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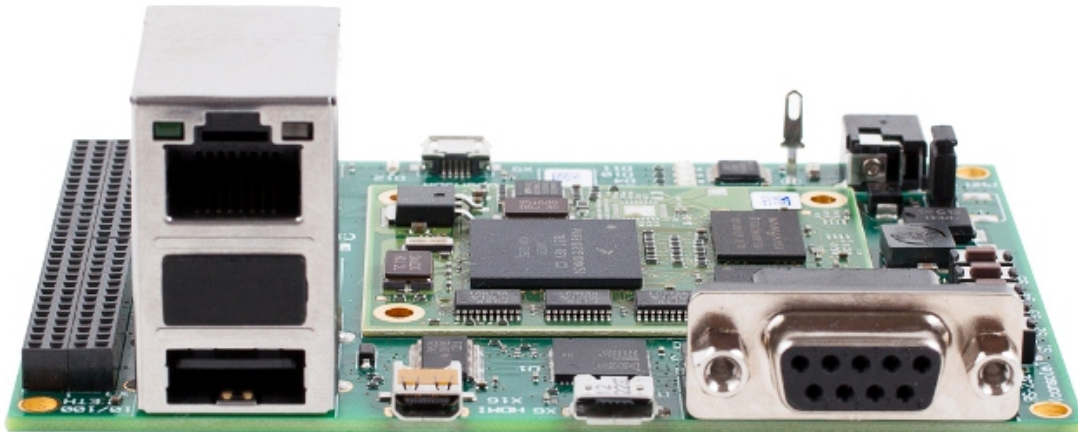
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Image Header

Cosmic Board

for phyCORE-Vybrid



ORDER NOW!
Max 3 boards per order

What is the Cosmic Board?

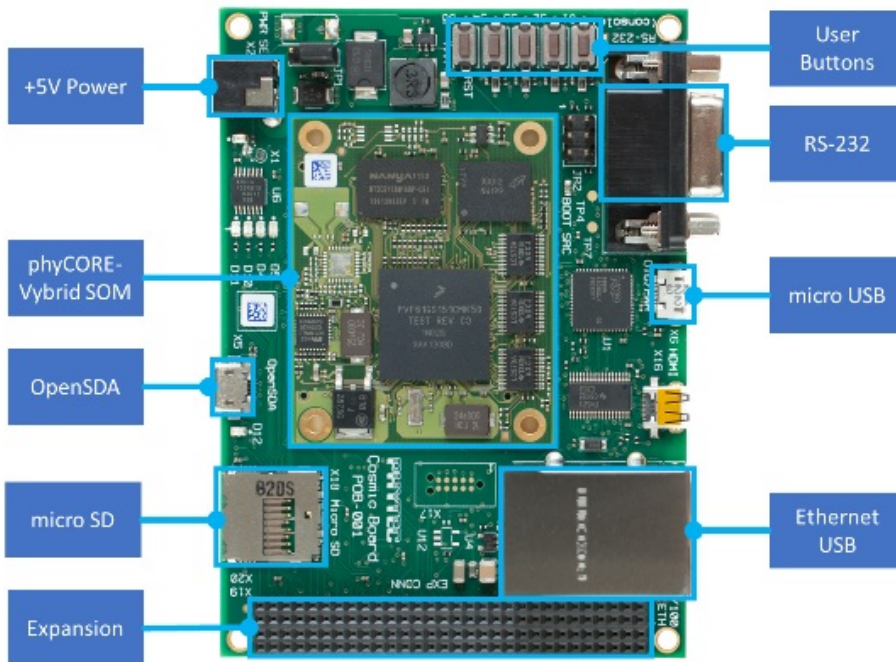
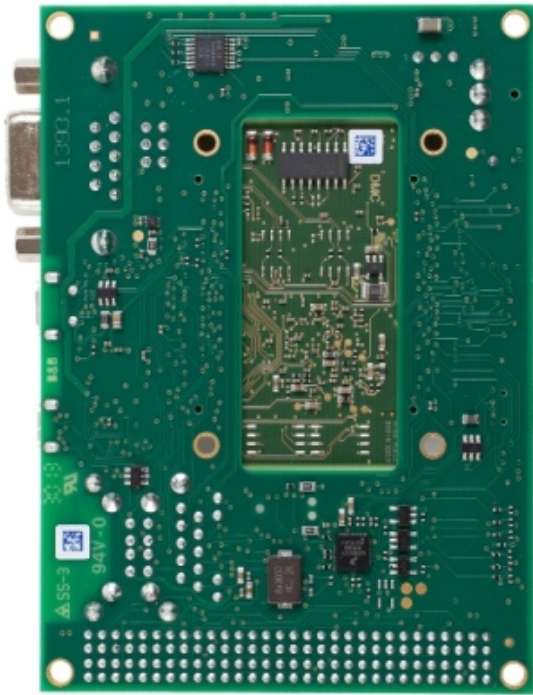
The Cosmic Board is a richly featured and community-supported development platform for engineers to immediately develop applications with Linux and MQX on Vybrid. The Cosmic Board concept is unique from any other community-supported board because it's much more than a low cost hobbyist tool. At the center of the Cosmic Board is an industrial rated, production-ready, System on Module (SOM). By starting with a SOM-based solution, developers are much closer to product than they imagine. It's possible to have first article prototypes ready in weeks, not months! Sounds out of this world, doesn't it?

