

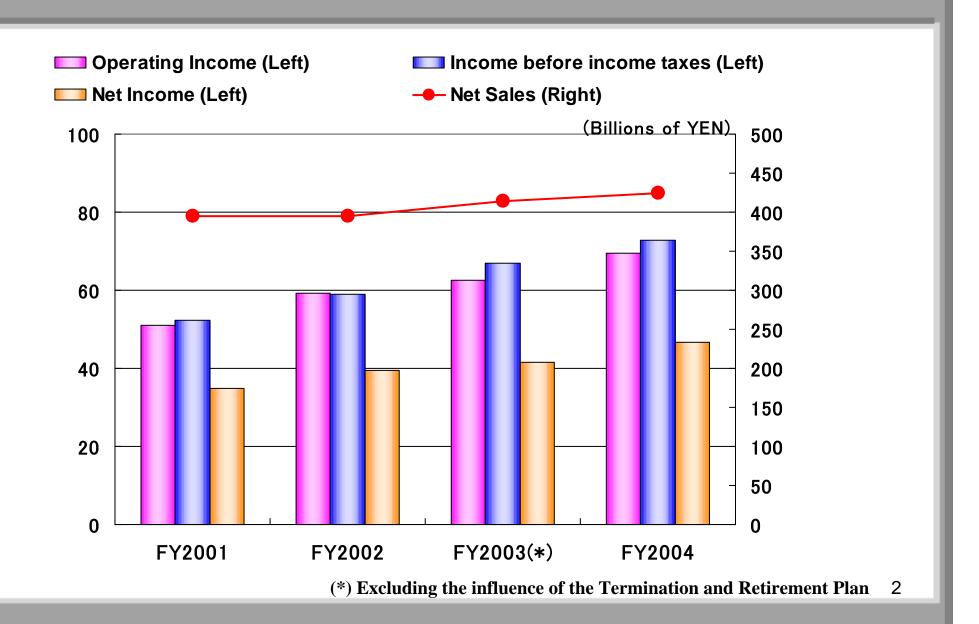
# INFORMATION MEETING 2005



Murata Manufacturing Co., Ltd.

#### **Business Performance Overview FY2004**





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#### (Billions of YEN, %)

	FY2003		FY2004		Growth	
	Amount	%	Amount	%	Amount	%
Net sales	414.2	100.0	424.5	100.0	+10.2	+2.5
Operating income	74.2	17.9	69.5	16.4	(4.7)	(6.3)
Income before income taxes	78.7	19.0	72.9	17.2	(5.8)	(7.3)
Net income	48.5	11.7	46.6	11.0	(2.0)	(4.0)

#### <Excluding the influence of the Termination and Retirement Plan in FY2003>

	FY2003		FY2004		Growth	
	Amount	%	Amount	%	Amount	%
Operating income	62.5	15.1	69.5	16.4	+7.0	+11.2
Income before income taxes	67.0	16.2	72.9	17.2	+5.9	+8.8

#### Electronic Equipment Market in FY2005



- We are not expecting as much growth in final demand as in the previous term
- We anticipate component prices to continue declining However...
  - •Mobile Phone Market 3G phones and Bluetooth equipped models
  - •Personal Computer Market MPUs with multiple cores
  - •Digital AV Equipment Market LCD-TVs, PDP-TVs, DVD recorders
  - •Automotive Electronic Equipment Market Further expansion is expected



We plan to expand our business by large-capacitance MLCCs, small MLCCs, application specific MLCCs, Bluetooth® modules, power supplies and sensors.

(Note) Plantage application of Plantage SIC Inc. U.S.A.

#### **Business Performance Forecast for FY2005**



(Billions of YEN, %)

	1H FY2005		2H FY2005		FY2005	
	Amount	% (*1)	Amount	% (*1)	Amount	% (*1)
Net sales	215.0	(1.5)	230.0	+11.6	445.0	+4.8
Gross income	86.0	(2.9)	90.5	+12.7	176.5	+4.5
Operating income	34.5	(9.6)	40.5	+29.2	75.0	+7.9
Income before income taxes	36.0	(9.2)	42.0	+26.3	78.0	+7.0
Net income	22.5	(9.5)	26.5	+22.0	49.0	+5.2

<sup>\*1</sup> Growth ratio against the same term of the previous year

<sup>\*2</sup> Sales forecast by quarter [Q1:107.0, Q2:108.0, Q3:118.0, Q4:112.0] (Billions of YEN)

