

POWER MANAGEMENT SOLUTION BY NETWORK MANAGEMENT STRATEGY AND ANALYSIS OF A DC-DC AUTOMOTIVE BUCK CONVERTER

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ABSTRACT

This paper will focus on the Power Management solution of Automotive Infotainment Systems especially in luxury vehicles, considering the Network Management Strategies involved in ECUs via ECU Node Simulation and analyzing parameters related to Clock Synchronisation.

This paper also considers a Buck Converter with a 42V/14V dc/dc converter based topology. 42V/14V dual voltage system will become a replacement to the separate 14V system which is currently available in the industry.

KEYWORDS: Automotive, Infotainment System, Powertrain, CANoe, Capl Debugger, Clock Synchronisation, DC-to-DC Converter