# NEW MULTIMARKET PRODUCTS
## QUARTERLY HIGHLIGHTS

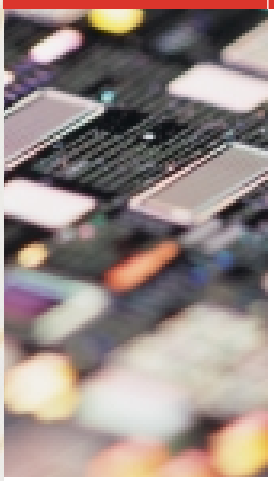
Semiconductors

VOLUME 2
ISSUE 2
MAY 2003

Discretes | Logic | Microcontrollers | Standard Analog

In this issue:





### 1. LPC210x

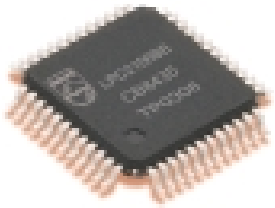
LPC2100 microcontroller family targets 16- and 32-bit systems

The LPC2100 family further expands Philips' broad microcontroller portfolio, giving customers a smooth, low-cost migration path from 8-bit and 16-bit to 32-bit. Optimized for high-performance and low-power, these devices operate at 60 MHz (54 Dhrystone MIPS) and feature 128-bit wide zero-wait state Flash, making them ideal for real-time embedded applications. Employing the ARM7TDMI-S core with Real-Time Monitor and Real-Time Trace, the new LPC2100 family ensures customers have broad industry support with software applications and tools from third party vendors (ARM, Ashling, Hitex, Keil Software, Nohau and Phytec), offering market solutions that enable rapid, low-cost, low-risk development.

Key features
- 16 – 64 Kbytes SRAM (LPC2104, LPC2105 and LPC2106)
- 128 Kbytes 60 MHz zero-wait state Flash Program Memory
- Real-Time Clock, Watchdog, PLL, PWMs
- $I^2C$, SPI and 2 UARTs
- Timers and system supervisory features
- Full Embedded ICE-RT™ and ETM™ (Embedded Trace Macrocell)
- Flash In-system Programming and Updating Bootblock Software
- On-chip ARM Real-Time Monitor
- Small footprint packages: 48-pin LQFP and 48-pad MicroLeadFrame™ (HVQFN)

Key benefits
- Low power
- Large on-chip data buffer
- Best ARM interrupt handling

Key applications:
- Point-of-sales terminals
- Low power, high performance industrial control
- Data acquisition
- Security systems / access control
- Serial protocol converters
- Higher RAM content devices such as large stacks required by TCP/IP and other connectivity related applications



For more information:
http://www.semiconductors.philips.com/pip/LPC2104BBD48.html

PHILIPS



## 2. PH3230S and PH8230E

### Extended range of N-Channel MOSFETs in LFPAK

Our N-channel MOSFET range of devices in the LFPAK (Loss Free PAcKage) offers low thermal resistance comparable to that of larger power packages, overcoming the thermal limitations of SO8. In fact, LFPAK delivers thermal performance close to that of traditional power packages such as D-PAK and $D^2$PAK, and features lower intrinsic inductance, making it ideal for high-frequency power switching applications.

### Key features

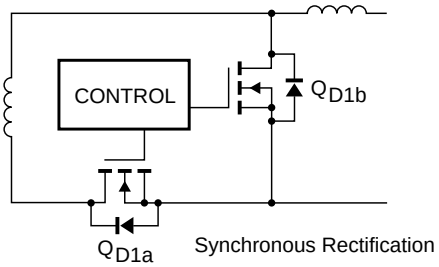
- Low intrinsic inductance – 1.1 nH (50% lower than SO8)
- 0.8 mΩ package resistance
- Low package height – 1.1 mm (40% thinner than an SO8)
- House a growing range of optimized PowerMOS devices

### Key benefits

- Enables compact designs
- Faster switching in VHF circuits

### Key applications

- DC/DC conversion
- Mobile equipment
- Telecommunications
- Computing




MSD837

| | $V_{DS}$ | Max $R_{DS(ON)}$ mΩ | | $Q_{GD}$ |
|---|---|---|---|---|
| Type Number | (V) | $V_{GS}$ = 10 V | $V_{GS}$ = 4.5 V | nC |
| PH3230S | 30 | 3.2 | 6.5 | 13 |
| PH8230E | 30 | 8.2 | 13.2 | 5 |

For more information:
www.semiconductors.philips.com/pip/PH3230S.html
www.semiconductors.philips.com/pip/PH8230E.html

## 3. BUK1M200-50SDLD

### Quad low-side switch

First in a new range of multi-channel TOPFET devices, the BUK1M200-50SDLD comprises four 200 mΩ low-side switches. The integration of four channels into a single 20-pin IC package enables considerable cost savings over traditional discrete solutions.

