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Edge AI
Partner Enablement Package

Learn how the combination of AI and edge computing delivers near-real-time value to businesses

Contents

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Why Partner with Intel?

At Intel, our goal is to improve lives and outcomes for everyone and every enterprise on this planet

But we aren't doing this alone!

Together with our partners, we are creating real value for our customers by **bringing AI everywhere** and minimizing the risks in AI solution deployment

When you partner with Intel, you partner with a complete AI ecosystem

Our broad portfolio of AI-enabling technologies and collaboration with hardware, software, and solution ecosystem partners delivers real world solutions and differentiated business outcomes for industries, companies, and communities.

Helping you to grow your business.

Join Us On the Journey to Bring AI Everywhere

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Bringing AI Everywhere

ADDITIONAL AI PARTNER ACTIVATION PACKAGES

ACCESS NOW

- Generative AI / Enterprise AI
- AI Workloads on Intel® Xeon®
- AI Everywhere

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4

Bringing AI Everywhere

AI Software & Services
Fast development with open source tools and workflows that offer choice and flexibility

AI PC
Workforce productivity: 300+ AI-enabled features on the AI PC

Edge AI
Efficiency at the edge: Performance designed for space and power constraints

Data Center & Cloud AI
AI acceleration with performance per dollar advantages

AI Networking
High speed connectivity: Standards-based connectivity with excellent scalability and cost advantages

Scalable AI computing platforms

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Fast Development in an Open Ecosystem

Open source tools and workflows offer choice and flexibility

AI Software & Services

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Software

Accelerate on an open ecosystem
Open frameworks and libraries to accelerate performance—includes PyTorch optimizations and GenAI models on Hugging Face

OpenVINO

Develop once, deploy everywhere
Deploy across diverse hardware with minimal code modification

intel tiber
Edge Platform

Bring AI to the edge
Scalable edge and AI solutions on standard hardware with cloud-like ease

intel tiber
AI Cloud

Build in the cloud
Open, optimized AI models, frameworks, and libraries

oneAPI

No vendor lock-in
Optimized libraries for all major AI frameworks, with tools to migrate code from CUDA

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Deploy AI Everywhere with OpenVINO™

Maximize hardware with the OpenVINO™ toolkit and take advantage of integrated accelerators to run AI workloads with optimal cost efficiency

visit **openvino.ai**

Edge
Accelerates inference in IoT device application for a variety of use cases in Retail, Industrial Manufacturing, Healthcare, Smart Cities and more—powered by the full range of Intel® Architecture.

AI PC
With AI-acceleration built into every Intel® Core™ Ultra processor, you can deliver compelling, new experiences—enhanced collaboration, productivity, and creativity – right on the AI PC.

Cloud
Support fast-growing cloud workloads powered by Intel® Xeon® Scalable processors featuring built-in accelerators for more performance-per-core and unmatched AI performance.

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Powered by oneAPI
oneAPI

Fast, Accurate Results with High-Performance

OpenVINO™ is a powerful toolkit that accelerates AI workloads such as computer vision, generative AI, audio, speech, language, and recommendation systems.

What sets OpenVINO™ apart is its versatility. With a "write once, deploy anywhere" approach, developers can craft an application or algorithm and execute it across various Intel architectures, including CPU, GPU, NPU, FPGA, and the ARM CPU architecture.
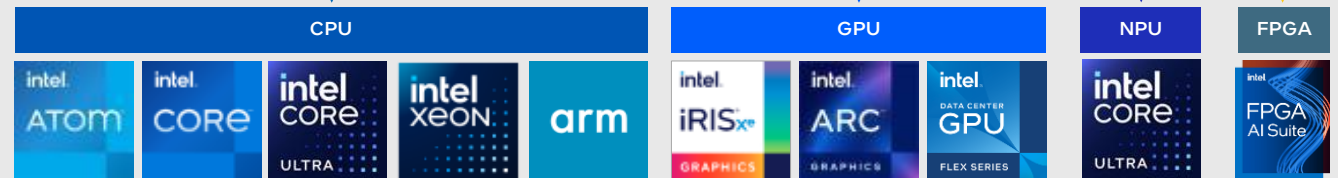
1 MODEL

PyTorch TensorFlow TensorFlowLite PaddlePaddle ONNX Keras

OpenVINO™

2 OPTIMIZE

Optimized Performance

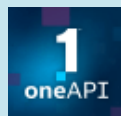| CPU	GPU	NPU	FPGA
intel ATOM · intel CORE · intel CORE ULTRA · intel XEON · arm	intel iRISxe GRAPHICS · intel ARC GRAPHICS · intel DATA CENTER GPU FLEX SERIES	intel CORE ULTRA	intel FPGA AI Suite

3 DEPLOY

Windows   Linux   macOS

oneAPI

Powered by oneAPI
The productive, smart path to freedom for accelerated computing from the economic and technical burdens of proprietary alternatives.

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Edge AI

What is Edge AI?

