Unity Lab Services
A Thermo Fisher Scientific Brand

CryoMed User Interface SOM Board Replacement Instructions

Process and resources to update the SOM Board for the CryoMed TSCM Series LN2 Freezer.

TSCM Series CryoMed LN2 Freezer
Revision: “A”
Instruction Number 334133I01

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Disclaimer:

Please read entire procedure prior to starting. This upgrade should only be performed by a qualified Service Technician and should only be done with consent from the customer.

Prerequisites:

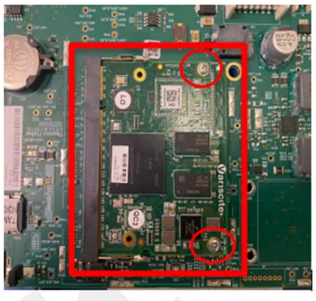
- SOM Board Kit (SOM Board + Instructions).
- SD Card kit part number 332258G01 (331371H01 + 332259I01).
- ESD strap.
- Screwdriver with multi bits for the following screws:
    - UI Removal: SCREW TB 8-18X.50 SS C PH
    - SCREW, #8-16 X .375 SS PH,
    - SOM Removal: SCREW PAN HEAD PHILLIPS M2X0.4
- Current Service password for the day.
- User credentials available for admin or User Role 1.
- Spare User Interface.
    - This is only as a safety precaution and should only take one per site update.

Procedure:

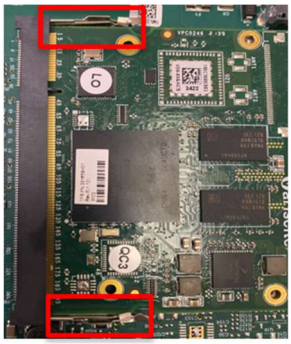
1. Login to the CryoMed User Interface (UI) using the username “service” and using the current service password of the day.
2. Once in the Service Mode locate the button labelled “Data Backup” and initiate by pressing the labeled button. Once the data backup is complete, proceed to the next step.
3. Log out from Service, request permission from user to allow login for either admin or user role 1.
4. Login with the correct credentials and Power the CryoMed device down by press and hold on the Power Button on the upper right corner of the UI. Follow the prompt for confirmation.
5. Turn the Power Switch to the off position.
6. Unplug the CryoMed power cord from the wall outlet.
7. Remove the outer bezel carefully from the UI by gently pulling it off by hand. It is held by four tabs.

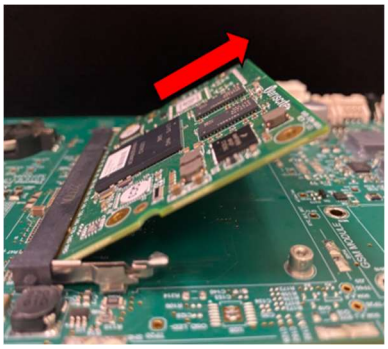
8. Please ensure to wear an ESD strap and connect it properly before moving forward with this procedure, if not already wearing.
9. Remove the bottom two Phillips head screws (SCREW, #8-16 X .375 SS PH) from UI housing and loosen the top two Phillips head screws (SCREW TB 8-18X.50 SS C PH). (the top two screws do not have to be completely removed to remove the UI from the housing).
10. Slide the UI from the housing, tilt the UI so that you can view the back of the UI.
11. Unplug the Main Board to display harness connected to J18 on UI. Unplug any other harness if still connected. Refer below picture.

12. Locate the SOM module, located on the back of the UI board as shown in the below picture.

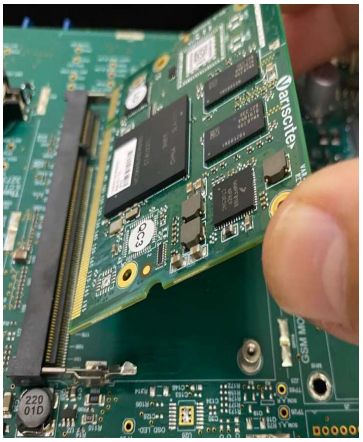


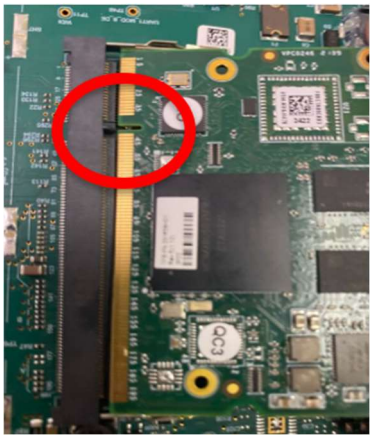
13. For removing SOM module, remove the two Phillips head screws(SCREW PAN HEAD PHILLIPS M2X0.4) from the SOM module and set aside to reinstall later in this procedure.
14. Once the screws are uninstalled, gently pull the two metal retainer clips away from the SOM module, one clip on each side of the SOM module. This should allow the SOM to tilt upwards away from the board.