### Key features

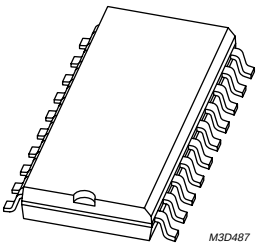
- Over-temperature protection
- Overload protection
- Current limiting
- Direct-drive capability by a standard microcontroller

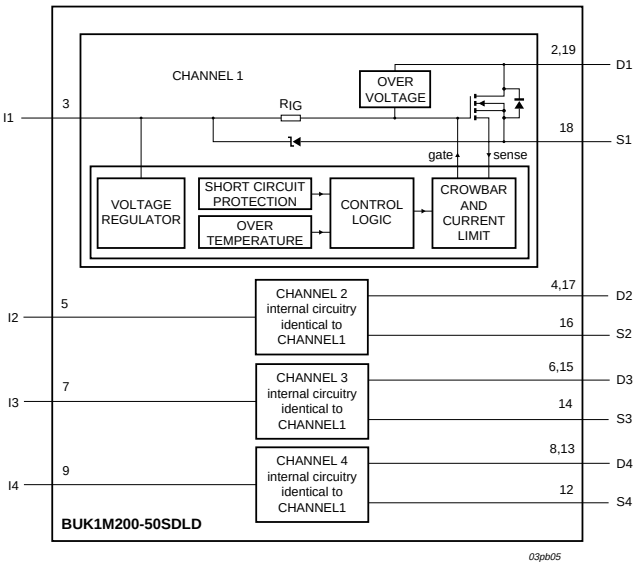
### Key applications

- Driver for small lamps, motors and relays in many automotive systems
- Low frequency PWM
- DC switching

### Key benefits

- Cost-effective compared to traditional discrete solutions
- Reduced board space




For more information:
www.semiconductors.philips.com/pip/BUK1M200_50SDLD.html

## 4. NE57810 and NE57811

### Advanced DDR termination regulators

Philips' DDR (Double Data Rate) termination regulators maintain an output voltage (DDR reference bus voltage) that is one-half of the RAM supply voltage. Capable of providing up to +/- 3.5 A for sustained periods, their fast response to load changes reduces the need for output capacitors. Housed in SPAK-5 (SOT756) package, thermal robustness ensures maximum design flexibility.

### Key features

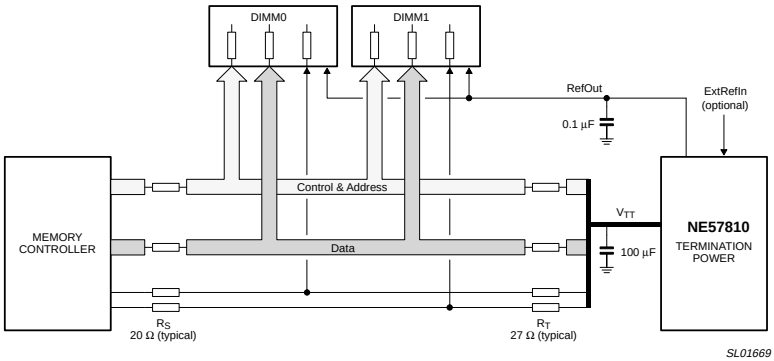
- Fast transient response time
- Over-temperature and over-current protections
- Internal divider maintains termination voltage at ½ memory supply voltage
- Reference out for other memory and control components
- Flexibility from optional external voltage reference-in (NE57810)
- Shutdown pin (NE58711)

### Key benefits

- Reduced need for external components (switching FETs, inductors, decoupling capacitors)
- Significantly reduces board space and overall system cost
- Compatible with DDR-I ($V_{DD}$ = 2.5 V) and DDR-II ($V_{DD}$ = 1.8 V) SDRAM systems

### Key applications

- Desktop PC systems
- Workstations and servers
- Game machines
- Set-top boxes
- Embedded systems
- Digital video recorders


For more information:
www.semiconductors.philips.com/pip/NE57810S.html
www.semiconductors.philips.com/pip/NE57811S.html

## 5. PicoGate logic

### New PicoGate logic functions in SOT505-2

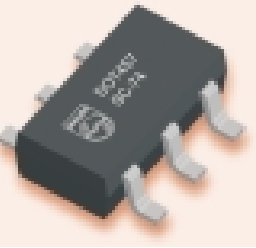
Philips has expanded its logic products portfolio with the introduction of new PicoGate logic functions in the 8-pin SOT505-2 package. This extends Philips' PicoGate offering to include 5, 6 and 8-pin functions. Look out for products being released in HC, AHC and LVC technologies in the upcoming months.