Edge AI brings artificial intelligence (AI) to "the edge," closer to where data is generated. Unlocking new levels of business insight, efficiency, and innovation.

Innovative capabilities at the edge, facilitated by advancements in computing performance and efficiency are bringing together the physical and digital worlds.

Edge AI, which brings AI to local devices and sensors, enables rapid data analysis and action independent of the cloud or data center. This unlocks **near-real-time responsiveness and insights**, **increased efficiency**, **reduced operational costs**, and the ability to deliver **new types of customer experiences**.

LEARN MORE

■ Article - What is Edge AI ?

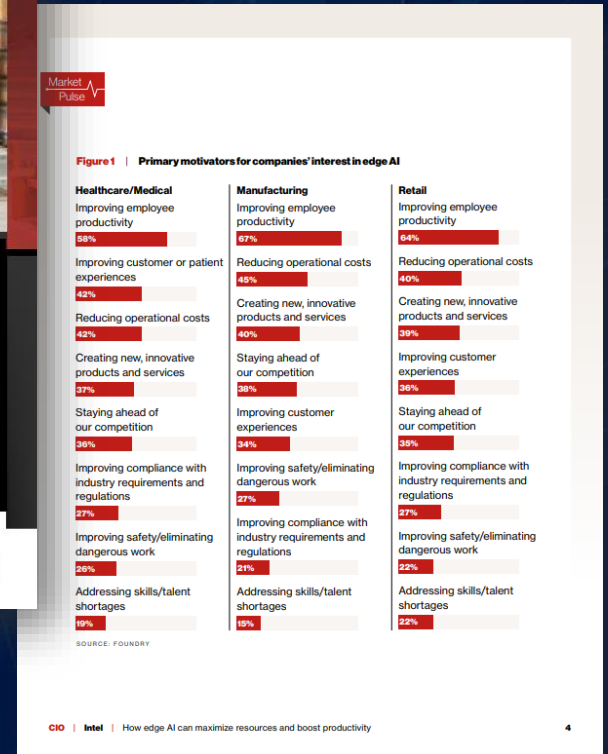■ Report - How Edge AI can maximize resources and boost productivity

SPONSORED CONTENT | WHITE PAPER

How **Edge AI** can maximize resources and boost productivity

New survey of healthcare, manufacturing, and retail leaders reveals technology's transformative potential

CIO   SPONSORED BY intel

Figure 1 | Primary motivators for companies' interest in edge AI

Healthcare/Medical
Improving employee productivity 58%
Improving customer or patient experiences 42%
Reducing operational costs 42%
Creating new, innovative products and services 37%
Staying ahead of our competition 36%
Improving compliance with industry requirements and regulations 27%
Improving safety/eliminating dangerous work 26%
Addressing skills/talent shortages 19%

Manufacturing
Improving employee productivity 67%
Reducing operational costs 45%
Creating new, innovative products and services 40%
Staying ahead of our competition 38%
Improving customer experiences 34%
Improving safety/eliminating dangerous work 27%
Improving compliance with industry requirements and regulations 21%
Addressing skills/talent shortages 15%

Retail
Improving employee productivity 54%
Reducing operational costs 40%
Creating new, innovative products and services 39%
Improving customer experiences 36%
Staying ahead of our competition 35%
Improving compliance with industry requirements and regulations 27%
Improving safety/eliminating dangerous work 22%
Addressing skills/talent shortages 22%

SOURCE: FOUNDRY

CIO | intel | How edge AI can maximize resources and boost productivity   4

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Edge AI Opportunities

Processing data closer to where it is being generated enables greater processing speeds, increased volumes, and real-time, action-led results[1]

50%
of edge computing deployments will involve machine learning by 2026

Source: Gartner

"Without the enhancements that edge computing brings, enterprises will be left behind in a hypercompetitive marketplace, where speed of insight, security and expanded analytics are driving forces." – Jack Gold, Founder and Principal Analyst, J. Gold Associates, LLC

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offers an edge-centric approach that has delivered over **90,000** real-world edge deployments and **200M** processors sold over the past 10 years[2]

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Edge AI Business Benefits

Edge AI can help enterprises tackle any number of complex challenges to solve real-world problems

Operational speed and efficiency

Crucial to innovation, AI-based automation at the edge enables near-real-time, autonomous operations, eliminating delays associated with cloud-based processing. Latency and network bottlenecks are minimized, boosting data transfer rates.

Energy conservation

Energy-efficient edge AI devices are designed to facilitate low-power computing and can be significantly more efficient than cloud-based processing. Meanwhile, networking hardware like routers and switches consume less power, as traffic to and from the data center is minimized.

Security and data sovereignty

Keeping sensitive data at the edge helps to reduce security and privacy risks by ensuring local control, autonomy, and compliance with regulations.

Cost-effectiveness

The growing volume of data from sensors and devices makes edge computing more cost-effective than sending data to the cloud and back. Less bandwidth is consumed, and fewer cloud-based resources are needed, helping to reduce operational expenses.

