Response to Reviewer 4 Comments

Point 1: Indeed automotive manufacturing and electric vehicle manufacturing constitute a large percentage of the total market share. It is recommended to present some statistics and economic data to highlight the importance of the filed. You may check below some useful articles/reports:

a) https://www.statista.com/statistics/316786/global-market-share-of-the-leading-automakers/

Response 1: We included a new paragraph presenting the automotive statistics and economic data. (Page 1, lines 18-23)

Point 2: You could also refer to Big Data analytics to electronics manufacturing due to the large amount of big data sets.

a) Li, B., Kisacikoglu, M.C., Liu, C., Singh, N. and Erol-Kantarci, M., 2017. Big data analytics for electric vehicle integration in green smart cities. IEEE Communications Magazine, 55(11), pp.19-25.
b) Mourtzis, D., Vlachou, E. and Milas, N.J.P.C., 2016. Industrial big data as a result of IoT adoption in manufacturing. Procedia cirp, 55, pp.290-295.

Response 2: We included the works in the introduction section as suggested. (Page 2, lines 53-55)

Point 3: The authors state in Introduction (Contribution of this paper) that "they provide real-time communication through 4G/LTE network.". Actual real-time communication cannot be achieved with 4G/LTE networks due to latency and low bandwidth capabilities. Please check the following paper for more details regarding the implementation of 5G networks in future work:

a) Mourtzis D, Angelopoulos J, Panopoulos N. Smart Manufacturing and Tactile Internet Based on 5G in Industry 4.0: Challenges, Applications and New Trends. Electronics. 2021; 10(24):3175. https://doi.org/10.3390/electronics10243175

Response 3: We replaced the term "real-time" with "near real-time", which is a more accurate term in this case.

Point 4: Use instead of "Background" the keyword "Communication protocols" in the title of Section 2. It reflects in a more clear manner the content of this section.

Response 4: Done as requested.

Point 5: Similar works in the field of Digital Manufacturing using IoT and Edge Computing for data acquisition and analysis can be found below. You may consider some of them towards the completeness of the literature review.

a) Mourtzis, D., Angelopoulos, J. and Panopoulos, N., 2022. Design and Development of an Edge-Computing Platform Towards 5G Technology Adoption for Improving Equipment Predictive Maintenance. Procedia Computer Science, 200, pp.611-619.
b) Lydia Athanasopoulou, Harry Bikas, Alexios Papacharalampopoulos, Panos Stavropoulos & George Chryssolouris (2022) An industry 4.0 approach to electric vehicles, International Journal of Computer Integrated Manufacturing, DOI: 10.1080/0951192X.2022.2081363

Response 5: We included the works in the literature review section as suggested. (Page 4, lines 169-173)

Point 6: Please explain in a more technical manner the term "Intelligent Acquisition and Analysis System". Which characteristics offer its intelligence? Is it adaptive?

Response 6: The system has an intelligent and adaptive characteristic due to its AI algorithms execution, which changes according to the desired application, the acquired variables (selected experiment), and the vehicle's ECU configuration (mapped in the A2L file). We didn't extend this explanation in the article because our main focus is on hardware development.

Point 7: Please provide an Illustration of the System Architecture. For example, you should present the location of the sensors in the car, the communication with the server, the type of data and so on.

Response 7: We replaced Figures 1 and 2 with figures that show more details of the system as requested. (Page 6)

Point 8: Please ensure the high quality of the Figures.

Response 8: We revised the figures to ensure high quality.