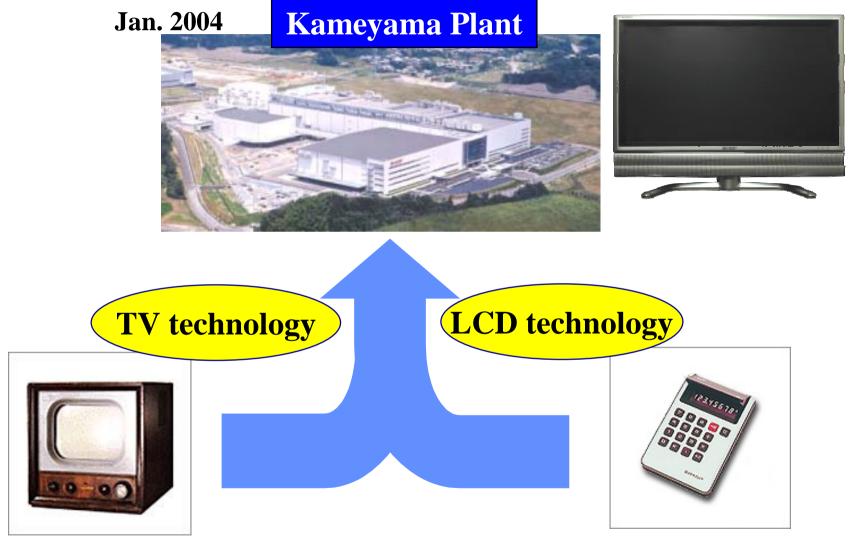
# SHARP Business Strategy 2004

President Katsuhiko Machida

**February 18, 2004** 



### **Integrated LCD TV Plant Goes On Line**



1953: Japan's first TV

1973: World's first calculator with an LCD display



# I. Business Strategy

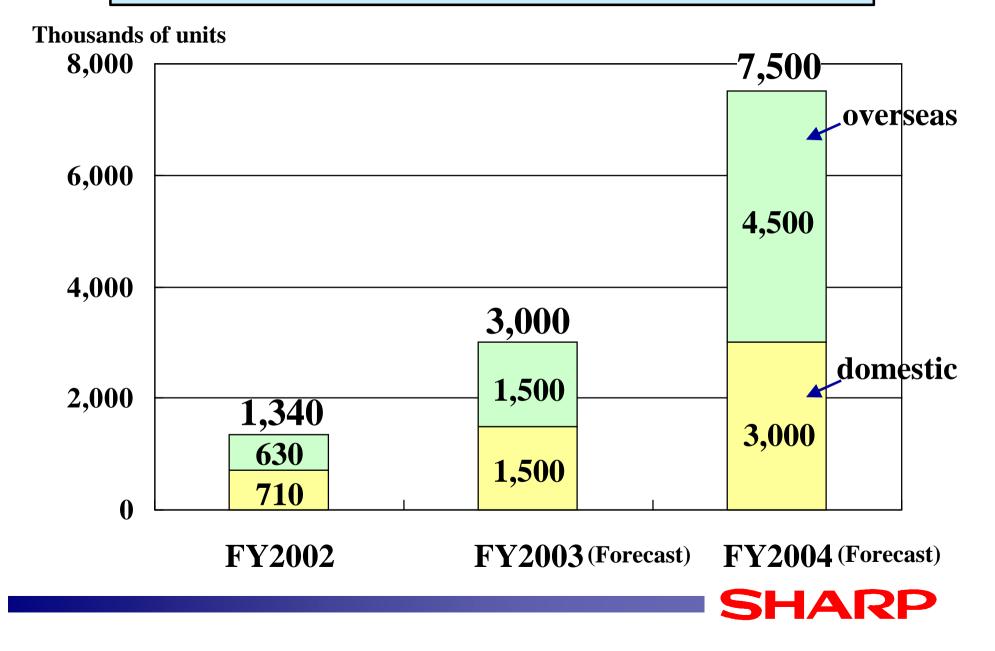


# **Product Business**

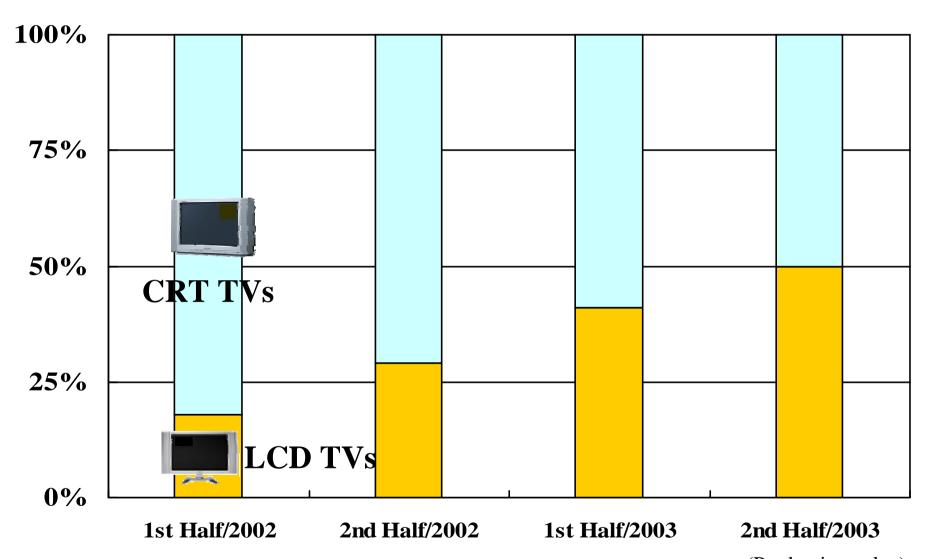
# 1. LCD TVs



## (Industry) Worldwide LCD TV Demand

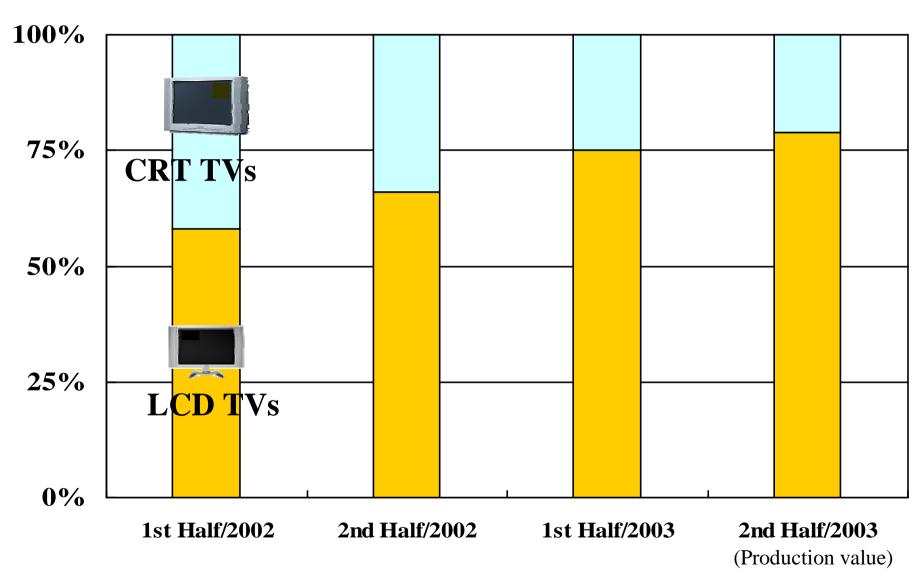


### LCD TV Sales as % of Sharp's Total Overseas TV Sales



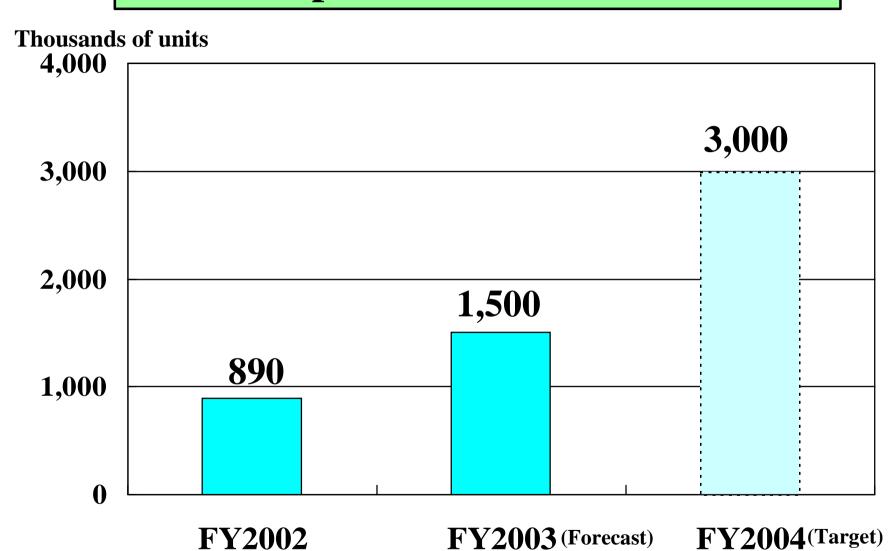


### LCD TV Sales as % of Sharp's Total Domestic TV Sales





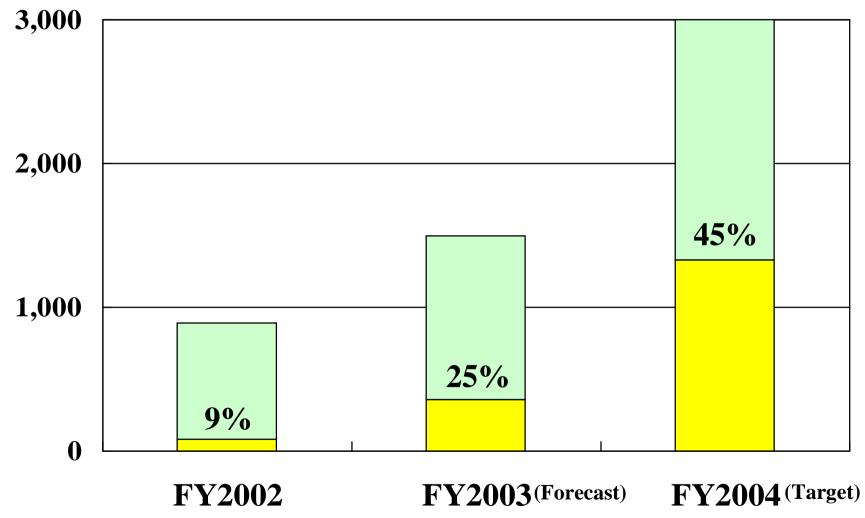
## **Sharp's LCD TV Unit Sales**





### Wide-screen LCD TV over 22 inches as % of Sharp's Total LCD TV Sales







### Sharp's LCD TV Cost Competitiveness

6th generation mother glass (1,500 x 1,800mm)

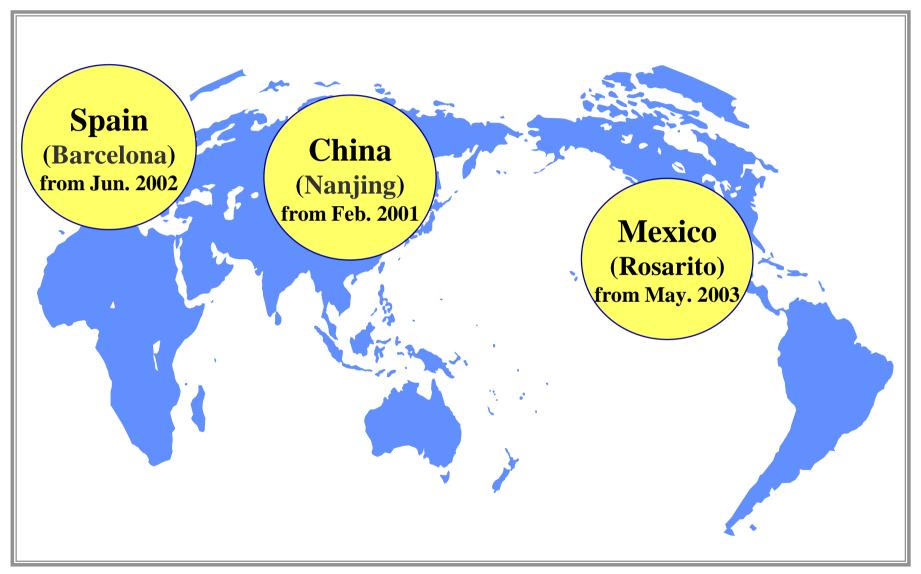
Simplify manufacturing process at the unified production site (from LCD panels to TV sets)

