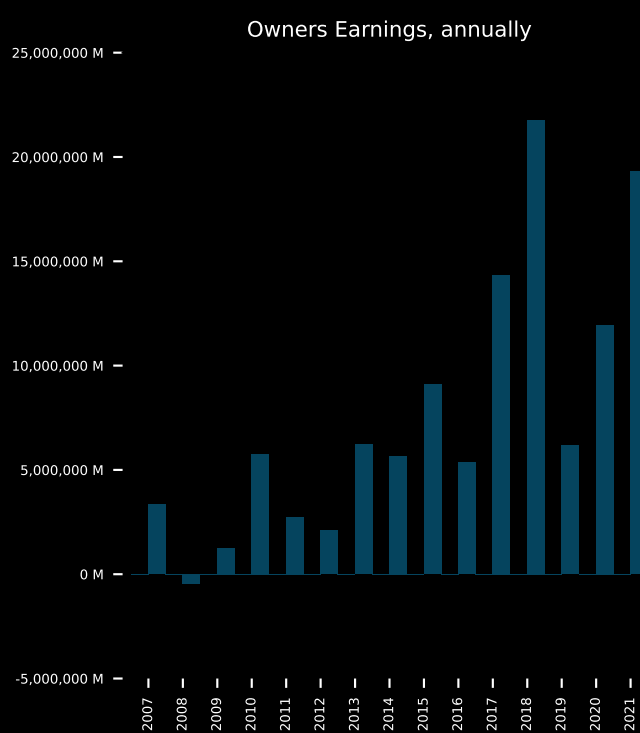
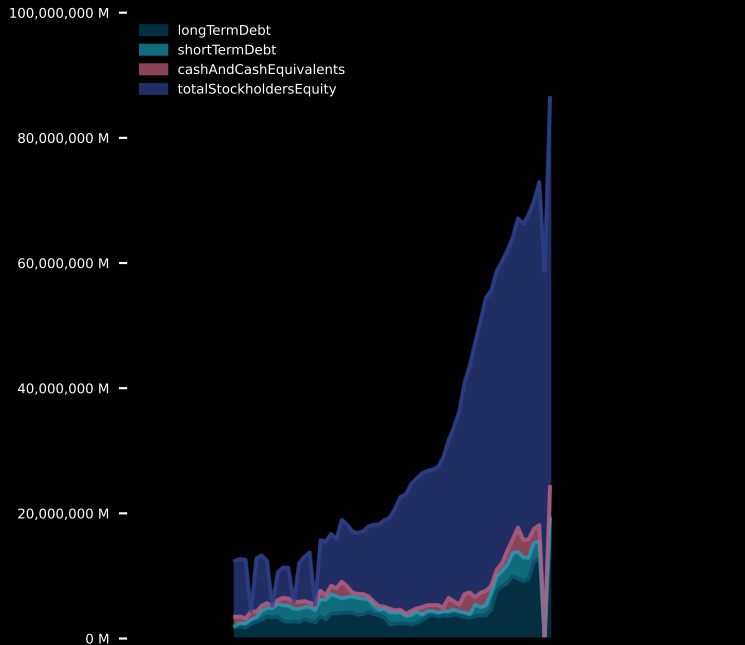
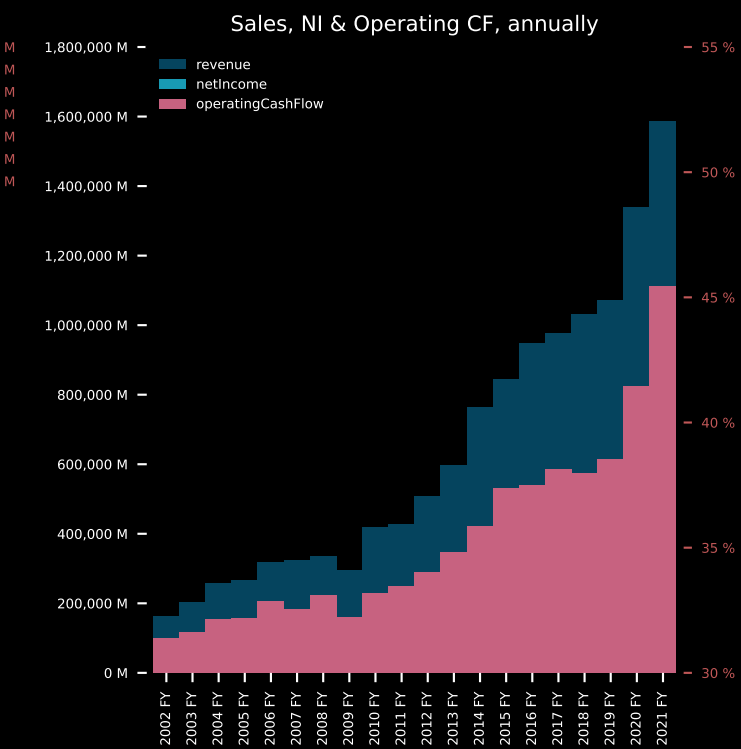
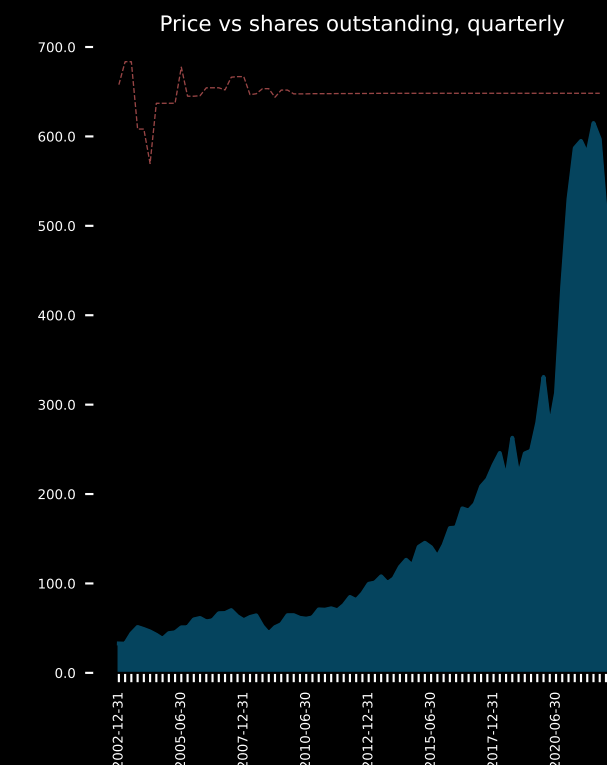
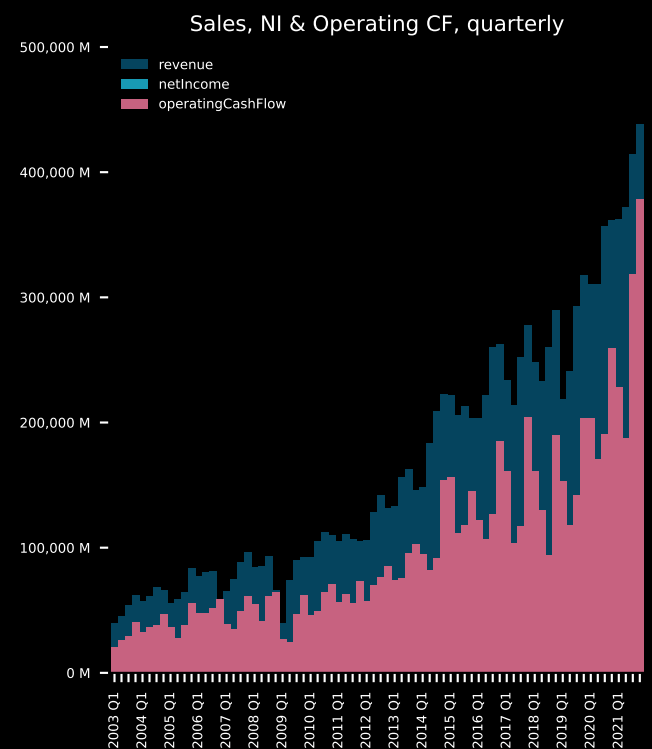


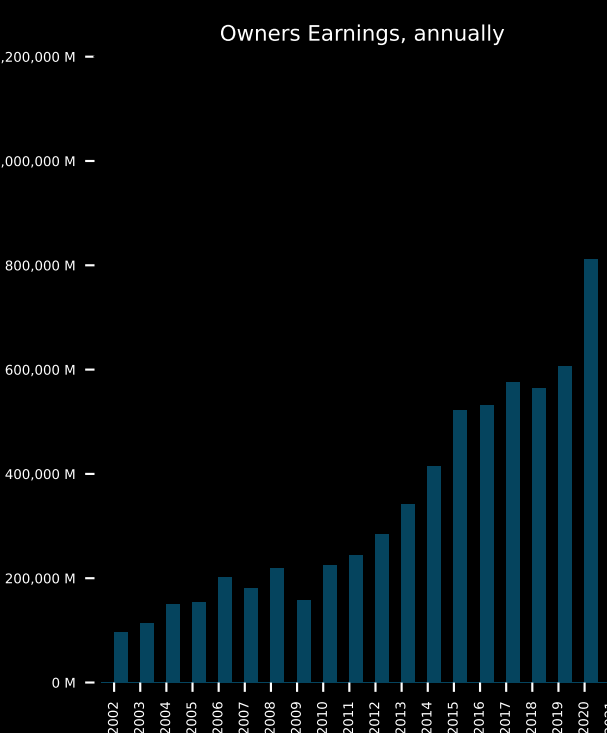
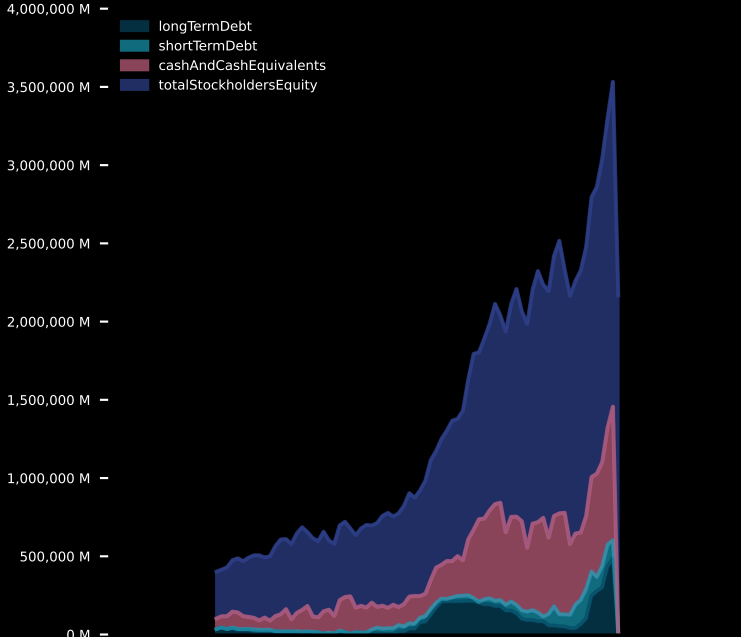
HY9H.F / Semiconductors / US / 2022-08-23



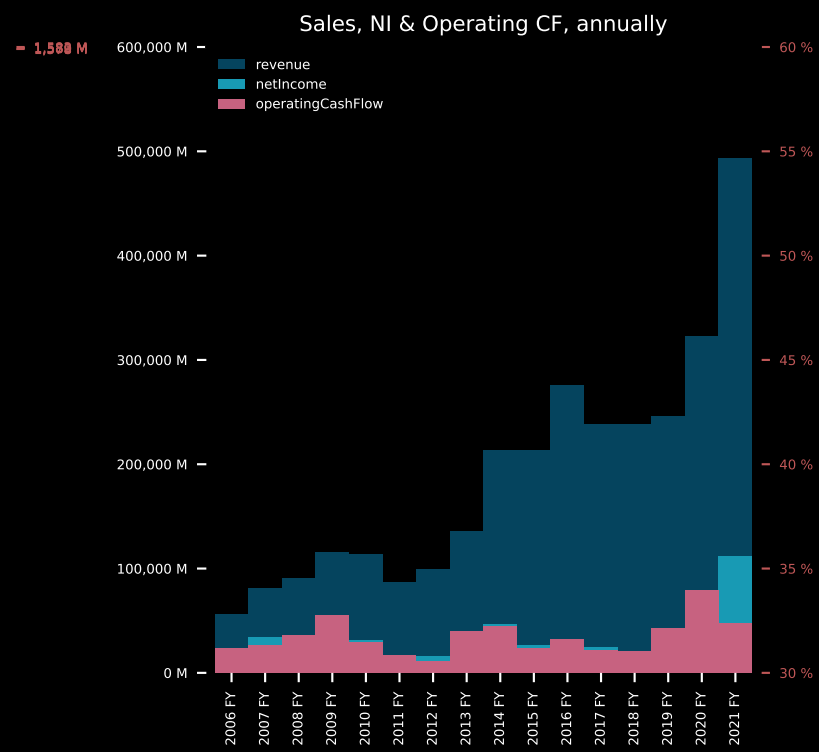
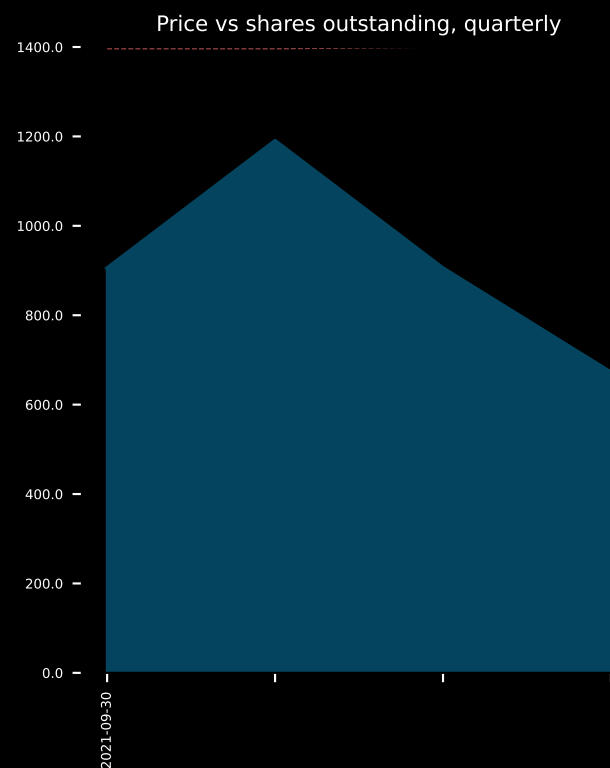
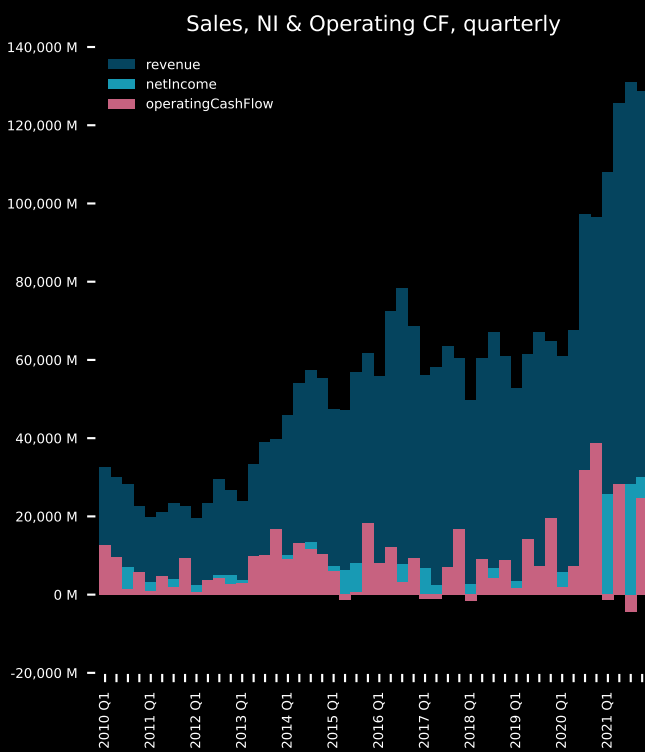
SK hynix Inc., together with its subsidiaries, engages in the manufacture, distribution, and sale of semiconductor products worldwide. The company offers memory semiconductor products, including DRAM, NAND flash, multi-chip package, etc.; and system semiconductors, such as CMOS image sensors, etc. Its products used in server, networking, mobile, personal computer, consumer, and automotive applications. The company was formerly known as Hynix Semiconductor Inc. and changed its name to SK hynix, Inc. in March 2012. SK hynix, Inc. was founded in 1949 and is headquartered in Icheon-si, South Korea.



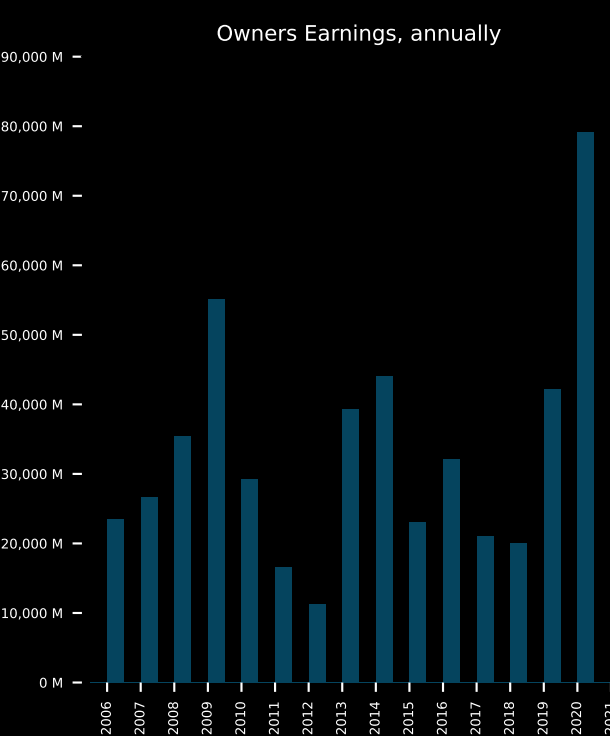
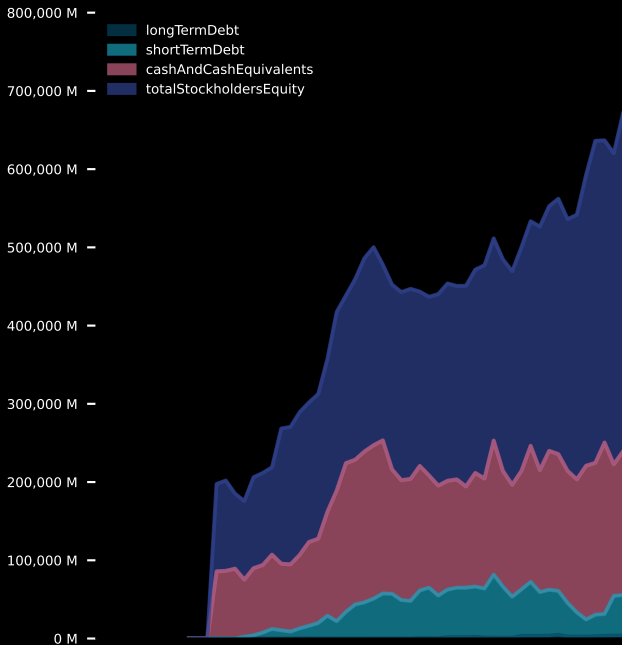
2330.TW / Semiconductors / US / 2022-08-23



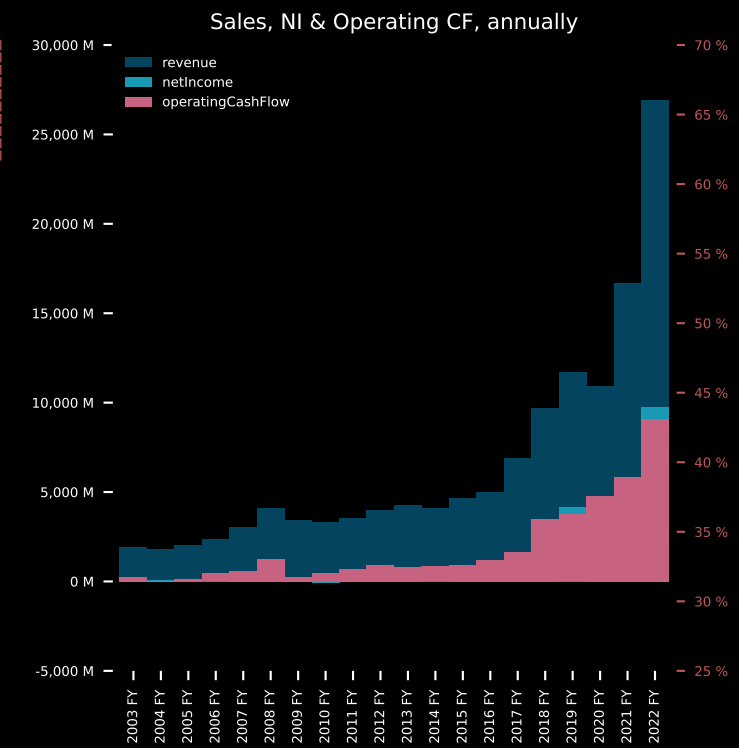
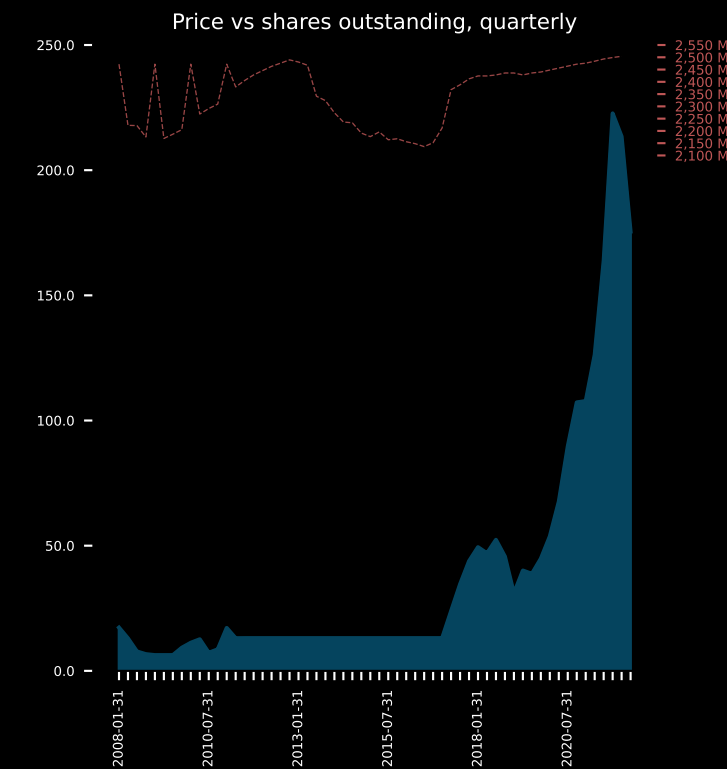
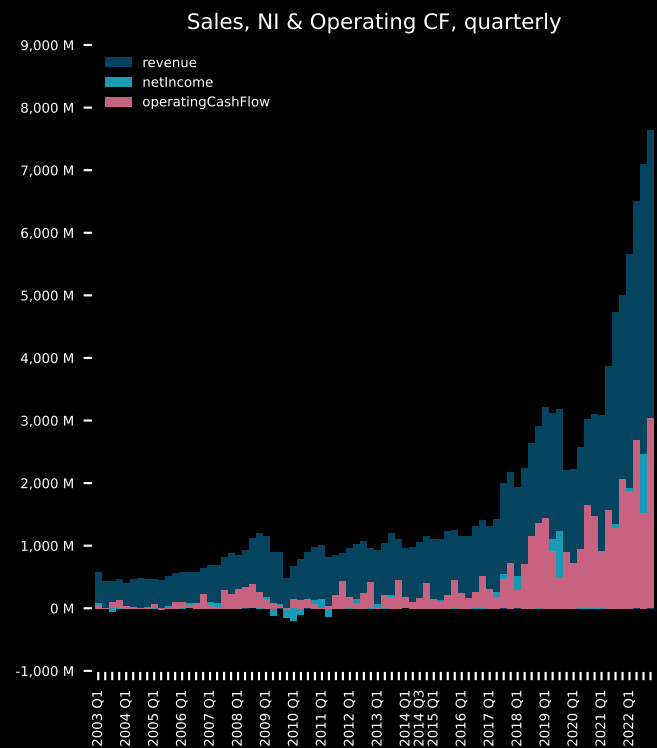
Taiwan Semiconductor Manufacturing Company Limited manufactures, packages, tests, and sells integrated circuits and other semiconductor devices in Taiwan, China, Europe, the Middle East, Africa, Japan, the United States, and internationally. It provides complementary metal oxide silicon wafer fabrication processes to manufacture logic, mixed-signal, radio frequency, and embedded memory semiconductors. The company also offers customer support, account management, and engineering services, as well as manufactures masks. Its products are used in mobile devices, high performance computing, automotive electronics, and internet of things markets. The company was incorporated in 1987 and is headquartered in Hsinchu City, Taiwan.



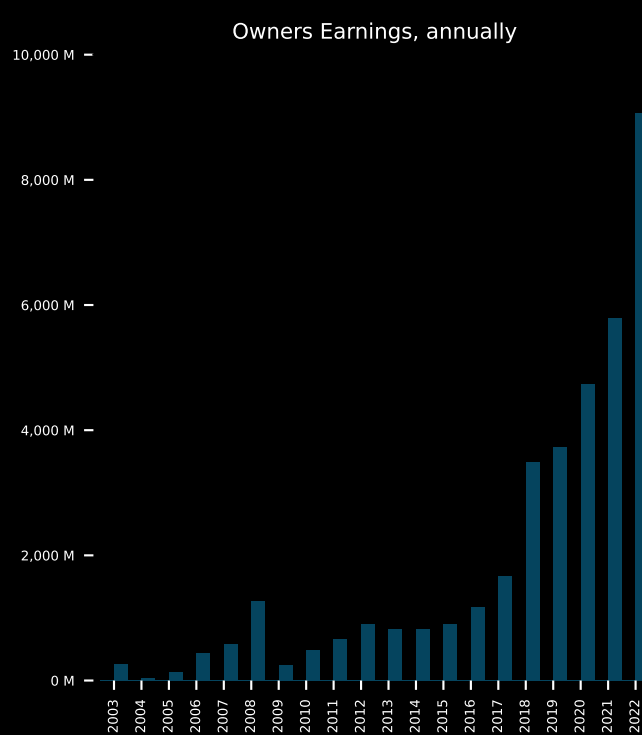
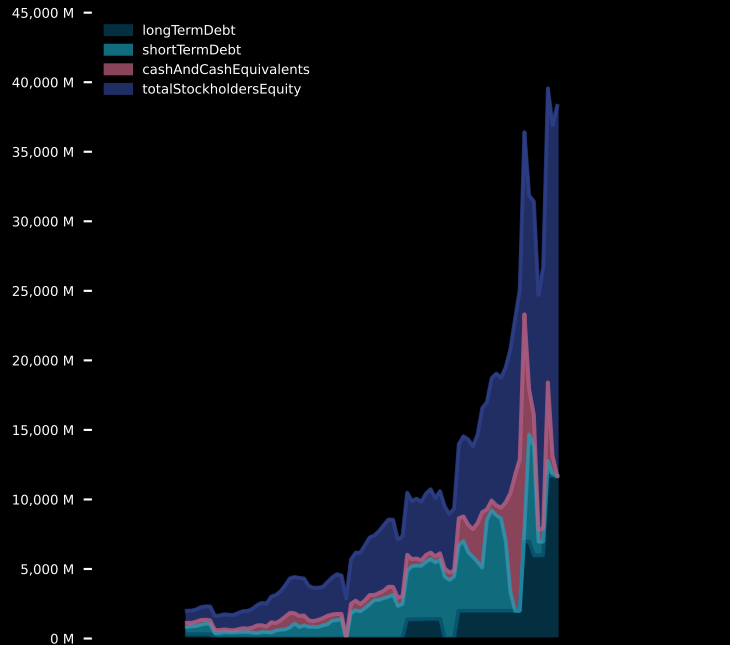
2454.TW / Semiconductors / US / 2022-08-23



MediaTek Inc. researches, develops, produces, and markets integrated circuits (ICs) in worldwide. It provides multimedia, computer peripherals oriented, consumer-oriented, and other application ICs. The company offers mobile communication, tablet, automotive chipsets; bluetooth, wireless LAN chips; artificial intelligence of things device SoCs; global positioning satellite chips; smart home connectivity chips; optical storage chipsets; bio-sensing analog front-end chips; DVD player SoCs; blu-ray DVD player chipsets; digital TV controller chips; power management and controller chips for various electronics; and USB PD type-c controller chips. It also provides wireless communication chipsets are mainly used in smartphones, tablets, chromebook, and feature phones; and NFC and wireless charging chips are mainly used in mobile phones, routers, TVs, set-up-boxes, smart wearables, smart home appliances, internet of things applications, game consoles, notebooks, and portable navigation devices. In addition, the company offers digital TV decoder and demodulator chips are used to receive and decode digital TV signals from either satellite, terrestrial, or cable. The company also provides

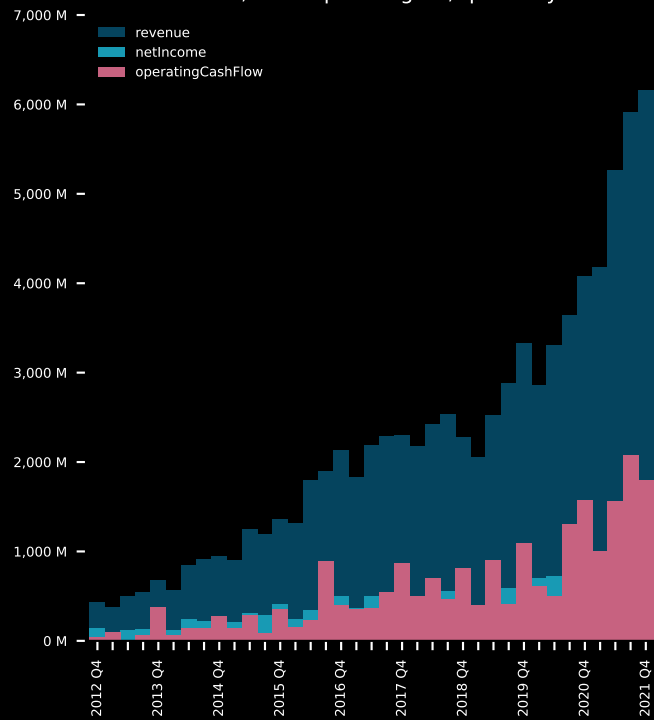


NVD.DE / Semiconductors / US / 2022-08-23

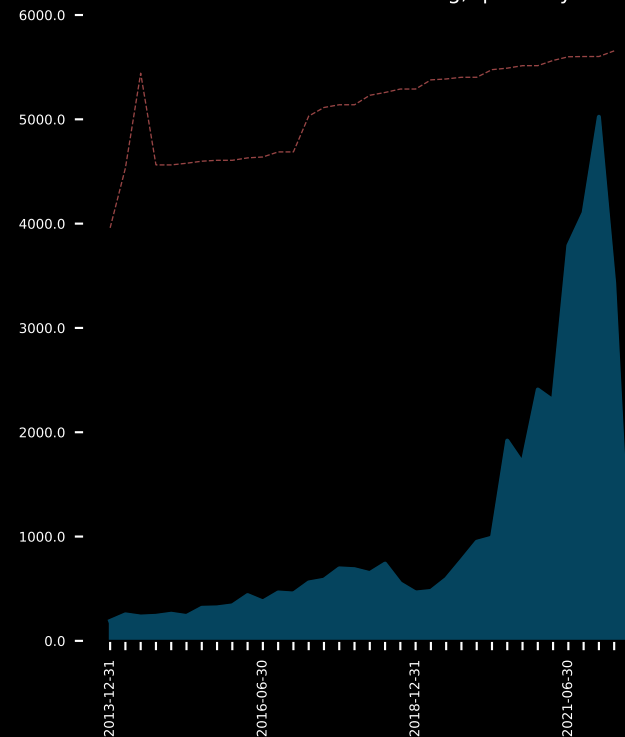


NVIDIA Corporation provides graphics, and compute and networking solutions in the United States, Taiwan, China, and internationally. The company's Graphics segment offers GeForce GPUs for gaming and PCs, the GeForce NOW game streaming service and related infrastructure, and solutions for gaming platforms; Quadro/NVIDIA RTX GPUs for enterprise workstation graphics; vGPU software for cloud-based visual and virtual computing; automotive platforms for infotainment systems; and Omniverse software for building 3D designs and virtual worlds. Its Compute & Networking segment provides Data Center platforms and systems for AI, HPC, and accelerated computing; Mellanox networking and interconnect solutions; automotive AI Cockpit, autonomous driving development agreements, and autonomous vehicle solutions; cryptocurrency mining processors; Jetson for robotics and other embedded platforms; and NVIDIA AI Enterprise and other software. The company's products are used in gaming, professional visualization, datacenter, and automotive markets. NVIDIA Corporation sells its products to original equipment manufacturers, system integrators, and distributors.

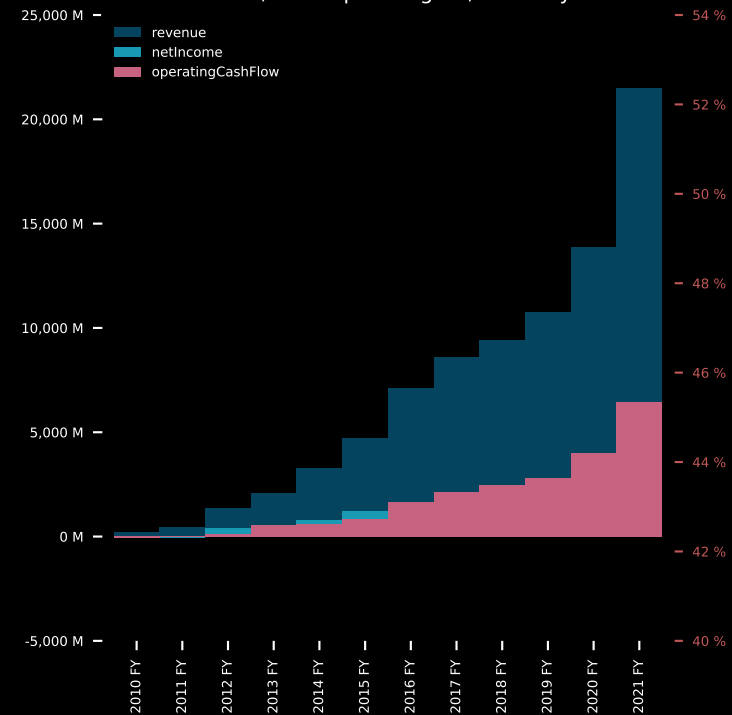
Sales, NI & Operating CF, quarterly



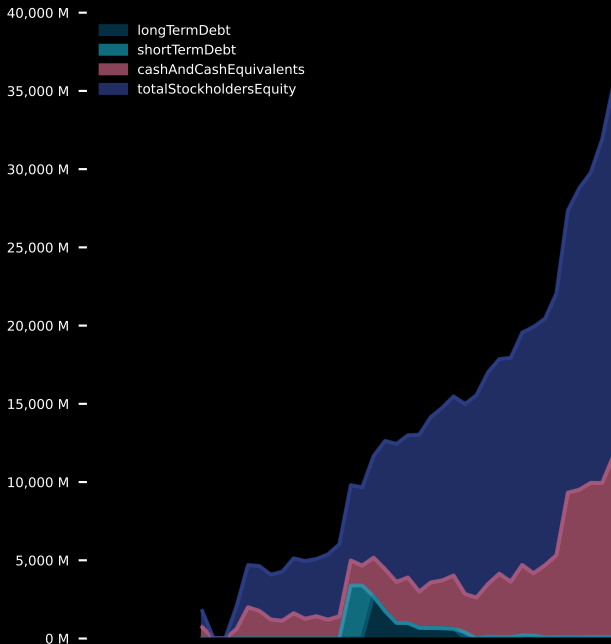
Price vs shares outstanding, quarterly



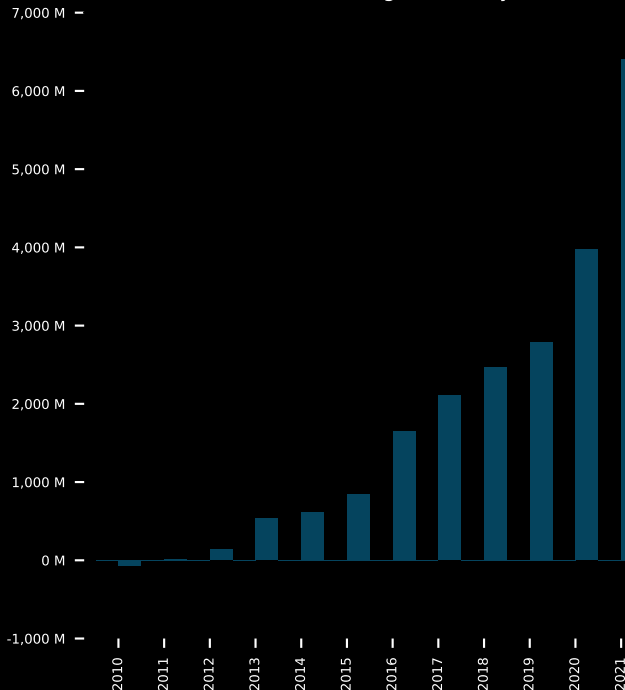
Sales, NI & Operating CF, annually



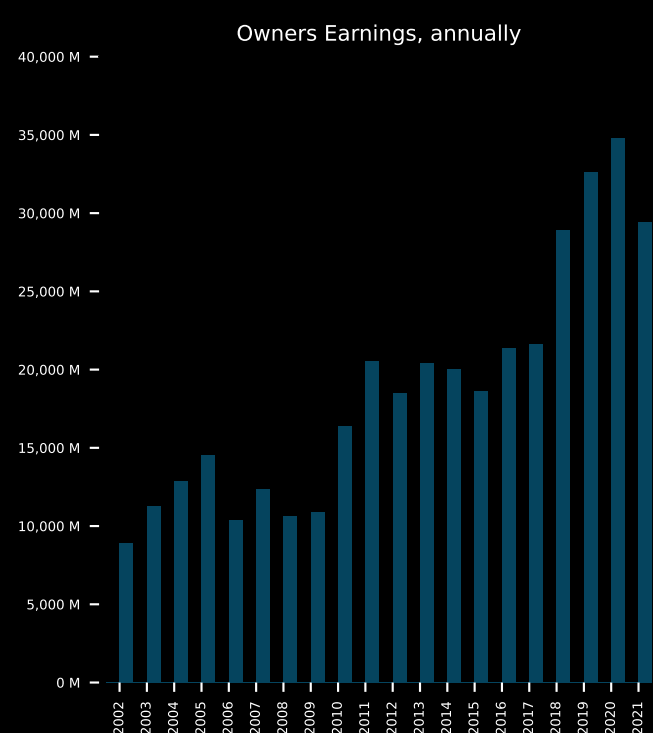
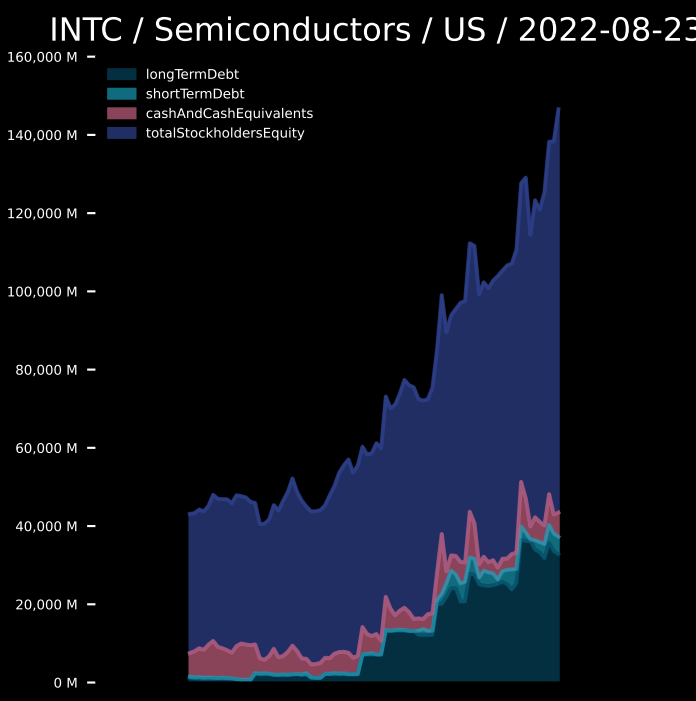
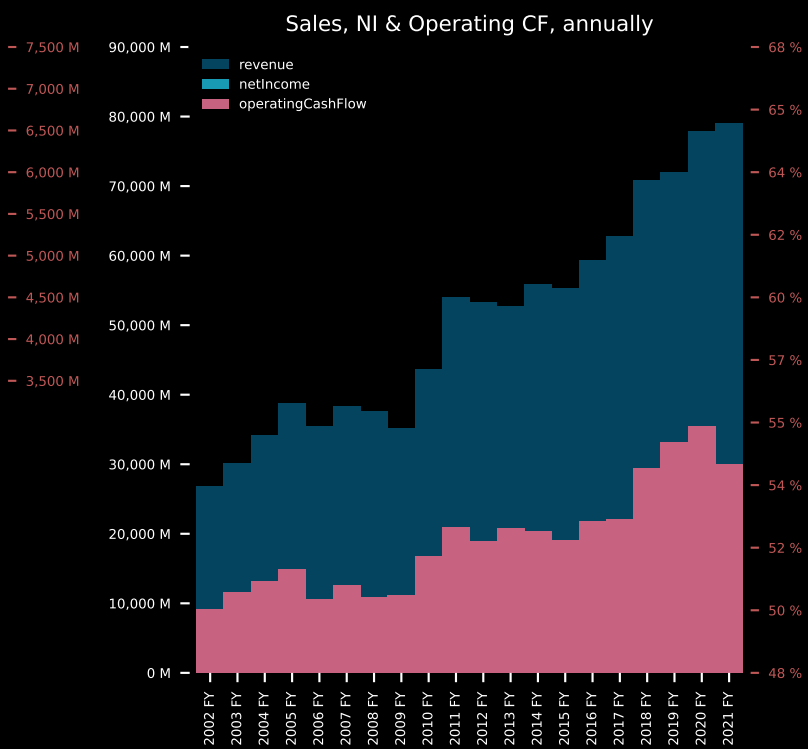
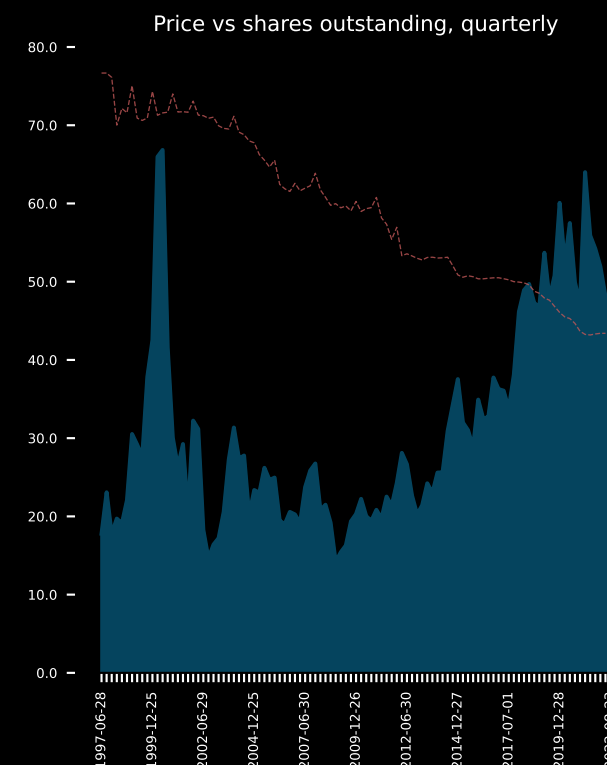
6415.TW / Semiconductors / CN / 2022-08-23



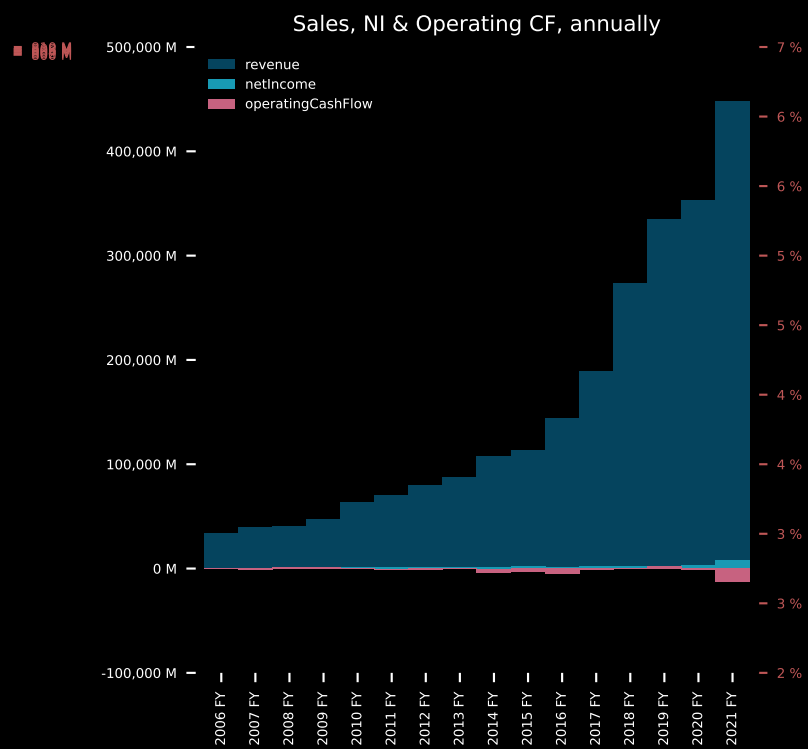
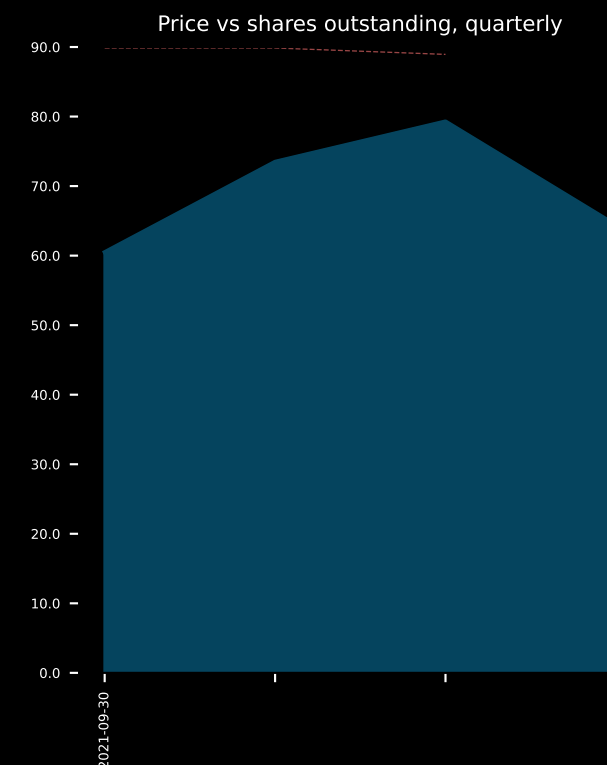
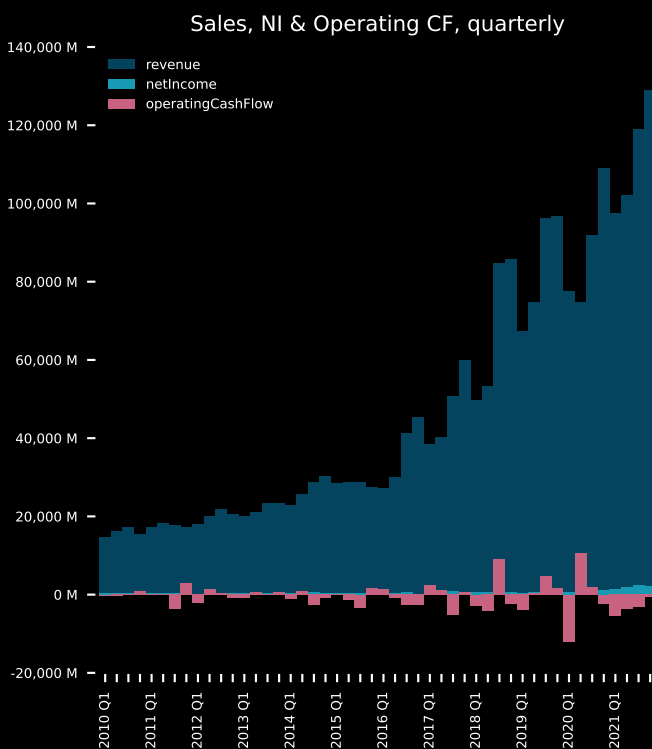
Owners Earnings, annually



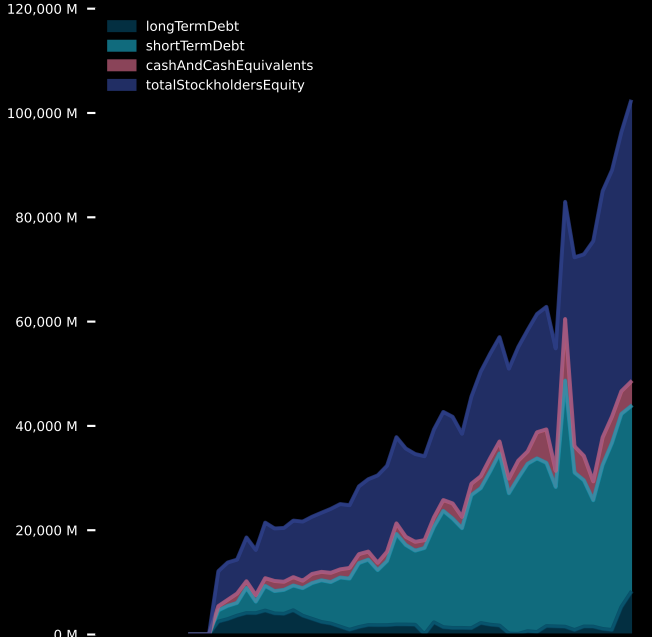
Silergy Corp. researches, develops, designs, and sells a range of power- management integrated circuits (ICs) in China and internationally. The company also offers single output step down, dual output step down, single output step up, and linear regulators; protection switches; electricity metering and embedded measurement ICs; ESD products; AC input LED lighting products; Li-Ion/Li-polymer battery chargers; motor drivers; audio amplifiers; and light sensors. In addition, it provides electronic components and related technical services. Its products are used in LED lighting, tablet computers, notebook computers, solid-state drives, video surveillance systems, servers, digital set-top boxes, smart phones, televisions, LED backlight modules, routers, mobile power sources, and smart meters. The company was incorporated in 2008 and is headquartered in Hangzhou, China.



Intel Corporation engages in the design, manufacture, and sale of computer products and technologies worldwide. The company operates through CCG, DCG, IOTG, Mobileye, NSG, PSG, and All Other segments. It offers platform products, such as central processing units and chipsets, and system-on-chip and multichip packages; and non-platform or adjacent products, including accelerators, boards and systems, connectivity products, graphics, and memory and storage products. The company also provides high-performance compute solutions for targeted verticals and embedded applications for retail, industrial, and healthcare markets; and solutions for assisted and autonomous driving comprising compute platforms, computer vision and machine learning-based sensing, mapping and localization, driving policy, and active sensors. In addition, it offers workload-optimized platforms and related products for cloud service providers, enterprise and government, and communications service providers. The company serves original equipment manufacturers, original design manufacturers, and cloud service providers. Intel Corporation has a distribution partnership with All Other segments.



3036.TW / Semiconductors / US / 2022-08-23

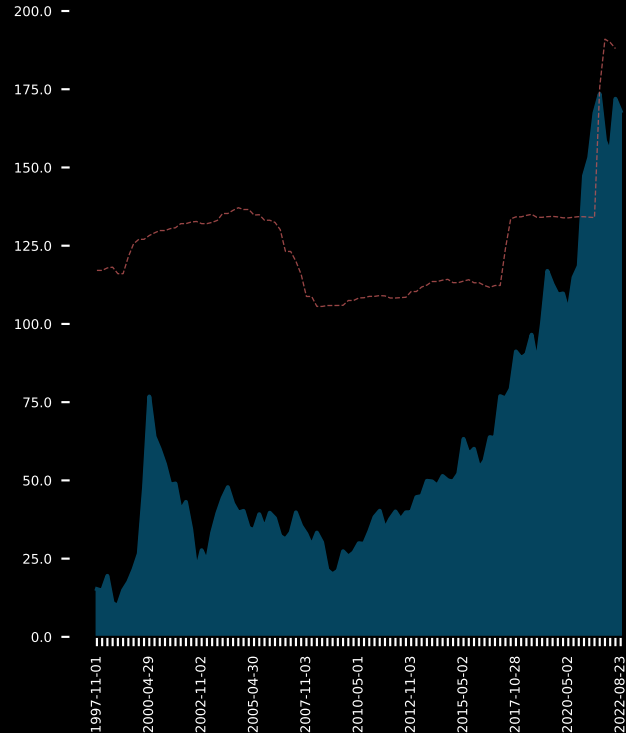


WT Microelectronics Co., Ltd., together with its subsidiaries, develops and sells electronic and communication components in China. Its products are used in various fields, including communication, computing, consumer electronics, industry and instrument, IoT, and automotive. The company is also involved in the trading, selling and technology servicing, and research and development businesses. WT Microelectronics Co., Ltd. was founded in 1993 and is headquartered in New Taipei City, Taiwan.

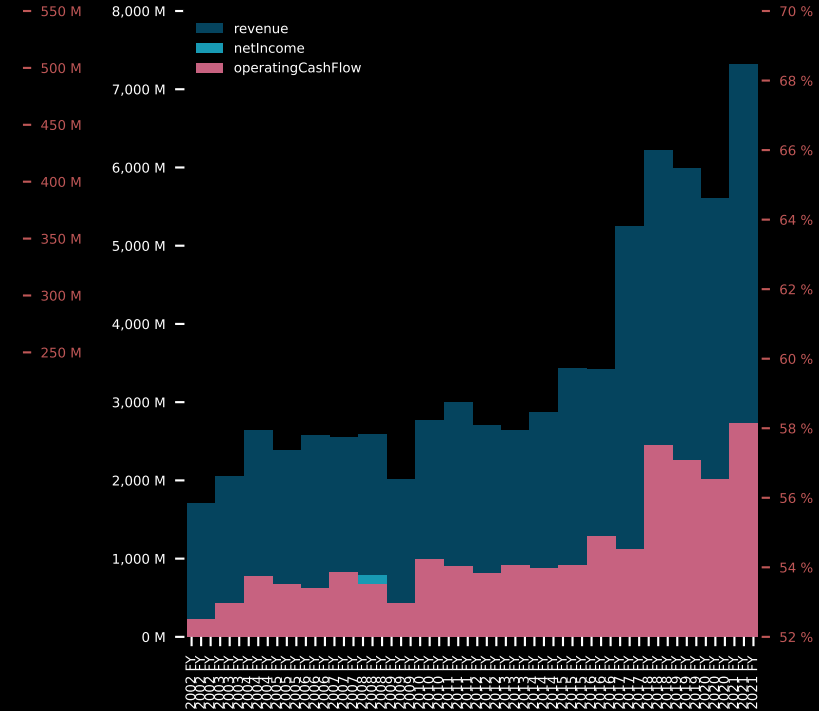
Sales, NI & Operating CF, quarterly



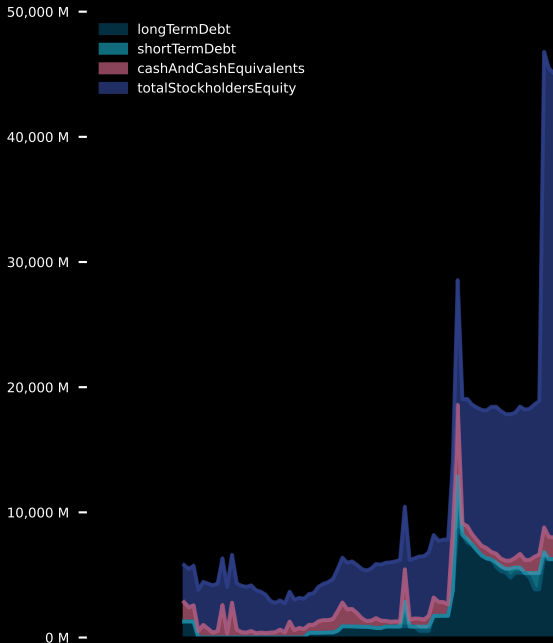
Price vs shares outstanding, quarterly



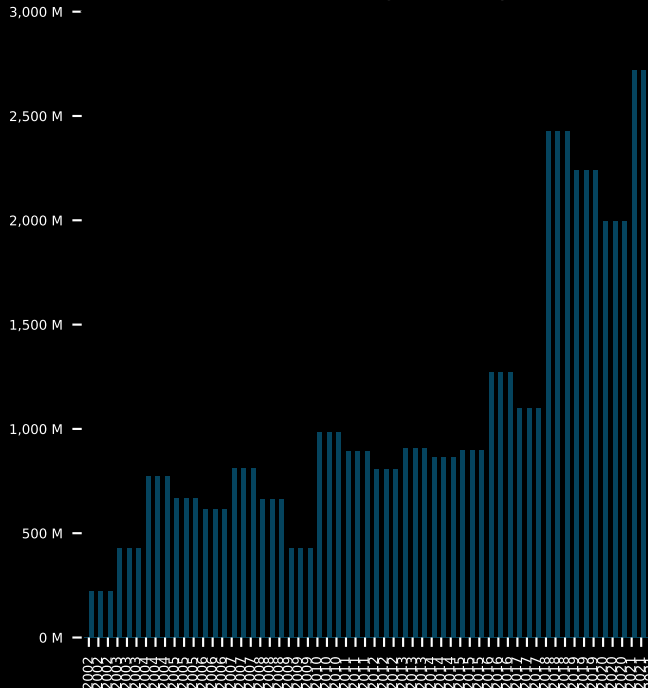
Sales, NI & Operating CF, annually



ADI / Semiconductors / US / 2022-08-23



Owners Earnings, annually

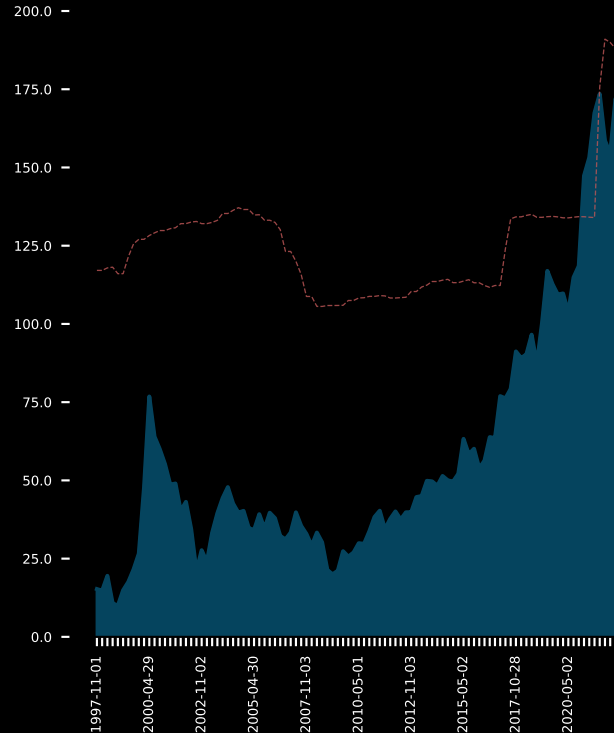


Analog Devices, Inc. designs, manufactures, tests, and markets integrated circuits (ICs), software, and subsystems that leverage analog, mixed-signal, and digital signal processing technologies. The company provides data converter products, which translate real-world analog signals into digital data, as well as translates digital data into analog signals; power management and reference products for power conversion, driver monitoring, sequencing, and energy management applications in the automotive, communications, industrial, and high-end consumer markets; and power ICs include performance, integration, and software design simulation tools for accurate power supply designs. It also offers high-performance amplifiers to condition analog signals; and radio frequency and microwave ICs to support cellular infrastructure; and microelectromechanical systems technology solutions, including accelerometers used to sense acceleration, gyroscopes for sense rotation, inertial measurement units to sense multiple degrees of freedom, and broadband switches for radio and instrument systems, as well as isolators. In addition, the company offers digital signal

