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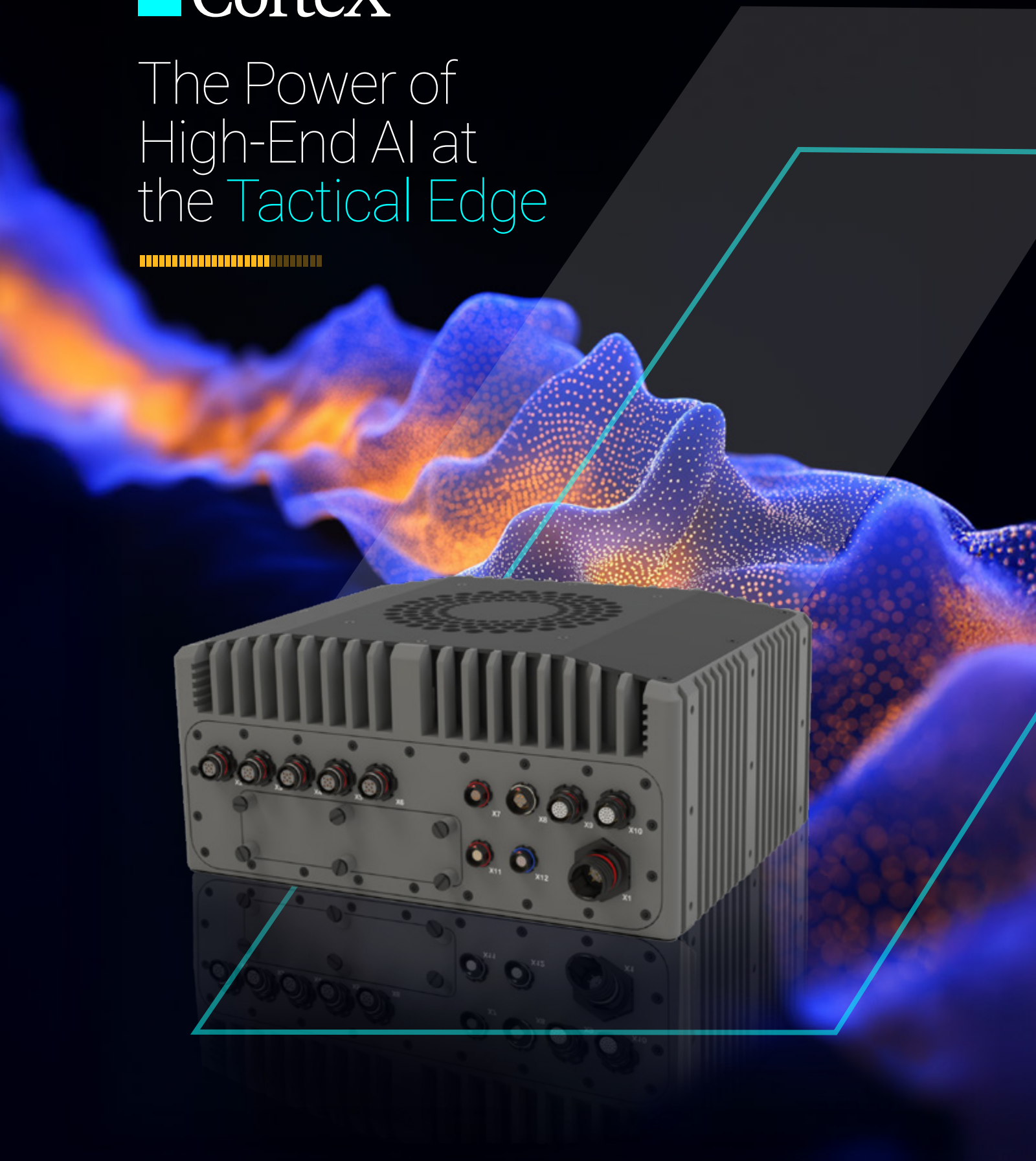
CorteX

The Power of High-End AI at the Tactical Edge



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Brings battlefield-grade intelligence directly into the mission space:

- **Real-time AI inference**
  with NVIDIA RTX ADA 5000 GPU (Tensor + RT cores)
- **Cloud-independent system**
  with onboard sensor fusion, object detection, and real-time situational awareness
- **MIL-STD-certified ruggedness**
  for shock, vibration, dust, water, and extreme temps (IP67, -40°C to +60°C)

Enables Tactical Advantages:

- **No latency**
  Decisions made in milliseconds, not seconds
- **No bandwidth dependency**
  Works even when disconnected or jammed
- **No compromise**
  andles AI workloads with the footprint of a shoebox

Enables Force Multiplier Across NATO Platforms:

- **Combat vehicles gain AI-powered vision & target ID**
- **Border patrol units deploy autonomous surveillance kits**
- **Special forces use it for on-the-move data processing**

Solves A Number of Challenges

Lack of Real-Time Processing in Harsh Environments Solves with high-performance
13th-gen Intel CPU + RTX ADA 5000 GPU (304 Tensor Cores) and rugged MIL-STD-810H compliance

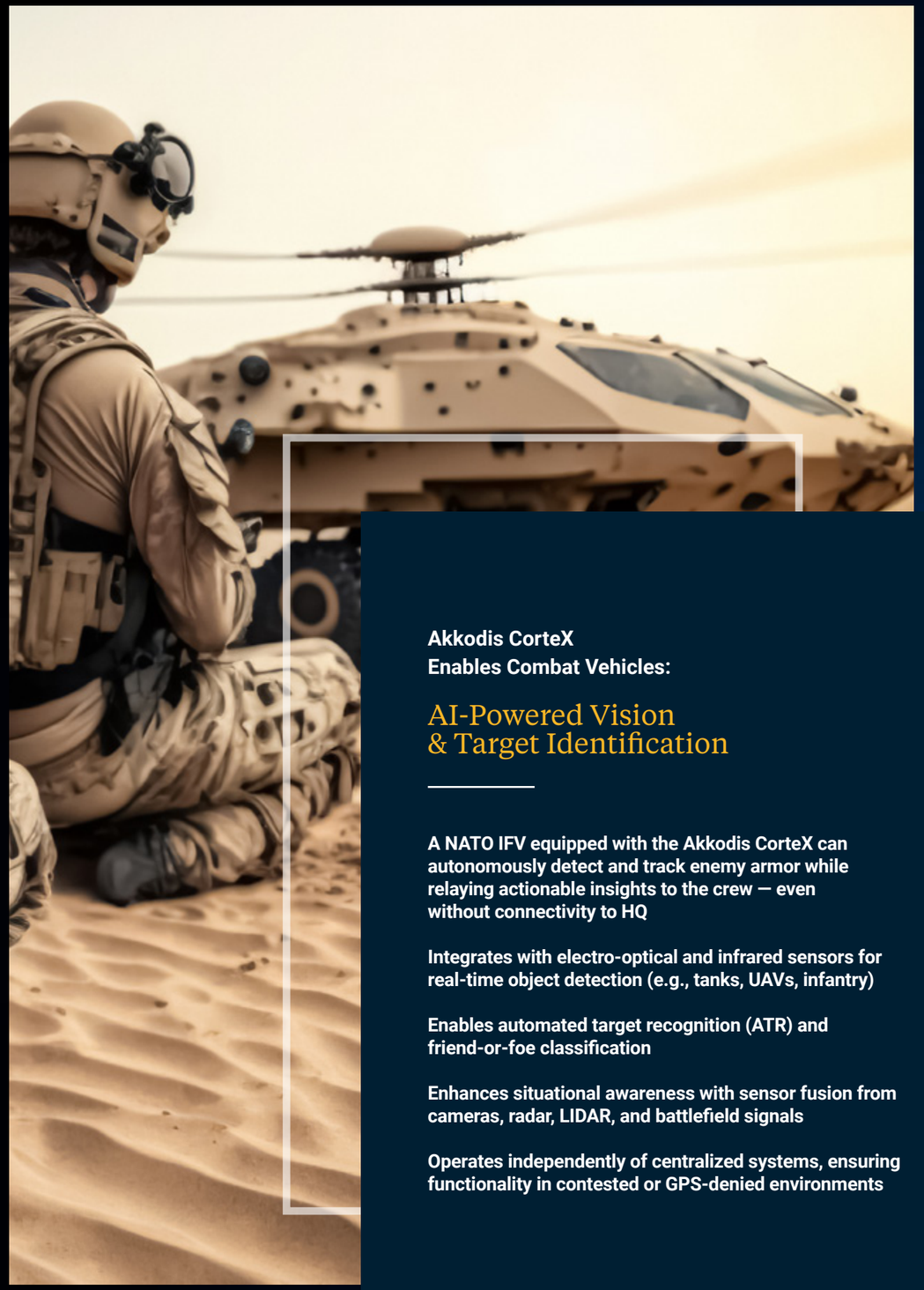
No High SWaP Constraints in Military Vehicles
Compact form factor, IP67-rated, under 8kg, -40°C to +60°C operating range

