单芯片32位微控制器；带16/32/64 kB RAM的128 kB ISP/IAP flash

LPC2104FBD48

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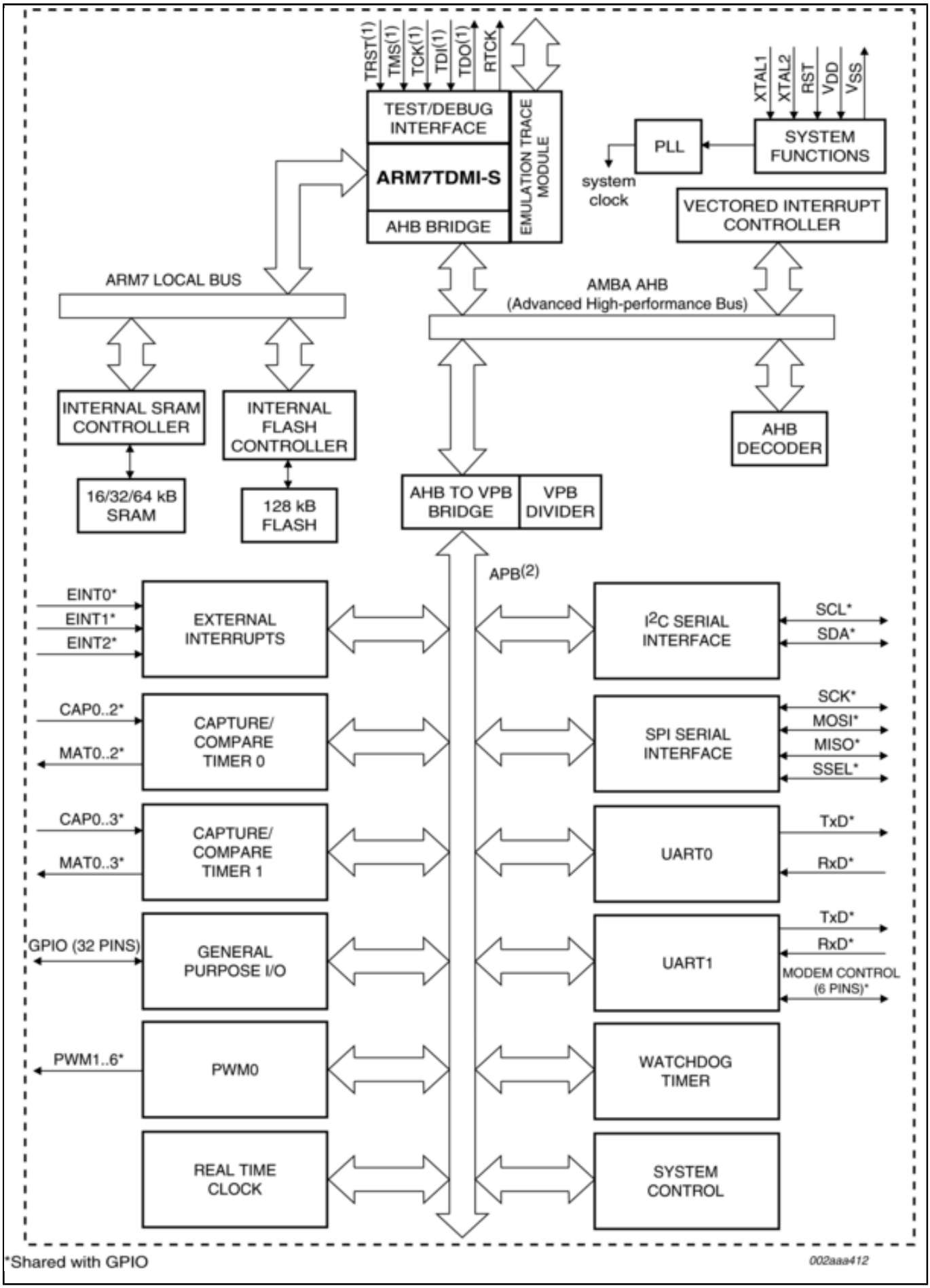
UART基于16位/32位 Arm7TDMI-S™ CPU，支持实时仿真和嵌入式跟踪，并拥有128 KB的嵌入式高速Flash存储器。128位存储器接口和独特的加速架构使得32位代码可在最高时钟速率下执行。对代码大小要求严格的应用程序，可选用的16位Thumb模式以最小的性能损失换取超过30%的代码压缩。

由于尺寸小，功耗低，对于小型化是一项关键要求的应用（如门禁控制和销售点），这些微控制器是理想之选。它们具有各种串行通信接口和高达64 KB的片上SRAM选项，非常适合于通信网关和协议转换器、软调制解调器、语言识别和低端成像，提供大缓冲容量和高处理能力两大优势。多个32位定时器、PWM通道和32个GPIO线使得这些微控制器尤其适用于工业控制和医疗系统领域。

注：在整个数据表中，无论器件是否以/00和/01为后缀，LPC2104/2105/2106都将适用。后缀将用于区分包含新特性的器件。

Block diagram: LPC2104FBD48, LPC2105FBD48, LPC2106FBD48, LPC2106FHN48 Block Diagram


TRST(1)
TMS(1)
TCK(1)
TDI(1)
TDO(1)
RTCK
TEST/DEBUG INTERFACE
ARM7TDMI-S
AHB BRIDGE
EMULATION TRACE MODULE
XTAL1
XTAL2
RST
VDD
VSS
PLL
SYSTEM FUNCTIONS
system clock
VECTORED INTERRUPT CONTROLLER
ARM7 LOCAL BUS
AMBA AHB
(Advanced High-performance Bus)
INTERNAL SRAM CONTROLLER
INTERNAL FLASH CONTROLLER
AHB DECODER
16/32/64 kB SRAM
128 kB FLASH
AHB TO VPB BRIDGE
VPB DIVIDER
APB(2)
EINT0*
EINT1*
EINT2*
EXTERNAL INTERRUPTS
I2C SERIAL INTERFACE
SCL*
SDA*
CAP0..2*
MAT0..2*
CAPTURE/ COMPARE TIMER 0
SPI SERIAL INTERFACE
SCK*
MOSI*
MISO*
SSEL*
CAP0..3*
MAT0..3*
CAPTURE/ COMPARE TIMER 1
UART0
TxD*
RxD*
GPIO (32 PINS)
GENERAL PURPOSE I/O
UART1
TxD*
RxD*
MODEM CONTROL (6 PINS)*
PWM1..6*
PWM0
WATCHDOG TIMER
REAL TIME CLOCK
SYSTEM CONTROL
*Shared with GPIO
002aaa412

View additional information for 单芯片32位微控制器；带16/32/64 kB RAM的128 kB ISP/IAP flash.

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