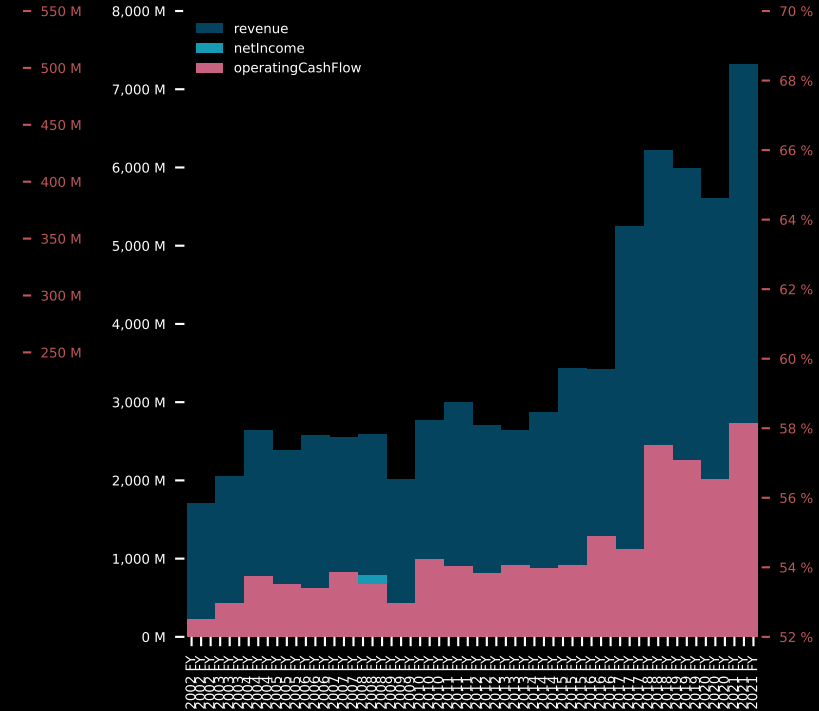
Sales, NI & Operating CF, quarterly



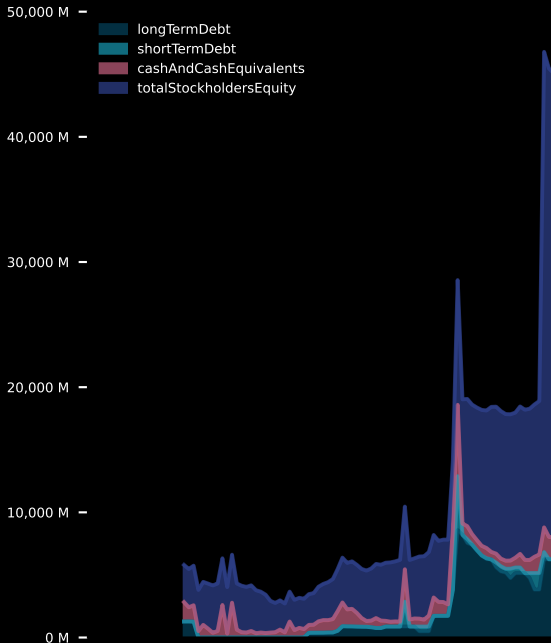
Price vs shares outstanding, quarterly



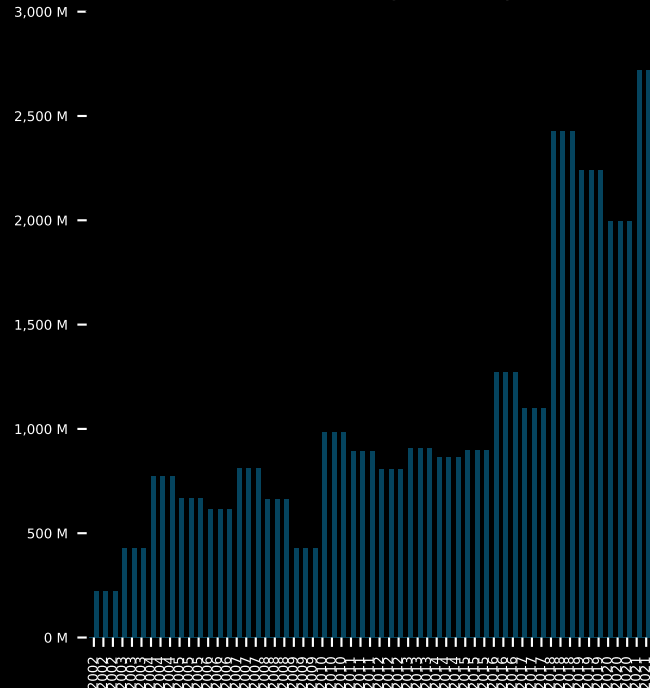
Sales, NI & Operating CF, annually



ADI / Semiconductors / US / 2022-08-23



Owners Earnings, annually

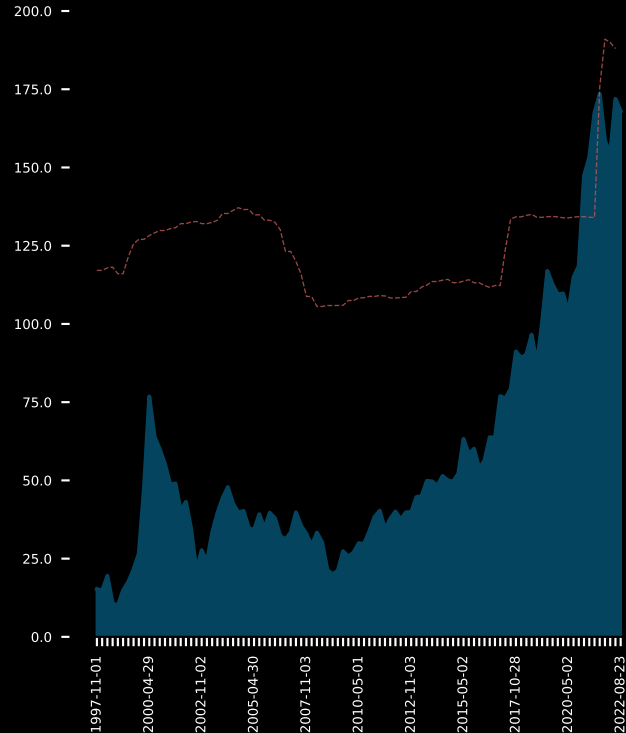


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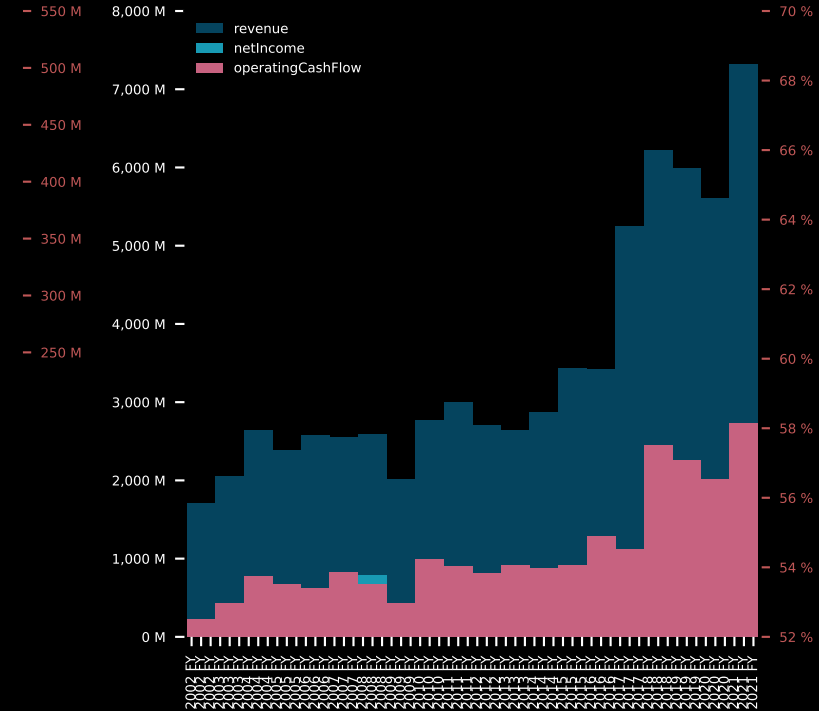
Sales, NI & Operating CF, quarterly



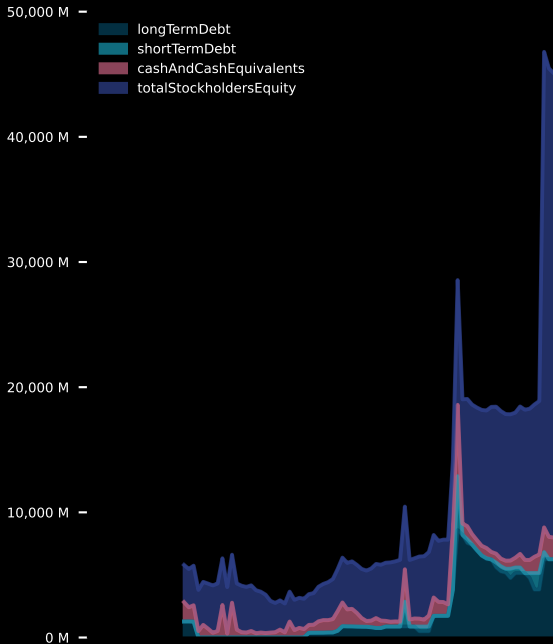
Price vs shares outstanding, quarterly



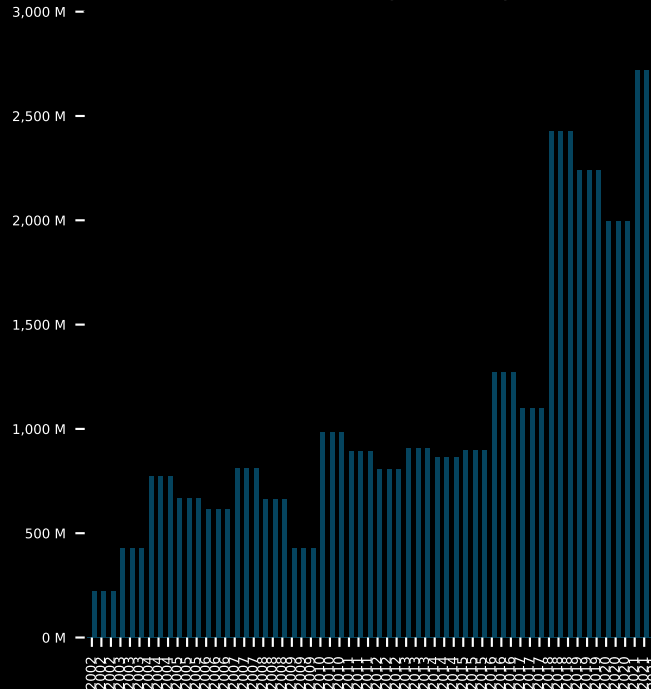
Sales, NI & Operating CF, annually



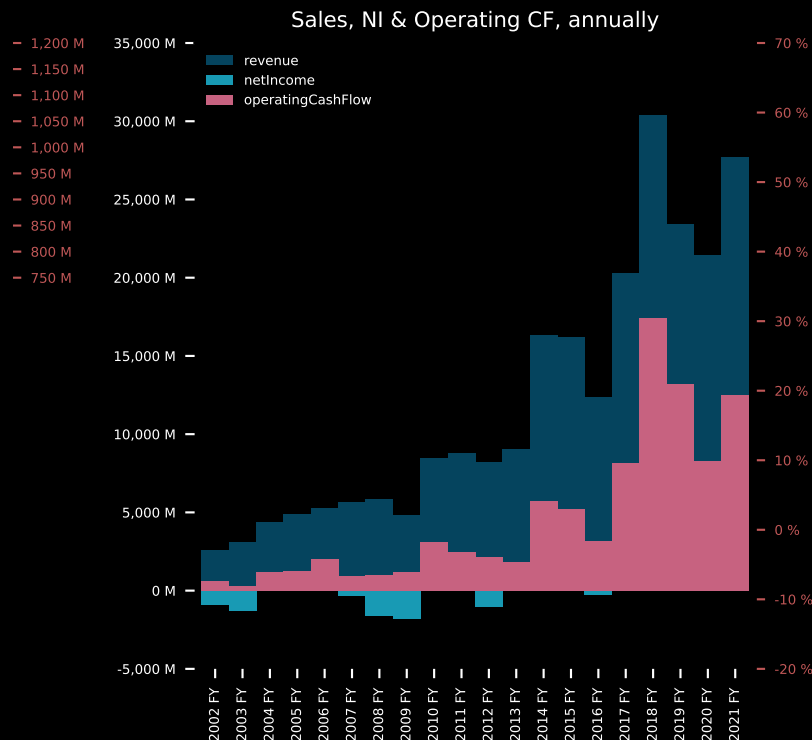
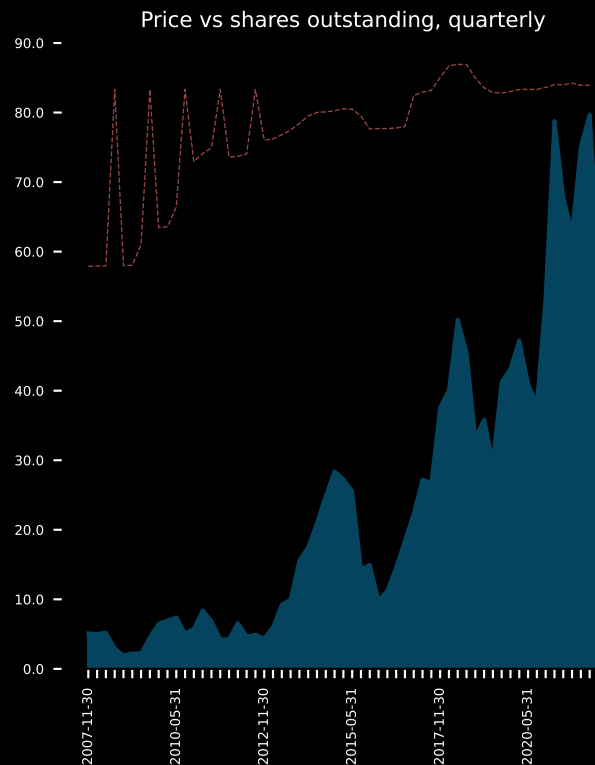
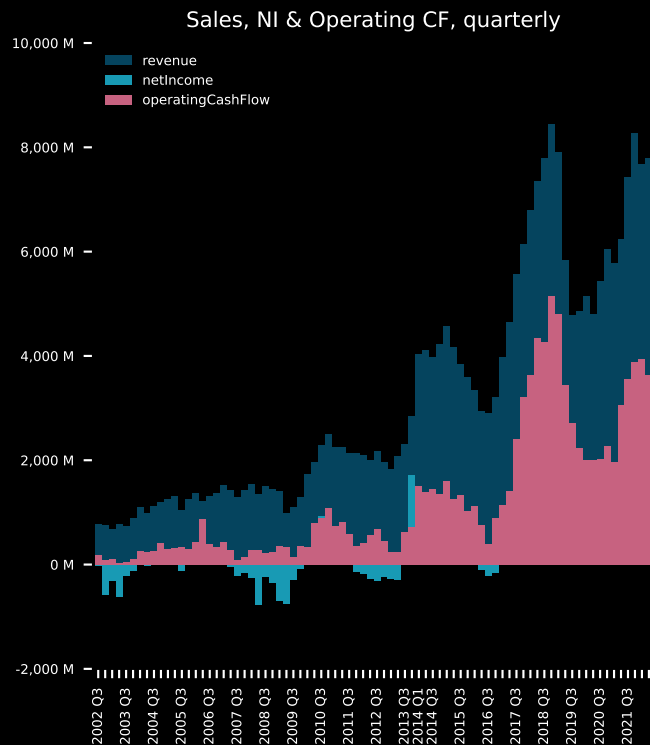
ADI / Semiconductors / US / 2022-08-23



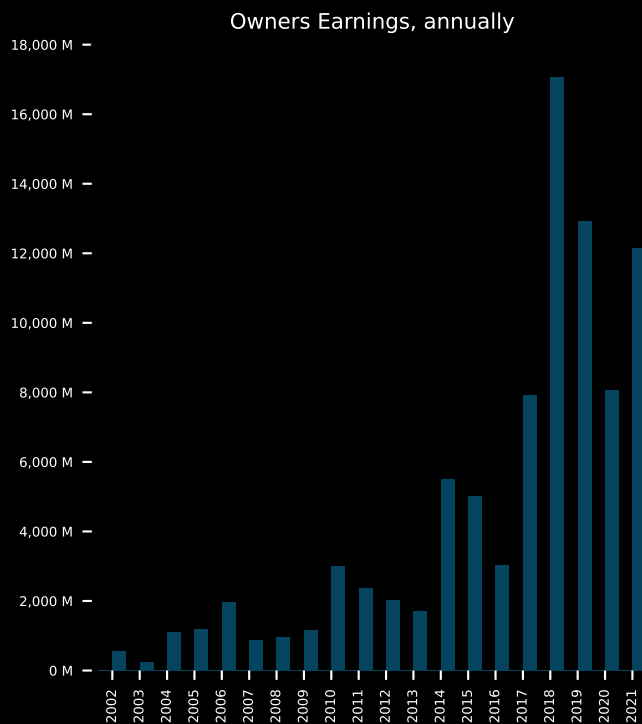
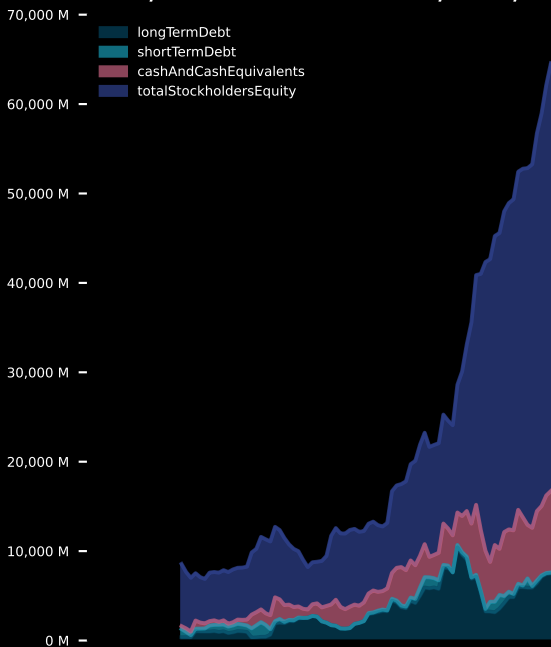
Owners Earnings, annually



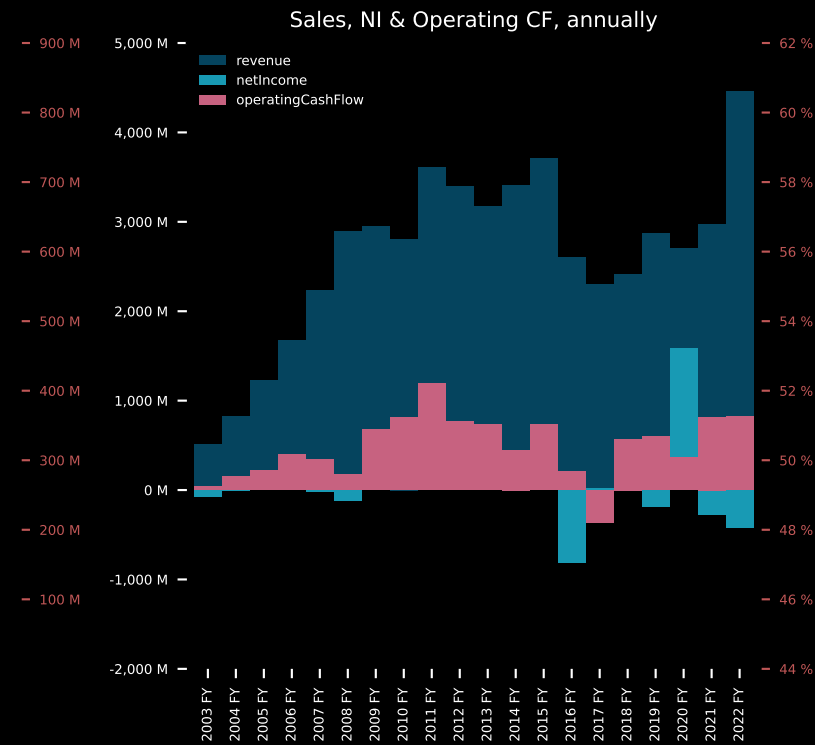
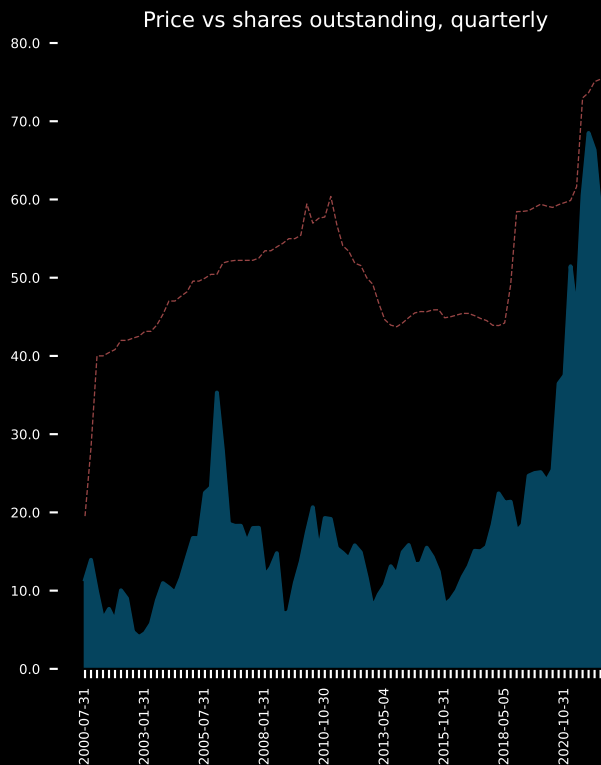
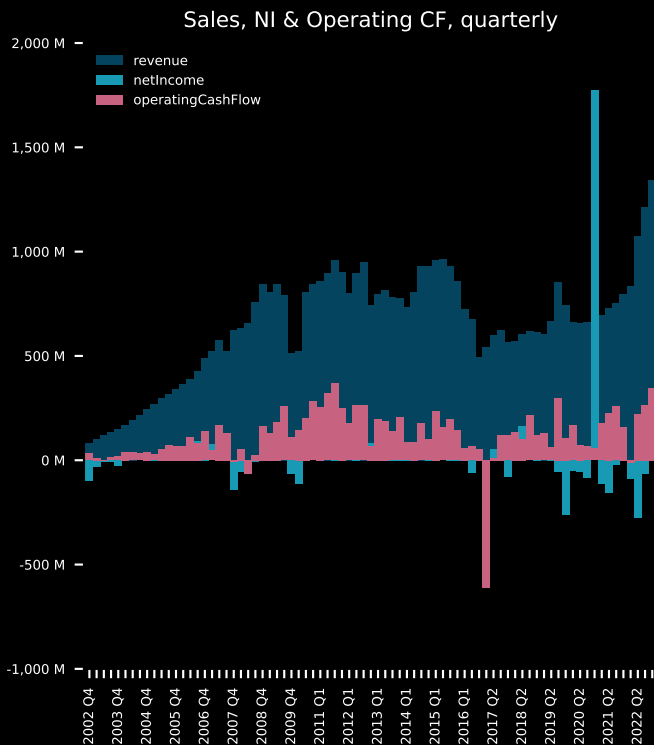
Analog Devices, Inc. designs, manufactures, tests, and markets integrated circuits (ICs), software, and subsystems that leverage analog, mixed-signal, and digital signal processing technologies. The company provides data converter products, which translate real-world analog signals into digital data, as well as translates digital data into analog signals; power management and reference products for power conversion, driver monitoring, sequencing, and energy management applications in the automotive, communications, industrial, and high-end consumer markets; and power ICs include performance, integration, and software design simulation tools for accurate power supply designs. It also offers high-performance amplifiers to condition analog signals; and radio frequency and microwave ICs to support cellular infrastructure; and microelectromechanical systems technology solutions, including accelerometers used to sense acceleration, gyroscopes for sense rotation, inertial measurement units to sense multiple degrees of freedom, and broadband switches for radio and instrument systems, as well as isolators. In addition, the company offers digital signal



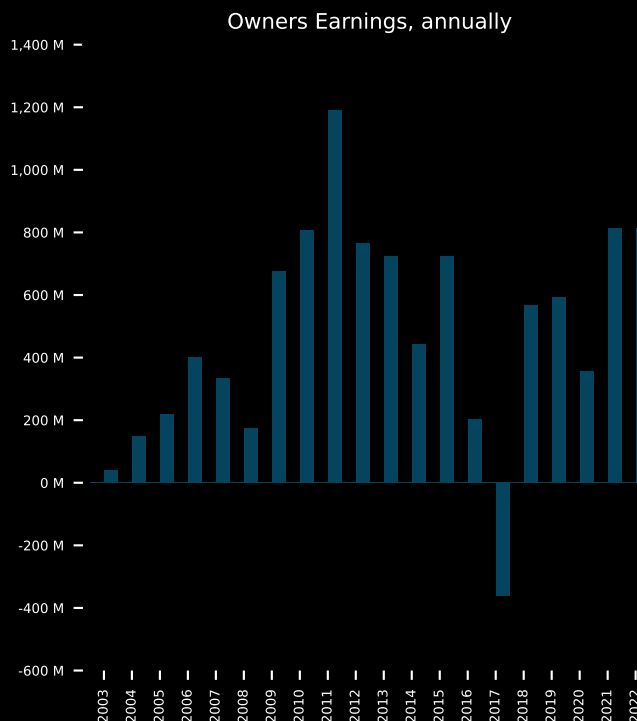
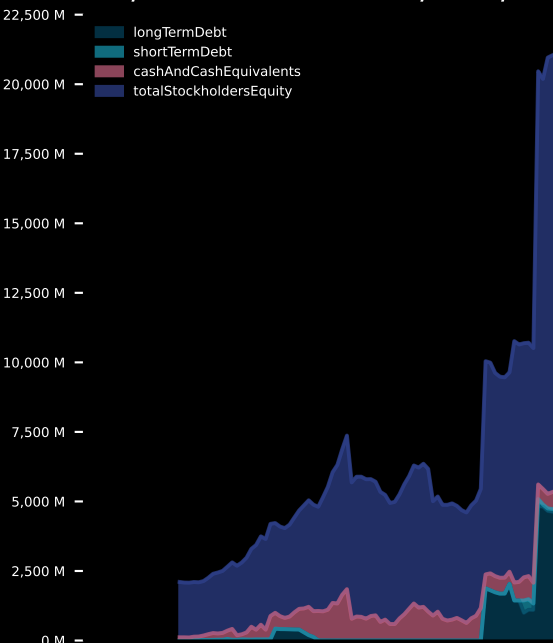
MTE.DE / Semiconductors / US / 2022-08-23



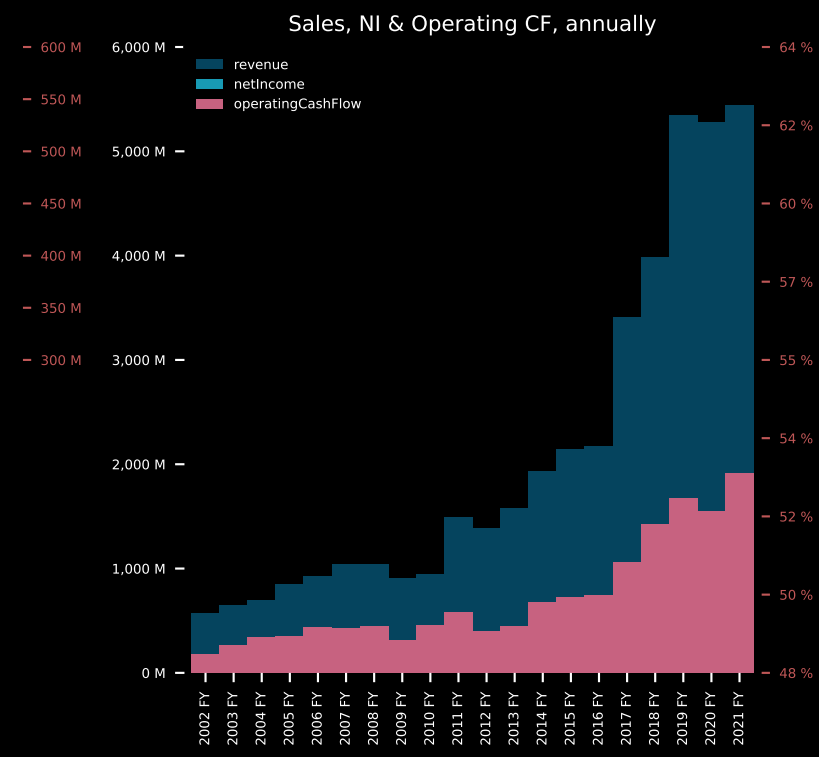
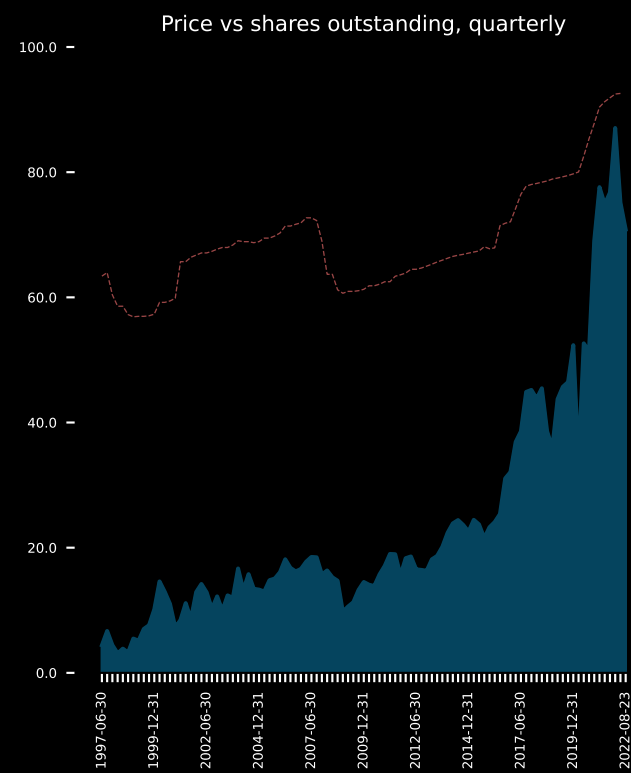
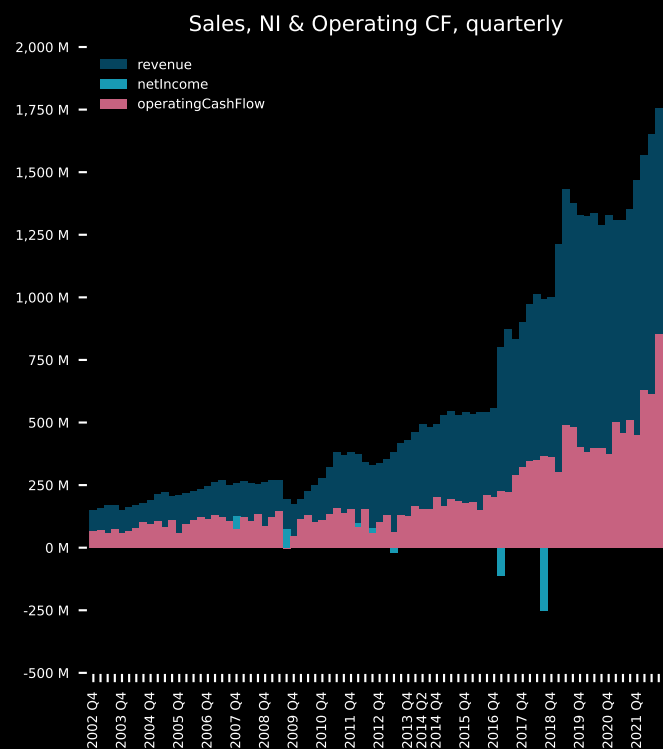
Micron Technology, Inc. designs, manufactures, and sells memory and storage products worldwide. The company operates through four segments: Compute and Networking Business Unit, Mobile Business Unit, Storage Business Unit, and Embedded Business Unit. It provides memory and storage technologies comprises DRAM products, which are dynamic random access memory semiconductor devices with low latency that provide high-speed data retrieval; NAND products that are non-volatile and re-writeable semiconductor storage devices; and NOR memory products, which are non-volatile re-writable semiconductor memory devices that provide fast read speeds under the Micron and Crucial brands, as well as through private labels. The company offers memory products for the cloud server, enterprise, client, graphics, and networking markets, as well as for smartphone and other mobile-device markets; SSDs and component-level solutions for the enterprise and cloud, client, and consumer storage markets; other discrete storage products in component and wafers; and memory and storage products for the automotive, industrial, and defense markets.



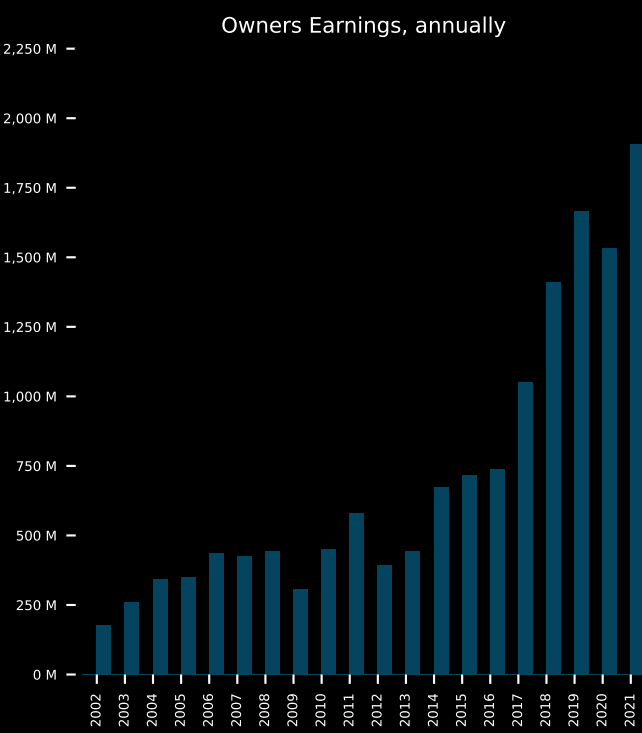
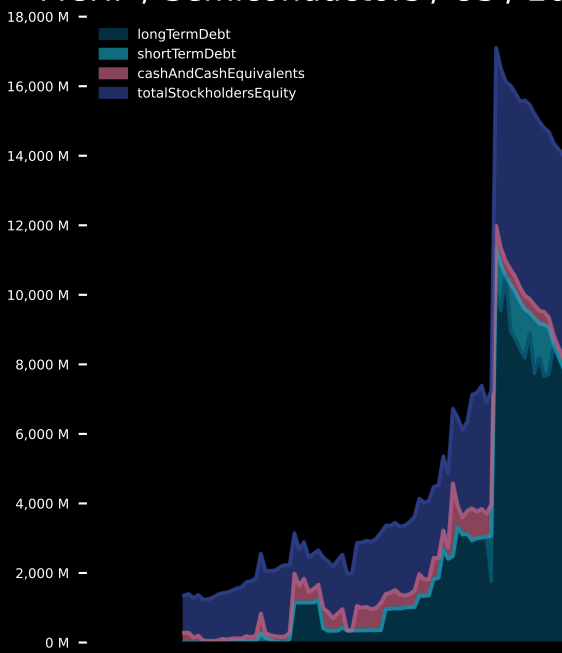
MRVL / Semiconductors / BM / 2022-08-23



Marvell Technology, Inc., together with its subsidiaries, designs, develops, and sells analog, mixed-signal, digital signal processing, and embedded and standalone integrated circuits. It offers a portfolio of Ethernet solutions, including controllers, network adapters, physical transceivers, and switches; single or multiple core processors; ASIC; and printer System-on-a-Chip products and application processors. The company also provides a range of storage products comprising storage controllers for hard disk drives (HDD) and solid-state drives that support various host system interfaces consisting of serial attached SCSI (SAS), serial advanced technology attachment (SATA), peripheral component interconnect express, non-volatile memory express (NVMe), and NVMe over fabrics; and fiber channel products, including host bus adapters, and controllers for server and storage system connectivity. It has operations in the United States, China, Malaysia, the Philippines, Thailand, Singapore, India, Israel, Japan, South Korea, Taiwan, and Vietnam. Marvell Technology, Inc. was incorporated in 1995 and is headquartered in Wilmington, Delaware.



MCHP / Semiconductors / US / 2022-08-23

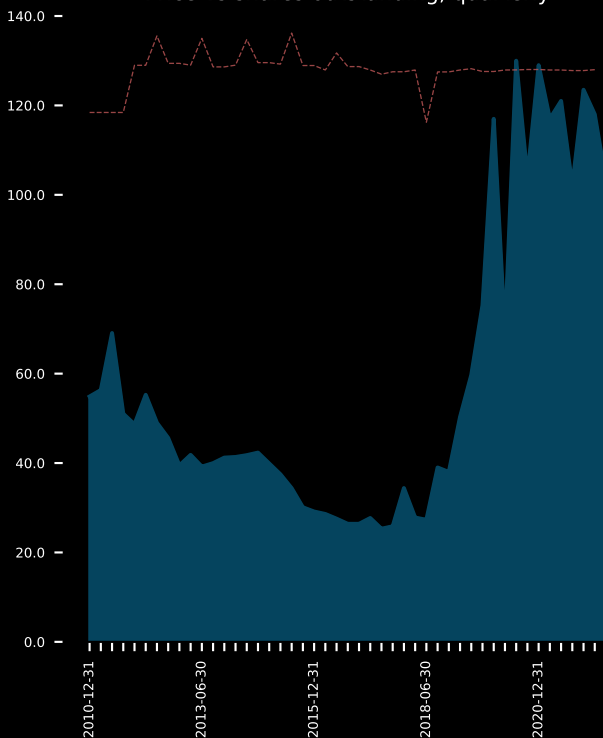


Microchip Technology Incorporated develops, manufactures, and sells semiconductor products for various embedded control applications in the Americas, Europe, and Asia. The company offers general purpose 8-bit, 16-bit, and 32-bit microcontrollers; 32-bit embedded microprocessors markets; and specialized microcontrollers for automotive, industrial, computing, communications, lighting, power supplies, motor control, human machine interface, security, wired connectivity, and wireless connectivity applications. It also provides development tools that enable system designers to program microcontroller products for specific applications; field-programmable gate array (FPGA) products; and analog, interface, mixed signal, and timing products comprising power management, linear, mixed-signal, high-voltage, thermal management, discrete diodes and metal oxide semiconductor field effect transistors (MOSFETS), radio frequency (RF), drivers, safety, security, timing, USB, Ethernet, wireless, and other interface products. In addition, the company offers memory products consisting of serial electrically erasable

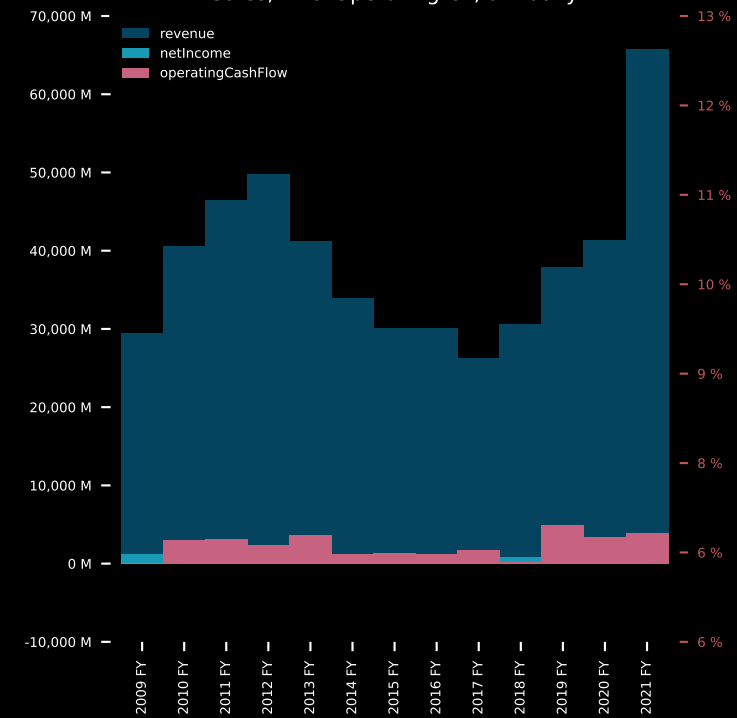
Sales, NI & Operating CF, quarterly



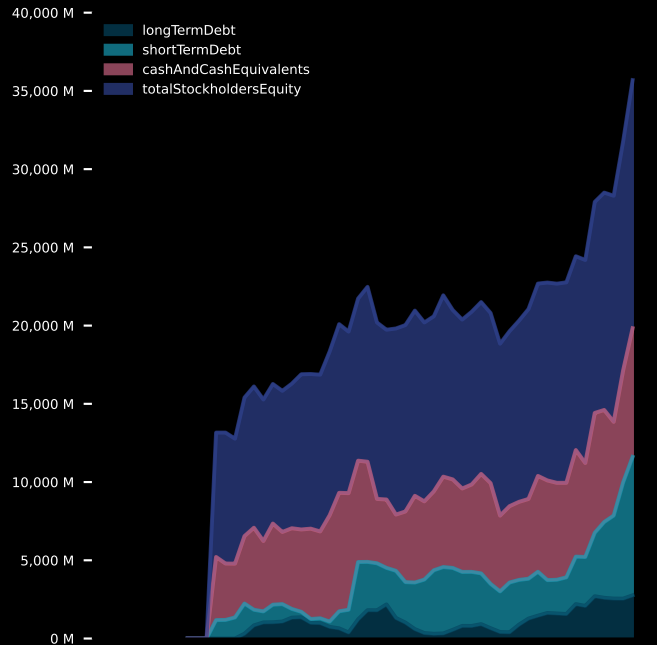
Price vs shares outstanding, quarterly



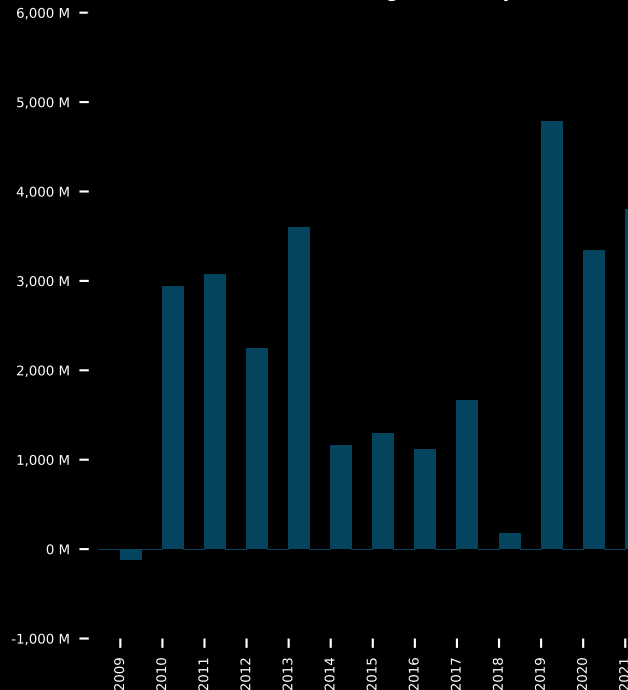
Sales, NI & Operating CF, annually



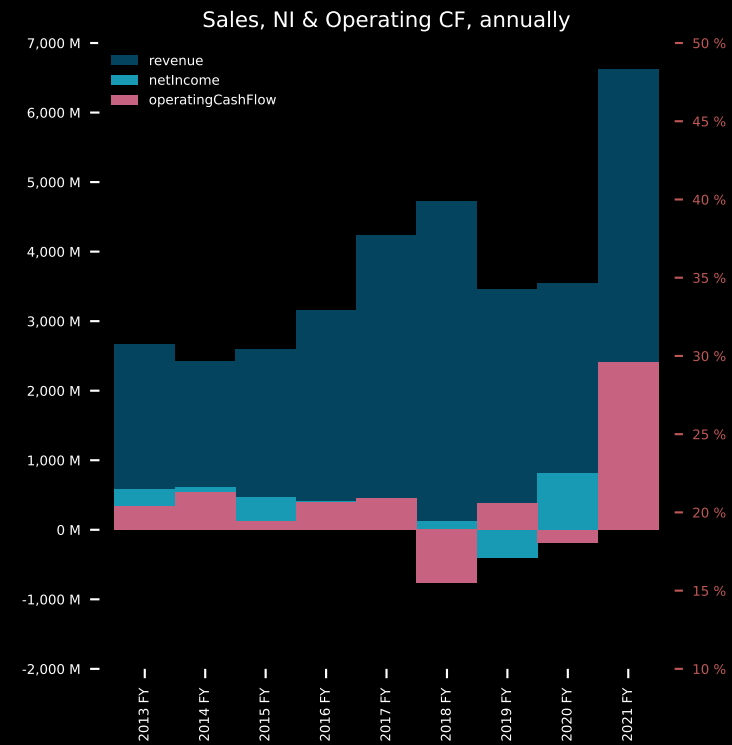
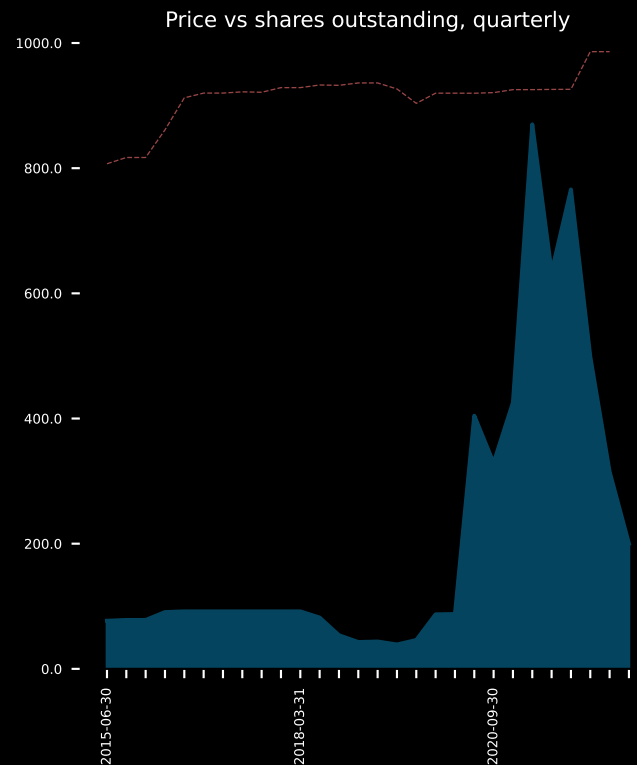
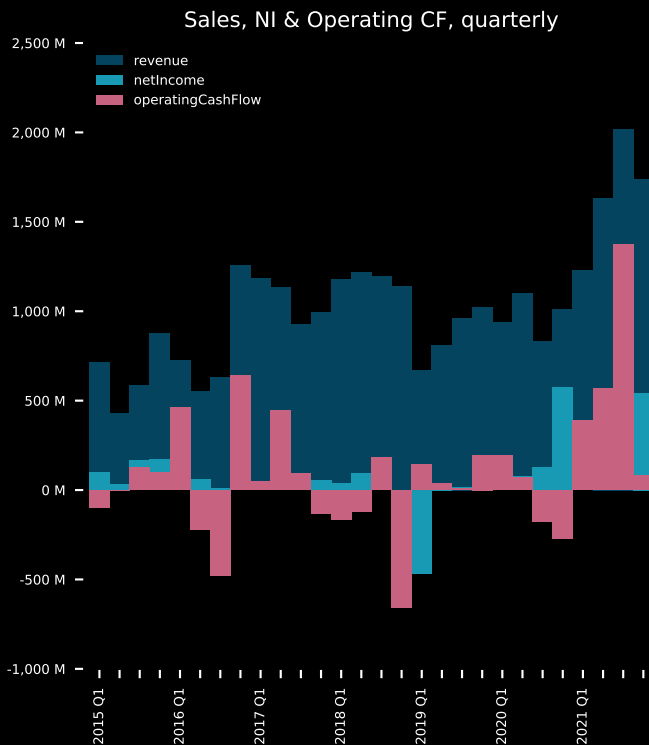
6278.TW / Semiconductors / US / 2022-08-23



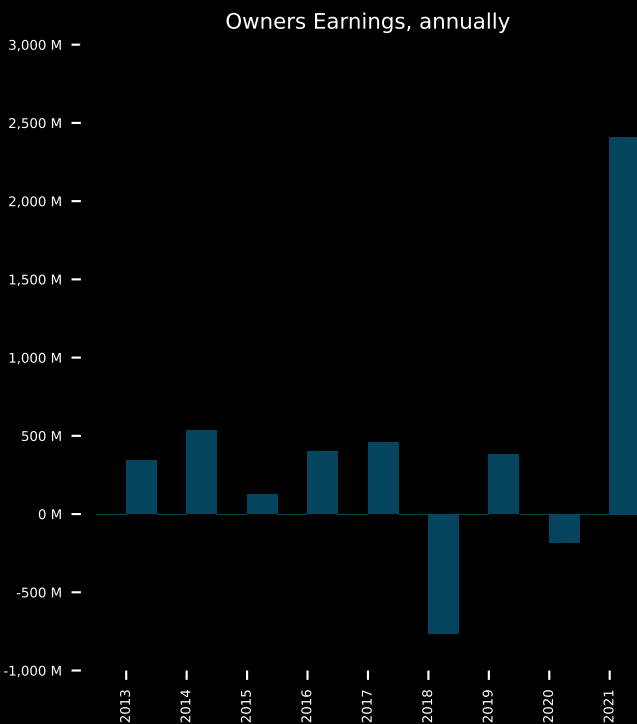
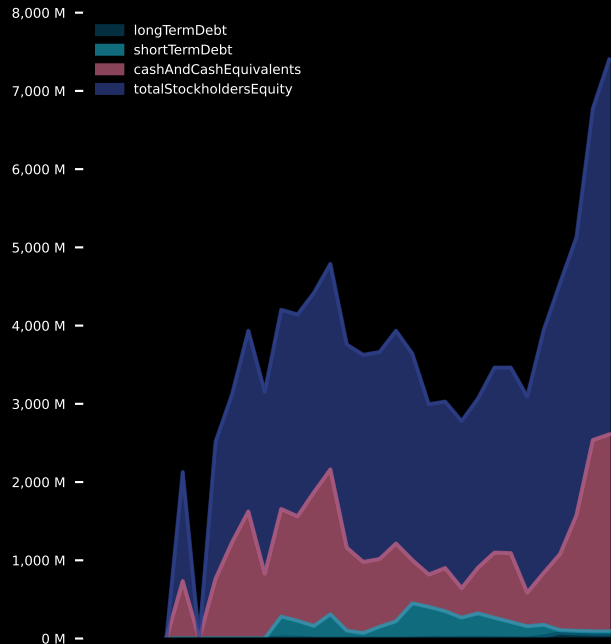
Owners Earnings, annually



Taiwan Surface Mounting Technology Corp. provides LCD surface-mount technology production solutions worldwide. The company offers digital camera and cellular phone LCD panel, notebook and television TFT-LCD panel, LED TV power supply, and LCD TV inverter control boards. It also provides micro projector and touch panel, DVD R/W, TV set, and lighting application control boards, as well as wireless controllers and refrigerator display panels; and digital camera/cellular, automotive dashboard panel, notebook, and PC/LCD television backlight bars. The company was incorporated in 1990 and is headquartered in Taoyuan City, Taiwan.

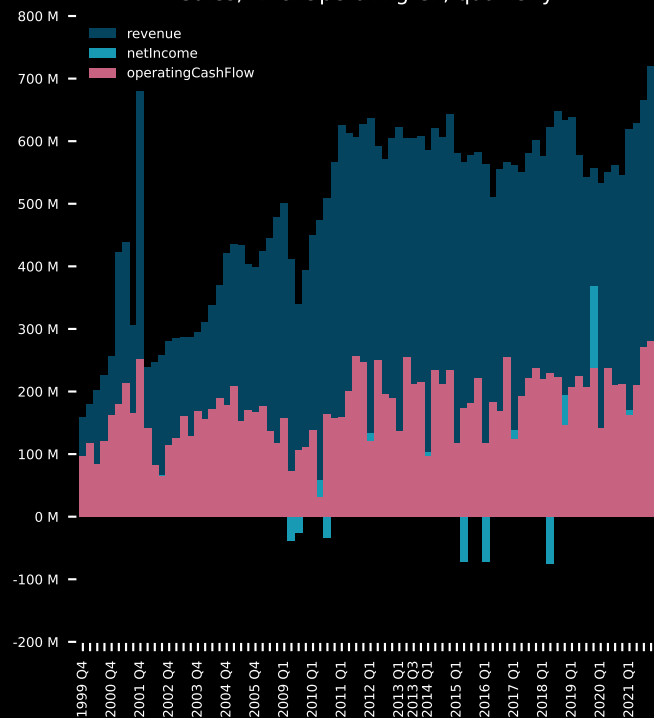


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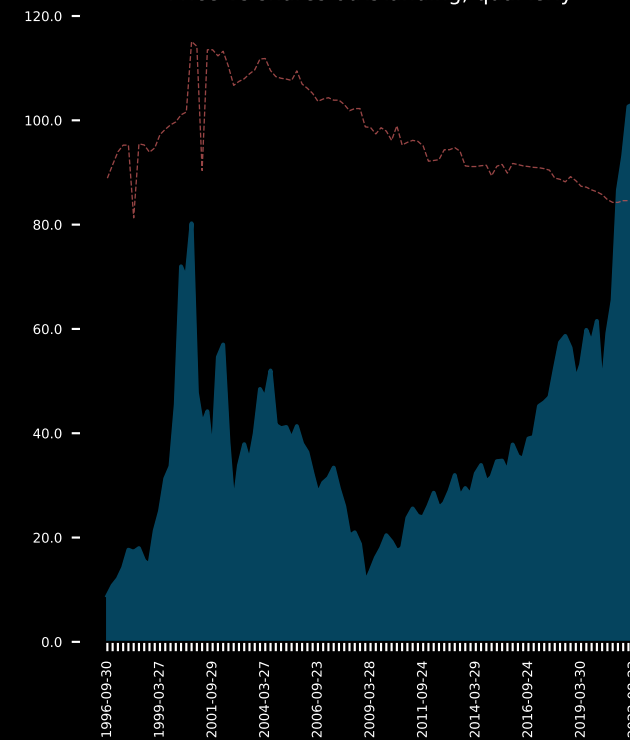


AP Memory Technology Corporation engages in designing, licensing, manufacturing, and selling customized memory chip products and technologies in Taiwan and internationally. It designs, manufactures, and sells memory-related IC products for use in functional cell phones and Internet of Things related products, including Prseudo SRAM for wearable devices application; and DRAM for use in ultra-low-power, ultra-high-bandwidth, and logic in-memory, as well as offers technical consulting services. The company was incorporated in 2011 and is headquartered in Zhubei, Taiwan.

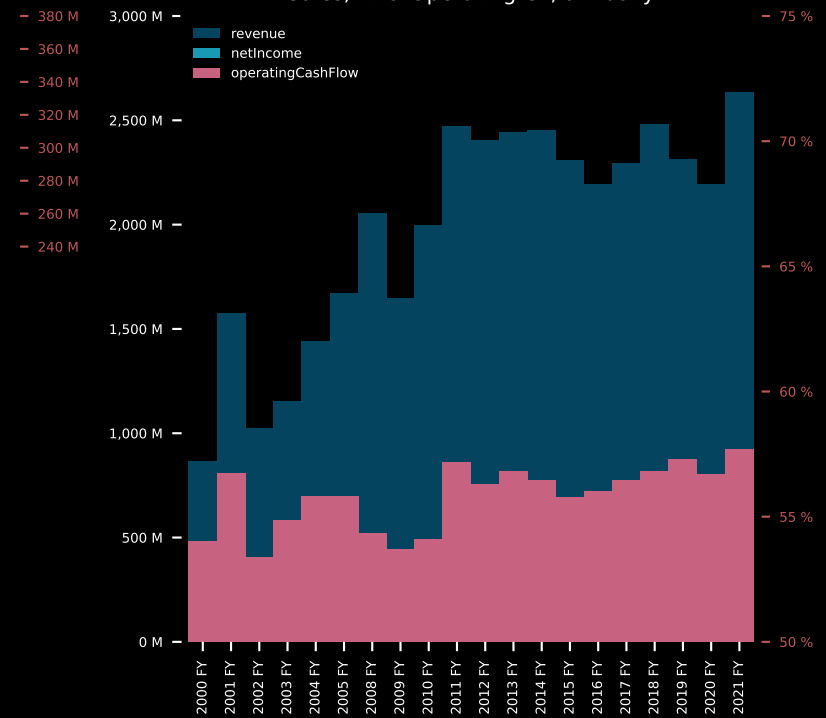
Sales, NI & Operating CF, quarterly



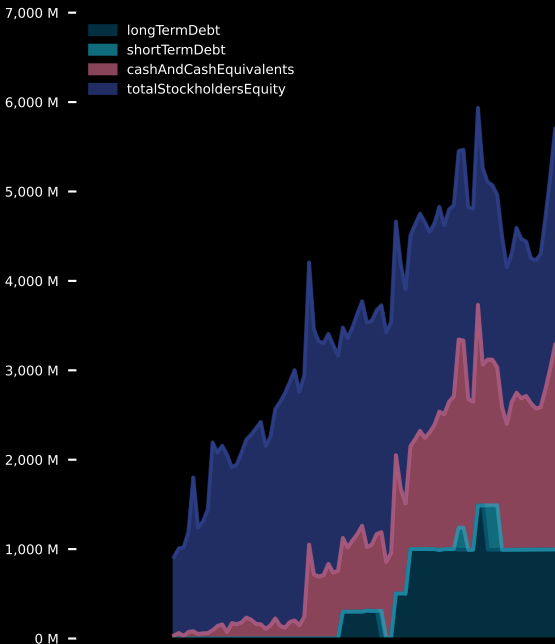
Price vs shares outstanding, quarterly



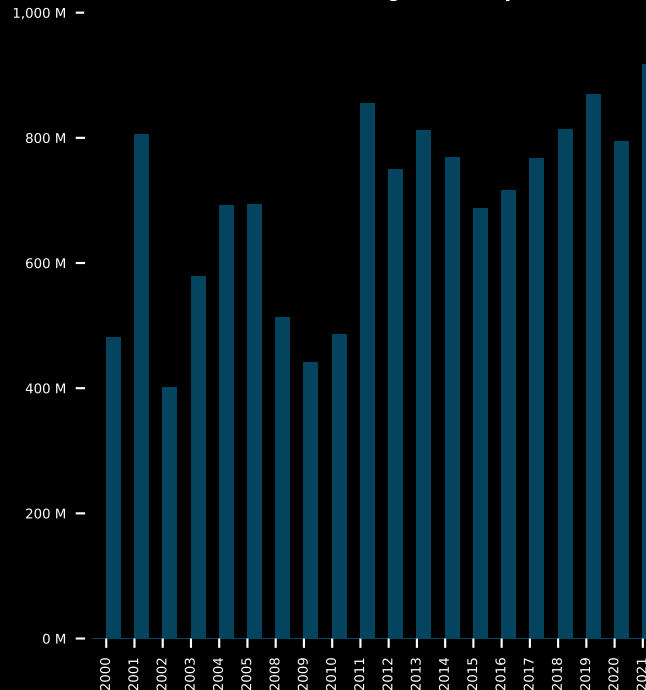
Sales, NI & Operating CF, annually



MXIM / Semiconductors / US / 2022-08-23

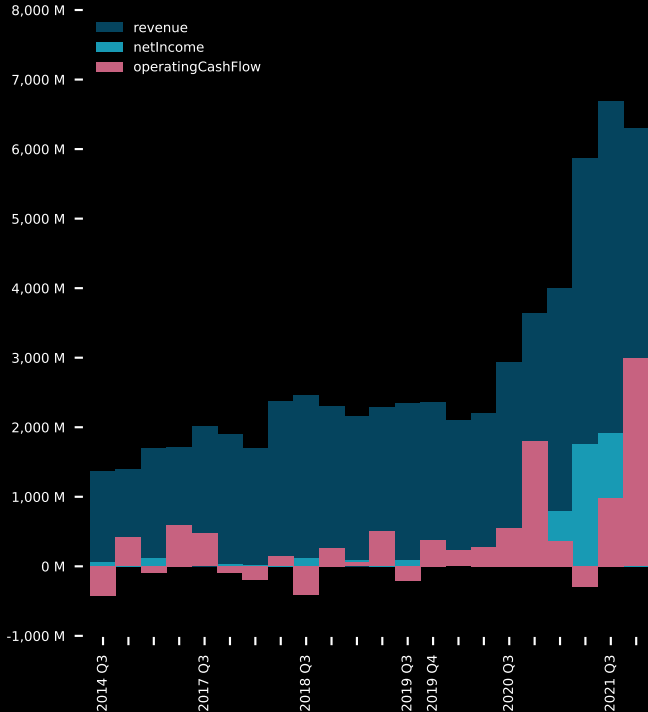


Owners Earnings, annually

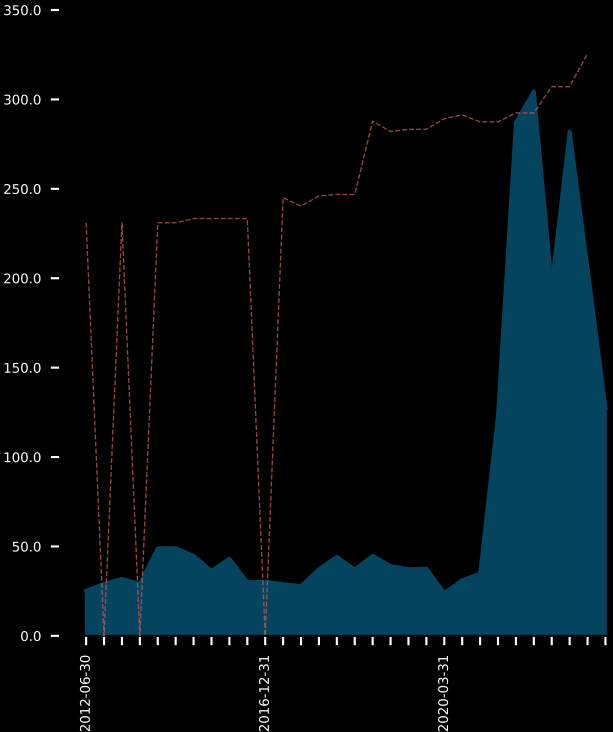


Maxim Integrated Products, Inc. designs, develops, manufactures, and markets a range of linear and mixed-signal integrated circuits in the United States, China, rest of Asia, Europe, and internationally. The company also provides various high-frequency process technologies and capabilities used in custom designs. It serves automotive, communications and data center, consumer, and industrial markets. The company markets its products through a direct-sales and applications organization, as well as through its own and other unaffiliated distribution channels. Maxim Integrated Products, Inc. was founded in 1983 and is headquartered in San Jose, California.

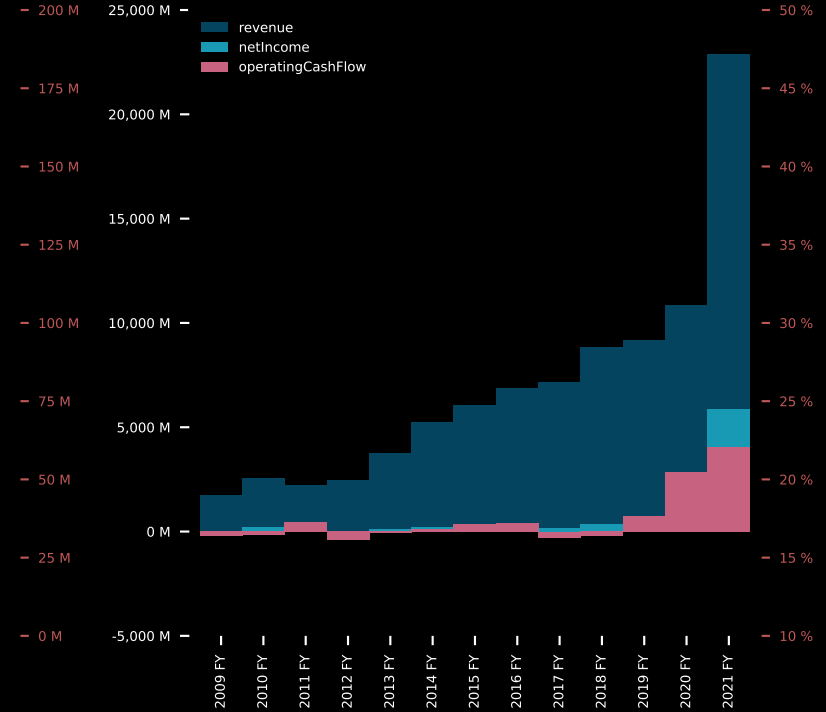
Sales, NI & Operating CF, quarterly



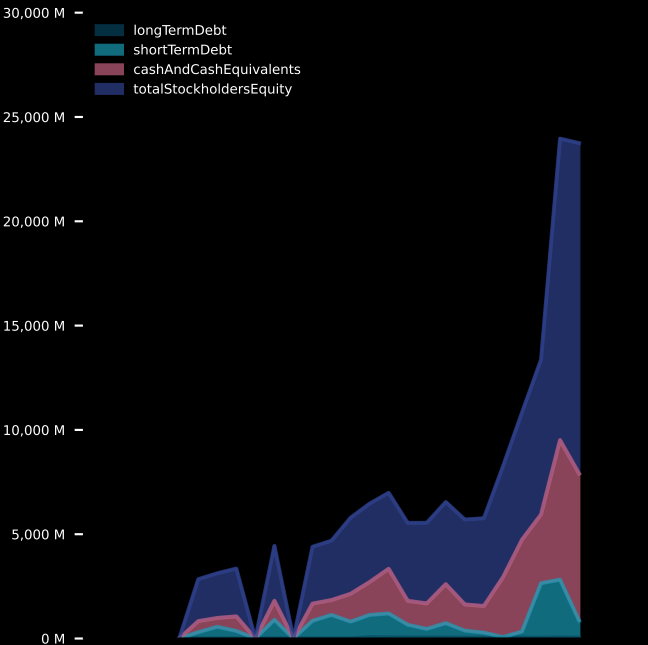
Price vs shares outstanding, quarterly



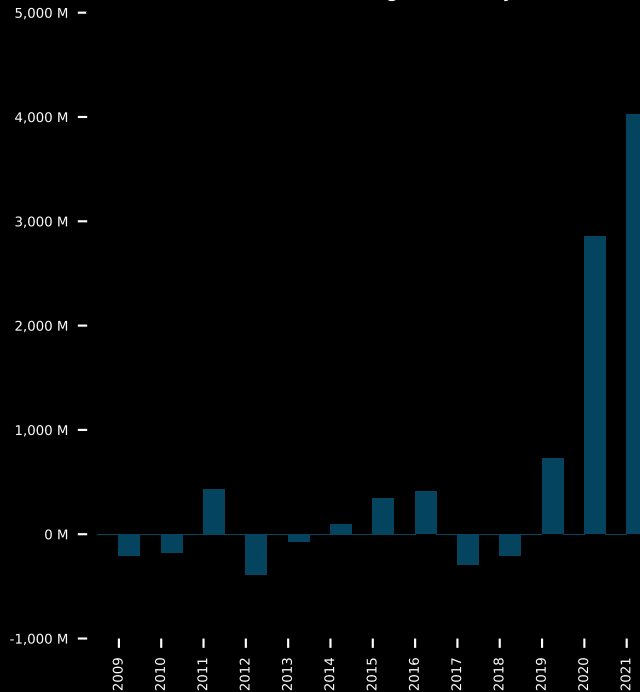
Sales, NI & Operating CF, annually



4961.TW / Semiconductors / US / 2022-08-23

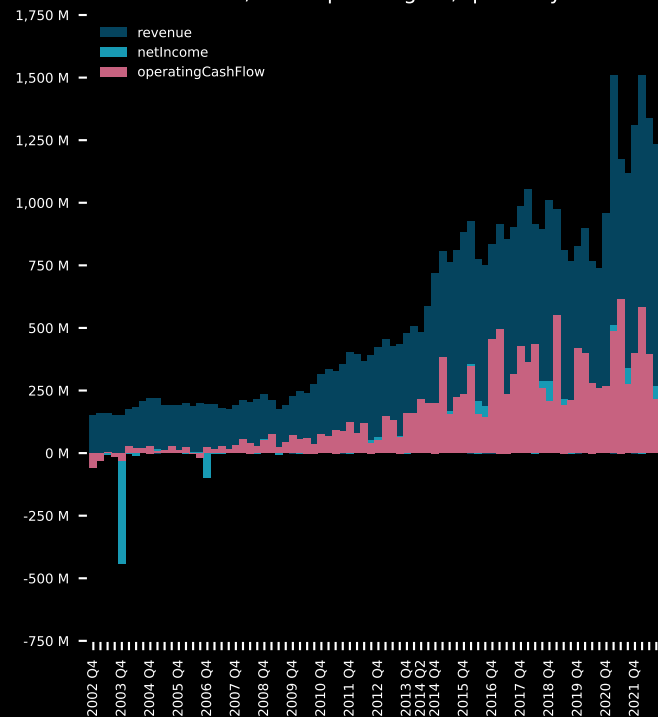


Owners Earnings, annually

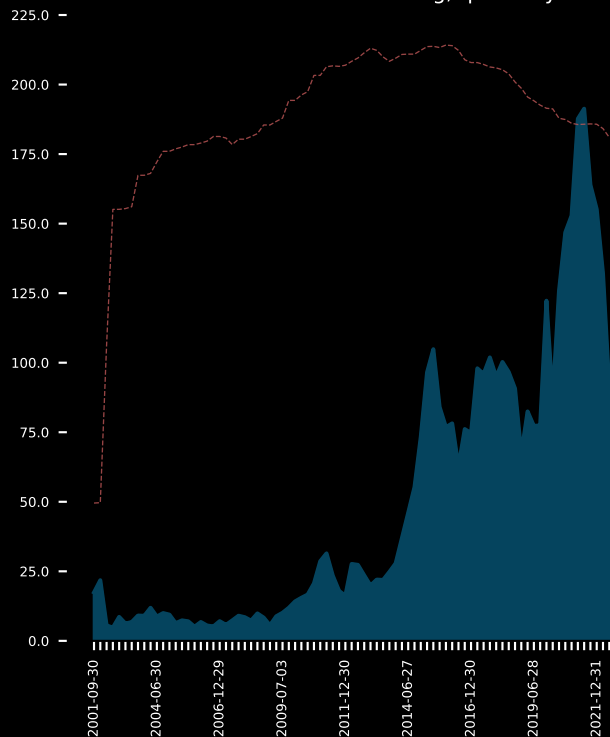


Fitipower Integrated Technology Inc. research, design, and development of LCD driver ICs and analogs, and digital and mixed-signal power management ICs in Taiwan. It offers power management products comprising buck DC-DC, boost DC-DC, linear regulator, LCD power, power switch, WLED driver, reset IC, and motor driver, as well as other products, such as PMUs, ASICs, etc.; and display driver products, including AV/tablet, DSC, NBMNT, TV, and gate products. The company's products are used for various applications consisting of LCD-TVs, notebooks, networking, portable devices, set-top boxes, CCTV/security, desktops, LED lighting, and TFT-LCD driver products. Fitipower Integrated Technology Inc. was founded in 1995 and is headquartered in Hsinchu City, Taiwan.

