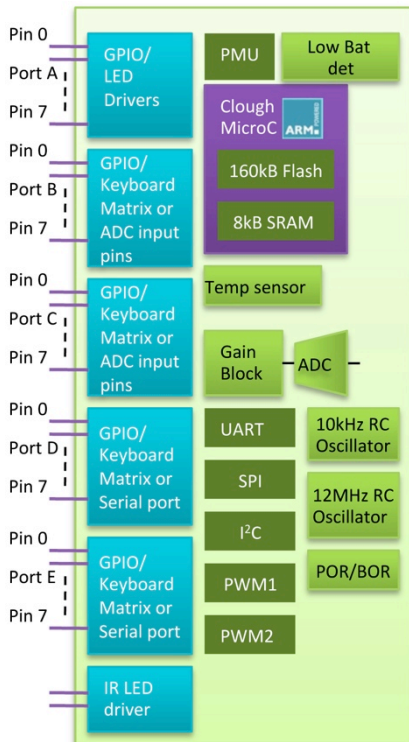


KamCho Features

- ARM M0 32-Bit MCU
- 160kB Flash / 8kB SRAM
- (1) 8-10 bit ADC
- (39) GPIO control pins
- (8) LED Driver Outputs
- (1) 1A IR LED Driver
- Internal 12MHz RC Oscillator
- Buffered 32.768 kHz Clock
- 10kHz Auxiliary Clock (<1uA)
- (4) 32 Bit Timers
- (1) I²C Interface
- (1) SPI Interface
- (1) UART Interface
- (2) 12-bit PWMs
- Integrated power regulation



Recommended Applications

Mobile, Industrial, Commercial, Automotive, Medical

iND80205 - “KamCho”

32-Bit ARM M0 Based Microcontroller Family

Device Description

The KamCho microcontroller family is a product line consisting of highly integrated 32-bit general purpose ARM M0 based microcontrollers, clocking at up to 20MHz. This line of products is low-cost enough to compete with the 8-bit microcontroller market segment and provides a path for partners to begin transition to 32-bit wide applications.

KamCho integrates 160kB of flash RAM and 8kB of SRAM on die for feature-rich applications or applications requiring redundancy of data storage. It integrates multiple clocking options including a high accuracy (1%) 12MHz RC oscillator, 32kHz real-time clock, low power (<1uA) 10kHz auxiliary clock, and watchdog timer for high performance, low power designs.

This line of microcontroller products also integrates multiple peripherals. KamCho is the highest-featured version with 39 general purpose I/O available to the user. Of these I/O ports, 8 have the capability to drive high current for LED applications. There is also an additional I/O which is capable of driving 1A for IR LED applications.

KamCho integrates an 8-10 bit ADC (SAR architecture) with up to 41 input channels. There is also a bandgap reference on die which supports a temperature sense circuit.

KamCho integrates a power management block including on-chip regulators. The device can be powered without regulators from 2.3V to 3.3V or with regulators from 2.9V to 3.6V

KamCho has several options for interfacing with other integrated circuits such as an I²C interface, SPI interface, UART interface, and 2 PWM outputs (12-bits resolution).

Ordering Information

Device Ordering Name	Platform	Temp Range	Package	Pins
iND80205 KamCho	General purpose microcontroller applications	-40C to +85C	7x7 mm QFN	48 Pins @ 0.50 mm Pitch