Insufficient Onboard AI/ML Inference Capability
Embedded GPU supports edge-based neural net inference without backhaul latency

Cybersecurity and Data Integrity Concerns in Edge Systems
Secure Boot, TPM 2.0, and UEFI BIOS with backup

Key features:

Intel 13th generation i7 Core CPU
NVIDIA RTX AD5000 GPU
5x Gigabit Ethernet ports
USB 2.0 + USB3.2
1x HDMI
3x RS-232/422/485 isolated serial ports
2x CAN ports
Analog Audio
Removable 2.5” SSD
SWaP
IP67
Extended operating temperature



Akkodis CorteX
Enables Combat Vehicles:

AI-Powered Vision & Target Identification

A NATO IFV equipped with the Akkodis CorteX can autonomously detect and track enemy armor while relaying actionable insights to the crew — even without connectivity to HQ

Integrates with electro-optical and infrared sensors for real-time object detection (e.g., tanks, UAVs, infantry)

Enables automated target recognition (ATR) and friend-or-foe classification

Enhances situational awareness with sensor fusion from cameras, radar, LIDAR, and battlefield signals

Operates independently of centralized systems, ensuring functionality in contested or GPS-denied environments

Naval Applications for
Akkodis CorteX

Autonomous & Manned Vessel Sensor Fusion

A corvette uses the Akkodis CorteX to run AI-based fusion of radar and IR inputs to identify fast-moving low-signature threats (e.g., swarm boats or drones).

Integrates radar, sonar, EO/IR, and AIS (Automatic Identification System) data.

Runs AI models onboard for:

Maritime object classification

Threat prioritization

Anomaly detection (e.g., stealth vessels or illegal fishing patterns)

Reduces reliance on centralized processing on combat management systems.

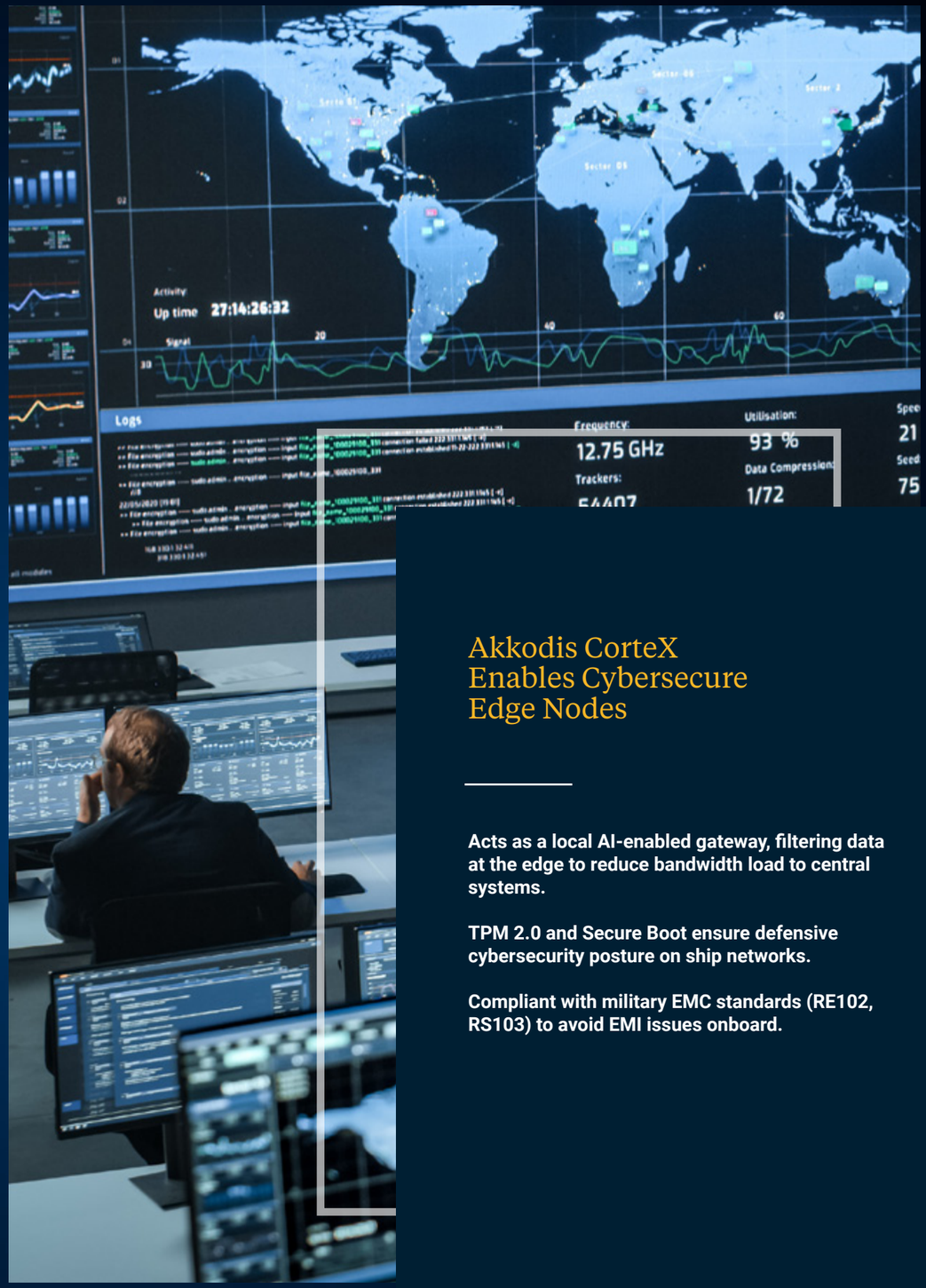
CorteX Enables Electronic Warfare (EW) and SIGINT Nodes