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Edge AI Use Cases

Edge AI unlocks use cases with applications for every industry, enabling enterprises to deploy to the far and near edges, and utilize the cloud for scalable operations
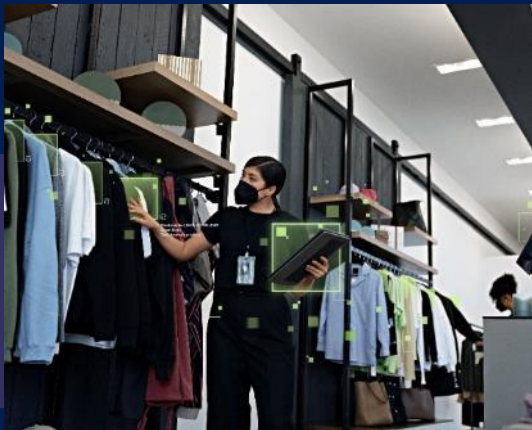
Retail

- Inventory management
- Smart retail shop
- Loss prevention
- Counterfeit detection
- Self-checkout
- Customer flow analysis
- Smart shelving

Manufacturing

- Asset tracking
- Defect detection
- Targeted performance reports
- Automated safety measures
- Predictive maintenance
- Efficiency optimization

Energy

- Equipment monitoring
- Asset tracking
- Fuel management
- Hazard detection
- Peak shaving
- Consumer & worker safety

Transportation

- Traffic intersection monitoring
- Performance monitoring
- Ticketing systems
- Passenger information
- Fleet object identification
- Theft detection

Infographic - Your distinct AI edge in manufacturing: A safer workforce at a lower cost

Whitepaper - The state of edge AI in manufacturing: moving to a new paradigm

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Intel® AI Portfolio for the Edge

Intel® AI Portfolio for the Edge

Intel® Xeon® processor

Bringing AI to the edge

Incredible performance per watt for rigorous network and edge workloads, including AI, where space and power are limited

Intel® Core™ Ultra processor

Supercharge AI vision at the edge

Take on challenging AI workloads at the edge and analyze more video streams with multiple compute engines working together

Intel® Arc™ GPU

Edge GPUs deliver fast AI inference

Outstanding compute density and energy efficiency for AI inference at the edge with purpose-built acceleration

INTEL SOFTWARE VIDEOS >   Edge AI Reference Kits

Choose Hardware for Specific AI Workloads

Light AI

Efficiency for sub-100W designs

CPU AI, built-in GPU, built-in NPU

intel CORE   intel ATOM

+

Xe

Medium AI

Scale up perf/W for diverse system designs

Discrete GPU & built-in CPU AI

intel XEON   intel CORE

+

intel ARC GRAPHICS

Heavy AI

Optimize for peak perf and density

Optimize with high-end Discrete GPU

intel XEON   intel CORE

+

intel ARC GRAPHICS

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Intel® Xeon® Processors for Edge Workloads

Accelerate Edge Workloads with 5th Gen Intel® Xeon® processors

Achieve incredible performance for demanding emerging AI and edge workloads. 5th Gen Intel® Xeon® processors boost AI performance and energy efficiency, improve operational efficiencies, and enable confidential computing in edge deployments.

Up to	Up to	Up to	Up to
1.59x	**1.29x**	**2.81x**	**5.28x**
average performance gain[1]	average performance-per-watt gain[2]	higher real-time inference performance for image classification[3]	higher real-time inference performance for object detection[4]

vs. 3rd Gen Intel® Xeon® Gold 6348 processors

CPU REFRESH

Access the Intel® Xeon® Processor Advisor Suite to calculate the best route to lower TCO and path to ROI

Benefits of Advanced Edge Capabilities

Faster AI inferencing

Support for Intel® Distribution of OpenVINO™ toolkit, Intel® AMX, and Intel® Data Center GPU Flex Series

Energy efficient and performant

Optimized Power Mode and low-power SKUs advance sustainability goals while integrated accelerators[5] and faster memory speeds boost compute performance

Built-in trust for enhanced confidential computing

Intel® Software Guard Extensions, Intel® Trusted Domain Extensions, and Intel® Platform Firmware Resilience

Extended availability[6] and long-life reliability SKUs[7]

Drive ROI with systems that will endure in the field for many years

LEARN MORE

- Infographic - 5th Gen Intel® Xeon® processors for Edge
- Product Brief - 5th Gen Intel® Xeon® Processors for Edge

[5] Available on select SKUs.

[6] Intel does not commit or guarantee product availability or software support by way of road map guidance. Intel reserves the right to change road maps or discontinue products, software, and software support services through standard EOL/PDN processes. Contact your Intel account rep for additional information.

[7] SKUs with long product use life (up to 10 years, up to 100 percent active, no turbo) – Industrial-commercial temperature use condition.

