

16 Buttons Application Kit

Solution for touch and LED-display control

THE KIT IS BUILD around Infineon's new XC836T 8-bit microcontroller and is a combined control solution for capacitive touch buttons and LED-display functionality. The sensing sensitivity is adjusted to work with a 2mm acrylic glass cover mounted on the substrate.

A dedicated functional unit of the XC836T microcontroller manages both, the control of the capacitive touch sensing and the driving of an LED-matrix for the use in displays. Specific ROM code is part of the device to reduce configuration and calibration effort in the design.

The application example code is loaded to the Flash memory of the microcontroller and can be accessed and modified with DAVE™ Bench - Infineon's free development tool chain. You can easily build up on this code and develop your own solution with fast time to market.

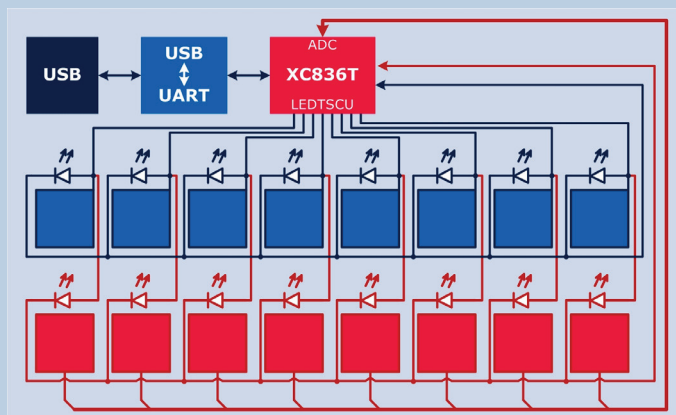
Key Features

- Flexible and ready to use solution for combined capacitive touch and LED-display control
- XC836T microcontroller featuring a dedicated functional unit for touch and display control and a ROM library to support configuration and calibration
- Application example code for control of 16 touch buttons and 16 touch indicator LEDs
 - Documentation and Tools on CD-ROM
 - DAVE™ Bench free development tool chain
 - Product and application documentation
- USB I/F for power supply and programming access
- Functional blocks of the 16 Buttons Application Kit

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Functional blocks of the 16 Buttons Application Kit



- 16 capacitive touch sensor buttons covered with 2mm acrylic glass
- One LED for each button to indicate touch incidents
- XC836T microcontroller
 - Functional unit for combined touch and LED-display control
 - ROM library with optimized code supporting configuration and calibration
 - UART / USB interface for code and programming access
- USB connector for power supply

Microcontrollers for advanced touch sense control

The XC836T microcontroller used in this Application Kit is part of a new scalable set of devices supporting advanced touch sense control for the use in industrial and automotive applications.

Availability

Product	Flash	ADC	Co-Processor	50mA Ports	Temp. Range	Package	AEC Q100
SAF-XC822T-0FRI	2KB	4ch / 10bit	no	no	- 40 to + 85°C	PG-TSSOP-16	no
SAF-XC822T-1FRI	4KB	4ch / 10bit	no	no	- 40 to + 85°C	PG-TSSOP-16	no
SAF-XC822MT-1FRI	4KB	4ch / 10bit	yes	no	- 40 to + 85°C	PG-TSSOP-16	no
SAF-XC824MT-1FGI	4KB	4ch / 10bit	yes	no	- 40 to + 85°C	PG-DSO-20	no
SAF-XC836MT-2FRI	8KB	8ch / 10bit	yes	yes	- 40 to + 85°C	PG-TSSOP-28	no
SAF-XC835MT-2FGI	8KB	8ch / 10bit	yes	yes	- 40 to + 85°C	PG-DSO-24	no
SAK-XC822MT-1FRA	4KB	4ch / 10bit	yes	no	- 40 to + 125°C	PG-TSSOP-16	yes
SAK-XC836MT-1FRA	4KB	8ch / 10bit	yes	yes	- 40 to + 125°C	PG-TSSOP-28	yes
SAK-XC836MT-2FRA	8KB	8ch / 10bit	yes	yes	- 40 to + 125°C	PG-TSSOP-28	yes

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