

Hardware Design / Signal Integrity / Power Integrity Engineer

We can't predict what the future holds, but we know Texas Instruments will have a part in shaping it.

Texas Instruments (TI) is seeking Hardware (HW) Applications Engineers with career interests in:

• Hardware System Design, PCB Design, Signal Integrity, Power Integrity, Etc.

Job Summary:

- Work in an exciting team and develop skills designing TI Evaluation and Reference PCB boards:
 - o Technical requirements and HW system design
 - Schematic, PCB stack-up, and layout design
 - Analog, Digital, and High-speed circuit design
 - o Power Distribution Network (PDN) design
 - Signal Integrity and Power Integrity simulations
 - Parts selection, Bill-of-Materials (BOM)
 - o Board bring-up and design validation
 - o Product launch and continual process improvement



https://www.ti.com/tool/SK-AM62A-LP

Technical skills, tools, and interest areas

- Transmission line theory, semiconductor device physics, signal and power integrity
- Stack-up, design rules, impedance control, Power Distribution Network (PDN)
- Crosstalk, eye diagrams, return paths, TDR impedance, supply noise, S-parameters
- I/O SPICE models, IBIS models, IBIS-AMI models, Thermal models
- Synopsys HSPICE, Cadence Spectre, Viva, SystemSI and TopXp, Siemens Hyperlynx
- ANSYS SiWave and SiWave-PSI, Cadence OrCad and Allegro, Altium CAD
- High-Speed Interfaces: DDR, USB, PCIe, Ethernet, eMMC, OSPI, etc.
- Electromagnetic interference (EMI) and electromagnetic compatibility (EMC)

Education

Electrical Engineering (EE), Electrical & Computer Engineering (ECE), or related field

Positions

- College Graduate positions (Graduating Fall 2024 or Spring 2025)
- Summer Internship positions (Summer 2025)

If you have a passion for **HW Design / Signal Integrity / Power Integrity / Etc.** and an excitement to grow, innovate, take an active role in product definition, and develop technical leadership, please reach out!

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