A frigate's EW officer uses the Akkodis CorteX to detect and classify enemy radar emissions, enabling faster countermeasure deployment.

Leverages GPU acceleration for real-time signal processing, pattern recognition, and waveform classification.

Operates independently in contested electromagnetic environments.

Can be deployed in containerized COMINT/SIGINT pods or integrated with EW suites.



Akkodis CorteX Enables Cybersecure Edge Nodes

Acts as a local AI-enabled gateway, filtering data at the edge to reduce bandwidth load to central systems.

TPM 2.0 and Secure Boot ensure defensive cybersecurity posture on ship networks.

Compliant with military EMC standards (RE102, RS103) to avoid EMI issues onboard.

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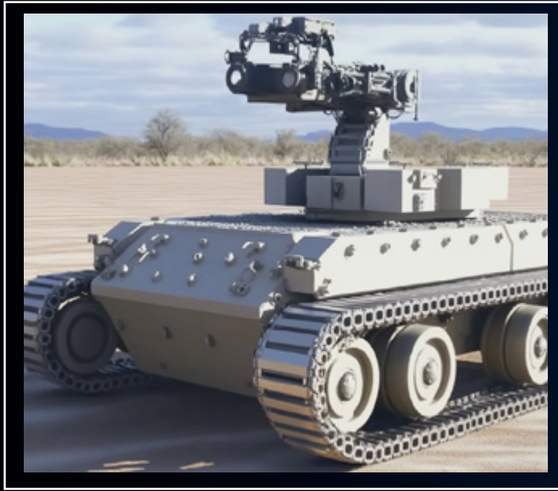
Use cases

Electronic Warfare & ISR Payloads

GPU acceleration enables AI-based signal intelligence (SIGINT) or real-time video processing

Can be used in UAV ground control stations or EW-equipped armored platforms



Autonomous or Semi-Autonomous Military Ground Vehicles

Edge inference of computer vision models (object detection, terrain analysis)

Real-time sensor fusion (LIDAR, radar, EO/IR)

CAN and RS interfaces make it easy to integrate into military vehicles

Tactical Communications Hubs / Network Gateways

Acts as a secure, mobile edge router with advanced routing logic

Interfaces with legacy systems (serial, CAN) and modern IP networks simultaneously

Useful for dismounted units or vehicle-based mesh networks

Mobile Command & Control (C2) Nodes

Hosts C2 apps and real-time data dashboards on-site

Can run AI-assisted decision-making tools for battlefield management

Secure boot, hardened IO, and rugged specs enable reliable forward deployment

Surveillance and Perimeter Security

Edge AI video analytics for border control, base security, or temporary checkpoints

Real-time alerts and object recognition with minimal bandwidth use

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Engineering a Smarter Future Together.

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