



Electronics

Client

Texas Instruments

Location

Richardson, TX, USA



Conceptual Rendering

Kilby R&D Center

Project Highlights

- Research and Development
- Fabrication Facility
- Class 1 Cleanroom and Support Facilities
- Administrative Office and Support Facilities
- Utility Service Support Wing
- Structured parking

Project Description

Almost fifty years ago, Jack Kilby invented the first integrated circuit and began an industry that set the world on a course for the high-technology environment that we live in today. While Jack is no longer with us, his memory lives on.

Texas Instruments celebrated Jack Kilby's innovation by dedicating a research and development center in his honor. According to Texas Instruments, the Kilby Center is the world's most advanced research center for silicon manufacturing.

CH2M HILL IDC is proud to have contributed to this historic facility. Research and Development Fabrication Facility Class 1 Cleanroom and Support Facilities Administrative Office and Support Facilities Utility Service Support Wing Structured parking



The Kilby Center is a 37,160m² complex with a central focus on a 4,738m² Class 1 cleanroom that supports R&D for 300mm processes.

The fabrication area is a three-level facility:

- 1) a fan tower supplied ballroom design cleanroom with a 4.9m ceiling height.
- 2) a 5.6m subfab/plenum space, finished floor to top of raised floor.
- 3) a 4.9m mechanical equipment support level.

CMP facilities are located on the subfab/plenum level adjacent to the waffle but in classified space. Other fab support labs and test areas are off the waffle in non-clean spaces.

The cleanroom provides the Kilby Center a state-of-the-art research and development silicon wafer fabrication facility on Texas Instruments' Richardson, Texas campus. The entire project was delivered on a fast track schedule and used a design/build approach to several of the Center's building systems. CH2M HILL IDC was responsible for designing the entire project, including the Class 1 cleanroom. Additionally, CH2M HILL IDC self-performed the construction of the cleanroom.



CH2M HILL IDC provided design/build services for the buildout of the initially unoccupied space within the facility as well as a related scrubber yard expansion. Segregated shipping and receiving for clean materials, chemicals, and support materials were a part of this project.

Technical Issues

- Fast track delivery with specific building systems via design/build