

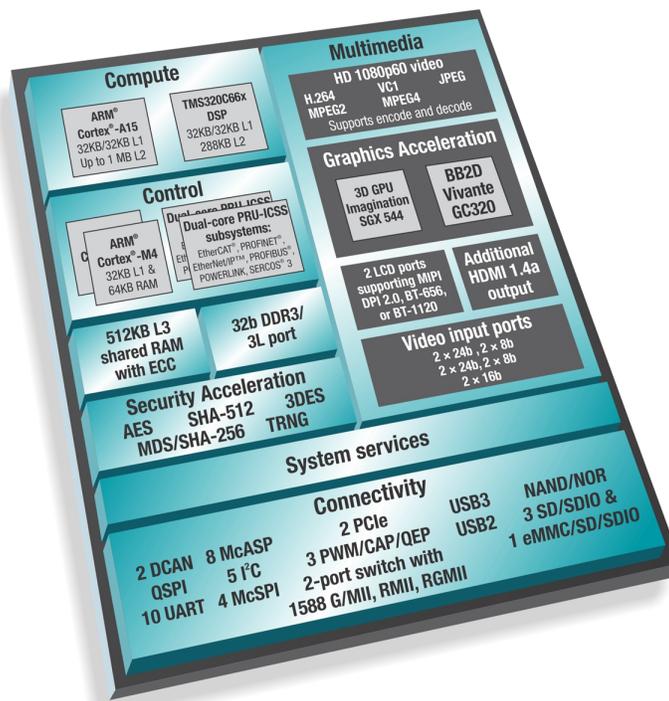
# Technical Article

## From Zero to Hero



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It's not easy for any device to be a hero, but the AM570x processor is just that—a hero. With a cost optimized platform that reduces board space with a 17x17 mm package size, combined ARM® Cortex®-A15, ARM Cortex-M4 , C66x DSP, 3D and 2D acceleration cores and an integrated Industrial Communications Subsystem (PRU-ICSS) capable of running different [industrial Ethernet protocols](#) simultaneously, it's no question that the AM570x processor is the chip of choice. But before we start with a hero, let's start from the beginning.



TI's AM57x processors revolutionized the processing experience. The [Sitara™ AM57x processor family](#) integrates several different processing cores and provides the right mix of peripherals. The blend of these components provides the highest processing power in the Sitara processor family; along with high-resolution video encoding and decoding features. High performance, a key feature of the family, will continue to be part of future devices in the family through the addition of the cost-optimized AM570x processors.

As a member of the AM57x processor family, interfaces like USB and PCIe have been added to AM570x processors to provide high speed connectivity while also being cost optimized. Interfaces like USB make it easy to connect peripherals like a mouse, keyboard or USB flash drive. More information about the specific interfaces can be found in the datasheet.

Compared to the rest of the AM57x processor family, the power solution is easier. This can further reduce overall system costs. For additional flexibility, Sitara processors like the AM57x processor family can be easily paired with WiLink™ module Wi-Fi devices.

The combination of cores and peripherals make it ideal for several applications. For example, AM570x processors can be used in a [programmable logic controller](#) (PLC) application by taking advantage of the PRU-ICSS to run industrial Ethernet protocols. Additionally, AM570x processors can be used in human-machine-

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interface (HMI) products with its mix of peripherals. The graphics processing can be offloaded to integrated 2D and 3D graphics accelerators, and the output options allow for connections to a variety of options like a simple LCD screen or a monitor with HDMI. Anywhere that graphics, performance and cost is a concern, the AM570x processor can fill those needs.

To develop software, [ProcessorSDK](#) provides options for Linux, RT-Linux or TI RTOS on AM570x processor. It is software compatible with other Sitara processor devices, making it easy to migrate to higher performance devices or even more cost-sensitive devices in future design cycles.

AM570x processors provide the right balance of cost-optimization and processing performance to design smarter solutions today.

**To Learn More about Sitara AM57x Processors Please Visit the below Links.**

- [How to efficiently move information through your factory blog](#)
- [Order AM5706 now and begin your next development](#)
- [Order AM5708 now and begin your next development](#)
- [Read our Control-level design challenges in smart factory automation systems blog](#)
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