2020 Year in Review

2020 has been a year the world will never forget.

We say that every December as we introduce Intel's yearbook. And it's always true. But this year it's especially appropriate. We've grappled in our personal and professional lives with a world turned topsy-turvy by the pandemic. Still, it's been a year of achievements — large and small — as day after day we conceive and craft world-changing technologies that enrich the lives of every person.

Our lives in 2020 have indeed been dominated by COVID-19. But collectively, more than 110,000 of us at Intel have achieved a great deal this year — in spite of its challenges.
The Pandemic

Employees in fabs, labs, data centers keep the biz running

In the face of the pandemic, Intel employees across three continents who run our all-important factories, labs and other mission-critical facilities step up in a huge way — our global manufacturing machine continues to operate successfully. As a result, Intel keeps our customers supplied with the technology they need to help people all over the world at this challenging time. To help ensure the health and safety of Intel employees who continue to work on site, the company, guided by the company’s Pandemic Leadership Team and medical doctor, puts strict social distancing guidelines in place. The company limits activities that require people to work in close proximity, switches many in-person meetings to virtual ones, increases cleaning of high-traffic areas and offers free meals to employees on-site, among other benefits. The message to employees from Ann Kelleher, general manager of Technology Development, is clear: “Intel’s top priority in managing the coronavirus situation is protecting the health and well-being of our employees while continuing to operate and support our customers around the world.”
The Pandemic

Many WFH, but everyone navigates a new working world

No matter your role at Intel, no matter where in the world you work, the global COVID-19 pandemic changes a great deal about how we do our jobs. Under the guidance of Intel’s Pandemic Leadership Team — which puts employee health and safety first — most of our 110,000 employees work from home for most of 2020. Nearly all business travel halts. But thousands of other employees who perform critical roles in labs and factories continue to work on-site — wearing face masks and following careful social distancing guidelines. Intel earmarks $100 million toward helping all employees confront challenges resulting from the pandemic, including reimbursement for home office equipment and childcare costs. Many on-site employees are offered free meals. All employees are offered mental health time, flexible leaves of absence, personal time off and other accommodations. To help employees navigate this complex new work world, Intel compiles everything into a one-stop-shop COVID-19 intranet page.
The pandemic sharply increases the global demand for a host of technology-related products and services — from medical supplies to laptops — and Intel works with customers across the industry to help them deliver the goods to people facing the most serious needs. When Medtronic needs to rapidly deploy 80,000 ventilators to help critically ill patients breathe, an Intel team pulls out all stops to help. Medtronic writes to the Intel team, “you helped us save lives.” Another Intel team jumps in to help a company configure its fleet of workstations, safely and remotely. In Singapore, in just two weeks’ time, an Intel team helps repurpose the Intel® RealSense™ camera into an automated temperature scanner to screen people entering public buildings.
The Pandemic

Intel contributes $50 million; employees jump in to help

To help our communities face the pandemic's extraordinary new challenges, Intel extends its hand in multiple ways. Intel's $50 million Pandemic Response Technology Initiative, among other things, aims to help 600,000 students in the Los Angeles school district with remote learning. Intel works with an Intel Capital portfolio company to get high-quality data to healthcare professionals — so they can diagnose and treat patients remotely. Protective gear is critical to ensure the safety of healthcare workers — so Intel donates 1 million gloves and masks to front-line medical professionals. And individual Intel employees all over the world jump in to personally help — from setting up a shelter for homeless coronavirus patients, to 3D printing face shields.

Read more | Intel Commits $50 Million with Pandemic Response Technology Initiative to Combat Coronavirus | Houston Depends on Intel Tech for Healthcare, Education and Connectivity Solutions | Intel's PRTI at 100 Days: In Los Angeles, Online Classes that Inspire | Intel Donates More Than 1 Million Protective Items for Healthcare Workers in Coronavirus Fight | Intel and MIC Announce Scale to Serve Program to Rapidly Expand Remote ICUs to 100 US Hospitals
New Products

