NXP EdgeReady Smart HMI Solution Based on i.MX RT117H with ML Vision, Voice and Graphical UI

SLN-TLHMI-IOT-RD

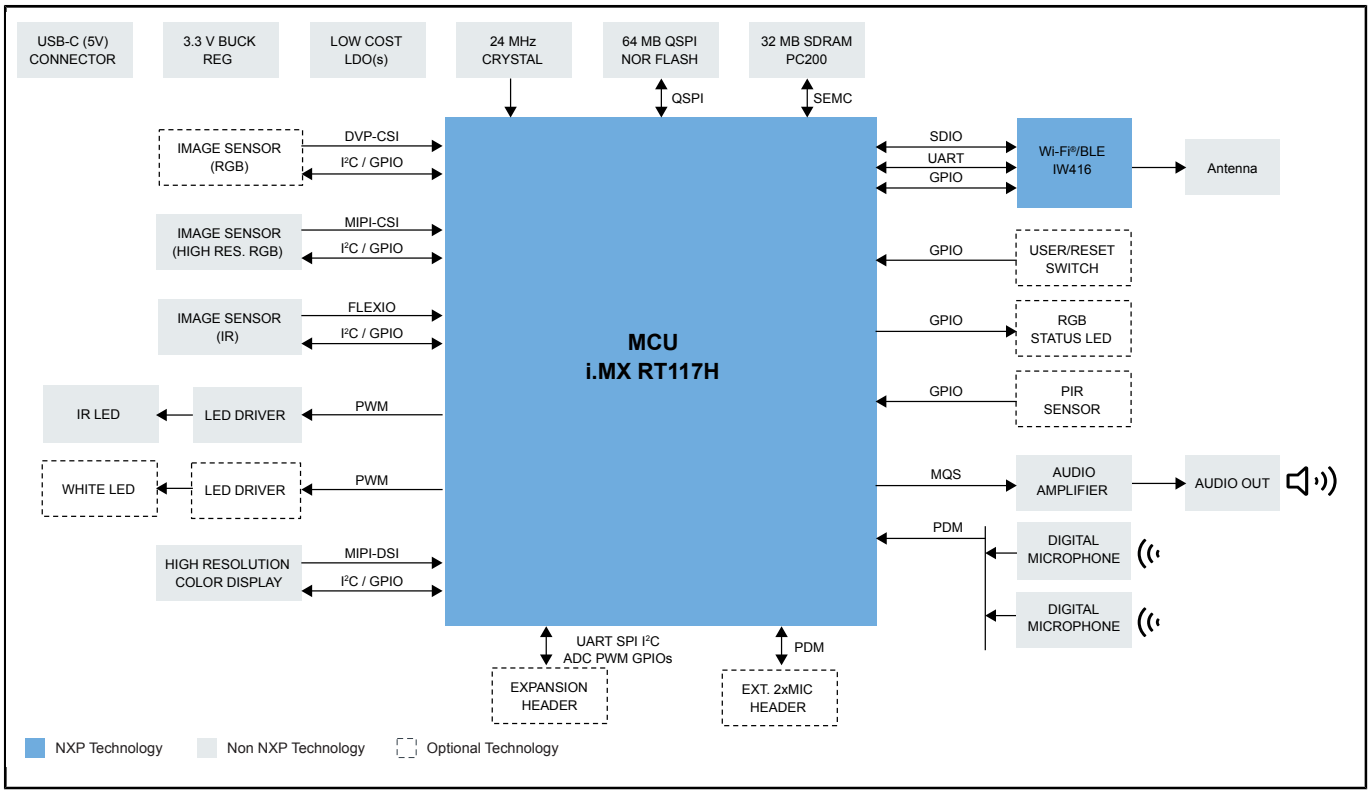
Last Updated: Oct 26, 2023

The NXP EdgeReady Smart Human Machine Interface (SMHMI) solution leverages the i.MX RT117H crossover MCU to allow developers to quickly and easily enable multi-modal, intelligent, hands-free capabilities including machine learning (ML), vision for face and gesture recognition, far-field voice control and 2D graphical user interface (GUI) in their products. These functions can be mixed and matched to simplify overall system design using just this single NXP high-performance crossover MCU.