Reduce panel transportation costs at the unified production site

Develop image processing LSI for LCD TVs



## **Sharp's Overseas LCD TV Production**



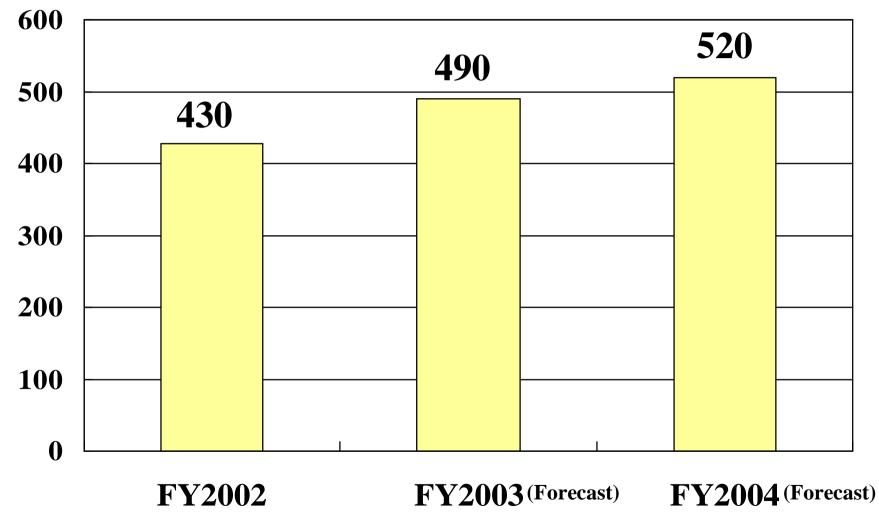


# 2. Mobile Phones



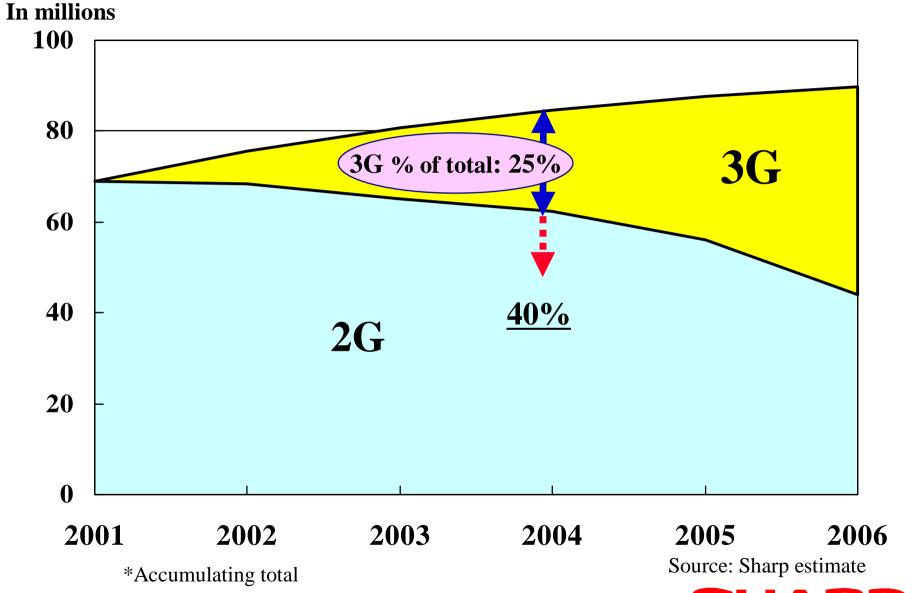
### (Industry) Worldwide Mobile Phone Demand

#### Millions of units





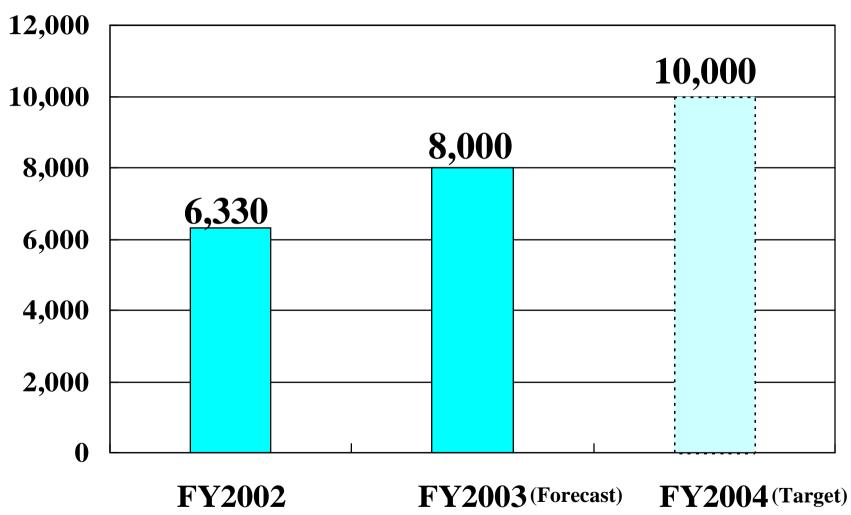
### (Industry) Mobile Phone Subscribers\* by System In Japan





