



# MPC5775E 3-phase PMSM Development Kit

## MCSPTR2A5775E

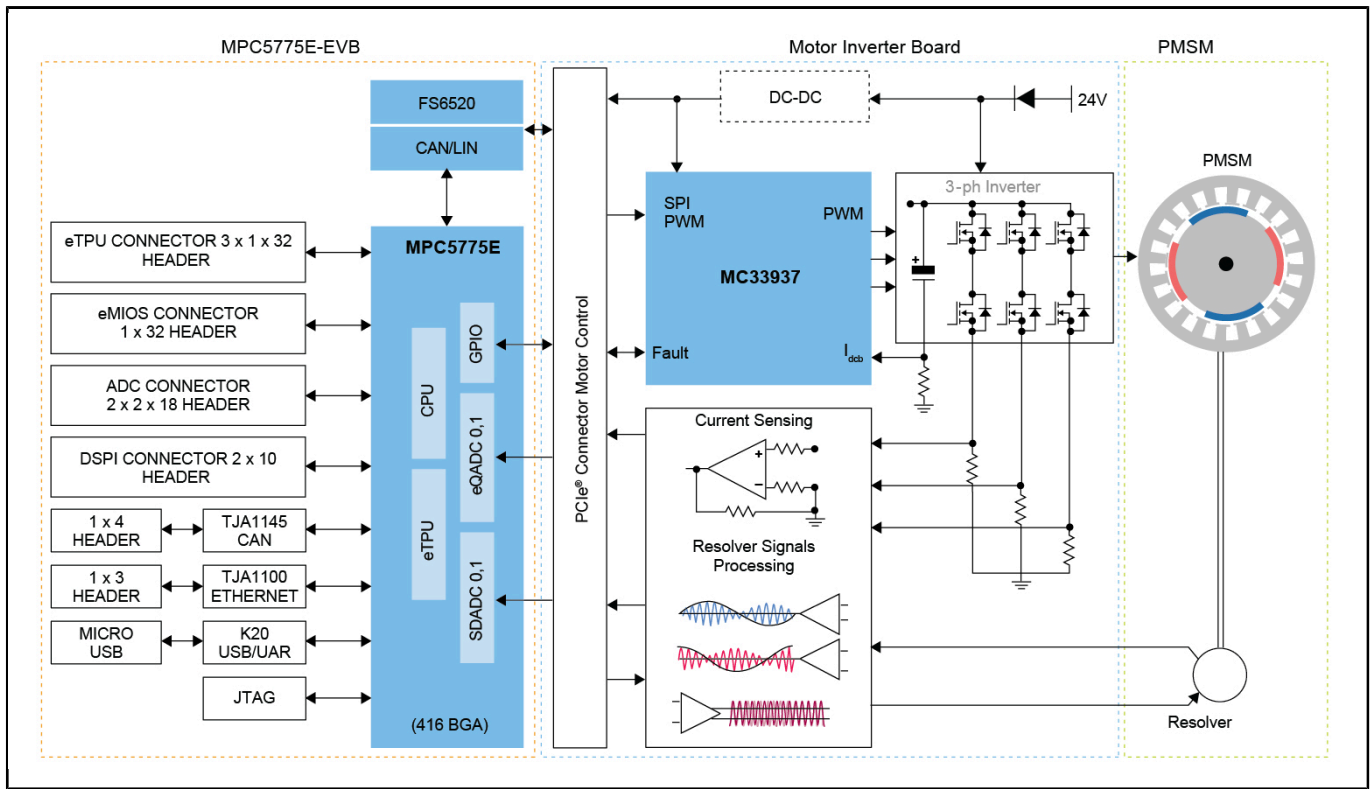
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The MCSPTR2A5775E is a compact and highly-optimized development kit engineered for 3-phase Permanent Magnet Synchronous Motor (PMSM) control, 3-shunt current sensing, and resolver position sensing.