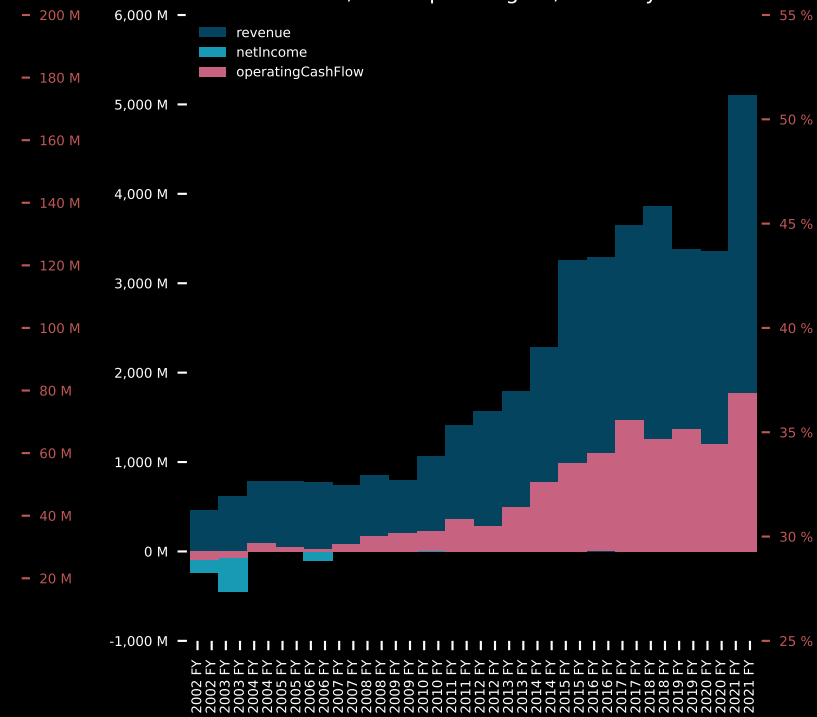
Sales, NI & Operating CF, quarterly



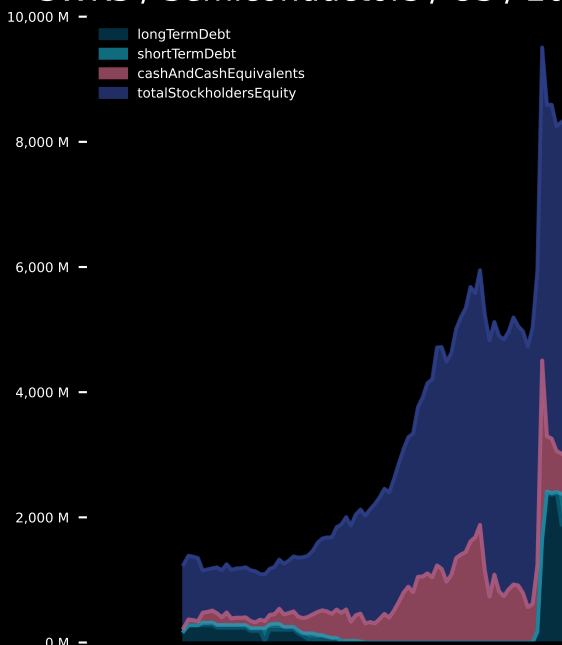
Price vs shares outstanding, quarterly



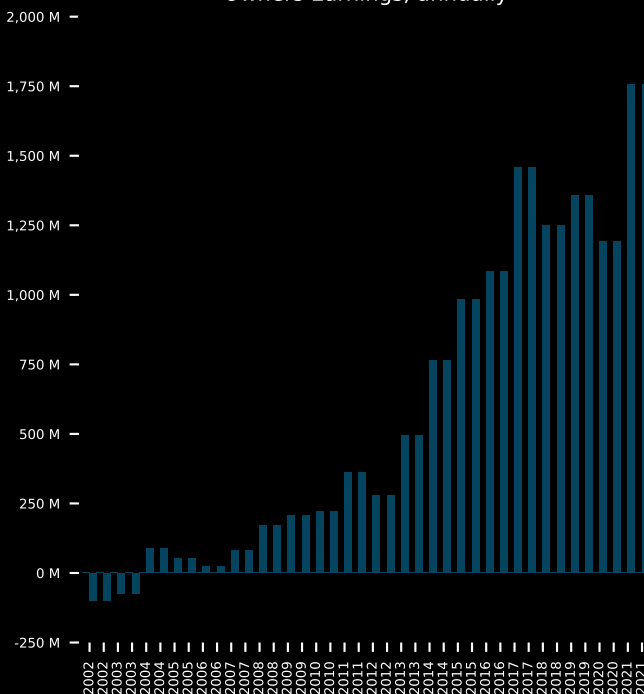
Sales, NI & Operating CF, annually



SWKS / Semiconductors / US / 2022-08-23

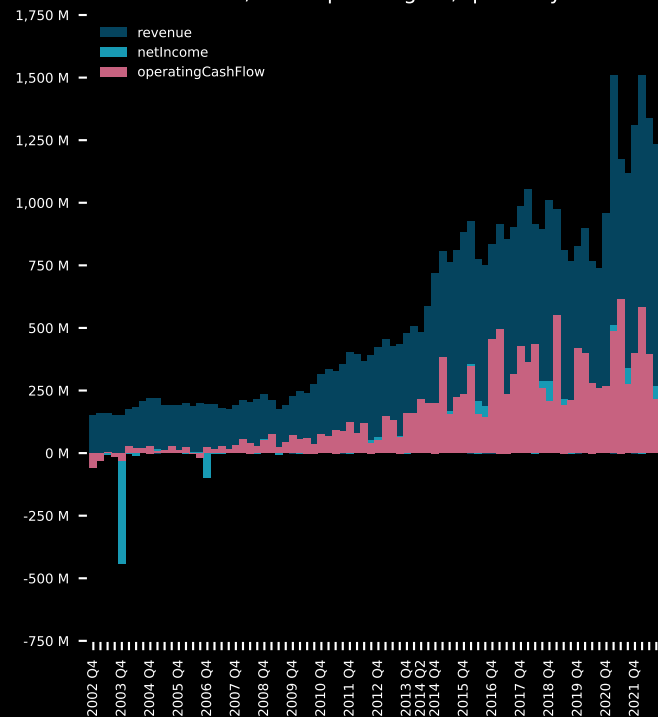


Owners Earnings, annually

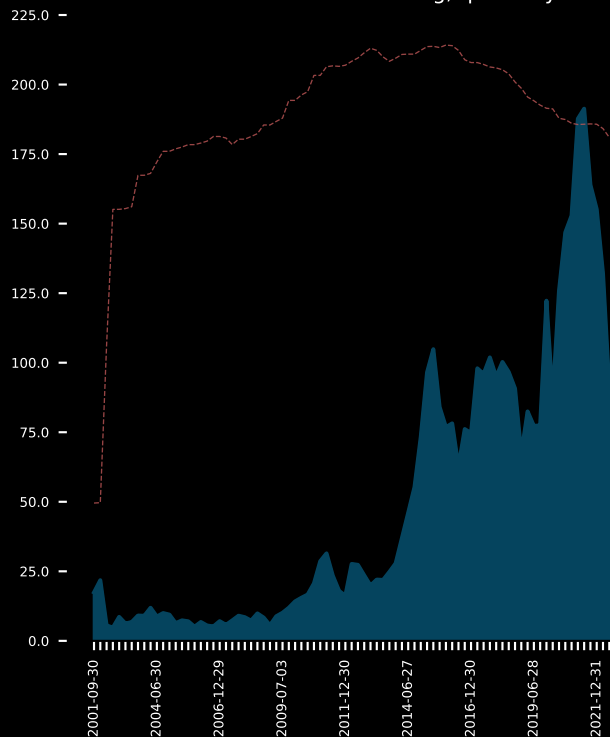


Skyworks Solutions, Inc., together with its subsidiaries, designs, develops, manufactures, and markets proprietary semiconductor products, including intellectual property in the United States, China, South Korea, Taiwan, Europe, the Middle East, Africa, and rest of Asia-Pacific. Its product portfolio includes amplifiers, antenna tuners, attenuators, automotive tuners and digital radios, circulators/isolators, DC/DC converters, demodulators, detectors, diodes, wireless analog system on chip products, directional couplers, diversity receive modules, filters, front-end modules, hybrids, light emitting diode drivers, low noise amplifiers, mixers, modulators, optocouplers/optoisolators, phase locked loops, phase shifters, power dividers/combiners, receivers, switches, synthesizers, timing devices, technical ceramics, voltage controlled oscillators/synthesizers, and voltage regulators. The company provides its products for use in the aerospace, automotive, broadband, cellular infrastructure, connected home, entertainment and gaming, industrial, medical, military, smartphone, tablet, and wearable markets. It sells its products

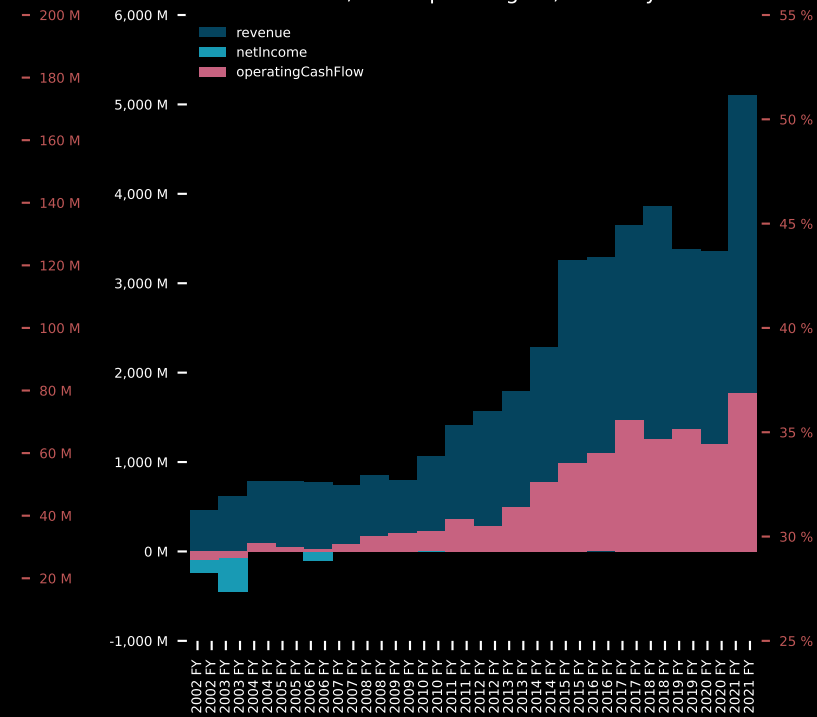
Sales, NI & Operating CF, quarterly



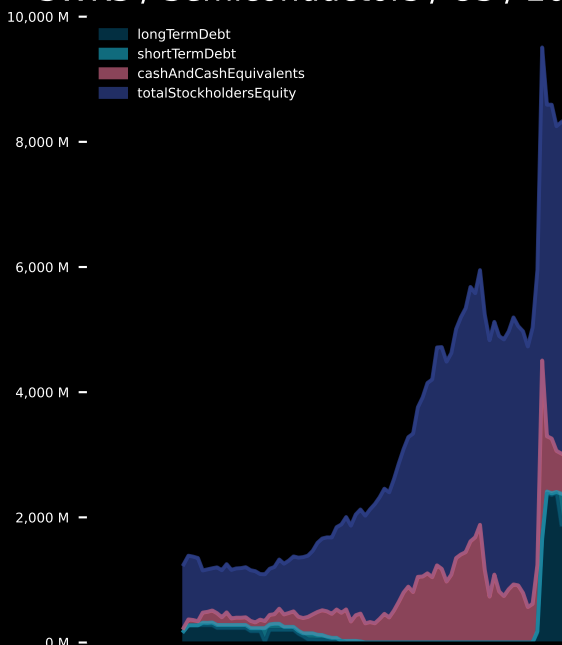
Price vs shares outstanding, quarterly



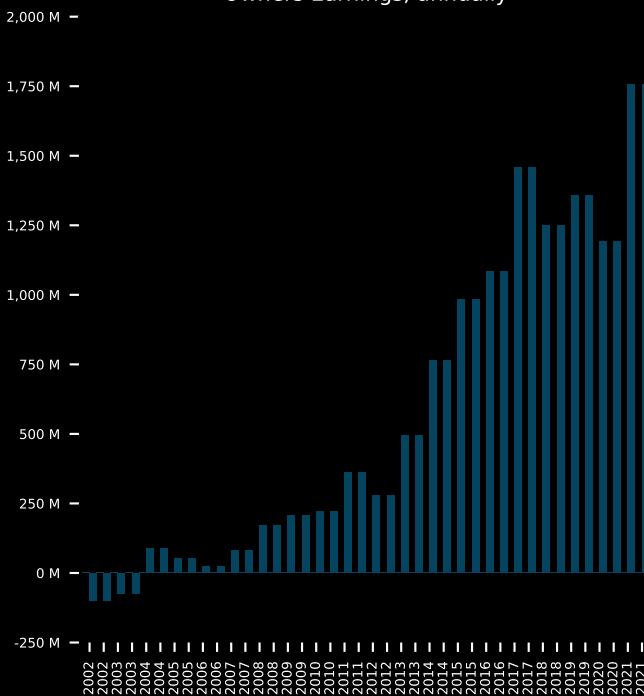
Sales, NI & Operating CF, annually



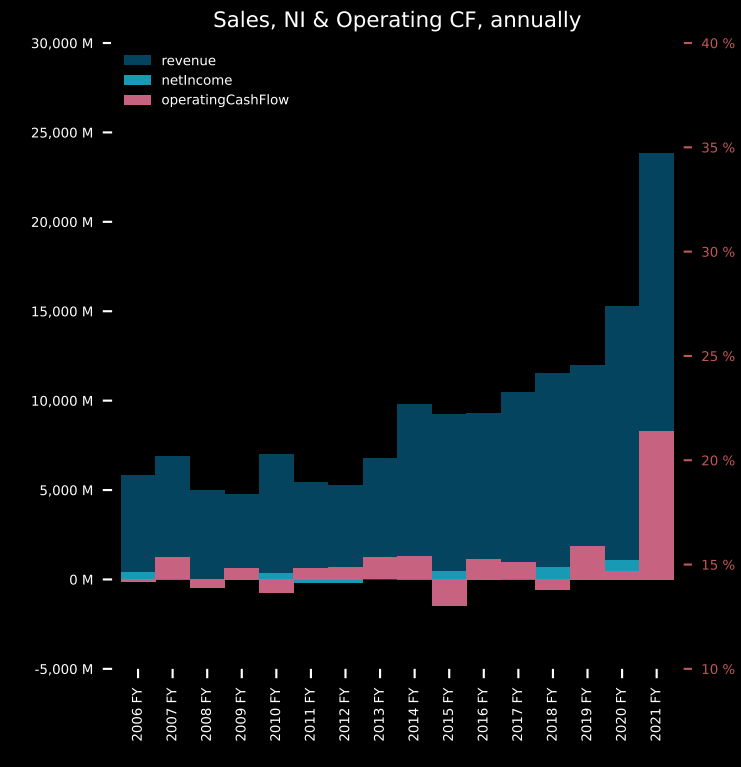
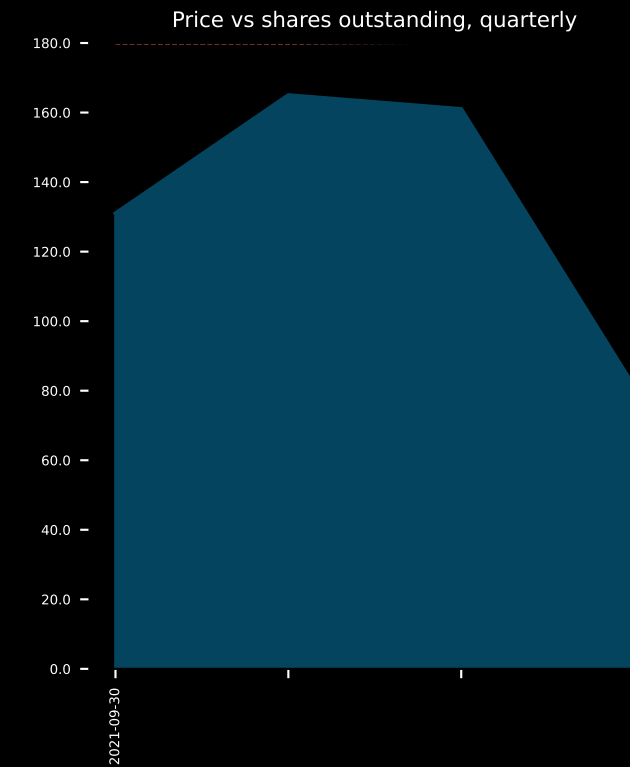
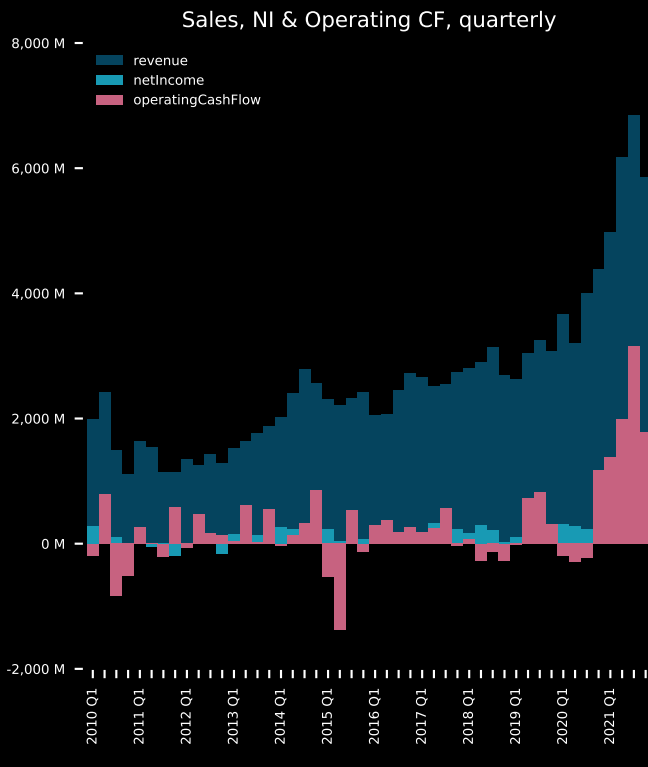
SWKS / Semiconductors / US / 2022-08-23



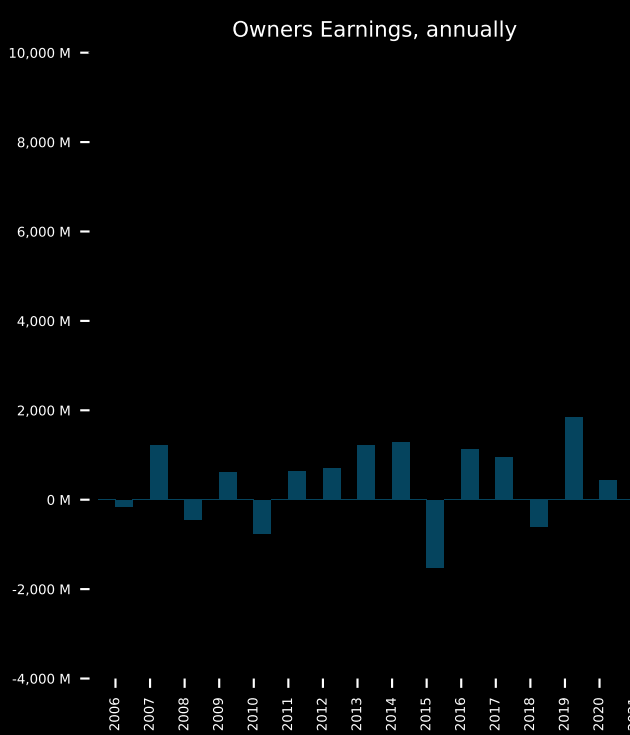
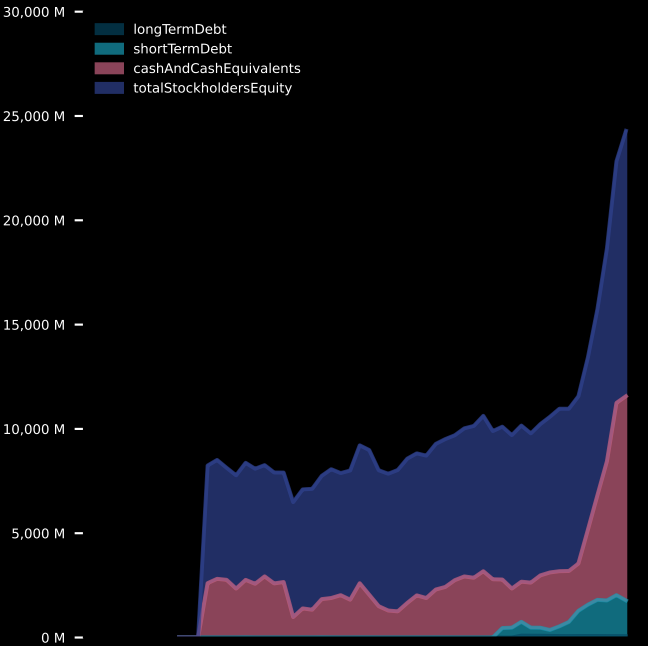
Owners Earnings, annually



Skyworks Solutions, Inc., together with its subsidiaries, designs, develops, manufactures, and markets proprietary semiconductor products, including intellectual property in the United States, China, South Korea, Taiwan, Europe, the Middle East, Africa, and rest of Asia-Pacific. Its product portfolio includes amplifiers, antenna tuners, attenuators, automotive tuners and digital radios, circulators/isolators, DC/DC converters, demodulators, detectors, diodes, wireless analog system on chip products, directional couplers, diversity receive modules, filters, front-end modules, hybrids, light emitting diode drivers, low noise amplifiers, mixers, modulators, optocouplers/optoisolators, phase locked loops, phase shifters, power dividers/combiners, receivers, switches, synthesizers, timing devices, technical ceramics, voltage controlled oscillators/synthesizers, and voltage regulators. The company provides its products for use in the aerospace, automotive, broadband, cellular infrastructure, connected home, entertainment and gaming, industrial, medical, military, smartphone, tablet, and wearable markets. It sells its products

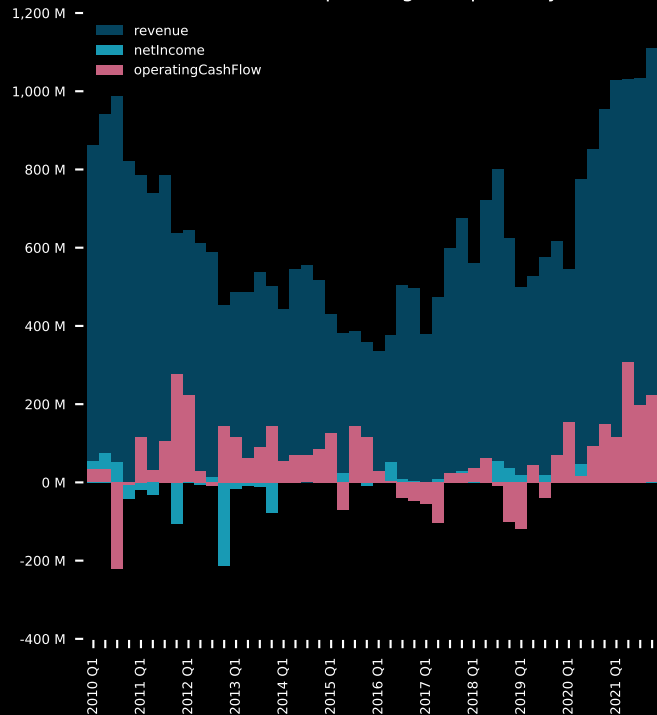


3006.TW / Semiconductors / US / 2022-08-23

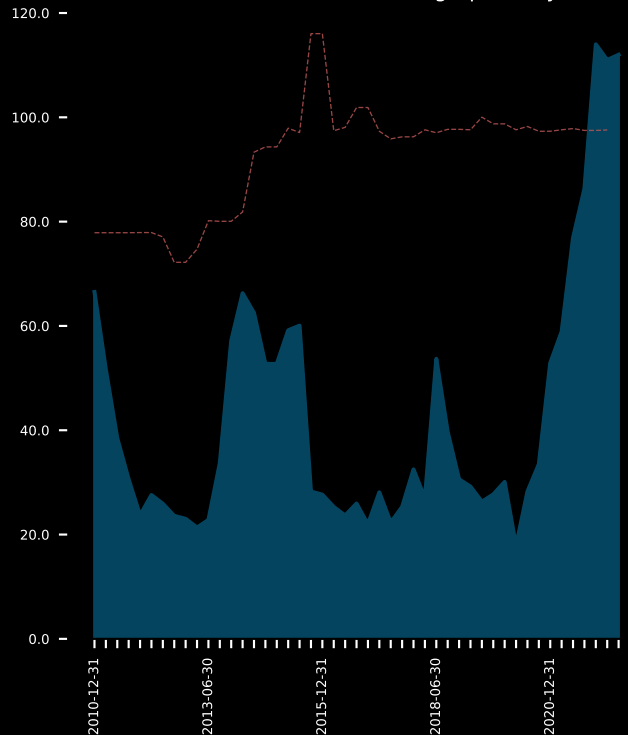


Elite Semiconductor Microelectronics Tech Inc engages in research, development, production, manufacture, and sale of dynamic and static random access memory, flash memory, analog integrated circuit, and analog and digital mixed integrated circuits in Taiwan, rest of Asia, and internationally. The company also offers information software, product design, management consultant, technical, and trading services. In addition, it is involved in the wholesale and retail of electronic materials; and manufacture of electronic components. The company offers its products for use in various application, including industrial, automotive, consumer, PC peripherals, networking, RC servo PCBA, audio, and power. Elite Semiconductor Microelectronics Tech Inc was founded in 1998 and is based in Hsinchu City, Taiwan.

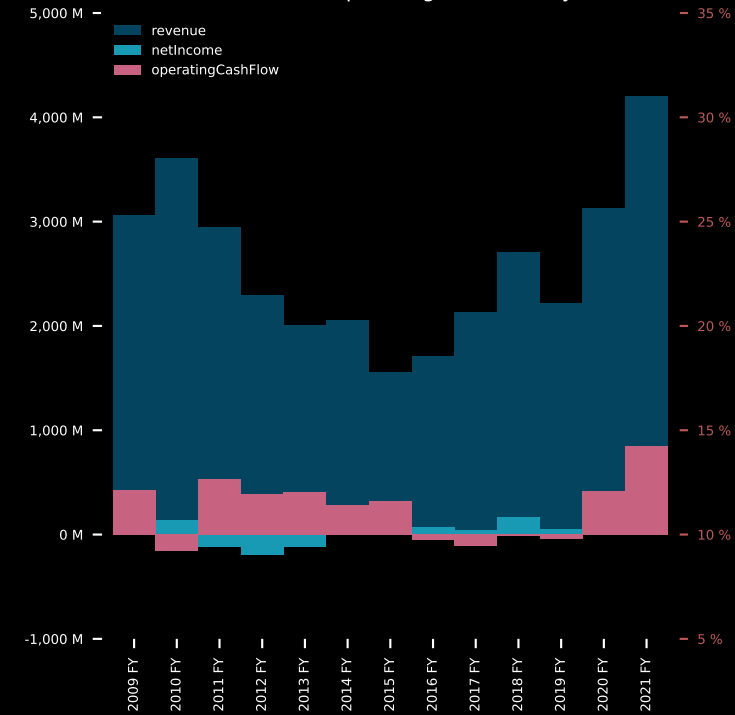
Sales, NI & Operating CF, quarterly



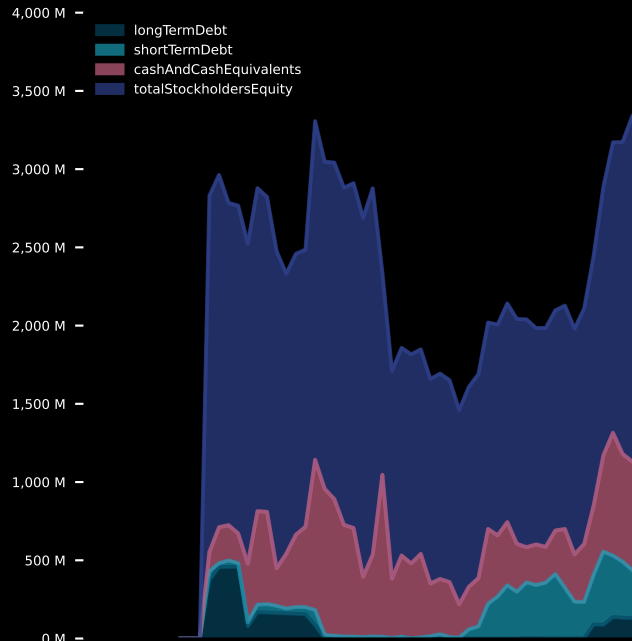
Price vs shares outstanding, quarterly



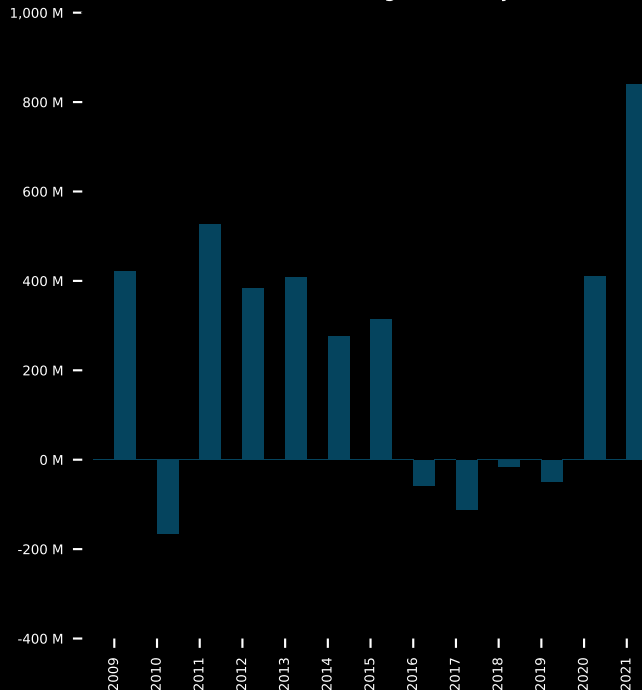
Sales, NI & Operating CF, annually



8261.TW / Semiconductors / US / 2022-08-23

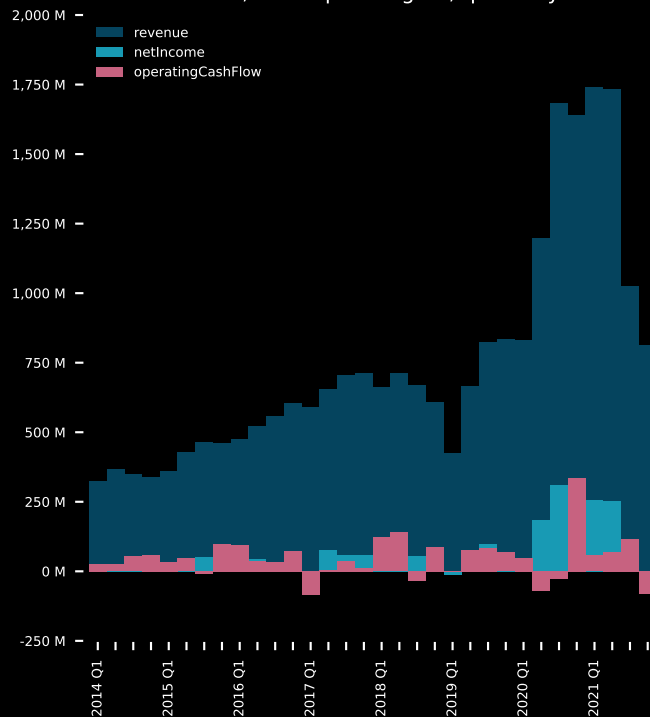


Owners Earnings, annually

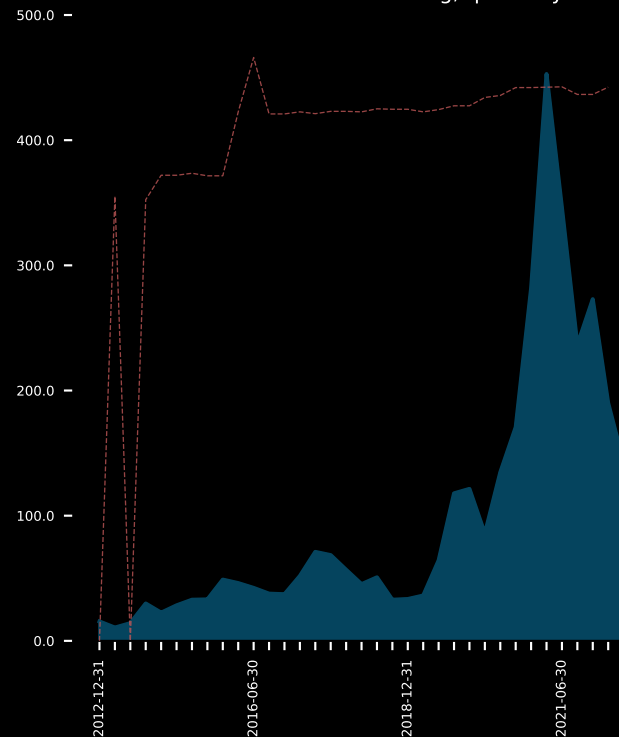


Advanced Power Electronics Co., Ltd. provides MOSFET components in Europe, Africa, Asia, Australia, North America, and South America. The company offers power MOSFETs; super junctions; IGBTs; and power ICs, including power IC-LDOs, power IC-DDRs and resets, and power IC-load switches, as well as testing services. Its products have applications in networking devices, LED, LCD/LED TVs, switching power systems, MB, and notebooks. The company's products are used in the computing, consumer electronics, display, communications, and industrial segments. Advanced Power Electronics Co., Ltd. was founded in 1998 and is headquartered in Zhubei City, Taiwan.

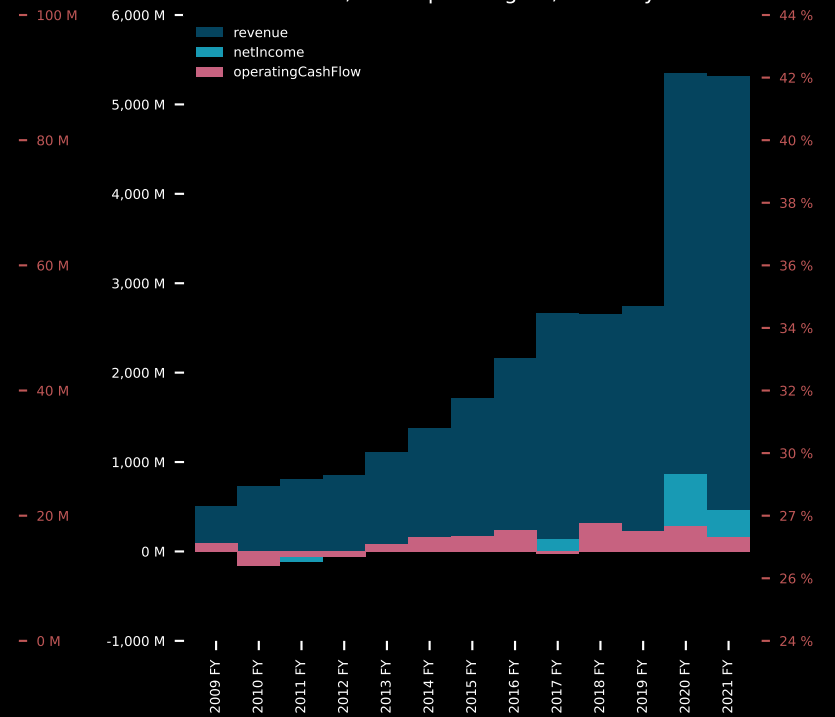
Sales, NI & Operating CF, quarterly



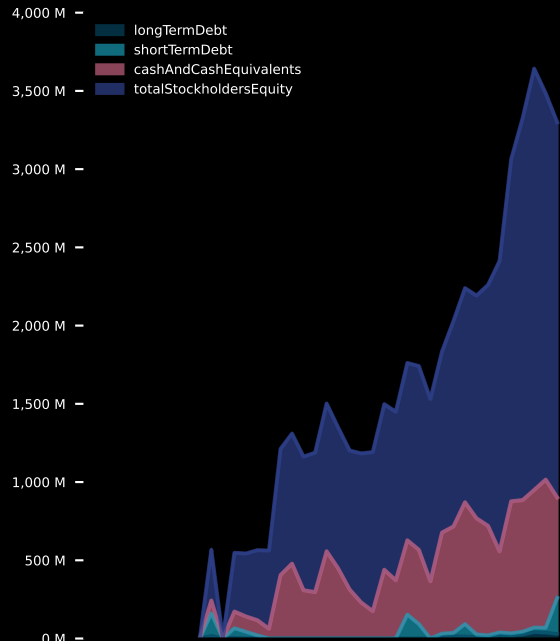
Price vs shares outstanding, quarterly



Sales, NI & Operating CF, annually



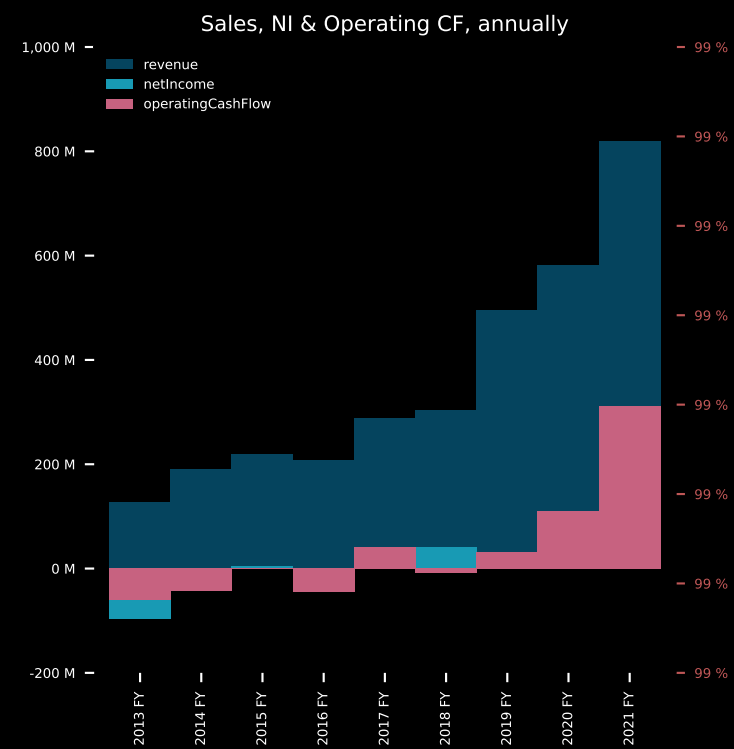
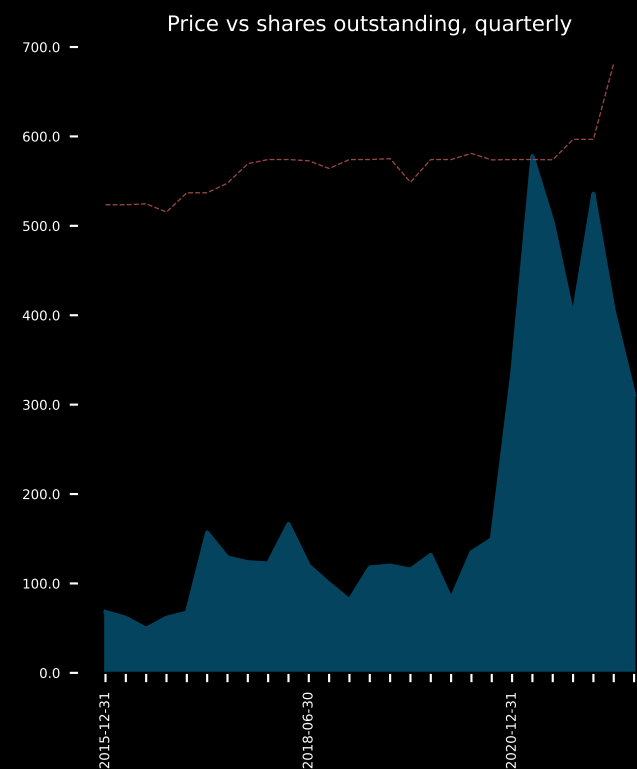
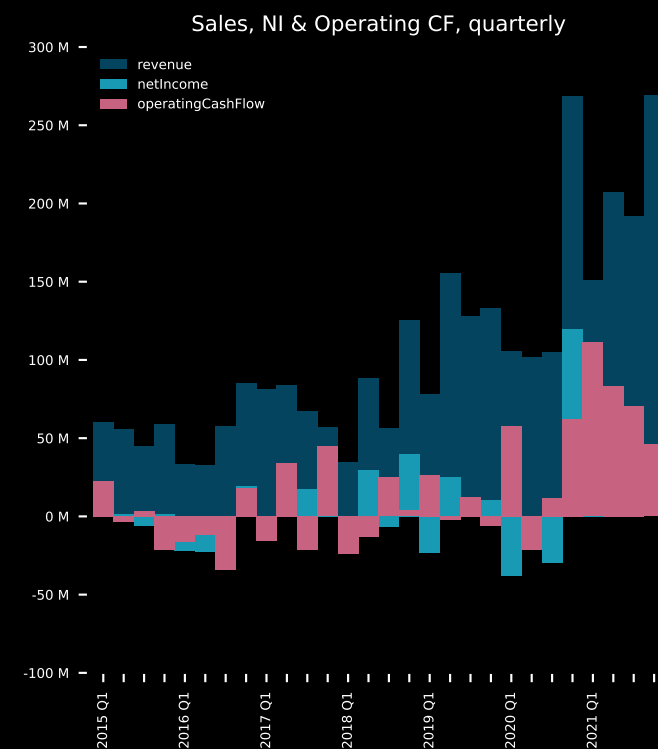
4968.TW / Semiconductors / US / 2022-08-23



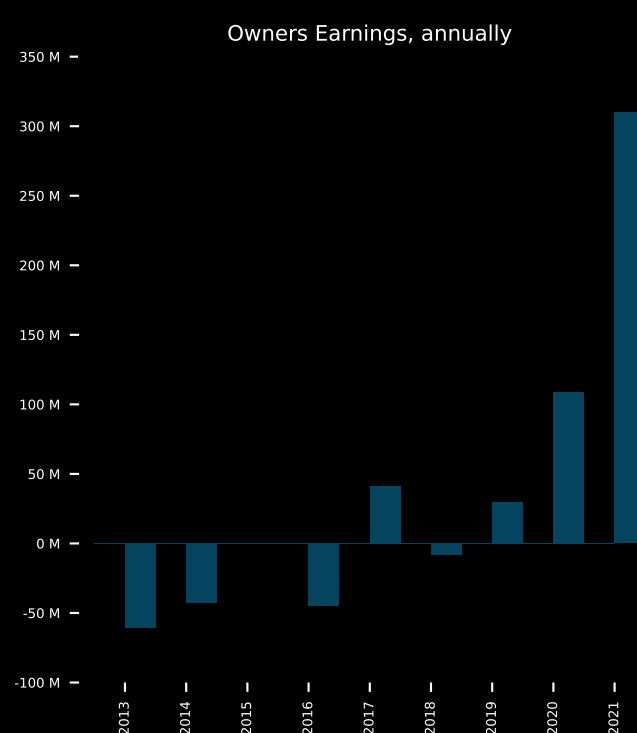
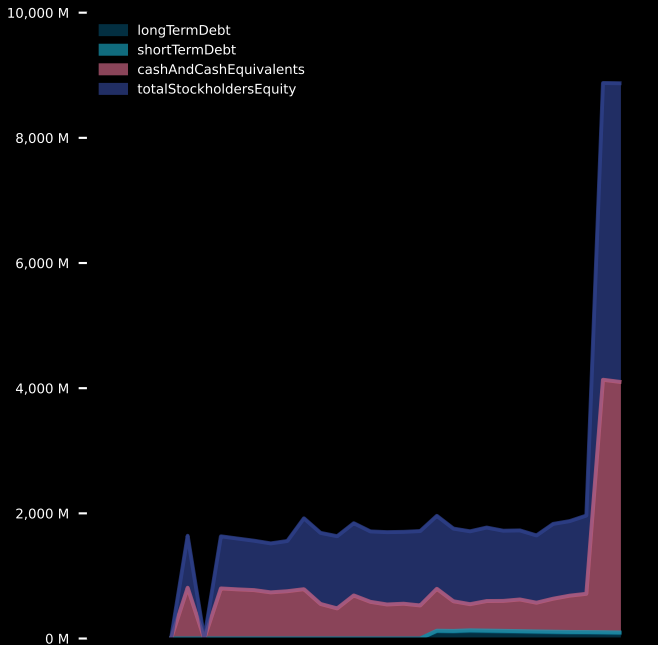
Owners Earnings, annually



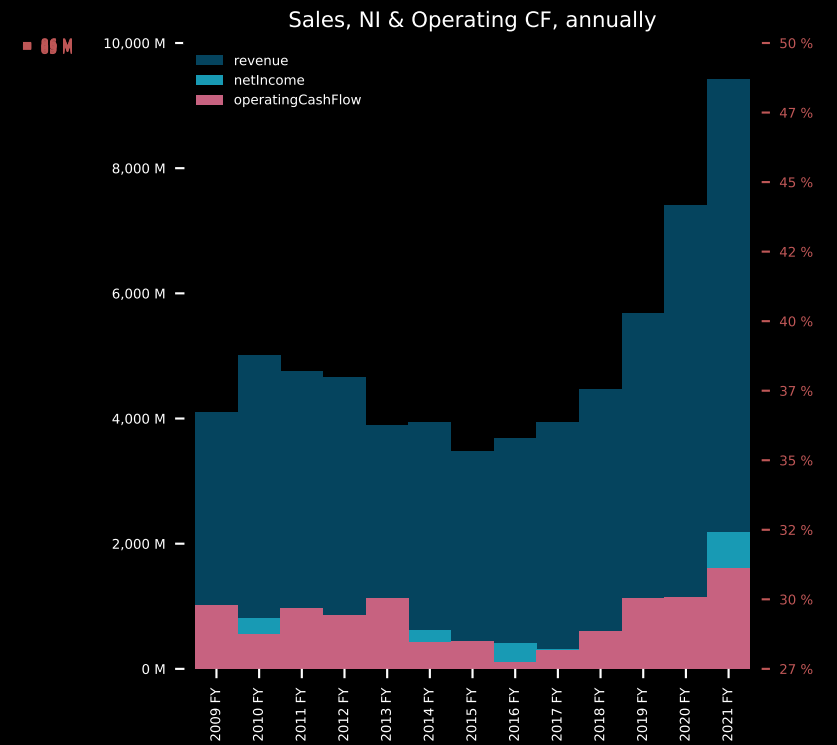
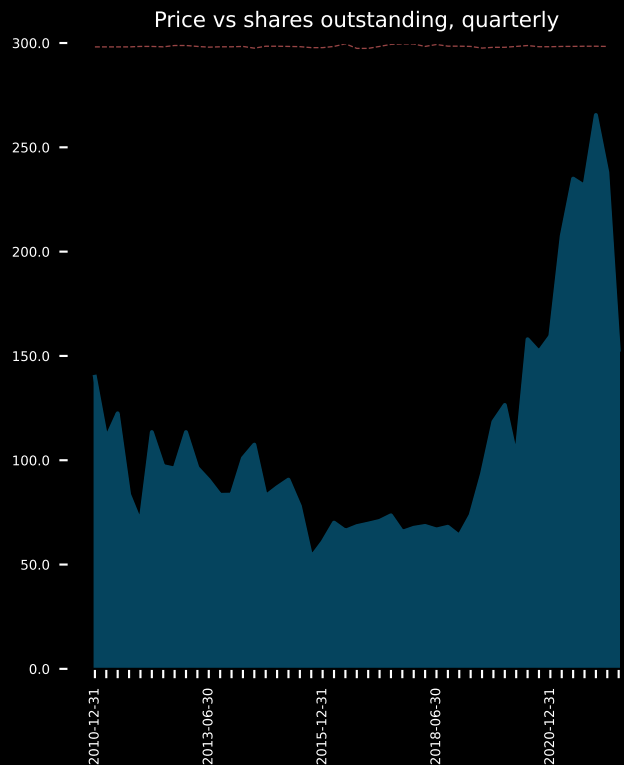
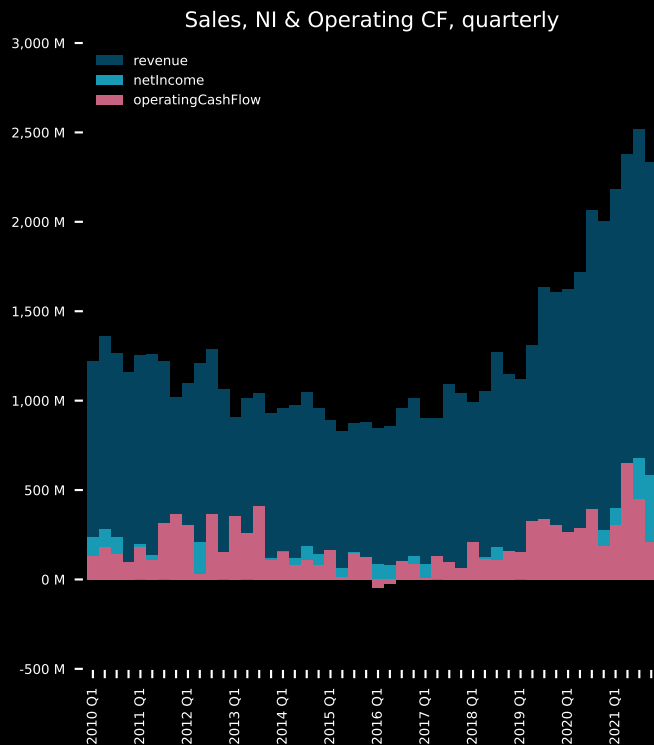
RichWave Technology Corporation designs, develops, and sells radio frequency (RF) integrated circuits in Taiwan and internationally. It offers a portfolio of RF front-end components for Wi-Fi, such as power amplifiers, low noise amplifiers, switches, and front-end modules; mobility switches, mobility and GPS LNA products, and power amplifiers; RF components, and Internet of Things (IoT) low noise amplifiers and switches; automotive front-end modules and switches; cable network switches; motion sensors; and GPS/WiFi SAW, cellular SAW, IoT SAW, and dual SAW filters. The company also provides single-chip broadcast IC tuners, as well as a line of wireless video/audio transmission chipsets for various ISM bands. Its products are used in various applications, including networking, mobile, smart home, internet of things, wireless media, broadcasting, and automotive. The company was founded in 2004 and is headquartered in Taipei City, Taiwan.



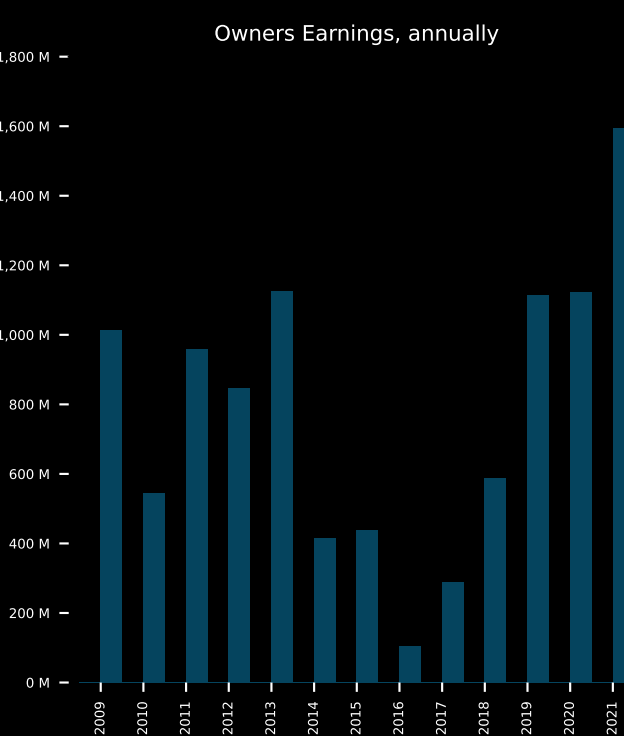
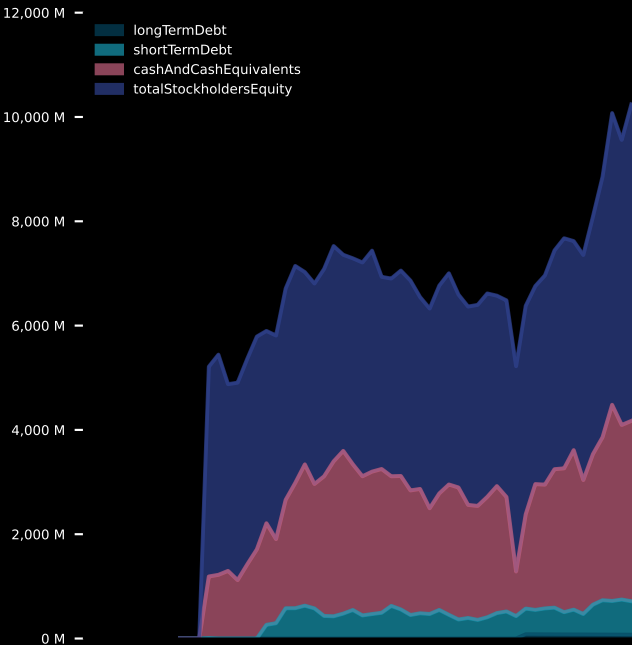
6533.TW / Semiconductors / US / 2022-08-23



Andes Technology Corporation engages in the research and developing, designing, manufacturing, and marketing of embedded processor intellectual property (IP), related hardware/software developing platform, and toolchains worldwide. The company offers AndeStar Architecture, a patented 32-bit/64-bit RISC-style CPU architecture; AndeCore, a series of 32-bit/64-bit CPUs for use in embedded applications; Andes Custom Extension that allows designers design their own CPU instructions on the already performance optimized AndeCore processors; and AndeShape Platform that contains three categories of products for system development with AndeCore processors. It also provides AndeSight IDE, an eclipse-based IDE that provides solutions to develop embedded applications; and AndeSoft SW Stack, which provides a set of software components, such as real-time operating system, Linux kernel and drivers, libraries, middleware, and application frameworks. Andes Technology Corporation was incorporated in 2005 is headquartered in Hsinchu, Taiwan.

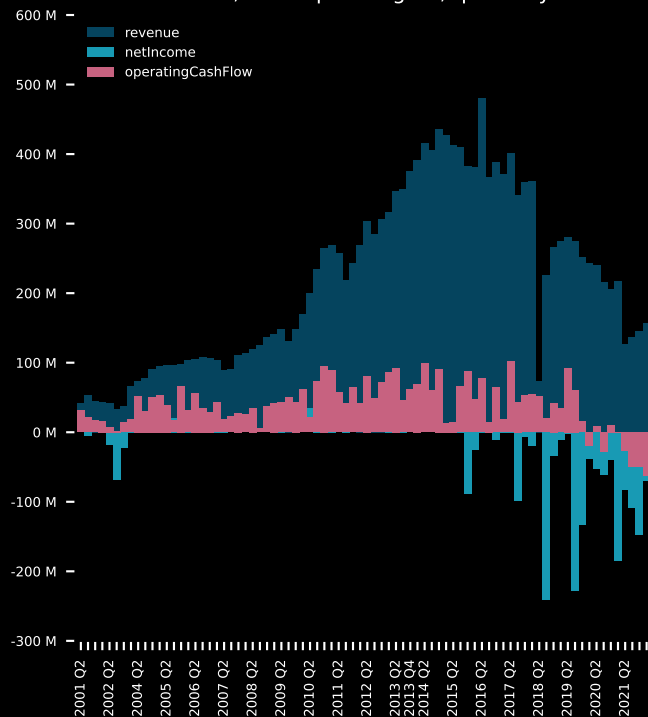


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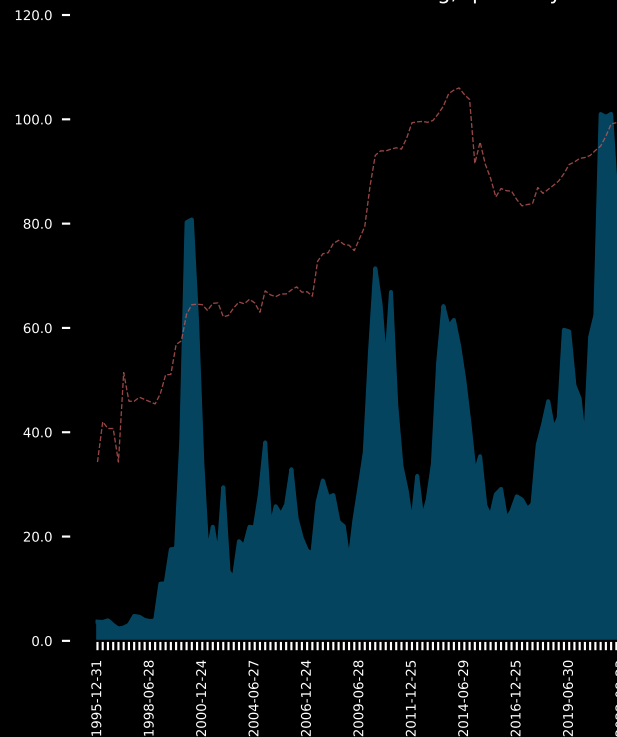


Global Mixed-Mode Technology Inc. provides analog IC solutions in Taiwan and internationally. The company offers amplifier series products, including operational amplifiers, comparators, integrated buffers, mono and stereo audio amplifiers, stereo headphone drivers, and DDR terminators; and analog, and single and dual power switches. It also provides synchronous quasi-PWM step down converters, asynchronous step down converters, synchronous step down converters and controllers, dual synchronous step down converters, synchronous step down converters with LDO, lighting drivers, step up controllers and converters, charge pumps and current sources, LED backlight drivers, photoflash chargers, level shifters, integrated PMICs for LCDs, local dimming LED drivers, and chargers. In addition, the company offers multi-channel PMIC products and motor drivers; delay time embedded and adjustable products; thermal switches, temperature transducers, digital interface temperature sensors, sensor and fan controllers, and fan controllers and drivers; and single and dual output products. Its products are used in various applications, which include mobile, desktop PC, and industrial applications.

