

# 企業活動を通じて Through Corporate Activities

## 地球といのちのために、半導体ができること What Semiconductors can do for Life and the Earth

### 電力消費量の削減に貢献

### Contributing to Reductions in Electricity Consumption

エレクトロニクス分野の急成長を背景に電力消費量も世界的に増大しています。日本では世界の約5%にあたる年間9,200億kWhの電力を消費しています。これにより、日本では年間4.17億tものCO<sub>2</sub>を排出していることとなります。当社では半導体製造メーカーとして、超低消費電力技術を駆使した製品開発・製造を行うことにより電力消費量の削減に貢献していきます。

Electricity consumption is increasing all over the world as a direct consequence of rapid growth in the field of electronics. Japan consumes 5% of the world's electricity, which amounts to 920 million kWh every year. This results in 417 million tons of CO<sub>2</sub> being emitted on an annual basis. In our role as a manufacturer of semiconductors, we at SANYO Semiconductor develop and manufacture our products using extremely low-power consumption technology, thereby contributing to reductions in electricity consumption.

- 世界の電力消費量:年間17兆5,332億kWh(※1)
- 日本の電力消費量:年間9,200億kWh(※2)
- 日本での使用端電力1kWhあたりのCO<sub>2</sub>排出量:0.453kg-CO<sub>2</sub>(※2)
- 温室効果ガスCO<sub>2</sub>の4.17億tの排出は、東京ドーム約217杯分のドライアイスの量に相当

※1 出所:総務省統計局発行「世界の統計2008年版」より

※2 電気事業連合会発行「2008年度環境行動計画による2007年度実績値」

- Global electricity consumption: 17,533,200,000,000kWh per annum (\*1)
- Japan's electricity consumption: 920,000,000,000kWh per annum (\*2)
- Amount of CO<sub>2</sub> emitted for each kWh of electricity used in Japan: 0.453kg-CO<sub>2</sub> (\*2)
- Emissions amounting to 417 million tons of CO<sub>2</sub> greenhouse gas is the equivalent of enough dry-ice to fill Tokyo Dome approximately 217 times.

\*1 Source: National Statistics 2008 issued by the Statistics Bureau, Ministry of Internal Affairs and Communications

\*2 Results for Fiscal 2007 Based on the Fiscal 2008 Environmental Action Plan issued by The Federation of Electric Power Companies of Japan

### ・超低消費電力技術のご紹介 Introduction of Extremely Low-power Consumption Technology

超低消費電力を極めた、三洋のシリコンオーディオ用LSI GokLow<sup>®</sup> (極Low) シリーズ

SANYO GokLow<sup>®</sup> (Ultra-Low) Series IC, which achieved extremely low-power consumption, for use in silicon audio equipment

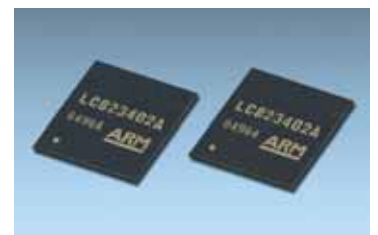
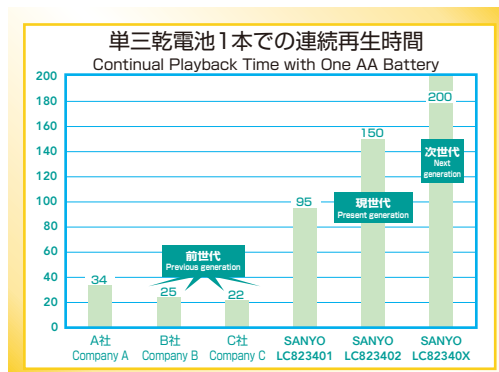
**圧縮Audio(MP3等)CODEC(従来品)**  
Compressed Audio (MP3, etc.) CODEC (Conventional Model)

- 消費電力が大きい(50mW~)
- High power consumption (50mW or more)
- ・DSPによるソフトウェアで実現
- ・Can be implemented with DSP software
- ・動作周波数の低減に限界あり(40MHz~)
- ・Limits how low the operational frequency can be set (40MHz or higher)
- ・製品の電池寿命が非常に短い
- ・Life-span of the battery is extremely short (単三電池1本で30時間程度まで)  
(Maximum of approximately 30 hours for one AA battery)



