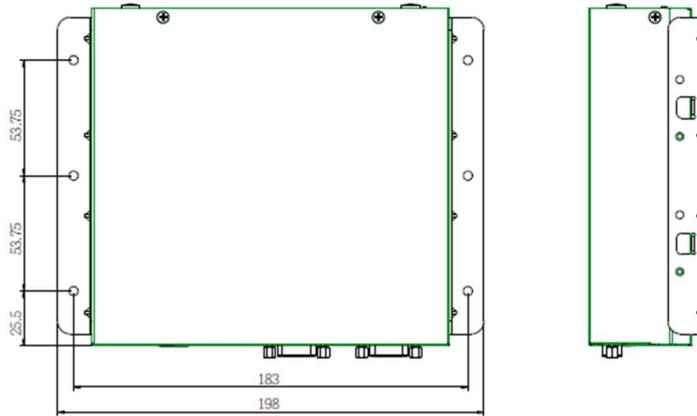
A. Dimension of DE5900 (unit: mm[inch])



B. LH02 L type Holder(Include 2 piece holder and 4 FPH M3 screws)

Dimension of L type Holder. (unit: mm)

(This L type Holder can only lock on horizontal desktop table)



Ver: DE5900-MU-12182023