Key features
- Intricate line layout patterns can be created while saving up to 85% board space
- Single-, dual-, and triple-gate functions in 5-, 6-, or 8-pin packages
- Designers can select the number of functions needed

Key benefits
- Simplifies PCB routing
- Reduced board space
- Time-to-market
- Cost-effectiveness

Key applications
- Space-critical systems
- Handheld portable devices
- SoC / ASIC fixes
- Glue logic


For more information:
www.semiconductors.philips.com/logic/products/picogate





## 6. PMEM4010ND, PMEM4010PD

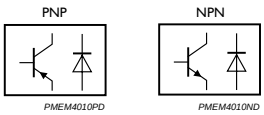
### Ultra low $V_F$ (MEGA) Schottky diode and BISS transistor combination in SOT457 (SC-74)

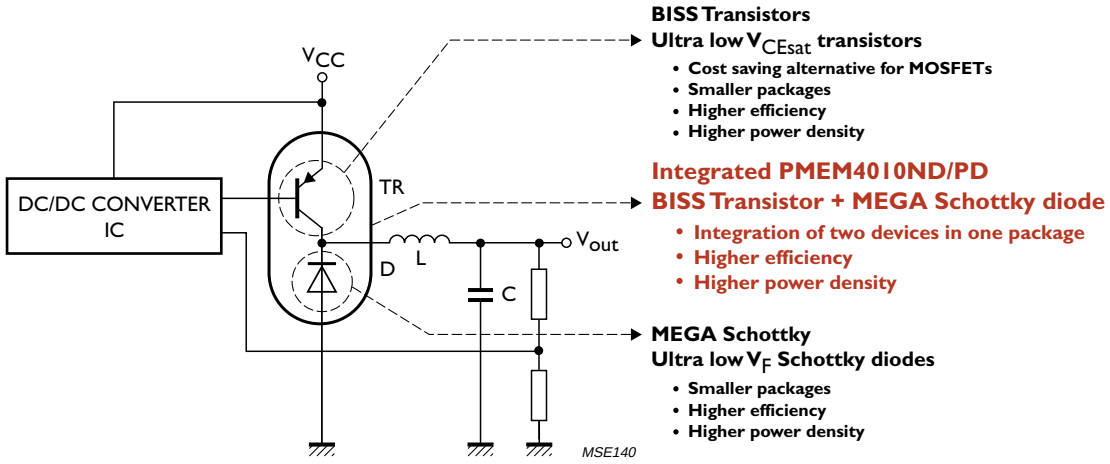
Combining an NPN or PNP transistor with low $V_{CEsat}$ and high current capability, and an ultra low $V_F$ Schottky rectifier diode with integrated guard ring for stress protection in a SOT457 (SC-74) small-signal package, these devices offer the highest efficiency and industry leading performance.

**Key features**
- High efficiency
- Less power losses and heat generation
- High current capability compared to size
- 600 mW total power dissipation
- 1 A current capability
- Small plastic SMD package

**Key benefits**
- Occupies less board space
- Reduced pick and place costs

**Key applications**
- Discrete DC/DC converter
- Peripheral rectifier diode combined with integrated DC/DC controllers
- Reverse polarity protection
- General purpose load drivers
- Inductive load drivers




For more information:
www.semiconductors.philips.com/pip/PMEM4010ND.html
www.semiconductors.philips.com/pip/PMEM4010PD.html



## 7. PMV213SN, PMV117EN, PMV60EN, PMV45EN, PMV56XN and PMV31XN

### µTrenchMOS 100, 30 and 20 V N-Channel MOSFETs in SOT23

Continuing Philips' commitment to expand the innovative µTrenchMOS portfolio, the new PMV series of 100, 30 and 20 V N-channel MOSFETs draws upon our core strengths of leading-edge TrenchMOS™ technology and package miniaturization to bring this family's performance benefits to the industry-standard SOT23 package.

### Key features

- Low $V_{GS(th)}$ (1.8 V) capability
- Low $R_{DS(on)}$
- Enhanced thermal and electrical properties

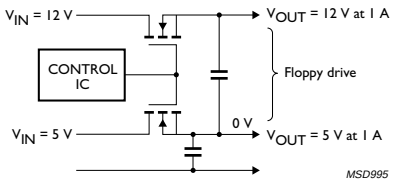
### Key benefits

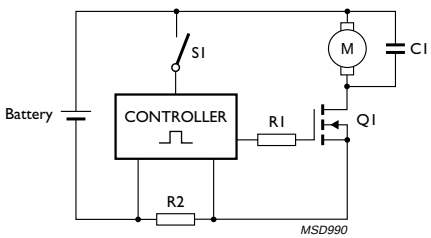
- High performance from a small footprint
- Lower power dissipation
- Cooler running applications
- Greater efficiency

### Key applications

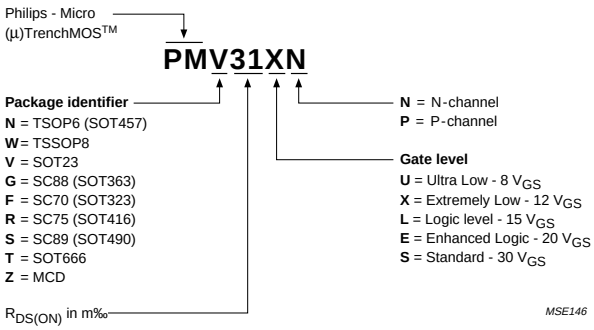
- Battery-powered motor control
- Load switch in notebook PCs
- High-speed switch in set-top box power supplies
- Driver FET in DC/DC converters

