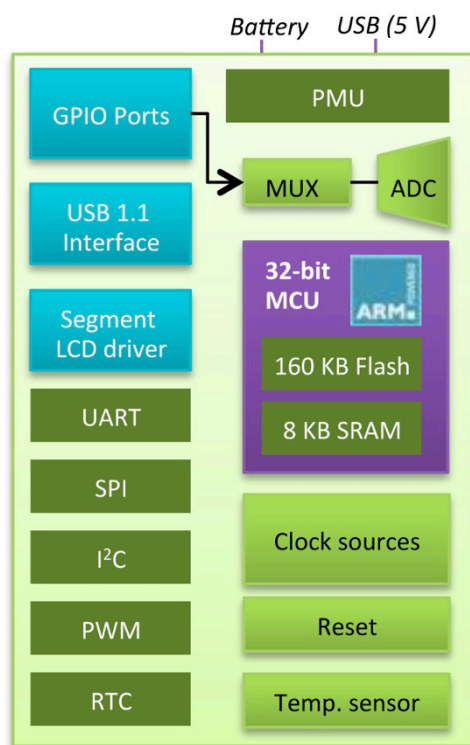![indie SEMICONDUCTOR logo]

Shmueli Features

- ARM M0 32-Bit MCU
- 160kB Flash / 8kB SRAM
- USB Interface
- (18) Low Voltage GPIOs
- 10MHz RC Oscillator
- 3.58MHz XTAL Oscillator
- 10kHz Auxiliary Clock (<1uA)
- POR/BOR
- (3) 32-bit Timers, Watchdog Timer
- UART , I^{2}C, SPI Interfaces
- (1) 12-bit PWM

Recommended Applications

- IoT and wearables
- Embedded mobile
- Consumer products

iND81201 - "Shmueli"
General Purpose ARM M0 uC with USB Interface

Device Description

The iND81201 is a member of the general purpose microcontroller family of products from indie. It is a highly integrated 32-bit general purpose ARM M0-based microcontroller which clocks 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 transitioning to 32-bit wide applications.

The iND81201 features a high performance 32-bit wide ARM M0 core with 160kB of flash RAM and 8kB of SRAM. A real time clock (RTC), 12MHz RC oscillator, 32kHz sleep mode clock, 10kHz auxiliary clock, and watchdog timer are all fully integrated on die for high performance, low power design.

Shmueli includes integrated power management and is capable of running entirely off either a 3V battery or the integrated USB port. No other components are required for power regulation of the IC, creating an efficient, low cost design.

The iND81201 integrates a USB 1.1 (USB2.0 compatible) serial interface supporting control, bulk, and interrupt transfers so that data can be stored and downloaded at a later time.

The iND81201 also easily interfaces to any other discrete SoCs through standardized UART, I^{2}C, or SPI interfaces and provides 18 GPIO controls to interface with other on-board components.

Shmueli is packaged in a low cost 7x7mm QFN package with 48 pins and can be operated from -40C to +85C.

Ordering Information

Device Ordering Name	Platform	Temp Range	Package	Pins
iND81201 Shmueli	General purpose uC applications requiring USB interfacing	-40 C to +85C	7x7 mm QFN	48 Pins @ 0.5 mm Pitch