Ultra-Compact All-in-One Chips for LCD Modules

BU957xx Series (COF Package)

The industry’s smallest Chip on Film design integrating multiple IC functions for LCD modules on a single chip

Product Outline

ROHM’s latest offering - the first*1 all-in-one chip geared for LCD modules - utilizes proprietary process technology to integrate all of the ICs required for LCD modules on a single chip*2. This reduces both the number of external parts and wiring complexity significantly, minimizing board area by 5 times and weight by 2/3 over conventional designs, leading to lighter, smaller end-products. An additional advantage of the novel design is that surplus current is eliminated, reducing power consumption by 10%*1, contributing to longer battery life in portable devices.

■ The first all-in-one chip

Conventional 16-inch LCD Module

Conventional 16-inch LCD Module

Conventional: 3.3W

Reduced: 10%

ROHM: 3.0W

Lower power consumption contributes to longer battery life

■ Significantly reduces board size and weight

Conventional 16-inch LCD Module

Conventional 16-inch LCD Module

1/5th the area

2/3rds the weight

Module integrating 2 x BU957xx

Area: 1550mm²

Weight: 8g

ROHM’s COF solution reduces the number of ICs and components required along with the requisite wiring, leading to smaller, lighter boards.

■ Contributes to lower power consumption

Conventional: 3.3W

Reduced: 10%

ROHM: 3.0W

Lower power consumption contributes to longer battery life

■ Fewer components required

Conventional

Resistors

70pcs

Capacitors

55pcs

ICs

7pcs

BU957xx

30pcs

25pcs

7pcs

53% Less

Cuts the number of required components by 53% compared with conventional designs

■ Additional features

• Supports WXGA resolution, 16-inch panels and smaller

• Compatible with LVDS and MIPI I/F

• Total support system provided (excluding the glass)*

*COF adjustment and circuit tuning required based on the customer’s environment

*1: ROHM December 2012 survey

*2: The COF pitch can be customized to customer requirements