

Crisis in Power Engineering Education: A National Security Concern Minneapolis, MN October 21-22, 2022



Intel Corporation

Semiconductor Manufacturing

Computer Hardware

Artificial Intelligence

Company Background

- Founded 1968
- 2021 GAAP revenue of \$79 Billion \bullet and global workforce of 121,100 (2021 Annual Report Form 10 K)
- Employees located in 46 ulletcountries worldwide Many US locations including Austin, Chandler, Columbia, DuPont, Folsom, Fort Collins, Hillsboro, Hudson, Rio Rancho and Santa Clara. Products: Processors, Graphics \bullet Processing Units, Memory and Wireless Products, Storage, FPGAs & Programmable Devices, ASICs and Chipsets

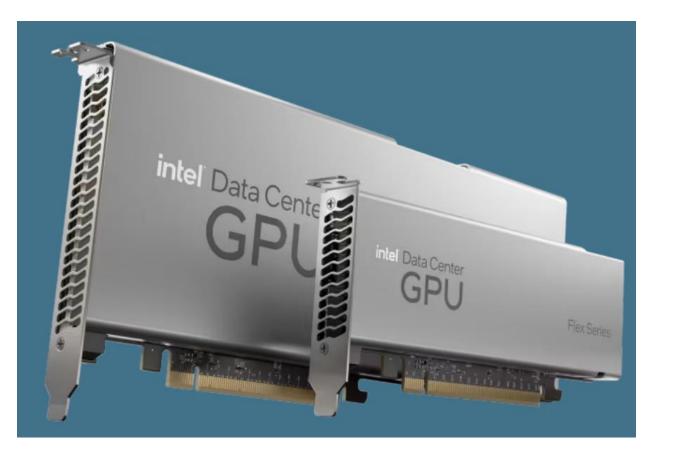




- Power delivery complexity going ulletup due to increase in power levels and power supply count
- Focus on high conversion ulletefficiency for better battery life and low data center energy costs
- Voltage regulator integration •
- Power integrity for clean power ulletdistribution
- **DC-DC** conversion lacksquare

Source: intel.com





Power and Energy Talent Base

- Hundreds of power engineers work at Intel across different business units
- Focus is more on the power electronics when compared to power systems
- Engineers and Technicians with ulletAS, BS, MS and PhD degrees

- Total package includes market competitive pay, stock grants and bonuses, employee stock purchase plan, retirement benefits, paid time off and family leave, parent reintegration, fertility assistance, flexible work schedules, sabbaticals, and onsite services
- jobs.intel.com for • Visit: immediate openings

- In May 2021, Intel announced a \$3.5 billion investment in New Mexico
- In September 2021, Intel ulletbroke ground on two new leading edge manufacturing facilities in Arizona (\$ 20 B)
- In September 2022, Intel ulletannounced plans for an initial investment of > \$20 billion in the construction of two new leading-edge chip factories in Ohio. The initial phase of the project is expected to create 3,000 Intel jobs and 7,000 construction jobs