NEW Products

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A WL-CSP*1 video driver that eliminates the need for an output capacitor for increased space conservation.

The trend towards smaller, increasingly sophisticated digital still cameras and mobile phones with video capability necessitate smaller, higher density IC products. Conventional video driver ICs require a highcapacitance capacitor at the video signal output for TV monitors which can cause



mounting problems in ultra-compact portable devices.

ROHM's BH769 GU series video driver ICs eliminate the need for a high-capacitance capacitor by integrating a charge pump circuit that drives the IC using both positive and negative voltages. In addition, the ICs are offered in a WL-CSP (Wafer Level Chip Size Package -1.6mm x 1.6mm x 0.75mm - the package is almost the same size as the chip itself), significantly contributing to end-product miniaturization.

This series also provides many of the features required of portable devices such as low voltage operation (2.5V-3.45V) and 0µA (typ) standby current consumption, resulting in increased power savings.

Single-chip liquid crystal driver with built-in high-speed MSDL*22 serial interface for 16.77 million color QVGA*3 amorphous TFT LCD mobile phone displays.

ROHM's LCD driver combines the Gate*4 and Source drivers*5 into a single chip and features a built-in power supply and video frame memory, reducing power consumption as well as the number of components required, contributing to increased space savings. An RGB gamma correction func-



tion enables increased fine-tuning capability for faithful color scale reproduction.

In addition to parallel and serial interfaces, the BU66R01CH is compatible with MSDL2 (Mobile Shrink Data Link 2), a differential serial data transmission technology*6 developed by ROHM featuring low voltage high-speed data transmission (200Mbps), resulting in reduced noise along with the number of connections required for LCD module control and image transmission (from 12-20 to 4-6).

High speed, durable thermal printheads featuring ROHM's original Step-Free structure.

The popularity of thermal

printers for industrial applications, such as bar code label and package printing, continues to grow due to the fact that they are lightweight, compact and possess high-speed printing capability. The number of applications is increasing as well, necessitating a demand



for high-speed, high-resolution thermal printheads featuring increased power conservation and ultra-high durability.

ROHM meets these needs by offering the SH3004-DC70A and SH3002-DC70A thermal printheads that utilize original Step-Free and super-hard coating technologies in order to eliminate the step between the resistive element and electrode, resulting in improved abrasion, corrosion (ion) and ESD resistance for greater reliability as well as increased heat transfer characteristics that enable high-speed printing. The near edge structure*7 significantly improves printing accuracy.

ROHM continues to apply its considerable expertise in semiconductor and module technologies and significant resources in developing high quality, ultra-compact products for image input devices such as facsimiles, color scanners and multifunction printers.

World's smallest remote control receiver modules featuring the industry's first dual-lens structure.

ROHM offers the RPM5500 series of ultra-compact, highsensitivity surface mount remote control receiver modules*8 in order to meet the growing demand for portable devices with remote control functionali-



technology in order to reduce the volume to 1/16th the size of conventional leaded products (65.3mm³: top view type, 51.0mm³: side view type smallest in the world). The units feature a two-lens structure (telephoto/wide-angle), ensuring excellent optical characteristics regarding both straight line coverage and directivity. The chip, developed in-house, uses ROHM's advanced LSI circuit technology for significantly lower noise (infrared, power supply, electromagnetic).

ROHM continues to produce highly reliable remote control and IrDA communication modules and optical sensors as well as smaller, more sophisticated products using the most advanced optical and packaging technologies.

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*1 WL-CSP

This represents the latest in packaging technology. The IC is resin-sealed in a wafer state and the package assembled at a size nearly equal to that of the bare chip. It is optimal for devices that require high-density mounting, such as mobile phones

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- *2 ŃSDL
- A high-speed differential serial transmission technology developed by ROHM for mobile phones featuring low power consumption and low noise.
- *3 QVGA (Quarter Video Graphics Array) Specifies a resolution of 320 x 240 pixels
- *4 Gate driver
- LSI that drives the TFT LCD Gate and Bus lines.

*5 Source drive

ty.

- LSI that drives the TFT LCD Source and Bus lines (Drain)
- *6 Serial transmission technology
- A data transmission method where all data bits are transmitted consecutively on one line *7 Near edge structure
- Structure where the resistive element is placed very close to the edge, ensuring straight path printing even with thick media
- *8 Remote control receiver modules
- Converts infrared rays into electronic signals *9 IrDA
- Infrared data communication standard.