

LPC2880  
1k units from:  
**€ 4.17**

LPC2888  
1k units from:  
**€ 6.70**

OM10092  
Evaluation Board  
**€ 845**

# LPC2880/2888

## ARM7 MCU with Hi-Speed USB



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The LPC2880 and the LPC2888 are ARM7-based microcontrollers for portable applications requiring low power and high performance. It includes a USB 2.0 Hi-Speed device interface, an external memory interface that can interface to SDRAM and Flash, an SD/MMC memory card interface, A/D and D/A converters, and serial interfaces including UART, I<sup>2</sup>C-bus, and I<sup>2</sup>S-bus. The chip can be powered from a single battery, from the USB, or from regulated 1.8V and 3.3V.

### Key Features

- ARM7TDMI processor with 8kB cache, operating at up to 60MHz
- 1MB on-chip Flash program memory with 128-bit access for high performance along with 64kB SRAM
- Boot ROM allows execution of Flash code, external code, or Flash programming via USB
- On-chip DC-to-DC converter can generate all required voltages from a single battery or from USB power
- Multiple internal buses allow simultaneous simple DMA, USB DMA, and program execution from on-chip Flash without contention
- External memory controller supports Flash, SRAM, ROM, and SDRAM Also has SD/MMC memory card interface
- Serial interfaces:
  - UART with fractional baud rate generation, flow control, IrDA support, and FIFOs
  - I<sup>2</sup>C-bus interface
  - I<sup>2</sup>S-bus (Inter IC Sound bus) interface for independent stereo digital audio input and output

- Hi-Speed USB 2.0 device (480 Mbit/s or 12 Mbit/s) with on-chip physical layer
- 10-bit A/D converter with 5-channel input multiplexing
- 16-bit stereo A/D and D/A converters with amplification and gain control
- Two 32-bit timers with selectable prescalers; Real Time Clock can be clocked by 32kHz oscillator or another source
- 8-bit/4-bit LCD interface bus.
- Available in 180 ball TFBGA package (TFBGA180, 10x10x0.8mm)

### Key Applications

- Portable, battery-powered products
- USB enabled devices
- Instrumentation
- Peripheral control (Smart Card readers, scanners, printers etc.)

### Key Design Tips

- Development/Evaluation boards and software (IDE, Compiler, Debugger, Emulator) available from <http://www.lpc2tools.com>

Service available or already delivered T&R from Manufacturer.  
Tapes are available, but not stocked at Avnet Logistics due to low demand.  
Device supported by or programming equipment, but the socket for this package must be provided by customer.

P/N	Package	Programming	Taping & Reeling	Marking
LPC2880FET180	180-ball TFBGA			
LPC2888FET180	180-ball TFBGA			