## **Sharp's Mobile Phone Unit Sales**







## Sharp's New 3G Mobile Phones

NTT DoCoMo



SH900i

Compatible with FOMA, which offers users a variety of contents

2.02 Megapixel CCD camera

Vodafone



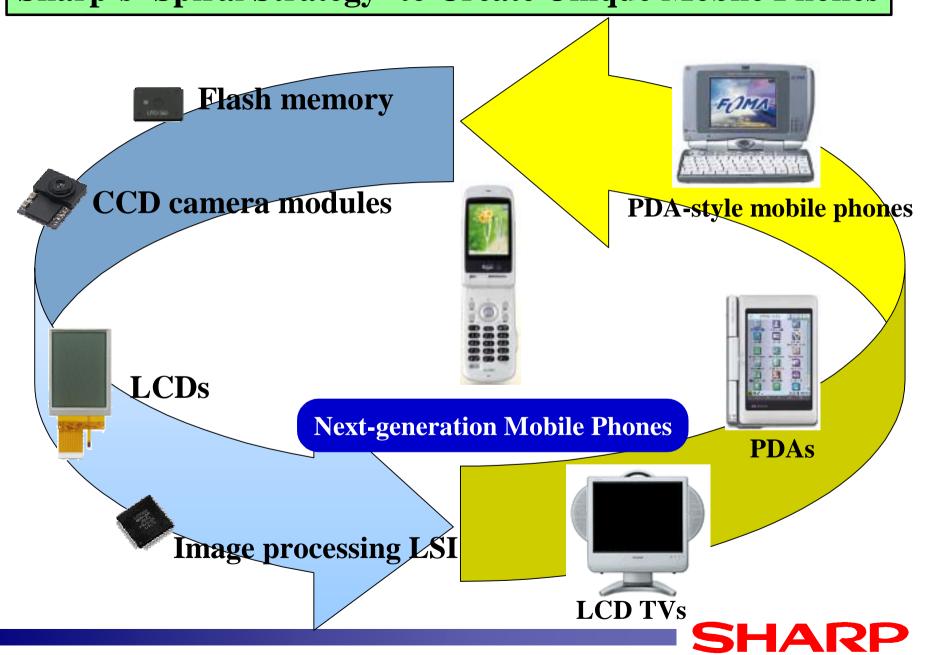
**V801SH** 

Customers can easily send off Megapixel pictures

W-CDMA/GSM-compatible



### Sharp's 'Spiral Strategy' to Create Unique Mobile Phones



## **Evolution of Mobile Phones**

Enhanced AV function

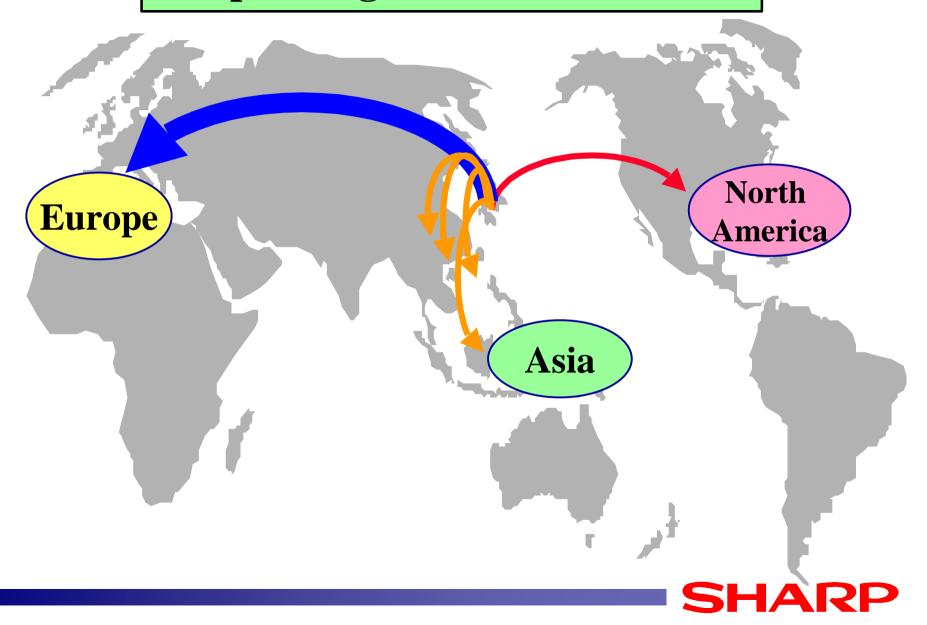
Improved camera function



E-Cash function



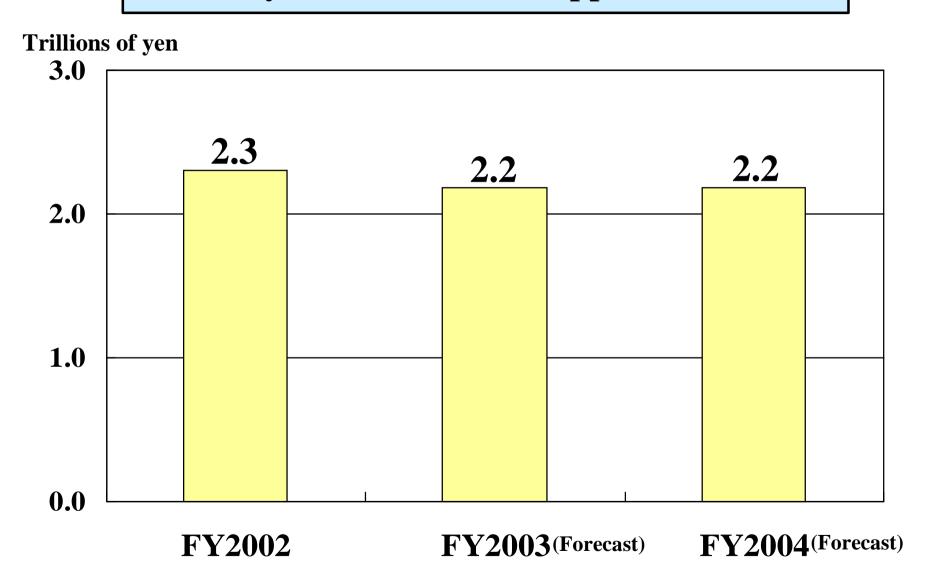
# **Expanding Overseas Business**



# 3. Home Appliances

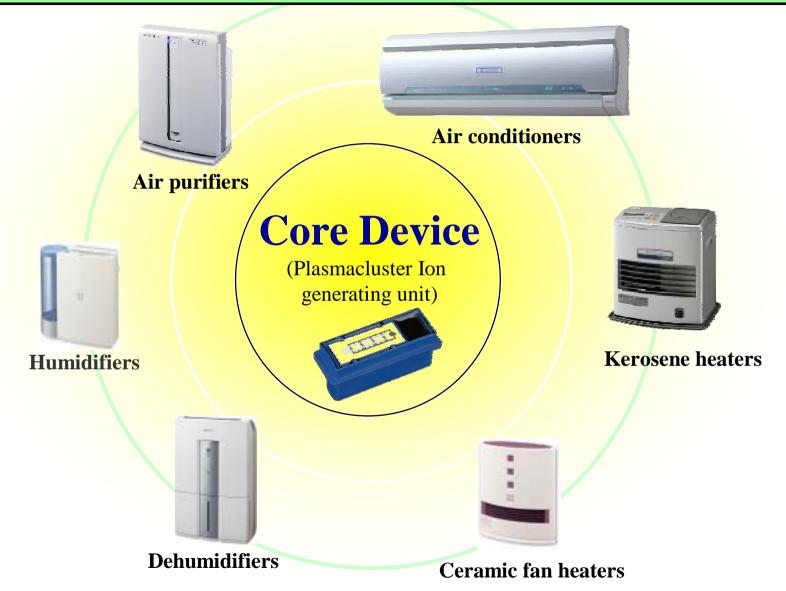