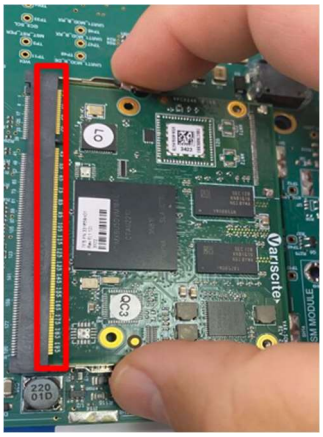




15. Now the SOM module can be carefully removed by sliding it away from the long connector of the carrier board and removed.
16. Locate the New SOM module (part number 333419H01) and insert the SOM in the long connector of the carrier board. It will need to be raised at an angle to ensure the “notch” is positioned correctly to align with the long connector on the carrier board. Make sure to insert the SOM pins fully into the connector slot so that SOM pins make a good contact with connector, good way to check is the SOM pins will fully go into the connector as referenced in the pictures below.

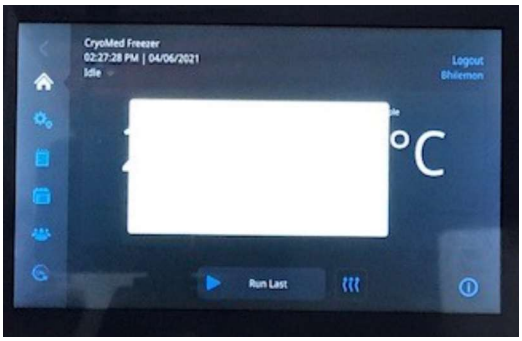


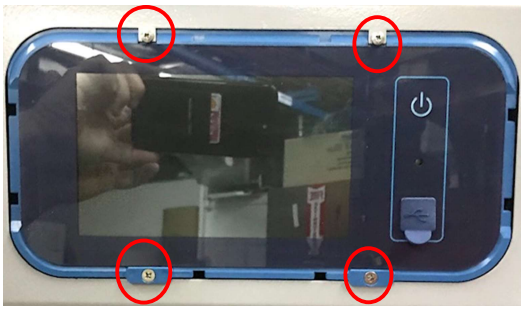


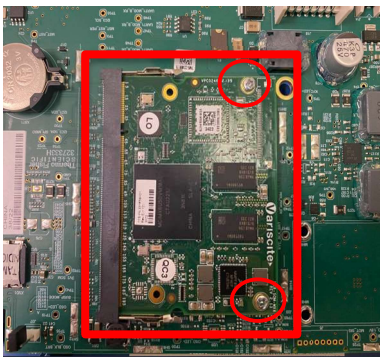


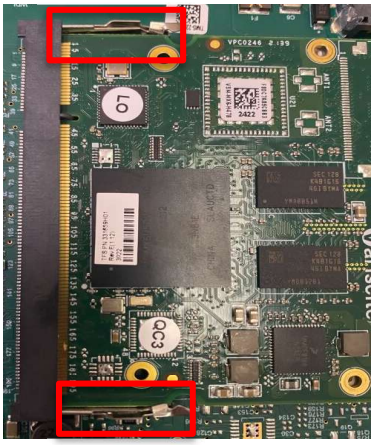
17. Once the SOM module has been fitted to the long connector, press down, and secure the two metal clips (on the sides of the SOM) and reinstall the two Phillips head screws to the SOM module.
18. Install the User interface back into the system and ensure that all the wires are connected back.
19. Slide the UI through the Top Screws and install the bottom screws.
20. Tighten the top screws but ensure not to overtighten.
21. Power up the unit, ensure the system has restored all the user data by verifying existing runs, recent events, users. (It should be reviewed and approved by the responsible customer to ensure all their data is restored)
22. Installation of the new Som is complete.