**Hard drive load switch**




**µTrenchMOS™ part numbering**




For more information:

www.semiconductors.philips.com/pip/PMV31XN.html
www.semiconductors.philips.com/pip/PMV45EN.html
www.semiconductors.philips.com/pip/PMV56XN.html
www.semiconductors.philips.com/pip/PMV60EN.html
www.semiconductors.philips.com/pip/PMV117EN.html
www.semiconductors.philips.com/pip/PMV213SN.html

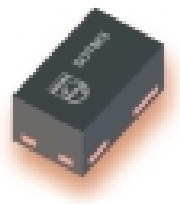
## 8. Resistor-Equipped Transistors

### RET family continues to grow with 81 new options

55 new RETs (or digital transistors) have been released in industry-standard packages – SOT346 (SC-59), SOT323 (SC-70) SOT23 and SOT54 (TO-92) – ensuring maximum design freedom in applications across all market segments, from automotive to communications. Our RETs are also available in an extensive choice of smaller SMD packages and standard Japanese packages, such as SOT416 (SC-75), SOT490 (SC-89), SOT363 (SC-88) and SOT666. In addition, 26 new RETs are offered in the ultra-small SOT883 (SC-101), which has a footprint 90% smaller than SOT23 yet still delivers the same power dissipation and collector current capabilities.

### Key features

- Single or dual RETs with a choice of resistor combinations
- Broad range of SMD package options available
- Also available in a leaded package



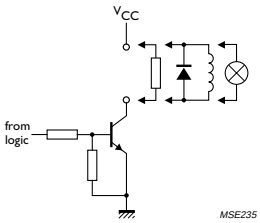
### Key benefits

- Increased end-product reliability
- Lower handling and inventory costs
- Simplified circuit design
- Reduced board space requirements
- Shorter assembly times
- Reduced pick and place effort

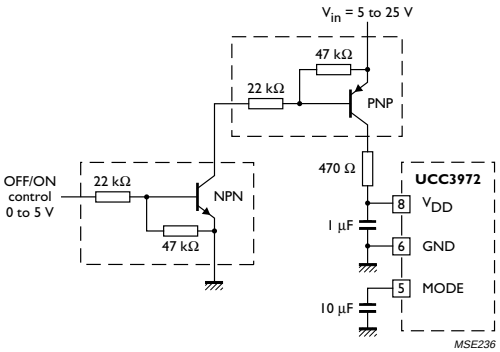
### Key applications

- Digital applications
- Switching loads
- Controlling IC inputs

RET to switch loads up to 100 mA




RET to control IC inputs (UCC3972 SMPS controller shown)




For more information:
www.semiconductors.philips.com/selectionguides/tables/30588.html

## 9. TDA8754

### Triple 8-bit ADC

The highly integrated TDA8754 triple 8-bit ADC has extensive functionality built-in including sync processor, flexible PLL (phase lock loop), adjustable clamp level and gain control on each channel, and two separate analog input banks. The device's increased flexibility allows customers to reduce the complexity of their systems, while enabling top-class performance on the whole speed range.

### Key features

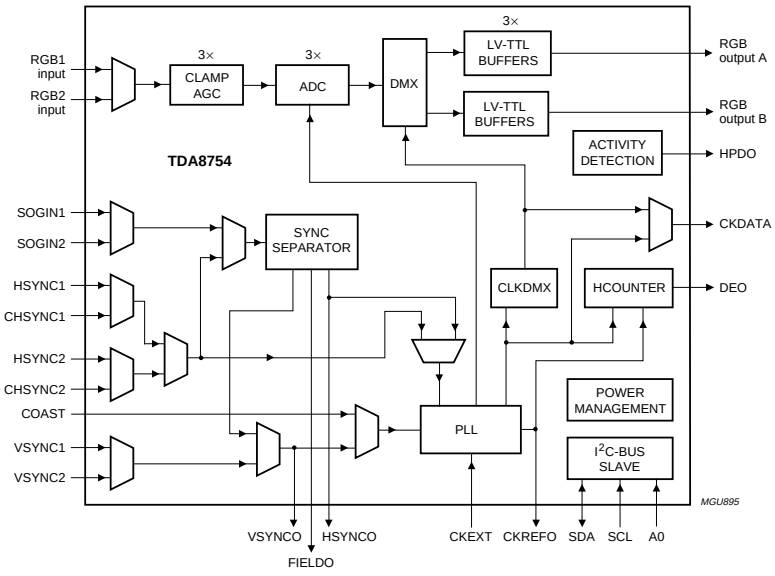
- 2 RGB / YPbPr analog inputs
- Sync separation and processing for sync-on-green
- Composite and 3-level sync
- Flexible PLL with precise phase adjustment and low jitter
- Fully controlled by $I^2C$
- Speed up to 270 Msps