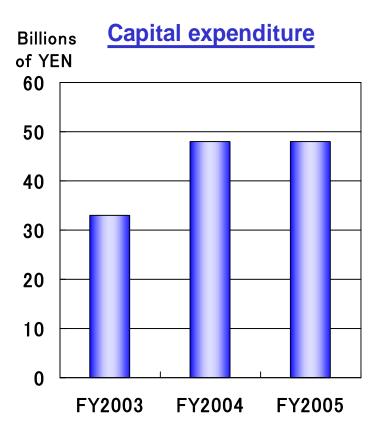
#### Capital expenditures



#### ⟨*FY2005 Plan*⟩

#### 48 billion yen

- the same level as in FY2004
- Production capacity increase and cost reduction
- R&D to create new products
- New building and production line of MLCCs in our Wuxi plant in China



#### **Capacitors**

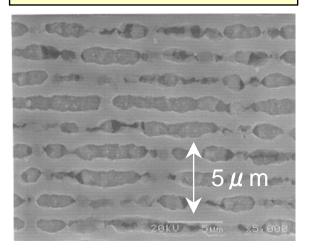


#### Large-capacitance MLCCs

- Established mass-production technology for thin layer dielectrics
  - Commercialized large-capacitance MLCCs using leading-edge 1.0 μ m thin-layer dielectrics
  - Sales for 1608 size  $10 \mu$  F products and 2012 size  $22 \mu$  F products are rapidly increasing

We have strengthened the lineup of compact and large-capacitance MLCCs

#### 1.0 $\mu$ m thin-layer dielectrics

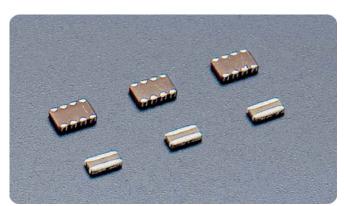


- Promoting the replacement for electrolytic capacitors
- Increase of demand due to the trend toward miniaturization and functional sophistication of mobile equipment, PCs, digital AV equipment and game machines



# Application-specific capacitors

- Low-ESL type capacitors
  - We hold a large share in application—specific capacitors among the limited number of capacitor manufacturers
  - Due to the multi-core trend in MPUs, demand for low-ESL type and large-capacitance MLCCs are projected to increase
  - Expansion of markets outside PCs,
     such as game machines and servers



Chip Monolithic Ceramic Capacitors (low-inductance type)8

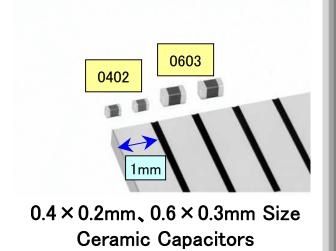
#### **Capacitors**



#### Small size MLCCs

#### • "0603" size

- Adopted for use in power amplifier module
- Expansion of applications such as mobile phone main boards, digital still cameras, and portable game machines
- The unit sales in FY2004 doubled compared with the previous term



#### • "0402" size

- Murata was the first in the industry to commercialize
- Increasingly being used in mobile phone power amplifier modules

# Bluetooth Module



#### Bluetooth<sup>®</sup> Market

The ratio of Bluetooth<sup>®</sup> equipped phones among mobile phones will increase from about 10% in 2H FY2004 to about 20% by 2H FY2005

#### Bluetooth<sup>®</sup> Modules

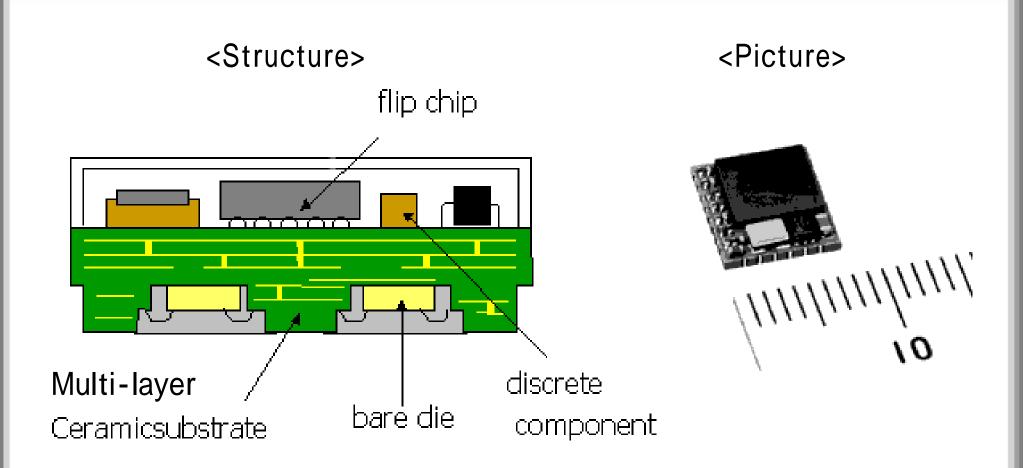
- Recently more of the major mobile phone manufactures have been adopting
- The ratio of products made with LTCC, for which raw materials are manufactured internally, will increase greatly in 2H FY2005