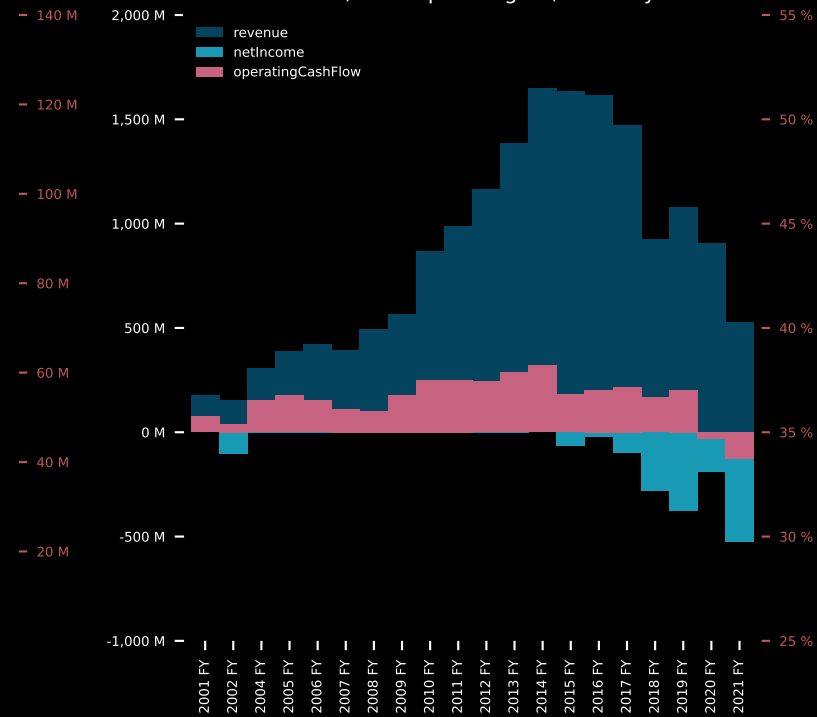
Sales, NI & Operating CF, quarterly



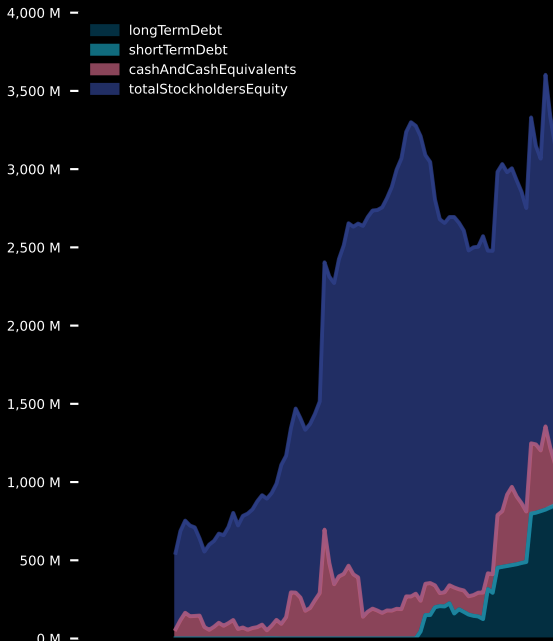
Price vs shares outstanding, quarterly



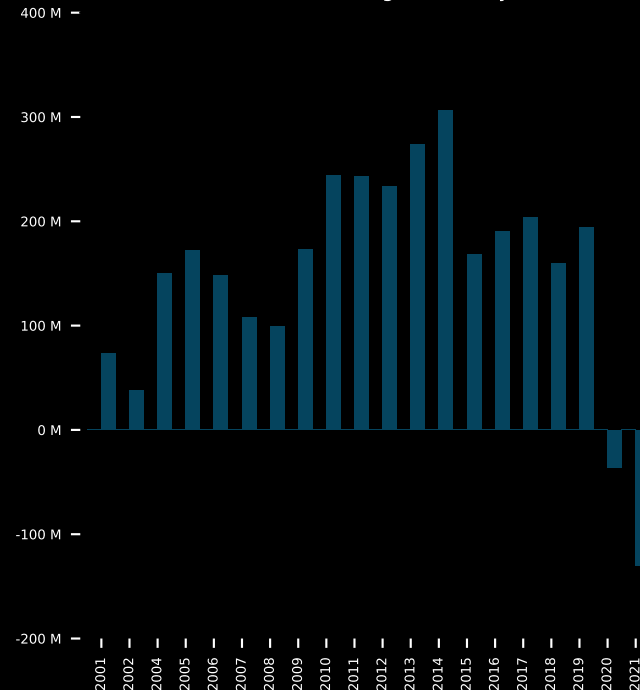
Sales, NI & Operating CF, annually



CREE / Semiconductors / US / 2022-08-23

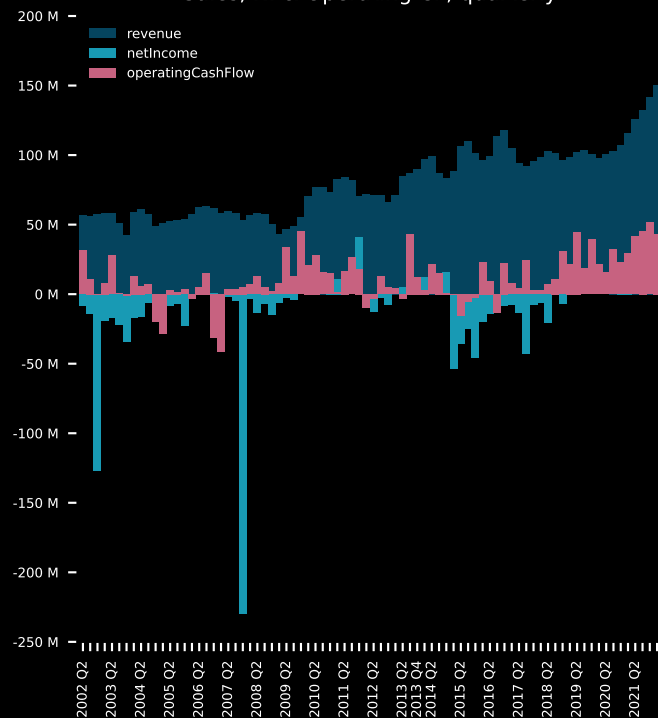


Owners Earnings, annually

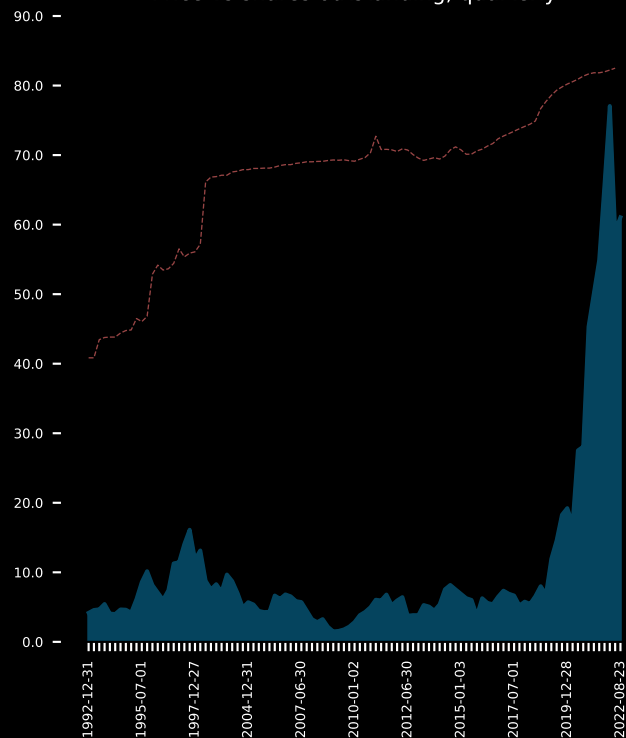


Cree, Inc. provides lighting-class light emitting diode (LED) and semiconductor products for power and radio-frequency (RF) applications in the United States, China, Europe, and internationally. It operates in two segments, Wolfspeed and LED Products. The Wolfspeed segment offers silicon carbide (SiC) materials for RF, power switching, gemstones, and other applications. It also provides SiC power device products, including SiC Schottky diodes, metal oxide semiconductor field effect transistors (MOSFETs), power modules, and gate driver boards for electric vehicles, including charging infrastructure, server power supplies, solar inverters, uninterruptible power supplies, industrial power supplies, and other applications. In addition, this segment offers gallium nitride (GaN) die, high-electron mobility transistors (HEMTs), monolithic microwave integrated circuits (MMICs), and laterally diffused MOSFET (LDMOS) power transistors for telecommunications infrastructure, military, and other commercial applications; and custom die manufacturing services for GaN HEMTs and MMICs. The LED Products segment provides blue and green LED chip products for video

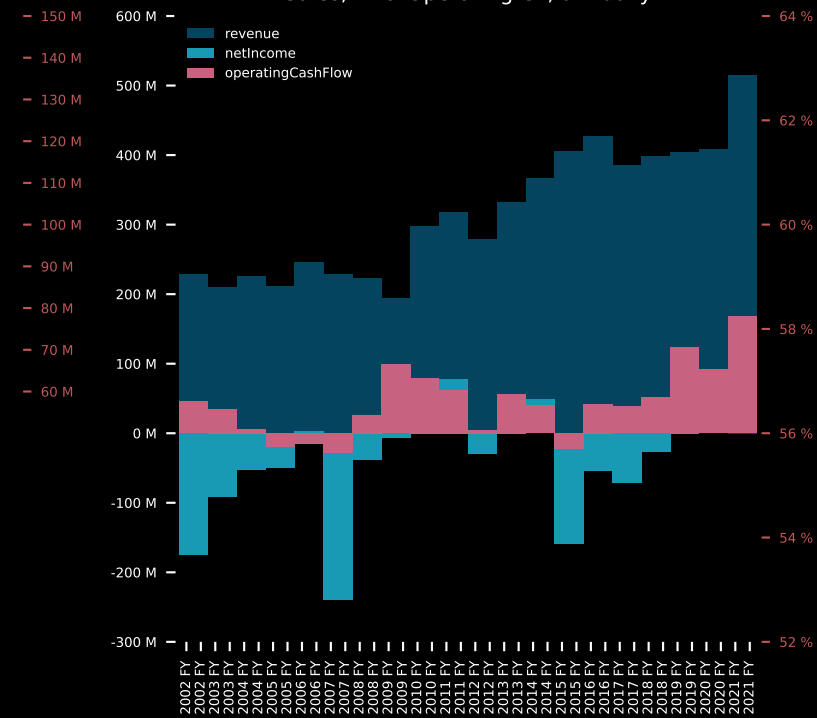
Sales, NI & Operating CF, quarterly



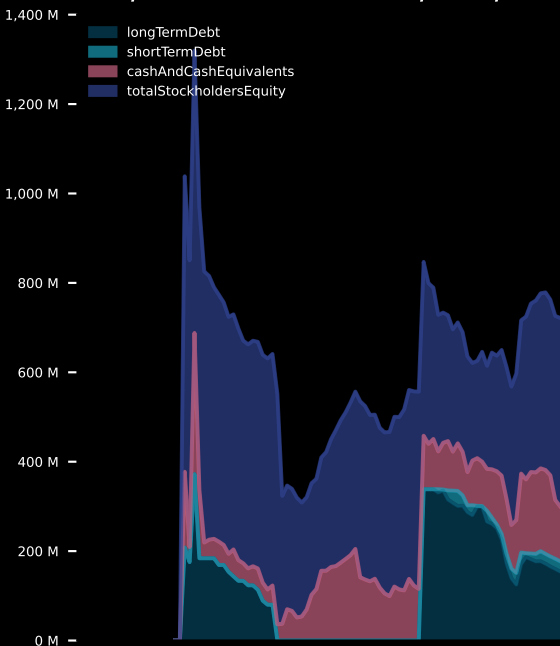
Price vs shares outstanding, quarterly



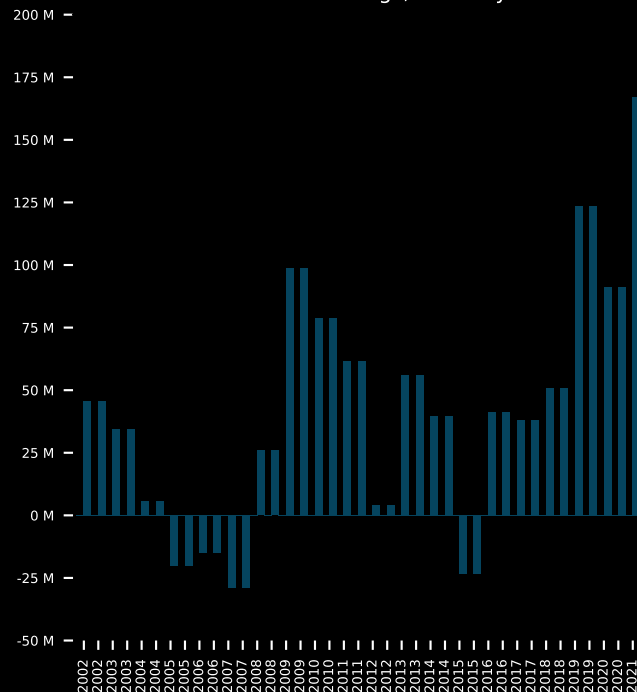
Sales, NI & Operating CF, annually



LSCC / Semiconductors / US / 2022-08-23

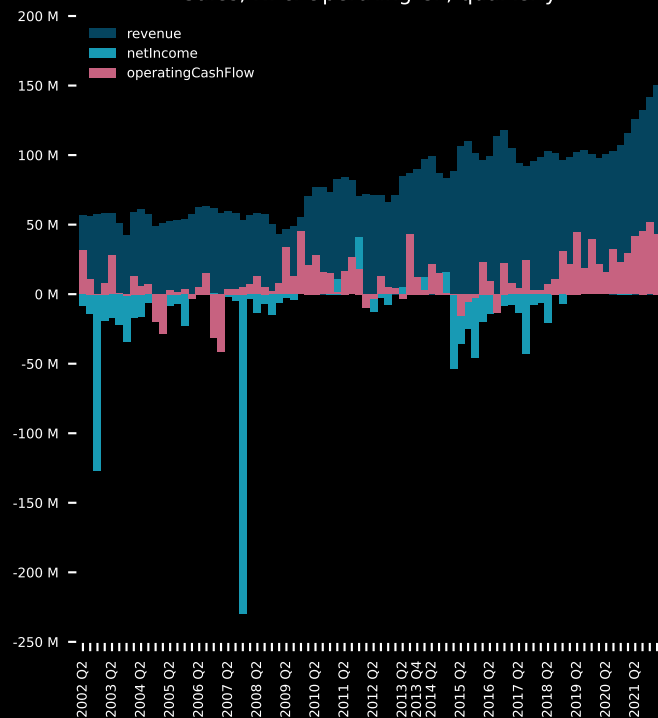


Owners Earnings, annually

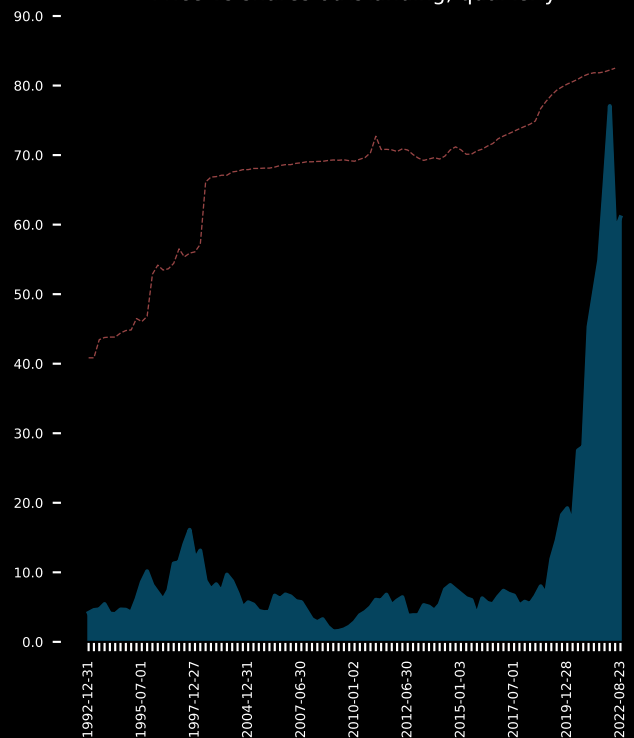


Lattice Semiconductor Corporation, together with its subsidiaries, develops and sells semiconductor products in Asia, Europe, and the Americas. The company offers field programmable gate arrays that consist of four product families, including the Certus-NX and ECP, Mach, iCE40, and CrossLink. It also provides video connectivity application specific standard products. In addition, the company licenses its technology portfolio through standard IP and IP core licensing, patent monetization, and IP services. It sells its products directly to end customers, and indirectly through a network of independent manufacturers' representatives and independent distributors. The company primarily serves original equipment manufacturers in the communications and computing, consumer, and industrial and automotive end markets. Lattice Semiconductor Corporation was incorporated in 1983 and is headquartered in Hillsboro, Oregon.

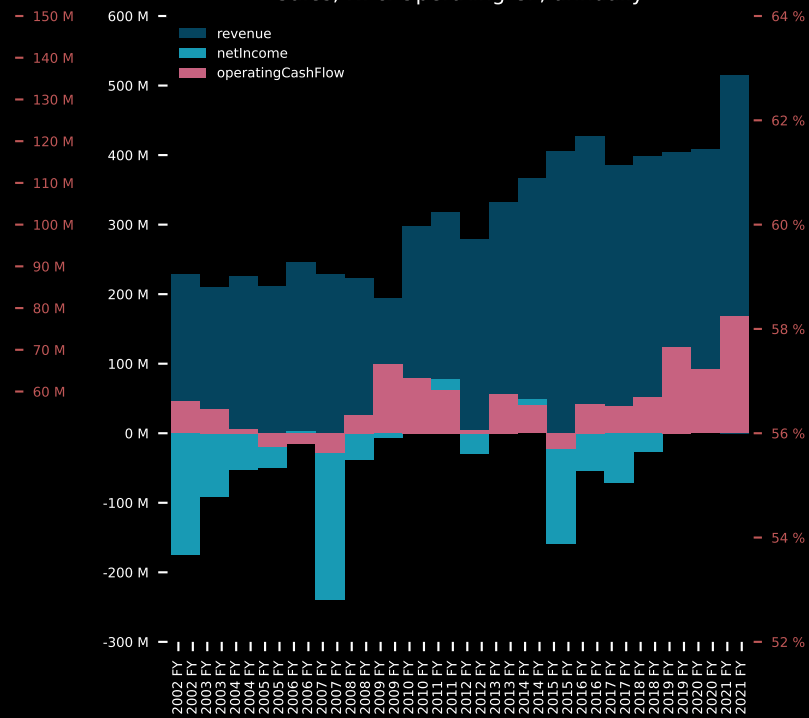
Sales, NI & Operating CF, quarterly



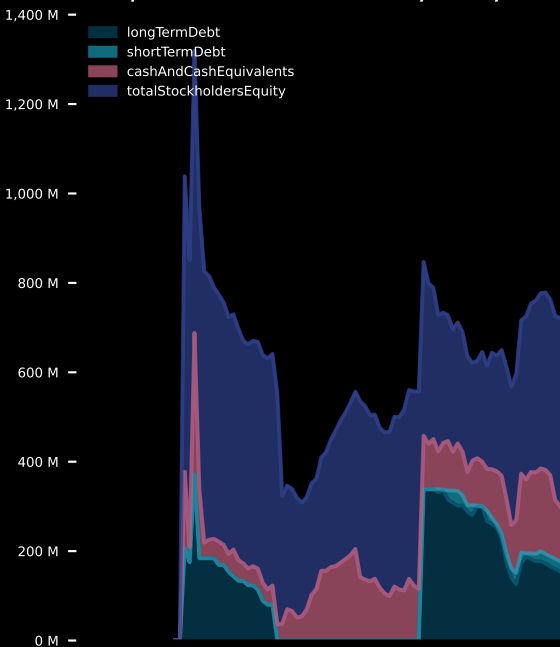
Price vs shares outstanding, quarterly



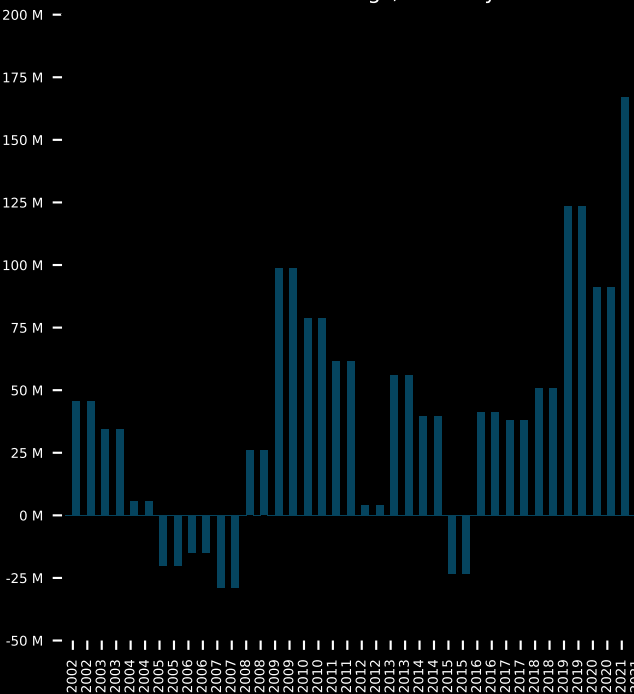
Sales, NI & Operating CF, annually



LSCC / Semiconductors / US / 2022-08-23

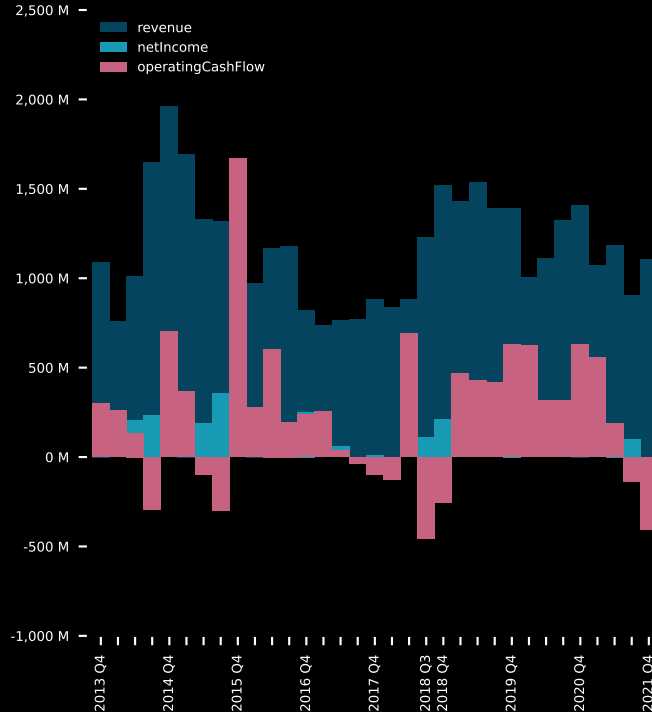


Owners Earnings, annually

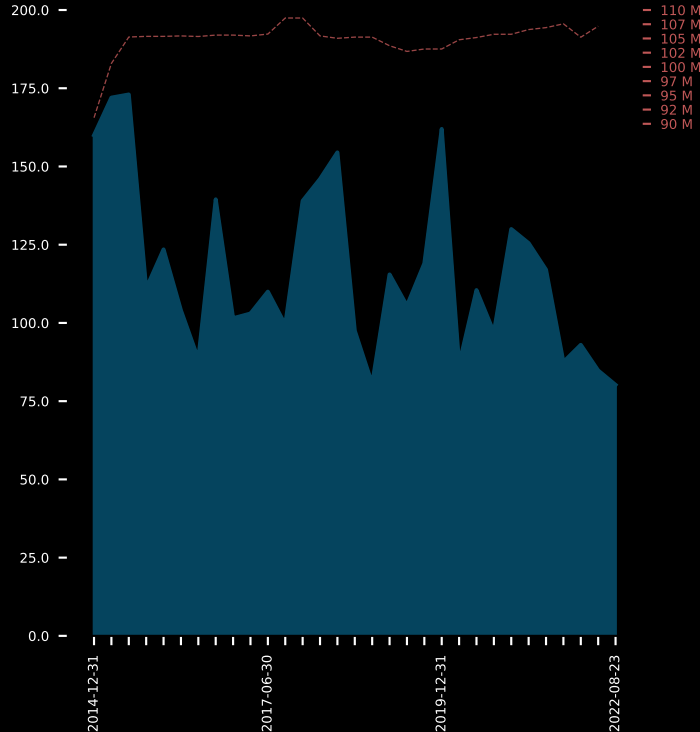


Lattice Semiconductor Corporation, together with its subsidiaries, develops and sells semiconductor products in Asia, Europe, and the Americas. The company offers field programmable gate arrays that consist of four product families, including the Certus-NX and ECP, Mach, iCE40, and CrossLink. It also provides video connectivity application specific standard products. In addition, the company licenses its technology portfolio through standard IP and IP core licensing, patent monetization, and IP services. It sells its products directly to end customers, and indirectly through a network of independent manufacturers' representatives and independent distributors. The company primarily serves original equipment manufacturers in the communications and computing, consumer, and industrial and automotive end markets. Lattice Semiconductor Corporation was incorporated in 1983 and is headquartered in Hillsboro, Oregon.

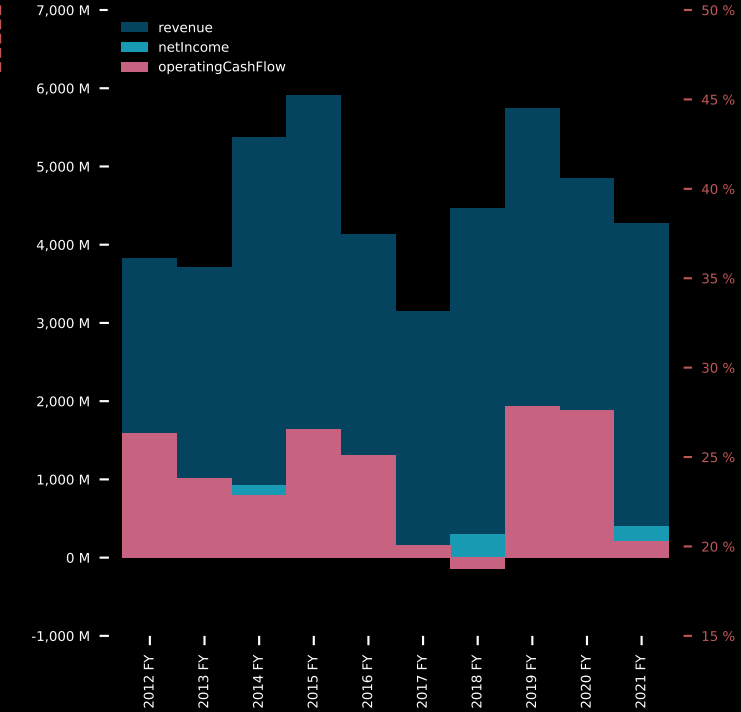
Sales, NI & Operating CF, quarterly



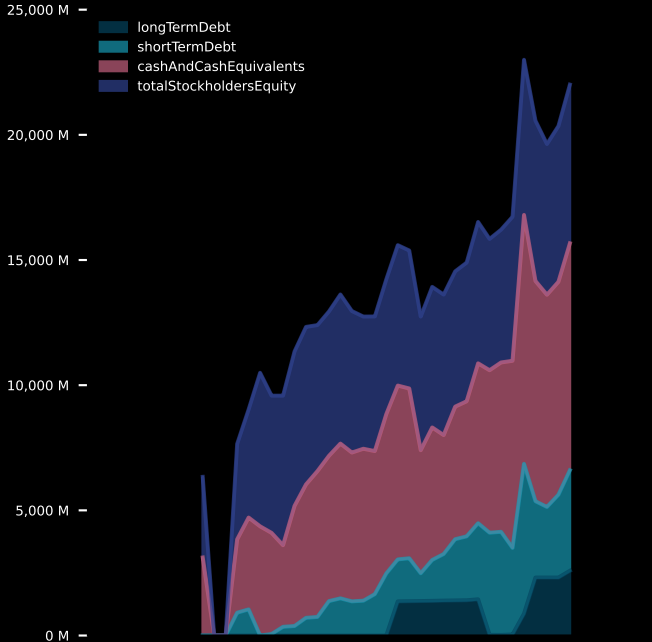
Price vs shares outstanding, quarterly



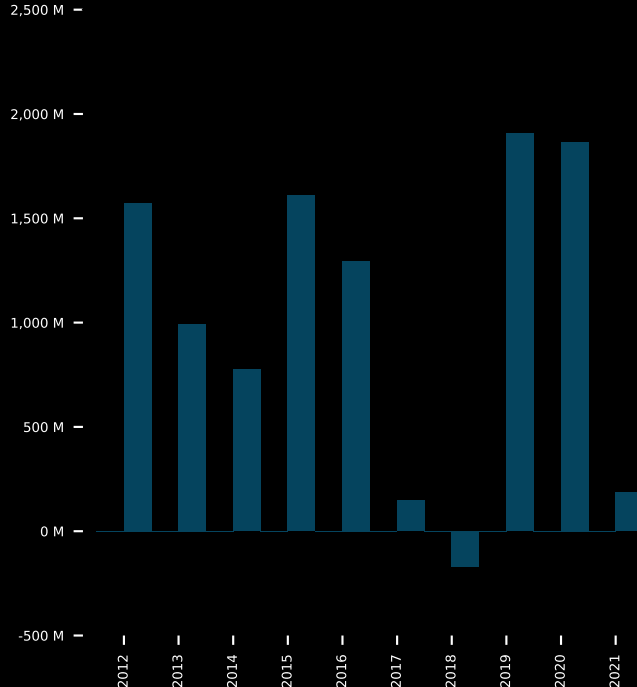
Sales, NI & Operating CF, annually



6451.TW / Semiconductors / KY / 2022-08-23

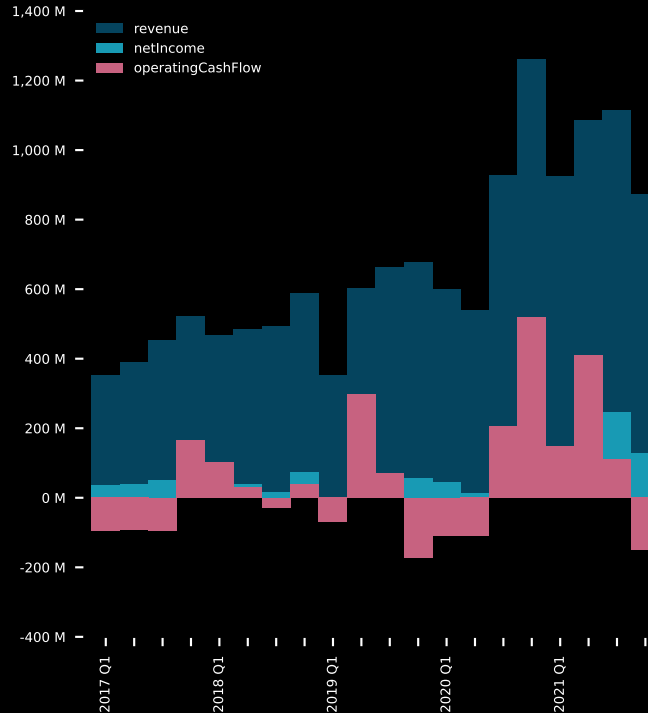


Owners Earnings, annually

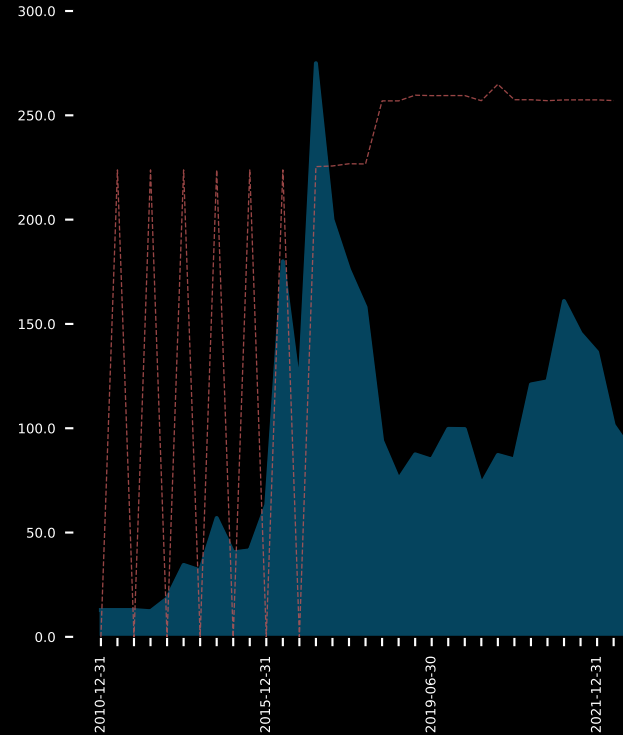


ShunSin Technology Holdings Limited, through its subsidiaries, engages in the assembly, testing, and sale of various integrated circuits related to semiconductors in Mainland China, the United States, Taiwan, Malaysia, Singapore, and internationally. The company's products include system in package module, including 2G/2.5G/3G/4G front end and power Amplifier (PA), PA, WiFi front end, mobile WiFi, and antenna switch modules; optical transceivers; thick film integrated circuit; and MEMS modules and sensors, such as accelerometers, gyroscopes, G-sensors, pressure and gesture sensors, light and proximity sensors, BAW filters, and TOF sensors. It also offers engineering services, such as assembly and testing. The company was founded in 2008 and is based in Grand Cayman, the Cayman Islands. ShunSin Technology Holdings Limited is a subsidiary of Foxconn (Far East) Limited.

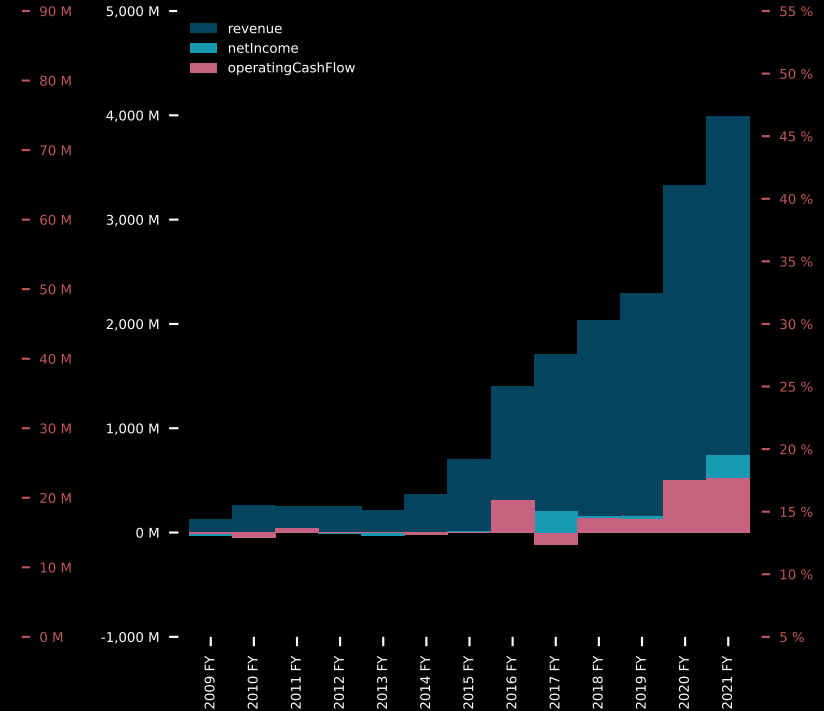
Sales, NI & Operating CF, quarterly



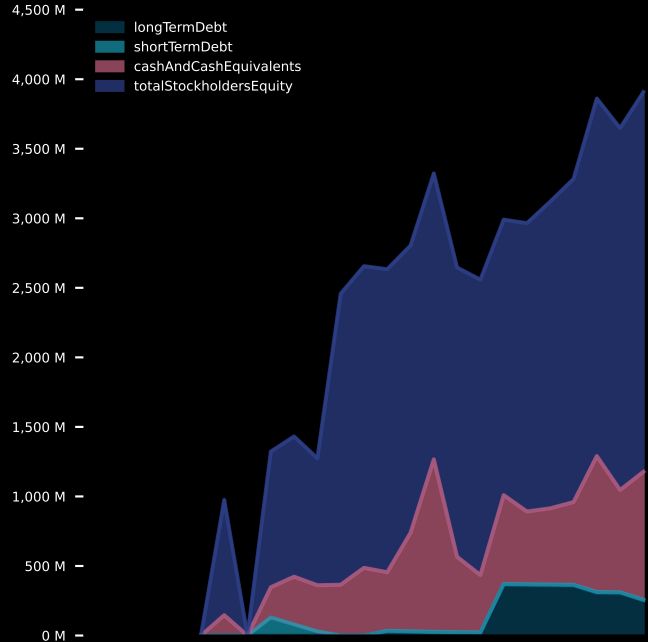
Price vs shares outstanding, quarterly



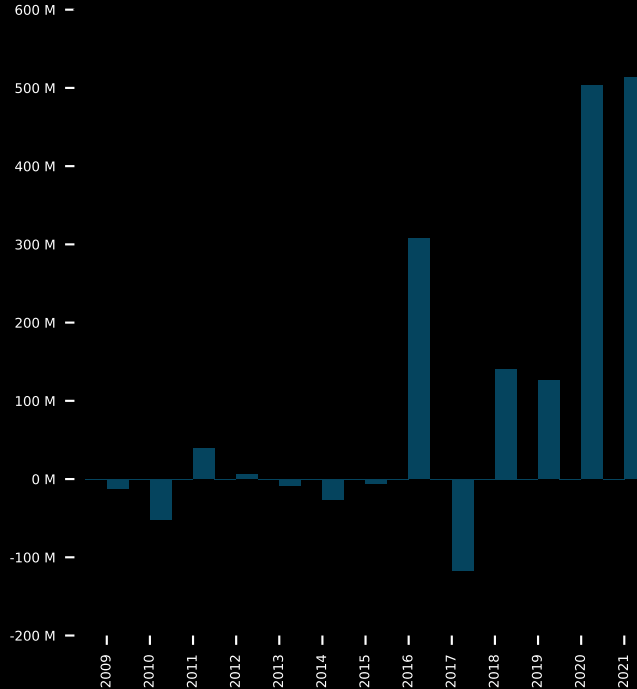
Sales, NI & Operating CF, annually



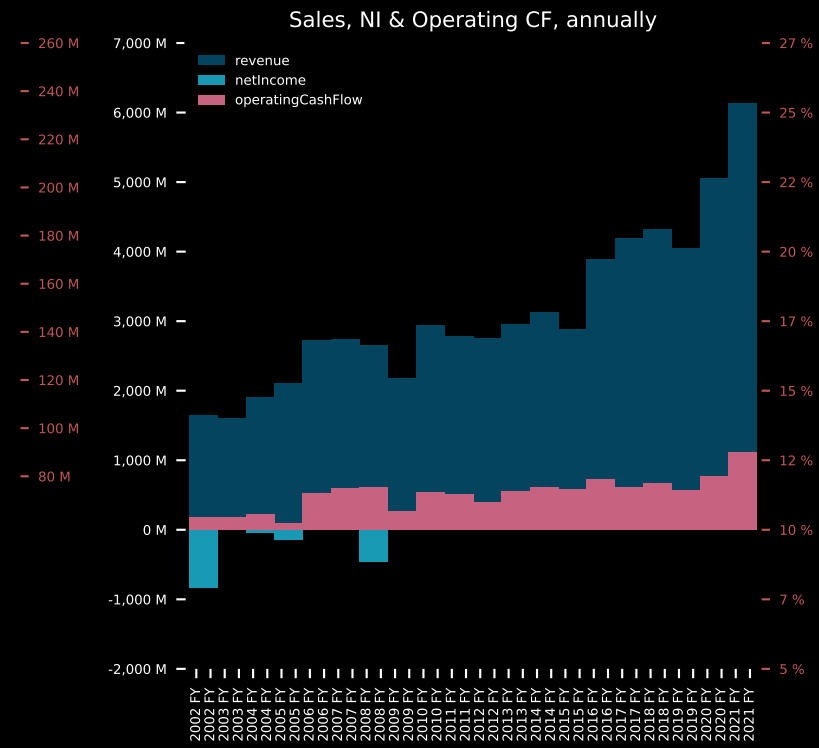
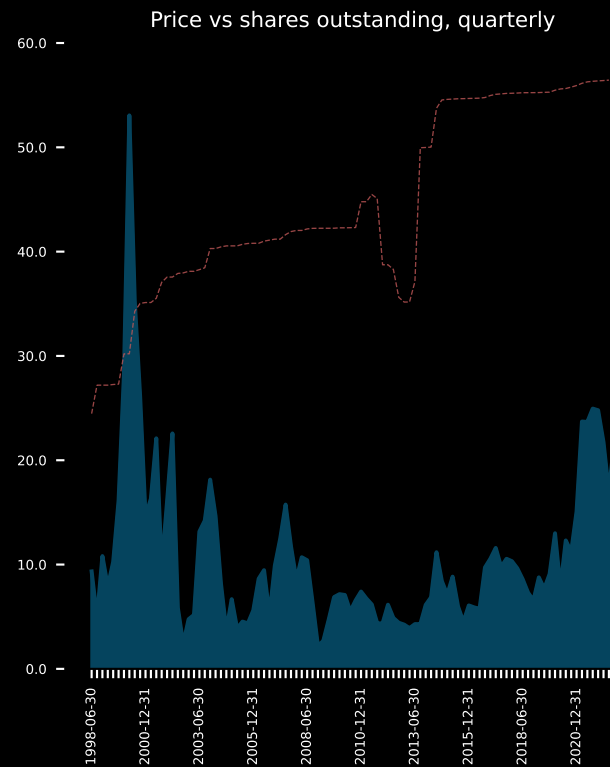
3530.TW / Semiconductors / US / 2022-08-23



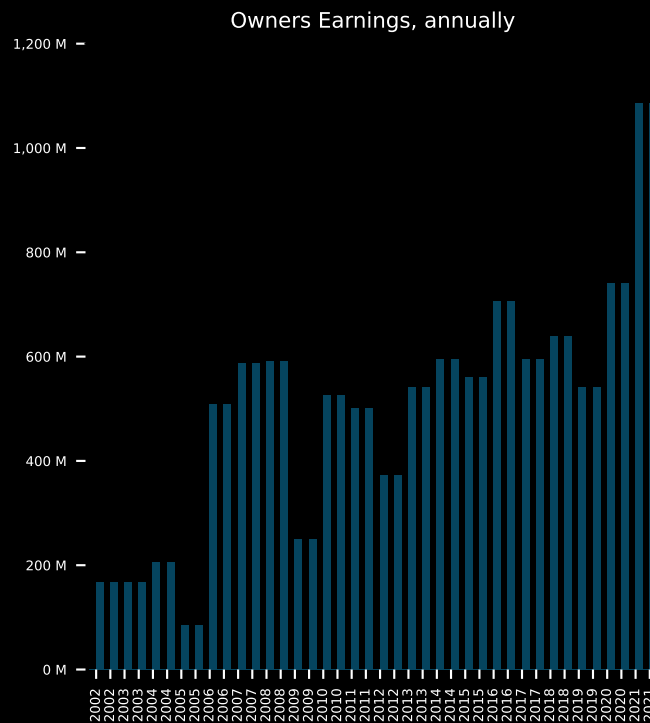
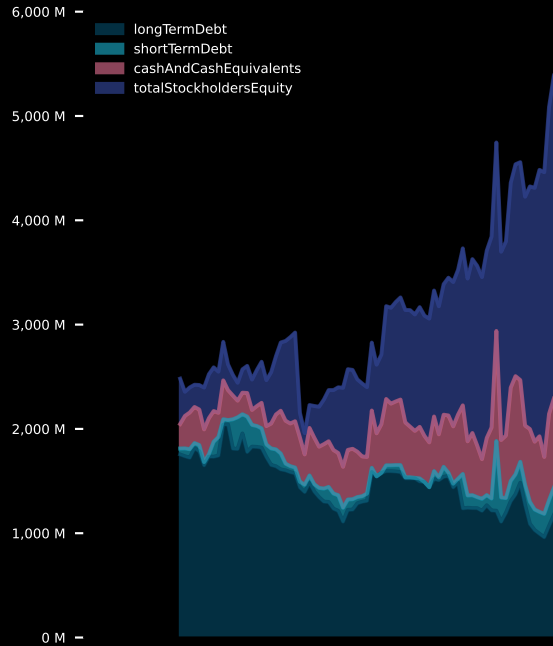
Owners Earnings, annually



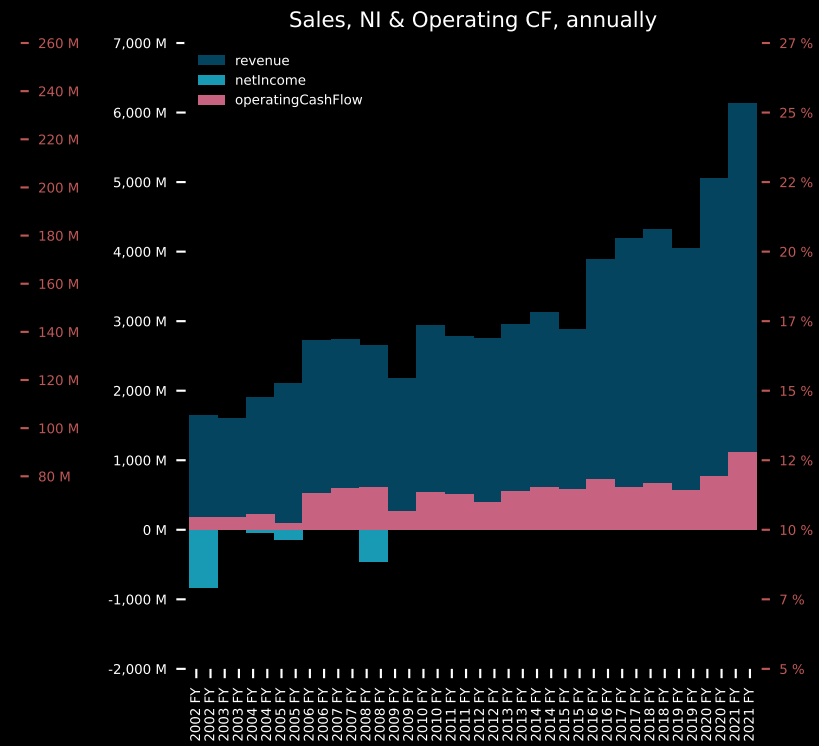
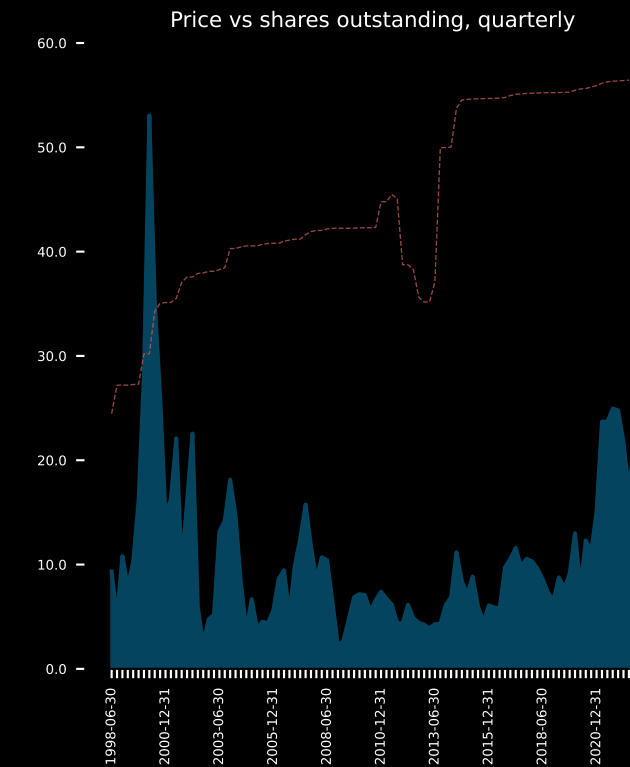
Silicon Optronics, Inc., together with its subsidiaries, designs, develops, and sells complementary metal-oxide-semiconductor image sensors in Taiwan, Hong Kong, the United States, and internationally. The company offers area sensors, including raw or SOC sensors for applications in smart phones and tablets, PC cams and Webcams, digital still cameras, and security and surveillance systems; and linear sensors for use in document scanners, multifunction printers, barcode scanners, fax machines, counterfeit money scanners, and portable scanners. It also engages in the investment business. Silicon Optronics, Inc. was incorporated in 2004 and is headquartered in Hsinchu, Taiwan.



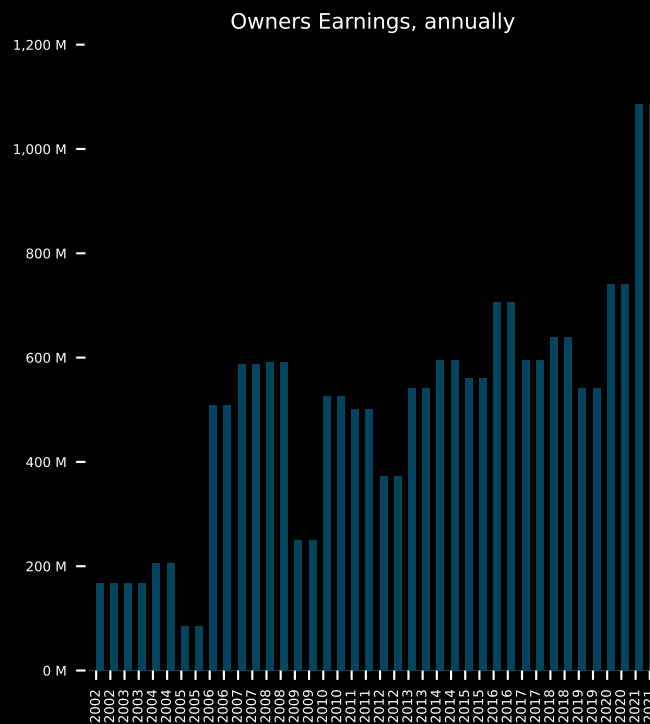
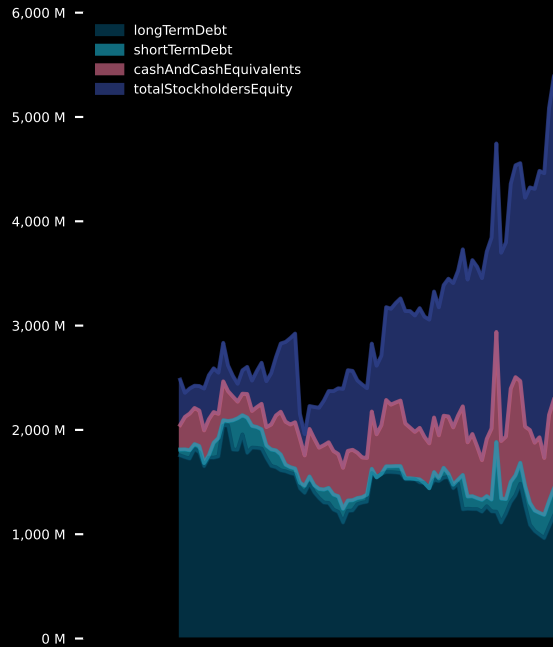
AMKR / Semiconductors / US / 2022-08-23



Amkor Technology, Inc. provides outsourced semiconductor packaging and test services in the United States, Japan, Europe, the Middle East, Africa, and the rest of the Asia Pacific. It offers turnkey packaging and test services, including semiconductor wafer bump, wafer probe, wafer back-grind, package design, packaging, and test and drop shipment services. The company also provides flip chip-scale package products for use in smartphones, tablets, and other mobile consumer electronic devices; flip-chip stacked chip-scale packages that are used to stack memory on top of digital baseband, and as applications processors in mobile devices; and flip-chip ball grid array packages for various networking, storage, computing, and consumer applications. In addition, it offers wafer-level CSP packages that are used in power management, transceivers, sensors, wireless charging, codecs, radar, and specialty silicon; wafer-level fan-out packages for use in ICs; and silicon wafer integrated fan-out technology, which replaces a laminate substrate with a thinner structure. Further, the company provides lead frame packages that are used in electronic devices for automotive, industrial, and consumer applications.



AMKR / Semiconductors / US / 2022-08-23

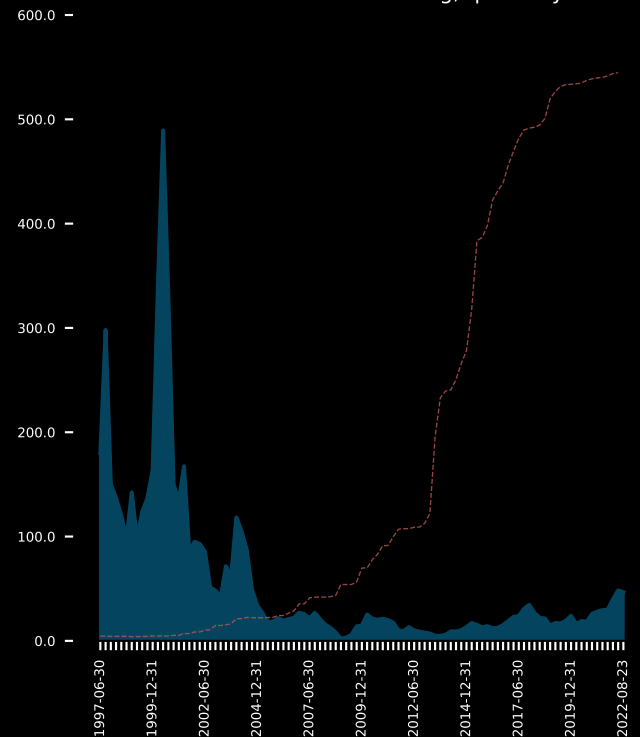


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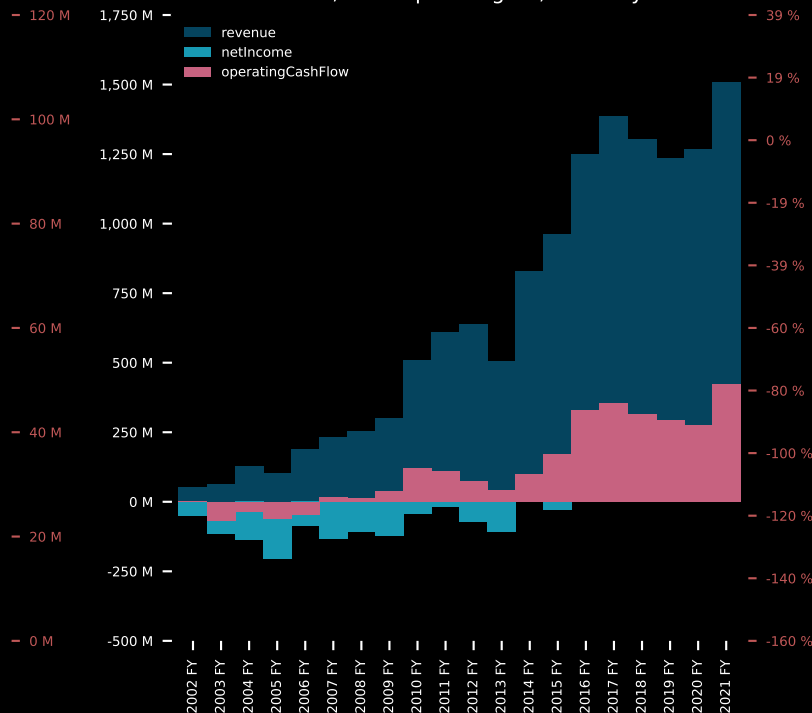
Sales, NI & Operating CF, quarterly



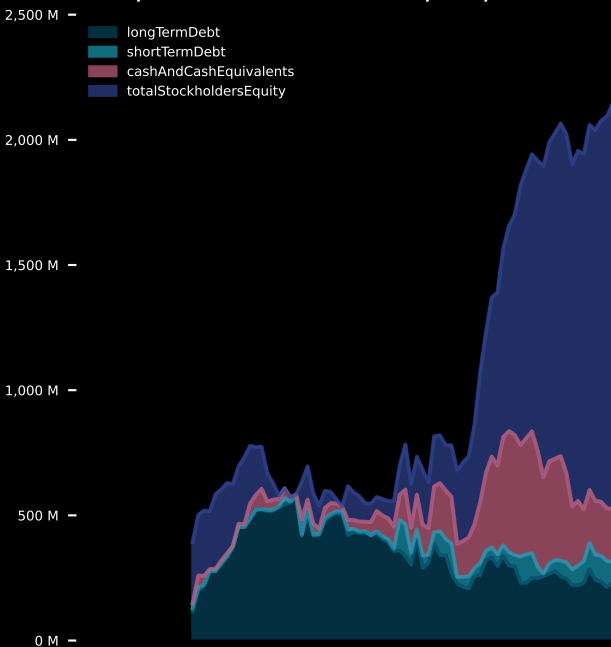
Price vs shares outstanding, quarterly



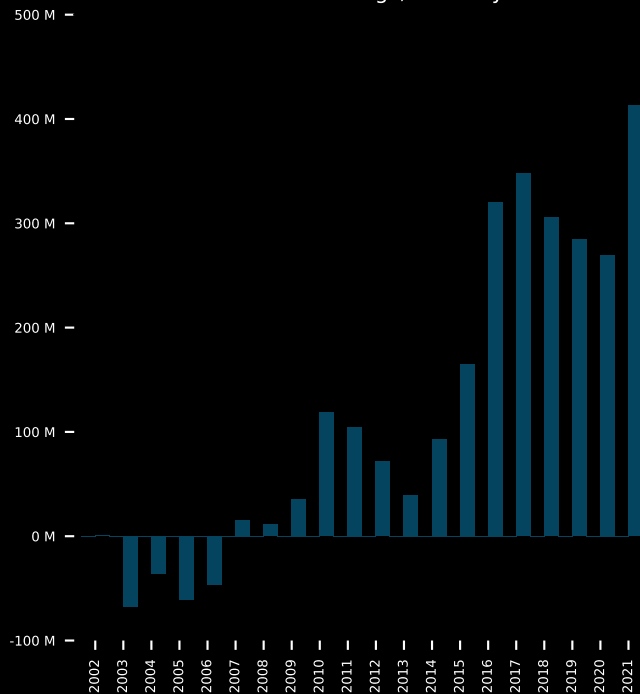
Sales, NI & Operating CF, annually



TSEM / Semiconductors / IL / 2022-08-23

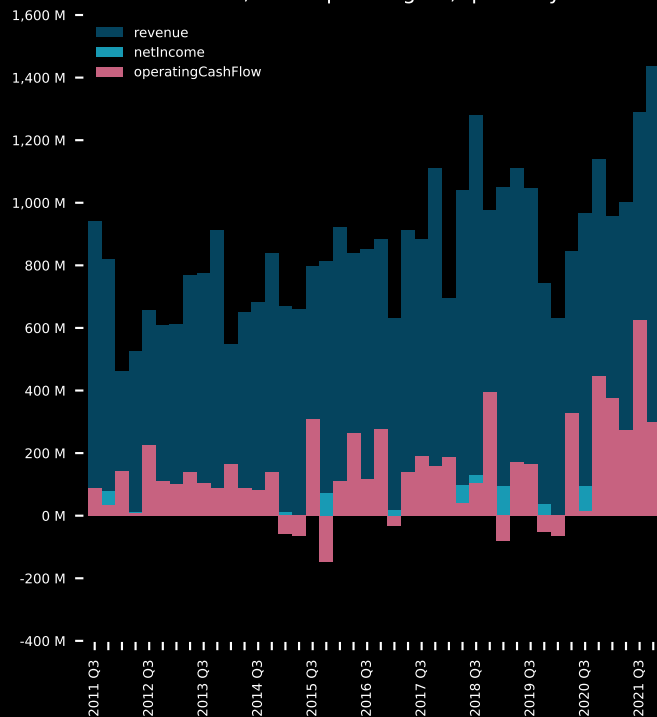


Owners Earnings, annually

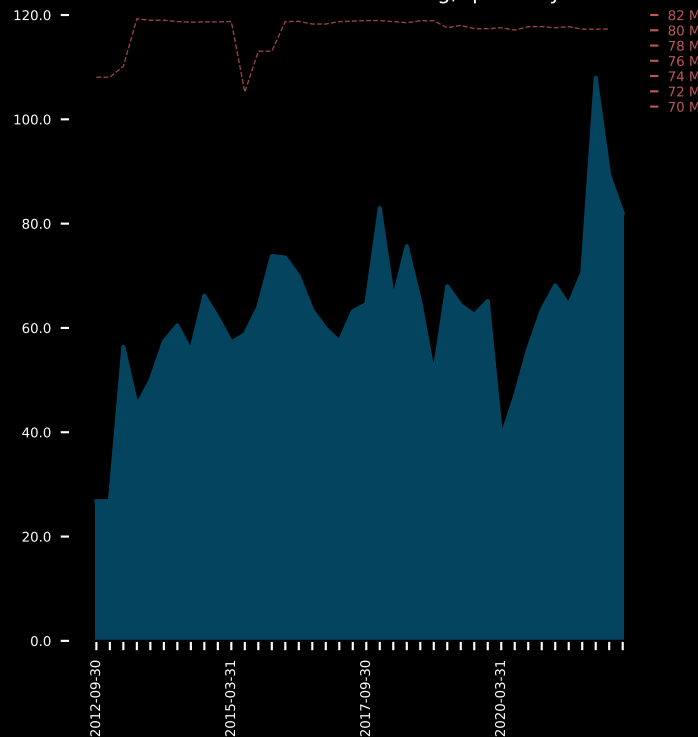


Tower Semiconductor Ltd., an independent semiconductor foundry, manufactures and markets analog intensive mixed-signal semiconductor devices in the United States, Japan, Asia, and Europe. It provides various customizable process technologies, including SiGe, BiCMOS, mixed-signal/CMOS, RF CMOS, CMOS image sensor, integrated power management, and MEMS. The company also offers wafer fabrication services and design enablement platform for design cycle, as well as transfer optimization and development process services to integrated device manufacturers and fabless companies. It serves various markets, such as consumer electronics, personal computers, communications, automotive, industrial, aerospace, and medical device products. Tower Semiconductor Ltd. has a strategic partnership with Anello Photonics Inc. for a new silicon optical waveguide process technology. The company was incorporated in 1993 and is headquartered in Migdal Haemek, Israel.