### (Industry) Domestic Home Appliance Demand





### **Sharp's Products incorporating Plasmacluster Ion Technology**





### Plasmacluster Ion Technology at Work in Numerous Industries

#### **INAX**

Lavatory

#### **DENSO**

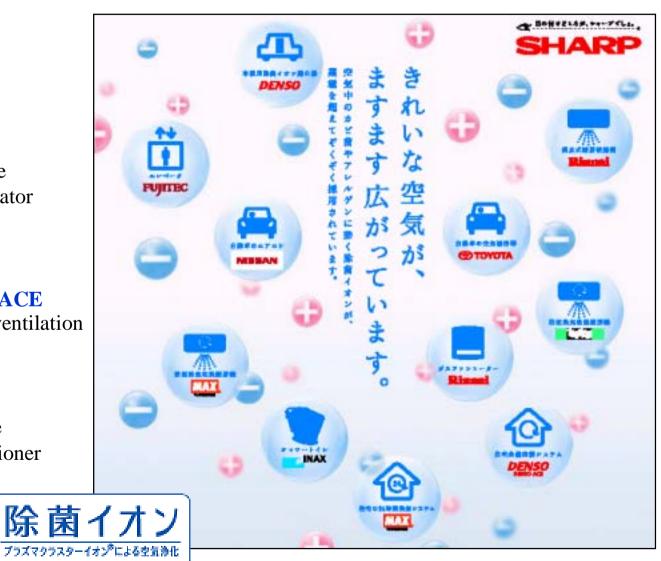
In-vehicle ion generator

#### **DENSO ACE**

24-hour ventilation system

#### **NISSAN**

In-vehicle air conditioner



#### **FUJITEC**

Elevator

#### **MAX**

Bathroom dryer

#### Rinnai

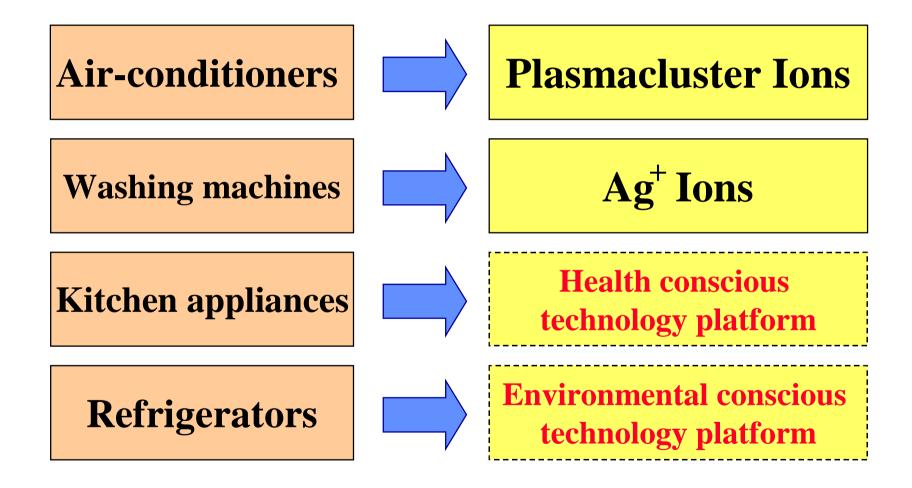
Gas heater



Plasmacluster Ion generating unit



## **Sharp's Unique Electronic Devices**



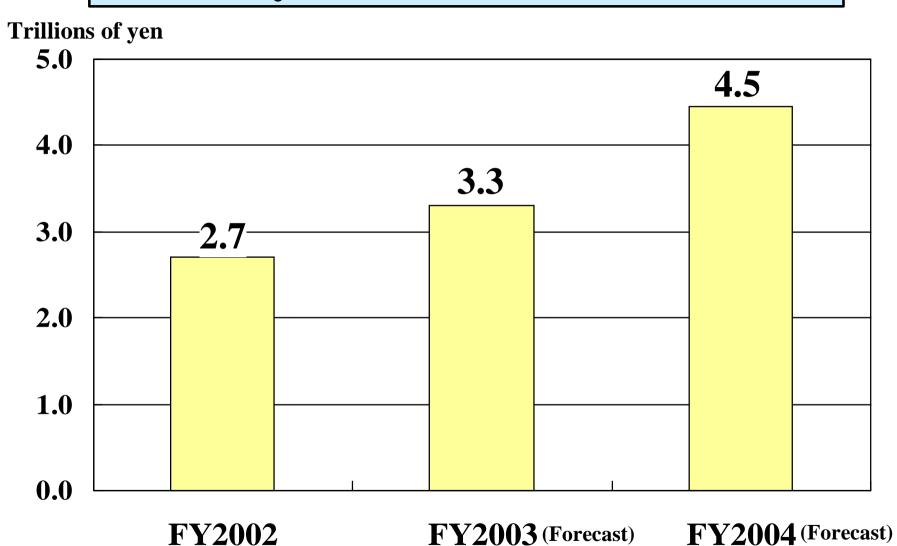