**三洋Hard Wired CODEC(GokLow<sup>®</sup>)**  
SANYO Hard Wired CODEC (GokLow<sup>®</sup>)

- 消費電力が小さい(10mW程度)
- Low power consumption (approximately 10mW)
- ・H/W回路にてCODECを実現
- ・CODEC made possible with an H/W circuit
- ・4MHz~16MHzでデコード可能
- ・Decoding possible from 4MHz to 16MHz
- ・製品の電池長寿命化実現
- ・Life-span of the battery maximized (単三電池1本で150時間達成は200時間)  
(150 hours for one AA battery, to be expanded to 200 hours)



シリコンオーディオ用LSI  
LC823402 GokLow<sup>®</sup>  
超低消費電力かつ高音質を実現  
ICs for Use with Silicon Audio Equipment  
LC823402 GokLow<sup>®</sup>  
Providing extremely low-power consumption and high sound quality

## 新潟県中越地震で学んだ教訓、対策を広く社会へ紹介

Introducing to Society the Training Programs Created and Countermeasures Learned Following The Mid Niigata Prefecture Earthquake

2004年10月23日、三洋半導体グループの主力工場であった旧新潟三洋電子(株)(現在の三洋半導体製造(株)新潟工場)は新潟県中越地震の直撃を受け生産が停止致しました。懸命の復旧活動によって2ヵ月後には生産を再開し、翌2005年7月にはライン再編によって新たな生産体制を整え復活しました。当社は、半導体工場としては過去に例をみない激しい震災体験から得た多くの教訓や考案された地震対策を三洋電機グループ内の会社はもちろん、講演、マスコミ取材協力等によって広く社外に対しても開示しています。

On October 23rd, 2004, one of the most productive of the SANYO Semiconductor Group factories, the former Niigata SANYO Electronics Co., Ltd. (currently the SANYO Semiconductor Manufacturing Co., Ltd. Niigata Plant) took a direct hit during The Mid Niigata Prefecture Earthquake and all production was halted. Production was resumed two months later after frantic recovery activities, and the line was then revamped in July of the following year to operate under a new production system. The lessons learned from this unprecedented and massive earthquake have been used in training programs and suggested damage-prevention measures, and have been distributed not only throughout the entire SANYO Group but also to a wide section of society through lectures, cooperation with journalists and other means.



### 取材協力

### Cooperating with Journalists

- 当社は被災体験から学んだ教訓を生かしてBCP(事業継続計画)策定に取り組んでいます。この取り組みに関して、毎日新聞社の取材要請に協力し、情報提供を行いました。  
※連載企画「企業の防災」  
(2008年11月12日～12月24日の計7回)に掲載

- We are working on BCP (Business Contingency Plan) formulation applying what we learned from the disaster of Niigata-Chuetsu Earthquake. As to our activity, we accepted the request to be interviewed by the Mainichi Newspapers and provided them with the information about our efforts.  
\* Appeared in the article "Company's Disaster Prevention" (7 times in total between Nov. 12 and Dec. 24 in 2008)

### 講演活動

### Lecture Activities

多くの講演依頼にできるだけ対応し、被災の体験内容や地震対策を紹介しました。



We tried to comply with as many requests for lectures as we could so that we could introduce to people our experiences during the earthquake and the countermeasures we established afterwards.

### 社会貢献活動

### Social Contribution Activities

- 春・夏・秋・冬 交通安全運動
- 春・秋 道路愛護月間
- 「三洋の森」ワークキャンプ IN京都/群馬 参加
- 「大泉まつり大人みこし」参加
- 四川大地震(災害救援募金活動)
- 献血(3回/年)
- 「ハートフルBOX(使用済カード、切手、はがき、コイン)」の回収
- ペットボトルの蓋、アルミ缶の回収



道路愛護月間  
Street Cleaning Month

- Spring, Summer, Autumn, and Winter Traffic Safety Program
- Spring & Autumn Street Cleaning Month
- Participated in "SANYO no Mori" work camp in Kyoto and Gunma
- Participated in "Oizumi Festival Adult Mikoshi"
- Szechuan Earthquake Disaster Relief Fund-raising
- Blood donation (3 times a year)
- Collection of Heartful Box (used cards, stamps, postcards and coins)
- Collection of plastic bottle caps and aluminum cans