Divisional Review

IC (Integrated Circuit) Field: Overview

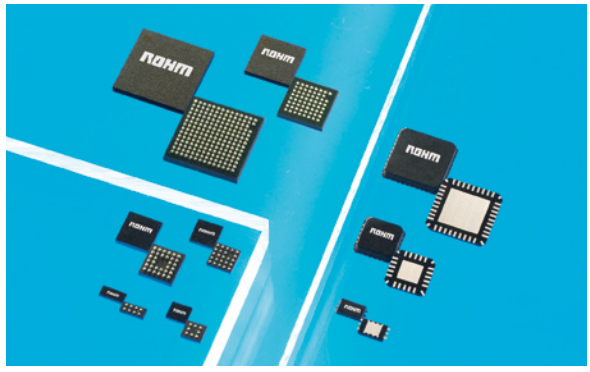
Power ICs

ROHM is continually working to strengthen and broaden its extensive power product lineup through the pursuit of power technology and by integrating disparate technical fields. Applications currently being expanded and improved upon include backlight inverter driver ICs for LCD TVs and power source ICs for gradient control. The adoption of new power supply solutions for automotive applications and driver ICs has begun to intensify with increased requirements for greater efficiency and performance. Product development is being implemented on ROHM's lineup for digital cameras and mobile phones by adding functionality to power blocks, such as USB charge protection.

The demand for motor drivers for office equipment, (i.e. fan motor drivers) continues to be high, while multichannel camera lens drivers, including those for zoom, autofocus, jitter correction in digital cameras and camera-equipped mobile phones, have been well-received in the marketplace. ROHM is also expanding its lineup of H-bridge and stepping motor drivers to include both standard and custom lineups.

Custom ICs

ROHM custom ICs contribute to device differentiation and the creation of novel applications through utilization of proprietary element technology. A unique product development system makes it easy to fulfill custom IC development orders. ROHM enjoys a well-deserved reputation for providing optimized state-of-the-art solutions that meet the demands of set engineers in the communications and audio sectors. Extensive experience in the high frequency field enables the development of products compatible with virtually any specification while ensuring support for customer-defined components such as antennas and AFEs. This custom design flexibility extends from single chips to black boxes that incorporate ROHM's core technology, including hard macrocells utilizing user-defined logic circuits and software as well as standard IP such as ARM processors. At ROHM we are further differentiating ourselves from the competition as a top manufacturer of custom ICs by providing direct support from our circuit design engineers for seamless communication.



ASSP and General Purpose ICs

Developing a more sophisticated and diverse lineup of analog and digital sound processors (ASP/DSP) has resulted in wide popularity in the automotive audio and home theater fields, while innovations in the video device sector have engendered high-speed data communications technology overdrive processors and LVDS/HDMI transceivers optimized for thin-screen televisions. Class D amplifiers, a key component for energy saving in audio systems, continue to evolve, along with SATA-PATA conversion ICs for wireless LANs and storage devices and high-speed MSDL and MDDI data interfaces for mobile phones.

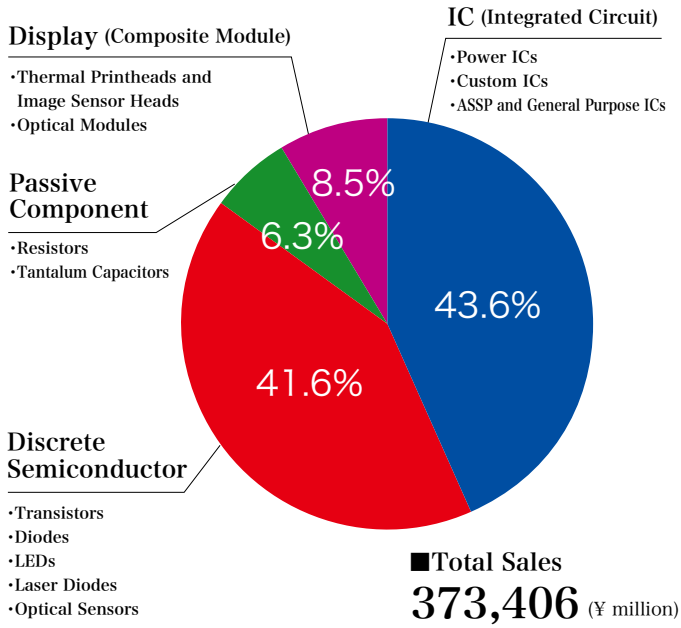
ROHM sensors, including Hall, temperature, brightness, and capacitive touch sensors, are renowned for their high quality and reliability and continue to command a large market share. ROHM high capacity (128k/256kbit) EEPROMs, featuring a unique double-cell structure that ensures a high degree of reliability through redundant operation, have seen widespread use in digital home appliances and automotive applications.

System Technology and SIPs

Implementing unique IP design automation has drastically improved the capability to respond to customer demands, while mass production of 90nm generation ICs utilizing 300mm wafers and mixed signal BiCDMOS processes mounted on power DMOS using 350nm wafers enable the production of IC solutions a class apart.

