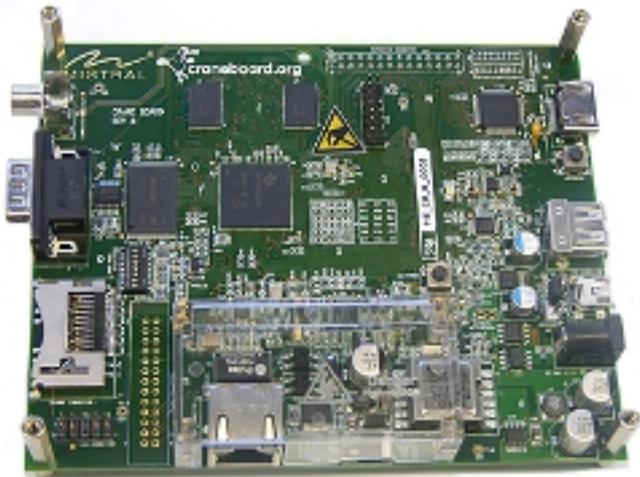


CraneBoard helps simplify design on TI's AM35x Sitara ARM MPU



Mistral Solutions announced CraneBoard, a new low-cost ARM-based development board, offers designers a fully open source printed circuit board (PCB) and design to reduce development costs. CraneBoard provides a cost-effective, alternative development option to Texas Instruments' (TI) AM35x Sitara ARM Cortex-A8 microprocessors (MPUs) evaluation module (EVM). It also utilizes community support and resources from the popular, open source BeagleBoard community.

Based on TI's [AM35x Sitara ARM Cortex-A8 MPU](#) [1], the CraneBoard provides new features not available on existing open source, low-cost development boards, including Power over Ethernet (PoE) and Controller Area Network (CAN) bus interfaces. Both the PoE and CAN interfaces can be used in industrial applications such as human machine interface (HMI), and CAN is also suitable for automotive applications.

The CraneBoard offers numerous integrated peripherals and provides users with flexible power options, such as a power-over-DC wall adapter, PoE enabled by TI's [TPS23750 PoE controller](#) [2], and USB, which allows for portability. An expansion port allows the ability to easily add functionality such as an LCD panel, along with wireless and audio capabilities and is compatible with other ARM Cortex-A8 open source boards. A complete open source board support package (BSP) for Linux is available from [CraneBoard.org](#) [3].

By leveraging [BeagleBoard.org](#) [4], [TI Sitara ARM MPU](#) [5] and ARM communities, CraneBoard users can share ideas, projects, and engage in discussions with fellow developers to utilize knowledge and resources for design and development. The CraneBoard also provides a reference platform for hardware and software developers to easily duplicate these designs, allowing them to go to market faster. By utilizing AM3517 Sitara ARM MPU advanced packaging, designers can implement low-cost, four-layer PCB designs.

Additionally, the CraneBoard is code compatible with other TI ARM Cortex-A8-based devices, allowing designers to add varying functionalities and utilize previous code investments, while designing with confidence for future devices.

CraneBoard features and benefits:

Features

600 MHz ARM Cortex-A8

256MB DDR2 SDRAM and 256MB NAND Flash memory

Open source PCB

Robust peripherals

- Three power sources (wall adapter, USB and POE)
- 3.3V I/O
- CAN Bus
- On-chip Ethernet
- USB Phy
- Integrated OTG Phy
- JTAG

Vast library of Operating system (OS)/real-time operating system (RTOS), codec libraries and demos available

Code compatibility with TI ARM Cortex-A8 devices

Benefits

Provides users with full featured operating systems and faster user interface transition

Allows developers to utilize low cost mem

Takes advantage of TI's Via Channel™ pad technology to allow a simple 4-layer PCB design that users can easily reference to reduce PCB costs

Enables communication with numerous devices and customization for proprietary interfaces

Broad software ecosystem to make design fast and simple

Developers can easily migrate from the CraneBoard to other platforms with maximum code reuse.

Pricing and availability

The CraneBoard is available starting at \$199 from Mistral and a number of distributors, including DigiKey. For community information, support and updates on CraneBoard development, please visit www.craneboard.org [6].

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Links:

[1] <http://www.ti.com/craneboardprpf>

[2] http://www.ti.com/ww/en/analog/poe/index.htm?DCMP=hpa_pmp_general&HQS=Other+OT+poe

[3] <http://www.craneboard.org/>

[4] <http://beagleboard.org/>

[5] <http://www.ti.com/craneboardprlp>

[6] <http://www.craneboard.org/xm-prhome>