On the Design and Control of an Electronic Parking Brake System

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ABSTRACT

An Electronic Parking Brake System (EPB) is developed for actuating the hand brake in vehicles based on design requirements. Auto actuating the brake function of EPB is provided with the extinguishing moment. And auto releasing the brake function of EPB can be executed when the vehicle start moving at the moment. An attached button and indicator must be set up on the driver ’ s master for manual actuating the EPB. The dynamic analysis is also proceeded for the safe EPB mechanisms. Controller Area Network bus system is setup therefore the system can communicate with the master controller of vehicle.

Keywords : Electronic parking brake ; dynamic analysis ; CAN bus system

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