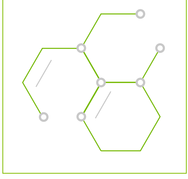
SOLVING THE UNSOLVABLE

Humanity's Toughest Challenges Require Infinite Computing

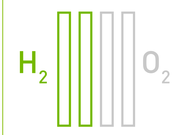
SMARTER MEDICINE



IT TAKES A LARGE AMOUNT OF COMPUTATIONALLY EXPENSIVE RESEARCH TO DEVELOP

BETTER CANCER DRUGS

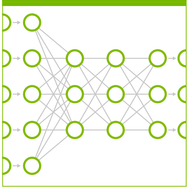
CLEANER ENERGY



THE ENERGY INDUSTRY HAS HARNESSED THE POWER OF GPU ACCELERATION TO DESIGN

CLEANER, MORE EFFICIENT FUEL

MODERN AI



INCREASINGLY COMPLEX NEURAL NETWORKS WITH TRILLIONS OF CONNECTIONS LEAD TO

DEEPER UNDERSTANDING

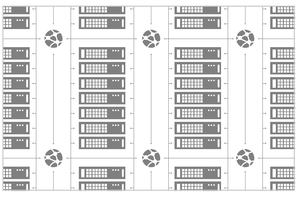
NVIDIA® PASCAL™ GPU ARCHITECTURE

OPENING A WORLD OF POSSIBILITIES

SOLVING MASSIVE COMPUTE INEFFICIENCY

TRADITIONAL DATA CENTER

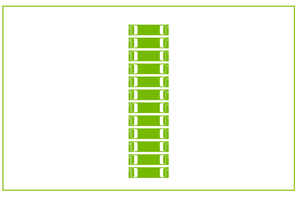
Built for transactional workloads with limited computing needs.



Uses many commodity servers interconnected with complex network infrastructures.

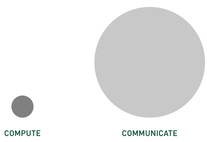
THE NEW DATA CENTER

Designed for workloads with infinite computing needs.

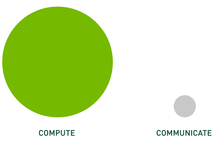


Uses fewer, lightning-fast nodes equal to the performance of thousands of commodity servers for simpler network infrastructure.

APPLICATION PERFORMANCE: COMPUTE VS COMMUNICATE



Time lost to network latency and energy spent communicating across complex networks infrastructure results in performance inefficiencies.



Removing the bottleneck saves time and energy. Completing tasks in a fraction of the time.

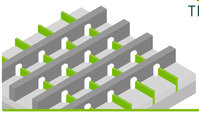
FIVE BREAKTHROUGHS

LEAPS IN TECHNOLOGY TO DRIVE COMPUTE EFFICIENCY

12X TRAINING **PERFORMANCE**

LEAP IN NEURAL NETWORK TRAINING PERFORMANCE WITH NEW **NVIDIA PASCAL ARCHITECTURE**

150B TRANSISTORS

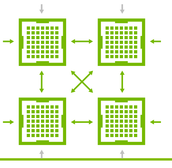


FABRICATED WITH **16 NANOMETER FINFET** FOR UNPRECEDENTED ENERGY EFFICIENCY

3X MEMORY **BANDWIDTH**

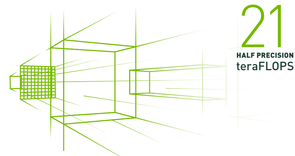
WITH **CoWoS® WITH HBM2** COMPARED TO NVIDIA MAXWELL™ ARCHITECTURE FOR BIG DATA WORKLOADS

5X INTERCONNECT **BANDWIDTH**



WITH **NVIDIA NVLINK™** FOR MAXIMUM APPLICATION SCALABILITY

21 HALF PRECISION teraFLOPS



DELIVERED BY **NEW AI ALGORITHMS** FOR PEAK PERFORMANCE DEEP LEARNING

What Challenge Will You Solve?

Explore what the latest breakthrough in GPU acceleration can help you achieve, discover, and solve today.

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