

### SANYO Microcontrollers

Industry's lowest power consumption

Ultra-Low Power Consumption 64-pin Flash Microcontroller Developed

During real time clock operation\*1

Easy Micon™

**Industry's lowest\*2 power consumption: 0.5μA**

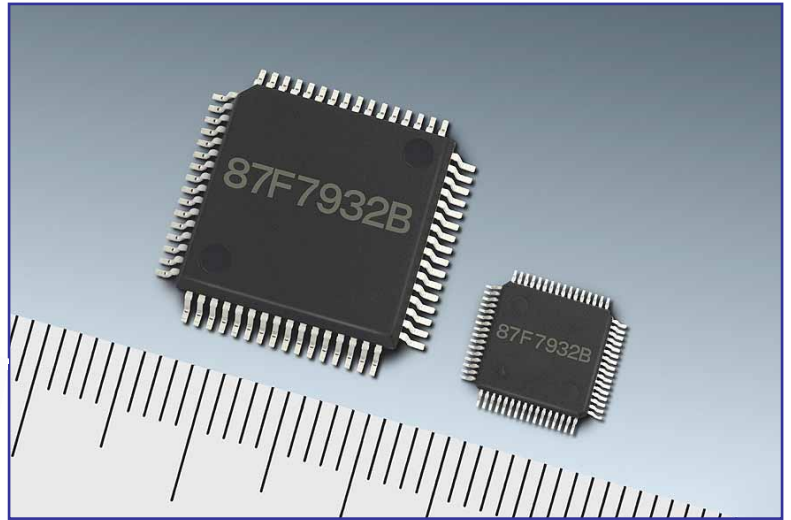
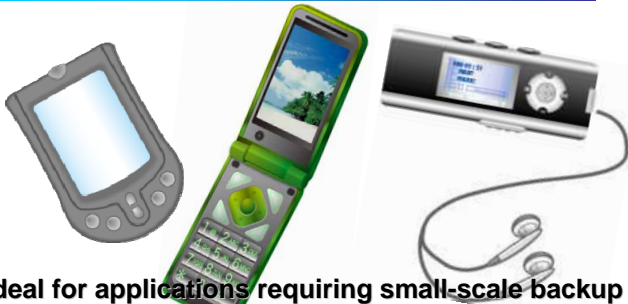
## LC87F7932B

Ultra-low power consumption flash microcontroller

Sample shipping: March 2009 (planned)

Production plan: 500,000 pcs / month

Sample price: 500 yen



Ideal for applications requiring small-scale backup power supplies including battery-powered mobile devices and other electronics products.

**Standby power consumption: 85% lower compared to existing SANYO products**

\*1 : When real time clock operation is on and the LCD is off. Equivalent to standby mode.

\*2: As of October 27, 2008. During real time clock operation.

### LC87F7932B Features and Specifications

\* Industry's lowest\*1 current consumption of 0.5μA during real time clock operation.\*2

**Lower power consumption improves the battery life of electronic devices.**

\* Built-in 12-bit resolution AD converter

\* Incorporates five types of oscillation circuits

Programmable selection of the optimal circuit for the particular application

\* Built-in reset and low-voltage detection circuits

**Helps reduce the number of components needed**

\* Built-in 100-year calendar

Complete development tools **simplify** and **accelerate** design development

### Specifications

- \* Flash ROM : 32K bytes
- \* RAM : 1K bytes
- \* LCD drivers : 24 segments x 4 commons
- \* LCD bias : 1/2 bias, 1/3 bias
- \* Real time clock function (Time count function)

- \* Full duplex UART
- \* On-chip debugger function
- \* Package : 64-pin QFP  
TQFP64J (7X7) (□ 7.0 X 7.0 mm)  
QIP64E (14X14) (□ 14.0 X 14.0 mm)

\*: Flash products are licensed from Silicon Storage Technology, Inc., (USA), and manufactured and sold by SANYO Semiconductor Co., Ltd.

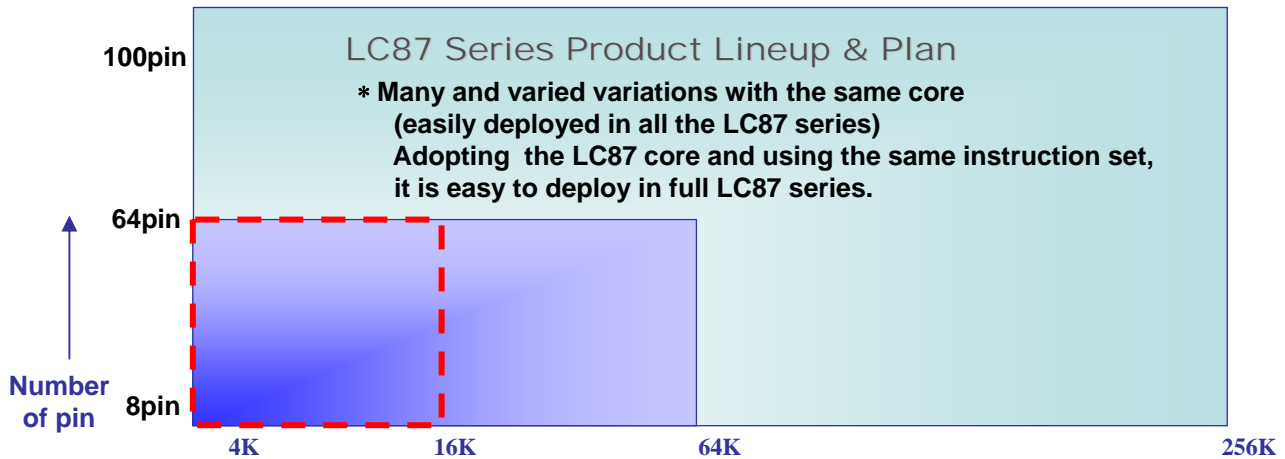
What is " Easy Micon™ " ?