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Intel® Xeon® for the Edge: Case Studies & Partner Solutions

Nature Fresh Farms Utilizes AI from Seed to Store

Results: Solving the Food Supply Chain

5X decrease time to package produce, from 45 seconds to 8 seconds per box[1]

Reduced transportation time from farm to retailer shelves from 4-10 days to **24-48 hours**[1]

Improved crop yields by **2-3%** every year[1]

Approximately **10X** more yield per acre compared to traditional farming[1]

READ MORE

Nature Fresh Farms Utilizes AI from Seed to Store

Intel and YalaTech Jointly Launch Edge AI-Box for Customer Insight Analysis of Digital Retail Store

The SkyLab MEC Platform Makes It Easy to Deploy Intelligent Edge AI for Road Traffic Solutions

Soterix Systems NexaiQ and AI Suite for Visual Analytics Redefine AI from Edge to Cloud

Edge-Based Multimodal Scene Intelligence for Digital Manufacturing

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NEW: Intel® Xeon® 6 SoC

Trusted Xeon® cores in a dense, integrated System-on-a-Chip (SoC) package designed to address space and power constraints

Acceleration

Media, network, and AI accelerators

Integration

Intel® QuickAssist Technology and Intel® Ethernet in one BGA package

Long life and power optimization

IO die with Intel 4 process for the highest efficiency and density and long-life options to support edge requirements
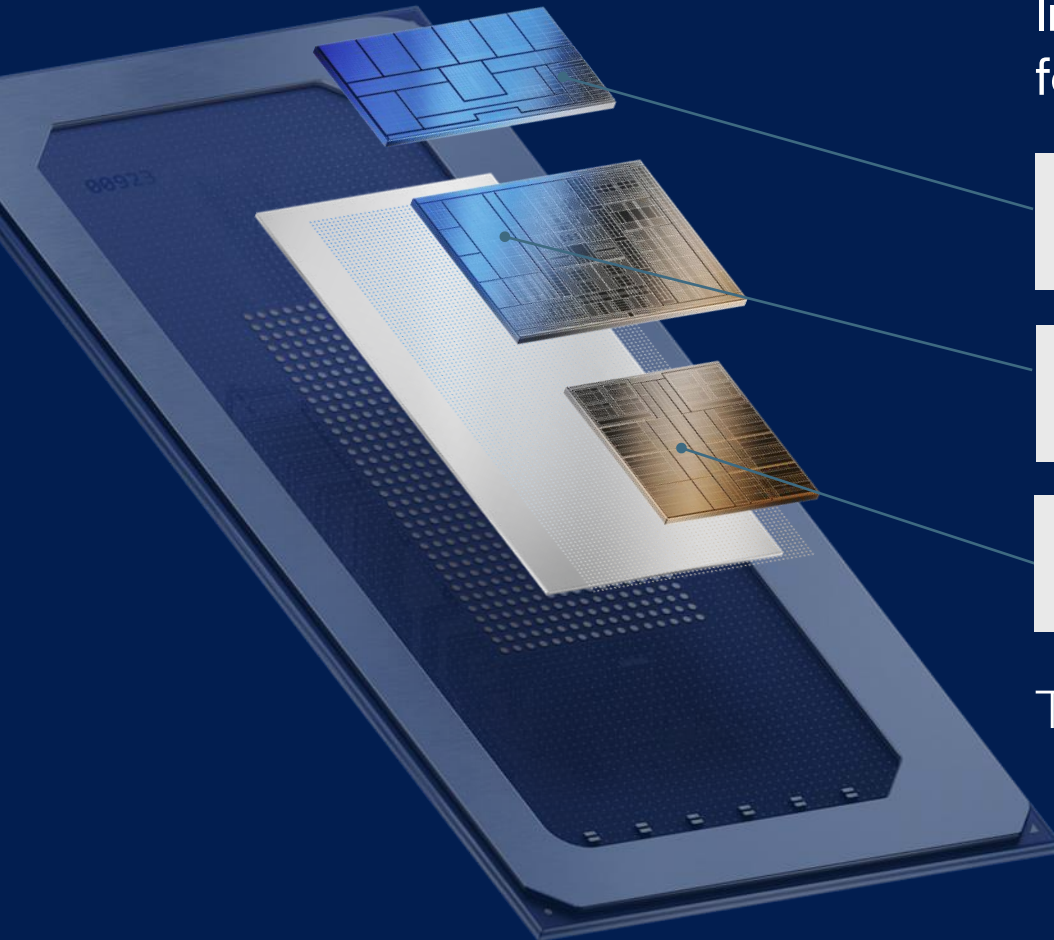
LEARN MORE

■ Product Brief

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Intel® Core™ Ultra for the Edge

Intel® Core™ Ultra Processors

Intel® Core™ Ultra Processors provide the right engines for all AI workloads

GPU	**High Throughput**
	Ideal for AI-accelerated high complexity workloads

NPU	**Dedicated Low Power AI Engine**
	Ideal for sustained AI and AI offload for battery life

CPU	**Fast Response**
	Ideal for lightweight, single-inference, low-latency AI tasks

The right balance of power and performance for AI

PRODUCT BRIEF

Intel® Core™ Ultra Processors

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intel CORE ULTRA

NEW: Intel® Core™ Ultra Processors (Series 2)

Intel® Core™ Ultra desktop processors (series 2) are the ultimate desktop and entry workstation platform, engineered to unlock new levels of intelligent performance for the most demanding daily tasks.