The Vybrid Microprocessor

The Freescale™ Vybrid (VFxxx) family is a sophisticated solution with human-machine interface support, multiple connectivity options, integrated power management, powerful peripherals, and concurrent real-time control. The VF5xx offers a cost-effective single core ARM® Cortex™-A5. The VF6xx is a highly integrated heterogeneous dual-core solution incorporating the ARM® Cortex™-A5 and Cortex™-M4 for low-power offload and real-time responsiveness. The VF6xx is available on the Cosmic+ Board.

The phyCORE-Vybrid System on Module

The phyCORE-Vybrid SOM is at the core of the Cosmic Board. With advanced manufacturing technology we have soldered the SOM directly to the Cosmic I/O base board. The 240-pins from the SOM provide access to a number of interfaces, including USB 2.0 OTG, Ethernet, CAN, and display. These interfaces from the SOM are routed to I/O connectors on the Cosmic Board.

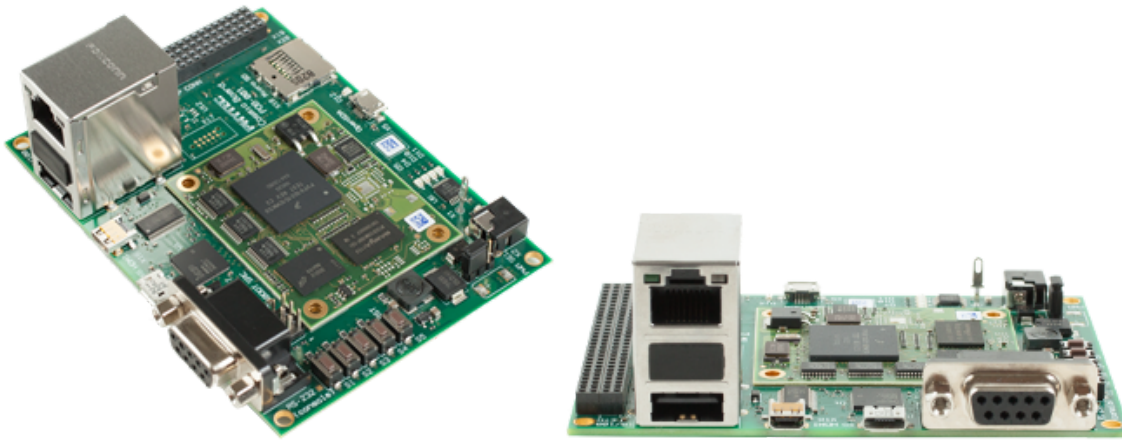


Cosmic Board Features

Cosmic+ Board Features

- phyCORE-Vybrid System on Module
- ARM® Cortex™-A5 @ 500MHz
- ARM® Cortex™-M4 @ 167 MHz (Cosmic+)
- 512 MB NAND / 256 MB DDR3
- HS USB OTG / HS USB Host
- RS-232
- 10/100 Ethernet
- Micro SD
- 4x User Buttons
- 4x User LEDs
- OpenSDA Debug Circuit (Cosmic+)
- Dual power source: Wall or USB
- 2x 60-pin Expansion Connectors

- LCD and WiFi add-on expansion coming soon!



Get Started

Cosmic is offered in two versions. Cosmic and Cosmic+. The Cosmic Board supports the VF5xx, with a single core ARM® Cortex™A5. The Cosmic+ Board supports the VF6xx with multi-core ARM® Cortex™-A5 and Cortex™-M4. The Cortex-M4 is supported by Freescale MQX. MQX is a Real-Time Operating System (RTOS) providing real-time performance within a small, configurable footprint. This RTOS is designed to allow you to configure and balance code size with performance requirements.

Cosmic+ Board Contents

- phyCORE-Vybrid/VF6xx SOM (Cortex™-A5/M4)
- Carrier Board (with OpenSDA Debug)
- Micro SD Card with Linux and MQX software demo
- Full Source Linux and MQX BSP*
- Free Timesys LinuxLink Pro subscription
- ARM Development Suite (DS-5™) license (1yr / 256k limit)
- 2x Micro USB cables

[Order](#)

The Board Support Package*

The Cosmic Board BSP is application development-ready, with all essential drivers and board-level features already supported. The only task left for most projects is application integration.

Documentation and Software

[Get Started Here](#)

[Hardware Manual](#)

PHYTEC Community




The PHYTEC Community is a professional customer focused community to provide fast and reliable technical support and information. Ask questions, share knowledge, explore ideas, and help solve problems. [Join the PHYTEC Community now.](#)

Professional Development Solutions

From initial concept, through manufacturing, we offer end to end solutions for OEMs seeking professional board solutions. Building a new embedded device from the ground up is an enormous challenge and risk, but embedded development is made much easier, faster, and cheaper by leveraging our expertise.



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