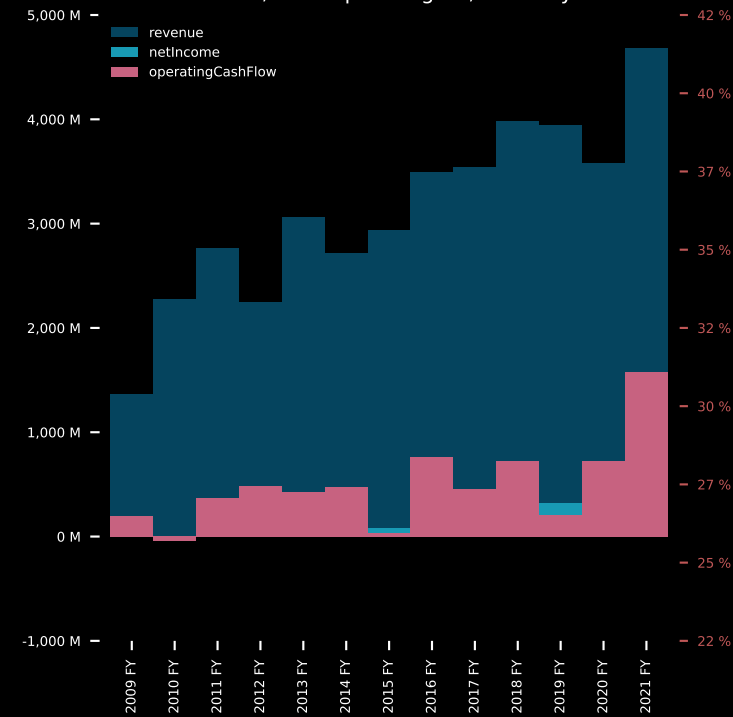
Sales, NI & Operating CF, quarterly



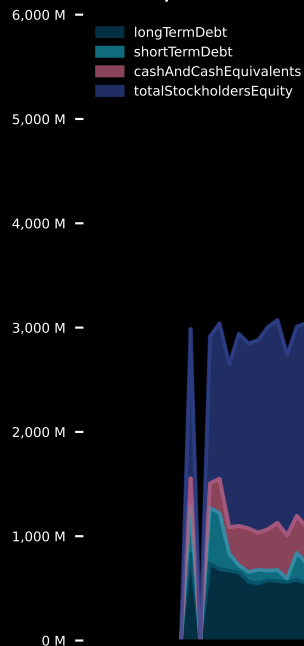
Price vs shares outstanding, quarterly



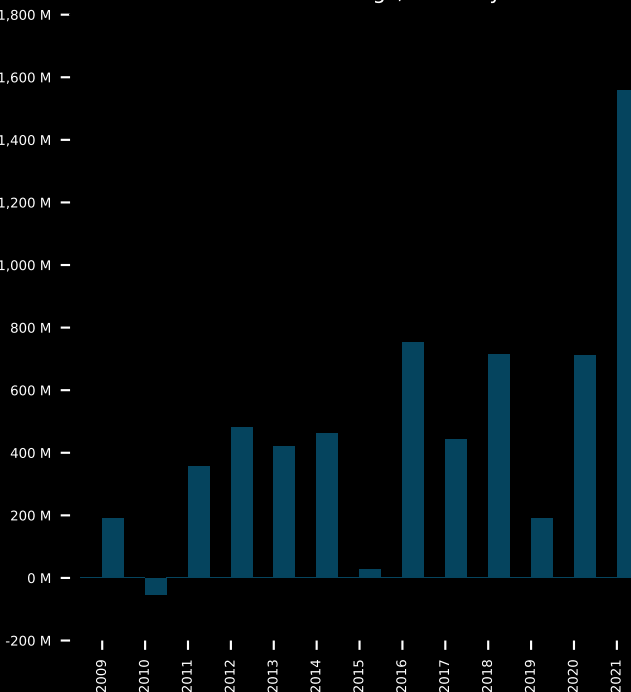
Sales, NI & Operating CF, annually



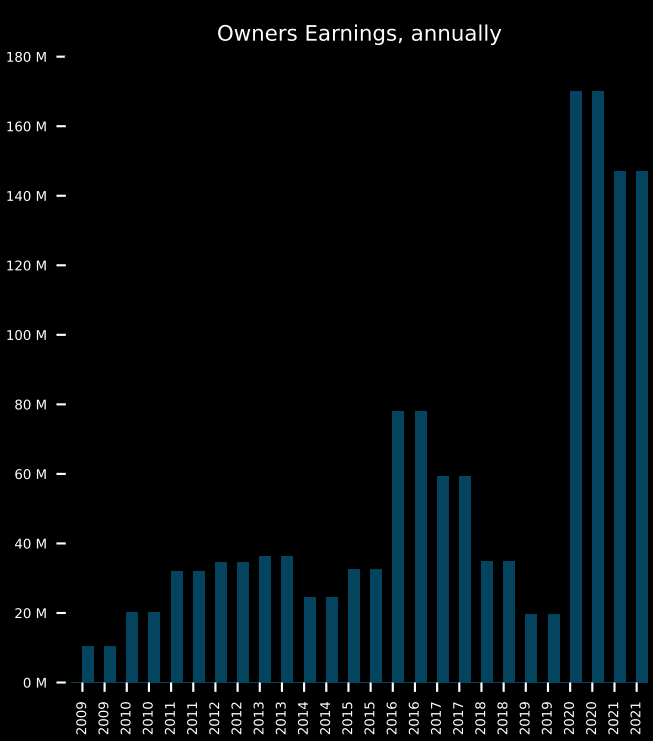
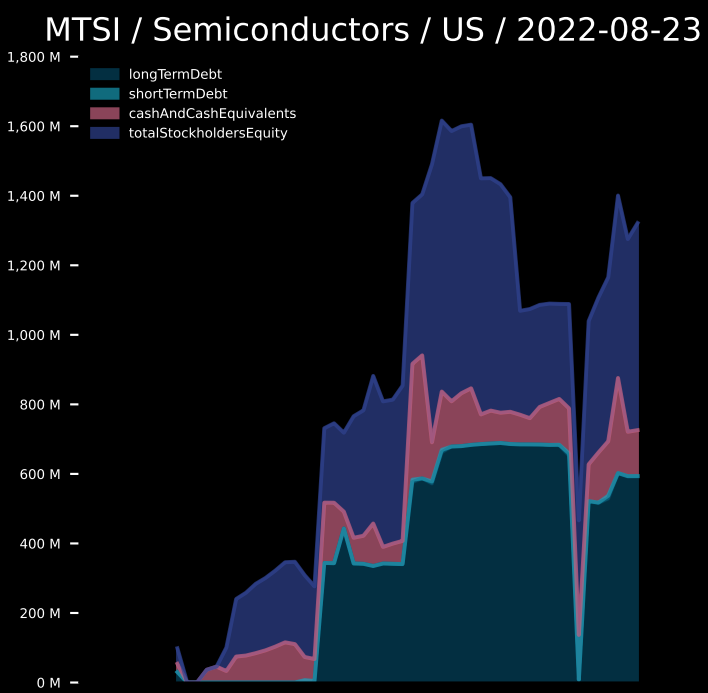
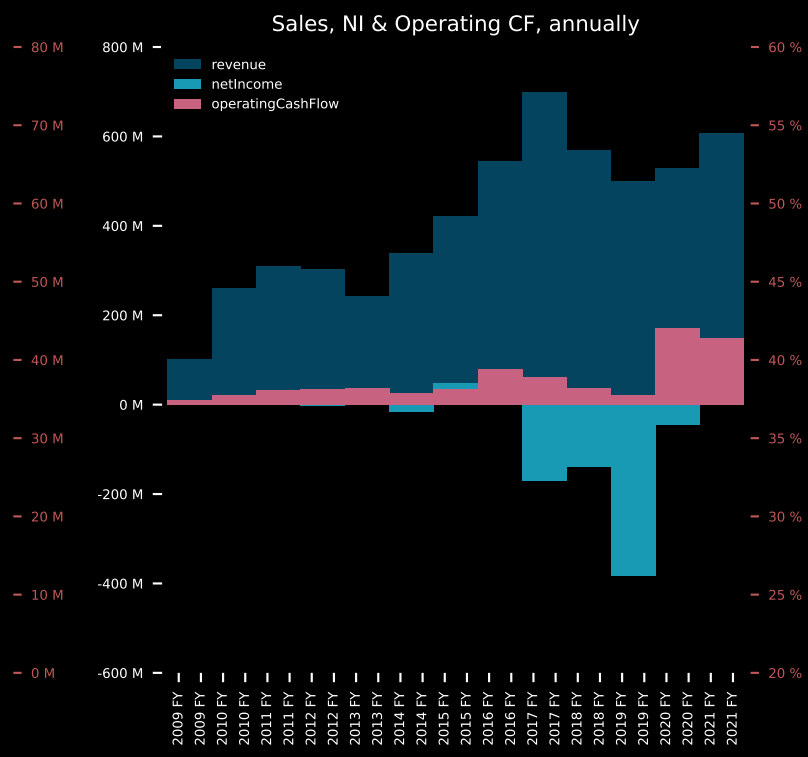
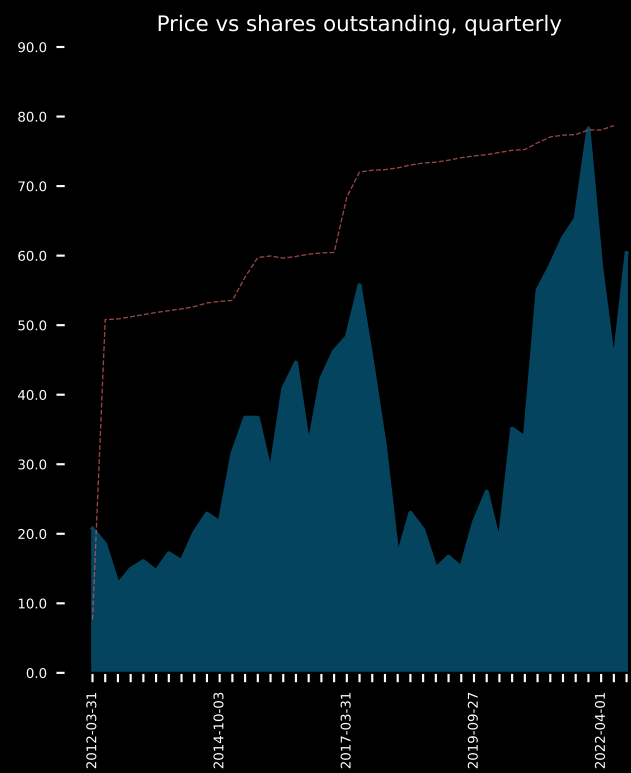
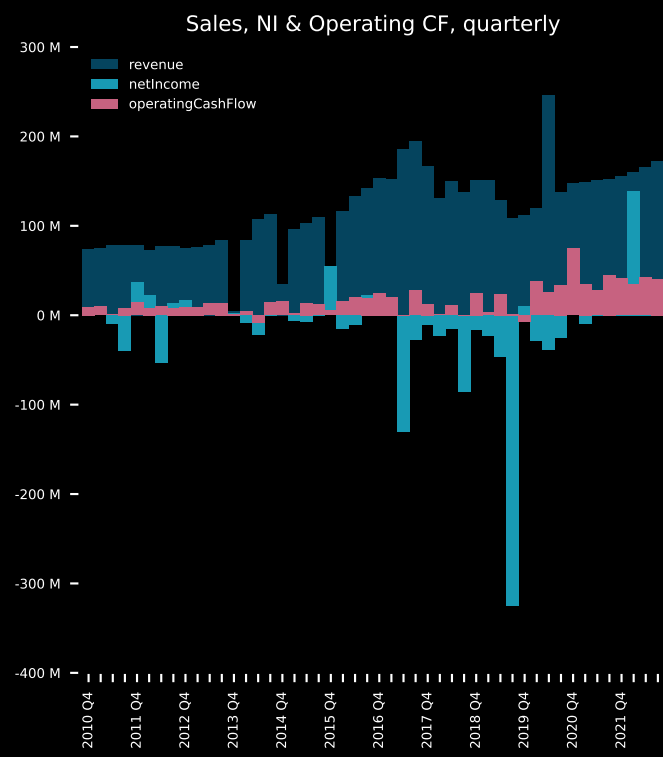
3583.TW / Semiconductors / US / 2022-08-23



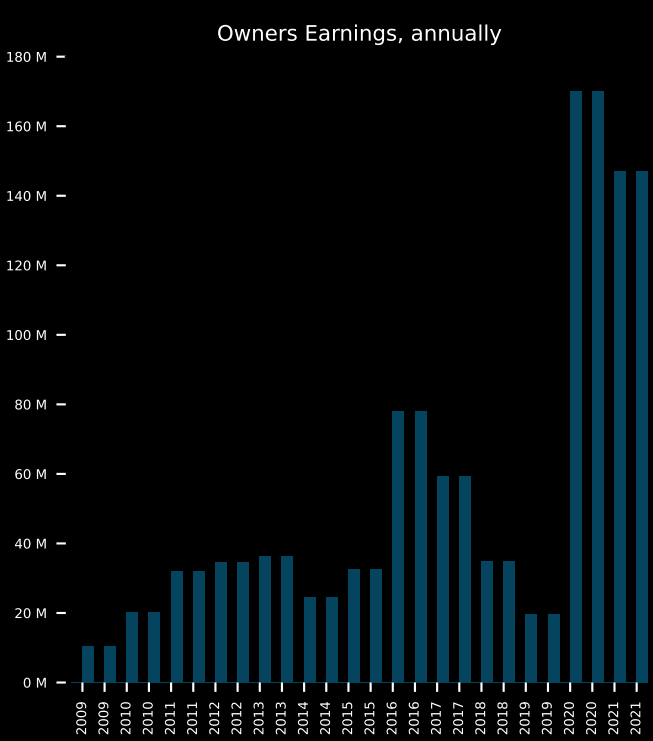
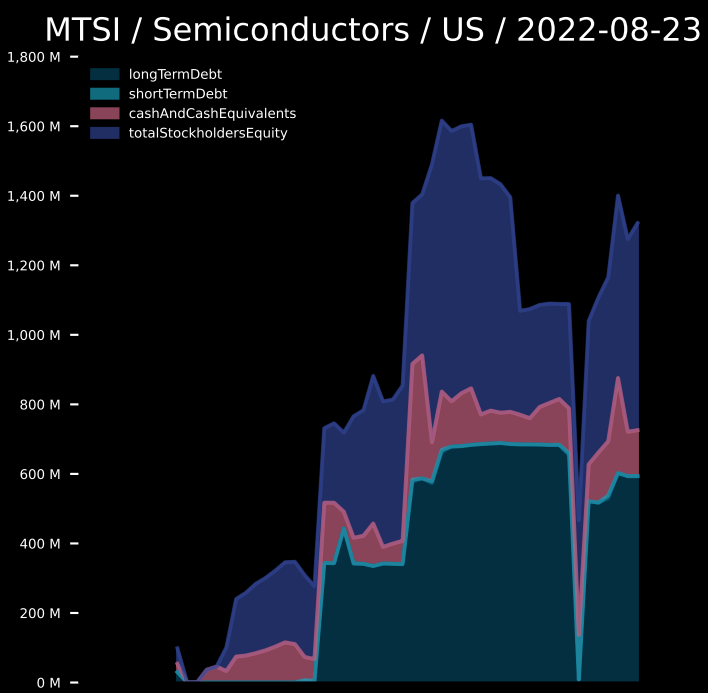
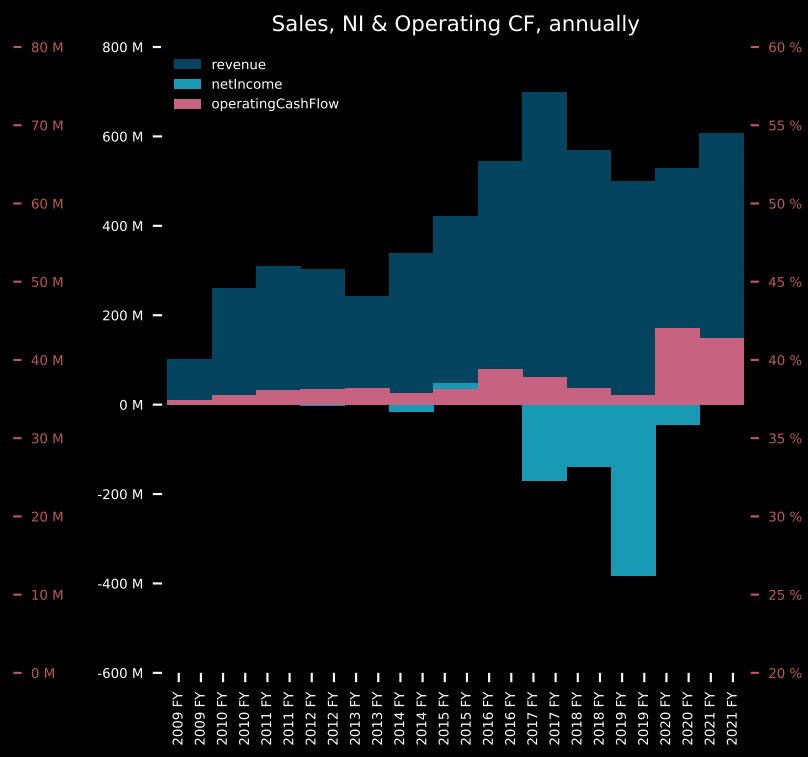
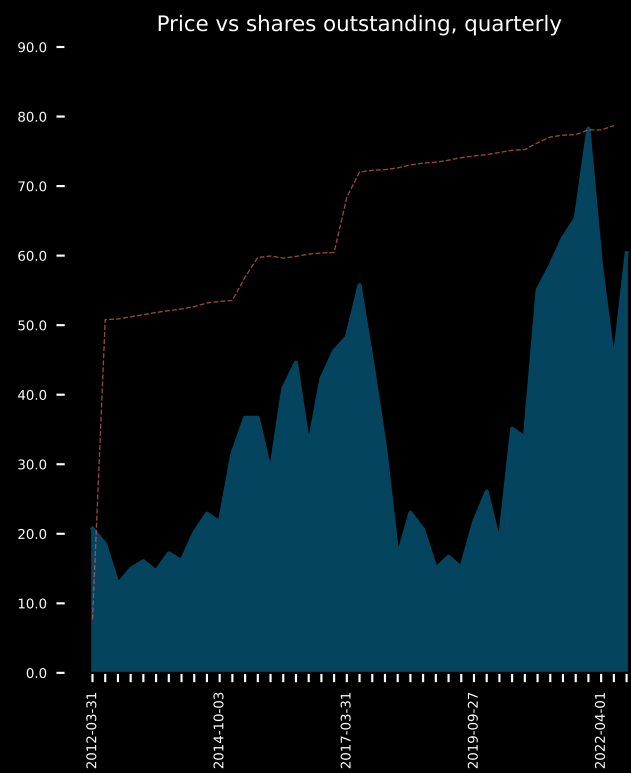
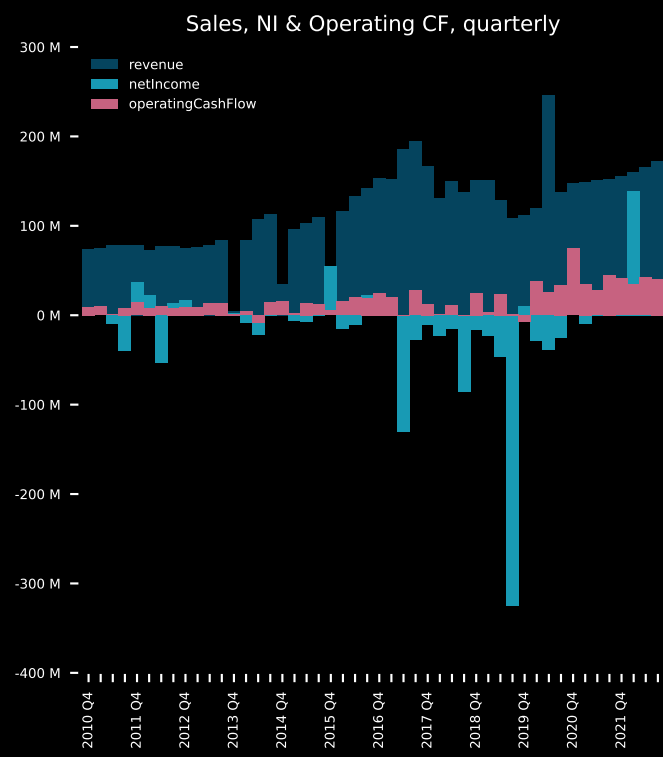
Owners Earnings, annually



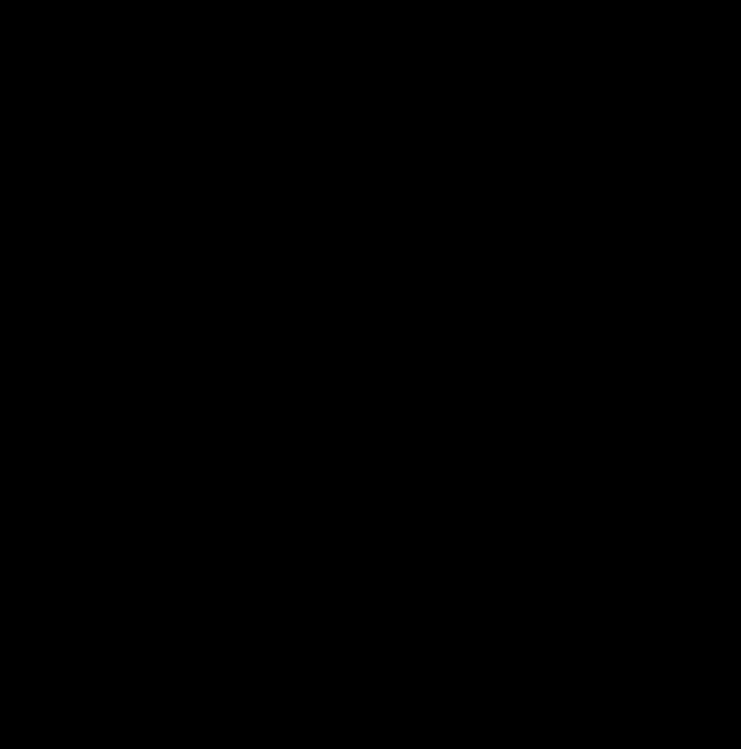
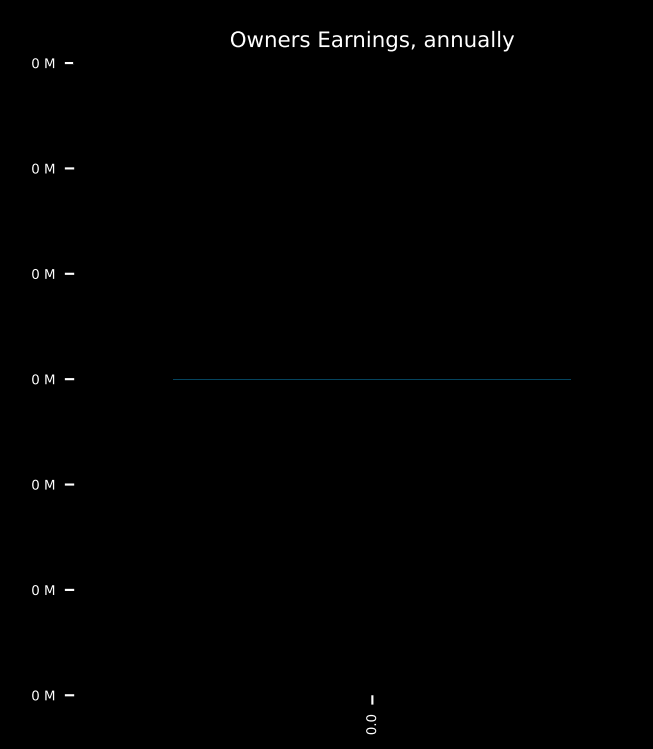
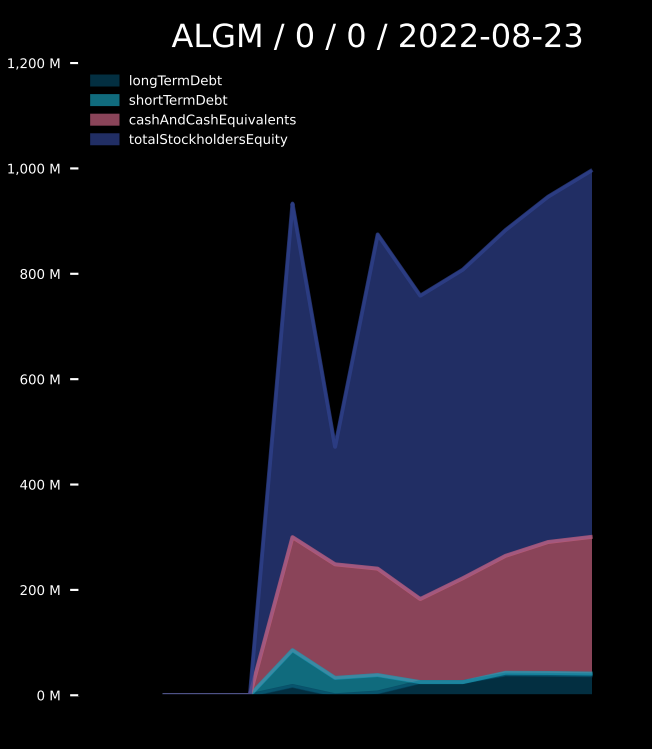
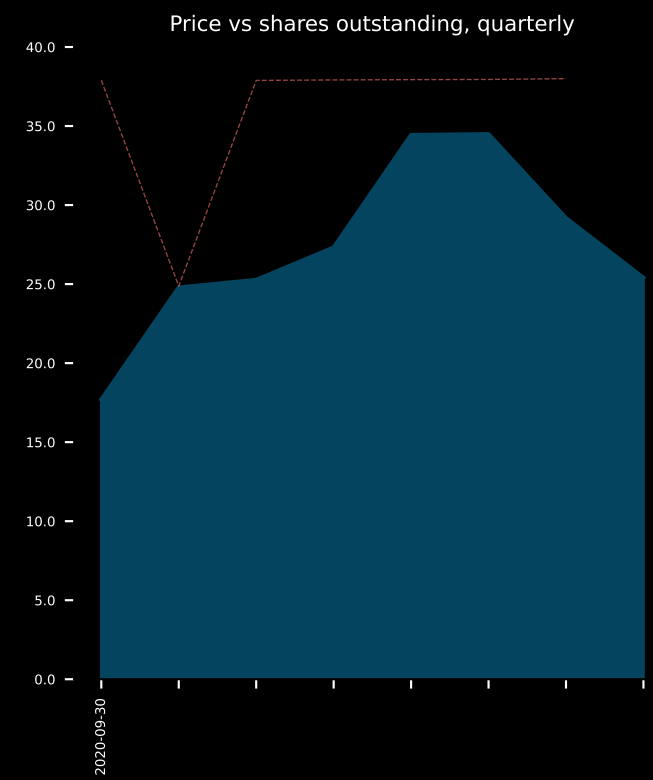
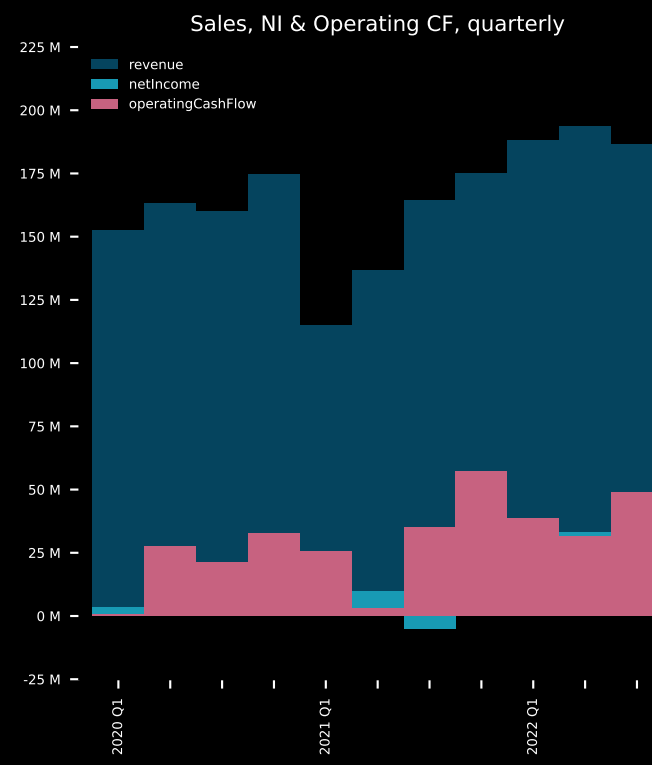
Scientech Corporation supplies products and services for the semiconductor, flat panel display, LED, data storage, scientific instruments, and high-tech related industries. The company offers chemical analysis and biotechnology equipment; remote control system; camera lens; flat panel display; mask/reticle and semiconductor front-end process equipment; MEMS/compound semiconductor/LED products; semiconductor packaging and testing equipment; 3D printing equipment; and wet benches/single wafer wet process equipment, and temporary bonding/de-bonding/glass recycle tools. It also provides wafer reclaiming services; repair, overhaul, and calibration services; and used tools, such as refurbished metrology, Nikon stepper/scanner, TEL track, and ion implanter tools. The company was founded in 1979 and is headquartered in Taipei, Taiwan.

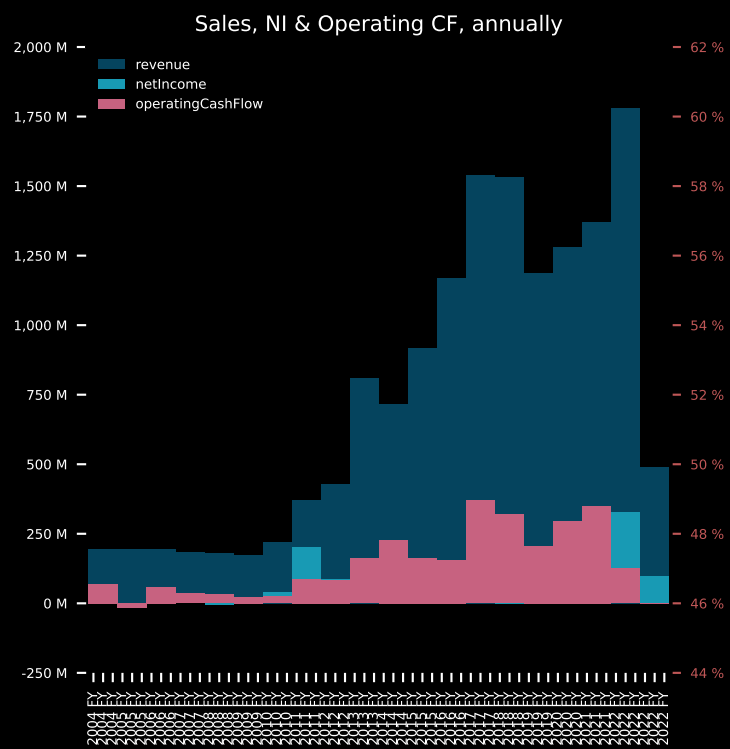
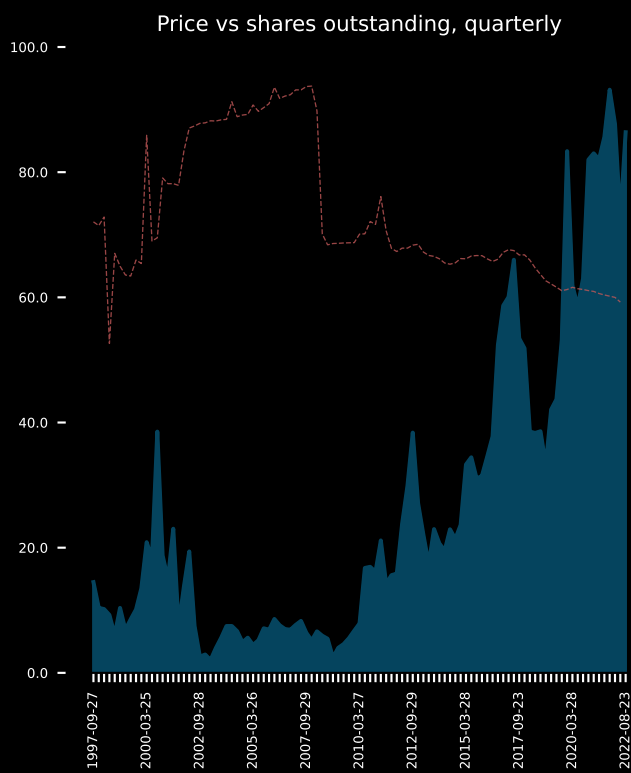


MACOM Technology Solutions Holdings, Inc., together with its subsidiaries, designs and manufactures analog semiconductor solutions for use in wireless and wireline applications across the radio frequency (RF), microwave, millimeter wave, and lightwave spectrum in the United States, China, the Asia Pacific, and internationally. The company offers a portfolio of standard and custom devices, including integrated circuits, multi-chip modules, diodes, amplifiers, switches and switch limiters, passive and active components, and subsystems. Its semiconductor products are electronic components that are incorporated in electronic systems, such as wireless basestations, high-capacity optical networks, radar, and medical systems and test and measurement. The company serves various markets comprising telecommunication that includes carrier infrastructure, which comprise long-haul/metro, 5G, and fiber-to-the-X/passive optical network; industrial and defense, including military and commercial radar, RF jammers, electronic countermeasures, and communication data links, as well as multi-market applications, such as

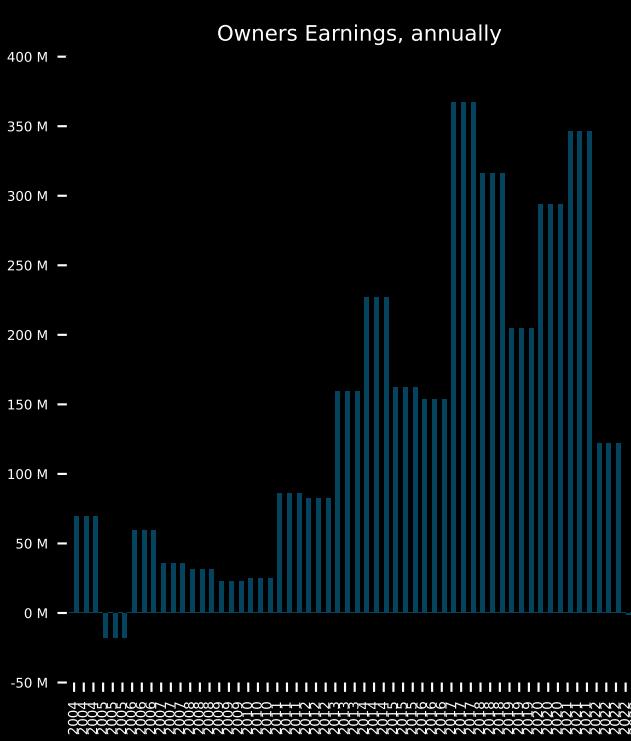
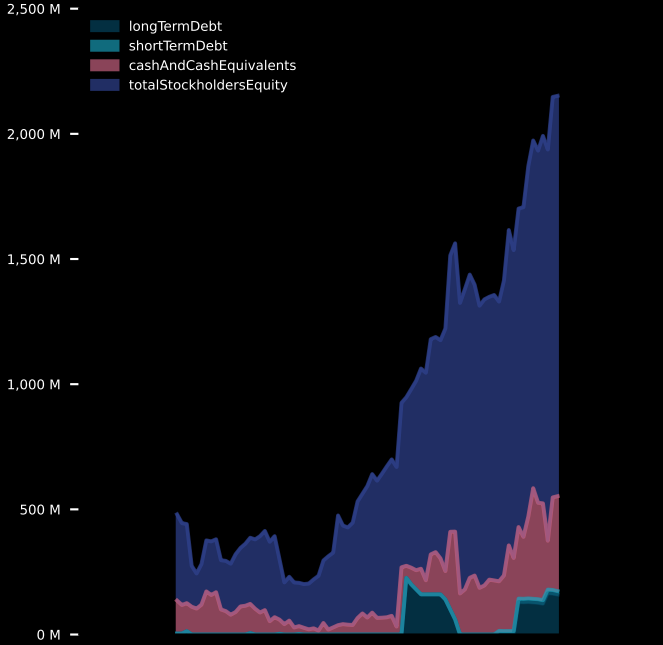


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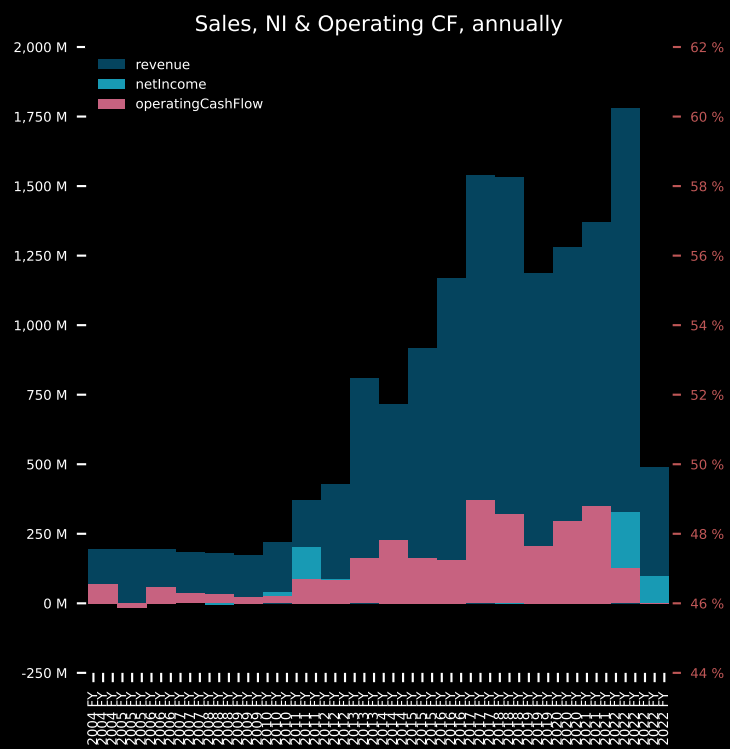
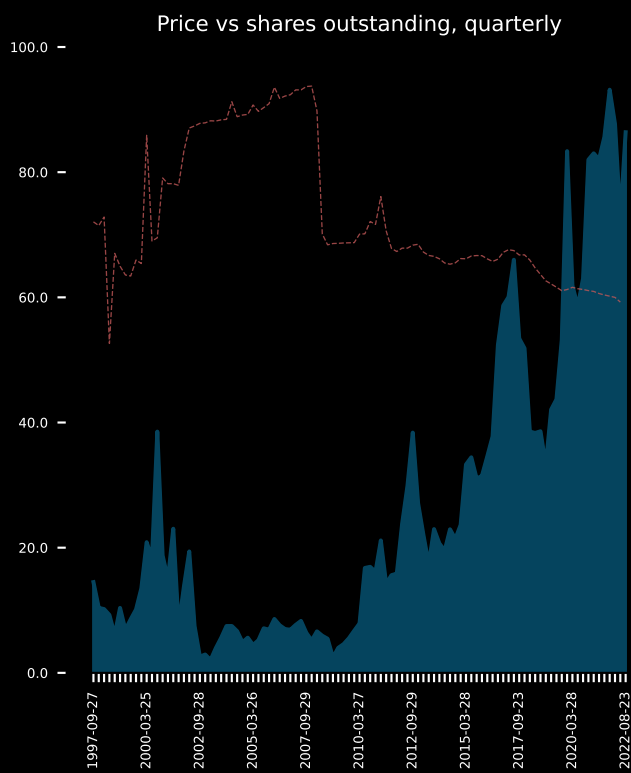




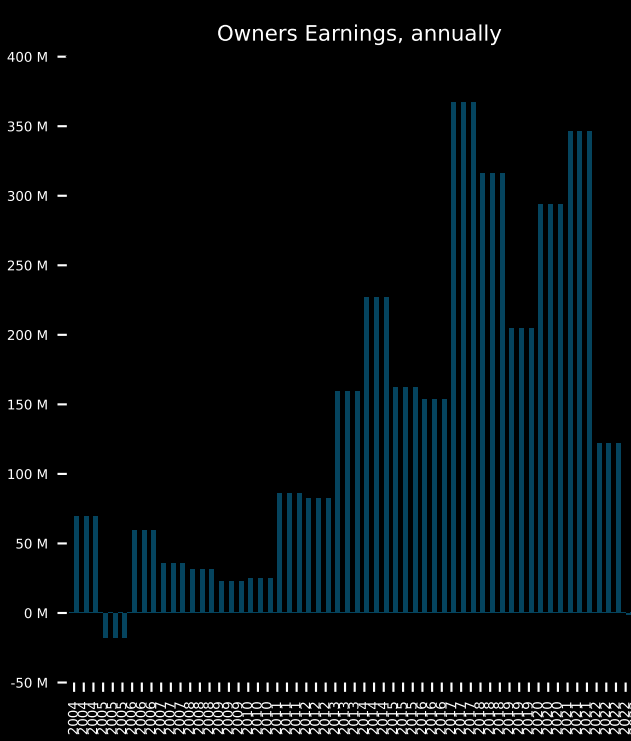
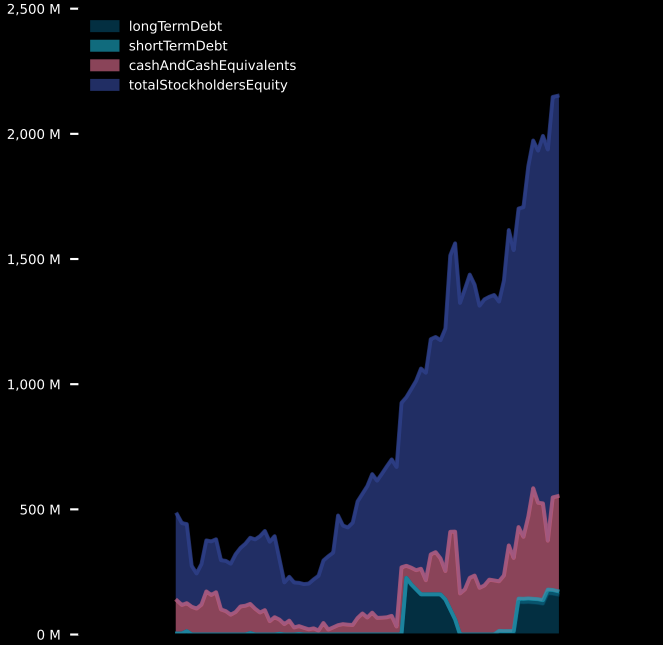
CRUS / Semiconductors / US / 2022-08-23



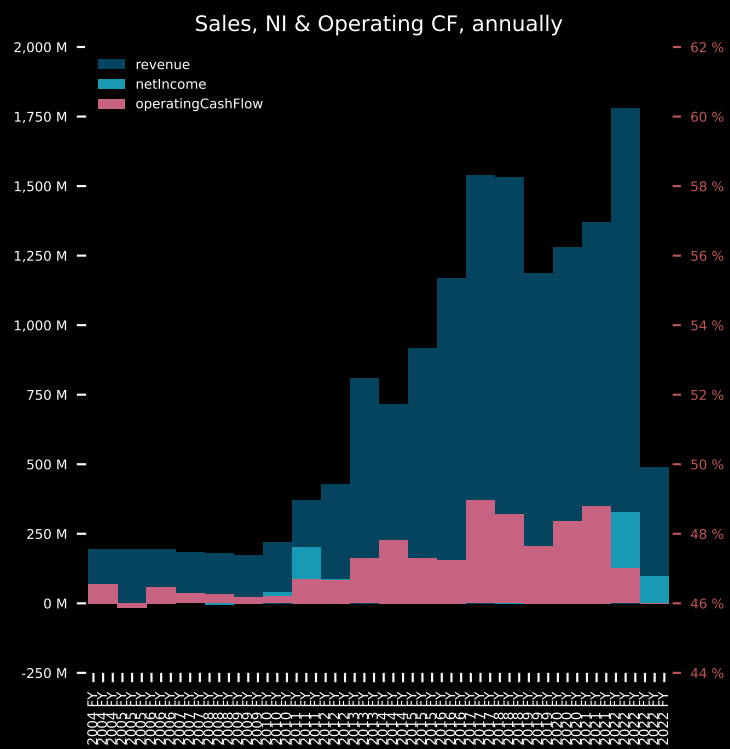
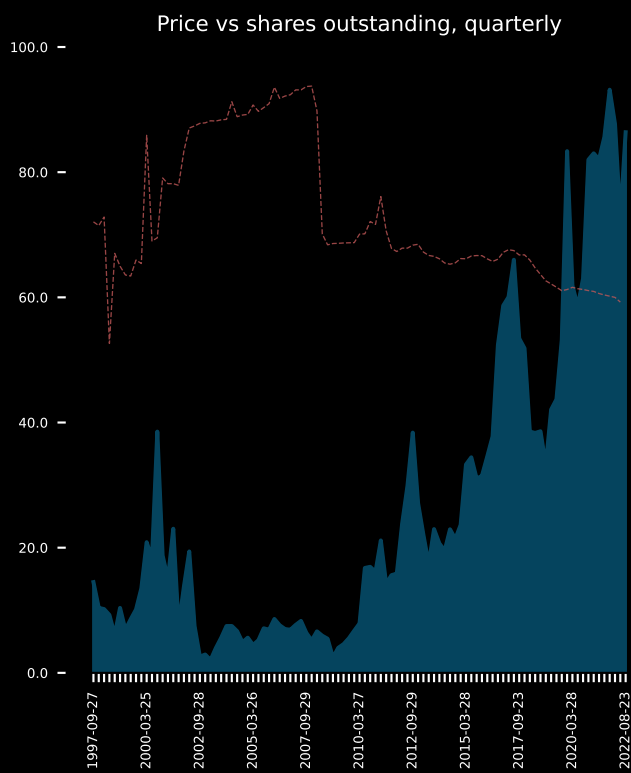
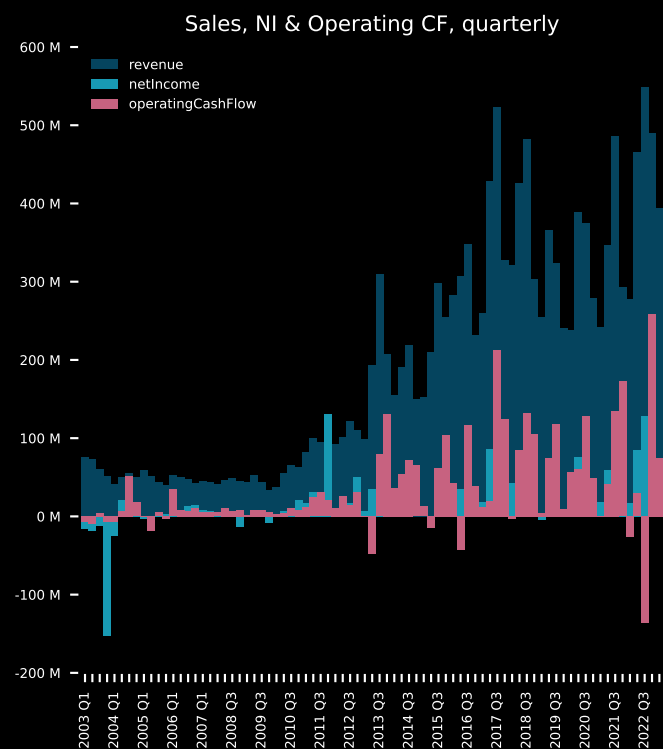
Cirrus Logic, Inc., a fabless semiconductor company, provides low-power and high-precision mixed-signal processing solutions in the United States and internationally. It offers portable products, including codecs components that integrate analog-to-digital converters (ADCs) and digital-to-analog converters (DACs) into a single integrated circuit (IC); smart codecs, a codec with digital signal processor; boosted amplifiers; digital signal processors; and SoundClear technology, which consists of a portfolio of tools, software, and algorithms that helps to enhance user experience with features, such as louder, high-fidelity sound, audio playback, voice capture, hearing augmentation, and active noise cancellation. The company's audio products are used in smartphones, tablets, wireless headsets, laptops, AR/VR headsets, home theater systems, automotive entertainment systems, and professional audio systems. It also provides high-performance mixed-signal products, such as haptic driver and sensing solutions, camera controllers, power conversion, and control ICs and fast-charging ICs used in various industrial and



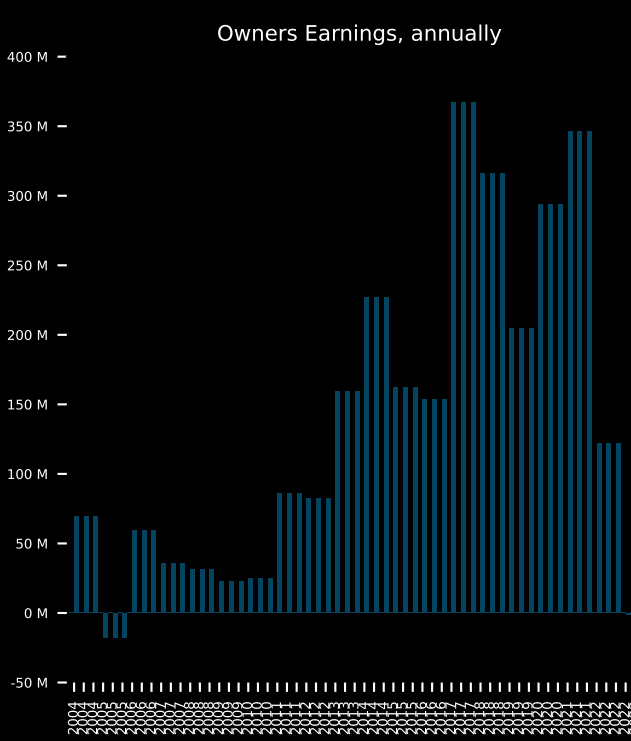
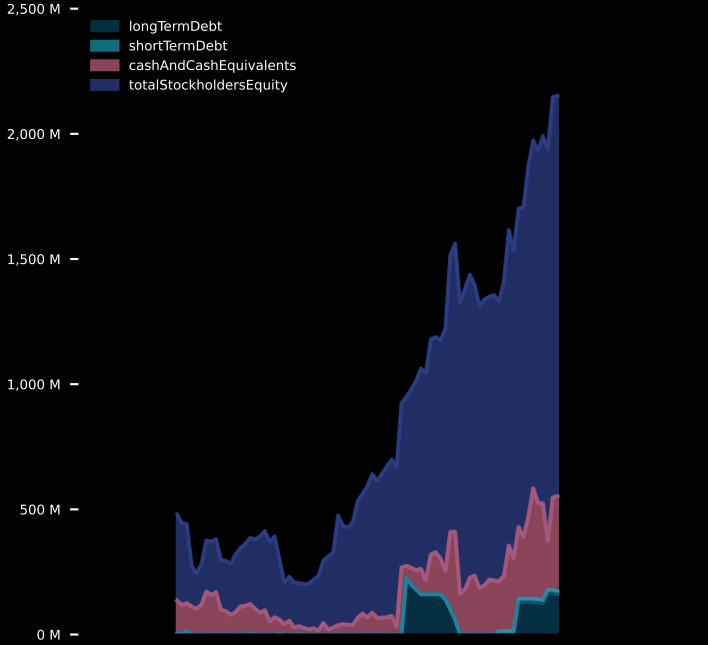
CRUS / Semiconductors / US / 2022-08-23



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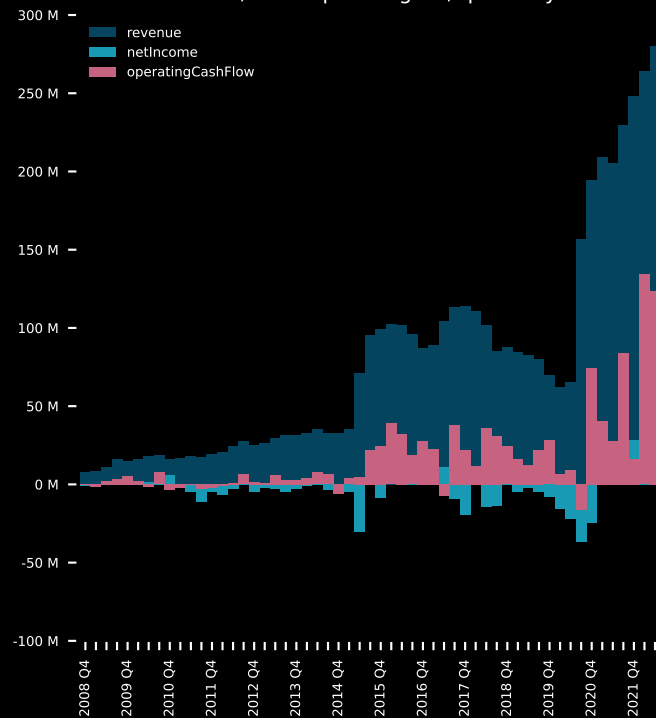


CRUS / Semiconductors / US / 2022-08-23

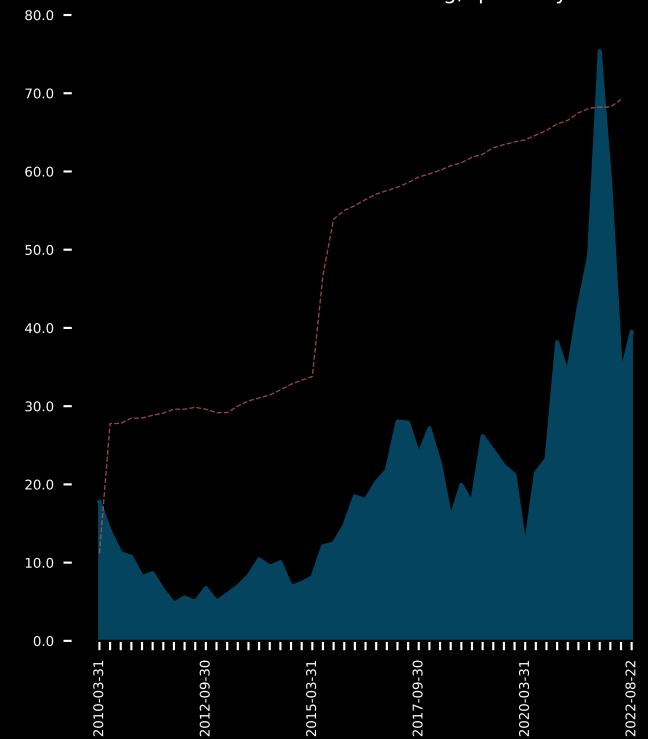


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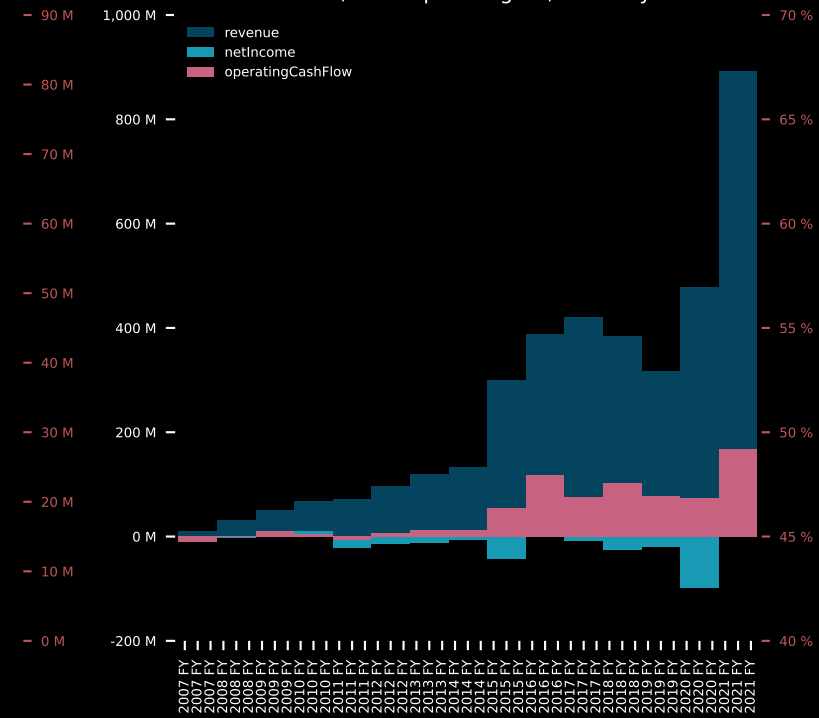
Sales, NI & Operating CF, quarterly



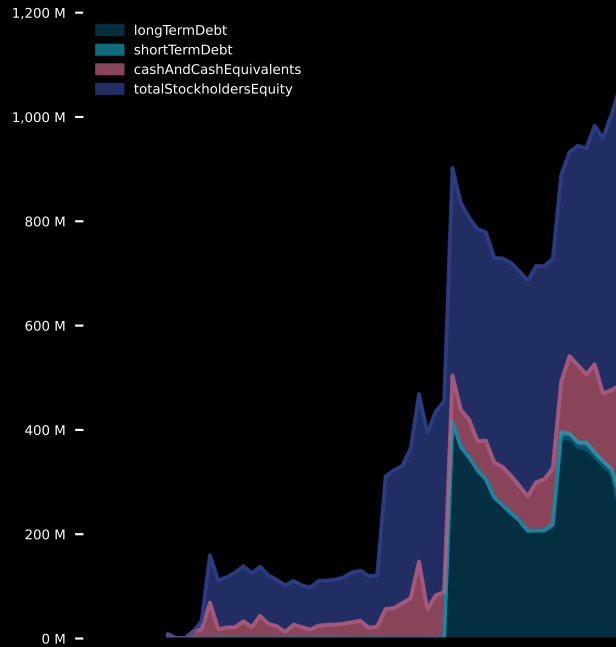
Price vs shares outstanding, quarterly



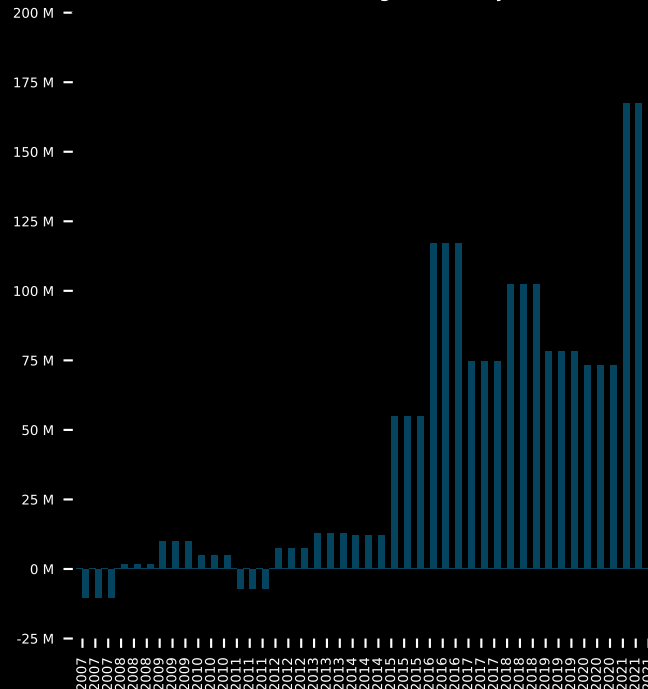
Sales, NI & Operating CF, annually



MXL / Semiconductors / US / 2022-08-22



Owners Earnings, annually

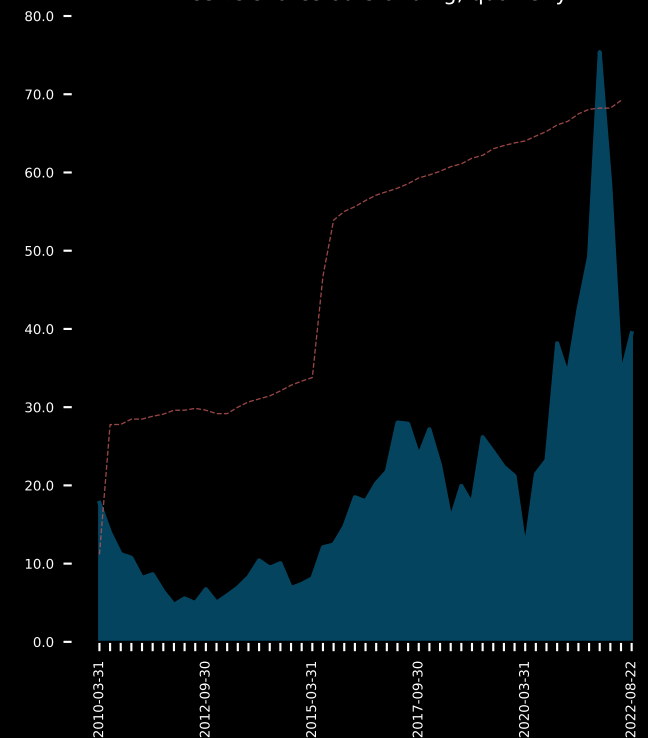


MaxLinear, Inc. provides radiofrequency (RF), high-performance analog, and mixed-signal communications systems-on-chip solutions (SoCs) for the connected home, wired and wireless infrastructure, and industrial and multi-market applications worldwide. Its products integrate various portions of a high-speed communication system, including RF, high-performance analog, mixed-signal, digital signal processing, security engines, data compression, networking layers, and power management. The company offers broadband radio transceiver front ends, data converters, embedded systems and software architecture, and architecture and system design for highly integrated end-to-end communication platform solutions. Its products are used in various electronic devices, such as cable data over cable service interface specifications (DOCSIS), fiber and DSL broadband modems and gateways; Wi-Fi and wireline routers for home networking; radio transceivers and modems for 4G/5G base-station and backhaul infrastructure; and fiber-optic modules for data center, metro, and long-haul transport networks, as well as power management

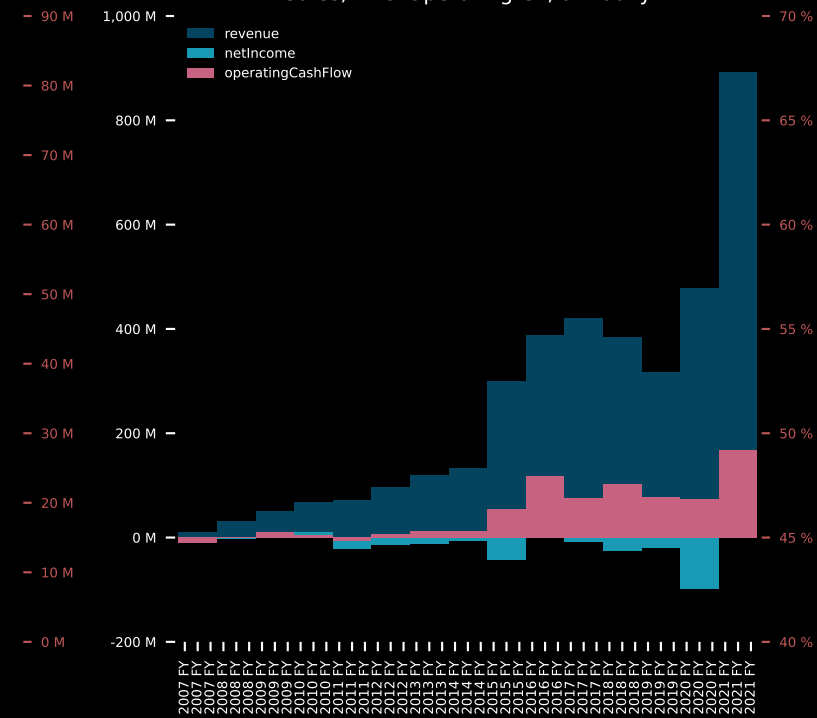
Sales, NI & Operating CF, quarterly



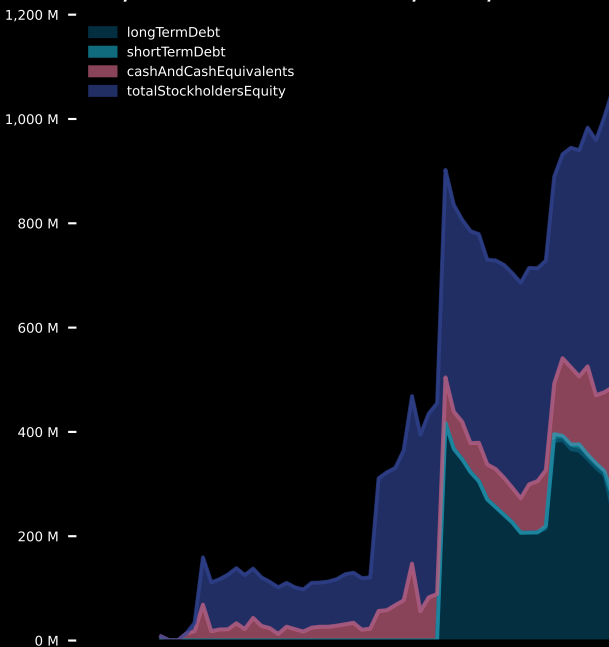
Price vs shares outstanding, quarterly



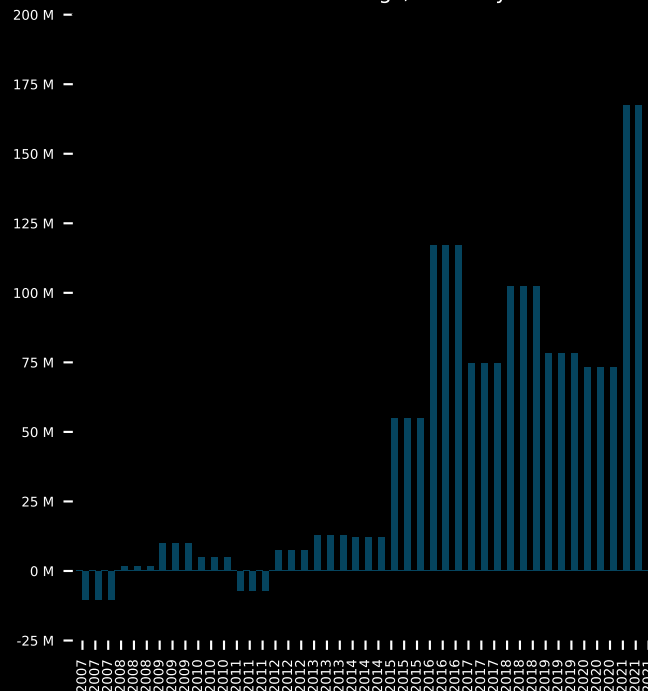
Sales, NI & Operating CF, annually



MXL / Semiconductors / US / 2022-08-22

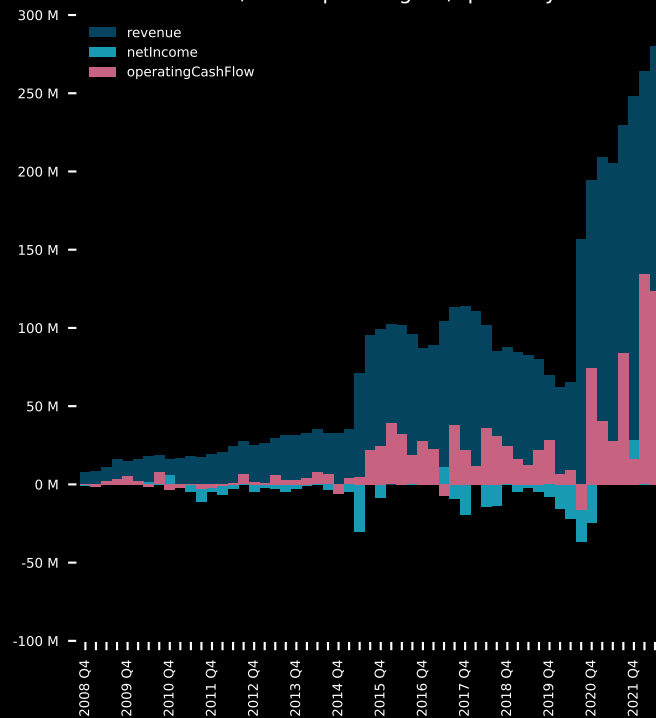


Owners Earnings, annually

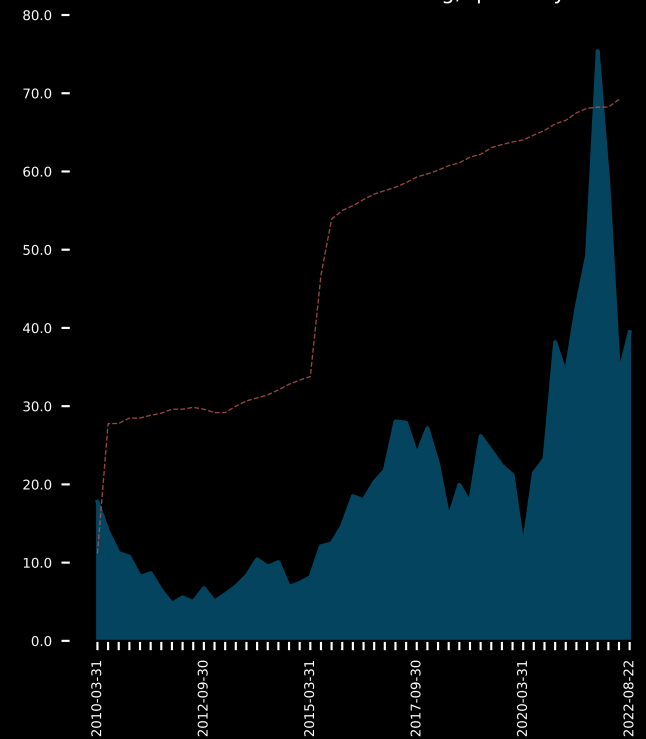


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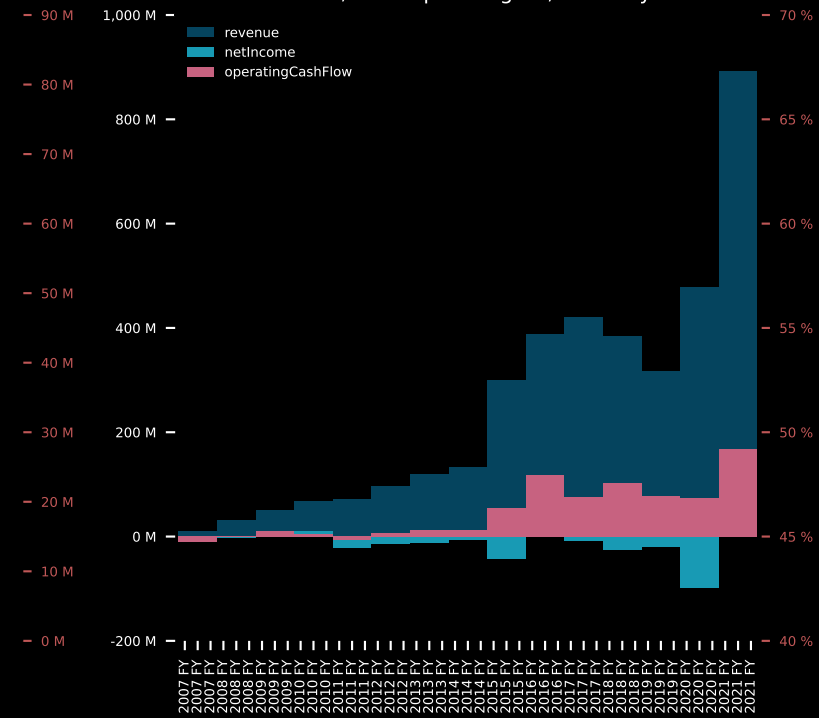
Sales, NI & Operating CF, quarterly