## **Device Business**

# 4. LCDs

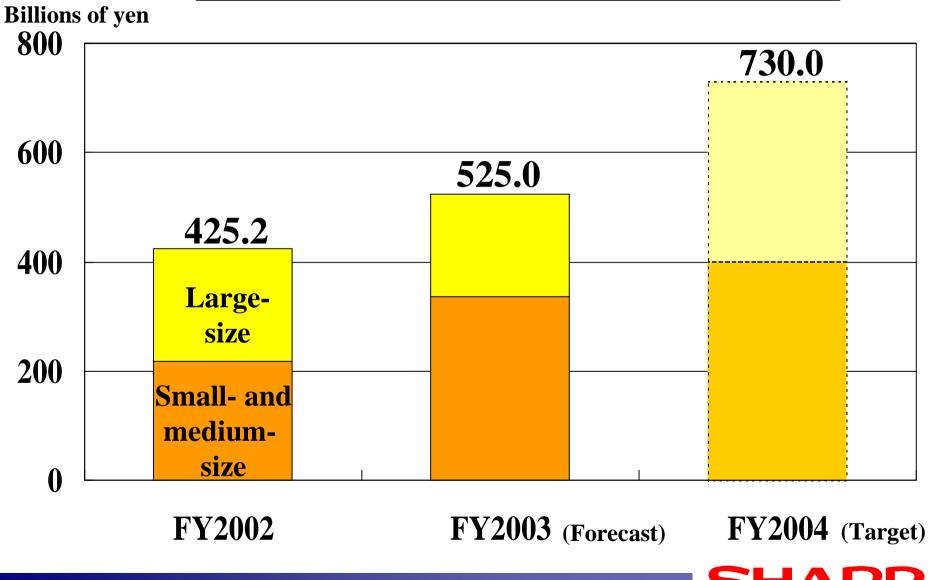


## (Industry) Worldwide LCD Demand



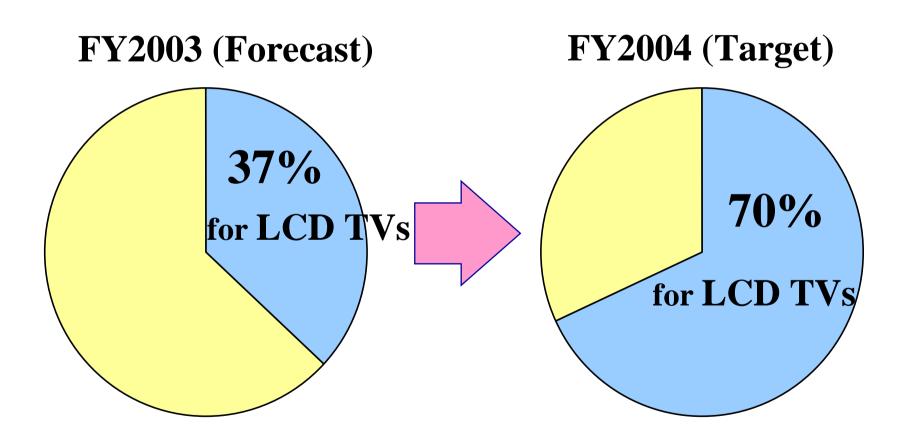


## Sharp's LCD Sales





### Sales of LCD Panels for TVs as % of Sharp's Total Large-size LCD Sales



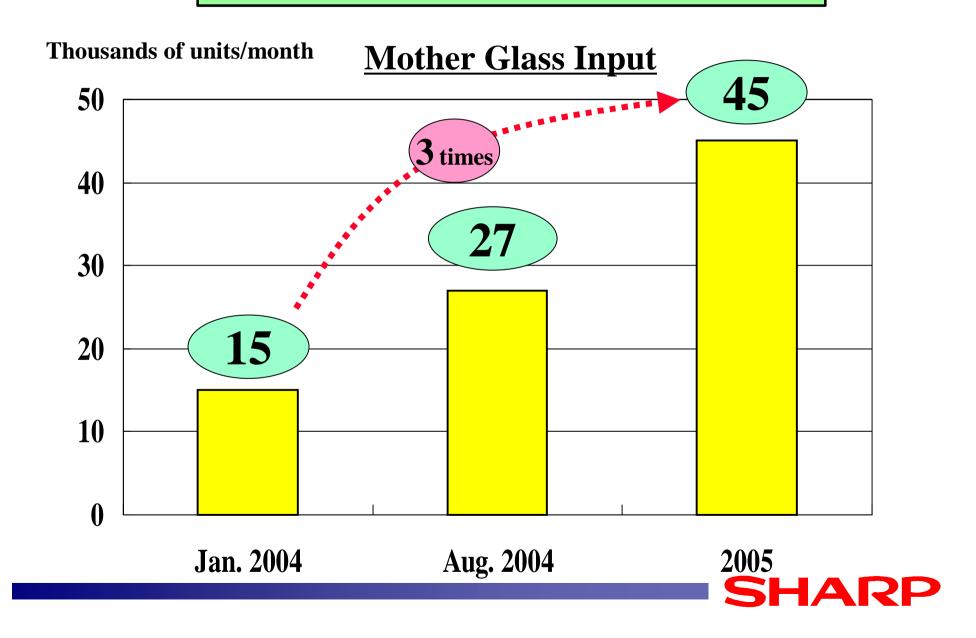
(Production value)



# Large-size LCDs



### **Kameyama Plant Production Capacity**



# Kameyama Plant



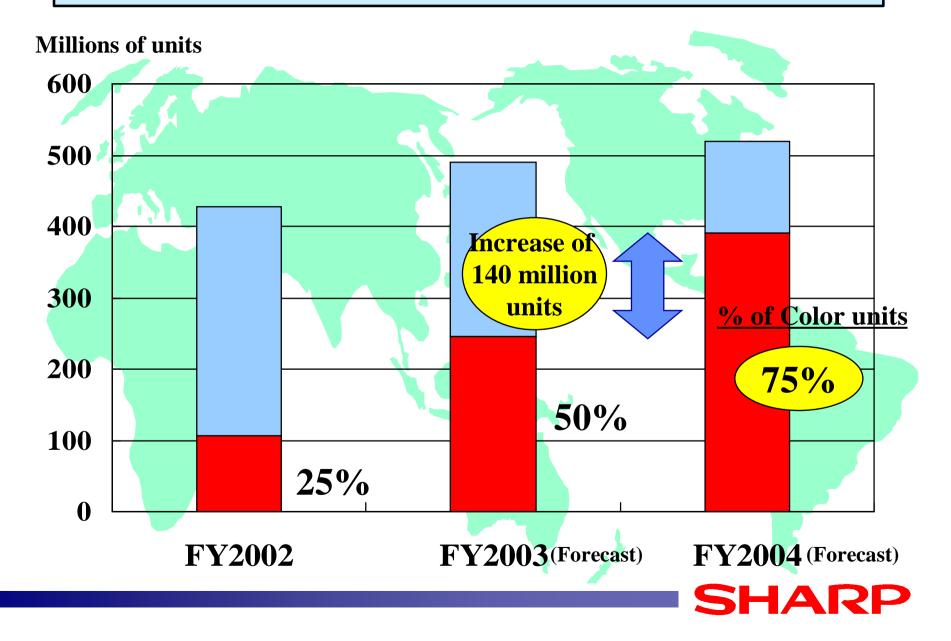
	1st phase	2nd phase	3rd phase
Start of operations	Jan. 2004	Aug. 2004	2005
Mother glass input (accumulated)	15K sheets/month	27K sheets/month	45K sheets/month
<b>Amount of investment</b>	100 Billion yen		50 billion yen
Mother glass size	1,500 x 1,800 mm		