### Key benefits

- Reduced system complexity

### Key applications

- LCD PC monitors
- Multimedia projectors
- PDP monitors and TVs
- Automotive navigation systems




For more information:
www.semiconductors.philips.com/acrobat/literature/9397/75010456.pdf

# New MultiMarket Products List

## Comprehensive New Products List Q2 2003

In the following overview you will find all Philips MultiMarket Semiconductors released in the last quarter. To ensure you can access more information quickly the type numbers are linked directly to their respective Product Information Page (PIP) on the Philips Semiconductors website.

### Discretes

| Type Number | Description | Package |
|---|---|---|
| **General Application Discretes** | | |
| PBSS4240DPN | Double Low $V_{CEsat}$ (BISS) 1.5 A, 40 V (NPN/PNP) | SOT457 / SC-74 |
| PBSS4240V | Single NPN Low $V_{CEsat}$ (BISS) 2 A, 40 V | SOT666 |
| PBSS5240V | Single PNP Low $V_{CEsat}$ (BISS) 2 A, 40 V | SOT666 |
| BCP51-10 | Single PNP Medium Power Transistor 1 A, 45 V | SOT223 / SC-73 |
| BCP52 | Single PNP Medium Power Transistor 1 A, 60 V | SOT223 / SC-73 |
| BCP52-10 | Single PNP Medium Power Transistor 1 A, 60 V | SOT223 / SC-73 |
| BCP54-10 | Single NPN Medium Power Transistor 1 A, 45 V | SOT223 / SC-73 |
| PUMB9 | Double RET, R1 = 10 k, R2 = 47 k, 100 mA, 50 V | SOT363 / SC-88 |
| PSS8550C | Single PNP Medium Power Transistor 1 A, 25 V | SOT54 / TO-92 |
| PSS8550D | Single PNP Medium Power Transistor 1 A, 25 V | SOT54 / TO-92 |
| PSS9014C | Single NPN General Purpose Transistor 0.1 A, 45 V | SOT54 / TO-92 |
| PSS9015B | Single PNP General Purpose Transistor 0.1 A, 45 V | SOT54 / TO-92 |
| PMEM4010ND | Ultra low $V_F$ (MEGA) Schottky diode and BISS transistor combination | SOT457 / SC-74 |
| PMEM4010PD | Ultra low $V_F$ (MEGA) Schottky diode and BISS transistor combination | SOT457 / SC-74 |
| BAS16VY | High-speed switching diode array | SOT363 / SC-88 |
| PSSI3120CA | Integrated clock terminator | SOT23 |
| BZX384 Series | Voltage Regulator Zener Diode | SOD323 / SC-76 |
| BZA856AVL | Quad low capacitance ESD suppressor | SOT353 / SC-88A |
| BZA862AVL | Quad low capacitance ESD suppressor | SOT353 / SC-88A |
| BZA868AVL | Quad low capacitance ESD suppressor | SOT353 / SC-88A |
| BZA956AVL | Quad low capacitance ESD suppressor | SOT665 |
| BZA968AVL | Quad low capacitance ESD suppressor | SOT665 |
| PDTA114EM | Single PNP RET, R1 = 10k, R2 = 10k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTA114TM | Single PNP RET, R1 = 10k, R2 = open, 100 mA, 50 V | SOT883 / SC-101 |
| PDTA114YK | Single PNP RET, R1 = 10k, R2 = 47k, 100 mA, 50 V | SOT346 / SC-59 |
| PDTA114YM | Single PNP RET, R1 = 10k, R2 = 47k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTA114YS | Single PNP RET, R1 = 10k, R2 = 47k, 100 mA, 50 V | SOT54 / TO-92 |
| PDTA114YU | Single PNP RET, R1 = 10k, R2 = 47k, 100 mA, 50 V | SOT323 / SC-70 |
| PDTA123EK | Single PNP RET, R1 = 2,2k, R2 = 2,2k, 100 mA, 50 V | SOT346 / SC-59 |
| PDTA123ES | Single PNP RET, R1 = 2,2k, R2 = 2,2k, 100 mA, 50 V | SOT54 / TO-92 |
| PDTA123EU | Single PNP RET, R1 = 2,2k, R2 = 2,2k, 100 mA, 50 V | SOT323 / SC-70 |
| PDTA123JK | Single PNP RET, R1 = 2,2k, R2 = 47k, 100 mA, 50 V | SOT346 / SC-59 |
| PDTA123JM | Single PNP RET, R1 = 2,2k, R2 = 47k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTA123JS | Single PNP RET, R1 = 2,2k, R2 = 47k, 100 mA, 50 V | SOT54 / TO-92 |
| PDTA123JU | Single PNP RET, R1 = 2,2k, R2 = 47k, 100 mA, 50 V | SOT323 / SC-70 |
| PDTA124EM | Single PNP RET, R1 = 22k, R2 = 22k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTA124XK | Single PNP RET, R1 = 22k, R2 = 47k, 100 mA, 50 V | SOT346 / SC-59 |
| PDTA124XM | Single PNP RET, R1 = 22k, R2 = 47k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTA124XS | Single PNP RET, R1 = 22k, R2 = 47k, 100 mA, 50 V | SOT54 / TO-92 |
| PDTA124XT | Single PNP RET, R1 = 22k, R2 = 47k, 100 mA, 50 V | SOT23 |
| PDTA124XU | Single PNP RET, R1 = 22k, R2 = 47k, 100 mA, 50 V | SOT323 / SC-70 |
| PDTA143EM | Single PNP RET, R1 = 4,7k, R2 = 4,7k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTA143TK | Single PNP RET, R1 = 4,7k, R2 = open, 100 mA, 50 V | SOT346 / SC-59 |
| PDTA143TM | Single PNP RET, R1 = 4,7k, R2 = open, 100 mA, 50 V | SOT883 / SC-101 |
| PDTA143TS | Single PNP RET, R1 = 4,7k, R2 = open, 100 mA, 50 V | SOT54 / TO-92 |
| PDTA143TT | Single PNP RET, R1 = 4,7k, R2 = open, 100 mA, 50 V | SOT23 |
