Solution Brief

Manufacturing, Financial Services, Pharmaceutical, Retail

New HP Videoconferencing Systems Use Intel® Processors for AI

HP Poly Studio Room Compute with Zoom Rooms delivers enterprise-wide collaboration; System uses Intel® Core™ Ultra Series 3 processor for AI functionality

Executive Summary

Hybrid work and distributed teams are increasing the need for videoconferencing systems that deliver consistent, engaging meeting experiences while remaining simple for IT to deploy, secure and manage. The HP Poly Studio Room Compute with Zoom Rooms addresses these requirements with a modular collaboration platform built for rooms of different sizes and configurations. Powered by Intel® Core™ Ultra processors, the system provides the AI-enabled compute capacity needed for today's collaboration features such as intelligent framing, audio optimization and meeting productivity tools, while providing headroom for future AI capabilities. With centralized management through Poly Lens, support for Intel vPro® technology and HP Wolf Security, HP Poly Studio Room Compute helps organizations improve meeting effectiveness, simplify room operations and protect collaboration infrastructure while maintaining TCO efficiency.

Solution Snapshot

The HP Poly Studio 7 Room Compute with Zoom Rooms device is a videoconferencing platform that uses an AI-enabled Intel® Core™ Ultra Series 3 processor to provide compute capacity for clear video and audio with support for today's AI features including automatic translation and transcription, meeting recaps with action items, contextual audio and background isolation, multi camera intelligence and auto-framing.

Introduction

The way work gets done has changed dramatically with the popularity of hybrid work, remote teams, and videoconferencing technology. The challenge for organizations is to boost the impact of these meetings by using technology to encourage participation and engagement.

Videoconferencing software platforms have been embracing AI to help with engagement through new capabilities such as automatic translation and transcription, meeting recaps with action items, contextual audio and background

Figure 1. Front view of the HP Poly Studio 7 Room Compute with Zoom Rooms.

isolation, multi camera intelligence and auto-framing. All of these AI capabilities are designed for increased engagement and meeting follow up.

As AI evolves, new features can be expected in these systems. Creating a hardware platform with the compute power to deliver these capabilities is the foundation of this meeting and collaboration transformation.

Videoconferencing platforms must be simple to install and manage and offer the same audio and video user experience across different room sizes and configurations such as table shape, windows, etc. From an IT perspective, videoconferencing platforms require single-screen management, security from cyber-attacks and enough processing to make the system future ready.

The HP Poly Studio 7 Room Compute with Zoom Rooms device delivers a videoconferencing platform that meets these demands. HP, an Intel® Industry Solutions Builders Partner, uses an AI-enabled Intel® Core™ Ultra Series 3 processor to provide compute capacity for clear video and audio with support for today's AI features and the processing capacity for emerging and future collaboration features.

Video Conferencing System

The HP Poly Studio Room Compute with Zoom Rooms is a videoconferencing system for Zoom users. The system details are:

HP Poly Studio 7 Room Compute with Zoom Rooms

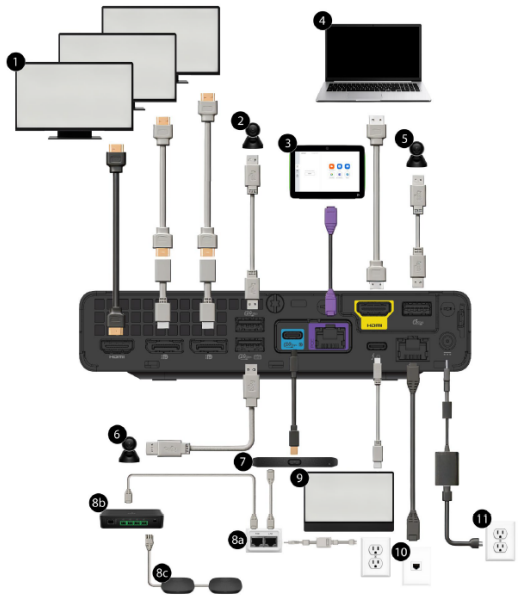
This system (see Figure 1) is based on the Intel® Core™ Ultra 7 processor 366H with 32GB of RAM and is designed for advanced setups including up to four cameras - ideal for large-sized conference rooms.

The device features 256GB of storage and supports integrated HDMI ingest for local content up to 4K60fps.

