![Chipsmall logo]

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Kinetis EA Series Family of Microcontrollers

ARM®-Based MCUs for Ultra-Reliable Applications

Features

- AEC-Q100 Grade1, Ta125 °C
- 12-bit ADC, PWM/Timers
- CAN and LIN Node
- Ultra-reliable MCU

Product One-Sheet

Get Sample   **Data Sheet**   **Tools**

Performance and Low Power – Up to 48 MHz ARM® Cortex®-M0+ core, single-cycle 32-bit x 32-bit multiplier, less than 2µA in stop mode

High Reliability – AEC-Q100 Grade 1, automotive quality, enhanced ESD/EMC performance up to 6 KV, 125 °C ambient temperature

Features Rich – CAN, LIN, SPI, I2C, analog comparators, multiple timers with PWM functionality

Enablement – Fast time to market with large choice of low-level drivers, reference designs, middleware libraries, and example code
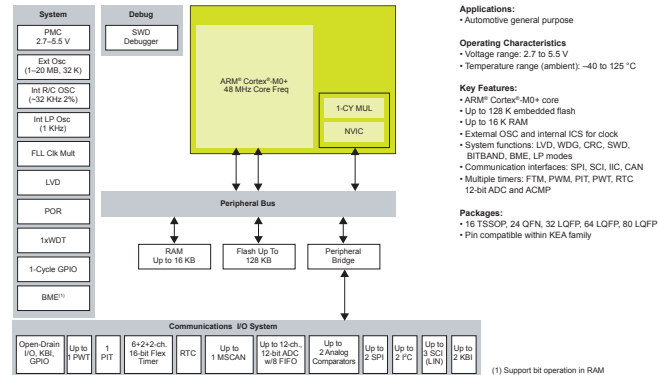
KEAZ128 Specifications

Flash	Up to 128 KB	Timer/PWM	Up to 8-ch., 16-bit
RAM	Up to 16 KB	Other Timer	RTC, PWT, 2 PIT
Core	M0+	Comparator	Two 6-bit DAC
Speed	48 MHz	CAN	1
Package	16 to 80 pins	SCI/SPI/I2C	Up to 3/2/2
Op Range	2.9 V–5.5 V	HMI	Up to 71 GPIO, 2 KBI, 1 IRQ
Temp	125 °C	Security	LVD, WDOG, CRC

Orderable Samples

Part Number	Temp Range	Package
S9KEAZ128	-40 °C to 125 °C	64 and 80 LQFP
S9KEAZN64	-40 °C to 125 °C	32 and 64 LQFP
S9KEAZN8	-40 °C to 125 °C	16 TSSOP and 24 QFN

Kinetis EA Series MCUs Block Diagram

Applications:
- Automotive general purpose

Operating Characteristics
- Voltage range: 2.7 to 5.5 V
- Temperature range (ambient): –40 to 125 °C

Key Features:
- ARM® Cortex®-M0+ core
- Up to 128 K embedded flash
- Up to 16 K RAM
- External OSC and internal ICS for clock
- System functions: LVD, WDG, CRC, SWD, BITBAND, BME, LP modes
- Communication interfaces: SPI, SCI, IIC, CAN
- Multiple timers: FTM, PWM, PIT, PWT, RTC 12-bit ADC and ACMP

Packages:
- 16 TSSOP, 24 QFN, 32 LQFP, 64 LQFP, 80 LQFP
- Pin compatible within KEA family

(1) Support bit operation in RAM

3 Phases Sensorless BLDC Motor Control
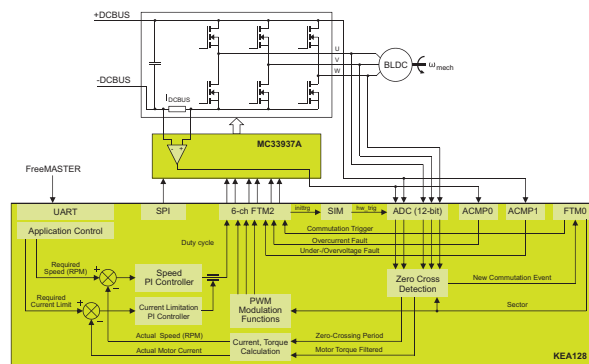
Success Stories

- Electric motor control
- Air flow system
- Industrial HVAC
- Battery management system

Target Applications

- CAN and LIN nodes
- Peripheral Gateway
- Lighting control
- DC/BLDC motor
- Pump/fan controller
- Battery management
- Generic sensor node
- HVAC

Enablement Tools

- Evaluation boards:
  - TRK-KEA8, TRK-KE64, TRK-KEA128
- Reference designs:
  - KEA128BLDCRD – BLDC Motor Control
  - Lighting Control, CAN/LIN Gateway
- CodeWarrior, KDS, IAR Embedded Workbench®, KEIL®, Cosmic
- NVM, CAN and LIN drivers, LIN stack
- M0+ motor control libraries
- FreeMASTER and MCAT