| PDTA143TU | Single PNP RET, R1 = 4,7k, R2 = open, 100 mA, 50 V | SOT323 / SC-70 |
| PDTA143XM | Single PNP RET, R1 = 4,7k, R2 = 10k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTA143XS | Single PNP RET, R1 = 4,7k, R2 = 10k, 100 mA, 50 V | SOT54 / TO-92 |
| PDTA143XU | Single PNP RET, R1 = 4,7k, R2 = 10k, 100 mA, 50 V | SOT323 / SC-70 |
| PDTA143ZM | Single PNP RET, R1 = 4,7k, R2 = 47k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTA143ZS | Single PNP RET, R1 = 4,7k, R2 = 47k, 100 mA, 50 V | SOT54 / TO-92 |
| PDTA143ZU | Single PNP RET, R1 = 4,7k, R2 = 47k, 100 mA, 50 V | SOT323 / SC-70 |
| PDTA144EM | Single PNP RET, R1 = 47k, R2 = 47k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTA144WK | Single PNP RET, R1 = 47k, R2 = 22k, 100 mA, 50 V | SOT346 / SC-59 |
| PDTA144WS | Single PNP RET, R1 = 47k, R2 = 22k, 100 mA, 50 V | SOT54 / TO-92 |
| PDTA144WT | Single PNP RET, R1 = 47k, R2 = 22k, 100 mA, 50 V | SOT23 |
| PDTC114EM | Single NPN RET, R1 = 10k, R2 = 10k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTC114TM | Single NPN RET, R1 = 10k, R2 = open, 100 mA, 50 V | SOT883 / SC-101 |
| PDTC114YK | Single NPN RET, R1 = 10k, R2 = 47k, 100 mA, 50 V | SOT346 / SC-59 |
| PDTC114YM | Single NPN RET, R1 = 10k, R2 = 47k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTC114YS | Single NPN RET, R1 = 10k, R2 = 47k, 100 mA, 50 V | SOT54 / TO-92 |
| PDTC123EK | Single NPN RET, R1 = 2,2k, R2 = 2,2k, 100 mA, 50 V | SOT346 / SC-59 |
| PDTC123ES | Single NPN RET, R1 = 2,2k, R2 = 2,2k, 100 mA, 50 V | SOT54 / TO-92 |
| PDTC123EU | Single NPN RET, R1 = 2,2k, R2 = 2,2k, 100 mA, 50 V | SOT323 / SC-70 |
| PDTC123JK | Single NPN RET, R1 = 2,2k, R2 = 47k, 100 mA, 50 V | SOT346 / SC-59 |
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| PDTC123JU | Single NPN RET, R1 = 2,2k, R2 = 47k, 100 mA, 50 V | SOT323 / SC-70 |
| PDTC124EM | Single NPN RET, R1 = 22k, R2 = 22k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTC124TK | Single NPN RET, R1 = 22k, R2 = open, 100 mA, 50 V | SOT346 / SC-59 |
| PDTC124TM | Single NPN RET, R1 = 22k, R2 = open, 100 mA, 50 V | SOT883 / SC-101 |
| PDTC124TS | Single NPN RET, R1 = 22k, R2 = open, 100 mA, 50 V | SOT54 / TO-92 |
| PDTC124TT | Single NPN RET, R1 = 22k, R2 = open, 100 mA, 50 V | SOT23 |
| PDTC124TU | Single NPN RET, R1 = 22k, R2 = open, 100 mA, 50 V | SOT323 / SC-70 |
| PDTC124XK | Single NPN RET, R1 = 22k, R2 = 47k, 100 mA, 50 V | SOT346 / SC-59 |
| PDTC124XM | Single NPN RET, R1 = 22k, R2 = 47k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTC124XS | Single NPN RET, R1 = 22k, R2 = 47k, 100 mA, 50 V | SOT54 / TO-92 |
| PDTC124XT | Single NPN RET, R1 = 22k, R2 = 47k, 100 mA, 50 V | SOT23 |
| PDTC124XU | Single NPN RET, R1 = 22k, R2 = 47k, 100 mA, 50 V | SOT323 / SC-70 |
| PDTC143EM | Single NPN RET, R1 = 4,7k, R2 = 4,7k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTC143TK | Single NPN RET, R1 = 4,7k, R2 = open, 100 mA, 50 V | SOT346 / SC-59 |
| PDTC143TM | Single NPN RET, R1 = 4,7k, R2 = open, 100 mA, 50 V | SOT883 / SC-101 |
| PDTC143TS | Single NPN RET, R1 = 4,7k, R2 = open, 100 mA, 50 V | SOT54 / TO-92 |
| PDTC143TU | Single NPN RET, R1 = 4,7k, R2 = open, 100 mA, 50 V | SOT323 / SC-70 |
| PDTC143XM | Single NPN RET, R1 = 4,7k, R2 = 10k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTC143XS | Single NPN RET, R1 = 4,7k, R2 = 10k, 100 mA, 50 V | SOT54 / TO-92 |
| PDTC143XU | Single NPN RET, R1 = 4,7k, R2 = 10k, 100 mA, 50 V | SOT323 / SC-70 |
| PDTC143ZM | Single NPN RET, R1 = 4,7k, R2 = 47k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTC143ZS | Single NPN RET, R1 = 4,7k, R2 = 47k, 100 mA, 50 V | SOT54 / TO-92 |
| PDTC143ZU | Single NPN RET, R1 = 4,7k, R2 = 47k, 100 mA, 50 V | SOT323 / SC-70 |
| PDTC144EM | Single NPN RET, R1 = 47k, R2 = 47k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTC144TK | Single NPN RET, R1 = 47k, R2 = open, 100 mA, 50 V | SOT346 / SC-59 |
| PDTC144TM | Single NPN RET, R1 = 47k, R2 = open, 100 mA, 50 V | SOT883 / SC-101 |
| PDTC144TS | Single NPN RET, R1 = 47k, R2 = open, 100 mA, 50 V | SOT54 / TO-92 |
| PDTC144TT | Single NPN RET, R1 = 47k, R2 = open, 100 mA, 50 V | SOT23 |
| PDTC144TU | Single NPN RET, R1 = 47k, R2 = open, 100 mA, 50 V | SOT323 / SC-70 |
| PDTC144WK | Single NPN RET, R1 = 47k, R2 = 22k, 100 mA, 50 V | SOT346 / SC-59 |
| PDTC144WM | Single NPN RET, R1 = 47k, R2 = 22k, 100 mA, 50 V | SOT883 / SC-101 |
| PDTC144WS | Single NPN RET, R1 = 47k, R2 = 22k, 100 mA, 50 V | SOT54 / TO-92 |

