PREFACE

Thank you for your interest in wired telecom products from Philips Semiconductors. As a leading supplier to the telephony market, we offer a wide range of discrete and integrated semiconductor telecom components.

A DETAILED REFERENCE SOURCE

This wired telecom handbook includes information on Philips Semiconductors' current integrated circuits and discrete products for wired applications. The products offer a comprehensive solution for wired telephony terminals, from line-interfaces, tone and pulse diallers and discrete devices, though to caller-identification decoders, digital answering-machine processors, hands-free circuits and LCD drivers.

To make selection easier, information is grouped into sections, each accompanied by a product selection guide, which describes the most significant product features. Each section contains detailed product descriptions in the form of data sheets. A new section entitled 'DSP-based solutions' has been added, consolidating the existing product portfolio and extending its range to highly-integrated multi-function telephone terminals.

Relevant application notes are published in the Application Handbook for Wired Telecom Systems (IC03b). Together IC03 part a) and b) provides a comprehensive reference source for wired telephony, including not only details about Philips Semiconductors' products, but also how best to apply them.

COMPREHENSIVE SOLUTIONS

Philips Semiconductors is a recognised leader in enabling technologies, system-level know-how, silicon, software and product development resources to help customers take full advantage of one of the fastest-growing markets in the world. Specifically the company is a leading innovator of products for:

- Caller Identification
- DSP-based solutions: digital answering machine processors, offering full-duplex speakerphone and the highest speech-compression rates on the market.
- Speech and Transmission circuits.
- Listening-in and hands-free circuits.
- Diallers and DTMF generators.
- Derivative telephony-specific micro-controllers (PCD33xx-family); the largest range of configurations and performance options, including low-voltage devices operating down to 1.8V.
- Low-voltage one-time-programmable (OTP) devices, including the PCD3755/56 series, still the lowest-voltage OTPs available.
- Bipolar transistors, regulators and protection diodes.
- LCD display drivers (available additionally as naked die or as chip-on-glass module assemblies).

TECHNOLOGY LEADER

Implementation of cost-effective Telecom terminals demands a broad knowledge, not only at the systems level, but also at the interconnection and component level. Philips Semiconductors' state-of-the art fabrication and packaging expertise provides the technology needed for today's demanding applications, together with the reliability and quality levels customers have come to rely upon from one of the world's top-ten semiconductor companies.

UNRIVALLED RESOURCES

Philips Semiconductors has one of the widest portfolios of technology in semiconductors to meet the needs of the wired telephony market. World-class designs, advanced fabrication processes and up-to-date manufacturing plans and logistics have established Philips Semiconductors as a world supplier. Quality Assurance is based on internationally-accepted quality standards such as ISO9000 and QA9000, as well as customer-specific standards such as Ford's TQE and AT&T's "Partner in Excellence.

CUSTOMER CO-OPERATION

Co-operation with customers is vital for securing market acceptance of customers' products and our own. In addition, we believe that technical partnerships are extremely important for stimulating further development of advanced Telecom technology, and have successful

partnerships with major Telecom systems suppliers and terminal makers.

WORLD-WIDE RESEARCH AND DESIGN-IN SUPPORT

Over 12 per cent of our turnover is invested back into research and development, covering process technology, design, system innovation, type/product development and assembly technology. The result is over 300 new devices per year, along with new technology and process developments, software and services.

We have our own System Laboratories, which explore new uses and applications; act as design and development laboratories to uncover potential problems from customers and help them develop their products faster through shared development; and replicate customer engineering efforts in-house.

Product Development Teams located at our manufacturing and development sites are technology-oriented. Many of our new products are the direct result of work done by the Development Teams, working alone, or in conjunction with groups in the Research or Systems Laboratories.

Philips Corporate Research Labs

Eindhoven, The Netherlands

Redhill, UK

Limeil-BrÈvannes, France

Aachen/Hamburg, Germany

Briarcliff Manor, USA

Philips Semiconductors' System Labs

Eindhoven, The Netherlands

TV, Telephony, Micro-controllers

Southampton, UK

Teletext, digital audio, software for TV and CD-ROM

Hamburg, Germany

Automotive, identification, DSP in radio and TV, Multimedia

Sunnyvale, USA

Multimedia, datacom, automotive

Product Development Teams

Caen, France

Speech and Transmission circuits, hands-free Ics

Zürich, Switzerland

DSP-based solutions, Caller-Identification, Telecom Microcontrollers, LCD drivers, peripheral Ics

Hamburg, Germany

Nijmegen, The Netherlands

Stadskanaal, The Netherlands

Discrete semiconductors and regulators