Custom AT Commands

Objective

To research a suitable Cavli product, propose three custom AT commands that could be implemented on it, and mock the expected responses manually.

Selected Module

Cavli C16QS – An LTE Cat 4/NB-IoT/2G multimode module designed for IoT applications, supporting standard GSM/LTE AT commands and additional Cavli-specific features.

Proposed Custom AT Commands

1. Command: AT+CAVLITEMP?

Mock Response:

+CAVLITEMP: 35.2 C
OK

Description:
 This command queries the internal temperature sensor of the module to monitor operating temperature and prevent overheating in the field.

2. Command: AT+CAVLIGPS?

Mock Response:

+CAVLIGPS: 40.7128,-74.0060,15

OK

Description:
 This command fetches the GPS location of the device in latitude, longitude, and altitude. Useful for tracking and geolocation in IoT deployments.

3. Command: AT+CAVLIREBOOT?

Mock Response:

+CAVLIREBOOT: Last reboot reason: Power Cycle
OK

Description:
 This command reports the reason for the most recent module reboot, assisting in maintenance and diagnostics.