LEARN MORE >
- Product Brief
- Quick Reference Guide
- How to Sell Guide

Intel® Core™ Ultra mobile processors (series 2) are high-efficiency processors built to deliver next-gen AI experiences in sleek and slim mobile form factors. They feature the latest generation of P-core, E-core, and low-power E-core architectures, advanced NPU AI Engines, and available with built-in Intel® Graphics or Intel® Arc™ GPUs.[1]

LEARN MORE >
- Product Brief
- Quick Reference Guide
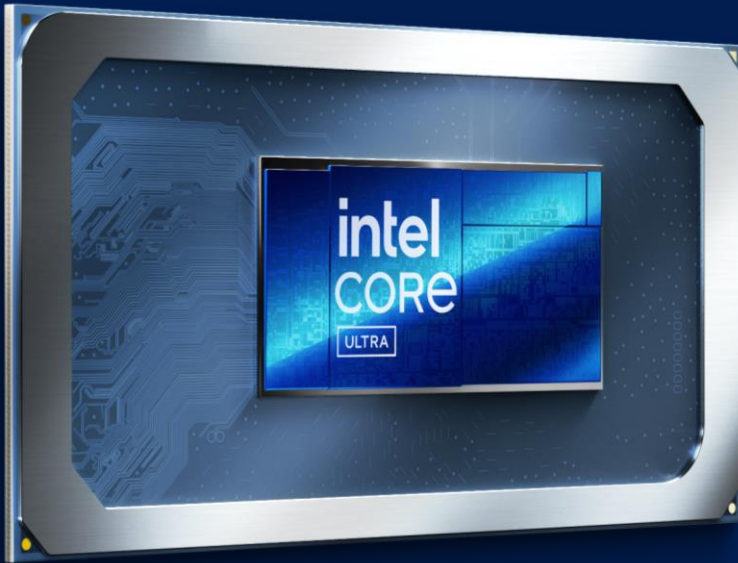
LAUNCH ANNOUNCEMENT CES 2025 > Intel to Power Large PC Refresh with New Silicon-Based Security

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[1]Intel® Arc™ Graphics: Intel® Arc™ graphics only available on select Intel® Core™ Ultra processor (Series 2) powered systems; minimum processor power required. OEM enablement required. Check with OEM or retailer for system configuration.

Intel® Core™ Ultra Benefits for the Edge

AI-ready performance

- Multiple integrated compute engines for AI — P-cores, E-cores, Intel® Arc™ GPU[1] and Intel® AI Boost, a built-in neural processing unit (NPU) for increased edge AI capabilities at low power
- Enable/accelerate AI inferencing cost-effectively without discrete accelerator

Immersive graphics and media

- Up to 8 X^e-cores (128 graphics execution units) for graphics/media-intensive workloads at the edge
- Built-in GPU reduces power consumption, lower build of material costs and enables smaller form factor design

12W to 65W TDP in a Ball-Grid Array (BGA) package

- As low as 12W in thermal design power (TDP) option for fanless design
- Full performance with 65W
- Simplify design with integrated platform controller hub (PCH)

Optimized for Edge

up to **1.5X**
AI performance[2]

up to **1.81X**
Graphics performance[2]

up to **2.56X**
AI performance/watt[2]

READ WHITE PAPER   Unveiling the Hardware and Software Foundation of Intel® Core™ Ultra Processors for the Edge

Industry Applications

Retail
- AI POS
- Digital Signage
- Interactive Kiosk
- Video Wall

Education
- Interactive Whiteboard
- Remote Classroom
- Video Conference

Hospitality
- Digital Signage
- Interactive Kiosk
- In-Store Analytics

Gaming
- Slot Machine
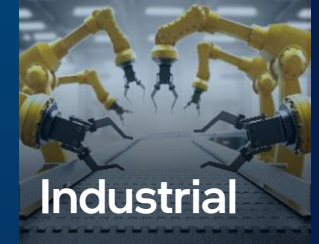- Electronic Table Game
- Lottery Ticket Kiosks

Healthcare
- AI-augmented Imaging with Ultrasound, X-Ray and Endoscopy

Smart Cities
- License Plate Recognition
- Traffic Management
- Network Video Recorder

Industrial
- Autonomous Mobile Robot
- Vision based Defect Detection
- AI-Augmented Process Control

Key Features

Display: 4 concurrent 4K displays, Pipelock, EDID, Bezel Compensation
Media: Integrated HDMI capture
GPU virtualization with SR-IOV

