Infineon® XC866 U-Light Kit

The XC866-1FR offers 4Kbytes of Flash memory addressing cost-sensitive applications. The 8-bit MCU is amongst others well- suited for LED control. Competitively priced, the new XC866 includes on-chip oscillator, EEPROM capability and embedded voltage regulator (EVR) to further reduce overall system cost.

The XC866 product series is offering an 8051 compatible architecture enabling re-use of large legacy code base. It offers fast instruction cycle times of only 75ns and flexible flash memory capacity of 4K, 8K or 16Kbyte, enabling both high-performance and cost effective solutions. An enhanced capture compare unit (CAPCOM6E) enables flexible and easy to use PWM signal generation with special modes for motor control. CAPCOM6E offers advanced features like integrated dead time control, emergency-OFF (Trap) control, direct hall-sensor inputs and a tight coupling with ADC for automatic triggering. The fast 10-bit ADC with high accuracy (+/- 2LSB) offers advanced features like comparator mode. This makes the XC866 ideal for control applications using brushless DC motors and offers the best price performance ratio.

Additionally XC866 includes three 16-bit timers, UART, SSC (Synchronous Serial Channel) and on-chip debugging support (JTAG). The XC866 also offers support for LIN (Local Interconnected Network).

The XC866 is available in a RoHS compatible “green” TSSOP-38 package with versions for the industrial and extended temperature range.

Infineon is offering a free-of-charge demo kit (XC866 U-Light kit) to evaluate the key features of XC866-1FR. The on-board multicolor LED is controlled by the PWM signals (Pulse Width Modulation) of the MCU to adjust the LED brightness and color.

<u>Key lighting functions of the MCU:</u>
- Xenon light control
- LED Brightness control
- LED Current regulation
- LED Temperature compensation
- Connectivity: LIN, CAN, SPI, UART
- Direct drive capability for LED

Kit includes:

- USB stick with SAK-XC866-1FR 8-bit MCU,
- Code Generation Tool - DAvE
- Keil C51 evaluation Compiler,
- Keil / HITEX HiTop Debugger,
- Flash loader / Mem Tool
- Demonstration programs.

Contact our distributor EBV Elektronik to order your XC866 U-Light kit.