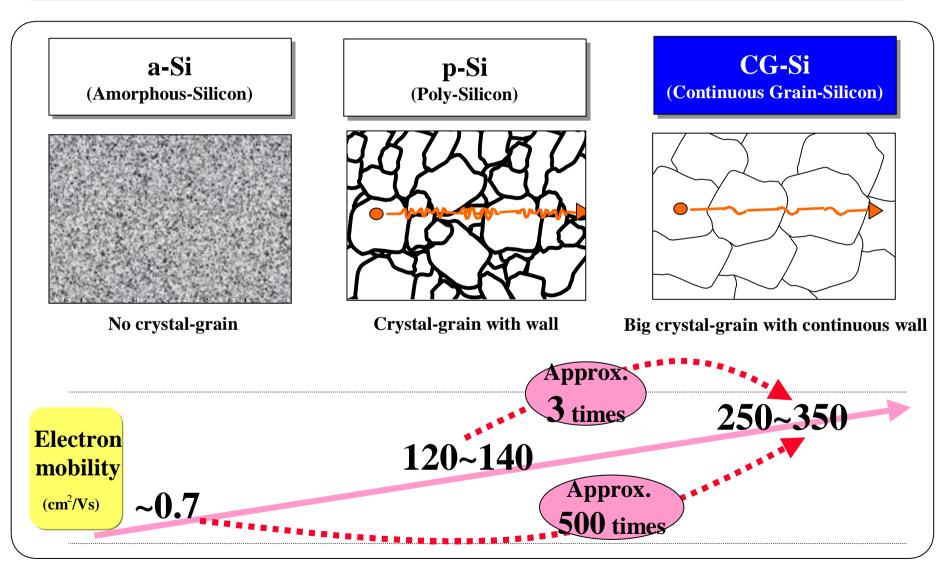
## **Small- and medium-size LCDs**



# (Industry) Worldwide Demand for Color Screen Mobile Phones as % of Total Demand of Mobile Phones



## **High Electron Mobility of Sharp's System LCDs**





## **Integration of peripheral ICs**

"Amorphous Silicon" "System LCDs" **Driver ICs Peripheral** circuits on glass substrate Integration Peripheral circuits Driver/IC **Cont**roller circuit **Power supply circuit** RAM •Thin, light weight •One side input, narrow flame Signal **Peripheral circuitry** Reduction of components **CPU** High reliability



### **Sharp's System LCD Plants**

**Tenri Plant** 







**Tenri Plant** 

Mie No.3 Plant

1st phase

2nd phase

**Start of operations** 

Oct. 2002

Jun. 2003

Mar. 2004

Production capacity\*
(accumulated)