# New MultiMarket Products List

| Type Number | Description | Package |
|---|---|---|
| Power Discretes | | |
| PMWD15UN | µTrenchMOS - 20 V N-Channel MOSFET | TSSOP8 |
| PMWD18UN | µTrenchMOS - 30 V N-Channel MOSFET | TSSOP8 |
| PMGD8000LN | µTrenchMOS - 30 V N-Channel dual MOSFET | SC-88 (SOT363) |
| PMN34UN | µTrenchMOS - 30 V N-Channel MOSFET | TSOP6 (SOT457) |
| PHU101NQ03LT | 30 V N-Channel MOSFET | IPAK (SOT533) |
| BUK1M200-50SDLD | Quad Channel TOPFET | SOT163-1 (SO20) |
| BUK1M200-50SGTD | Quad Channel TOPFET | SOT163-1 (SO20) |
| PH8230E | 30 V N-Channel MOSFET | LFPAK (SOT669) |
| PH3230S | 30 V N-Channel MOSFET | LFPAK (SOT669) |
| PMV213SN | µTrenchMOS - 100 V N-Channel MOSFET | SOT23 |
| PMV117EN | µTrenchMOS - 30 V N-Channel MOSFET | SOT23 |
| PMV60EN | µTrenchMOS - 30 V N-Channel MOSFET | SOT23 |
| PMV45EN | µTrenchMOS - 30 V N-Channel MOSFET | SOT23 |
| PMV56XN | µTrenchMOS - 20 V N-Channel MOSFET | SOT23 |
| PMV31XN | µTrenchMOS - 20 V N-Channel MOSFET | SOT23 |
| BUK75/7606-55B | 55 V High Performance Automotive MOSFET | BUK7506-55B in SOT78 (TO220AB) BUK7606-55B in SOT404 ($D^2$PAK) |
| BUK75/7607-30B | 30 V High Performance Automotive MOSFET | BUK7507-30B in SOT78 (TO220AB) BUK7607-30B in SOT404 ($D^2$PAK) |
| BUK95/964R4-40B | 40 V High Performance Automotive MOSFET | BUK954R4-40B in SOT78 (TO220AB) BUK964R4-40B in SOT404 ($D^2$PAK) |

