



# Single-chip 16/32-bit microcontrollers; 32/64/128/256/512 kB ISP/IAP flash with 10-bit ADC and DAC

## LPC2138FBD64

### Not Recommended for New Designs

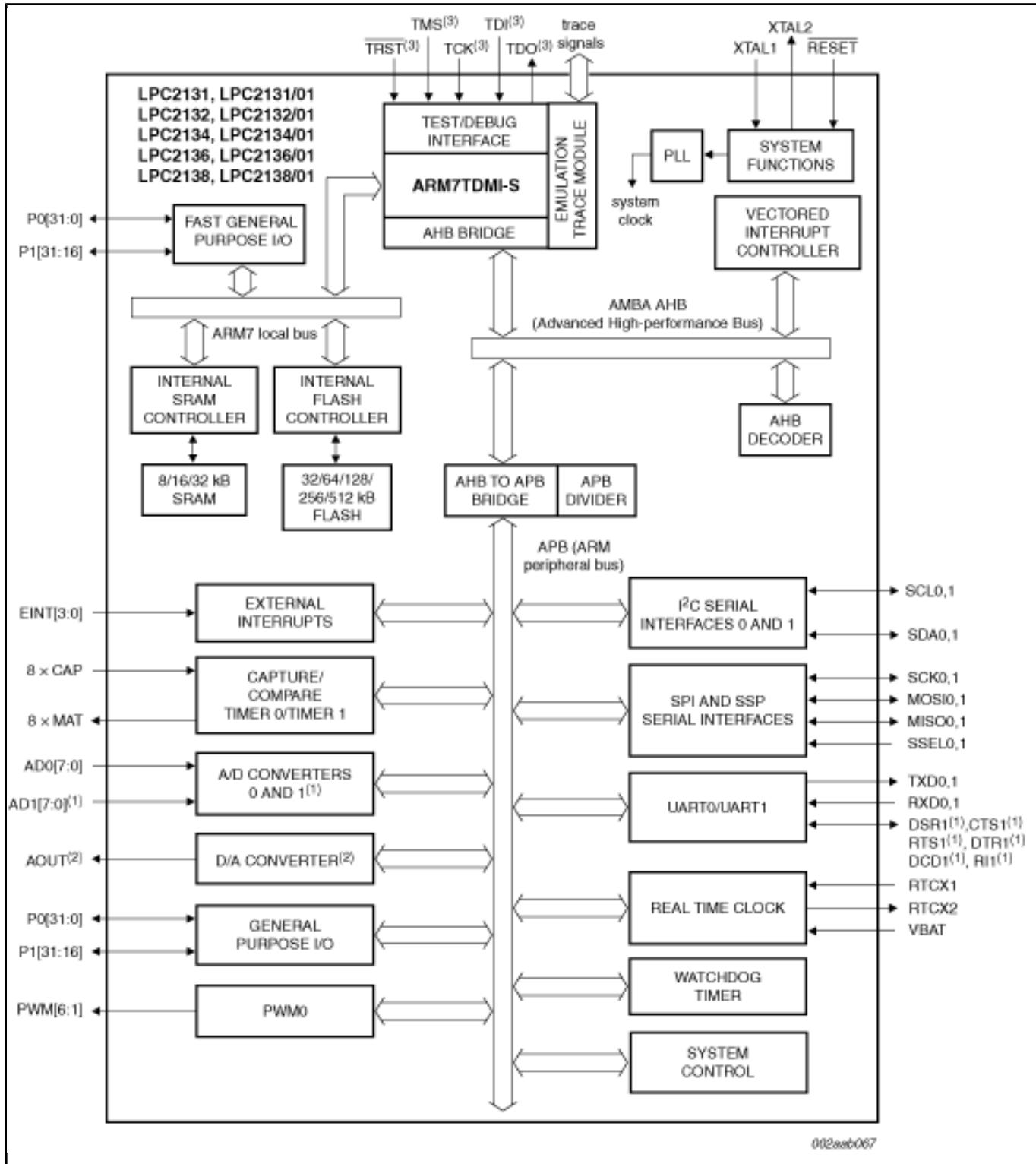
This page contains information on a product that is not recommended for new designs.

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The LPC2131/32/34/36/38 microcontrollers are based on a 16/32-bit Arm7TDMI-S™ CPU with real-time emulation and embedded trace support, that combine the microcontroller with 32 kB, 64 kB, 128 kB, 256 kB and 512 kB of embedded high-speed flash memory. A 128-bit wide memory interface and a unique accelerator architecture enable 32-bit code execution at maximum clock rate. For critical code size applications, the alternative 16-bit Thumb mode reduces code by more than 30 % with minimal performance penalty.

Due to their tiny size and low power consumption, these microcontrollers are ideal for applications where miniaturization is a key requirement, such as access control and point-of-sale. With a wide range of serial communications interfaces and on-chip SRAM options of 8 kB, 16 kB, and 32 kB, they are very well suited for communication gateways and protocol converters, soft modems, voice recognition and low-end imaging, providing both large buffer size and high processing power. Various 32-bit timers, single or dual 10-bit 8-channel ADC(s), 10-bit DAC, PWM channels and 47 GPIO lines with up to nine edge or level sensitive external interrupt pins make these microcontrollers particularly suitable for industrial control and medical systems.

## Block diagram: LPC2131FBD64, LPC2132FBD64, LPC2132FHN64, LPC2134FBD64, LPC2136FBD64, LPC2138FBD64, LPC2138FHN64 Block Diagram



View additional information for Single-chip 16/32-bit microcontrollers; 32/64/128/256/512 kB ISP/IAP flash with 10-bit ADC and DAC.

**Note:** The information on this document is subject to change without notice.

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