



Computer Segment

Mass Storage / Disk Drive Multimedia Interface IrDA



Whether you're integrating new functions, reducing the size and weight of your design, expanding capacity, reducing power consumption, extending battery life, or just aiming for the most efficient, cost-effective design, TEMIC can provide value-added solutions.

- Highly integrated "smart power" technology for efficient power management solutions
- RF and optoelectronic technology for complete opto and wireless network solutions
- Mixed-signal ASIC technology for highly integrated data transmission applications
- Critical technologies and proven applications to miniaturize, personalize, and synthesize your peripheral designs
- Submicron digital technology for data storage and processing in high-speed, low-voltage systems



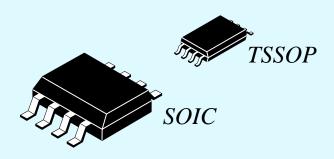
Power Supplies & DC-DC Converters

Compact solutions for low-voltage dc-to-dc conversion

• Highly-integrated, high-efficiency controller ICs in SOIC and TSSOP packages

LITTLE FOOT and LITE FOOT power MOSFET 30-V devices

- Prolong battery life with low on-resistance
- Based on our proprietary Trench technology





TV Tuners, Radio Tuners, & Multimedia

Distinguished selection of surface-mount

- ICs, PLL ICs, and high-speed frequency prescalers for TV, cable, satellite, and VTR tuners
- Video and sound IFICs, chroma-video ICs, pulse processing ICs, deflection ICs, east-west correction ICs, and video multiplexing ICs for TV/VTR applications

For highly integrated data transmission applications

- Voice processing ICs, network interface ICs, and video/image processing ICs
- Mixed-signal ASIC technology

Unique radio clock receiver ICs

Enables personal computers, VCRs, and fax machines to reset internal clocks automatically utilizing broadcast radio signals



Data Compression & MPEG/J

Video and image compression

- 2D discrete cosine transform circuit
- JPEG decoder
- Digital-to-analog video decoder
- Multimedia DCT-CODECs

ASIC methodology based on broad range of tools and products

Custom sea-of-gates and composite arrays

High-performance processes for datacom networks

- Low-power mixed analog-digital CMOS down to 0.5 microns
- Ultra-fast digital BiCMOS



Data Storage: Hard, Optical, & Tape Drives

Data storage applications

- Highly integrated products compatible with low operating voltages
- Housed in smallest packages possible

Super CMOS process

- 1-micron technology enables ROM and ROMLESS microcontrollers in six versions between 20 and 42 MHz
- High-speed 3-V products available
- For small form-factor 1.8-inch and 1.3-inch disk and tape drives 1.0-mm and 1.4-mm packages with slim profile

Spindle motor control and VCM control

- Both discrete and highly integrated solutions
- LITE FOOT and LITTLE FOOT power MOSFET families reduce power consumption lowest on-resistance and small size



PC Cards (PCMCIA)

PC Card power interface family saves space and reduces manufacturing costs

- Narrow-body and small-outline packages
- One integrated device can replace up to nine discretes and associated drivers

For PC Cards with on-board power supplies

• LITE FOOT family of products, at 1.1 mm of height, are thin enough to fit any PC Card meeting PCMCIA standards





Infra-Red Communication

TEMIC Semiconductors leads in development of components for data transmission compatible with IrDA standards

- Smallest integrated front-end modules including transmitter and receiver
- Pulse-shaping interface ICs
- High-speed silicon PIN photodiodes
- High-speed IR emitting diodes built on GaA1As technology



Wireless Communications

For wireless communications

- Leading-edge ICs and transistors for high-frequency signal conditioning
- Meets worldwide standards for analog and digital mobile communication

For RF ICs wireless applications

- ICs for transmit and receive path PLLs also
- Small-outline, surface-mount devices in chip sets reduce component count and save battery life in wireless LANs

A Leader in development of components for data transmission compatible with the IrDA standard



Battery Management

For NiCd and NiMH batteries

- ICs with combination of charge monitoring and phase control management
- Enables intelligent, gentle, fast charging capability
- Prevents damage from overcharging
- Prolongs battery life tenfold

For longer per-charge operation

• LITE FOOT and LITTLE FOOT power MOSFETs offer lowest onresistance with guaranteed specifications down to 2.5 V

For battery disconnect or load switching applications

• One LITTLE FOOT device built on Trench technology, replaces two previous-generation SO-8s — *Reduces Manufacturing Cost!*