2.5 million units/month

6.5 million units/month

► 12.2 million units/month

**Amount of investment** 

46 billion yen

50 billion yen

42 billion yen

Mother glass size

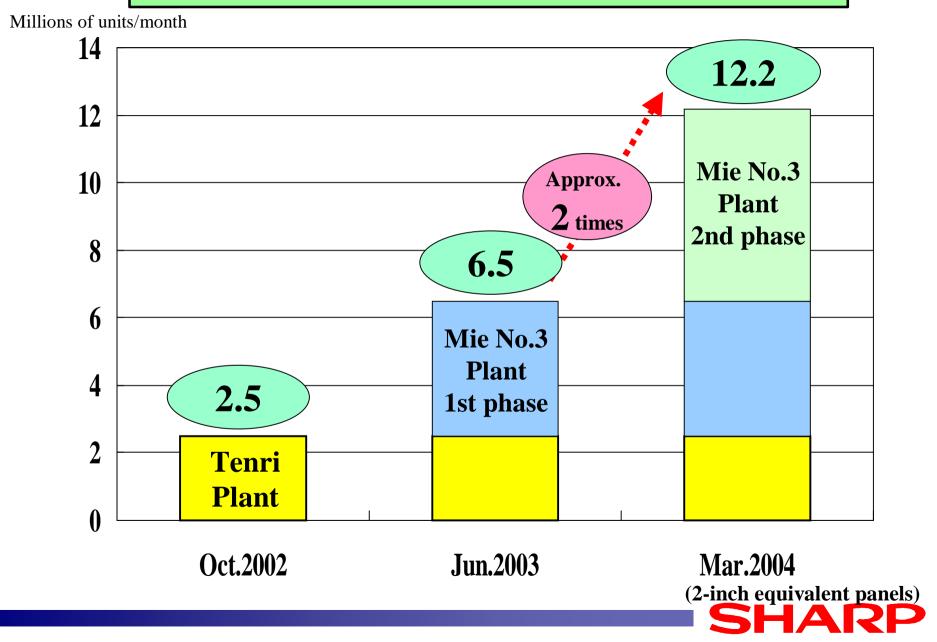
620 x 750 mm

730 x 920 mm

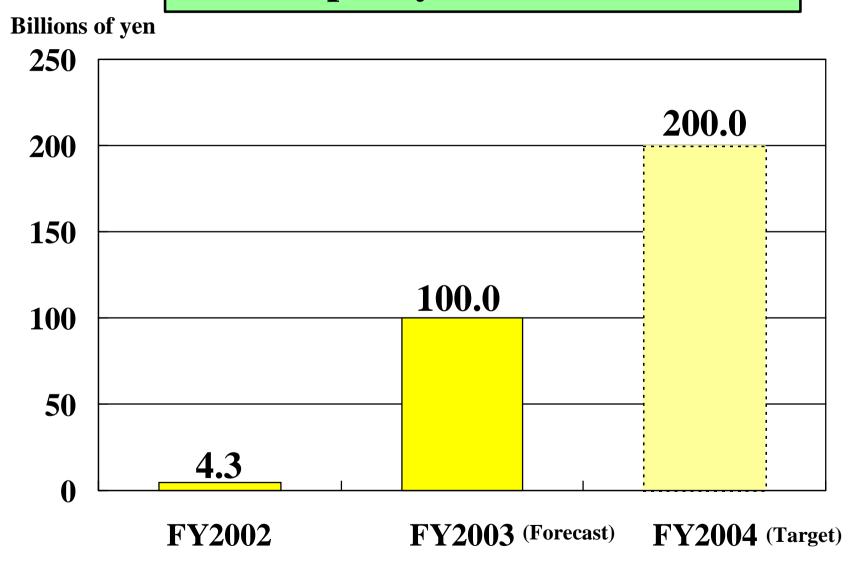
\*2-inch equivalent panels

**SHARP** 

### **Sharp's System LCD Production Capacity**



# **Sharp's System LCD Sales**

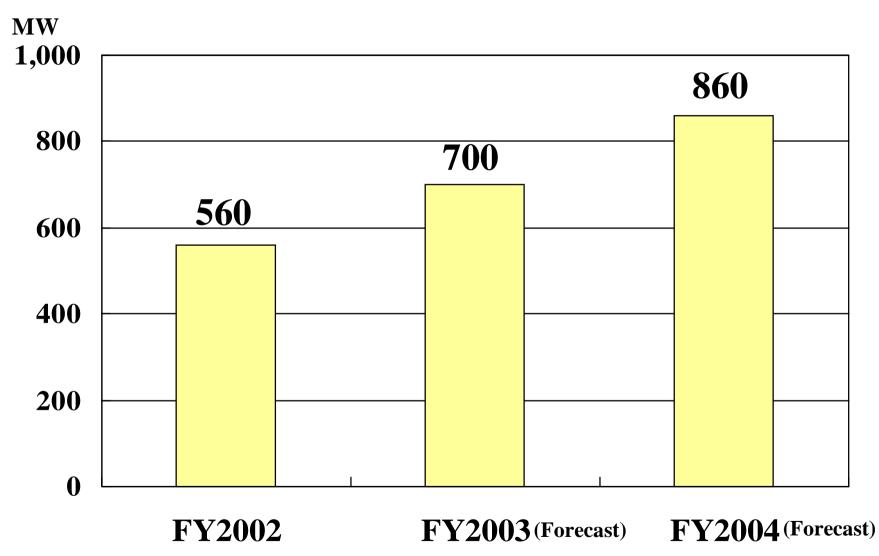




# 5. Photovoltaic Power System



### (Industry) Worldwide Solar Cell Demand

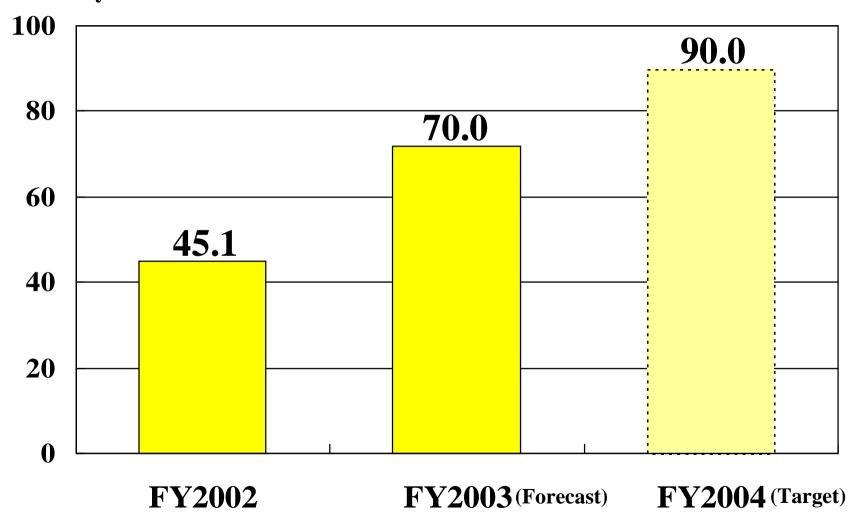


Source: Sharp estimate based on PV NEWS (May 2003)