Package technology incorporating the concept of 'higher added value' has led to the development of more sophisticated wafer-level CSPs featuring greater power capability in a smaller form factor. In addition, a new type of baseband IC for wireless LANs is offered that features a new SIP (System In Package) configuration integrating an RF chip, power source, and EEPROM into a single module. High reliability custom modules for automotive use are also on the rise, along with optimized IC solutions built completely in-house, from the manufacture of wafers, masks, molds, and lead frames from ingots to final inspection and taping, that ensure an unparalleled level of reliability.

Sales by Product Category



■Total Sales
373,406 (¥ million)

■IC (Integrated Circuit)

	sales (¥ million)	% of net sales	% change from previous year
2008	162,940	43.6	-6.1
2007	173,442	43.9	2.0
2006	170,088	43.9	7.0
2005	159,022	43.1	2.3
2004	155,447	43.7	-2.5

■Discrete Semiconductor

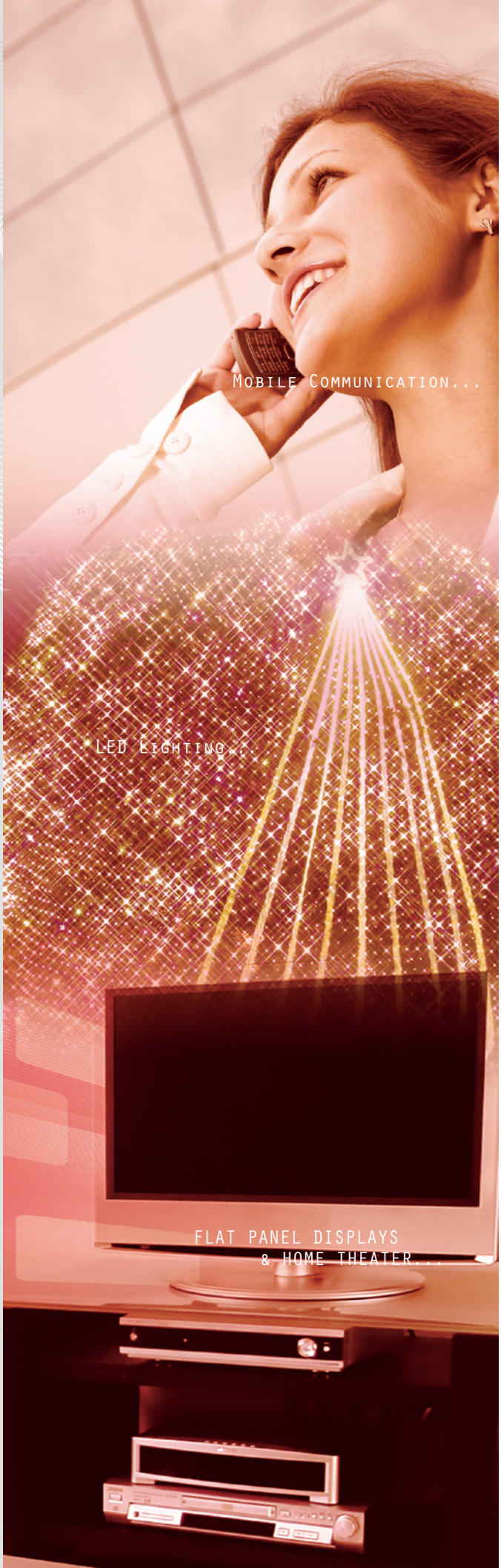
	sales (¥ million)	% of net sales	% change from previous year
2008	155,469	41.6	-0.7
2007	156,536	39.6	3.9
2006	150,636	38.8	6.2
2005	141,788	38.4	2.0
2004	139,009	39.1	2.0

■Passive Component

	sales (¥ million)	% of net sales	% change from previous year
2008	23,446	6.3	-5.2
2007	24,735	6.3	-1.1
2006	24,998	6.4	5.9
2005	23,610	6.4	-4.0
2004	24,601	6.9	-0.4

■Display (Composite Module)

	sales (¥ million)	% of net sales	% change from previous year
2008	31,550	8.5	-21.8
2007	40,369	10.2	-4.0
2006	42,068	10.9	-5.7
2005	44,604	12.1	22.0
2004	36,573	10.3	22.3



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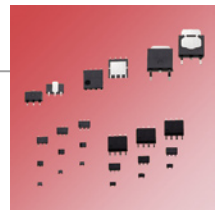
Discrete Semiconductor Field: Overview

Transistors



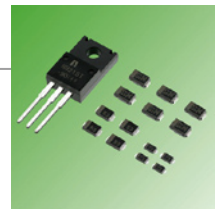
In the small signal field ROHM offers the ECOMOS™ series of low voltage drive (<1.5V), low ON-resistance MOSFETs specifically designed to reduce power consumption in compact portable devices. In addition, two new package types have been added to the popular bipolar lineup. Both the UMT (2.0 × 2.1mm) and EMT (1.6 × 1.6mm) feature flat leads, which is expected to bolster sales in the compact transistor market.