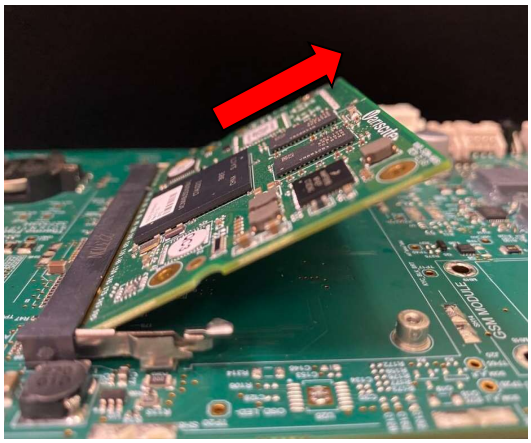
Appendix: SOM Module removal and reinstallation

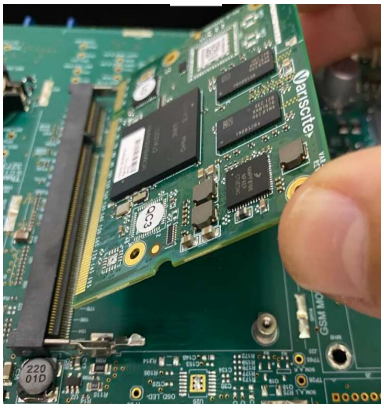
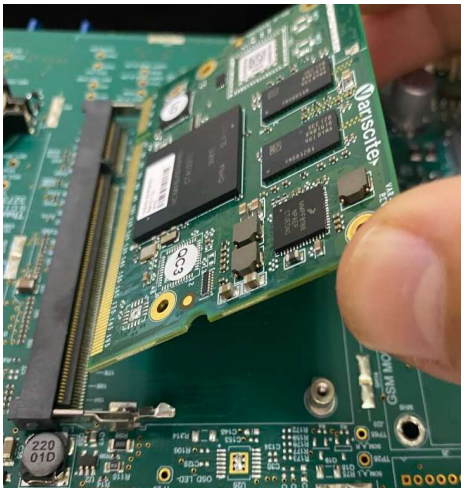
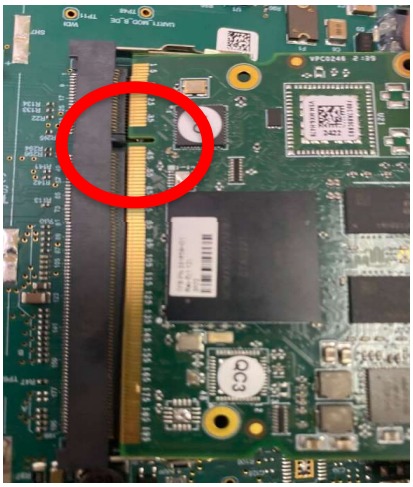
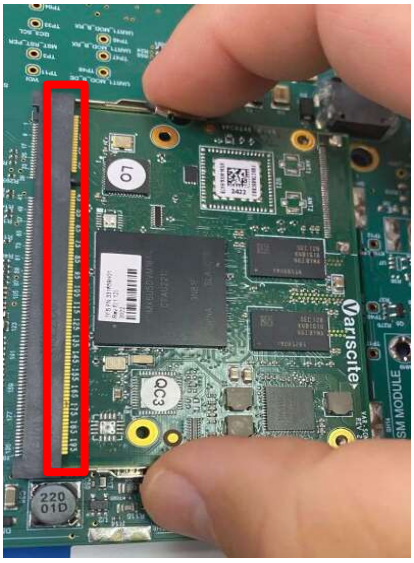
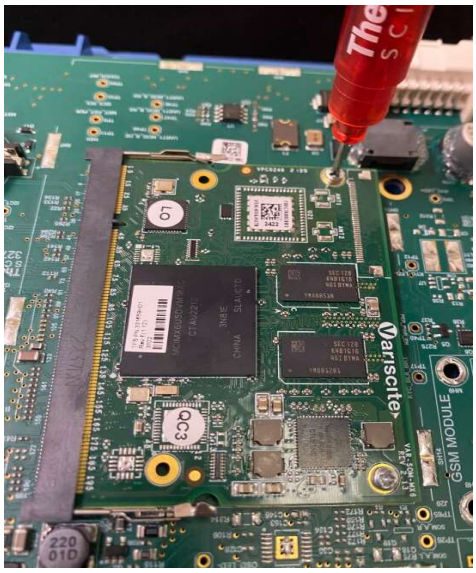












Installation of New SOM Module.