11th Gen Intel Core, Iris Xe, Atom P for 5G, oneAPI

With the launch of Tiger Lake — our much-anticipated 11th Gen Intel® Core™ family of processors — we set a new bar of performance and integration for laptops and internet of things devices. Tiger Lake chips, which include new Intel® Iris® Xe graphics, draw strongly positive press reviews and compete favorably with AMD’s Ryzen chip. As of 2020’s third quarter, Intel expects to ship 30% more 10nm chips than first forecast. “Tiger Lake is a shining example of the product leadership,” says CEO Bob Swan, “we can deliver for our customers through our six pillars of technology innovation.” But there’s more. Intel’s new Snow Ridge chip for 5G — the Intel® Atom™ P5900 platform — positions Intel to become the 5G base station market leader in 2021, a year ahead of projections. Rounding out 2020: Intel’s first discrete GPUs for laptops and servers, delivery of oneAPI toolkits and new security innovations unveiled for the Intel® Xeon® Scalable platform.
Can we just say it? SuperFin is super cool. The launch of Tiger Lake — our 11th Gen Intel® Core™ processor — also includes our new 10nm SuperFin process technology, the largest single intra-node enhancement in Intel history. Intel Fellow Ruth Brain says SuperFin on Intel’s FinFET process technology delivers “an unprecedented level of performance uplift.” In addition, with the launch of Lakefield, Intel is now in high-volume manufacturing of Foveros. That’s the new 3D packaging technology that stacks separate silicon logic chips into a single package — and is Intel’s secret sauce for our new disaggregated design approach. Want to better understand all this? Watch this 38-second video – with Lego parts.

Read more | Architecture Day 2020 | Lakefield: Hybrid CPU with Foveros Technology | ‘Lakefield’ Processors: Intel Core Processors with Intel Hybrid Technology
Everyday, Mobileye maps millions of km with our REM™ technology.

To deliver on the promise of autonomous driving, Intel subsidiary Mobileye expands its relationships and forms new partnerships across the globe. Calling it “the biggest deal Mobileye has ever done,” Chief Executive Officer Amnon Shashua unveils a deal with Ford Motor Company that will put Mobileye’s camera-assisted vision systems in Ford vehicles. Future Ford vehicles with this technology will offer an improved warning system for front collisions; better detection of vehicles, pedestrians and cyclists; and a feature to help you stay within your lane. Mobileye also strikes a deal with the Geely Auto Group to launch a premium electric vehicle with Mobileye SuperVision™, which offers advanced driver-assistance features. To speed up Mobileye’s mobility-as-a-service, Intel invests $900 million to acquire Israel-based Moovit. Mobileye technology is now helping keep more than 60 million vehicles — and their drivers and passengers — safer on the road.

Read more | Mobileye AVs Can Go Anywhere in Germany | Mobileye and Ford Announce High-Volume Agreement for ADAS in Global Vehicles | Mobileye, Geely to Offer Most Robust Driver-Assistance Features | Intel Acquires Moovit to Accelerate Mobileye’s Mobility-as-a-Service Offering

Autonomous Vehicles

Ford to get Mobileye tech; Intel invests big in Moovit
Big fab investments, including $7 billion in Arizona

Recently opened Fab 42 in Ocotillo, Arizona, represents a $7 billion investment and the creation of 3,000 new high-wage jobs. In anticipation of increasing customer demand for our products, Intel is also expanding factories in Oregon, Israel and Ireland. And Intel is making new investments in our factory in Rio Rancho, New Mexico, which also celebrates its 40th anniversary in 2020, to serve customer demand.

Read more | Intel Celebrates Manufacturing Day | Investing in Intel's Manufacturing to Win in Product Leadership | Intel's Diverse Technologies in New Mexico

CEO Bob Swan, left, visits Fab 42 during October’s Manufacturing Day.
Artificial Intelligence and 5G

Intel AI orbits the Earth; Snow Ridge speeds 5G

Intel aims to embed artificial intelligence everywhere, and we’re delivering on that commitment — starting 329 miles (530km) in space. The first satellite with AI on board is now circling the Earth, with an Intel® Movidius™ Myriad™ 2 Vision Processing Unit helping monitor polar ice, soil moisture and more. Other key AI developments: AI smarts gain power in 3rd Generation Intel® Xeon® Scalable, Stratix NX FPGAs and Habana® accelerators. Intel builds AI features into the Tiger Lake CPU and GPU. In 5G, with the launch of Snow Ridge — now known as the Intel Atom P5900 platform — we pull in our expectation to become the leading provider for 5G base station silicon by a full year.

Read more | Intel Powers First Satellite with AI on Board | Intel Announces Unmatched AI and Analytics Platform with New Processor, Memory, Storage and FPGA Solutions | AWS Leverages Habana Gaudi AI Processors
Neuromorphic and Quantum Progress

Pohoiki Springs packs power of 100 million neurons

By giving robots a sense of touch, and computer chips a sense of smell, Intel Labs marches forward on neuromorphic computing. The Loihi neuromorphic research chip’s architecture more resembles a human brain than a traditional x86 microprocessor. Of what use might this chip be? Intel announces a three-year agreement with Sandia National Laboratories to explore the value of neuromorphic computing for large-scale computational problems. Sandia kicks off its research with a 50-million neuron Loihi-based system in Albuquerque, New Mexico. The Pohoiki Springs system’s 100 million neuron computational capacity puts it on par with that of a small mammal brain. In quantum computing, Intel’s partnership with QuTech yields Horse Ridge, a demo chip that can control “hot” qubits, the fundamental unit of quantum computing, at temperatures slightly warmer — and far less difficult to achieve — than absolute zero.