Providing Designer-friendly "Hardware and Software"

- \* **Small size low pin count, compact, small memory configuration supported**  
Realizes high cost-performance with sufficient function and memory capacity within a small package.
- \* **Compact yet high functionality**  
Incorporates 12-bit ADC, oscillator circuits, power-on reset circuit, low-voltage detection reset circuit, etc.
- \* **Trial kit**  
The trial kit facilitates the user to evaluate a new series of microcontrollers.  
Evaluation can be done by only replacing 14-pin/24-pin/36-pin/48-pin on the sub-board.  
(Included: Evaluation board with a debugger, sub-boards, sample programs, and compiler)

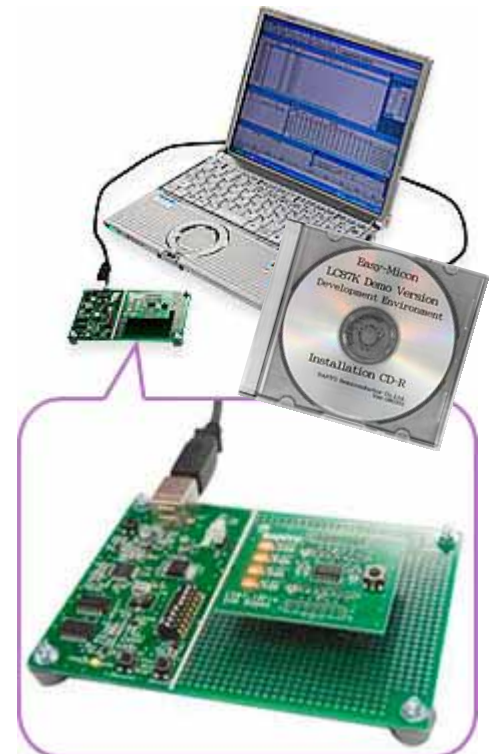
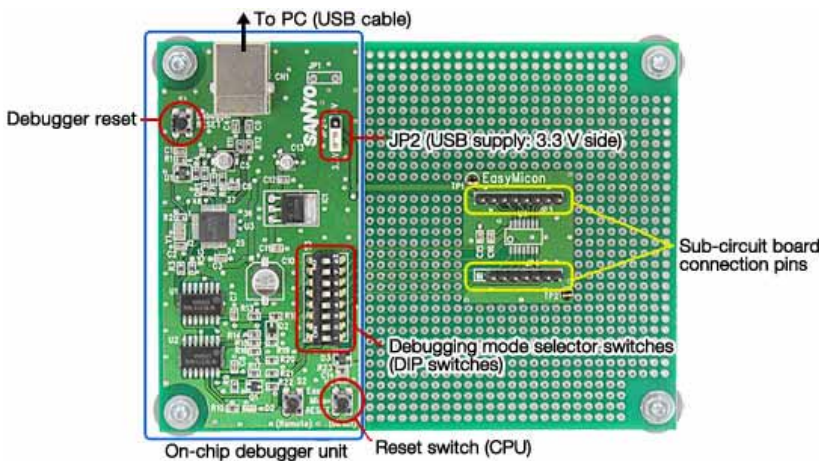
Easy Micon™ product lineup plan  
(ROM: 4K to 64K, Pin count: 8 to 64 pins)

Area supported by the Easy Micon™ demonstration compiler  
(ROM: Up to 16K)

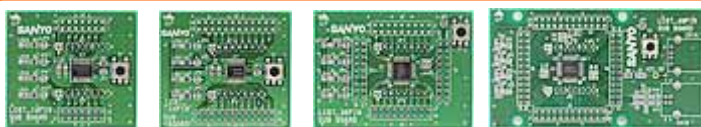


" Easy Micon™ " Trial Kit

Easy Micon™ boards without a processor integrate an "on-chip debugger unit" and a "target unit" onto a single board. Simply select the appropriate sub-circuit board (equipped with appropriate CPU) for the application and connect the board to the sub-circuit board connection pins in the target unit for easy hands-on development with Easy Micon™.



Sub-circuit board [ line-up of devices with 14 to 48 pins ]



14pin Sub-board    24pin Sub-board    36pin Sub-board    48pin Sub-board