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1. General Service Notes

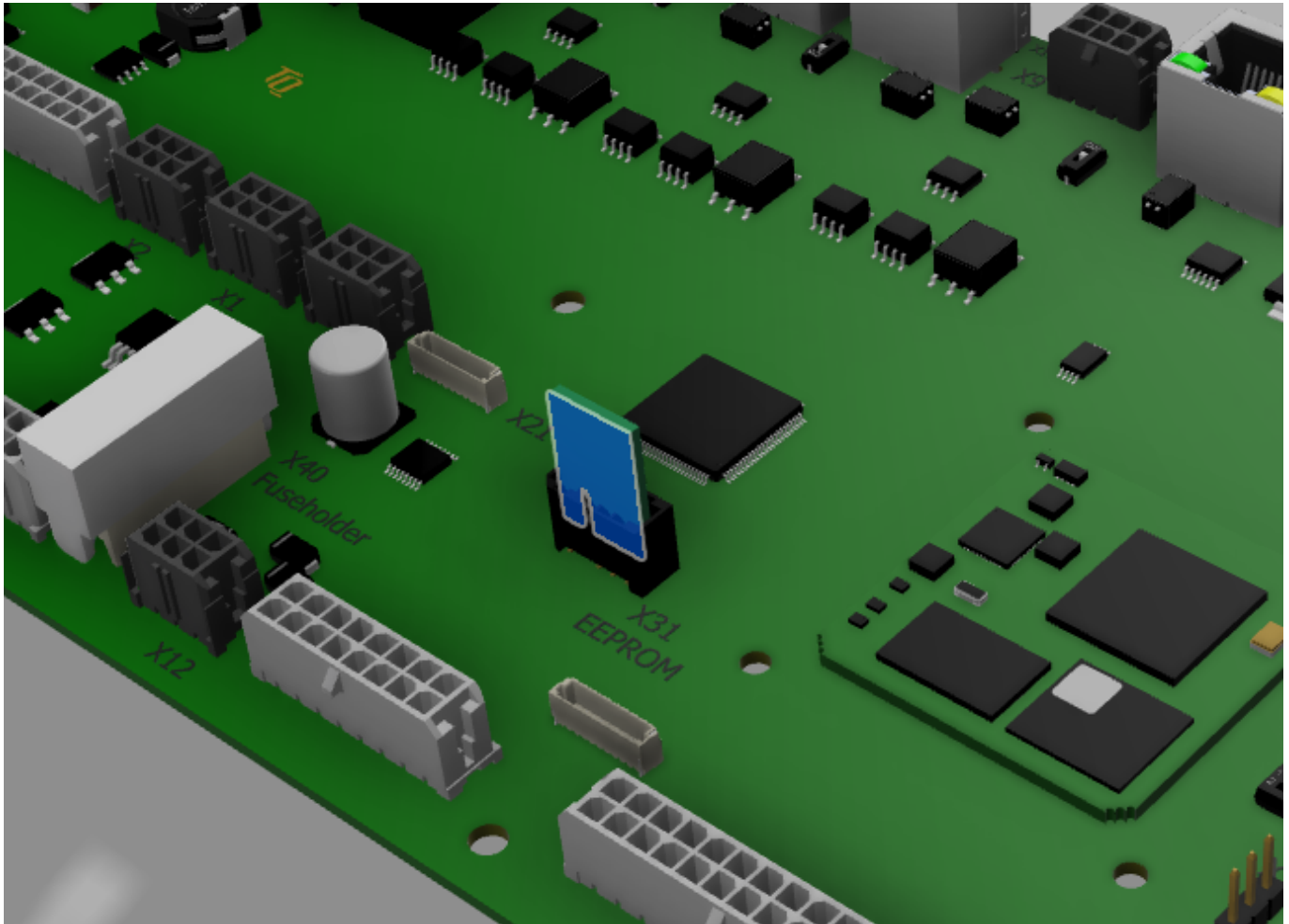
1.1 Note for Patches

- Since Version 8.23.00, its not possible so use unsigned patches.
- If you do so, you will get following errormessage: error: patch 'undefined' has wrong signature, state: failed
- New Patches are available in the [Microsoft Teams Channel](#) of the FuE Embedded Software Devices.