Read more | Intel and Sandia National Labs Collaborate on Neuromorphic Computing | Intel Scales Neuromorphic Research System to 100 Million Neurons | How a Computer Chip Can Smell without a Nose | Intel and QuTech Demonstrate High-Fidelity ‘Hot’ Qubits for Practical Quantum Systems
Intel Capital Invests

Intel acquires Moovit to speed autonomous driving

Despite the challenging global business climate, Intel Capital — the company’s venture capital arm, and one of the largest such firms in the world — continues to invest for the future with several significant mergers and acquisitions. The year’s biggest acquisition — at $900 million — is Israel based Moovit, a mobility-as-a-service (MaaS) company. CEO Nir Erez says that his firm, working with Intel subsidiary Mobileye, will bring MaaS “to every city and citizen around the world.” Intel Capital’s biggest equity investment — $253 million — is with Jio Platforms, which is bringing low-cost digital services to people across India.

Read more | Intel Capital invests $132 million in 11 disruptive tech startups | Intel, Lightbits Labs team up on disaggregated storage | Technology from 17 Intel Capital firms helps the coronavirus fight
Intel transforms its iconic brand in a way that Chief Marketing Officer Karen Walker says, “honors our heritage,” while signaling to our “customers, partners and investors that Intel is a modern technology leader focused on the future.” The company unveils an updated Intel logo, a refreshed Intel musical bong, a new color palette, a refreshed photography style and a host of other updates to Intel’s look in print and online. These changes, says Chief Executive Officer Bob Swan, serve as an “invitation to our partners to collaborate with Intel so we can help make them successful and do something wonderful.”
Bob Swan: ‘Standing on the sidelines is not an option’

World events do not stop, of course, at Intel's figurative four walls. As people, in the U.S. especially, focus on issues related to social equity and racial injustices, Intel redoubles its efforts to create an even better workplace — and a better world. “Standing on the sidelines is not an option,” writes Chief Executive Officer Bob Swan in a widely read letter to Intel employees. His message comes in the wake of social unrest across the U.S. Racism, issues of equal access and other systematic inequities are global issues and not limited to the U.S. Intel continues its work to foster a more diverse and inclusive culture, in which everyone has a voice and feels welcome to share their ideas to solve our world's greatest challenges.

Read more | Bob Swan Memo: The Sidelines are Not an Option; Intel Pledges $1M to Address Social Justice, Racism | We Must Collaborate, Not Compete, on Diversity | Inclusion @ Intel
Corporate Responsibility

2030 objectives
tackle climate change, digital readiness

Intel never sets small corporate responsibility goals, and this year we are setting some ambitious ones that we aim to achieve by 2030. Intel’s 2019-20 Corporate Responsibility Report defines three global challenges for the next decade to collaborate with others to leverage the power of technology to: revolutionize health and safety with technology; make technology fully inclusive and expand digital readiness; and achieve carbon-neutral computing to address climate change. “Our Intel team’s passion and drive to have a positive impact in the world every day inspires my confidence that we can achieve these bold objectives for the next decade,” writes Chief Executive Officer Bob Swan. Meanwhile, over the past decade, Intel and its employees donated their expertise, money and more than 10 million volunteer hours to help people in the communities where we operate around the world.

Read more | Intel Launches First Global Challenges, Marks a New Era of Shared Corporate Responsibility | Intel’s 2019-20 Corporate Responsibility Report | Intel Travels to Africa to Closely Track Responsibly Sourced Tech Minerals
We reimagine our purpose, vision, mission values

Intel's strong culture contributes in countless ways to our company’s half-century of business success and industry leadership. But we’re certainly not standing still. This year, we refresh our purpose, mission, vision and values for a new decade. Chief Executive Officer Bob Swan shares Intel’s purpose: “to create world-changing technology that enriches the lives of every person on Earth.” Our vision is “to be the trusted performance leader that unleashes the potential of data.” Chief People Officer Sandra Rivera discusses the evolution of Intel Values: Fearless, Inclusion, Customer Obsessed, One Intel, Truth and Transparency, and Quality. Sandra thanks employees for “everything you do to drive the company forward, and to live into our values.”