Computer Hardware Engineers
17-2061.00

Description: Research, design, develop, or test computer or computer-related equipment for commercial, industrial, military, or scientific use.

Other Resources:
ONET Link
MyNextMove Link

Sample of Reported Job Titles: Design Engineer, Engineer, Field Service Engineer

Job Zone

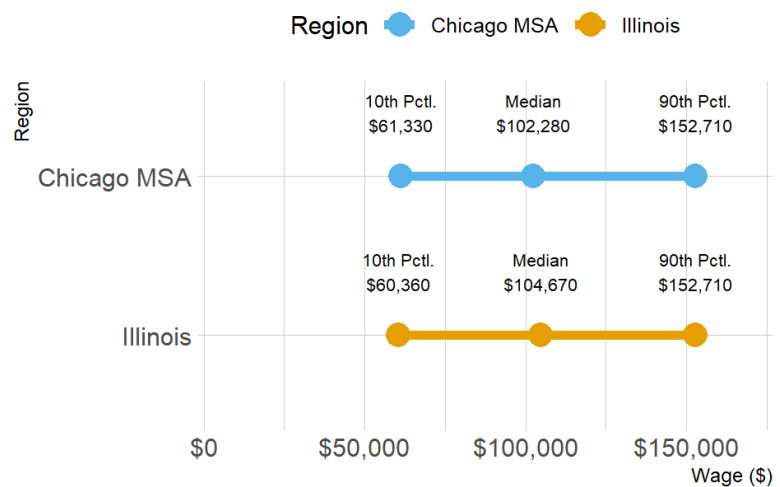**Title:** 4 - Considerable Preparation Needed

Education: Require a four-year bachelor's degree.

Experience: A considerable amount of work-related skill, knowledge, or experience is needed.

Training: Several years of work-related experience, on-the-job training, and/or vocational training needed.

Hot Technologies: Autodesk AutoCAD, C++, Cadence Allegro PCB Designer, Cadence Concept, Cadence OrCAD, Cadence Schematic Composer, Cadence Virtuoso Layout Suite

Region	Employment	Location Quotient	Median Wage
Chicago MSA	490	0.22	$102,280
Illinois	550	0.19	$104,670

Top 5 Core Tasks According to Current Job Holders	Frequency	Importance (out of 100)
Update knowledge and skills to keep up with rapid advancements in computer technology.	More than monthly	86
Design and develop computer hardware and support peripherals, including central processing units (CPUs), support logic, microprocessors, custom integrated circuits, and printers and disk drives.	More than yearly	84
Confer with engineering staff and consult specifications to evaluate interface between hardware and software and operational and performance requirements of overall system.	More than weekly	83
Build, test, and modify product prototypes, using working models or theoretical models constructed with computer simulation.	More than weekly	81
Write detailed functional specifications that document the hardware development process and support hardware introduction.	More than yearly	80

Sources: US Department of Labor O*NET 26.3 Database (May 2022 Release); Bureau of Labor Statistics Occupational Employment and Wage Estimates - National, State, and Metropolitan (May 2021 Release)

Nathalie P. Voorhees Center for Neighborhood and Community Improvement