AI-Capable: Intel Deep Learning Boost with Int8 support, Inferencing with CPU+iGPU+NPU, up to 50 simultaneous 1080p streams ingestion

Intel® Core™ Ultra Processors (Series 1): Up to 16 Cores / 22 Threads, 8 Xe-Cores, 8 lanes PCIe 5.0, 20 lanes PCIe 4, LPDDR5-6400 memory

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Case Studies with Intel® Core™ Ultra

SKYLUM software — Luminar Neo Ramps Up More AI-Driven Photo Effects Faster

[READ MORE]

AI enhances user experiences and delivers richer photo editing capabilities, building on the new functionality of Intel® Core™ Ultra processors and the OpenVINO™ toolkit

Intel's initiatives in the AI space, both on the CPU and GPU side, as well as the company's decision to add NPUs to all its new processors, allow us to improve the user experience for our creators significantly." Dmytro Mykhalchuk, VP of Product & Engineering, Skylum

V — VEGAS Pro Brings Out the Best of the New Intel® Core™ Ultra Processors

[WATCH VIDEO] [READ MORE]

Powered by Intel® Core™ Ultra processors, VEGAS Pro activates hardware-accelerated, AI-assisted video editing, taps the 2X boost in graphics performance and offers integral support for HDR visuals

"Our apps heavily use the GPU for demanding media processing workloads. MAGIX appreciates the integration of an NPU in the new Intel® Core™ Ultra processor as the next step towards an even more energy-efficient heterogenous compute environment." Jürgen Hirche, CTO, MAGIX

## ISS INTELLIGENT VIDEO. DEFINED. — Intelligent Safety Solutions Leveraging AI at the Edge

[READ MORE]

We are seeing an impressive 75% and 100% boost in video analytic workload capacity for our flagship SecurOS® Auto and SecurOS® Tracking Kit applications compared to the 11th Gen Intel Core processor, thanks in part to the significant improvements in the built-in Intel Arc GPU."

Aluisio Figueiredo, CEO Intelligent Security Systems

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Competitive Benchmarks

Deploy integrated AI and graphics in a BGA package
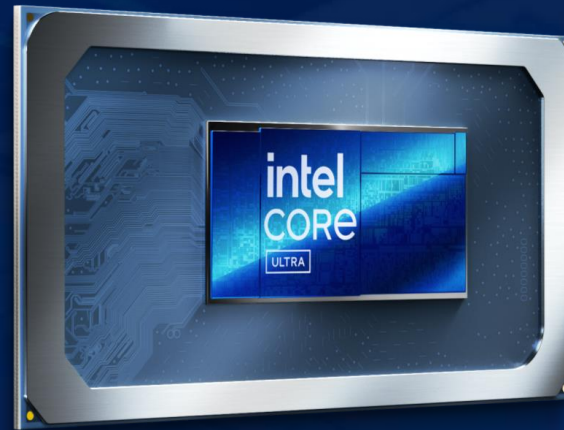
up to 3.4X

faster than NVIDIA Jetson AGX Orin in media performance[1]

up to 2.7X

faster than NVIDIA Jetson AGX Orin in video analytics end-to-end AI pipeline performance[1]

up to 8.3X

better performance/W/$ than NVIDIA Jetson AGX Orin in video analytics end-to-end AI pipeline performance[1]

[1] Performance varies by use, configuration, and other factors. Learn more at intel.com/processorclaims: Intel® Core™ Ultra processors, Edge. Results may vary.

Intel® Arc™ GPU for the Edge

Purpose-built to deliver discrete GPU muscle to the Network/IOT edge that advances innovation for AI, visual computing and media processing

AI acceleration with **OpenVINO™** support and XMX **built-in AI** engine

Graphics
For immersive visual experiences

AI Inferencing
Deploy advanced AI workloads at the Edge with specialized AI engines

Media Processing
Enhance video production, media transcoding and streaming

intel. ARC™ GRAPHICS

Long Life
Up to 5 years product availability

Support for Windows 10 LTSC

Digital Signage Features
Genlock, Pipelock, Bezel correction, EDID management, Combined Display & Multi-GPU Single Large Surface

AI Acceleration
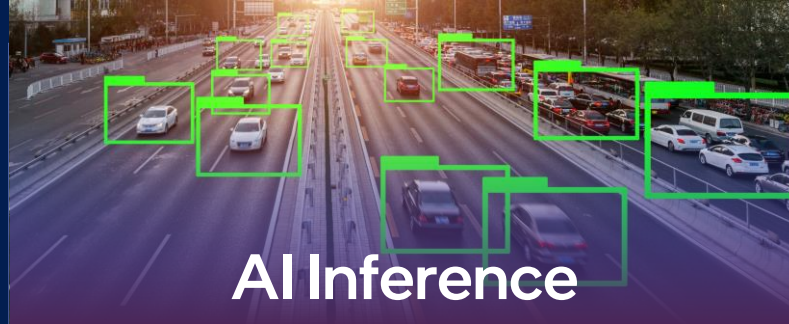With OpenVINO™ support and XMX built-in AI engine