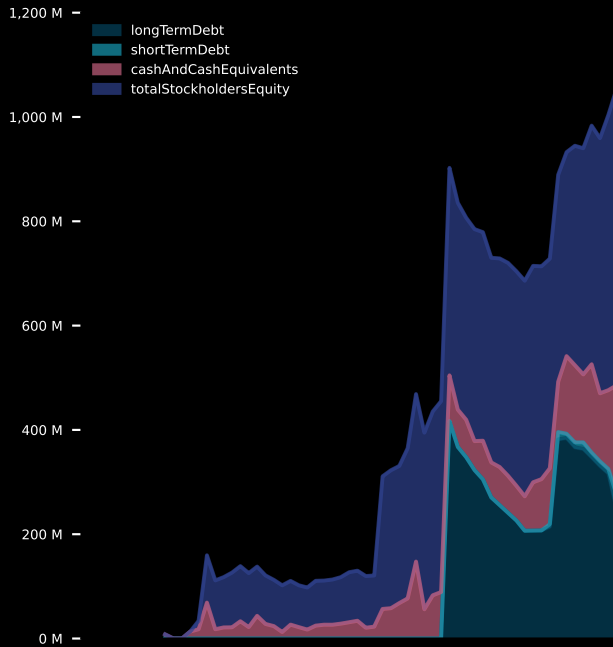
Price vs shares outstanding, quarterly



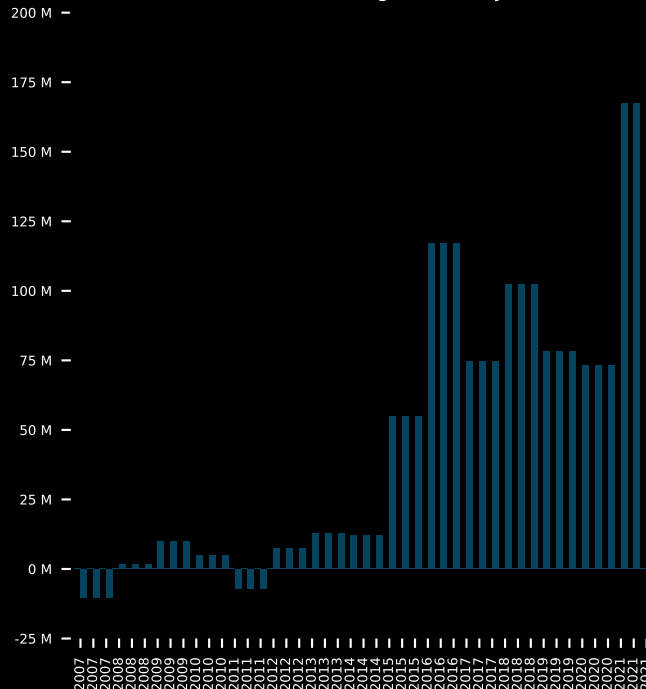
Sales, NI & Operating CF, annually



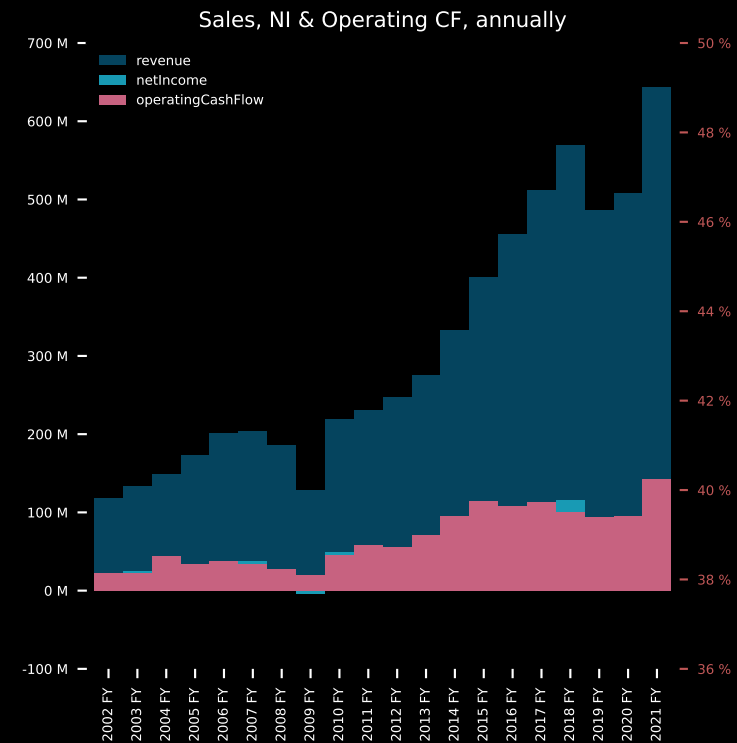
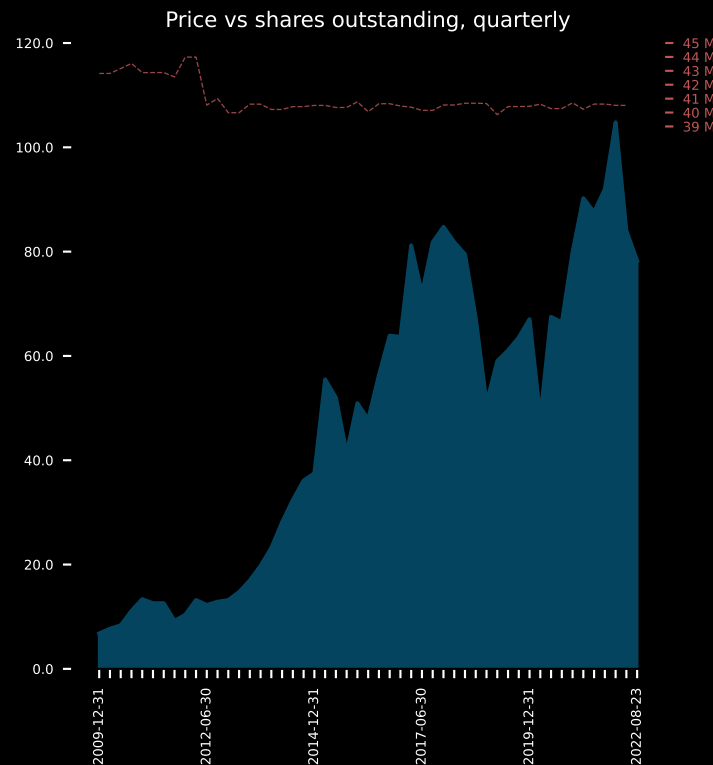
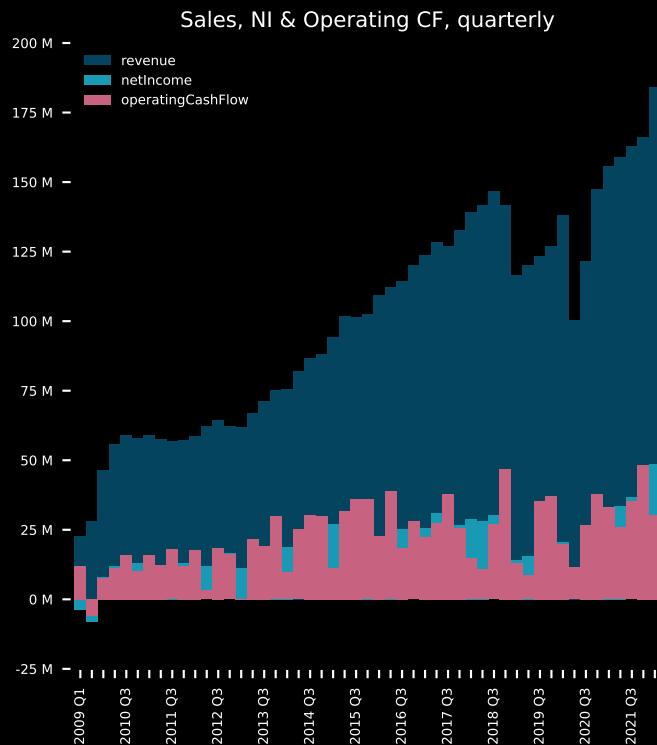
MXL / Semiconductors / US / 2022-08-22



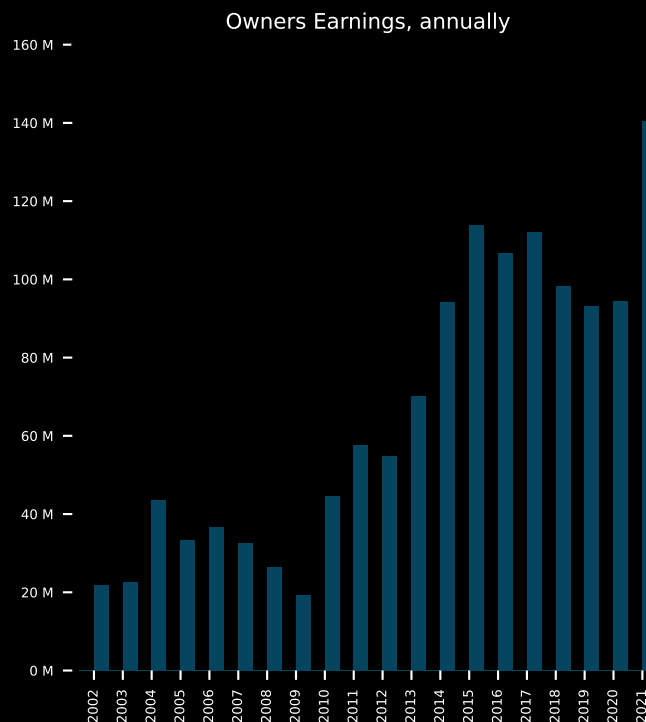
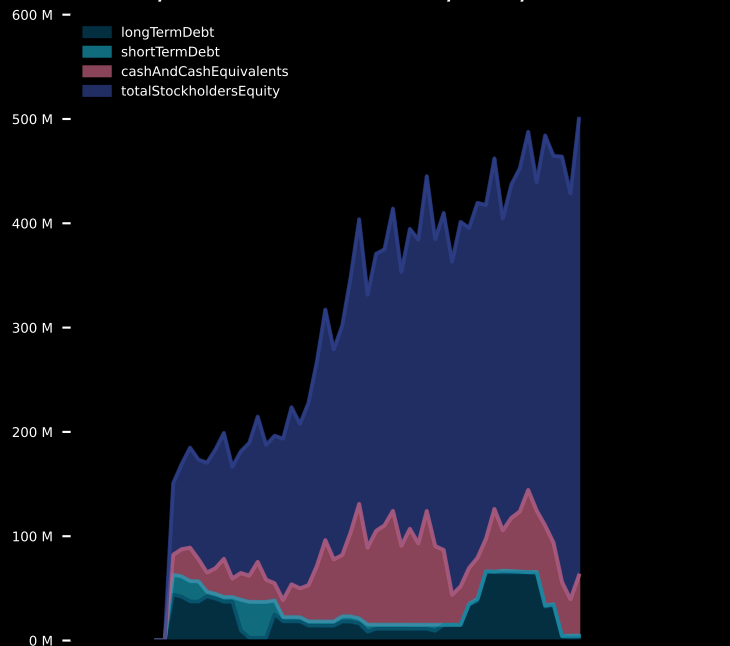
Owners Earnings, annually



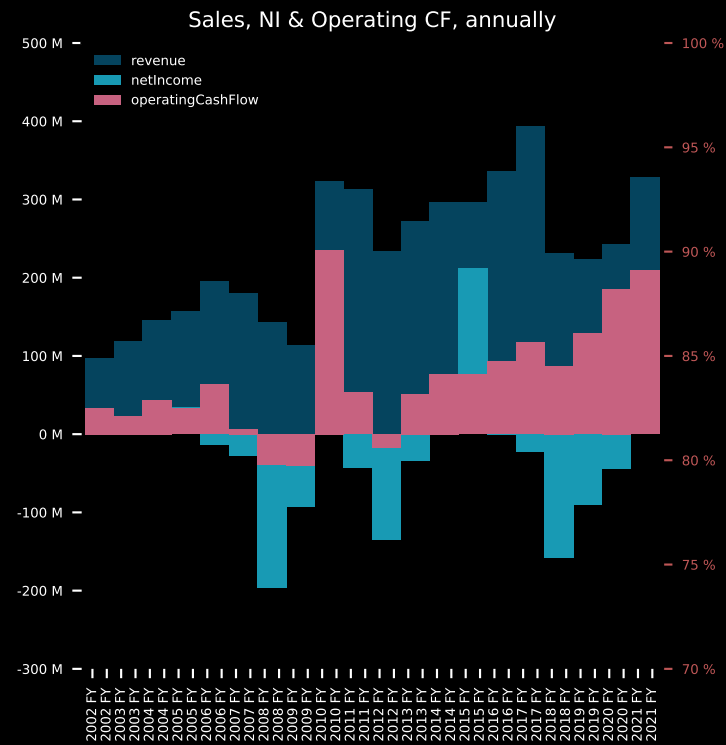
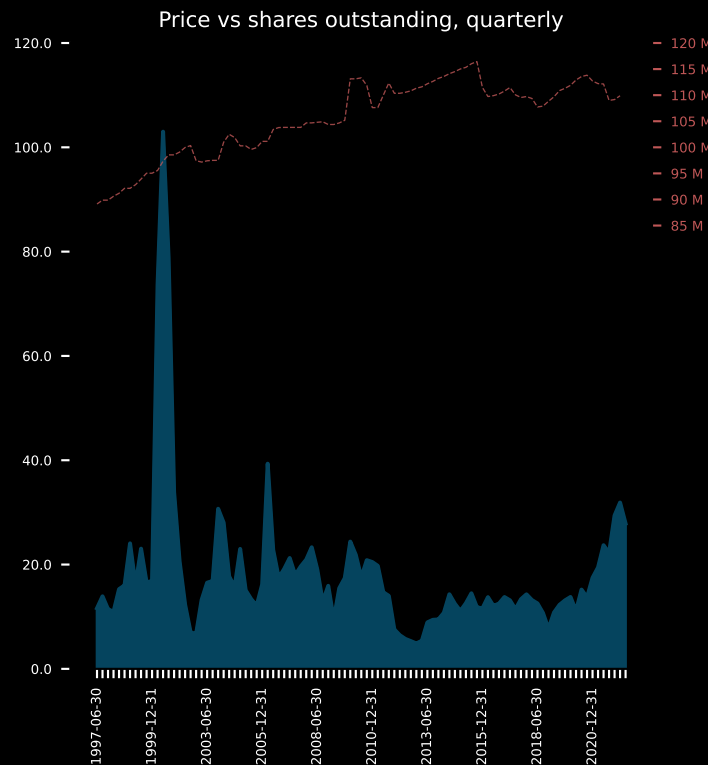
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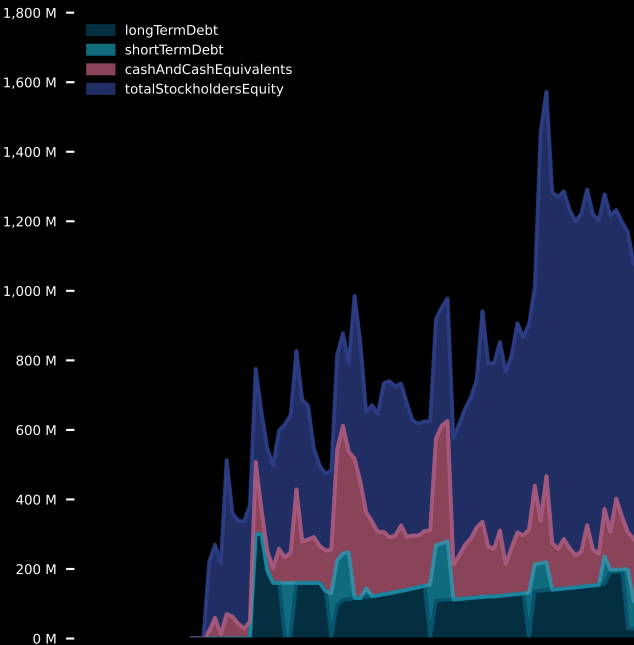
MELE.BR / Semiconductors / BE / 2022-08-23



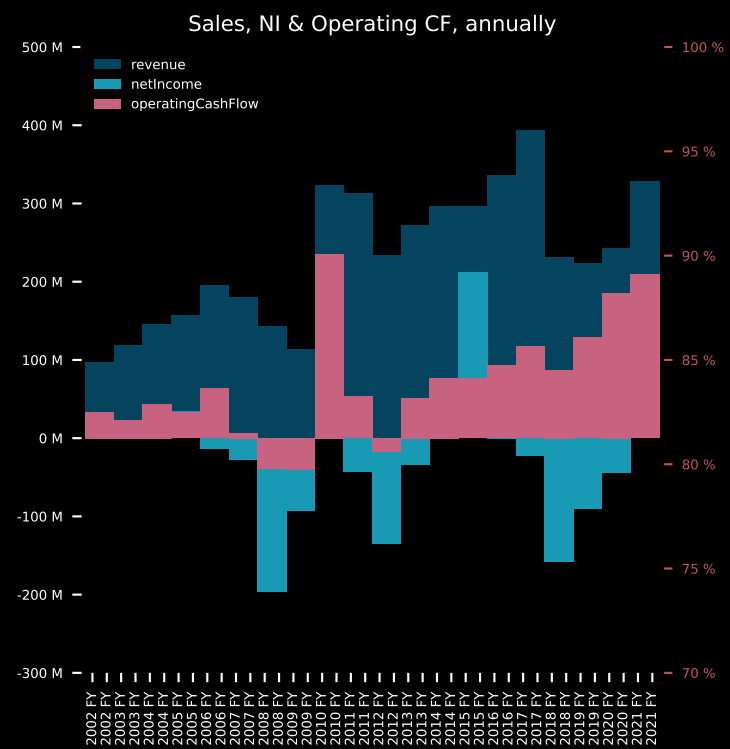
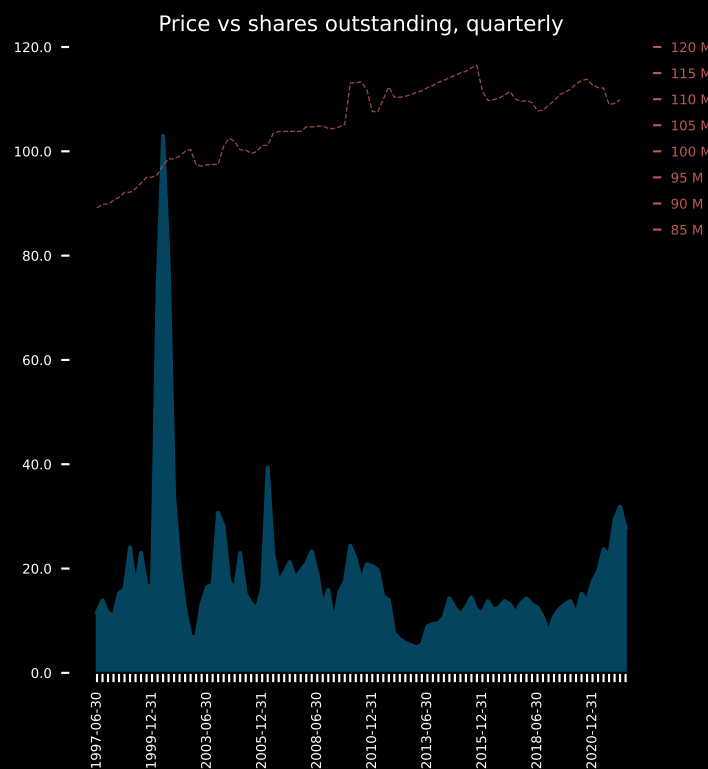
Melexis NV designs, develops, tests, and markets advanced integrated semiconductor devices primarily for the automotive industry in Europe, the Middle-East, Africa, the Asia Pacific, and North and Latin America. The company provides magnetic position, latch and switch, current, inductive position, tire monitoring, temperature, optical, pressure, and speed sensor ICs. It also offers embedded motor driver, fan and pump, LED, and pre driver ICs; and LIN/CAN system basis, NFC/RFID, radio-frequency receiver and transmitter, and switch controller ICs. The company was founded in 1988 and is headquartered in Ieper, Belgium. Melexis NV is a subsidiary of Xtrion N.V.



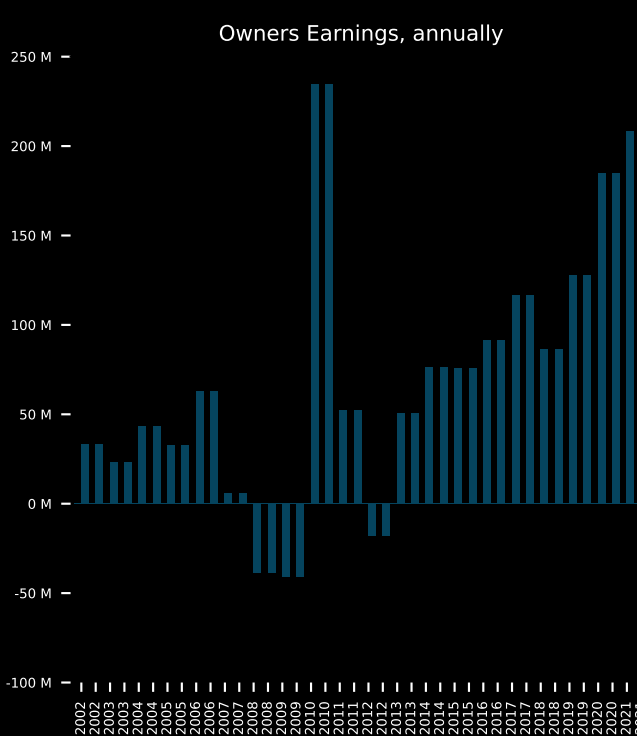
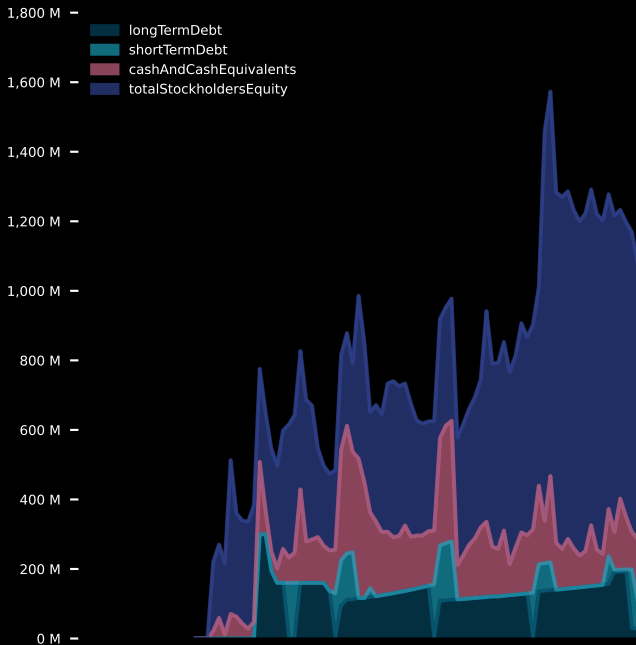
RMBS / Semiconductors / US / 2022-08-23



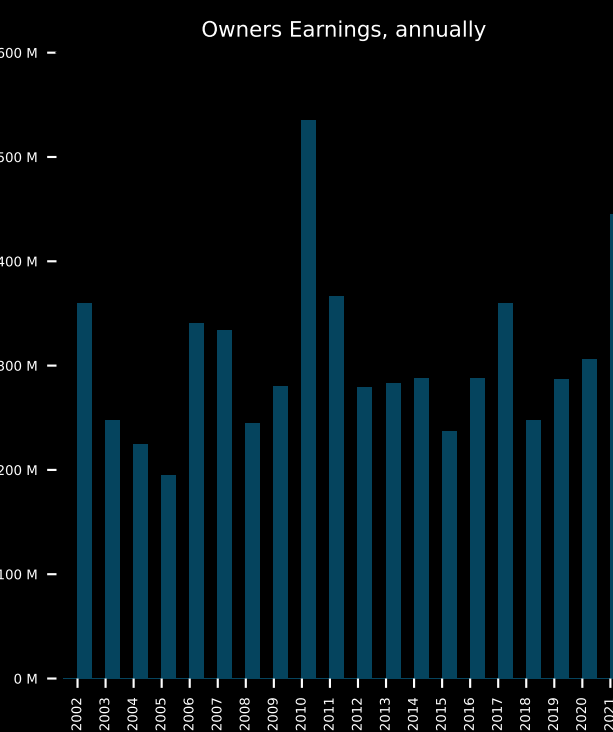
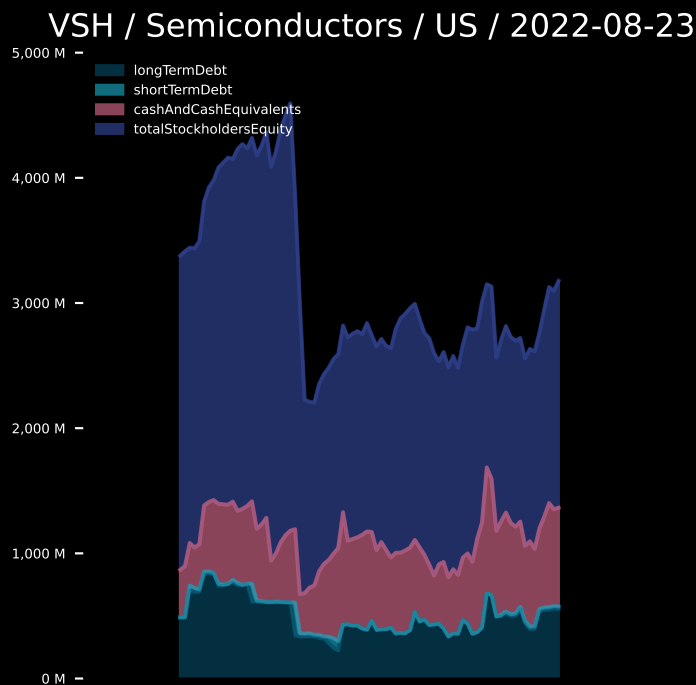
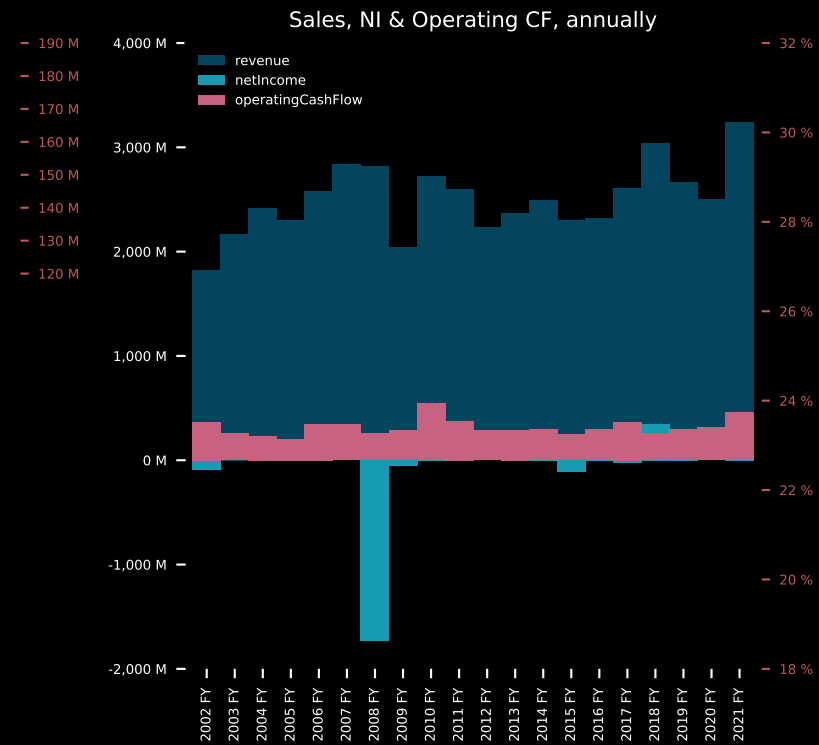
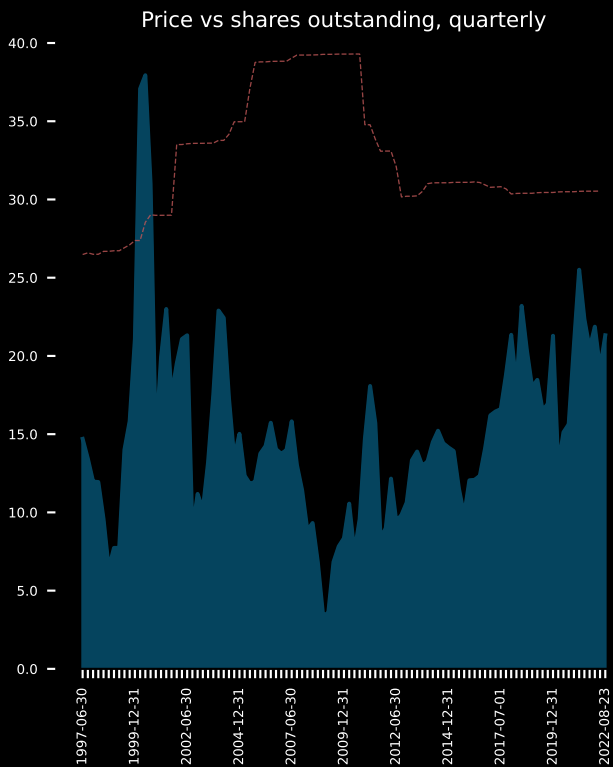
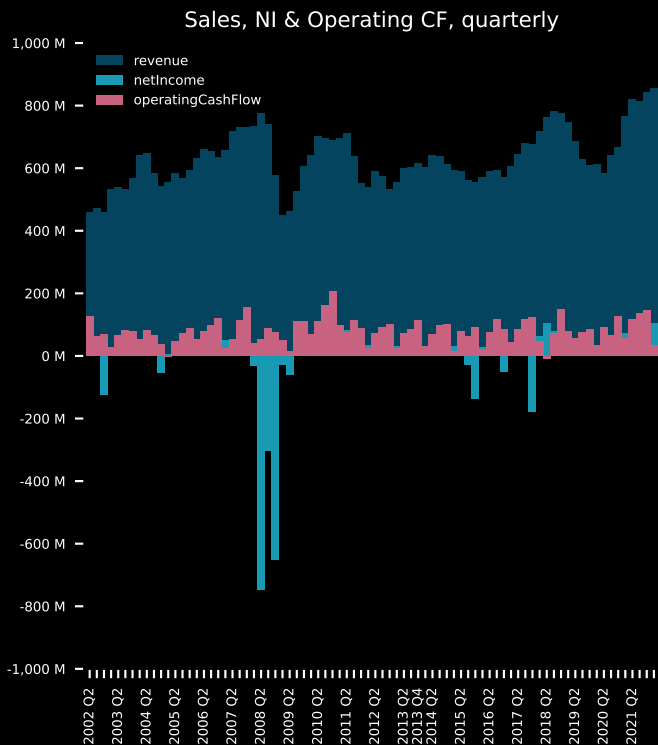
Rambus Inc. provides semiconductor products in the United States, Taiwan, South Korea, Japan, Europe, Canada, Singapore, China, and internationally. The company offers DDR memory interface chips, including DDR5, DDR4 and DDR3 memory interface chips to module manufacturers and OEMs; silicon IP comprising, interface and security IP solutions that move and protect data in advanced applications; and physical interface and digital controller IP to offer industry-leading, integrated memory and interconnect subsystems. It also provides a portfolio of patents that covers memory architecture, high-speed serial links, and security products. The company markets its products and services through its direct sales force and distributors. Rambus Inc. was incorporated in 1990 and is headquartered in San Jose, California.



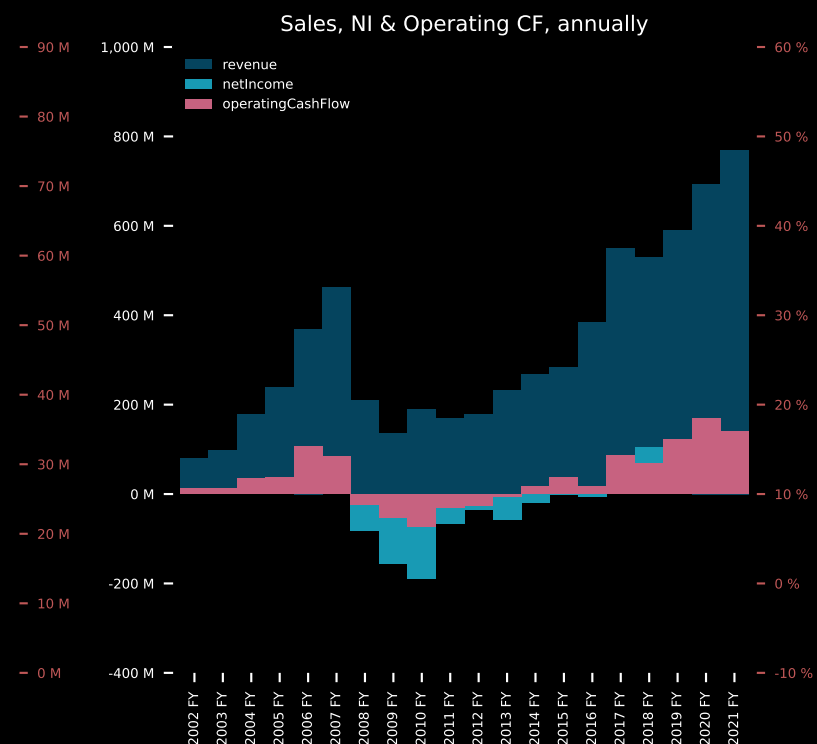
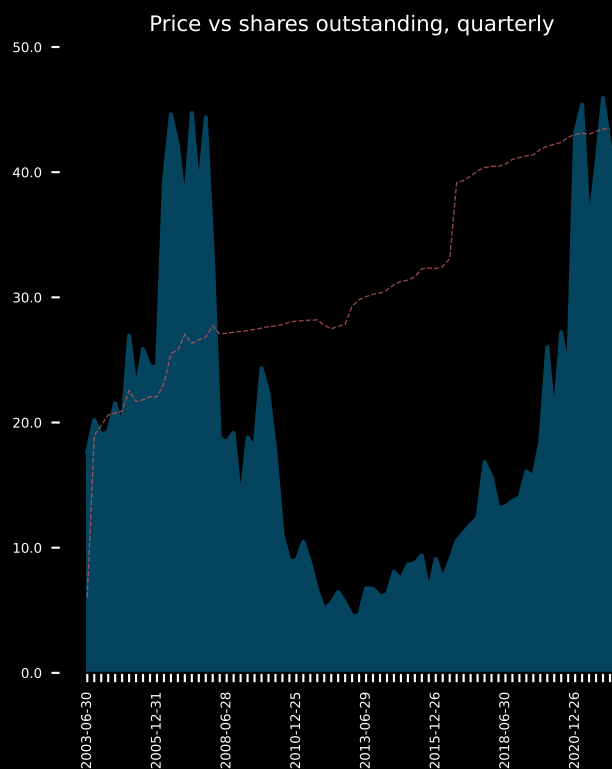
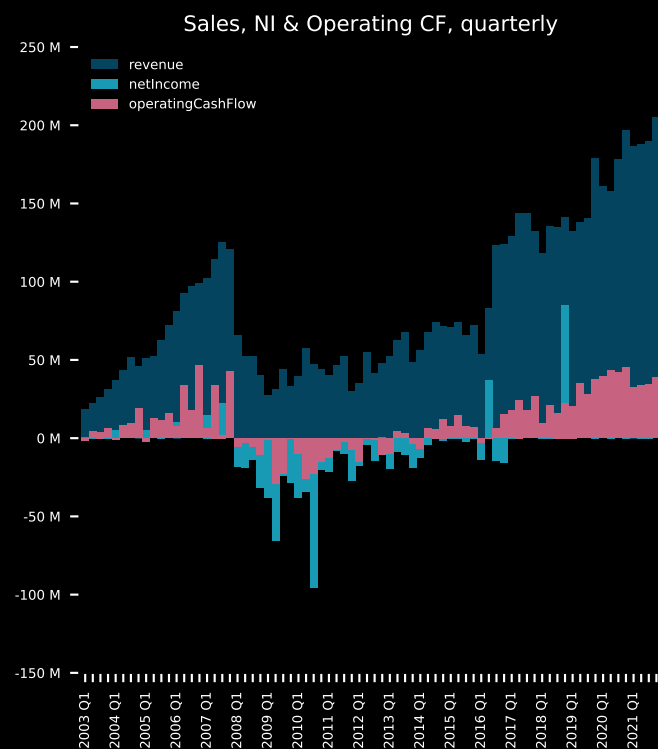
RMBS / Semiconductors / US / 2022-08-23



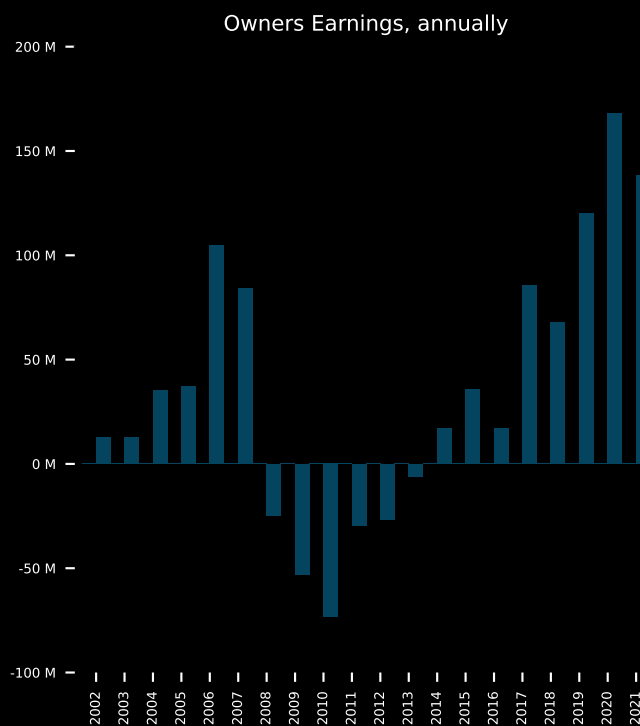
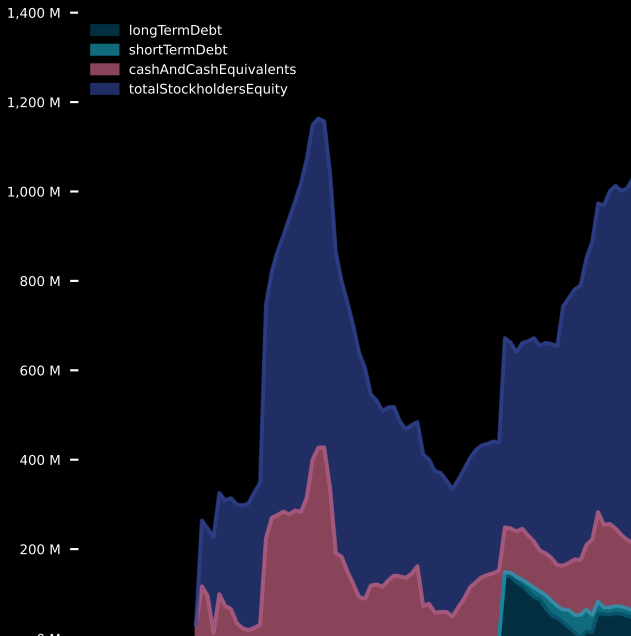
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Vishay Intertechnology, Inc. manufactures and supplies discrete semiconductors and passive electronic components in Asia, Europe, and the Americas. It operates through six segments: Metal Oxide Semiconductor Field Effect Transistors (MOSFETs), Diodes, Optoelectronic Components, Resistors, Inductors, and Capacitors. The MOSFETs segment offers low- and medium-voltage TrenchFET MOSFETs, high-voltage planar MOSFETs, high voltage Super Junction MOSFETs, power integrated circuits, and integrated function power devices. The Diodes segment provides rectifiers, small signal diodes, protection diodes, thyristors/silicon-controlled rectifiers, and power modules. The Optoelectronic Components segment contains standard and customer specific optoelectronic components, such as infrared (IR) emitters and detectors, IR remote control receivers, optocouplers, solid-state relays, optical sensors, light-emitting diodes, 7-segment displays, and IR data transceiver modules. The Resistors segment offers resistors, which are basic components used in various forms of electronic circuitry to adjust and regulate levels of voltage and current. The Inductors segment offers inductors, which are basic components used in various forms of electronic circuitry to store energy in a magnetic field.

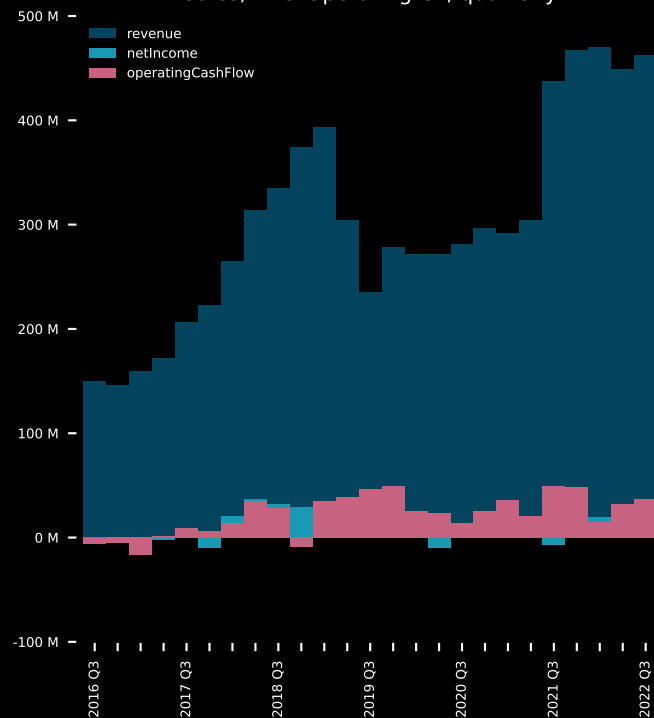


FORM / Semiconductors / US / 2022-08-22

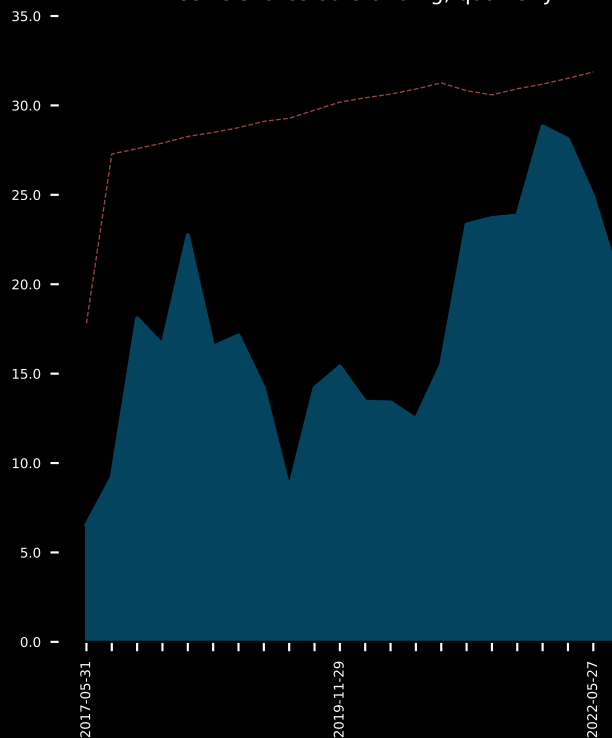


FormFactor, Inc. designs, manufactures, and sells probe cards, analytical probes, probe stations, metrology systems, thermal systems, and cryogenic systems to semiconductor companies and scientific institutions. It operates in two segments, Probe Cards and Systems. The company offers probe cards to test various semiconductor device types, including systems on a chip products, mobile application processors, microprocessors, microcontrollers, and graphic processors, as well as radio frequency, analog, mixed signal, image sensor, electro-optical, dynamic random access memory, NAND flash memory, and NOR flash memory devices; and analytical probes, which are used for a range of applications, including device characterization, electrical simulation model development, failure analysis, and prototype design debugging for universities, research institutions, semiconductor integrated device manufacturers, semiconductor foundries, and fabless semiconductor companies. It also provides probing systems for semiconductor design engineers to capture and analyze accurate data; surface metrology systems for the development, production, and distribution of semiconductor

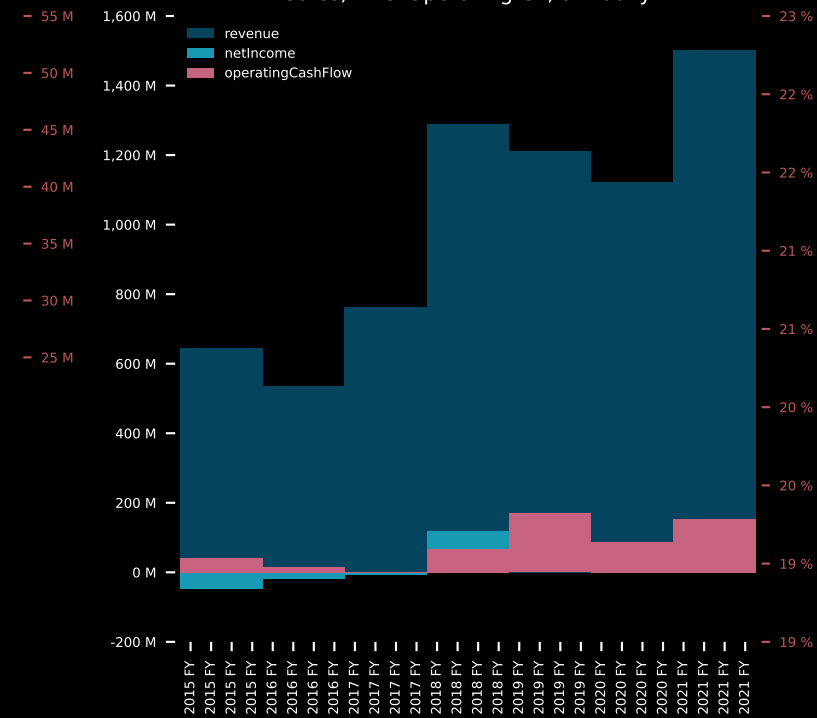
Sales, NI & Operating CF, quarterly



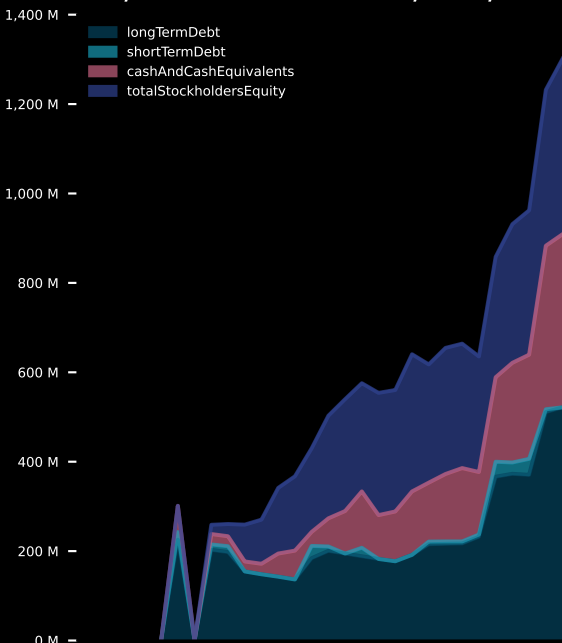
Price vs shares outstanding, quarterly



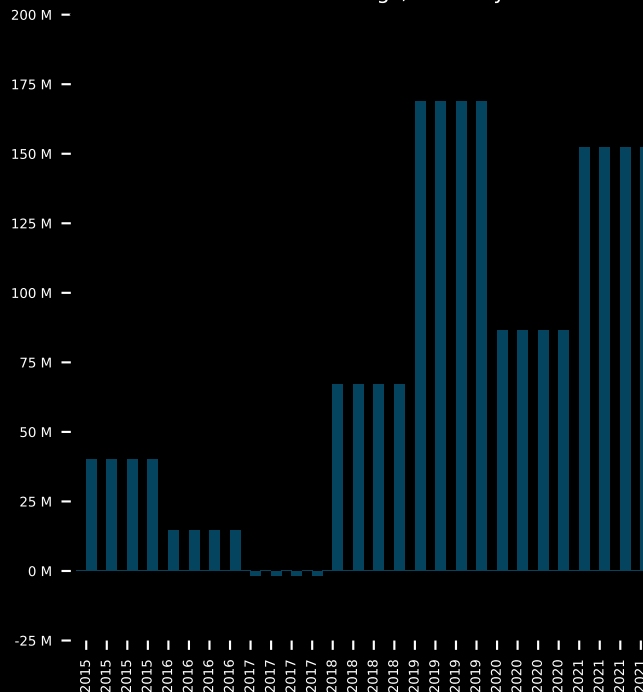
Sales, NI & Operating CF, annually



SGH / Semiconductors / US / 2022-08-23

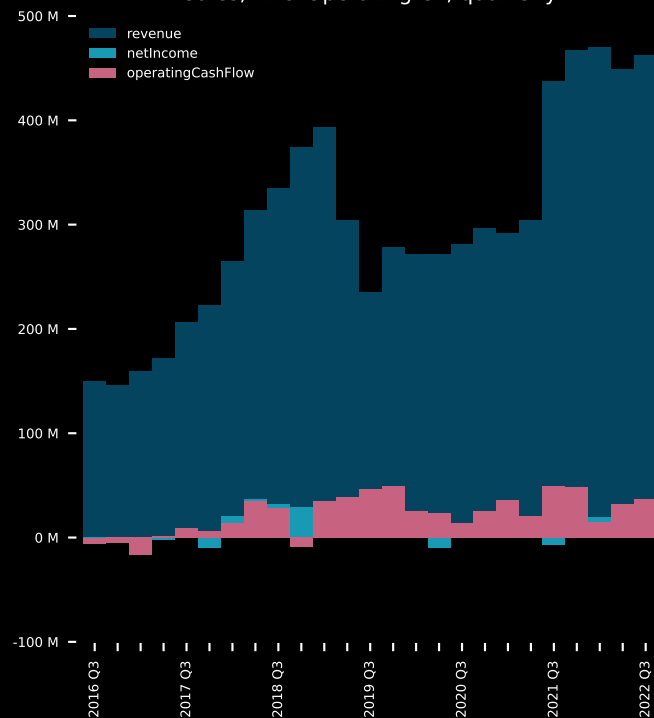


Owners Earnings, annually

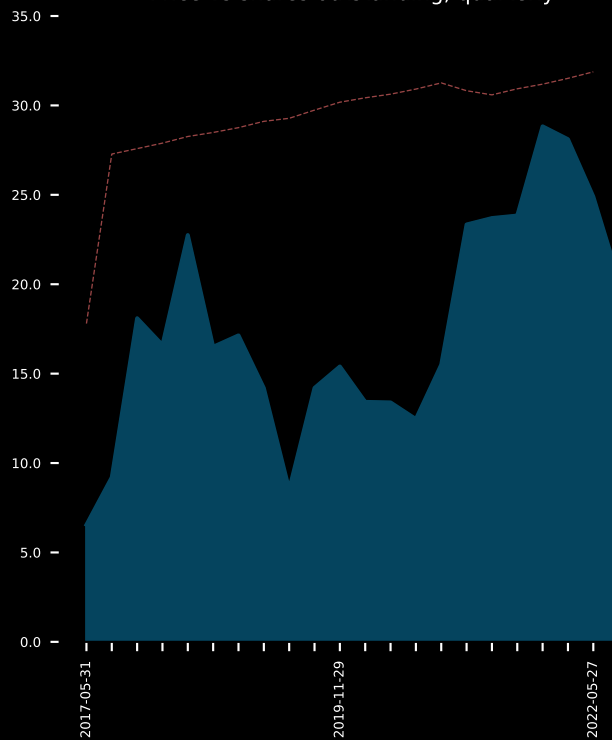


SMART Global Holdings, Inc. designs and manufactures specialty solutions for the computing, memory, and LED markets in the United States, Brazil, China, Europe, and internationally. It operates through Memory Solutions, Intelligent Platforms Solutions, and LED Solutions segments. The company offers dynamic random access memory modules for desktops, notebooks, servers, and smartphones; embedded and removable flash memory products; and flash component products. It also provides supply chain services, including procurement, logistics, inventory management, temporary warehousing, programming, kitting, and packaging. In addition, the company offers Penguin Computing solutions to customers in financial services, energy, government, social media, and education end markets; Penguin Edge solutions to government, telecommunications, health care, smart city, network edge, and industrial applications; and hardware and software products, including solutions based on the Open Compute Project. Further, it provides servers, software, integrated turn-key clusters, enterprise-grade storage, and

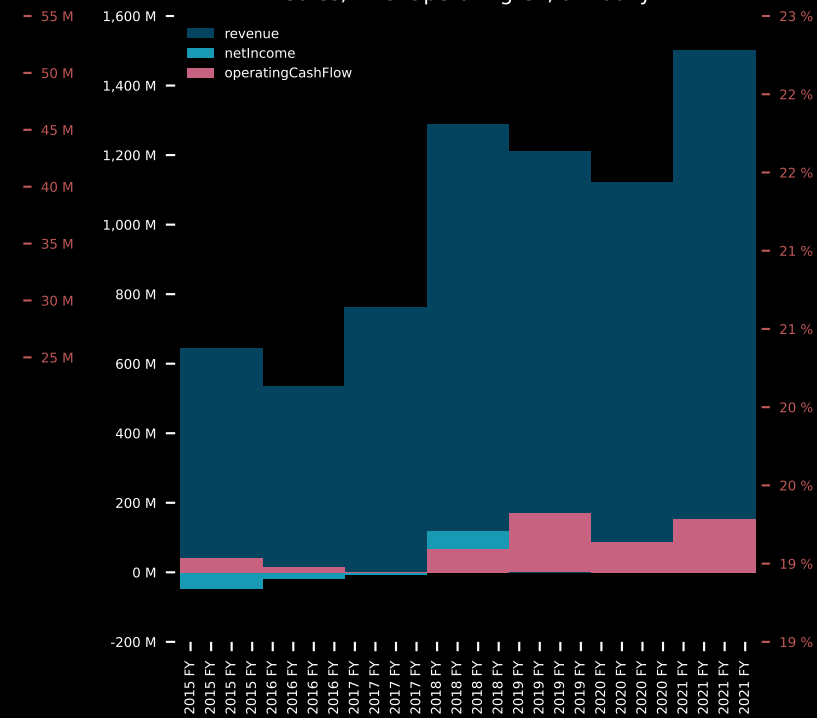
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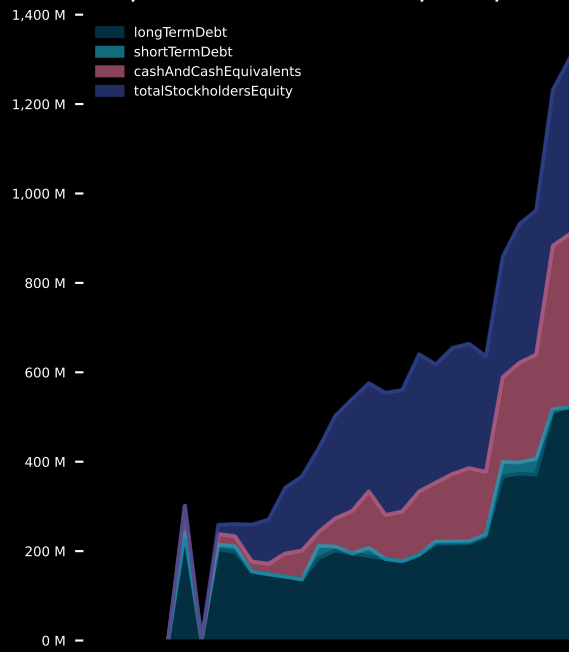
Price vs shares outstanding, quarterly



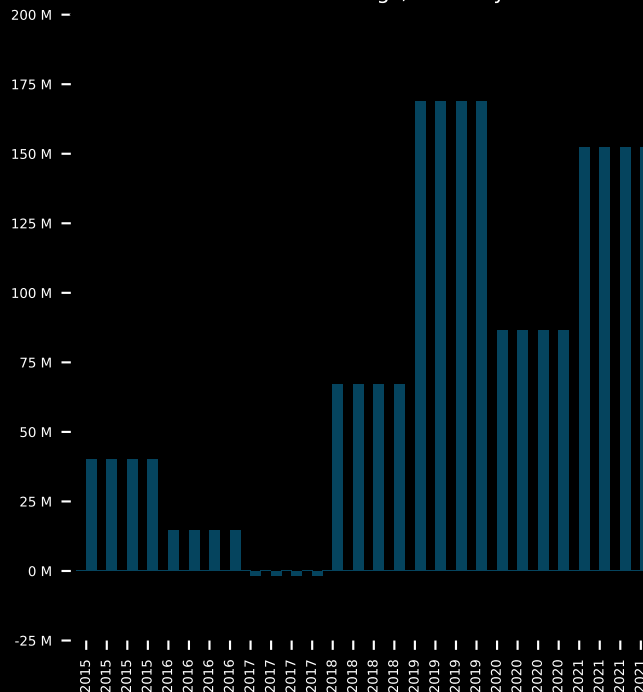
Sales, NI & Operating CF, annually



SGH / Semiconductors / US / 2022-08-23

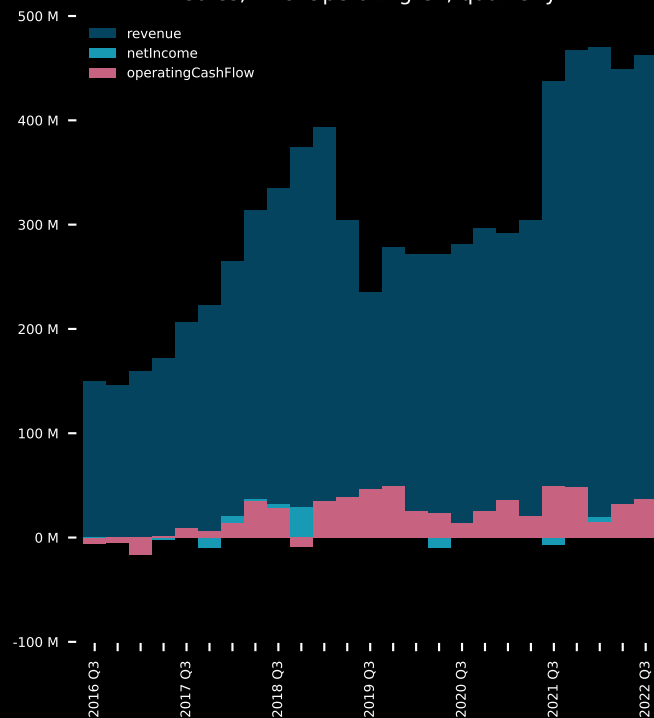


Owners Earnings, annually

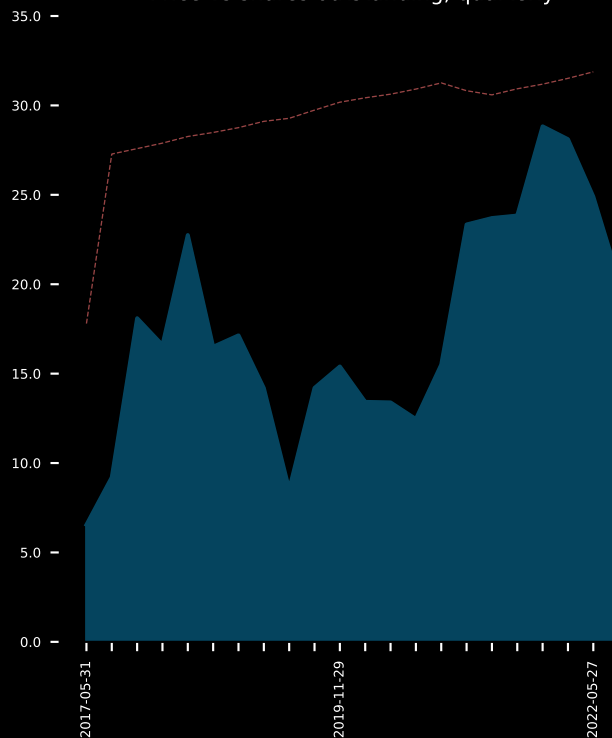


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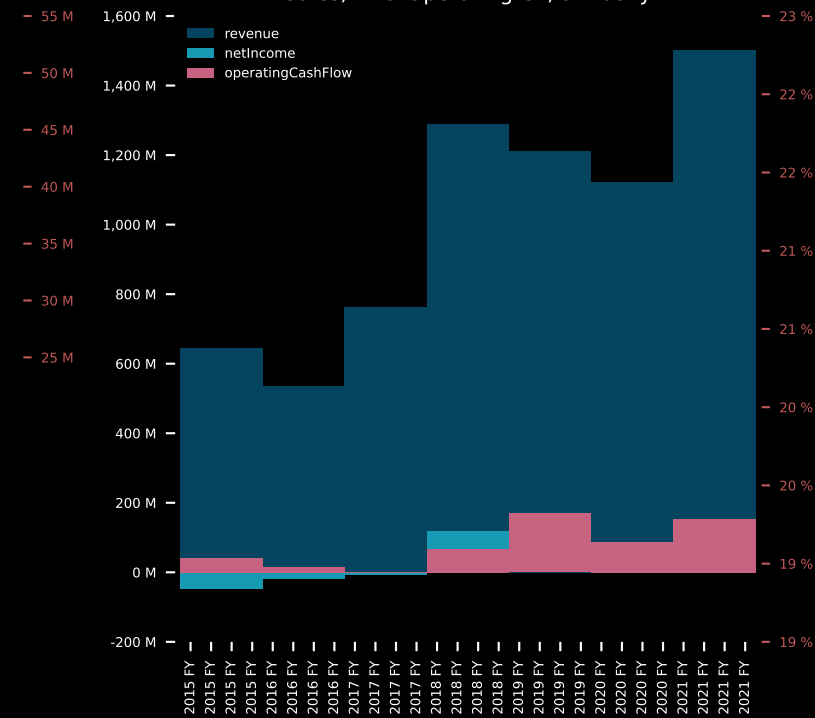
Sales, NI & Operating CF, quarterly