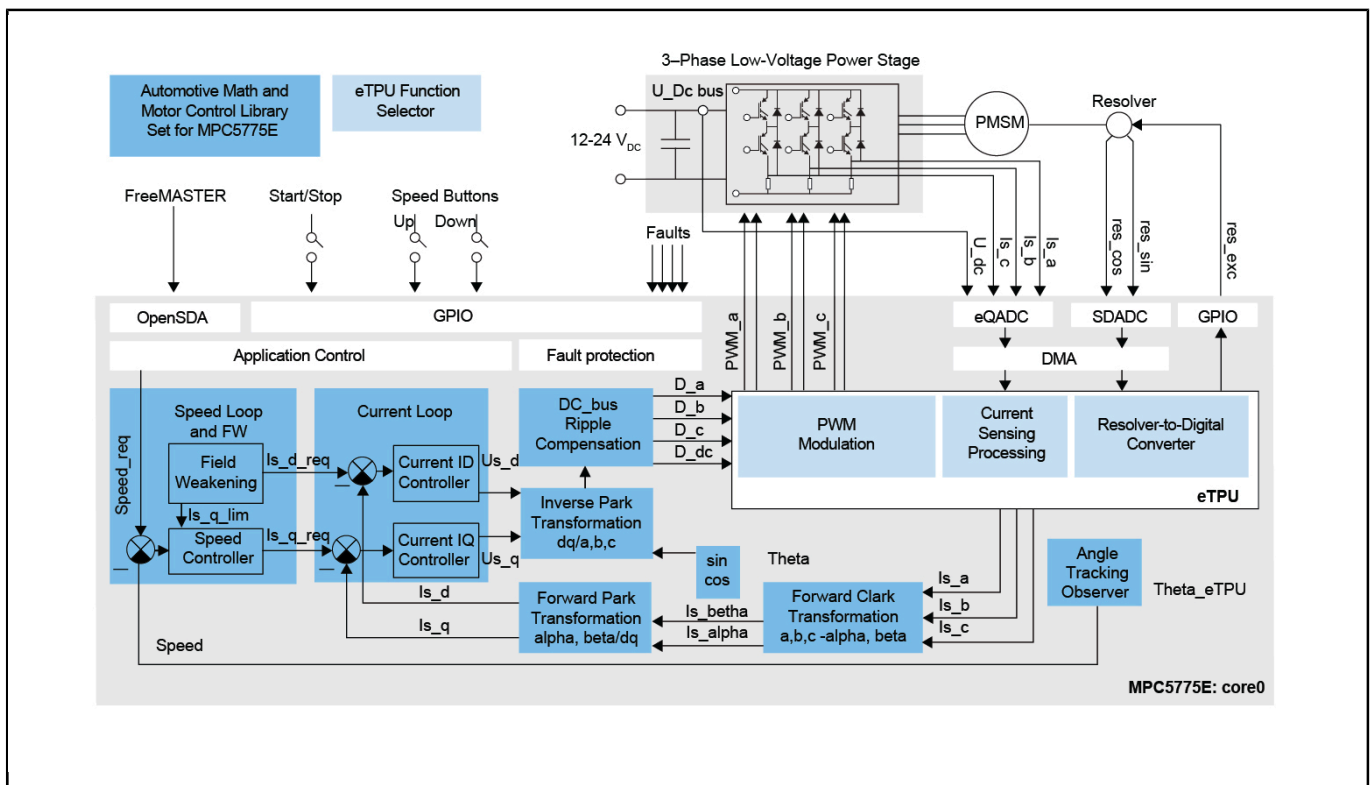
MCSPTR2A5775E supports efficient electric motor and inverter control, targeting advanced powertrain motor control and real-time control applications requiring up to ISO 26262 ASIL D.

Based on the 32-bit Power Architecture® MPC5775E microcontroller, the MCSPTR2A5775E offers high-performance computing, safety, and security capabilities. Its dedicated co-processor enhanced time processing unit (eTPU) helps to enable software-based resolver to digital conversion (RDC) implementation, allowing CPU offload.

# MCSPTR2A5775E architecture Block Diagram Block Diagram



# MCSPTR2A5775E FOC Control Loop Block Diagram



View additional information for [MPC5775E 3-phase PMSM Development Kit](#).

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

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