Embedded Use Conditions
On select SKUs

ACCESS INFOGRAPHIC   Intel® Arc™ GPU for the Edge

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Target Workloads
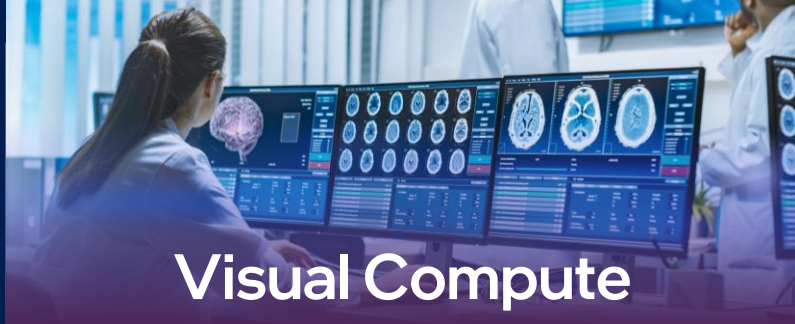
Visual Compute

- Simulation & Visualization
- Display: Video Wall, Interactive Flat Panel, Kiosk
- 3D Rendering and Visualization, e.g. medical imaging

AI Inference

- Media Analytics
- Machine Vision & Visual Inference: Objection Detection & Classification
- Natural Language Processing

Media Processing

- Media processing: Encode/Transcode & Streaming; Compression
- Content Creation
- Video Production

READ WHITE PAPER Unlocking the AI Power of Intel® Arc™ GPU for the Edge: A Deep Dive into Hardware and Software Enablement

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Intel® Arc™ GPU for the Edge: Product Class

Revolutionize the Edge with Supercharged AI, Media and Graphics Capabilities for Demanding Workloads

intel. ARC™
7xxE
High performance for heavy AI workloads and complex tasks

intel. ARC™
5xxE
Immersive visuals with enhanced AI inferencing capabilities

intel. ARC™
3xxE
Fits low power and small form factor requirements

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OpenVINO™ for Intel® Arc™ GPU

OpenVINO™ toolkit can be utilized for streamlined and optimal development of code for AI inference that run across diverse platforms. This ability helps accommodate differential requirements and ensure maximum usage of hardware acceleration across GPU and CPU

OpenVINO™

Performance

Accelerates inference, reduces footprint, and optimizes hardware utilization while maintaining accuracy, so that you can build performant and efficient AI applications

Usability

Streamlines AI development and deployment, so that you can save time and maximize productivity

Versatility

Provides adaptability to different requirements and use cases, so that your application can meet current and future needs

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Case Studies

VISTRY

Gen AI Chatbot for Restaurant Edge

"In the quick service restaurant industry, where speed and customer experience are paramount, the Intel® Core™ Ultra processor has been an exceptional asset for our edge computing needs. During our extensive testing, the Intel Core Ultra processor demonstrated exceptional performance metrics for our Employee Assist Chatbot, particularly in Time to First Token (TTFT) that **rival those of cloud-based solutions like ChatGPT 3.5,** thanks to the built-in Intel® Arc™ GPU improvement. This processor's robust capabilities ensure that our chatbot can handle peak-hour traffic with ease, maintaining swift and engaging customer interactions without compromise. Moreover, the privacy and bandwidth efficiency inherent in this edge solution are perfectly aligned with the operational needs of the restaurant industry."

Atif Kureishy
Founder | CEO

WATCH THE DEMO
(Under Partner Spotlights)

SAMSUNG MEDISON

AI-Augmented Ultrasound Imaging

"The Intel® Core™ Ultra processor has ushered in a new era of innovation in healthcare imaging. Our tests have revealed a remarkable **22% and 25% increase in AI performance throughput** for NerveTrack and Live ViewAssist/HeartAssist real-time ultrasound imaging applications respectively, compared to previous generations Intel® Core™ processor paired with a competitive discrete GPU.

"This breakthrough, attributed in part to the built-in Intel® Arc™ GPU, allows us to offer advanced AI features in next generation mid and entry level ultrasound devices without the need for discrete GPUs, resulting in more accessible and cost-effective cutting-edge imaging technology."

SungShik Baik,
Principal Engineer

WATCH THE DEMO
(Under Partner Spotlights)

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CALL TO ACTION:

Download Intel® Edge AI Software Solutions and **get started** building, deploying and scaling AI solutions on the Edge with Intel® Tiber™ Edge Platform

Accelerated Application Development

Develop Vision Models

Optimize AI Models

Develop Applications

SOLUTION BRIEF

AI-Driven Substation Protection, Built on the Intel® Tiber™ Edge Platform

Learn More >

Demo >

AI Activation Zones

Access a comprehensive resource hub designed to help grow your business and solve your customers' most pressing business challenges. Find exclusive, value-added technical and sales enablement resources to help you build and sell solutions with Intel technology.