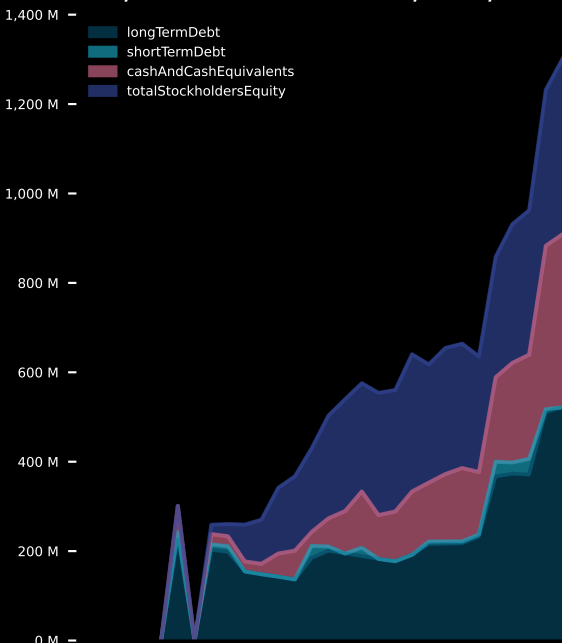
Price vs shares outstanding, quarterly



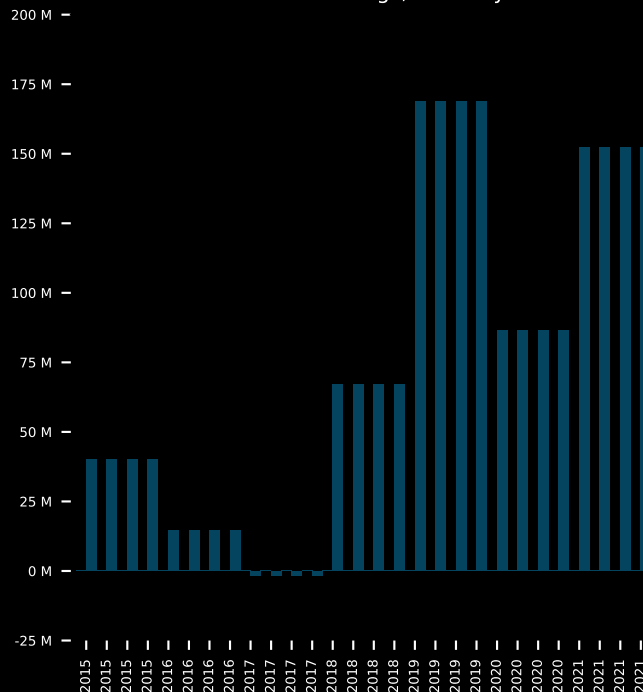
Sales, NI & Operating CF, annually



SGH / Semiconductors / US / 2022-08-23

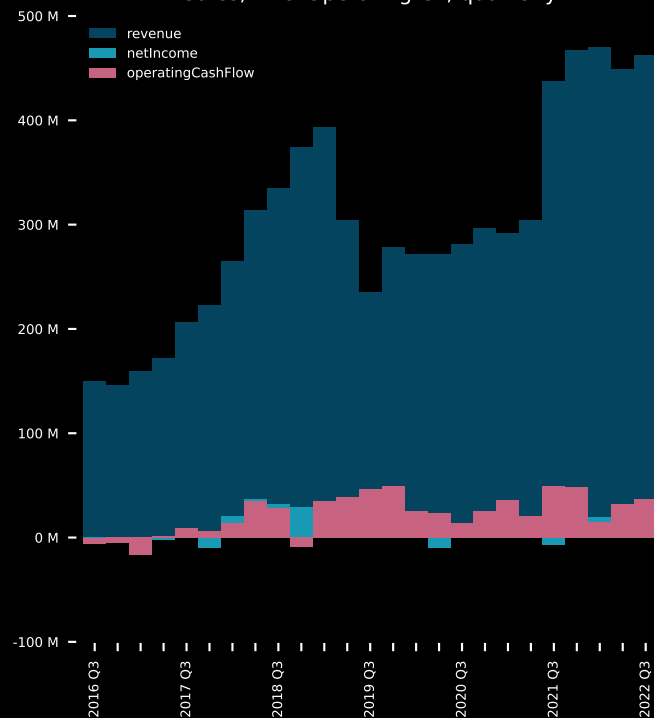


Owners Earnings, annually

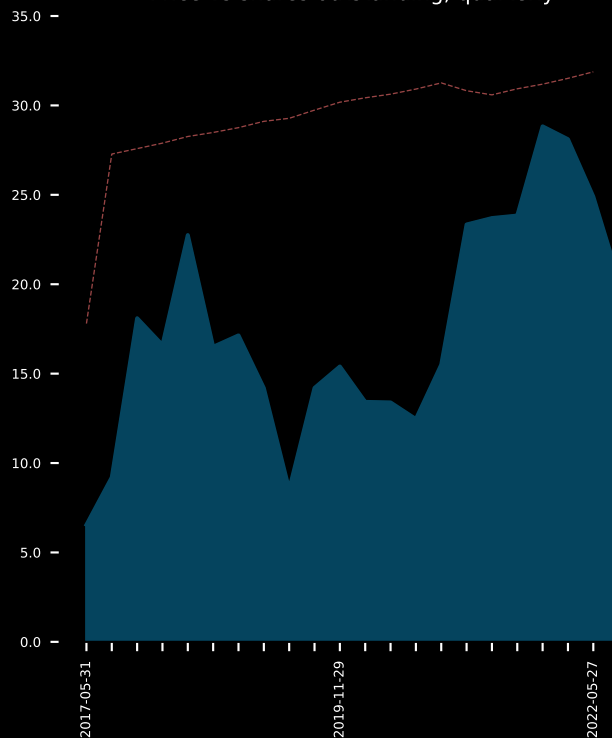


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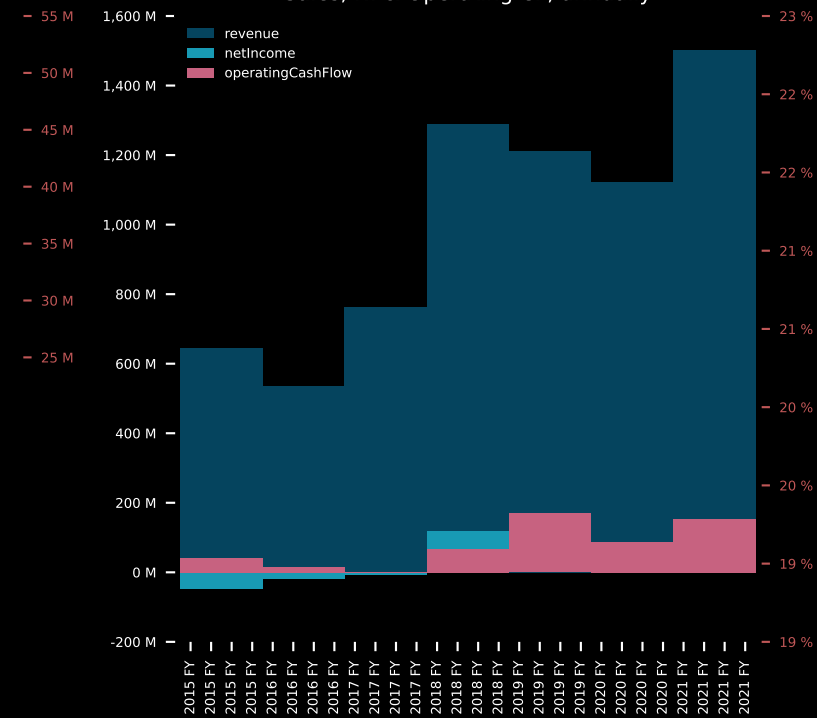
Sales, NI & Operating CF, quarterly



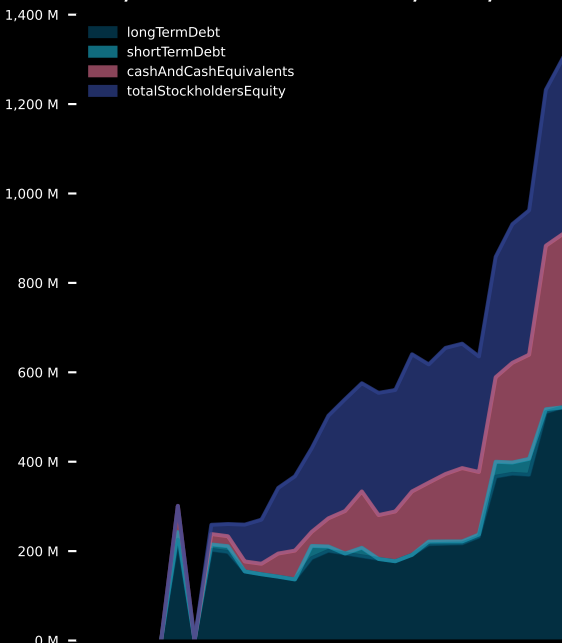
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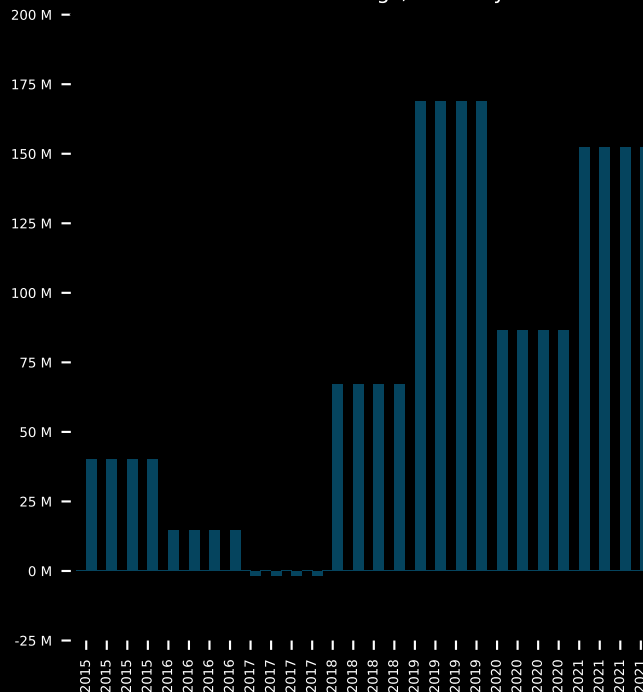
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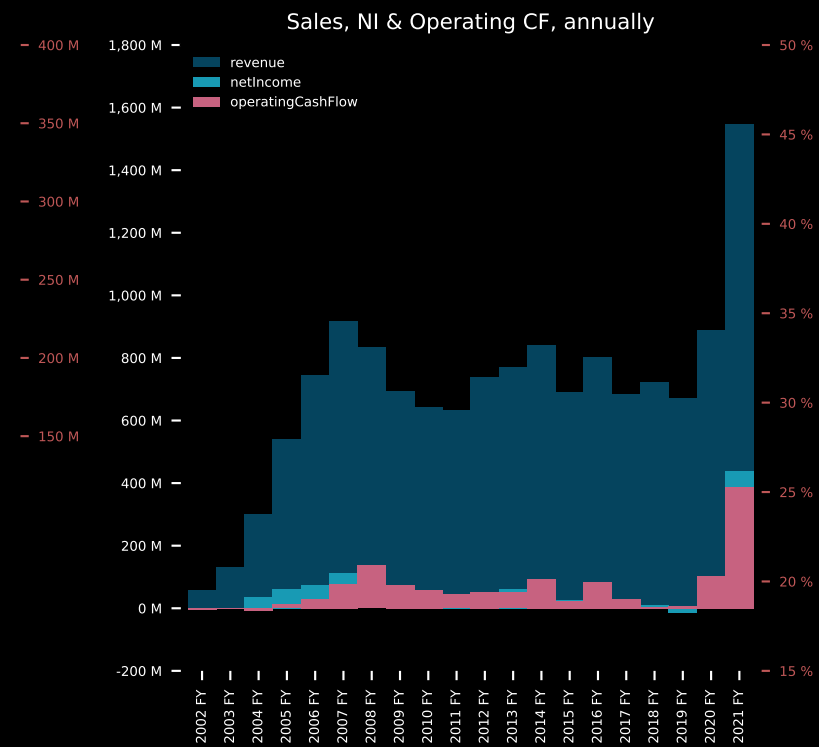
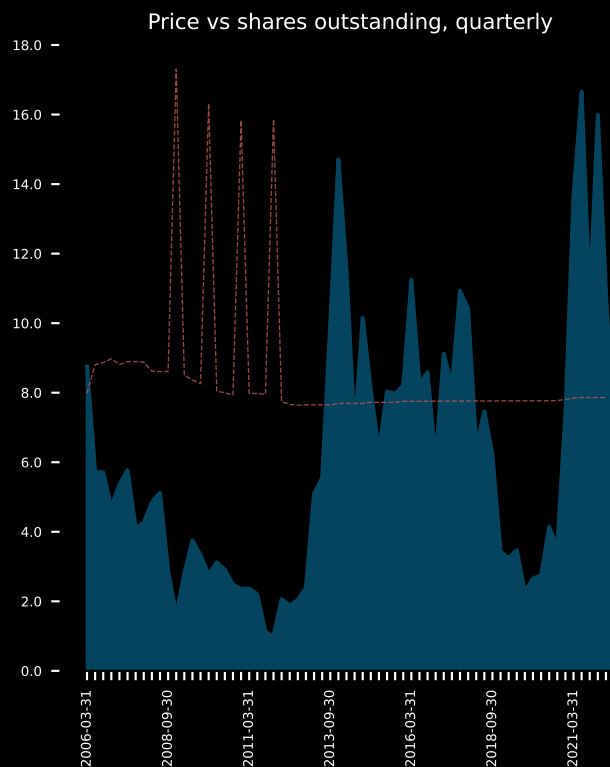
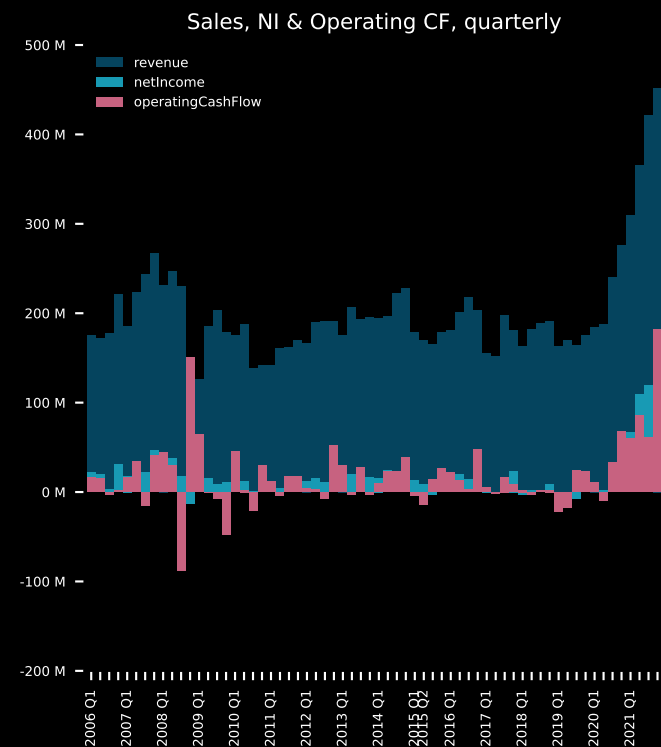
SGH / Semiconductors / US / 2022-08-23



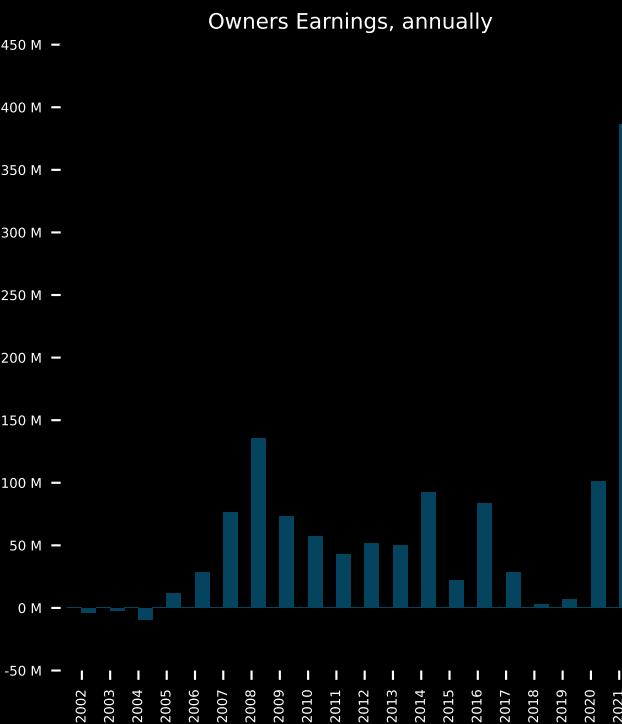
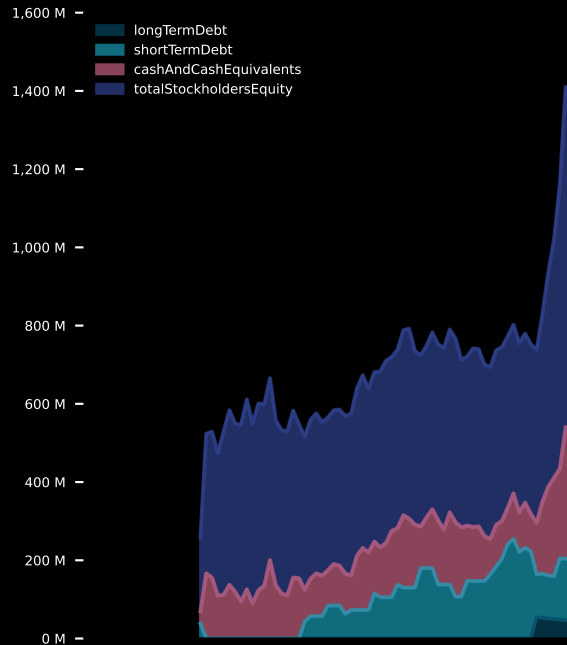
Owners Earnings, annually



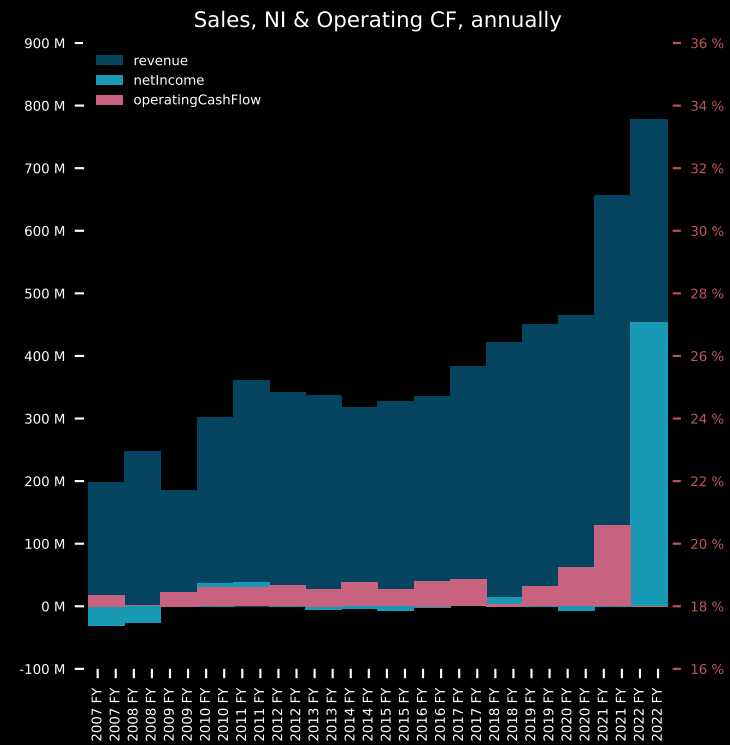
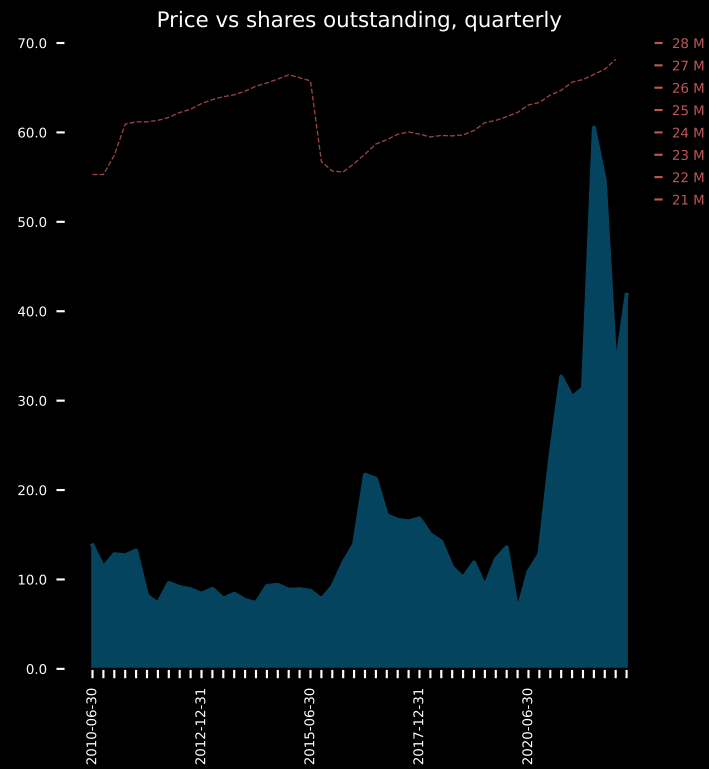
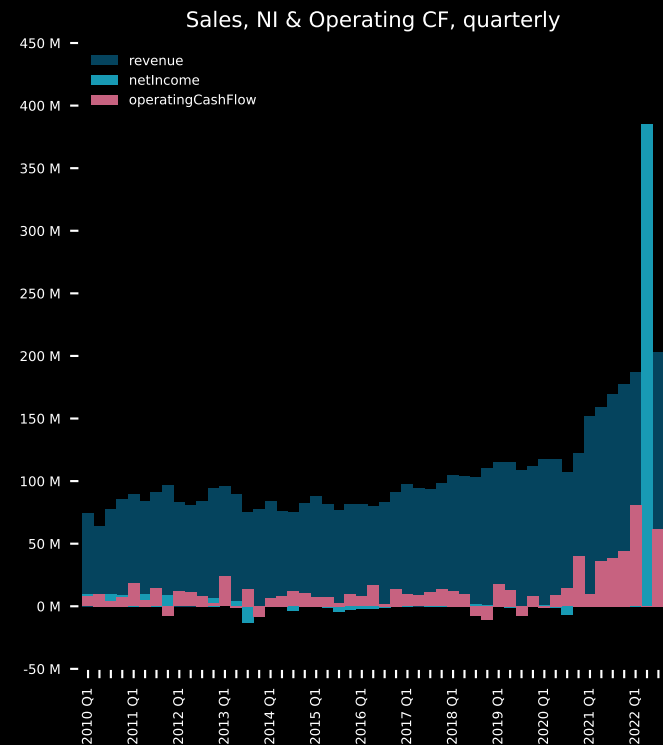
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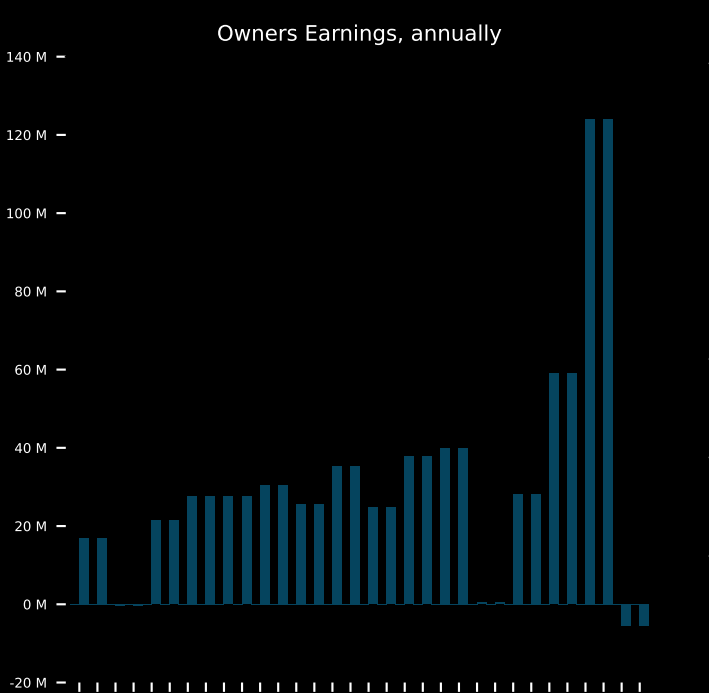
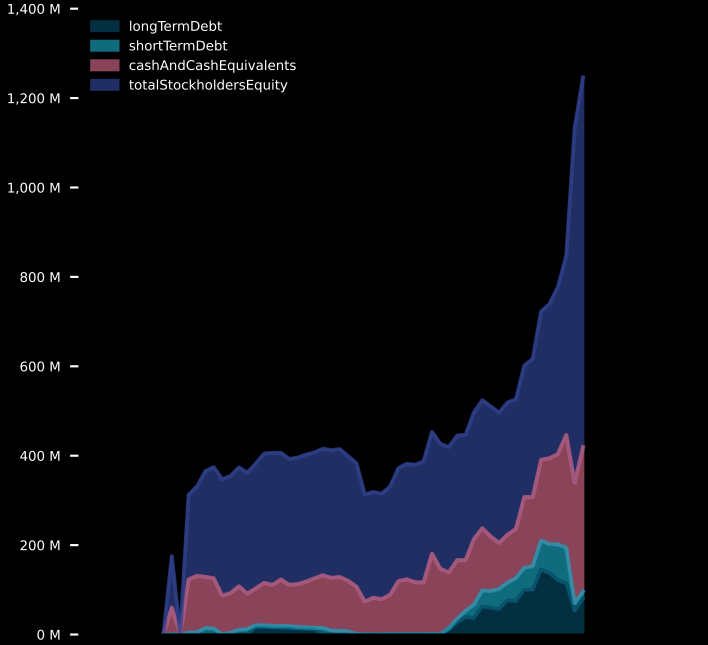
HIMX / Semiconductors / TW / 2022-08-23



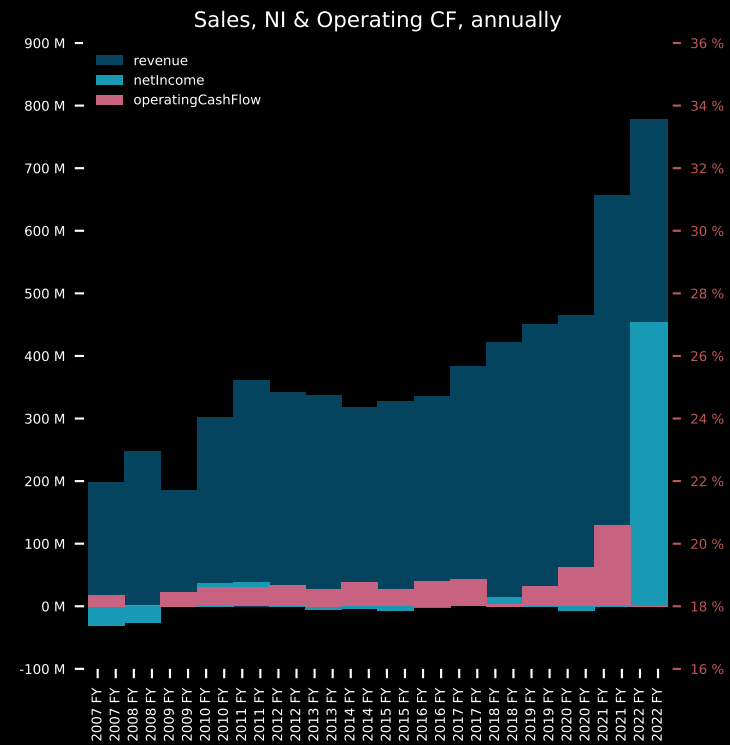
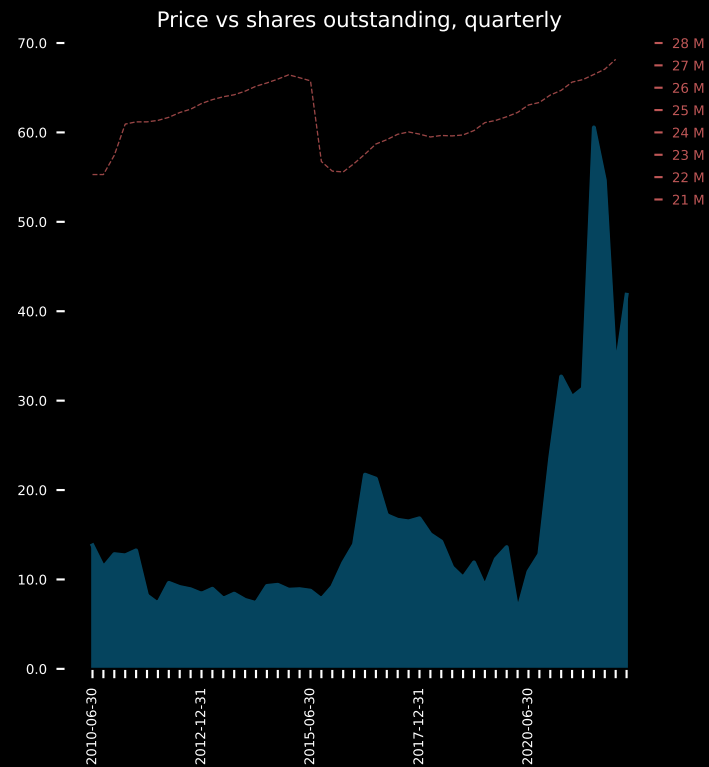
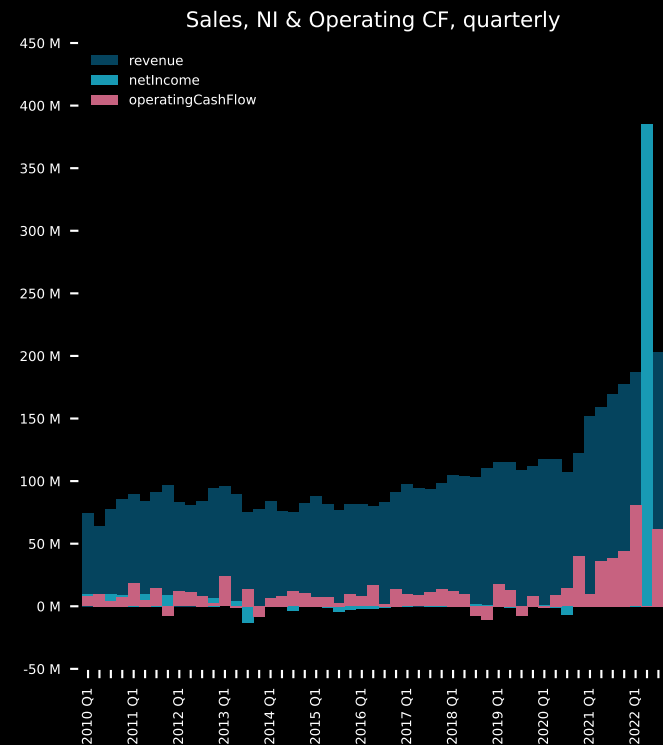
Himax Technologies, Inc., a fabless semiconductor company, provides display imaging processing technologies in China, Taiwan, the Philippines, Korea, Japan, Europe, and the United States. The company operates through two segments, Driver IC and Non-Driver Products. It offers display driver integrated circuits (ICs) and timing controllers that are used in televisions, laptops, monitors, mobile phones, tablets, automotive, digital cameras, car navigation, virtual reality devices, and other consumer electronic devices. The company also designs and provides controllers for touch sensor displays; in-cell touch and display driver integration single-chip solutions; light-emitting diode driver and power management ICs; and liquid crystal on silicon microdisplays for augmented reality (AR) devices and head-up displays for the automotive industry. In addition, it offers complementary metal-oxide-semiconductor image sensors and wafer-level optics for AR devices, 3D sensing, and ultra-low power AI image sensing, which are used in various applications, such as mobile phones, tablets, laptops, TV, PC camera, automobile, security, medical devices, and other consumer electronics. This is the



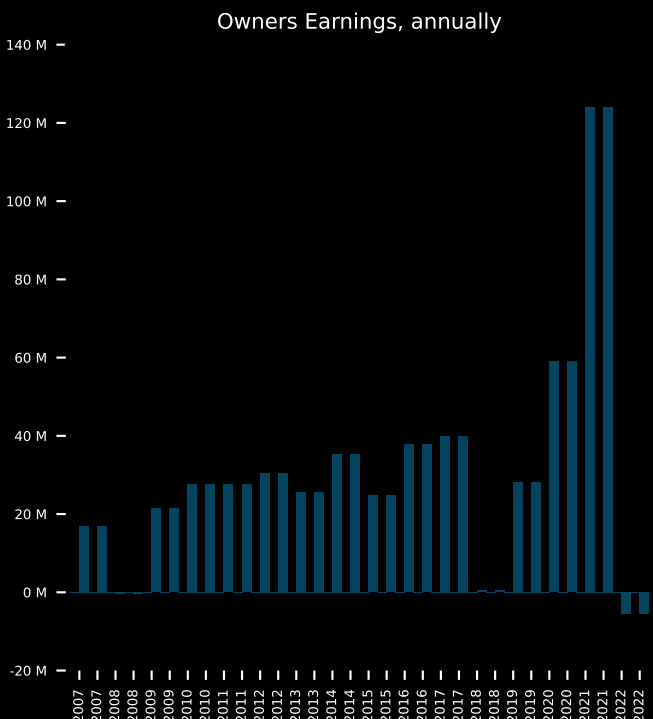
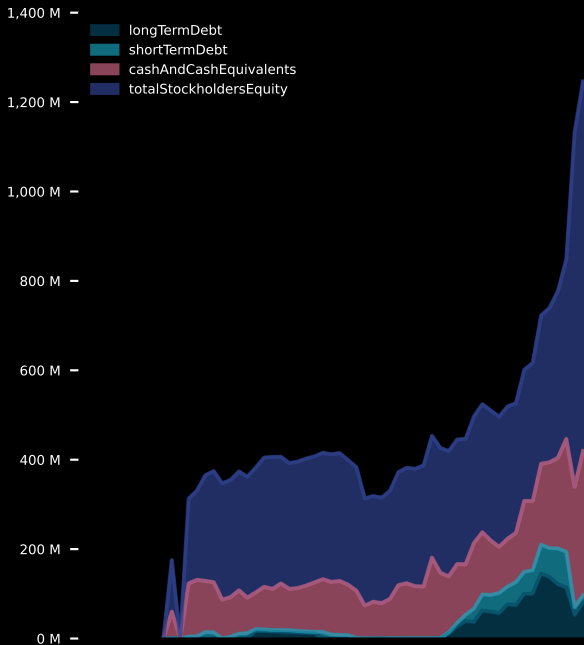
AOSL / Semiconductors / US / 2022-08-23



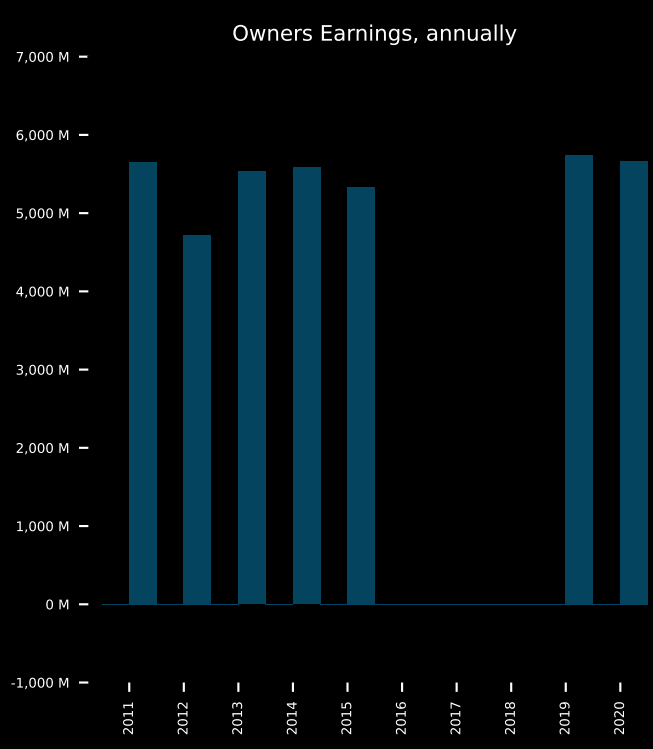
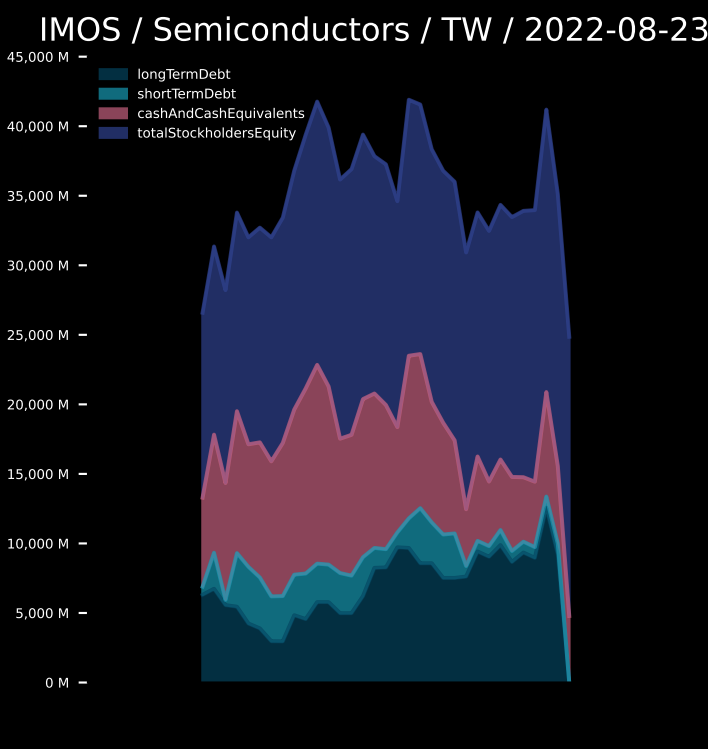
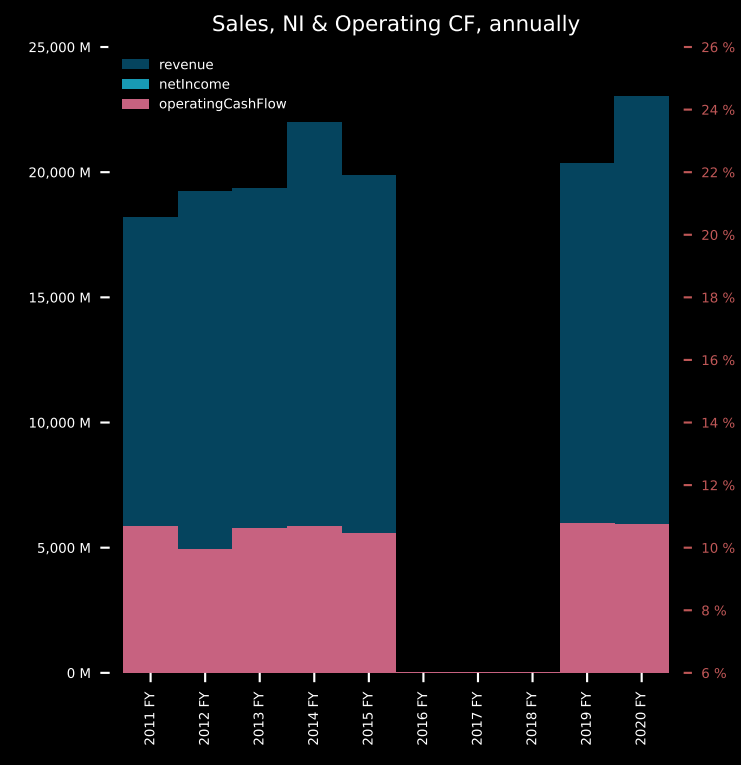
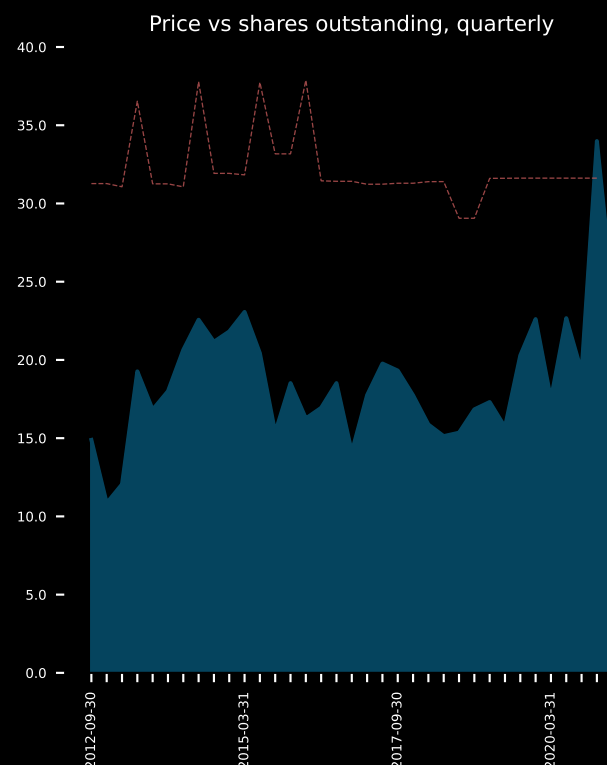
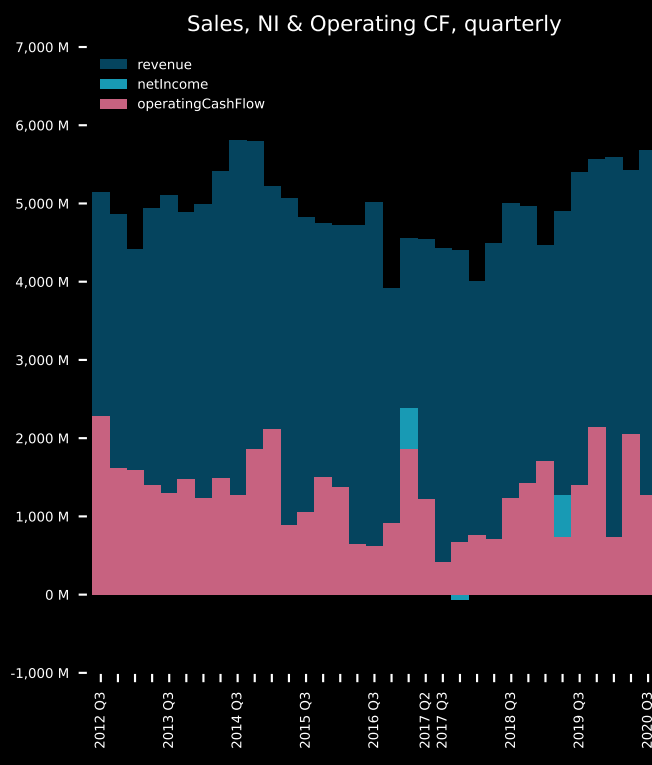
Alpha and Omega Semiconductor Limited designs, develops, and supplies power semiconductor products for computing, consumer electronics, communication, and industrial applications in Hong Kong, China, South Korea, the United States, and internationally. It offers power discrete products, including metal-oxide-semiconductor field-effect transistors (MOSFET), SRFETs, XSFET, electrostatic discharge, protected MOSFETs, high and mid-voltage MOSFETs, and insulated gate bipolar transistors for use in smart phone chargers, battery packs, notebooks, desktop and servers, data centers, base stations, graphics card, game boxes, TVs, AC adapters, power supplies, motor control, power tools, e-vehicles, white goods and industrial motor drives, UPS systems, solar inverters, and industrial welding. The company also provides power ICs that deliver power, as well as control and regulate the power management variables, such as the flow of current and level of voltage. Its power ICs are used in flat panel displays, TVs, Notebooks, graphic cards, servers, DVD/Blu-Ray players, set-top boxes, and networking equipment. In addition, the company offers aMOS5 MOSFET for industrial applications, DC



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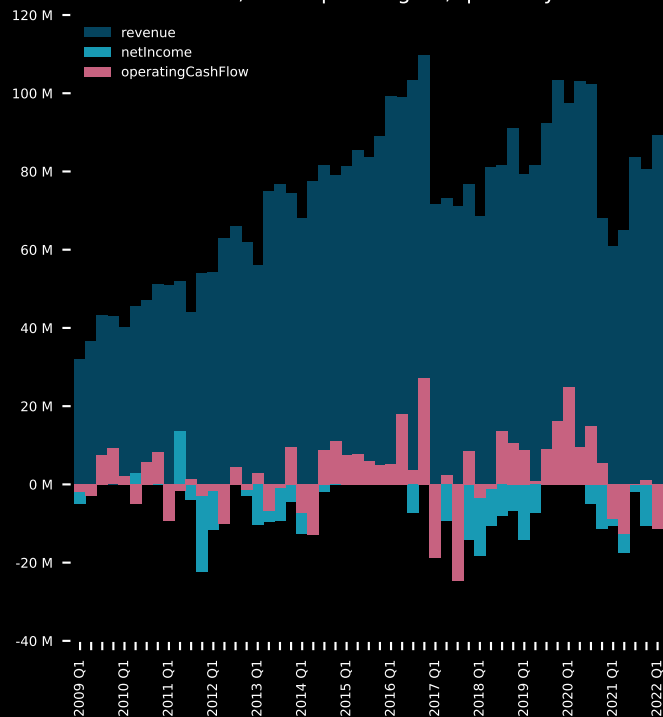


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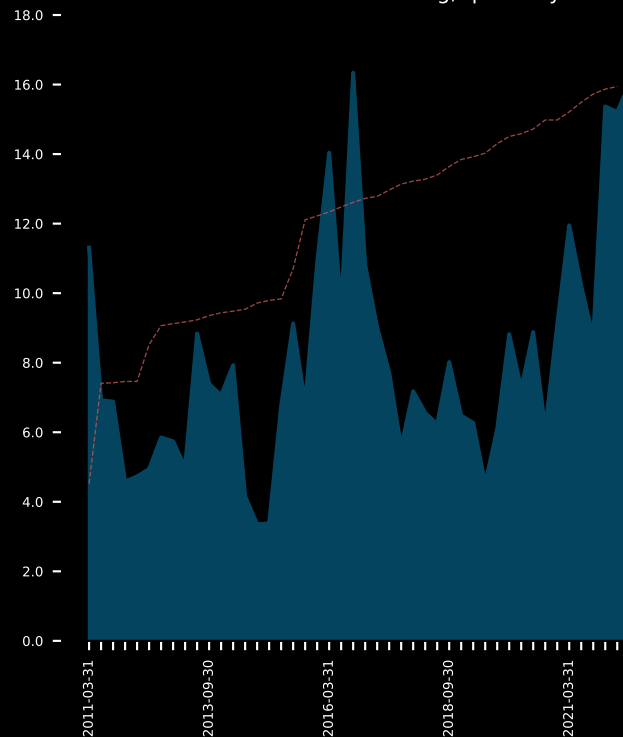


ChipMOS TECHNOLOGIES INC. engages in the research, development, manufacture, and sale of high-integration and high-precision integrated circuits, and related assembly and testing services in Taiwan, People's Republic of China, Japan, Singapore, and internationally. It operates through Testing; Assembly; Testing and Assembly for LCD, OLED and other Display Panel Driver Semiconductors; Bumping; and Other segments. The company provides a range of back-end assembly and testing services, including engineering test, wafer probing, and final test of memory and logic/mixed-signal semiconductors; and gold bumping, reel to reel assembly, and test services for LCD and other panel display driver semiconductors. Its semiconductors are used in personal computers; graphics applications, such as game consoles; communications equipment; mobile products comprising cellular handsets, tablets, and consumer electronic products; and automotive/industry and display applications, such as

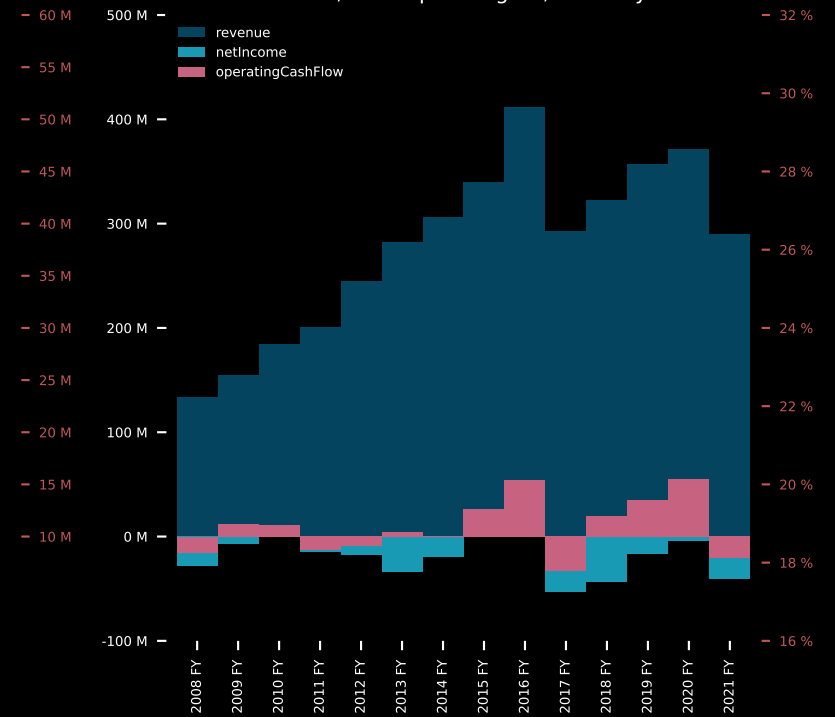
Sales, NI & Operating CF, quarterly



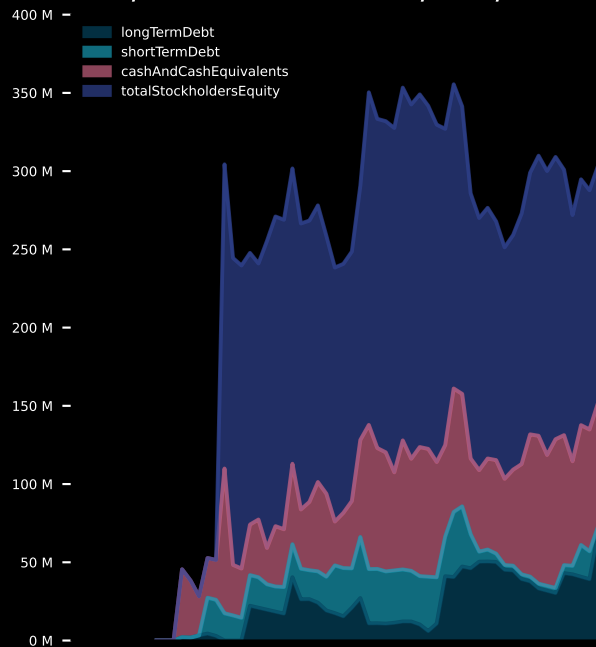
Price vs shares outstanding, quarterly



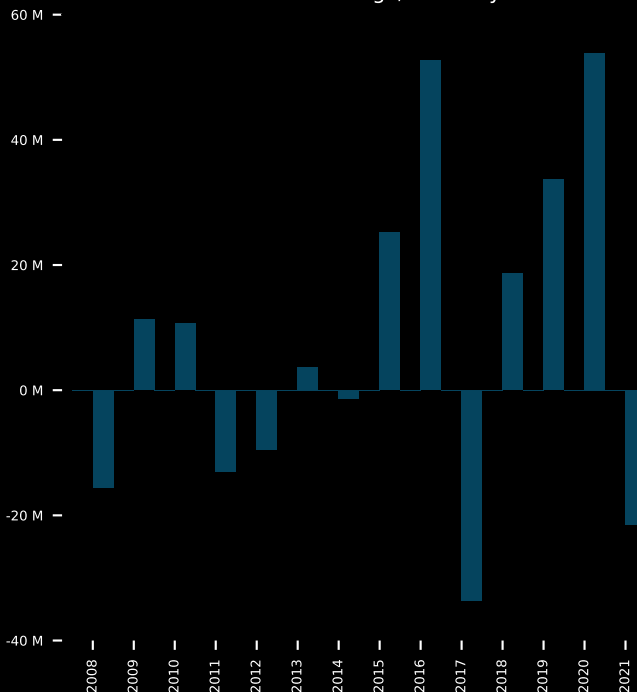
Sales, NI & Operating CF, annually



NPTN / Semiconductors / US / 2022-08-23

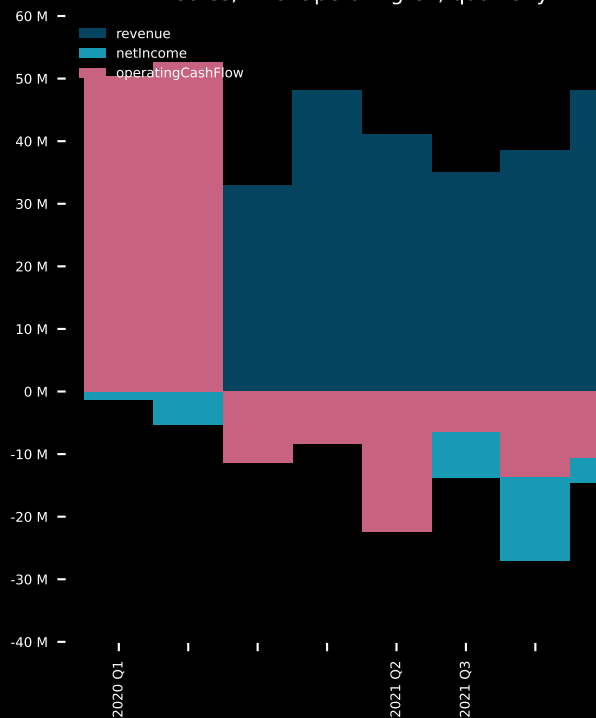


Owners Earnings, annually

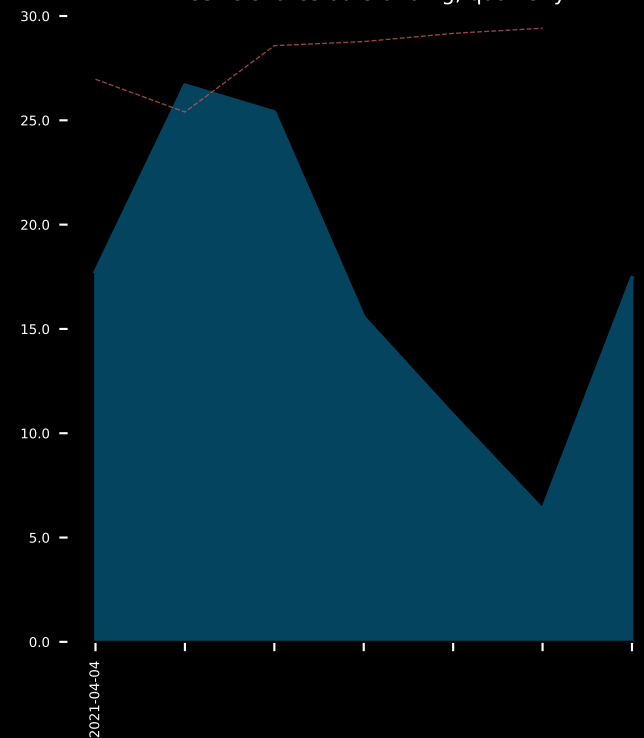


NeoPhotonics Corporation develops, manufactures, and sells optoelectronic products that transmit and receive high speed digital optical signals for cloud and hyperscale data center internet content provider and telecom networks. It offers transmitter and receiver components, and coherent modules, as well as switching products for 400G and optical transmission applications over distances of approximately 2 to 2,000 kilometers; ultra-narrow linewidth tunable lasers; electro-absorptively modulated lasers; distributed feedback lasers; component lasers; and integrated coherent receivers and modulators. The company also provides pluggable coherent transceivers that combine ultra-narrow linewidth laser with coherent receiver and performance coherent modulator; and 100G products for data center applications. In addition, it offers multi-cast switching solutions for 100G and above coherent systems; and network products and solutions, such as arrayed waveguide gratings, multiplexers, and filters that are used in dense wavelength division multiplexing systems. NeoPhotonics Corporation sells its products to network equipment manufacturers through a direct sales force in North America, Europe, and Asia.

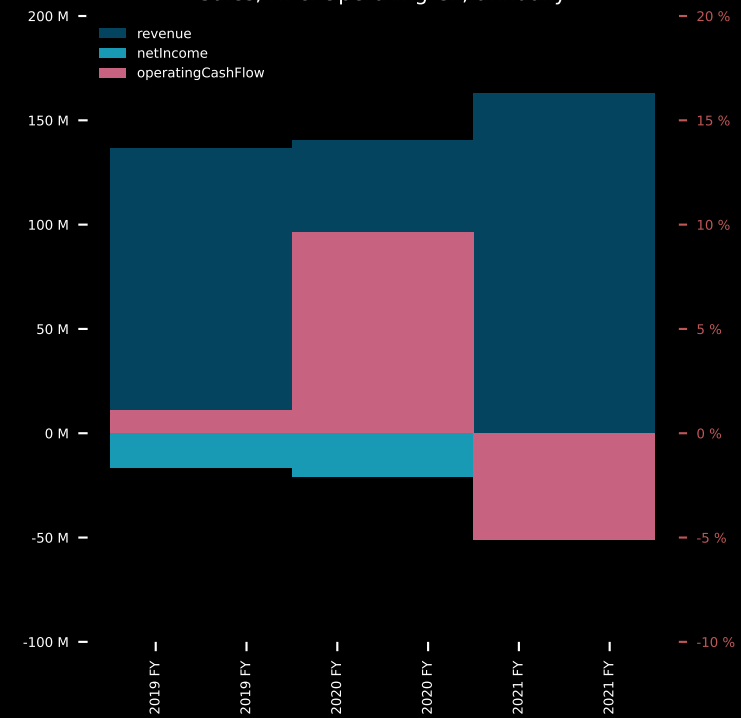
Sales, NI & Operating CF, quarterly



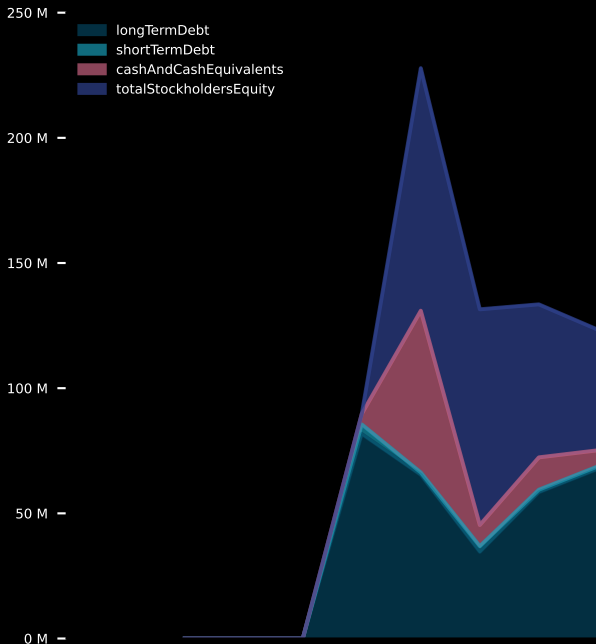
Price vs shares outstanding, quarterly



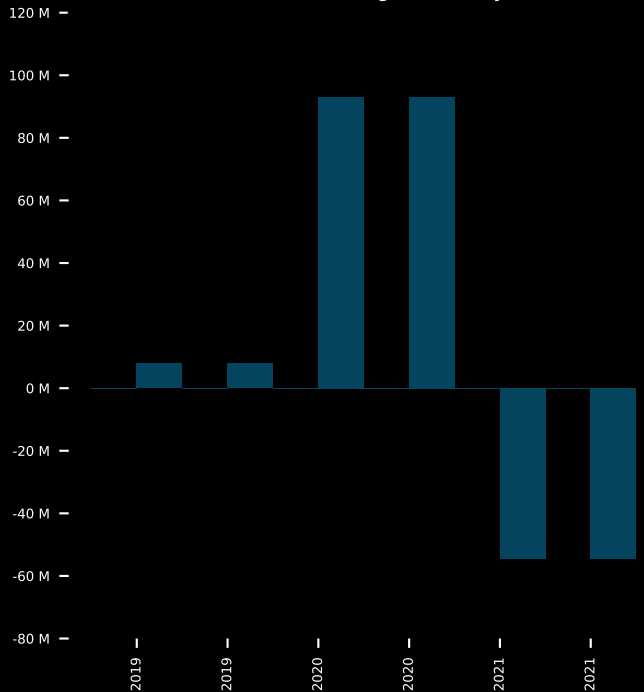
Sales, NI & Operating CF, annually



SKYT / Semiconductors / US / 2022-08-23

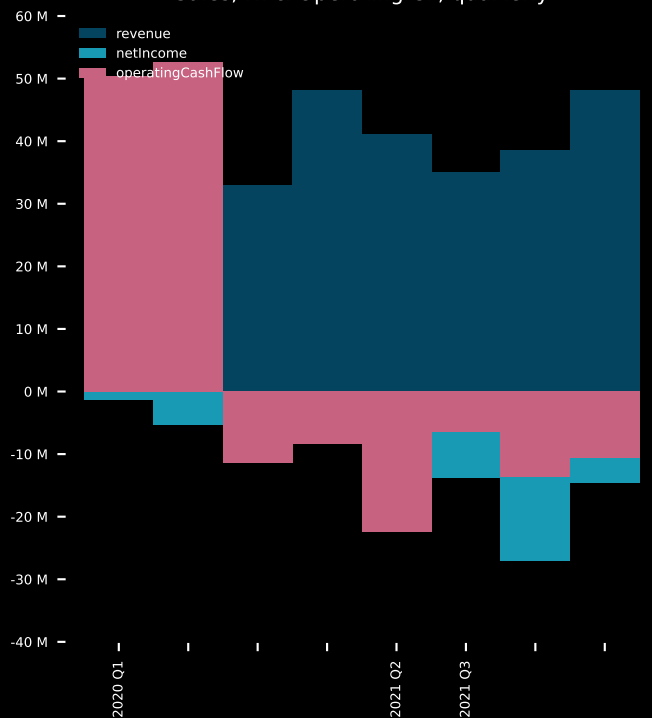


Owners Earnings, annually

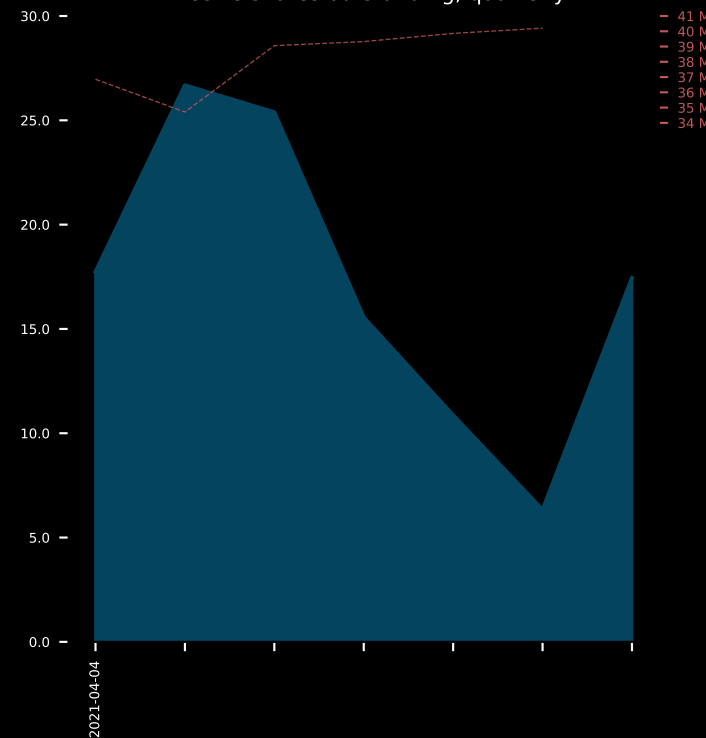


SkyWater Technology, Inc., together with its subsidiaries, provides semiconductor development and manufacturing services. The company offers engineering and process development support services to co-create technologies with customers; and semiconductor manufacturing services for various silicon-based analog and mixed-signal, power discrete, microelectromechanical systems, and rad-hard integrated circuits. It serves customers operating in the computation, aerospace and defense, automotive and transportation, bio-health, consumer, and industrial/internet of things industries. The company was incorporated in 2017 and is headquartered in Bloomington, Minnesota.

