TM4C129x Connected Development Kit

The TM4C129x Connected Development Kit (DK-TM4C129X) is a versatile and feature-rich engineering platform highlighting the 120-MHz TM4C129XNCZADI microcontroller that includes an integrated 10/100 Ethernet MAC+PHY, ARM® Cortex®-M4 CPU plus many other key features.

Development Kit Overview

Beyond the industry-leading Ethernet integration, this kit and its associated microcontroller (MCU), the TM4C129XNCZADI, also showcase integrated functions such as a color LCD interface, USB 2.0 OTG/Host/Device port, TI wireless EM connection, BoosterPack and BoosterPack XL interfaces, a Quad SSI-supported 512Mbit Flash memory, MicroSD slot, plus expansion headers providing easy access for interfacing to the MCU's high-speed USB ULPI port, Ethernet RMII / MII ports, and its external peripheral interface, which supports memories, parallel peripherals and other system functions.

Development Kit Contents

The DK-TM4C129X development kit contains everything you need to develop and run applications for TM4C MCUs, including an In-Circuit Debug Interface (ICDI) and an extensive software offering that provides libraries

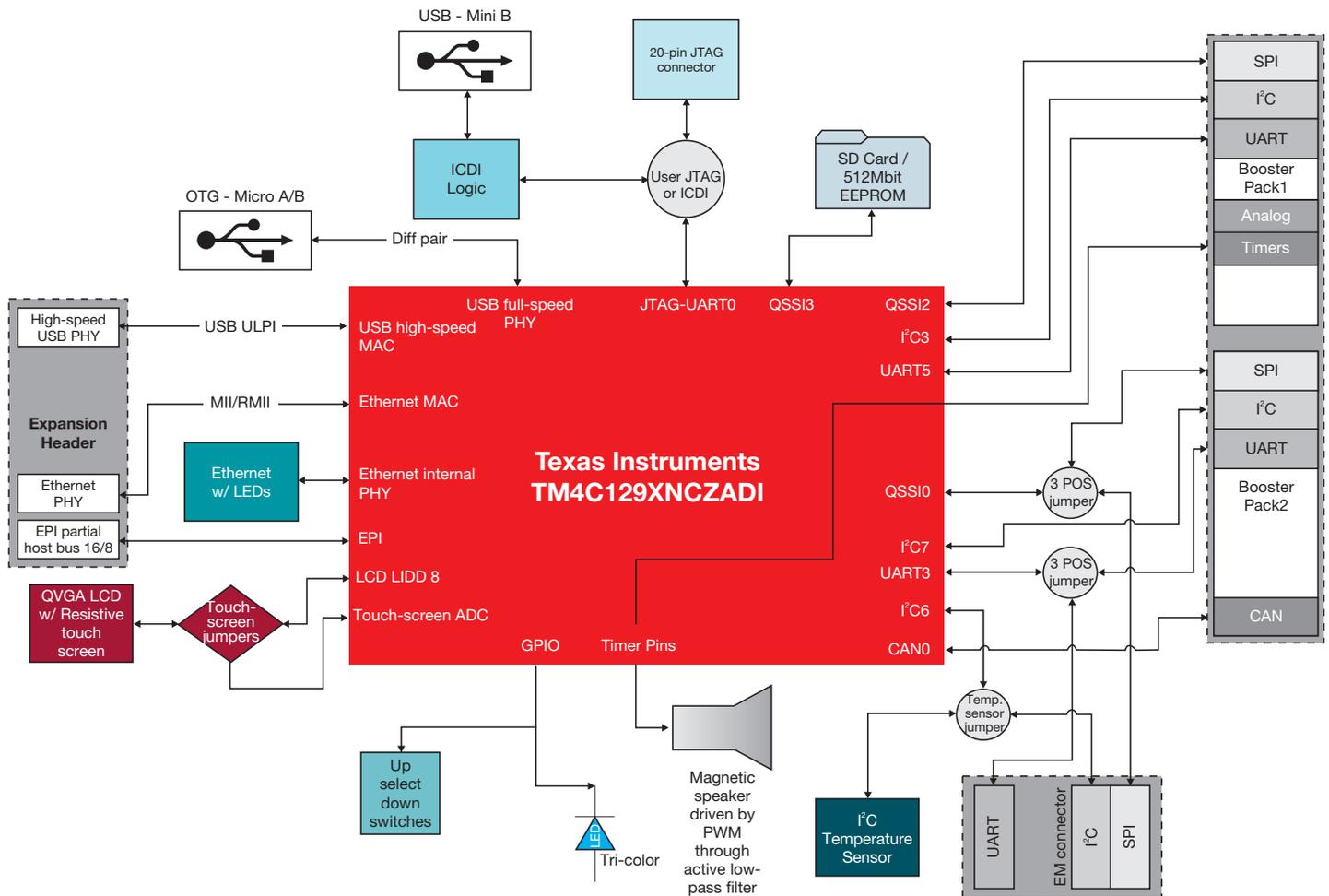▲ *TM4C129x Development Kit*

Features

- Based on TM4C129XNCZADI
  - 120-MHz ARM Cortex-M4 CPU (DSC w/ FPU)
  - 1MB Flash / 256KB SRAM / 6KB EEPROM
  - 8 timers (8×32-bit / 16×16-bit), plus SysTick and watchdogs
  - Motion-control PWM outputs
