



NXP Expands 5V-Capable Microcontroller Family with Industry Certified, Water Tolerant Touch Integration

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*Kinetis E now offers 32 KB to 256 KB Flash, 8 KB to 32 KB SRAM
targeted at the Industrial IoT and Home Appliance Markets*

Austin, Texas – March 7 2019 – NXP Semiconductor expands industry leading 5V microcontroller (MCU) family for greater product scalability and cost-effectiveness. The 5V KE1xZ family, based on the Arm® Cortex®-M0+, enables embedded control systems in harsh electrical environments now with an integrated CAN controller and capacitive touch from 32KB flash.

Designed for a wide range of industrial applications, the KE1xZ family offers rich mixed-signal integration across a range of compact memory variants with an integrated CAN controller for reliable, high-speed communication. The 1-Msps ADC and FlexTimer modules, combined with NXP's Freemaster software tools library and Motor Control Application Tuning plugin (MCAT) enable Brushless DC (BLDC) and other motor-control systems.

NXP's KE1xZ MCU family offers advanced noise immunity, water-tolerant touch and low-power wake-on-touch operation, essential features for the strict electromagnetic compatibility (EMC) standards of the industrial and home appliance markets. NXP's touch IP, combined with proven software and tools enable a high level of stability, accuracy and ease of use, with continued responsiveness and functionality through wet conditions and can sustain 10V in conducted noise, in alignment with International Electrotechnical Commission (IEC) 6100-4-6 test level 3.

Additional KE1xZ MCU features for high reliability, safety and security:

- Internal 48MHz internal reference clock with 1% accuracy over full operating range
- Boot ROM with built in bootloader and 128-bit unique device identifier (UID)
- ADC self-calibration feature
 - Flash Access Control (FAC)
- Cyclic Redundancy Check (CRC) generator module
- Internal watchdog (WDOG) with independent clock source and external watchdog monitor (EWM)
- On-chip clock loss monitoring
- IEC 60730 Class B safety certification
- LQFP package with 48- and 44-pin options

Product enablement and availability

The KE1xZ MCU family will be available globally in March 2019 from NXP and its distribution partners with a suggested resale price from \$0.79 at 10,000-unit quantities.

NXP enables developers through its MCUXpresso software and tools ecosystem, along with its FRDM-KE15Z and FRDM-TOUCH development platforms, with respective suggested resale prices of \$35 and \$15. Third-party support is enabled from the broad ARM ecosystem.

For more information about this family of MCUs, please visit: www.nxp.com/Kinetis/Eseries.

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