## Logic

| Type Number | Description | Package |
|---|---|---|
| GTL2000 | 22-bit GTL Processor Voltage Clamp | DGG |
| GTL2010 | 10-bit GTL Processor Voltage Clamp | BS |
| PCA9564 | Parallel Bus to $I^2C$ Bus Controller | D, PW |
| PCK12429 | 25-400 MHz Differential PECL Clock Generator | BD |
| PCKEP14 | 2.5 V / 3.3 V 1:5 Differential ECL/PECL/HSTL Clock Driver | D |
| 74HC2G00 | 5 V Dual 2-Input NAND Gate | DP |
| 74HC2G02 | 5 V Dual 2-Input NOR Gate | DP |
| 74HC2G08 | 5 V Dual 2-Input AND Gate | DP |
| 74HC2G32 | 5 V Dual 2-Input OR Gate | DP |
| 74HC2G86 | 5 V Dual 2-Input EXCLUSIVE-OR Gate | DP |
| 74HC3G04 | 5 V Triple Inverter | DP |
| 74HC3G14 | 5 V Triple Inverting Schmitt Trigger | DP |
| 74HC3G34 | 5 V Triple Buffer Gate | DP |
| 74HCT2G00 | 5 V Dual 2-Input NAND Gate | DP |
| 74HCT2G02 | 5 V Dual 2-Input NOR Gate | DP |
| 74HCT2G32 | 5 V Dual 2-Input OR Gate | DP |
| 74HCT2G86 | 5 V Dual 2-Input EXCLUSIVE-OR Gate | DP |
| 74HCT3G04 | 5 V Triple Inverter | DP |
| 74HCT3G34 | 5 V Triple Buffer Gate | DP |

| Type Number | Description | Package |
|---|---|---|
| DIGITAL DATACOM PRODUCTS | | |
| SC16C554IB80 | Quad Channel Universal Asynchronous Receiver Transmitter with 16-Byte FIFOs and Infrared (IrDA) Encoder/Decoder; IMPACT Series | B, A |
| SC16C754IA68 | Quad Channel Universal Asynchronous Receiver Transmitter with 64-Byte FIFOs | A |
| SCC2691AC1D24 | 5 V 1-Channel UART; Intel Interface; CMOS; 4-Byte FIFOs | D |

## Standard Analog

| Type Number | Description | Package |
|---|---|---|
| LP2985A-xxUK or D | Very low noise, low drop out, 150 mA linear regulator using a CMOS process technology. | CSP (Chip Scale Packaging) and SOT23-5 |
| SA57000-xxUK | CapFREE 150 mA, low noise, low drop out regulator with thermal protection. | CSP (Chip Scale Packaging) |
| MAX8877-xx | Very low noise, low drop out, 150 mA linear regulator using a CMOS process technology | SOT23-5 CSP (Chip Scale Packaging) |
| MAX8878-xx | Very low noise, low drop out, 150 mA linear regulator using a CMOS process technology. | SOT23-5 CSP (Chip Scale Packaging) |
| MAX810xW | Single function microprocessor reset used to monitor supply voltages in microprocessor and other logic systems. | SOT323 / SC-70 |
| MAX809xW | Single function microprocessor reset used to monitor supply voltages in microprocessor and other logic systems. | SOT323 / SC-70 |
| MAX63xx Family | Ultra-low power microprocessor reset circuit | SOT323 / SC-70 |
| TDA8769 | 12-bit, 80/105 Msps analog-to-digital converter (ADC) Nyquist/High IF sampling | HTQFP48 |
| TDA9965 | 12-bit, 5.0 V, 30 Msps analog-to-digital interface for CCD cameras | LQFP48 |
| TDA9965A | 12-bit, 5.0 V, 40 Msps analog-to-digital interface for CCD cameras | LQFP48 |
| NE57810 | Advanced DDR termination regulators | SPAK-5 (SOT756) |
| NE57811 | Advanced DDR termination regulators | SPAK-5 (SOT756) |
| TDA8754 | Triple 8-bit ADC | LQFP144 |

## Microcontrollers

| Type Number | Description | Package |
|---|---|---|
| LPC2104, LPC2105, LPC2106 | Single-chip 32-bit microcontrollers | LQFP48 |

# Philips Semiconductors

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date of release: May 2003
document order number: 9397 750 11422

**Published in the Netherlands**

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