2. Service Cases

2.1. Replacing a defect CIOC Board with intact EEPROM

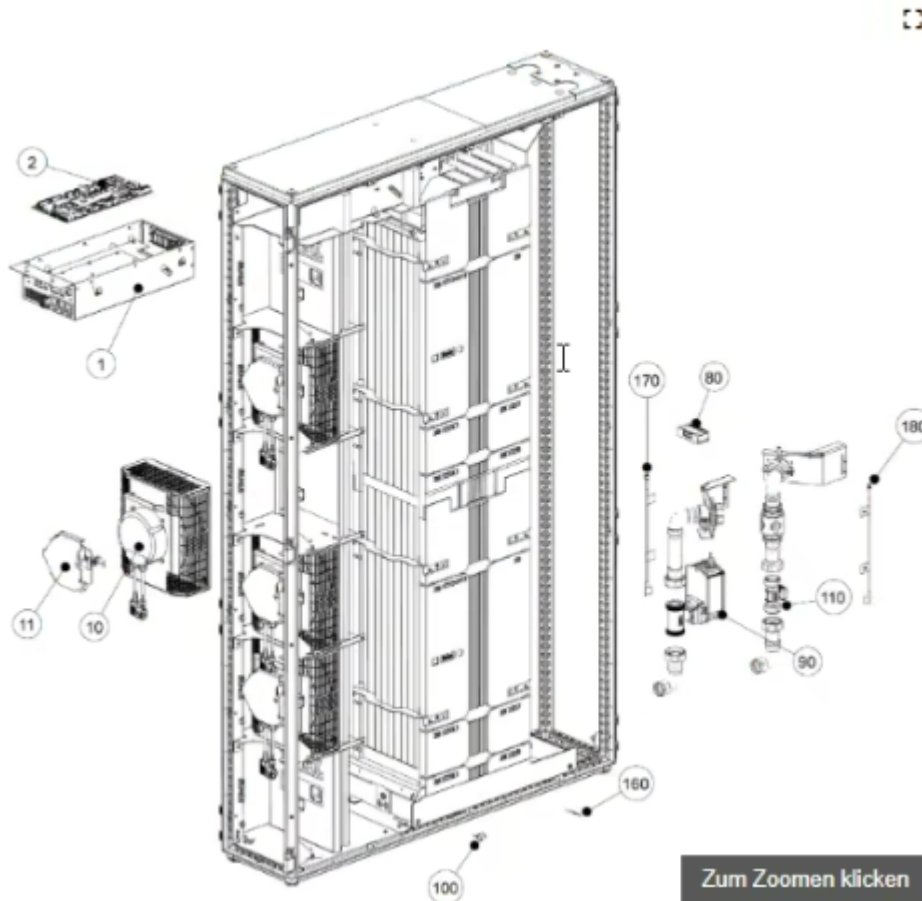
- Remove the EEPROM from the CIOC Board (see picture)



- Remove the old CIOC from the Machine (DLC, LCP, LCU, etc)
- Make sure the new board has at least the same firmware as the old one or the latest firmware (Update of all system partitions)
- Install the new CIOC into the Machine and replace the new EEPROM with the old one from the defect CIOC Board.
- The configuration should be loaded automatically from the new CIOC-Board

2.2. Enable digital Inputs for a cooling device

- LCPs produced after 24. April 2024 have compatible Hardware for monitoring the CIOCs two digital Inputs
- Due to software architectural and security reasons, it is currently not possible to configure these on customer side, if it has not been done in production
- To enable this function, please install a new E-Box (1&2) that has been configured by the production Team according to your devices specification (present in the QR-/Barcode)



- Keep in mind that a new E-Box will not come configured with old runtime values. They will all start at 0
- The "Save and Restore" concept of our operating system will help you to transfer all user settings to the new E-Box

3. References

In this chapter you will find general guides on processes that might be needed during service.

3.1. Set up connection with a new CIOC board and a PC

- Connect CIOC Board to powersupply and connect the Ethernet cable to your Laptop or the Network
- Wait for bootup (blue light stopped flashing)
- Connect the USB-C Cable to the CIOC and connect via Serialport
- On SSH Console login with admin/admin
 - You will get prompted with a password change request
 - Change it to e.g. "Test123!"
- Enter the IP Address of the CIOC in your browser, you can now access the Website.

3.2. Update of all system partitions

- Connect an SFTP Client to the board, by using admin/admin
 - place the update file with "R" at the end in the update folder
 - the system will not reboot (indicated in the status file)
 - run the Rescue Image (Described below: How to run rescue image)

