

Engineering

EMAC, Inc. is a global leader in Embedded ARM-based System-on-Module design and manufacturing. We can provide x86, ARM, Microcontroller, AI, Custom Carrier Board Development and Embedded Software.

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“Thank you for all the support you’ve given us over the past several years.”

—John Hooker, G.E.

Semi-custom engineering is a new concept when it comes to custom

application/product engineering. EMAC has been doing custom and semicustom engineering since 1985. Since that time EMAC has

developed an array of System on Module(SoM) embedded Single Board Computers(SBC), peripherals, and development software. These off-the-shelf products have a variety of features allowing them to be easily incorporated into a number of applications. Typically EMAC can make use of these off-the-shelf items along with an arsenal of ready-to-run library routines and device drivers in a custom application. This semi-custom approach provides the customer with a substantial cost savings and time savings over a fully custom approach.

The semi-custom approach works extremely well for prototypes and small production runs. If your application is cost-sensitive or will be mass-produced then a fully custom approach makes the most sense for production units. If a fully custom approach is warranted and the application requirements can be met by our off-the-shelf components, then a semi-custom design of the prototype is a cost-effective method of determining the feasibility of an application. After the prototype has been approved, a fully custom design can be derived from the semi-custom prototype. Hardware design of digital, analog and microprocessor-based circuitry is no problem. Circuits containing programmable

logic, FPGAs or even ASIC's can be developed. Multilayer PC boards and surface mount technology can be incorporated into your design.

The ability to make use of these new technologies can substantially reduce the cost per piece of the production unit for large runs. EMAC can have your product talk and interact with a PC. As a matter of fact, your circuit application can be put on a PC card



and if appropriate. PC interface software may be text or Windows™ based. Acquired

data can be stored in standard spreadsheet or database formats and manipulated by the PC. Custom PC-based software, such as TSR's and device drivers, or fully stand-alone application programs can be developed. After the circuit board is finished and the software is written, EMAC can help with enclosures, front panel artwork, and even manufacturing of the product. EMAC can offer a turn-key solution to your custom engineering needs. Give us a call and just see how reasonable custom engineering can be!

As a worldwide technology leader, EMAC offers a full line of commercial off the shelf carrier-boards (also known as a baseboard or Development board) for Embedded ARM System-on-Module and x86 Computer on Module projects. EMAC can design and provide Module and Carrier board solutions that are rugged, compact, low power, and high value. Designing for an off-the-shelf SOM module such as an NVIDIA Xavier AGX, NVIDIA Jetson NANO, NVIDIA Jetson Xavier NX, NVIDIA Jetson TX2, COM-Express, Q7 or even a

Custom System-on-Module is as simple as a fully custom solution. When your project requires a Custom Carrier Board our team of

engineers has the experience to deliver a quality carrier board at a competitive price.

Authorized Design Partners:

Below is a list of the companies EMAC, Inc. has developed engineering design partnerships with. While we can design projects with almost any semiconductors. These companies are manufacturers we have worked with and are our preferred design companies.



Analog Devices is a global leader in the design and manufacturing of analog, mixed-signal, and DSP integrated circuits.

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Digi-Key's Design & Integration Services Providers program is a listing of third-party design firms that can be contacted for Prototyping, Manufacturing and Systems Integrations Services.

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NXP is a leader in embedded processing solutions for the automotive, consumer, industrial and networking markets. We are driving the next great wave of innovation.

NXP Semiconductors

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STMicroelectronics is a leading supplier of many of the key technologies going into the next generations of consumer electronics. Connectivity, Conditioning and Protection, Motor Control, and Power & Energy Management.

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TI is a global semiconductor design & manufacturing company. Innovate with 80000+ analog ICs & embedded processors.

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