

# Like to Get Your Hands *Dirty*?

GIZMO 2 PACKS MORE PERFORMANCE AND CONNECTIVITY  
FOR DIY EMBEDDED PROJECTS

## If You can Dream It, Gizmo 2 can do It!

- ▼ Digital signage
- ▼ x86 set-top boxes (xSTBs)
- ▼ IP-TV
- ▼ Thin clients
- ▼ Jukebox
- ▼ Information kiosks
- ▼ Home automation
- ▼ Gaming machines
- ▼ Point-of-sale systems
- ▼ Media servers
- ▼ Robotics systems
- ▼ And more!

A new generation open-source platform is now available from GizmoSphere for embedded innovators and DIY enthusiasts to create more cool things than ever. Like its predecessor, Gizmo 2 is a compact, 4-inch by 4-inch, low-cost x86-based board that puts the power of a supercomputer with the I/O capabilities of a microcontroller in the palm of your hand. Looking for a platform to build that autonomous submersible vehicle? What about that “smart” jukebox you’ve always wanted to build, but never found a board with enough juice to power? Well with Gizmo 2, you’re now out of excuses.

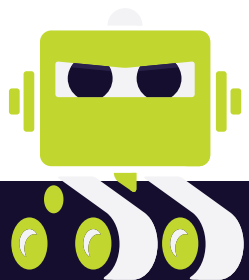
The board includes the dual-core AMD Embedded GX-210HA SoC (System-on-Chip), which combines a CPU on a single die with AMD Radeon™ HD 8210E discrete-class graphics, providing 85 GFLOPS performance, while drawing only 9 watts TDP. Imagine what you could do with that performance boost! And did we mention it’s passively cooled for fanless designs?

Gizmo 2 is geared up to provide greater flexibility and ease of use, with top-notch compute and graphics performance and lower power consumption. Gizmo 2 merges this increased performance power with direct access to a wide range of interfaces – GPIO, ADC/DAC, PWM, SPI, USB, SATA and PCIe – plus an updated selection of peripheral interfaces, including the much-requested and anticipated HDMI dedicated port, an mSATA port for connecting SSDs, and a microSD card slot.

Gizmo 2 comes with a microSD card preloaded with TimeSys Embedded Linux. In addition to this, it supports a variety of operating systems including – Minoca, Linux®, RTOS and Windows® Embedded 7 and 8, as well as Qt, a cross-platform framework used to create devices with stunning UIs and powerful native applications.

The state-of-the-art multicore AMD SoC architecture that underpins Gizmo 2 is optimized to deliver a level of parallel processing-driven performance that conventional CPUs, GPUs and hybrid chipsets simply can’t match. To enable parallel processing and high-performance graphics processing, Gizmo 2 supports standard graphics application programming interfaces (APIs) and frameworks, including DirectX® 11.1, OpenGL 4.2x and OpenCL™ 1.2.

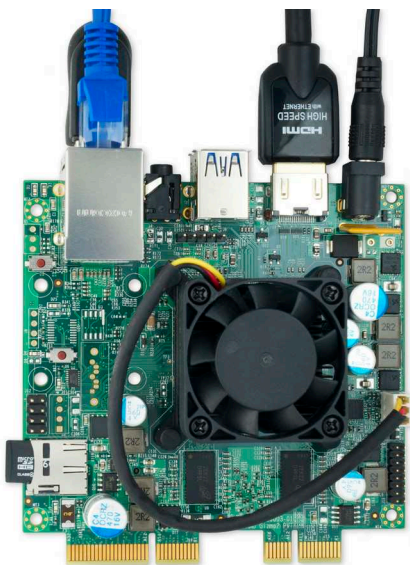
Gizmo 2 can be used for embedded development, PC replacement, microcontroller applications, SMB storage, parallel processing, multicore engineering and Internet of Things (IoT) solutions – basically any application that requires high performance, I/O connectivity and energy efficiency in a small package.



With the versatility of Gizmo 2, connectivity and high performance – powered by open development tools such as OpenCL – designers of all levels of expertise are equipped to invent parallel processing-driven systems that break the speed limits of earlier generation designs.

Gizmo 2 comes from GizmoSphere, a non-profit organization created to meet the open source development needs of embedded developers and DIYers around the globe. It serves as a resource center providing documentation, hardware design files, software downloads (including BSP, application and demo code), project examples, news and other information pertinent to the embedded development community. With new Gizmo 2 features and the collective expertise of the global GizmoSphere developer community, embedded innovators and DIY enthusiasts can develop ... virtually anything!

The Gizmo 2 board is available through [www.element14.com/Gizmo2](http://www.element14.com/Gizmo2) for **\$199**.



## GIZMO 2 SPECIFICATIONS

PROCESSOR/PERFORMANCE	AMD Embedded G-Series SoC - GX210HA - 1GHz Dual-Core
BOARD SIZE	4"x 4" form factor
PROCESSOR TDP	9W
USB	8 total with 4 onboard, 2 USB 2.0 / additional USB 2.0 header, 2 USB 3.0 others can be brought out
AUDIO	HD audio in/out
ETHERNET	RJ45 Gigabit Ethernet port
HDMI/DISPLAYPORT/LVDS	HDMI video/audio output
VGA	No
MEMORY	1GB DDR3-1600 SDRAM
SD	microSD card slot
PCIE	4x1 links of PCIe Gen2 for GPP and 1x4 links of PCIe for GPU
SATA	2x Gen3 - mSATA/mini PCIe connector
EMBEDDED IO	USB, GPIO, SPI programming port on board, DAC, ADC
TOOLS	JTAG header
OPERATING SYSTEMS	TimeSys Embedded Linux and Qt UI loaded on uSD and Linux, Minoca, RTOS, Windows Embedded 7 and 8
KIT CONTENTS	Gizmo 2 board 12V, 2A universal power supply, international plug adapter, uSD and coin cell
PRICE	<b>\$199</b>

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