AI PC

Technical Enablement

Sales & Marketing Enablement

Edge AI

Technical Enablement

Sales & Marketing Enablement

GenAI

Technical Enablement

Sales & Marketing Enablement

Sign up to Intel® Partner Alliance for full access or select one of the Activation Zones if you are already a member

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Intel® Cloud TV Training Videos

Gain Insights Using Data Inferencing at the Edge

Choosing the Right Path to Edge Computing

See more: Intel® CloudTV

Principles of AI Competencies

Principles of AI Everywhere Competency

AI is transforming how we work and live every day, and it is evolving rapidly. Intel is delivering a full spectrum of hardware and software platforms, offering open and modular solutions to expedite time-to-value in this era of exponential growth. Intel integrates AI seamlessly across its hardware and software technologies, supporting generative AI workloads and driving innovations like AI PC and AI at the edge.

In this curriculum, you'll delve into Deep Learning, Machine Learning, and Generative AI, and learn to navigate AI challenges using industry models tailored to data parameters. Learn how to assess customer needs effectively by applying the ADDS Methodology to offer tailored solutions from Intel's diverse portfolio, including CPU, GPUs, accelerators, technologies, software, and toolkits, for ease of AI solution deployments.

Enroll ›

Principles of AI Software & Ecosystem Competency

In the era of AI everywhere, businesses are reimagining every aspect of their operations, from finance to compliance, to see how AI can augment and automate workflows. Intel is helping businesses think differently about their enterprise AI strategies from the client to the edge to the cloud, helping customers maximize the value of their investments, reduce total cost of ownership (TCO), and get to market faster with enterprise-ready solutions.

From this curriculum, you will learn how to expedite AI development using open standards and harness data to drive business transformation. Explore a wide range of security solutions within the broad Intel AI ecosystem to ensure data integrity and protection. Delve into the breadth of Intel's AI-based products with a deep focus on Intel's AI software stack, toolkits, and Intel Developer Cloud for ease of AI solution deployments.

Enroll ›

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Additional Training & Resources

Training Courses

AI Software Optimization with OpenVINO™

Top 3 Reasons to Elevate Edge AI & Graphics with Intel® Core™ Ultra Processors

AI on the Edge with Computer Vision

Edge AI Enabled by OpenVINO™ Toolkit

AI from the Data Center to the Edge

Additional Resources

Dell and Intel Server Playbook for AI at the Edge

How AI-Ready Solutions Can Help Your Business Hit the Ground Running in Today's AI Race

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Notices and Disclaimers

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Configuration Details

Performance measured on Intel® Arc™ A370M GPU as proxy for Intel® Arc™ A370E GPU

System Configuration:
Intel® Arc™ A370M GPU. Advantech VEGA_P110-42A1. 8 Xe-cores, 4GB GDDR6. Intel® Core™ i7-13800HE. DDR5 5600Mhz 64GB
NVIDIA A500 GPU. ADLINK EGX-MXM-A500. 2048 CUDA Cores + 64 Tensor Cores + 16 RT Cores. 4GB GDDR6. Intel® Core™ i7-13800HE. DDR5 5600Mhz 64GB

[1] Workload & version: Unigene Superposition 2 V1.1. Windows 10. Graphics Driver: Intel 31.0.101.5186, NVIDIA 31.0.15.3799. Run Method: Warm. Iterations and result choice: 3 iterations, average.
[2] Workload & version: AI Inference Benchmark. OS: Ubunto 22.04. Kernel version 6.5.0-15-generic. GPU Driver version: Intel I915; NVDA 535.146.02. Intel Inference Framework: OpenVINO™ 2023.2.0. NVDA Inference Framework: CUDA 8.6.1.6. Intel Compute Framework: Intel OpenCL Runtime. NVDA Compute Framework: CUDA. AI Model: Resnet50, Int8, BS32. Intel AI Model Framework: TensorFlow/Caffe/Onnx. NVDA AI Model Framework: Caffe/ONNX. Run Method: Warm. Iterations and result choice: 3 iterations, average.
[3] Worklaod & version: AI Inference Benchmark. OS: Ubunto 22.04. Kernel version 6.5.0-15-generic. GPU Driver version: Intel I915; NVDA 535.146.02. Media Framework: FFMPEG 4.4.1.3. Run Method: Warm. Iterations and result choice: 3 iterations, average.
[4] Source: https://www.iotmart.com/en-en/s/product/detail/01t2y000000Gy2BAAS?language=en_US. Advertised as $345 on 5/31/24
[5] Source: https://www.mouser.com/ProductDetail/Advantech/SKY-MXM-A500-4SHA?qs=ST9lo4GX8V3tHKR4pF9fCw%3D%3D Advertised as $550 on 5/31/24