Simple Room Control

For system control and meeting management, HP offers the HP Poly TC10, an intuitive 10.1 inch IP touch controller. The controller delivers simplified system setup with fast auto-pairing and a modular design that makes it easy to reconfigure rooms as needs evolve. Up to four TC10 controllers are supported as part of the device's modular design.

The company also has a full collection of peripherals (see Figure 2). Camera options include the HP Poly Studio E60



1. Monitor(s)
2. USB camera
3. HP Poly TC10
4. Laptop (HDMI ingest)
5. USB camera
6. USB camera
7. USB video bar (+ HP Poly Studio A2 solution)
8. HP Poly Studio A2 solution
   - 8a: PoE adapter
   - 8b: HP Poly Studio A2 Audio Bridge
   - 8c: HP Poly Studio A2 mic solution
9. Confidence monitor (DP alt)
10. Network
11. Power

Figure 2. Image shows the maxed out configuration of the HP Poly Studio Room Compute with Zoom Rooms.

pan-tilt-zoom (PTZ) camera, HP Poly Studio E70 dual-lens smart conferencing camera, as well as HP Poly Studio V12/V52/V72 USB video bars with integrated mics/speakers for small to large rooms and HP Poly Studio A2 audio solution.

HP Poly Studio Room Compute devices come with the HP Poly Studio Room Compute app pre-loaded, which offers simplified firmware management and works in conjunction with Poly Lens to provision settings of HP peripherals, control the firmware updates, monitor the room, and provide alerts and analytics via a single pane of glass.

IT-Caliber Security

Enterprise-grade security is important to IT staff, and the HP Poly Studio Room Compute with Zoom Rooms device features the HP Endpoint Security Controller, a dedicated and physically isolated security microprocessor that protects the BIOS. The systems also support the Intel vPro® platform with Intel® Active Management Technology (Intel® AMT), enabling hardware-level health monitoring and security functionality that allows IT to detect vulnerabilities at the silicon layer and isolate infected machines.

Both of these enable the systems to run HP Wolf Security, an endpoint protection software solution that offers threat containment, AI-powered antivirus, credential protection and self-healing BIOS.

AI Processors Boost Performance

Powering the HP Poly Studio system is the Intel Core Ultra 7 processor 366H. This device offers a hybrid architecture that splits workloads between Performance-cores (P-cores), Efficient-cores (E-cores) and Low Power Efficient-cores to optimize processing power and battery life.

The P-cores provide maximum speed for single-threaded workloads while the E-cores process background tasks with very low power. These devices also support Low-Power Efficient-cores that handle basic tasks without waking the other parts of the CPU.

For the high-performance HP Poly Studio 7 Room Compute, the Intel Core Ultra 7 Processor 366H features four P-cores operating with a base frequency of 2 GHz, four E-cores operating at 1.6 GHz and four Low-Power Efficient-cores operating at 1.6 GHz. The device also features an integrated Intel® Graphics GPU with four Xe cores delivering up to 40 trillion of operations per second (TOPS) and a built-in NPU delivering up to 50 TOPS.[1]

In addition to security features, Intel vPro® technology also provides out-of-band management that can reboot or diagnose systems that are not responding at application/OS level - providing restoration of system functionality without a truck roll.

The high efficiency of Intel Core Ultra processors has allowed HP to design the devices to operate whisper quiet. They are certified for Ultra Low Noise by the TÜV European standards body[i].

[1]GPU TOPS represents peak INT8 throughput using XMX engines with dense models; NPU TOPS represents peak INT8 throughput on the NPU architecture. Actual performance varies by workload and configuration.

[i]https://www.certipedia.com/quality_marks/1111299059?locale=en&certificate_number=50720431

Conclusion

The right videoconferencing technology makes a difference in the effectiveness of meetings – increasing collaboration and productivity. It can help to bring out the best ideas by ensuring that everyone can participate regardless of where they are located. AI technology is also bringing useful features that aid in engagement and follow up. The HP Poly Studio Room Compute systems offer the hardware performance that maximizes the functionality and impact of this software thanks to a custom system design that features Intel Core Ultra processors.

Learn More

HP Poly Studio Room Compute Systems

Intel® Core™ Ultra 7 Processor 335H

Intel® Core™ Ultra Series 3 Processors

Intel® vPro

Intel® Active Management Technology

Intel® Industry Solutions Builders

intel ai

Notices & Disclaimers

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