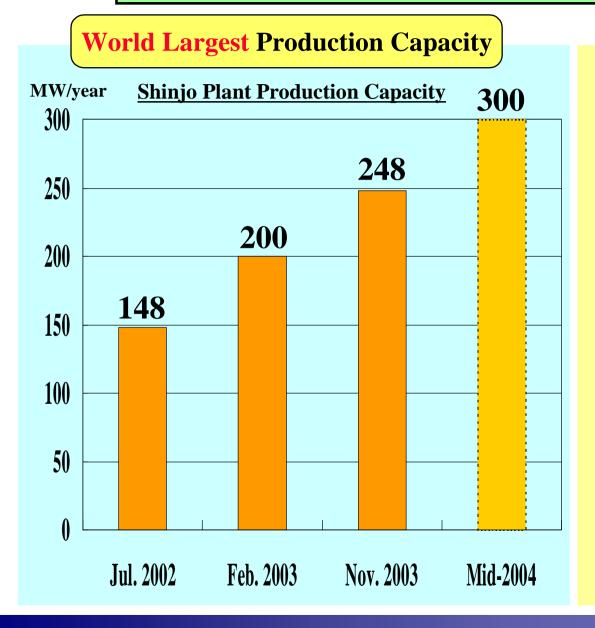
### **Sharp's Solar Cell Sales**







#### Sharp's Advantage



**Most Advanced Technology** 



**Module Conversion Efficiency** 

World Highest\*

17.4%

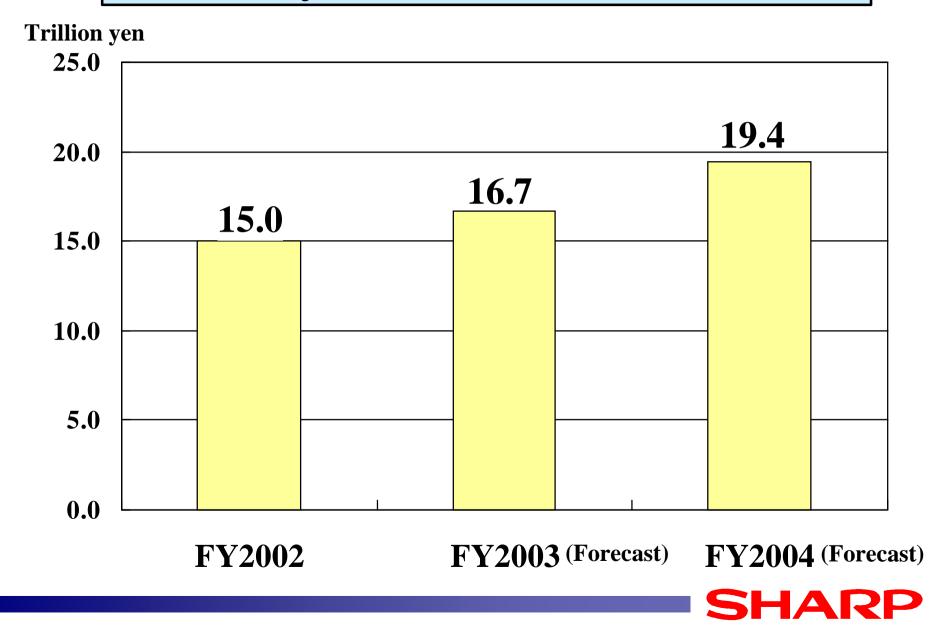
\*As of November 1, 2003



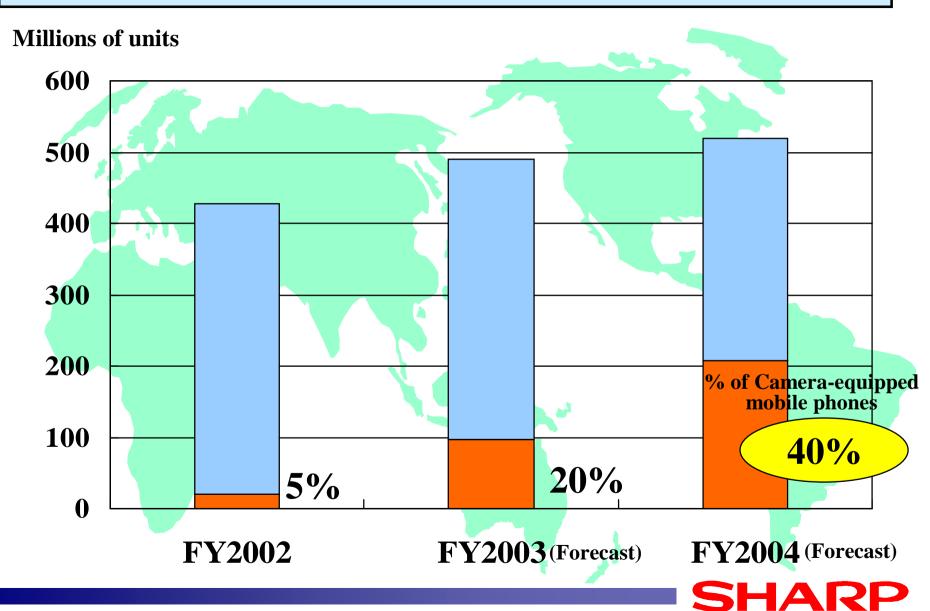
# 6. ICs



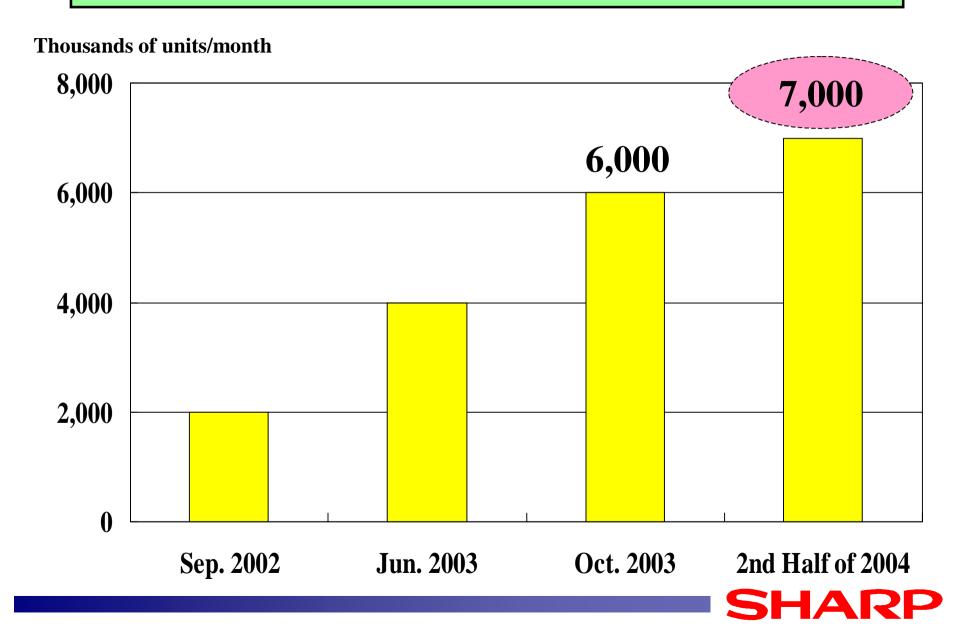
# (Industry) Worldwide IC Demand



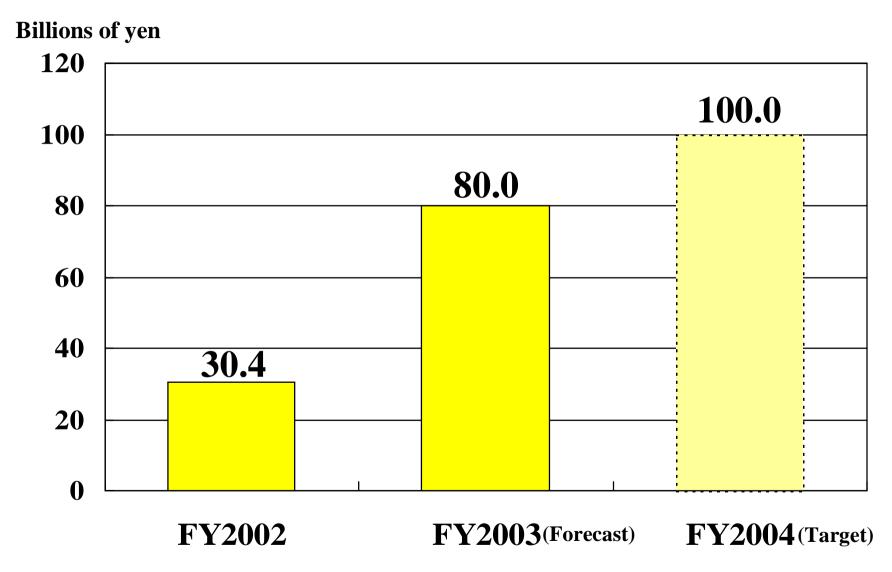
# (Industry) Worldwide Demand for Camera-equipped Mobile Phones as % of Total Demand of Mobile Phones



### **Sharp's CCD/CMOS Imager Production Capacity**



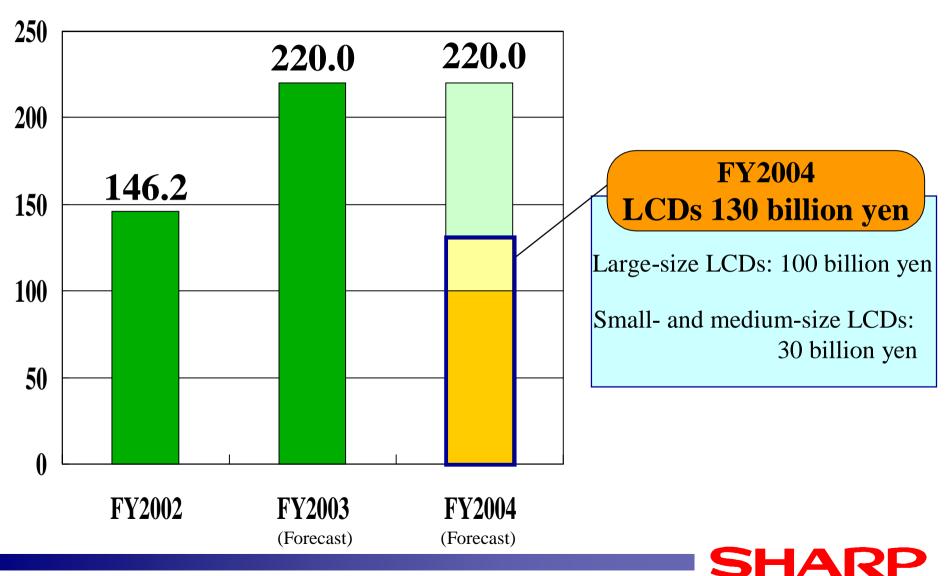
## **Sharp's CCD/CMOS Imager Sales**





# II. Capital Investment (Forecast)

Billions of yen



# SHARP

#### **Notes Regarding Future Plans and Estimates:**

This report contains statements describing future plans, strategies, and estimated performance. These descriptions are not based on past facts, but on the management's assumptions and beliefs in light of the information currently available. These plans, strategies, and performance estimates are subject to a certain amount of risk and uncertainty due to such factors as economic changes, supply-demand fluctuations, increased competition, currency exchange rates, and changes in tax laws. Please understand that actual business results may vary from our estimates.