ROHM medium power MOSFETs are available in the high performance MPT6 package size – 40% smaller than conventional surface mount products – meeting the needs of motor drivers and DC/DC converters.

New developments have been made in the power MOSFET sector, including high speed switching, high voltage resistance MOSFETs for plasma TVs and gaming devices, as well as a compact, thin package (TCPT3) compatible with currents above 30A.

ROHM continues to develop new technologies and sophisticated products in order to expand its already considerable share in the transistor market.

Diodes



Recent diode developments include a new lineup of ultra-high performance fast recovery diodes (FRDs) for thin screen TVs – well-regarded for their high speed and low VF – as well as power diodes, including Schottky barrier diodes (SBDs) featuring unprecedented voltage resistance levels. The automotive industry has been driving the demand for not only for these high voltage resistance SBDs but for compact, high surge resistance rectifying diodes as well.

Development and mass production of the compact small signal diode – a new class of diodes in the 0603 package size (the industry's smallest) – has stimulated new demand in mobile phones and portable music players. In addition, novel bidirectional Zener diodes utilizing a new type of surge-absorbing element are available in a wide range of voltages for broad compatibility, from mobile phones to industrial equipment and automotive sets.

Finally, silicon carbide (SiC) diodes, jointly developed with Nissan Motor Corp., have achieved a level of functionality and performance exceeding that of conventional silicon elements, with a high operating temperature range, high avalanche resistance, and large current capability, making them ideal for electric car applications.

LEDs

In the LED sector ROHM offers the PICOLED™ series, the most compact, thinnest LEDs on the market. Other products receiving much acclaim are high heat dissipation PSML package medium power 0.7W class LEDs and SML-M1/T1 series compact chip reflector LEDs featuring 1.5 times the brightness of conventional mold type products. In addition, combining device technologies for wavelength focusing during chip formation and for color calibration has made it possible to reproduce a wider range of colors, including previously problematic intermediate tones. These developments make ROHM ideally poised to meet the growing need for brighter, more compact LEDs in the rapidly growing markets of illumination devices, automotive electronics, and liquid crystal backlights.

Laser Diodes

ROHM laser diodes are mounted in high-quality laser devices developed in-house using advanced compound semiconductor technology. Popular in the optical disk and laser printer markets, the lineup includes infrared beam laser diodes for CDs and printers, red lasers for DVDs, and high output laser diodes for burning CDs and DVDs. Multiple package types are available in addition to the standard 5.6mm metal type, including units with a high thermal dissipation frame for high output applications.

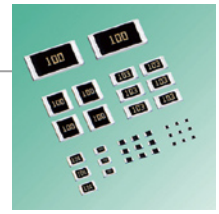
Optical Sensors

The use of photointerrupters for motion detection is increasing in a wider range of applications, such as compact rotating mechatronic devices and equipment for position/size/direction/pressure sensing. Original semiconductor and package technologies were utilized to integrate infrared photodiodes and phototransistors into the smallest surface mount package in the industry – ideal for compact digital cameras and mobile phones. ROHM offers a broad array of sensor products, including photoreflector-equipped units that combine optical emitting and receiving elements and 4-way directional sensors ideal for digital cameras.

Divisional Review

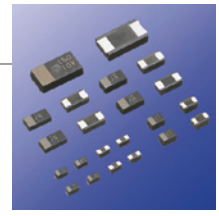
Passive Component Field: Overview

Resistors



ROHM has added to its renowned lineup of resistors with more compact, high performance, high reliability chip resistors and resistor arrays. New additions include ultra-low ohmic 1608-size, 0.25W PMR03 series units, anti-surge models, anti-sulfuration resistors, high voltage resistance products, and the smallest (0402 size) chip resistors in the industry.

Tantalum Capacitors



ROHM tantalum capacitors feature superior compactness, thinness, and capacitance compared with conventional products, making them ideal for portable audio players, mobile phones, digital cameras, and other compact electronic devices. New products include bottom electrode units, next-generation U case 1005 (1.0mm × 0.5mm) size models, and compact, thin organic tantalum capacitors featuring low ESR and large capacitance. ROHM utilizes the most advanced processes and equipment built entirely in-house to deliver products featuring unmatched reliability and quality.

Divisional Review

Display (Composite Module) Field: Overview

Thermal Printheads and Image Sensor Heads

The demand for POS terminals and kiosks continue to grow, requiring a greater number of high speed, high resolution thermal printheads. To meet this need ROHM has developed ultra-high performance printheads utilizing a proprietary step-free structure for greater reliability, improved resolution, and longer life. Additional features include high speed operation and high voltage resistance, making them ideal for bar code printers, package printers, and other high volume printing applications.

New innovations have been made in the contact image sensor (CIS) field, including compact 2-inch units for card reading, making ROHM ideally poised to meet the growing demand for small CISs in the security authentication field.

Optical Modules

ROHM continues to develop LED dot matrix modules that push the limits of functionality in the information display sector by utilizing the most advanced LED and process technologies. Ultra-fine pitch dot matrix modules are now available that are not only ideal for standard applications but for new applications not previously compatible with LED displays due to exceedingly strict requirements for compactness and precision.