We plan a large expansion for Bluetooth Modules in FY2005

# B Lie tooth Module





#### Sensor-Related Products



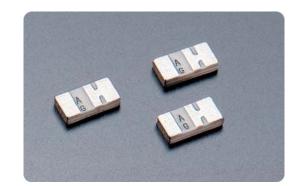
#### • GYROSTAR

 Increasing in the digital still-camera market as an image stabilization component



#### Shock sensor

- Sales for vibration detection are growing with the expansion of the HDD-equipped mobile market
- A very high share in the market
- We possess effective patents





We plan an over 10% increase in sales for sensor products in FY2005

#### **Power Supplies**



- Commercialized energy saving, highly efficient, compact, low profile power supplies for FAX and copying machine by using our circuit design and production technologies
- Rapidly gaining sales for the growing digital equipment such as PDPs and LCDs

We plan to strengthen the power supply business further by applying our accumulated circuit design technology and by utilizing outside resources

# Noise suppression components



## Increasing demand for noise suppression products

The trend towards digitalization and functional sophistication has resulted in an increased level of electronic noise that is detrimental to the performance of electronic equipment



• We provide a wide variety of noise suppression components applicable to various circuits such as;

chip ferrite beads, chip common-mode choke coils and chip coils (winding type, multi-layer type, film type)

Sales of our noise suppression components have steadily grown in the past few years

# Noise suppression components



#### Noise suppression component products

- Chip ferrite bead EMI filters (BLM)
  - -A DVD recorder uses about 70 units
- Chip three-terminal capacitors (NFM)
  - -Having special noise suppression characteristics for power supply lines
  - -A DVD recorder uses about 10 units
- Chip coils (LQW/LQG/LQP)
  - -A mobile phone requires about 30 units
- Chip common-mode choke coils (DCC)
  - -Effectively removing noise generated by a high-speed interface such as USB 2.0



**BLM Series** 



NFM21P Series







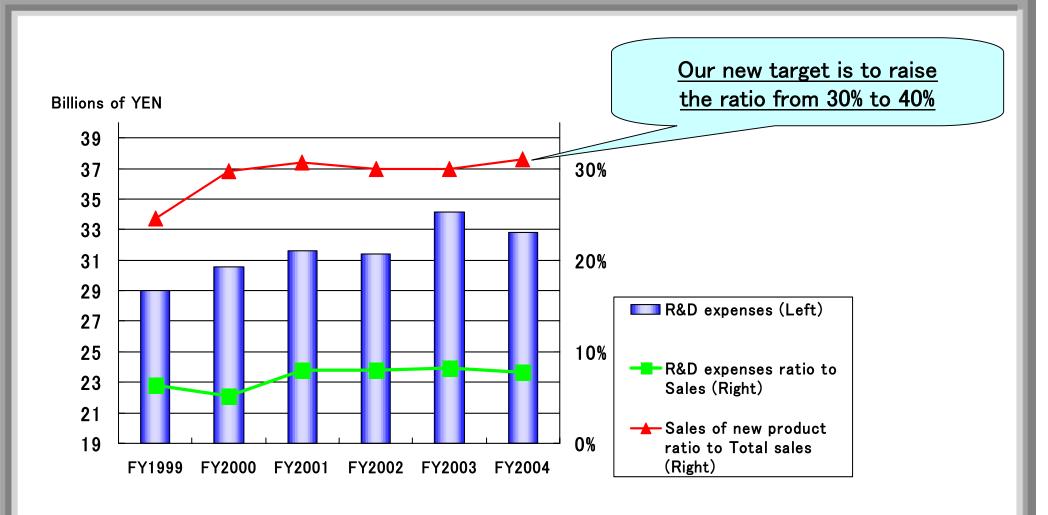
LQW/LQG/LQP Series



DLP/DLW31S Series

# R&D Expenses





\*R&D expenses in FY2003 includes 1,413 million yen related to the Termination and Retirement Plan



# Expansion of the wireless telecommunication market with the advent of the "ubiquitous network society"

- Wireless telecommunication equipment to realize mobile networking has already created a huge market
- In the future, the wireless telecommunication technology should be used for all kinds of situations from automobiles to home security



As we advance into the ubiquitous network society, electronic technology is expected to evolve and grow further

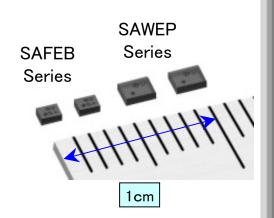


# A strong advantage in the wireless telecommunication market

-Capacitors and noise suppression components

#### Our share of SAW filter is increasing

 Commercialization of the smallest class SAW filters by applying chip-size packaging (CSP) technology



# Sophistication and downsizing through module products using LTCC

- -Creating high value added Bluetooth modules
- -Commercialized the world's smallest class wireless LAN modules



#### Commercialization of a multi-task communication module

- Information terminals handle a huge amount of data and are equipped with an electronic money feature
- Personal identification technology for security purpose becomes important
- The market volume in the security use including mobile phones is large

The mechanism of the wireless authentication system

Wearable key

Mobile phone

Lock!

