ARM Holdings

CASE STUDY

MINIMIZING ENVIRONMENTAL IMPACT WITH A HIGH EFFICIENCY DATA CENTER
Leading semiconductor IP supplier requires fully customized data center solution that aligns with its corporate responsibility vision of a sustainable and connected future.

You are considered the world leader in the creation of smart, low-energy semiconductor chips that are used in 95 percent of all smart phones globally. You have a growing geographic footprint, and you have recently designed and built your own award-winning, energy-efficient data center near your headquarters in the United Kingdom. You want to follow a similar path in the United States, but you need the help of an experienced data center developer to ensure the project’s success. Although your immediate need is a flexible provider that is willing to collaborate on a “build-to-suit” data center, you also want a long-term partner to consider for future projects in other parts of the world.

**The Client:** Leading semiconductor IP supplier

Founded in 1990, ARM Holdings is the world’s leading semiconductor intellectual property (IP) supplier. ARM designs the technology
that resides at the heart of advanced digital products, from smart phones and tablets to smart sensors and servers. ARM provides the processor and physical IP designs that enable semiconductor manufacturers to quickly develop complex silicon chips with a wide range of end-market applications. Headquartered in the UK, ARM has offices around the globe, including design centers in Taiwan, France, India, Sweden and the United States. It has been estimated that ARM technology can be found in 95 percent of smart phones, 80 percent of digital cameras and 35 percent of all electronic devices globally.

The Challenge: Comprehensive data center strategy needed

Given the rise in demand for cloud computing as it continues to gain market share in long-term secular growth markets, ARM understands that in order to keep pace with increasing customer demand it needs a comprehensive data center strategy that can be scaled up or down with the natural ebbs and flows of the business. At the heart of this strategy is establishing mission critical facilities in key markets, such as Texas, where ARM already has a major office presence. In Austin, ARM required a fully customized, high-efficiency and high-density data center solution to accommodate its growing business. ARM’s desire was to leverage—as much as possible—the same design and equipment used in its award-winning data center in Cambridge, England. However, ARM needed the knowledge, experience and resources of a U.S.-based firm to make it happen quickly, and to guarantee its success.

The Solution: State-of-the-art facility in Austin, Texas

Digital Realty converted one-third of an existing powered Base Building® in Austin into a custom-built, high-performance-computing (HPC) data center solution for ARM, using the basic design and building blocks of ARM’s facility in the UK. In order to complete the project, Digital Realty collaborated with the same designers,
The facility has leading-edge high-efficiency cooling, DCIM and security systems integrated into a fully customized HPC configuration. Builders and equipment suppliers that were involved in constructing the Cambridge facility. Outfitted with Digital Realty’s comprehensive Data Center Infrastructure Management (DCIM) system, EnVision, and a robust ecosystem that allows for unsurpassed connectivity, the state-of-the-art facility at 7500 Metro Center Drive is located in the 550-acre Metcenter Development near the Austin-Bergstrom International Airport and about 10 minutes from the state capital and the University of Texas campus. The facility has leading-edge high-efficiency cooling, DCIM and security systems integrated into a fully customized HPC configuration. Diverse underground electrical feeds from two nearby substations and access to 17 telecommunication providers in the close proximity to the building provide the necessary infrastructure to meet ARM’s needs.

Summary:
ARM put forth specific requirements for a customized data center solution in Austin, Texas, and it wanted to partner up with a provider that understood its business objectives, could keep pace with its growth trajectory and match the company’s global footprint. A true collaboration every step of the way, ARM’s new Texas facility received DataCenter Dynamic’s North America Award in 2014 for innovation in the medium data center. This project demonstrates Digital Realty’s ability to adapt its data center solution offerings to meet ARM’s sustainability objectives while enabling the organization to expand the delivery of its solutions worldwide.
About Digital Realty

Digital Realty Trust, Inc. supports the data center and colocation strategies of more than 1,000 firms across its secure, network-rich portfolio of data centers located throughout North America, Europe, Asia and Australia. Digital Realty’s clients include domestic and international companies of all sizes, ranging from financial services, cloud and information technology services, to manufacturing, energy, gaming, life sciences and consumer products.

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