

{{title}}	2
Example of failure	2
Revision history	2

{{title}}

Affected devices:

- Boron 404X (BRN404X)
- B-Series SoM 404X (B404X)
- E-Series SoM 404X (E404X)

Particle has made an update to timings related to a recovery procedure on devices carrying the u-blox SARA-R510 modem, per new recommendations by the cellular modem manufacturer.

This procedure, referred to as EHS by the modem manufacturer can restore connectivity to devices that experience a rare but serious condition in which an improper reset of the R510 in power-saving mode can force a device into a state where it is unresponsive to communication from the MCU. Until now, this state was only recoverable by resetting power to the device.

In Device OS 6.2.1 and later, a fix is provided so EHS will be successful in both normal operating mode and in power-saving mode.

Action required: Device OS 6.2.1 or later is recommended to obtain the fix on Boron 404X, B-Series SoM 404X, and E-Series SoM 404X devices.

Example of failure

A debugging trace log of a device in this failure mode will look similar to this:

```
0000368745 [ncp.client] TRACE: Emergency hardware shutdown the modem
0000394245 [net.pppncp] ERROR: Failed to initialize cellular NCP client: -210
0000394345 [ncp.client] TRACE: Powering modem on, ncpId: 0x47
0000394345 [ncp.client] TRACE: Modem already on
```

Revision history

TAN released January 13, 2025.