ID 12345

Lock!

If the two units separate more than a predetermined distance

Confirmation signal



# Antennas are essential electronic components for wireless telecommunication equipment

- Demand is expected to increase as the market for multi-band mobile phones expands
- We will establish our antenna business, working on main antennas using CERABRID<sup>™</sup>, which is complex dielectric material made from high-frequency dielectric ceramic powder and heat-resistant resin



antenna using CERABRID™

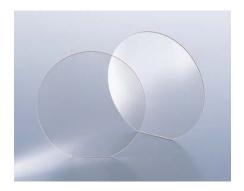
#### Compact digital terrestrial tuner

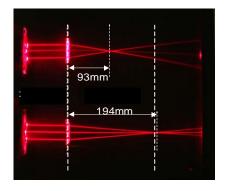
Utilizes our module downsizing technology



We are expanding our activities from microwave technology to millimeter wave technology and the field of optics

Transparent Ceramics (LUMICERA<sup>™</sup>)





Optical Transceiver



#### Automobile electronics



# Our approach to the automobile market

**1**Telecommunication

For car navigation system, Automotive LAN, ETC (Electronic Toll Collection), our existing microwave technology is utilized widely Demand for LTCC circuit boards is also expected to increase

2 Safety

TPMS (Tire Pressure Monitoring System) solutions

**3**Environment

Developing sound velocity sensors for fuel cells and piezoelectric actuators for fuel injection system



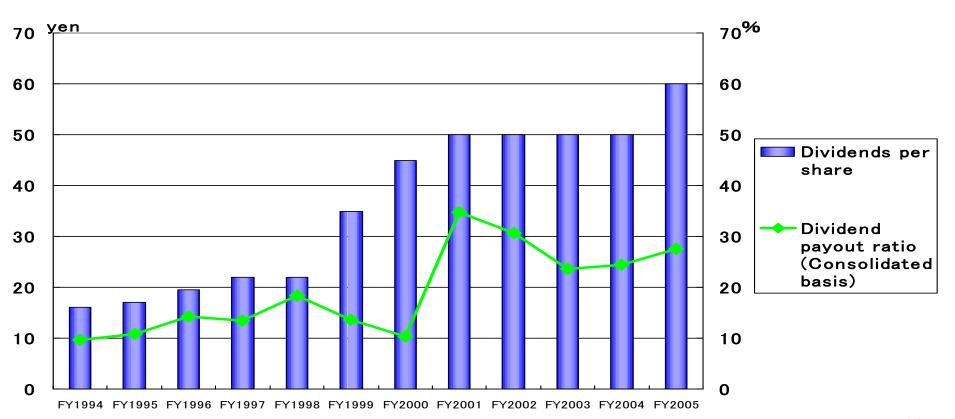
The present sales ratio for the automobile electronics market is 12%. We anticipate further growth in sales through our efforts.

# Dividends (consolidated)



<Dividends per share>

FY1998: 22yen → FY2005:60yen (estimated)



# Share Buy-Back

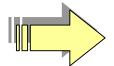


#### Total number of shares and purchase cost

From July 2002 to May 2005

Numbers of Shares
20.6 million shares

Purchase Cost 113.3 billion yen



Canceled 19 million shares

#### The return to shareholders ratio



(Billions of Yen, %)

	FY2002	FY2003	FY2004	Total
a. Net income	¥39.5	¥48.5	¥46.6	¥134.6
b. Share buy-back	¥48.1	¥32.1	¥27.2	¥107.5
c. Dividend	¥11.9	¥11.6	¥11.3	¥34.8
d. Dividend payout ratio (=c/a)	30.6%	23.7%	24.4%	25.9%
e. Share buy-back/ Net income (=b/a)	122.0%	66.2%	58.3%	79.8%
f. The return to shareholders ratio* (=(b+c)/a)	152.6%	89.8%	82.7%	105.7%

<sup>\*</sup>The return to shareholders ratio: The total of dividend and repurchased stock value divided by the net income



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- Murata undertakes no obligation to update the information contained in any portion of these statements.



