



MPC5775B BMS and VCU Reference Design

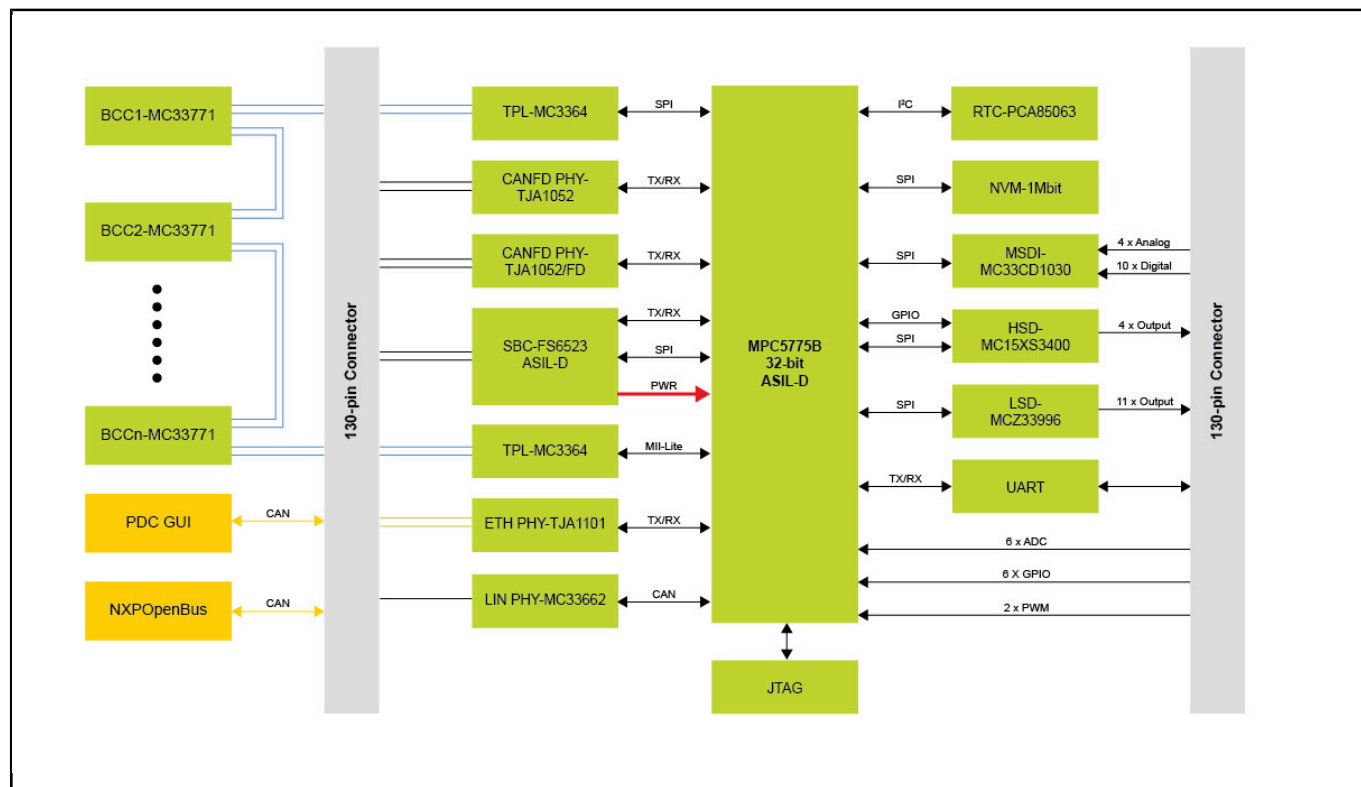
RDVCU5775EVM

Last Updated: Aug 21, 2024

The RDVCU5775EVM is an out-of-the-box, proven-concept and cost-effective reference design engineered to integrate battery management system (BMS) and vehicle control unit (VCU) high-voltage functionalities, plus direct powertrain system to domain controller up to ISO 26262 ASIL D automotive applications.

Based on the 32-bit Power Architecture® MPC5775B MCU, the FS6523 functional safety power SBC, and the MC33664 high-speed transform physical layer (TPL) network, the RDVCU5775EVM supports the MC3377x battery cell controller EVB daisy chain and the CD1030 33-channel multiple switch detection interface (MSDI) with programmable current.

MPC5775B BMS and VCU reference design - Block Diagram Block Diagram



View additional information for [MPC5775B BMS and VCU Reference Design](#).

Note: The information on this document is subject to change without notice.

www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2025 NXP B.V.