



S32K396 Evaluation Motherboard for X-IN-1 Applications

XIN1-MB-S32X

Preproduction

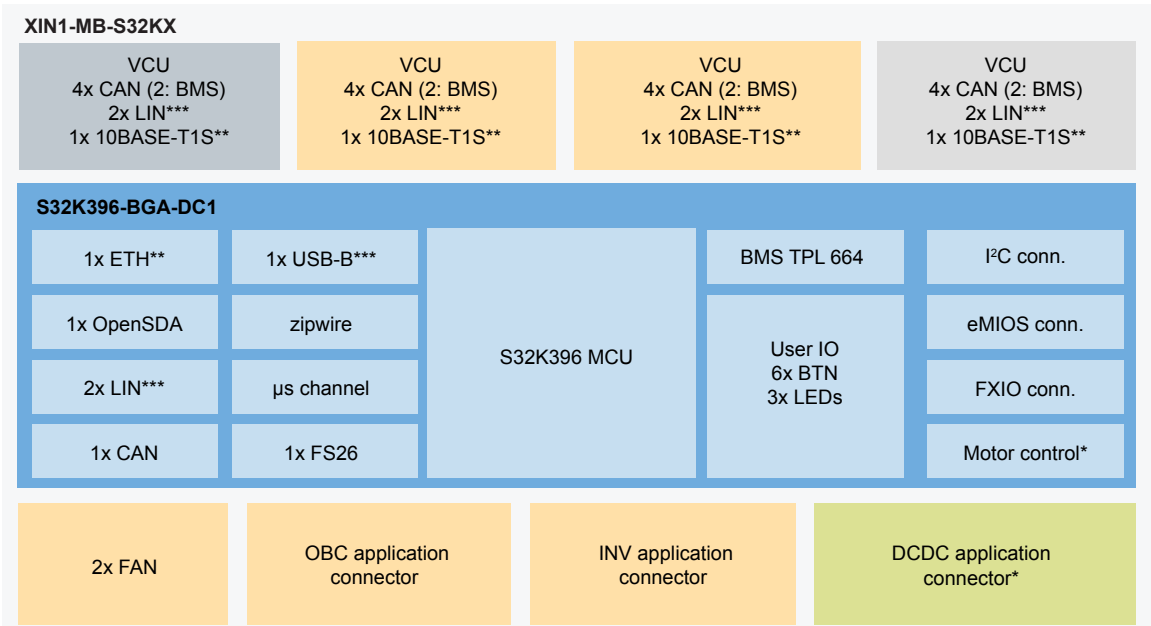
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The XIN1-S32X-MB is a versatile main board designed to interface the S32K396 MCU with a wide range of analog actuation and application boards. This modular approach enables fast prototyping and evaluation of multiple X-in-1 automotive use cases across powertrain, charging and energy-management domains.

The XIN1-MB-S32Kx is the interfacing board between the MCU used in the X-in-1 system and the various applications. This board acts as a motherboard (MB) for the MCU daughtercard (DC). This MB is mainly designed toward the S32K396-BGA-DC1 DC. This DC has the S32K396 MCU on board. The S32E2 and S32Z2 based MCU EVB boards will fit mechanically as well on this motherboard: S32E288-975EVB, S32Z280-594EVB and S32Z280-400EVB.

S32K396 Evaluation Motherboard Block Diagram



*Either the Motor control connector (PCIeX4) on the DC or the 68-pins connector on the MB can be used for the DC-DC application. The connector on the DC can also be used as a second inverter connector. It is advised to connect the DC-DC application to the MB via the connector on the MB (J1). To connect to the DC-DC application board, use the M55-806842-0150A cable.

**The ethernet peripheral on the DC is the same ethernet peripheral on the MB and soldering is needed on the DC to be able to use them.

***LIN2 (UART2) on the MB is the same UART as the USB-B UART and LIN3 (UART3) on the MB is the same LIN as LIN1 (UART3) on the DC. If the 2 LINs of the MB need to be used, place R187 to R193 on the DC, remove R571 and R572 on the DC and place the 4 LIN jumpers (J90 1-2 and 3-4 and J92 1-2 and 3-4).

View additional information for [S32K396 Evaluation Motherboard for X-IN-1 Applications](#).

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