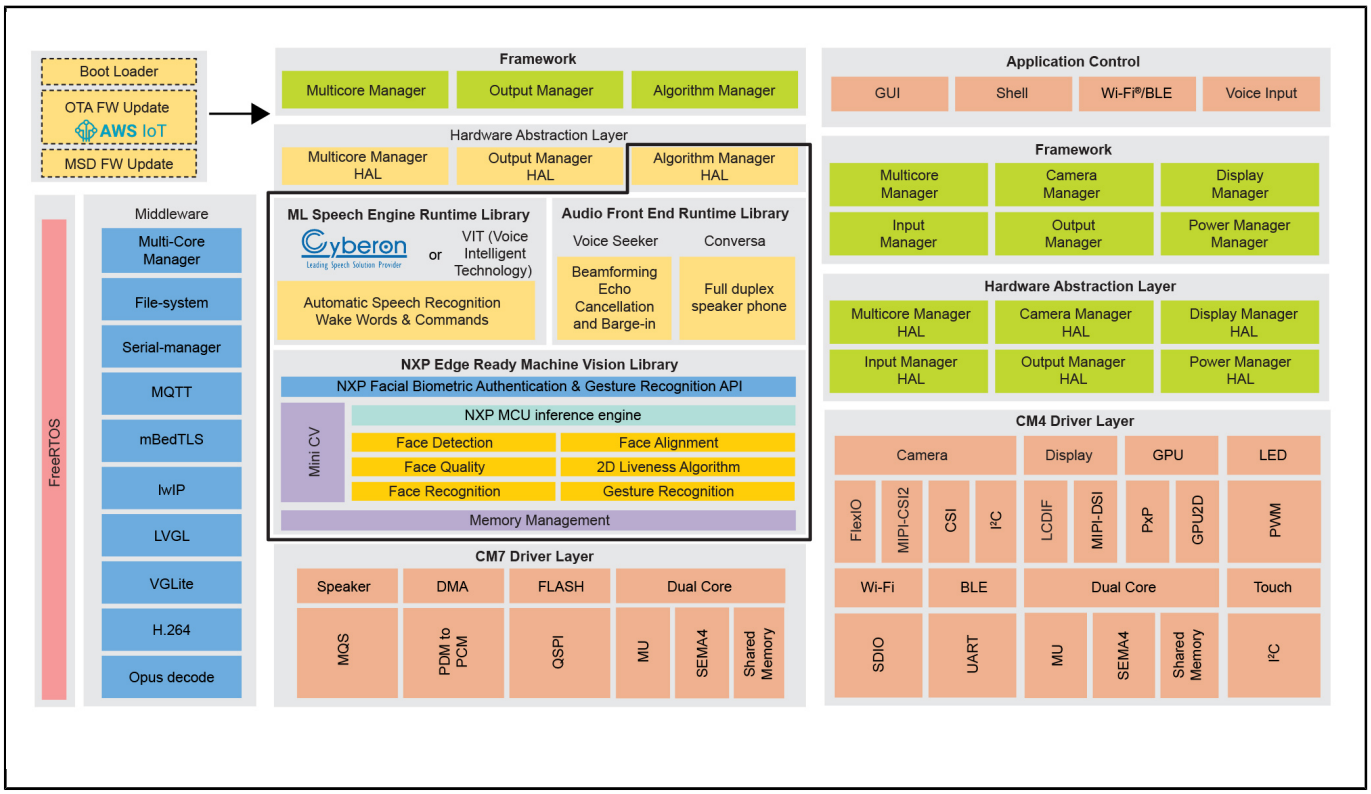
This solution’s development kit, the SLN-TLHMI-IOT, comes with a variety of features to help minimize time to market, risk and development effort, including: fully-integrated turnkey software, hardware reference designs and NXP one-stop-shop support for quick out-of-the-box operation. Face/gesture recognition and voice control are performed entirely offline thanks to the i.MX RT117H, eliminating the need for the cloud as well as the privacy and latency concerns that come with it.

In addition to production ready face/gesture recognition, AFE integrated far-field voice control and advanced GUI capabilities, its software framework gives designers the flexibility to customize vision, voice functions and combination of these features. The i.MX RT117H is used for HMI in a broad range of applications including but not limited to consumer, industry and more.

Smart HMI Solution Development Kit Hardware Block Diagram



Smart HMI Solution Development Kit Software Block Diagram



View additional information for NXP EdgeReady Smart HMI Solution Based on i.MX RT117H with ML Vision, Voice and Graphical UI.

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