Single-chip 16/32-bit microcontroller; 256 kB ISP/IAP flash with 10-bit ADC and CAN

LPC2194HBD64

Not Recommended for New Designs
This page contains information on a product that is not recommended for new designs.

Last Updated: Apr 8, 2022

The LPC2194 is based on a 16/32-bit Arm7TDMI-S™ CPU with real-time emulation and embedded trace support, together with 256 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.

With its compact 64-pin package, low power consumption, various 32-bit timers, 4-channel 10-bit ADC, four advanced CAN channels, PWM channels and 46 fast GPIO lines with up to nine external interrupt pins this microcontroller is particularly suitable for automotive applications such as a CAN gateway that connects several CAN busses or a CAN bridge between sub networks at different speeds. Sensors with CAN interface or debugging via CAN are additional applications that need more than two CAN interfaces. It is also an adequate solution for industrial control, medical systems and fault-tolerant maintenance buses. With a wide range of additional serial communications interfaces, it is also suited for communication gateways and protocol converters as well as many other general-purpose applications.

Remark: Throughout the data sheet, the term LPC2194 will apply to devices with and without the /00 or /01 suffixes. The /00 or the /01 suffix will be used to differentiate from other devices only when necessary.

Block diagram: LPC2194HBD64 Block Diagram

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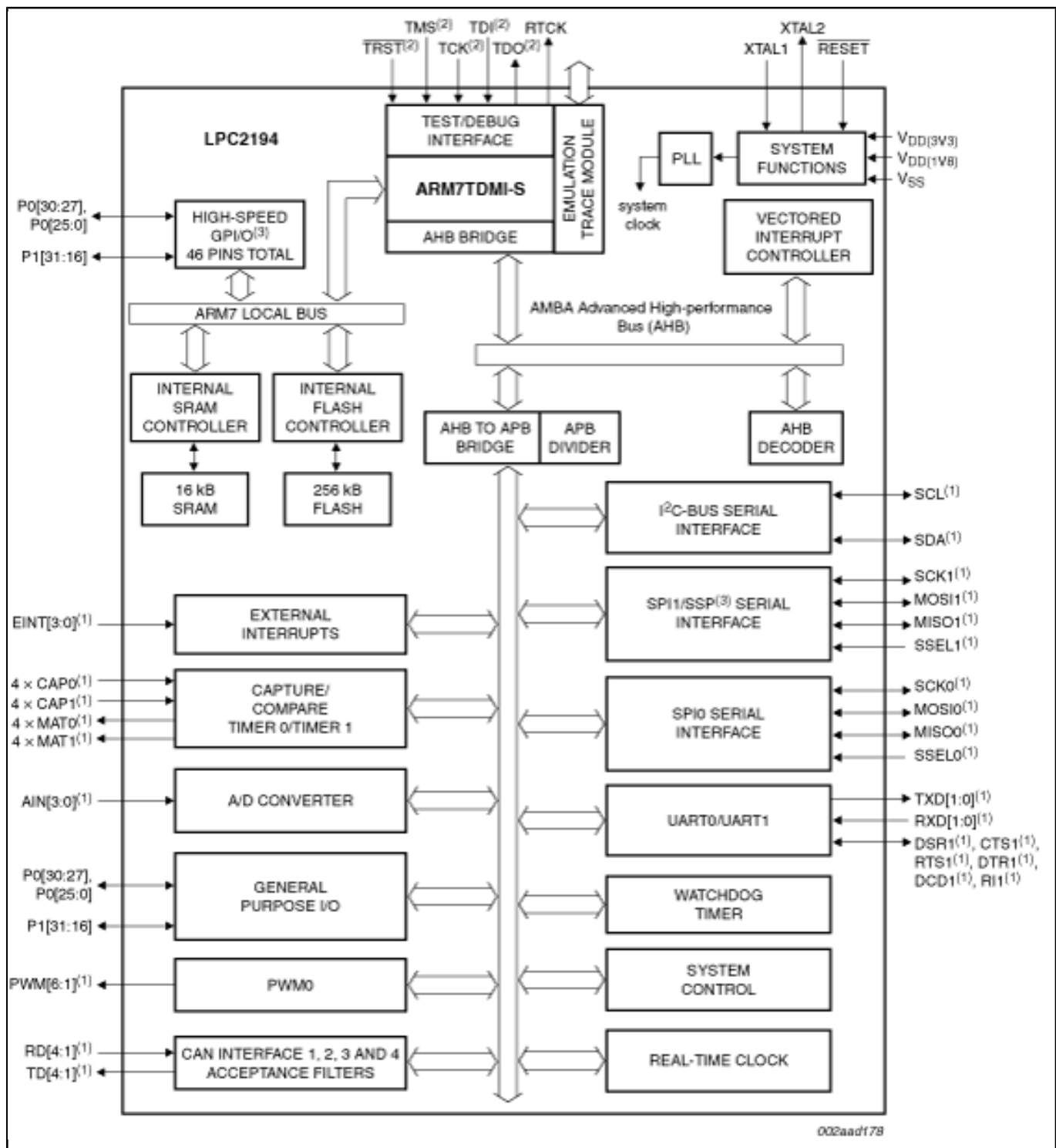
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Note: The information on this document is subject to change without notice.

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