BMx7318 48 V BMS Evaluation Board

EVBMA7518S48V

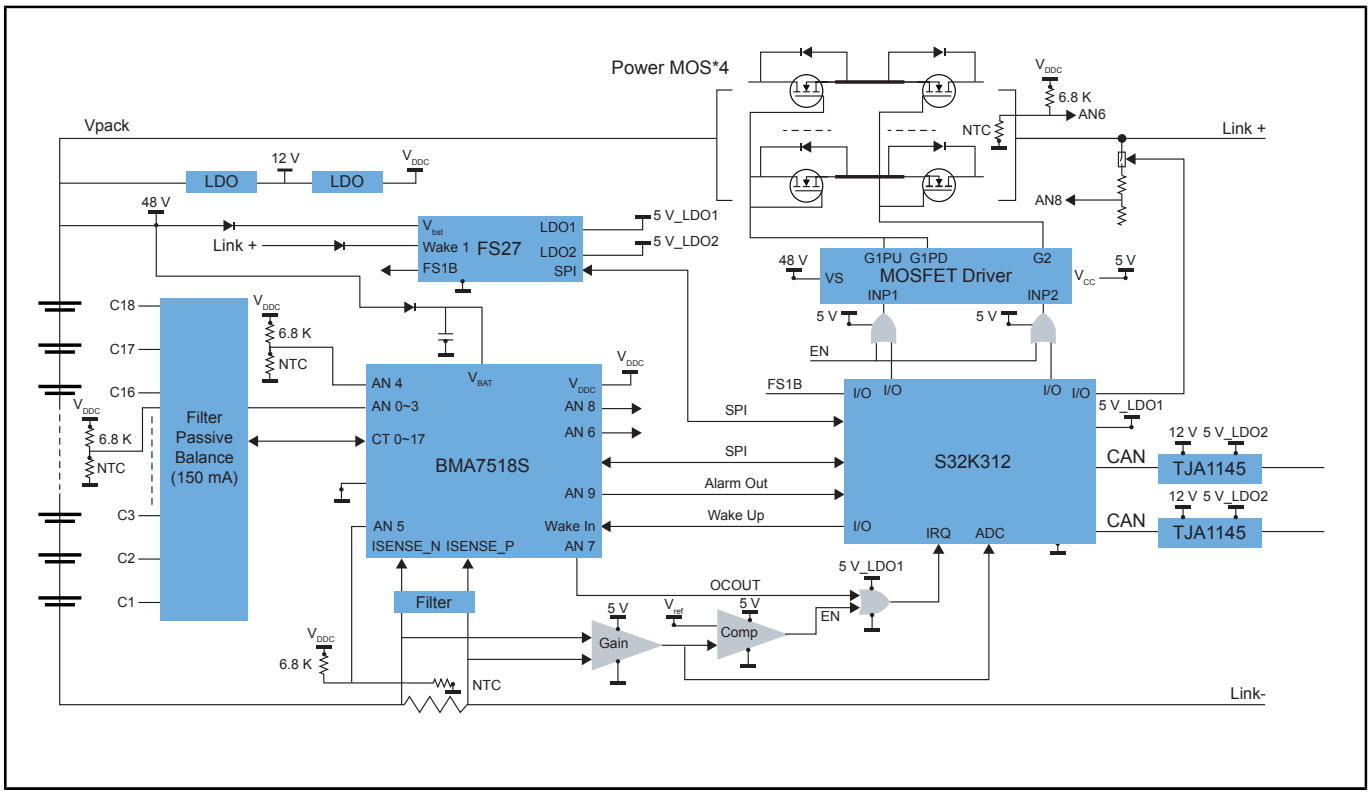
Last Updated: Aug 20, 2026

The EVBMA7518S48V provides a complete solution for 48 V battery management system (BMS) for automotive and industrial applications. The board integrates one BMA7518 device controlled by an S32K312 microcontroller (MCU). The BMA7518 supports measurement of lithium#ion batteries with four to 18 cells.

The BMA7518 communicates with the MCU through non#isolated serial peripheral interface (SPI), while off#board communication uses transformer physical layer (TPL) with transformer isolation. The MCU is powered by an FS27 system basis chip (SBC), supplied directly from a 48 V direct current (VDC) source.

The board also integrates a MOSFET driver for charge/discharge control and includes a redundant current measurement channel for timely overcurrent (OC) protection, enhancing overall functional safety performance.

EVBMA7518S48V Block Diagram



View additional information for BMx7318 48 V BMS Evaluation Board.

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. © 2026 NXP B.V.