  - 10 I²C, 8 UARTs, 4 QSPIs, 2 CAN, USB FS and HS support
  - 10/100 Ethernet MAC and PHY
  - LCD control module
  - 212-pin nfBGA with up to 140 GPIOs
- External system connection options
  - Standard BoosterPack and BoosterPack XL
  - TI wireless EM interface
  - Available I/O expansion
    - ULPI USB external PHY (for high-speed USB 2.0)
    - RMII/MII external Ethernet PHY
    - EPI, Host bus 16/8
- Ethernet RJ-45 jack
- USB H/D/O micro A/B USB connector
- Color QVGA display with resistive touch screen
- QSSI connected 512Mbit Flash memory and microSD slot
- 3× user buttons, tri-color user LED and speaker
- Hardware reset button and system LED indicators
- TM4C In-Circuit Debug Interface (XDS-ICDI) and standard 20-pin JTAG debug header
- Tool chains: Code Composer Studio™ IDE, Keil, IAR, CodeBench and GCC
- TivaWare™ DriverLib under TI BSD-style license
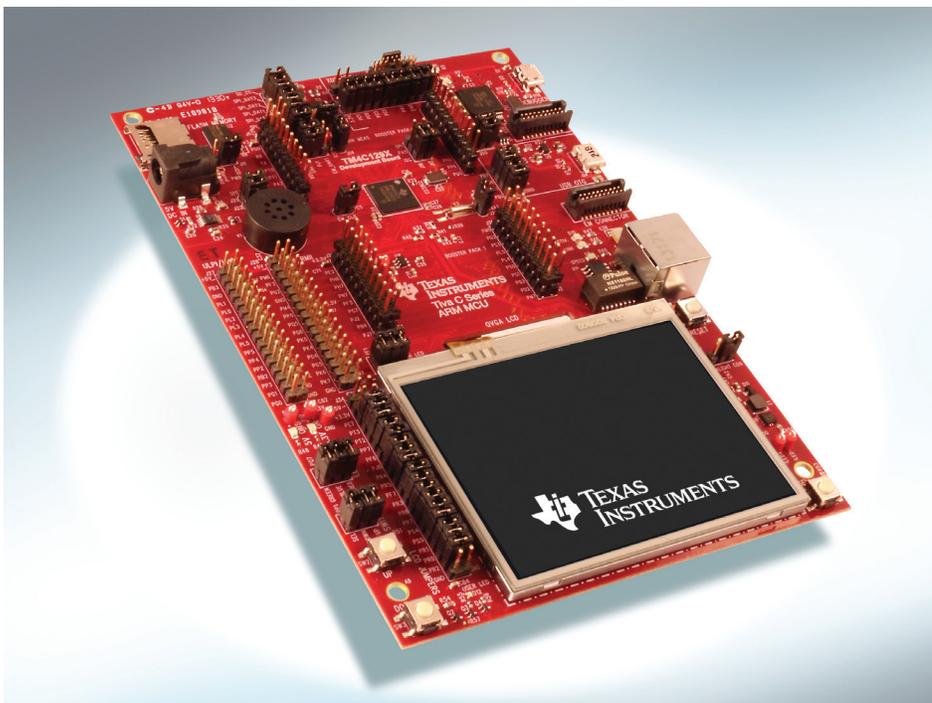
for key functions, source code examples, and important utilities to allow professional engineers to build and debug C code-based solutions quickly and efficiently in one of the several supported integrated development environments (IDEs), including Keil, Mentor Embedded, IAR, and Code Composer Studio™ IDE.

Part Number	Description
DK-TM4C129X	TM4C129x Microcontroller Development Kit

▲ TM4C129x Development Kit block diagram

For more information visit **www.ti.com/tool/dk-tm4c129x**

TEXAS INSTRUMENTS

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