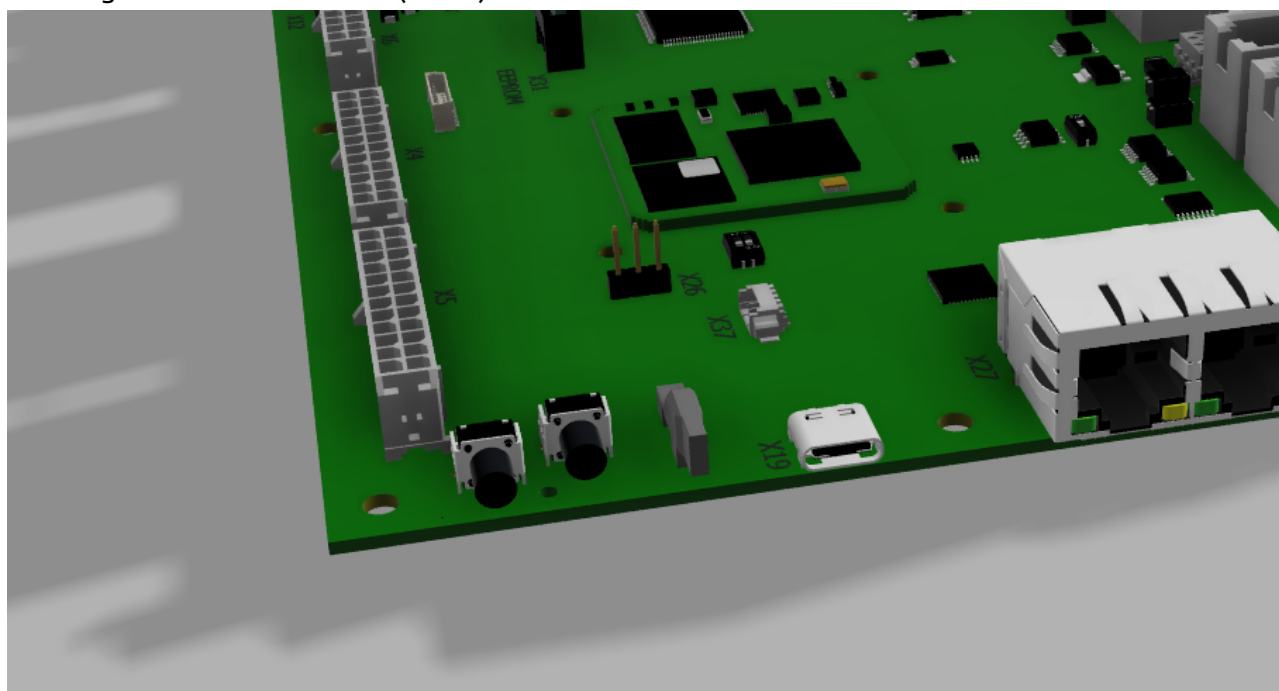
- On WebUI, SFTP or SSH console login with admin/admin
 - You will get prompted with an password change request
 - Change it to e.g. "Test123!"
- Run rescue to reset the device, so the customer can set his own password after the first startup

3.3 How to check all Partitions (Loaded, Fallback, Rescue)

- Connect an FTP/SFTP Client to the board, by using admin and your new password
- Navigate to /download/docs/sysinfo.txt
- Check the following partitions: - FS1 Version= - FS2 Version= - Rescue Version=

3.4 How to run the rescue image

- Press and hold the left button (Set)
- Press right button and release (Reset)

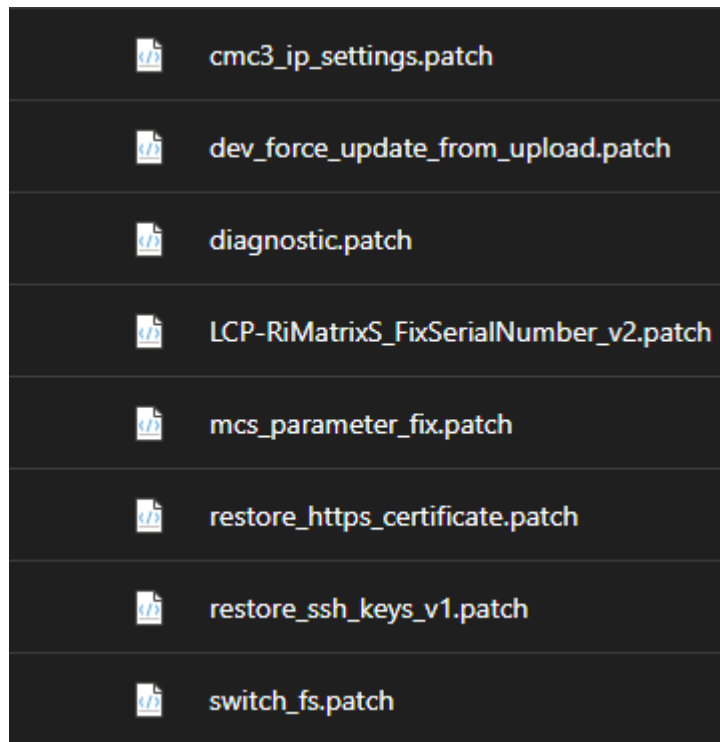


- Release left button when led starts blinking
- After the rescue was successful the device will start into the rescue image. All user settings are deleted

4. Attachments

4.1. Service Patches

- Chose one of the SIGNED patches



- Connect an SFTP Client to the board, by using admin and your new password
- Copy the xxx_.patch into the update folder
- Check the status file of the patch

Note: Patches are available in the [Microsoft Teams Channel](#)