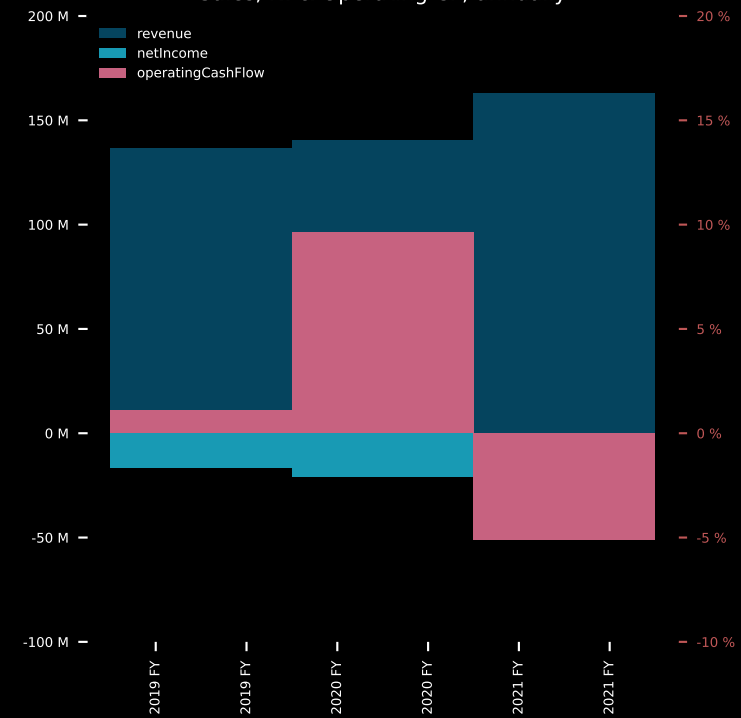
Sales, NI & Operating CF, quarterly



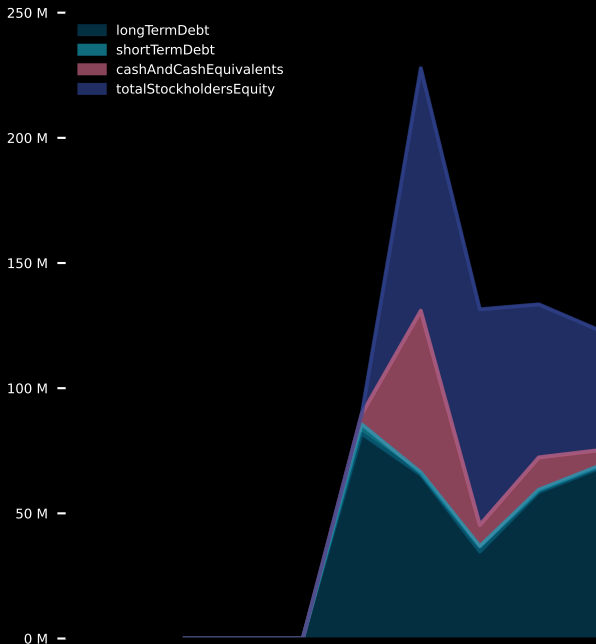
Price vs shares outstanding, quarterly



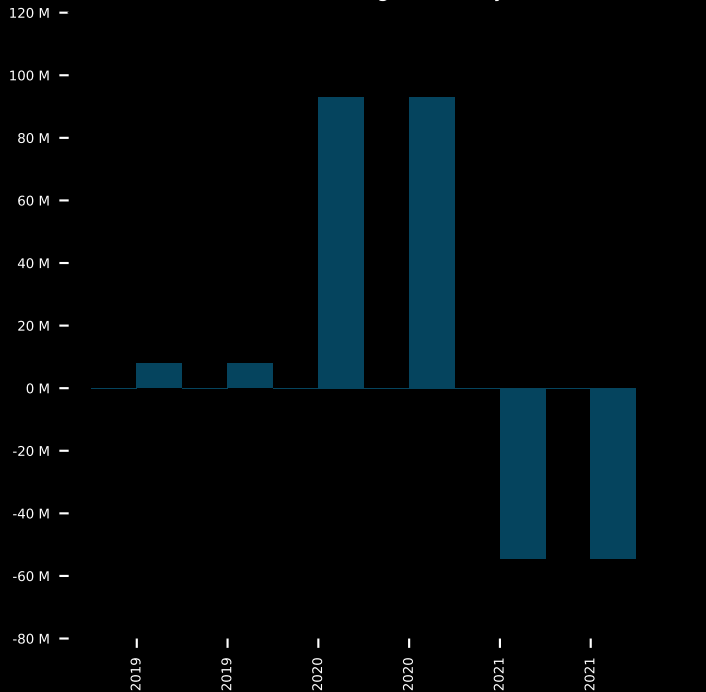
Sales, NI & Operating CF, annually



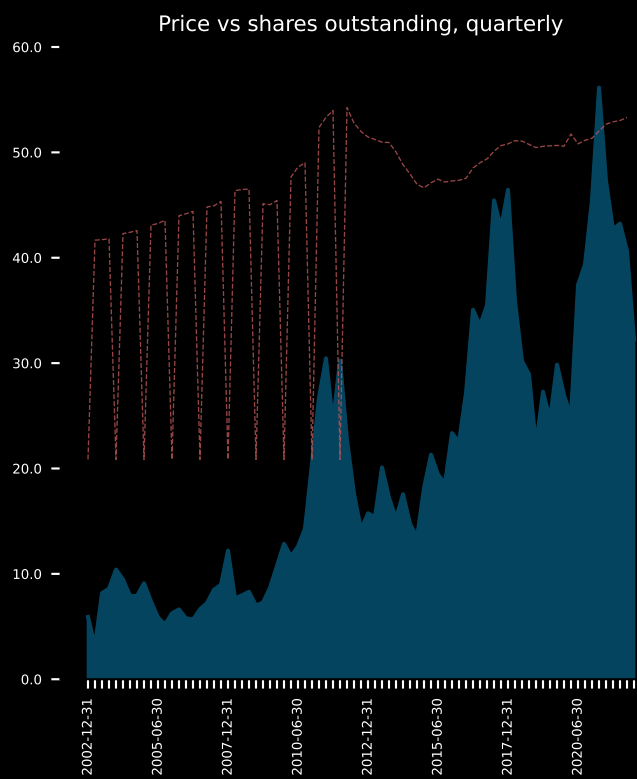
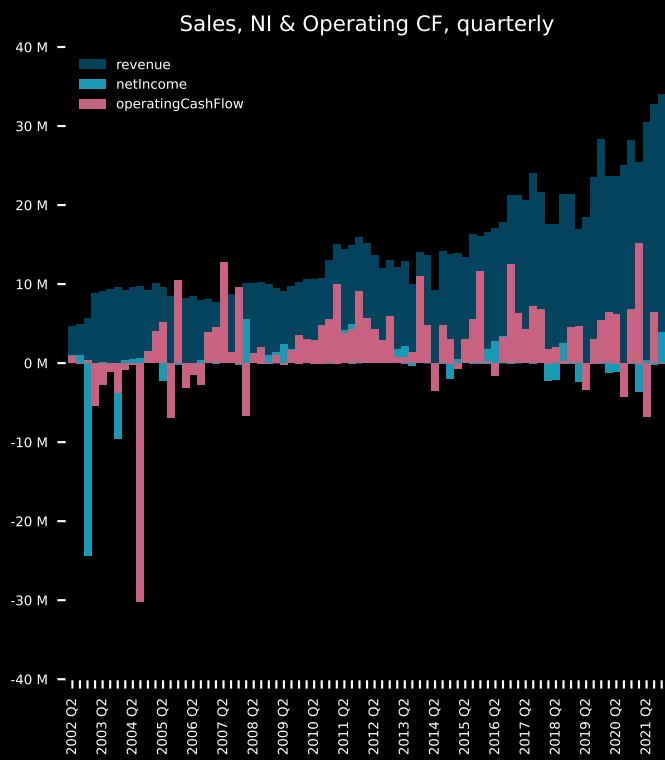
SKYT / Semiconductors / US / 2022-08-23



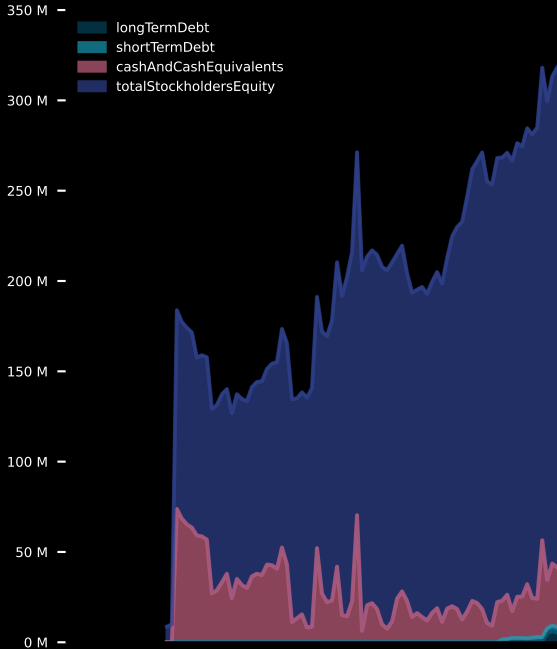
Owners Earnings, annually



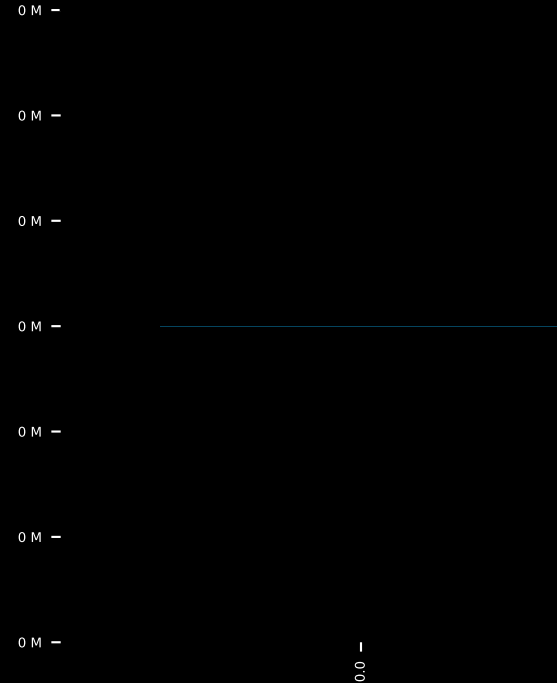
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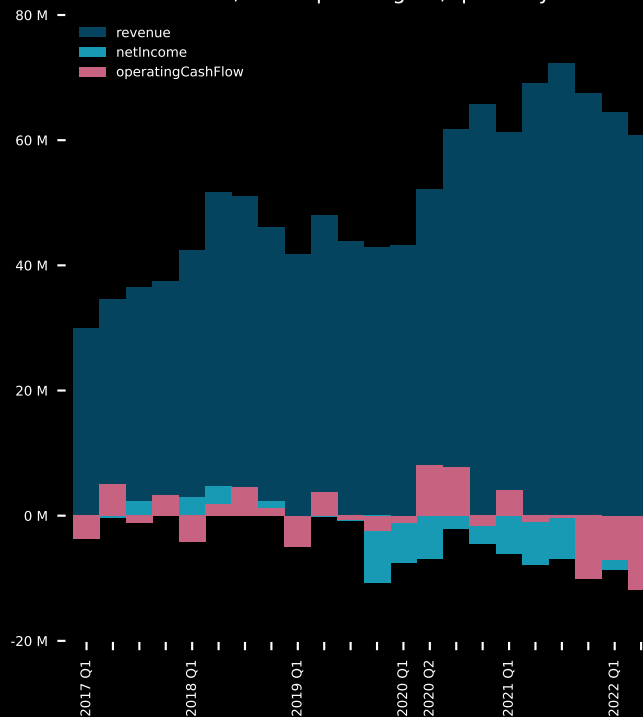
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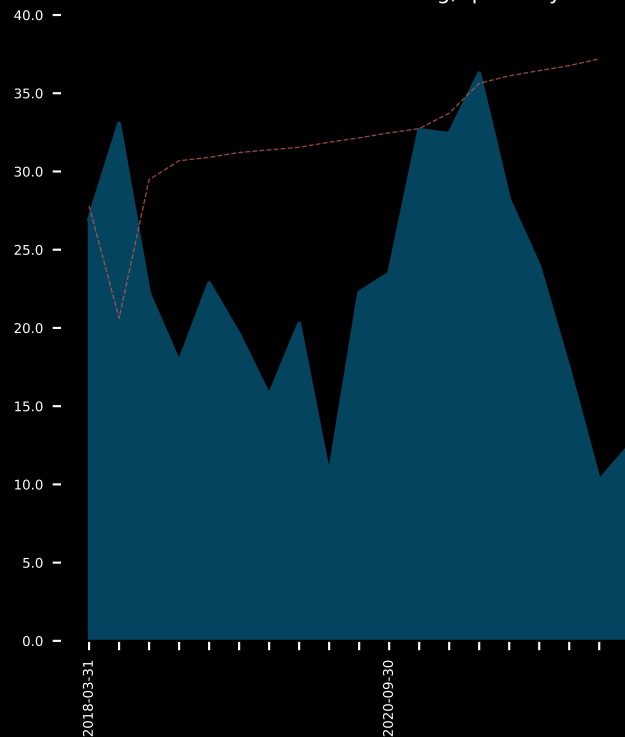
Owners Earnings, annually



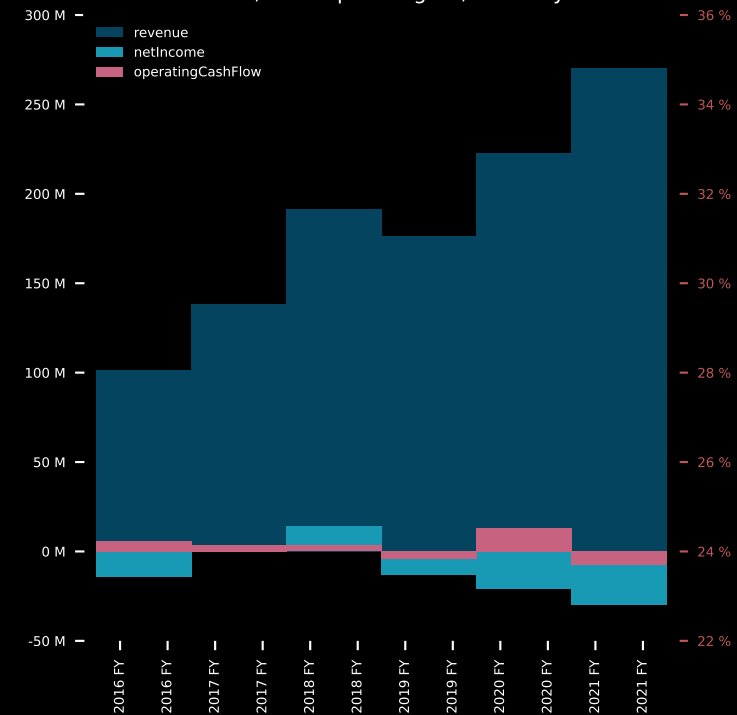
Sales, NI & Operating CF, quarterly



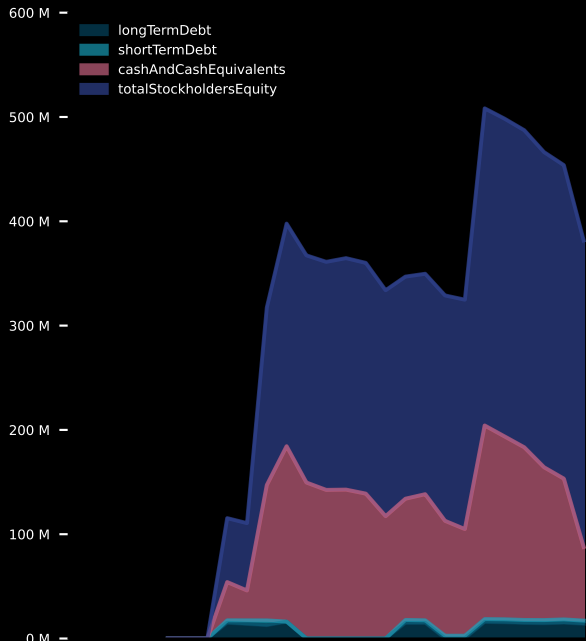
Price vs shares outstanding, quarterly



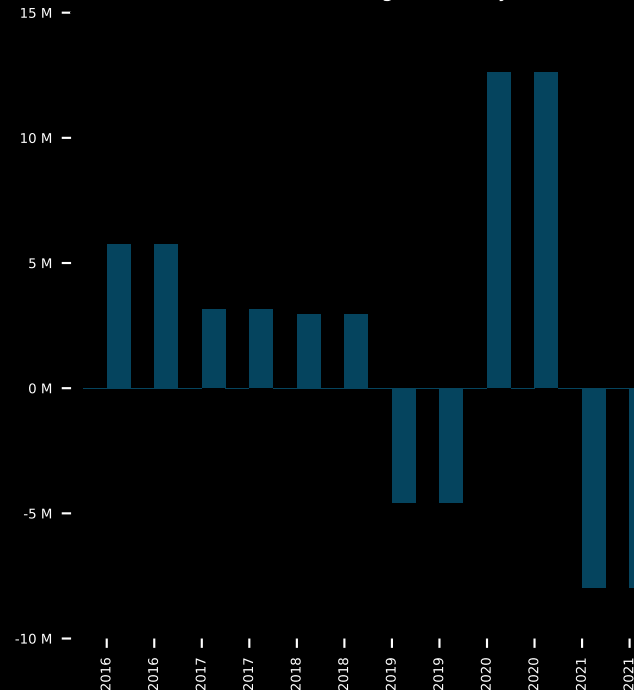
Sales, NI & Operating CF, annually



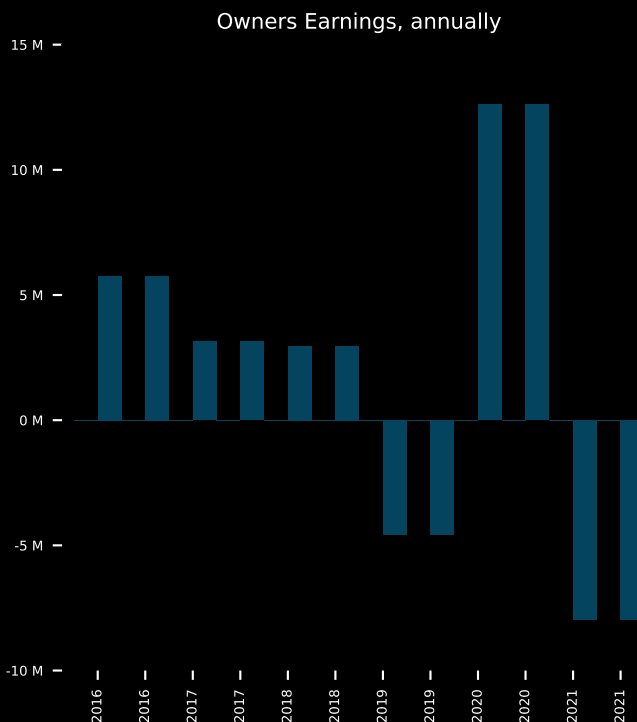
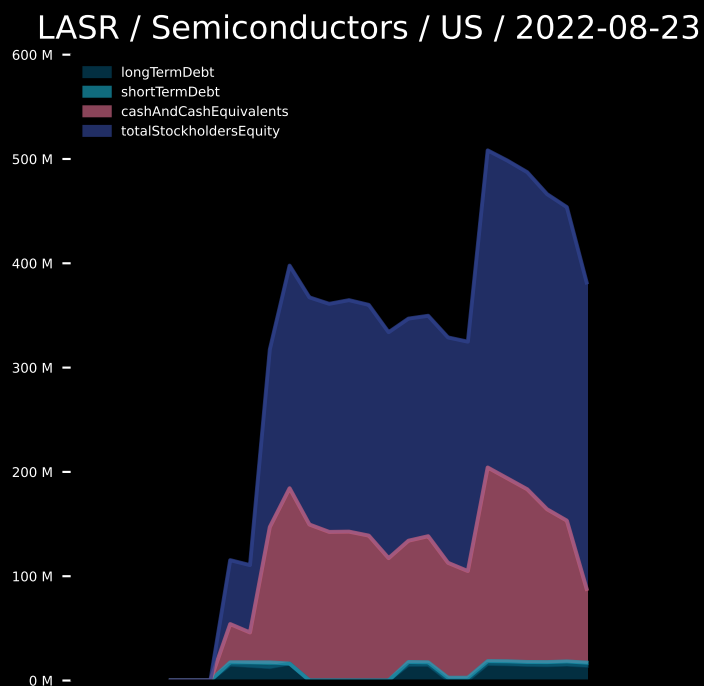
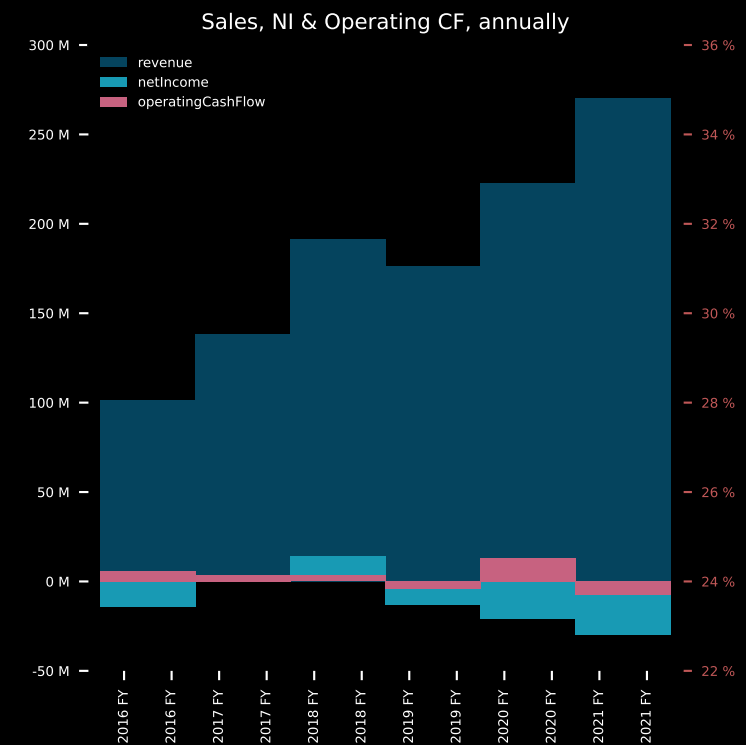
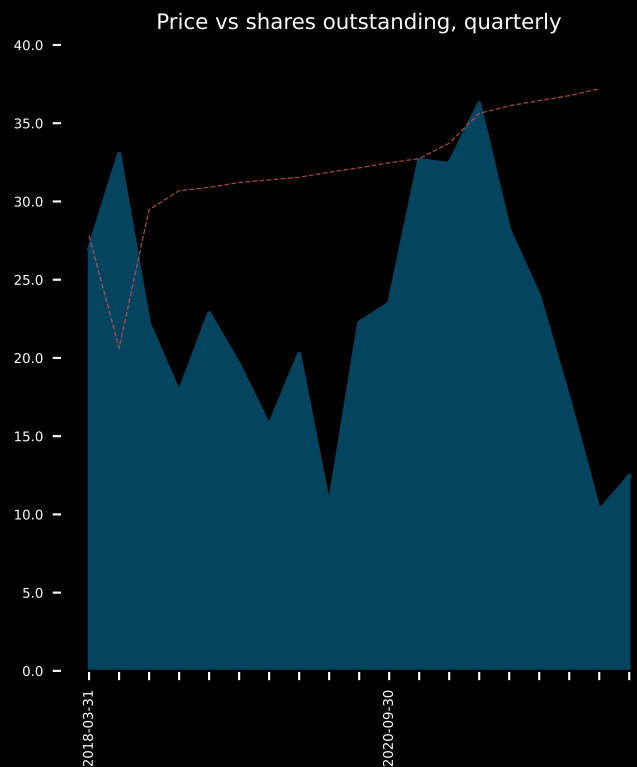
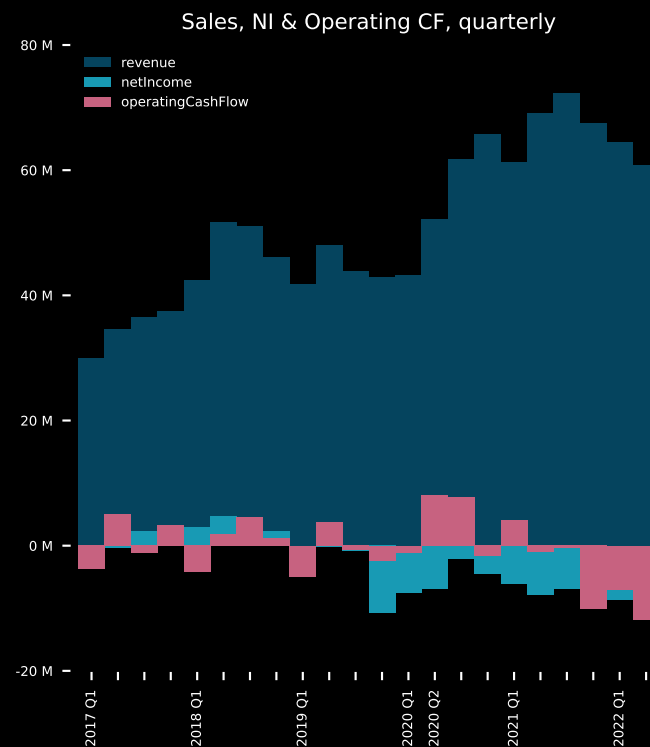
LASR / Semiconductors / US / 2022-08-23



Owners Earnings, annually

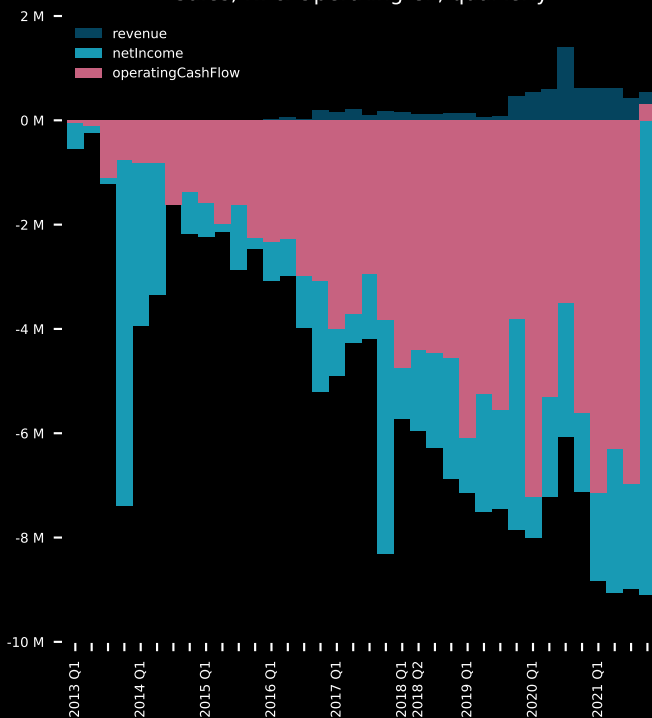


nLIGHT, Inc. designs, manufactures, and sells semiconductor and fiber lasers for industrial, microfabrication, and aerospace and defense applications. It operates in two segments, Laser Products and Advanced Development. The company also provides fiber amplifiers, and beam combination and control systems for use in high-energy laser systems in directed energy applications. It sells its products through direct sales force in the United States, China, South Korea, and European countries, as well as through various independent sales representatives and distributors in Asia, Europe, and South America. The company was formerly known as nLight Photonics Corporation and changed its name to nLIGHT, Inc. in January 2016. nLIGHT, Inc. was incorporated in 2000 and is headquartered in Camas, Washington.

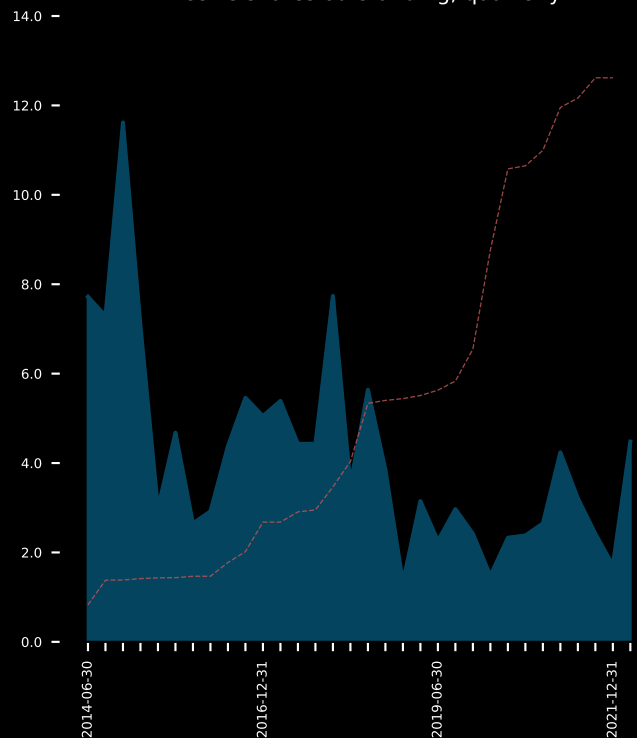


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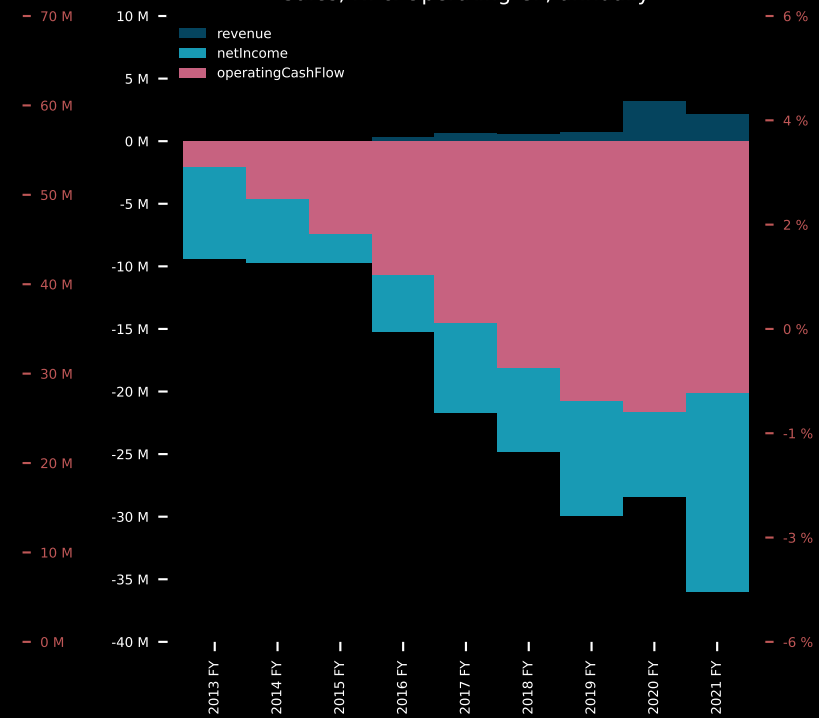
Sales, NI & Operating CF, quarterly



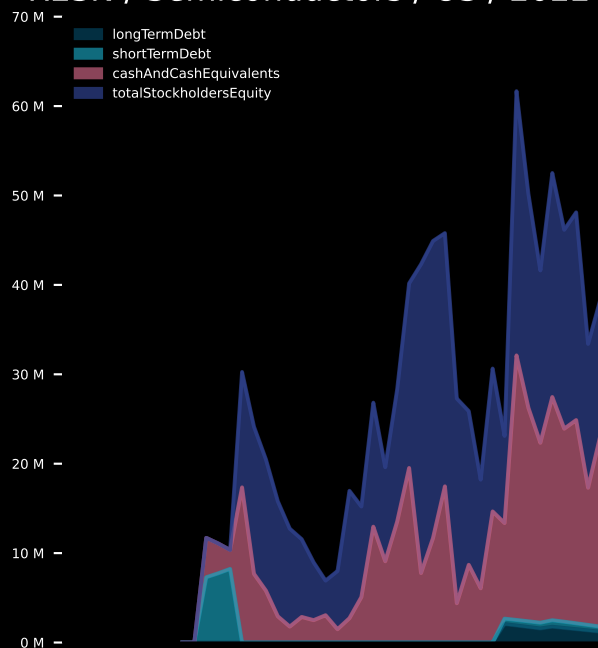
Price vs shares outstanding, quarterly



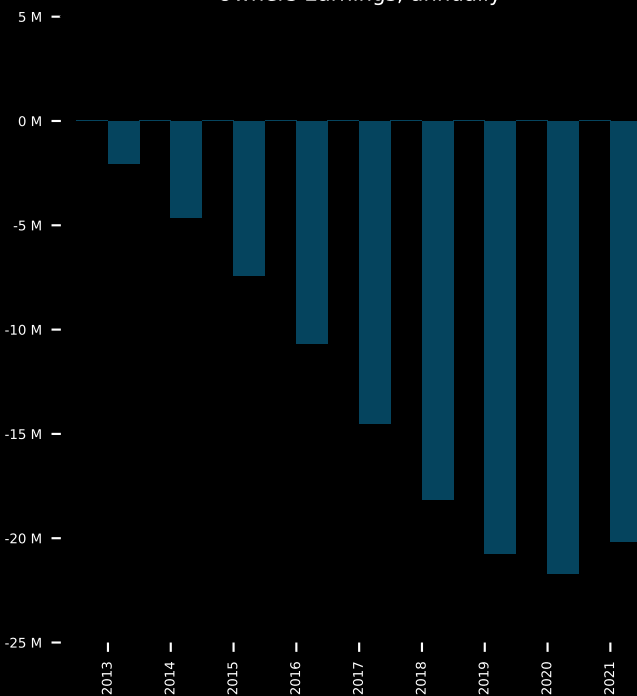
Sales, NI & Operating CF, annually



RESN / Semiconductors / US / 2022-08-23

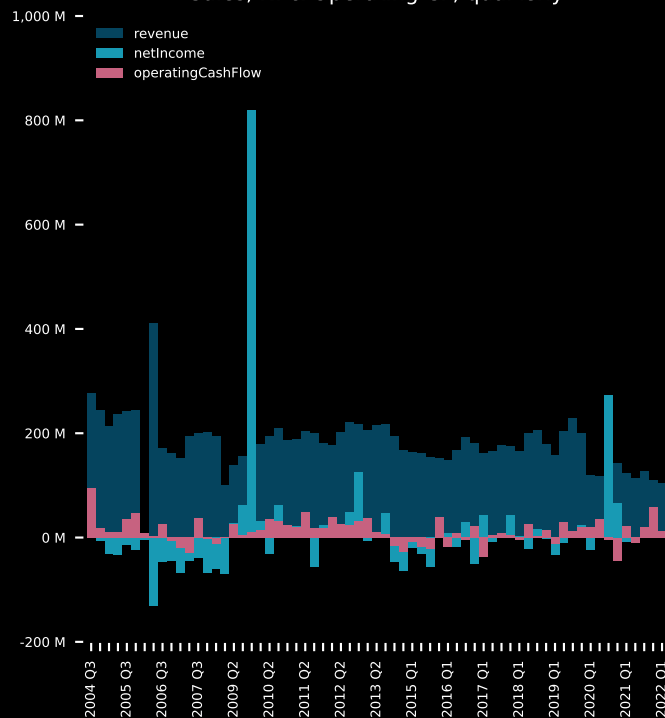


Owners Earnings, annually

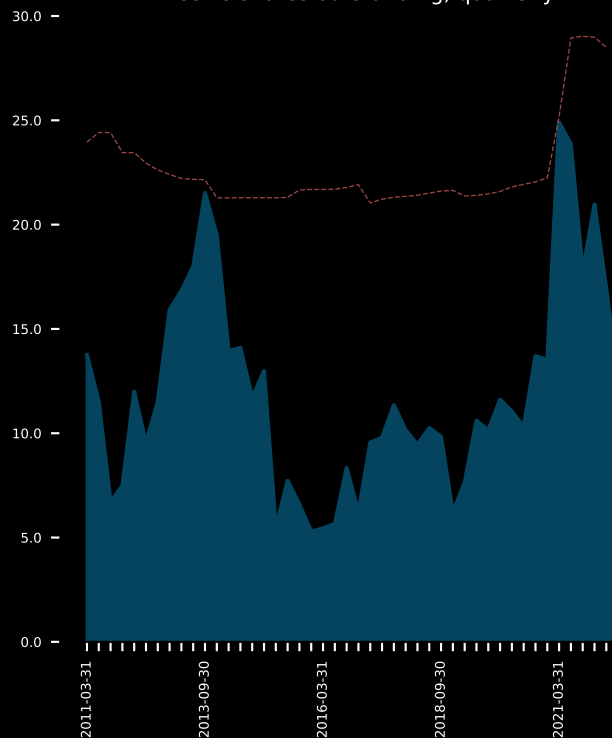


Resonant Inc., a late-stage development company, designs and develops filters for radio frequency (RF) and front-ends used in the mobile device, automotive, medical, Internet-of-Things, and related industries in Japan, China, and internationally. It uses WaveX, a software platform to configure and connect resonators that are building blocks of RF filters. The company develops a series of single-band designs for frequency bands; multiplexer filter designs for two or more bands to address the carrier aggregation requirements; and XBAR, a technology for mobile and non-mobile applications, including 5G, WiFi, and Ultra-WideBand applications. Resonant Inc. was incorporated in 2012 and is headquartered in Austin, Texas.

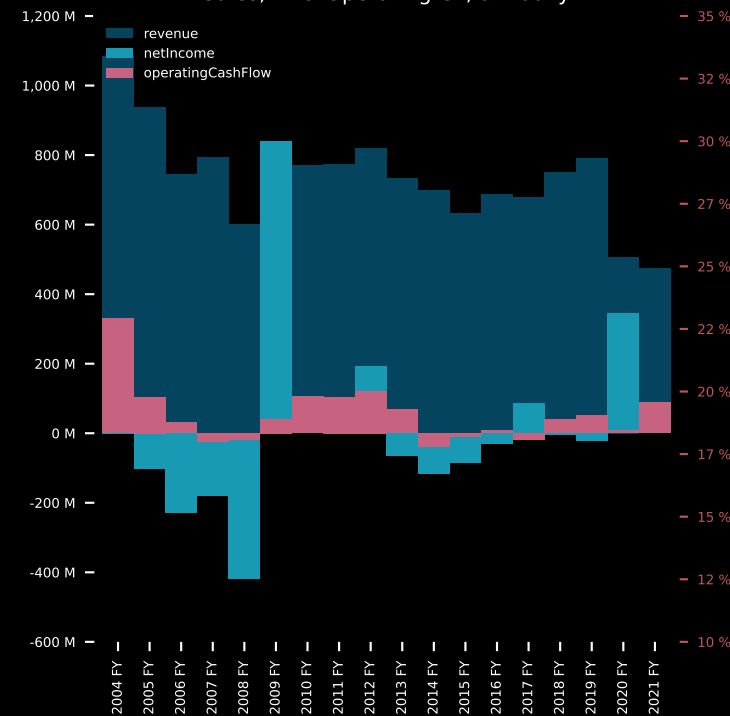
Sales, NI & Operating CF, quarterly



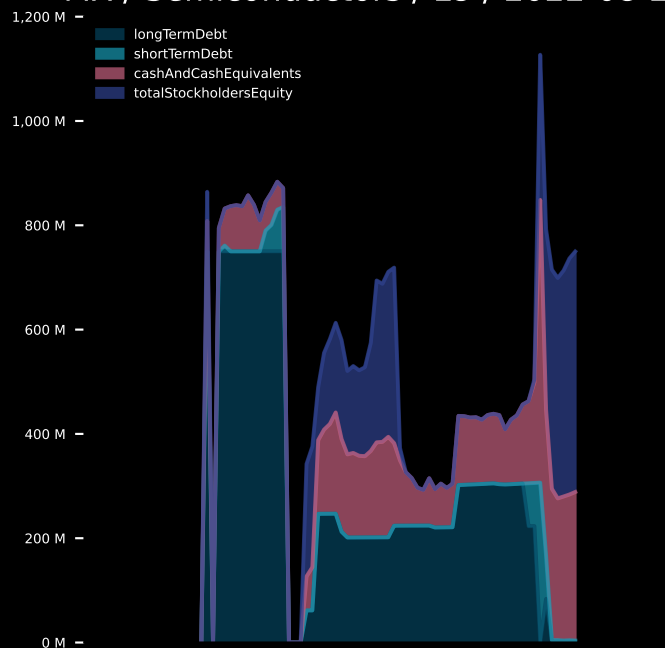
Price vs shares outstanding, quarterly



Sales, NI & Operating CF, annually



MX / Semiconductors / LU / 2022-08-23

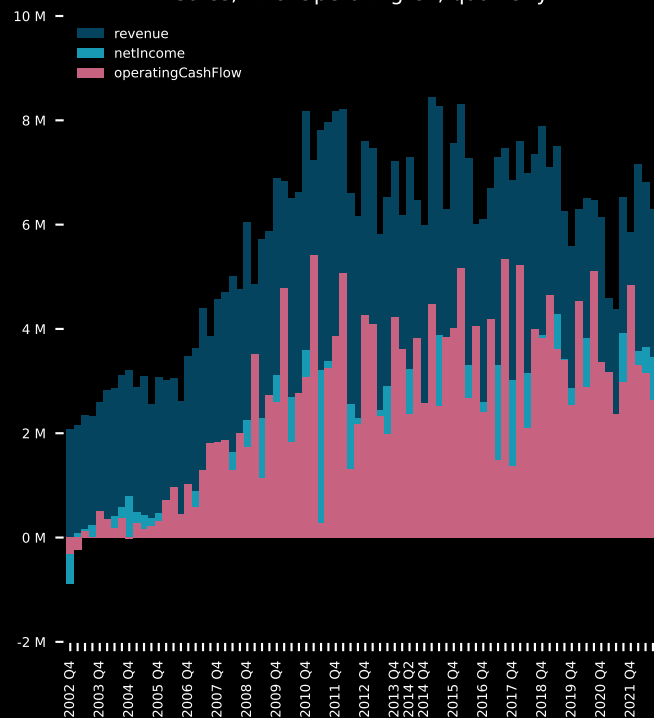


Owners Earnings, annually

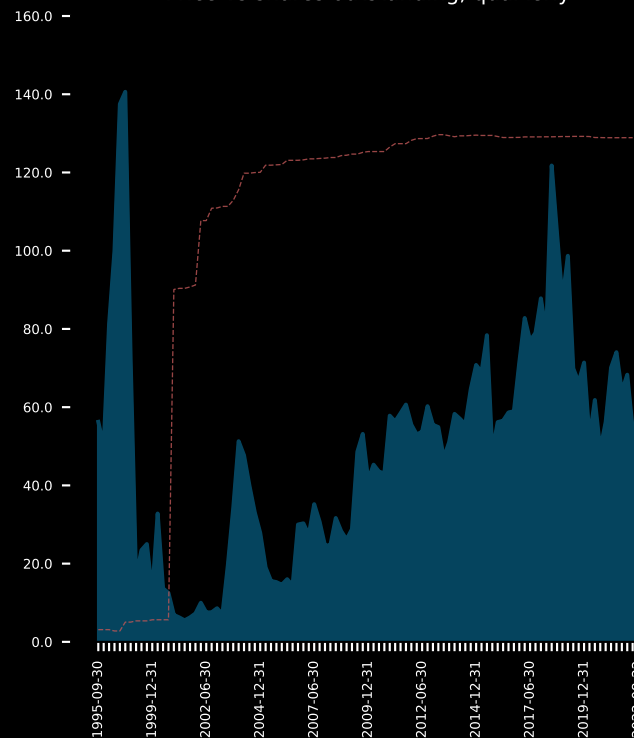


Magnachip Semiconductor Corporation, together with its subsidiaries, designs, manufactures, and supplies analog and mixed-signal semiconductor platform solutions for communications, the Internet of Things, consumer, industrial, and automotive applications. It provides display solutions, including source and gate drivers, and timing controllers that cover a range of flat panel displays used in mobile communications, automotive, entertainment devices, notebook PCs, monitors and liquid crystal displays, and micro light-emitting diode (LED) televisions. The company also offers metal oxide semiconductor field-effect transistors, insulated-gate bipolar transistors, AC-DC converters, DC-DC converters, LED drivers, regulators, and power management integrated circuits for a range of devices comprising televisions, smartphones, mobile phones, wearable devices, desktop PCs, notebooks, tablet PCs, and other consumer electronics, as well as for power suppliers, e-bike, photovoltaic inverter, LED lighting, motor drive, and home appliances; and organic light-emitting diode display driver integrated circuits for OLED TVs. It serves

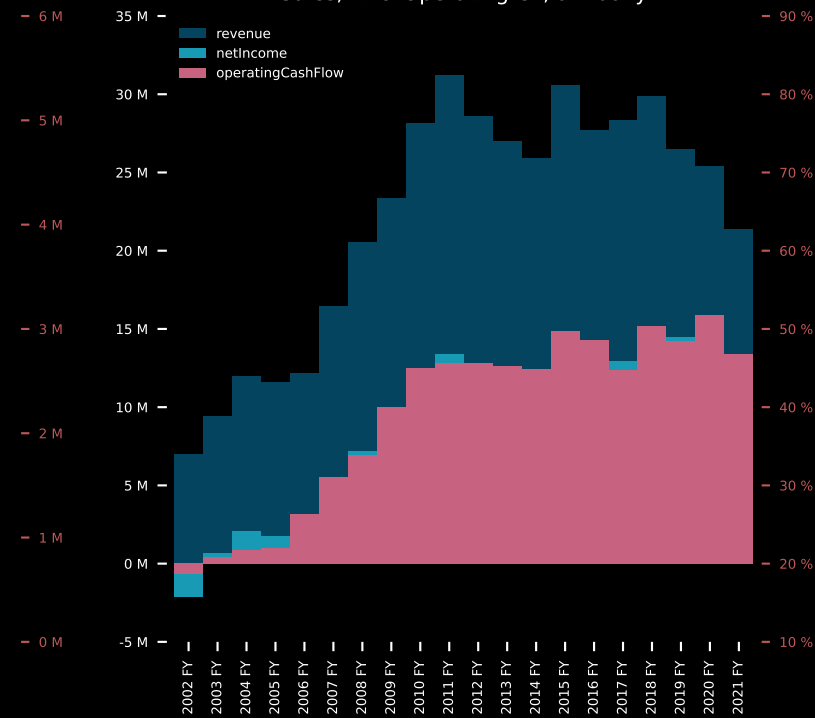
Sales, NI & Operating CF, quarterly



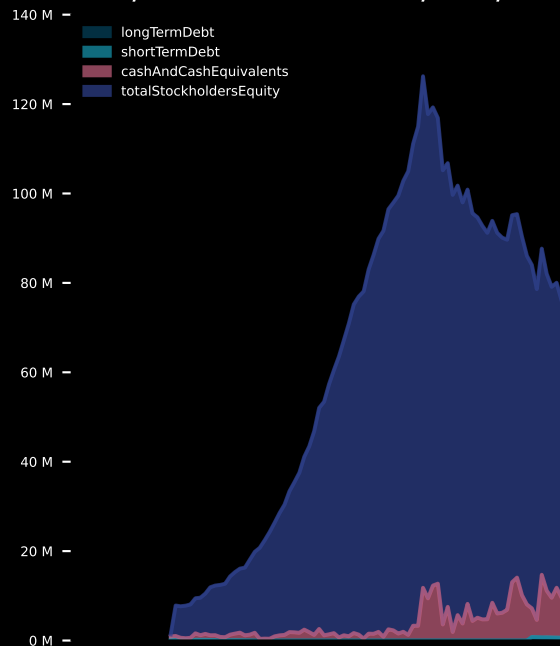
Price vs shares outstanding, quarterly



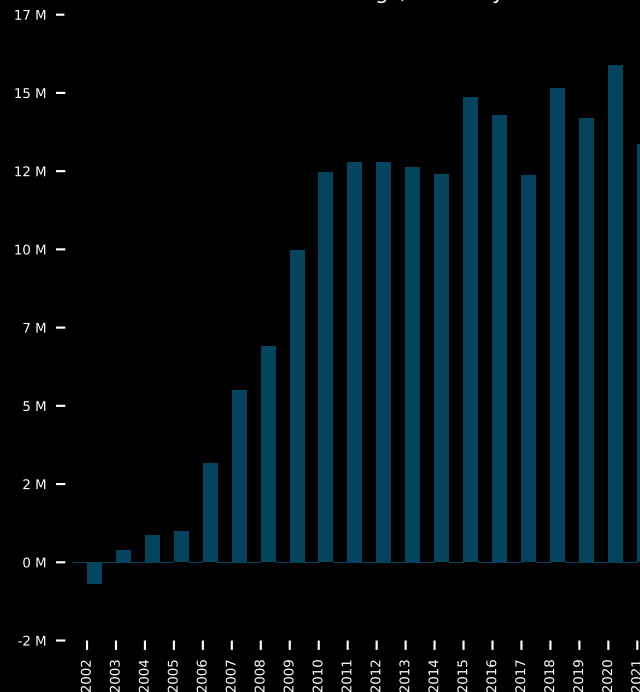
Sales, NI & Operating CF, annually



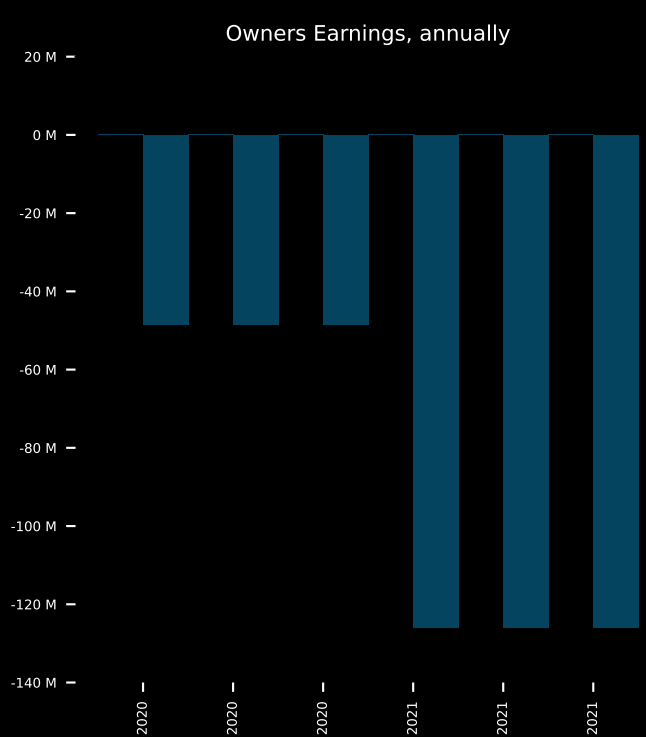
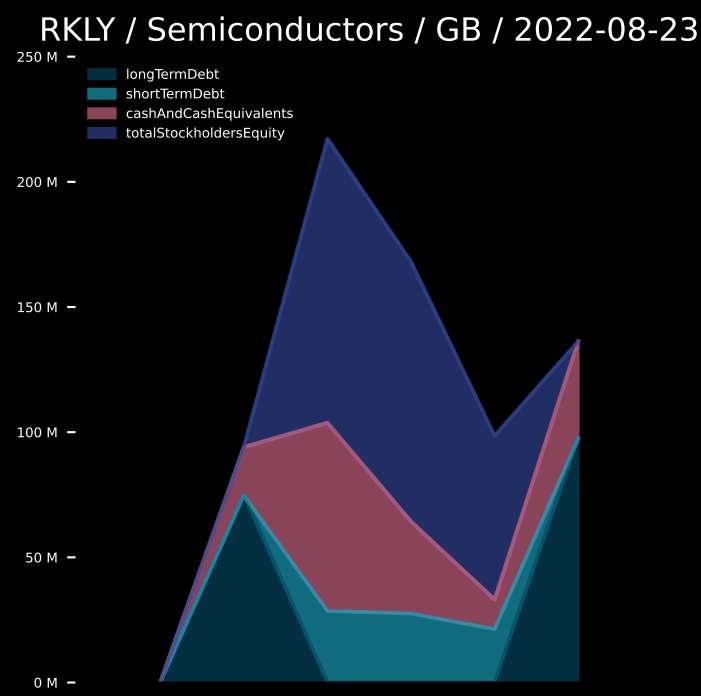
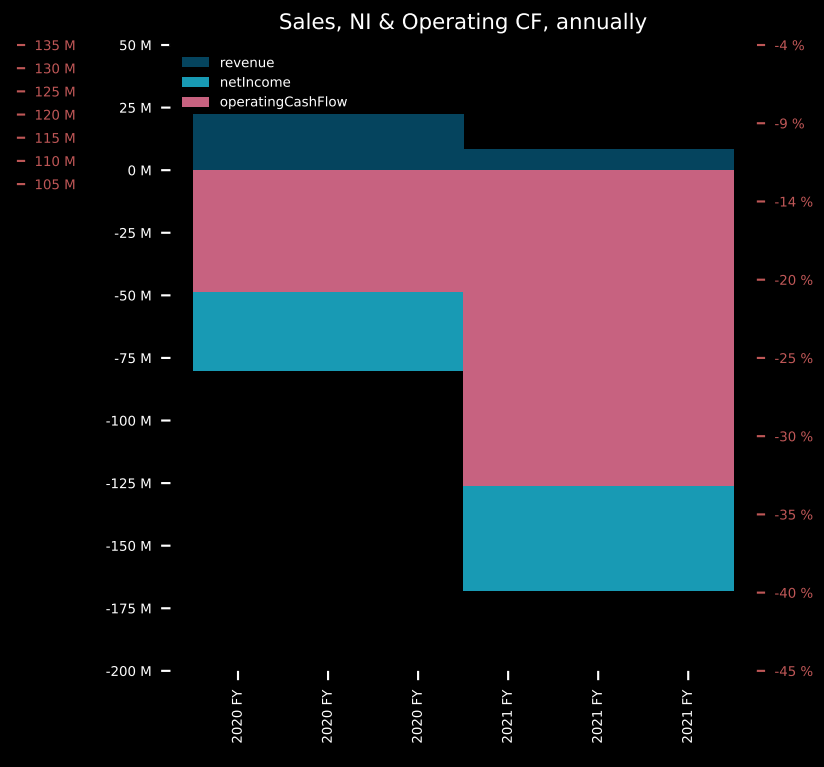
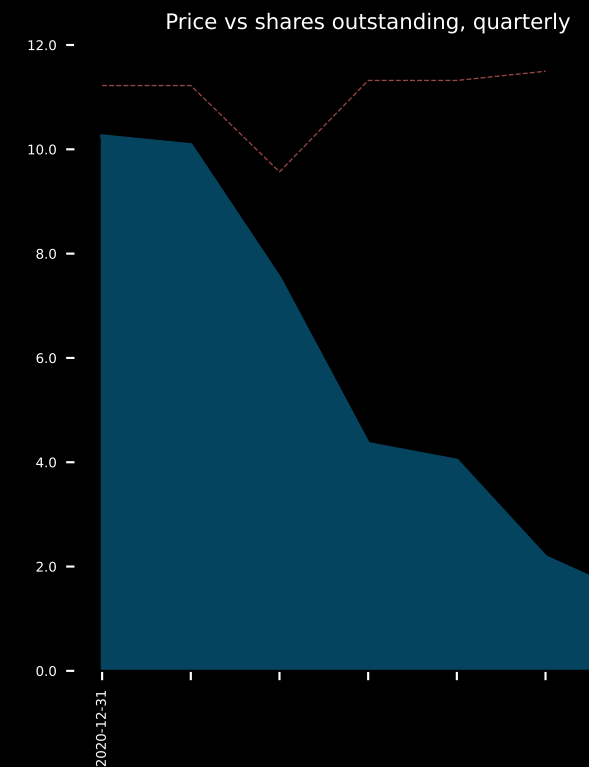
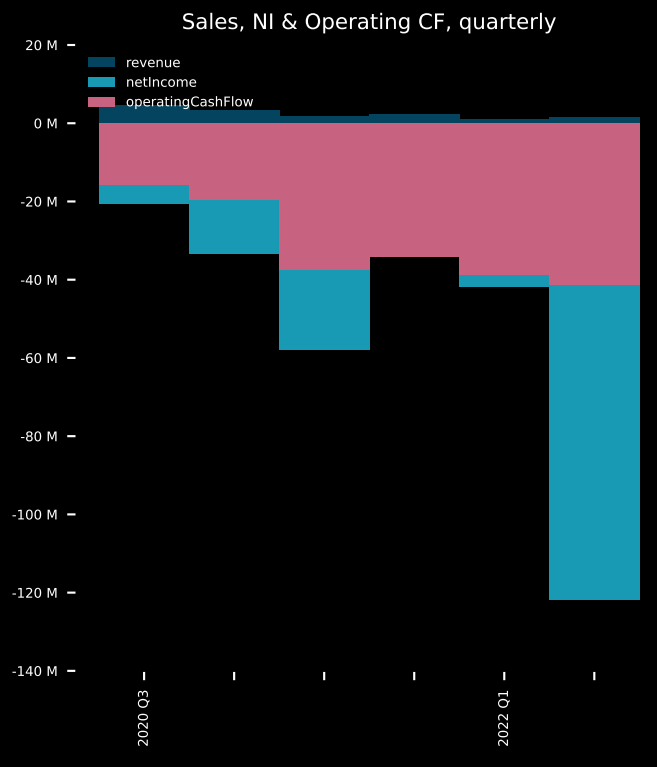
NVEC / Semiconductors / US / 2022-08-22



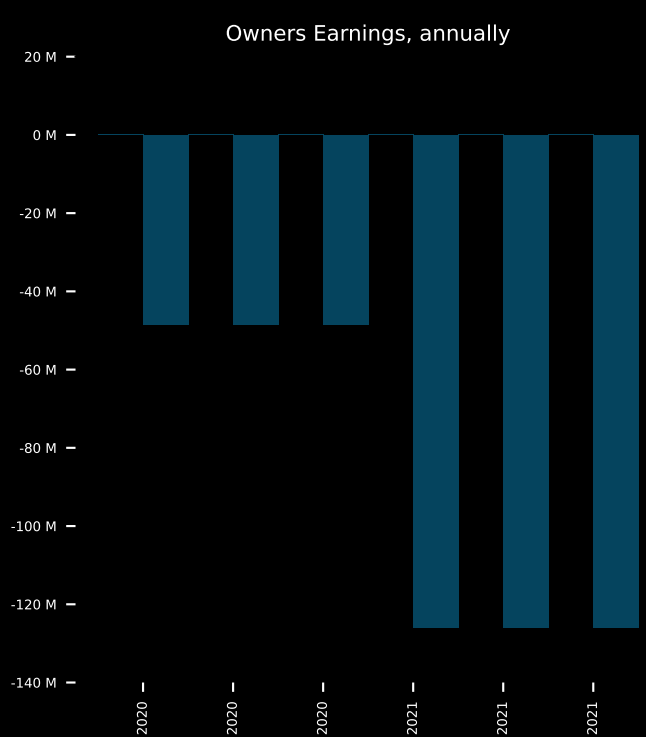
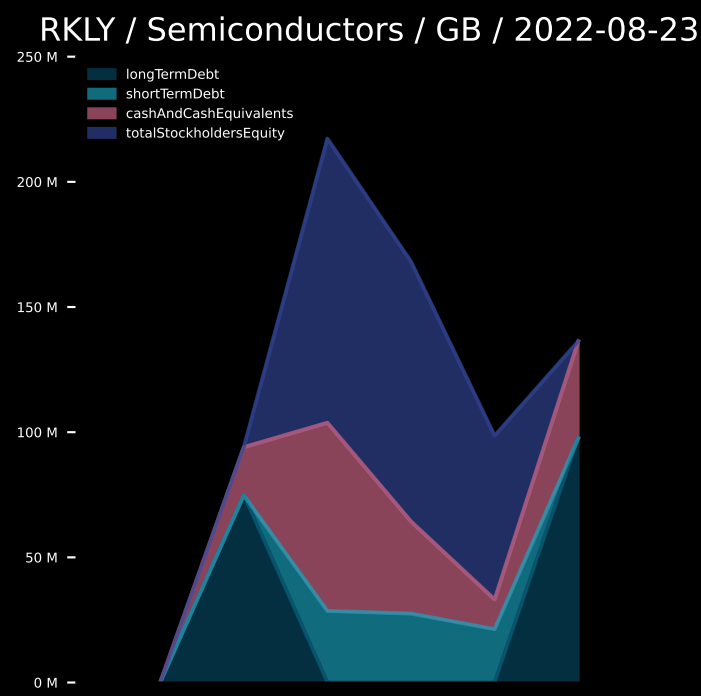
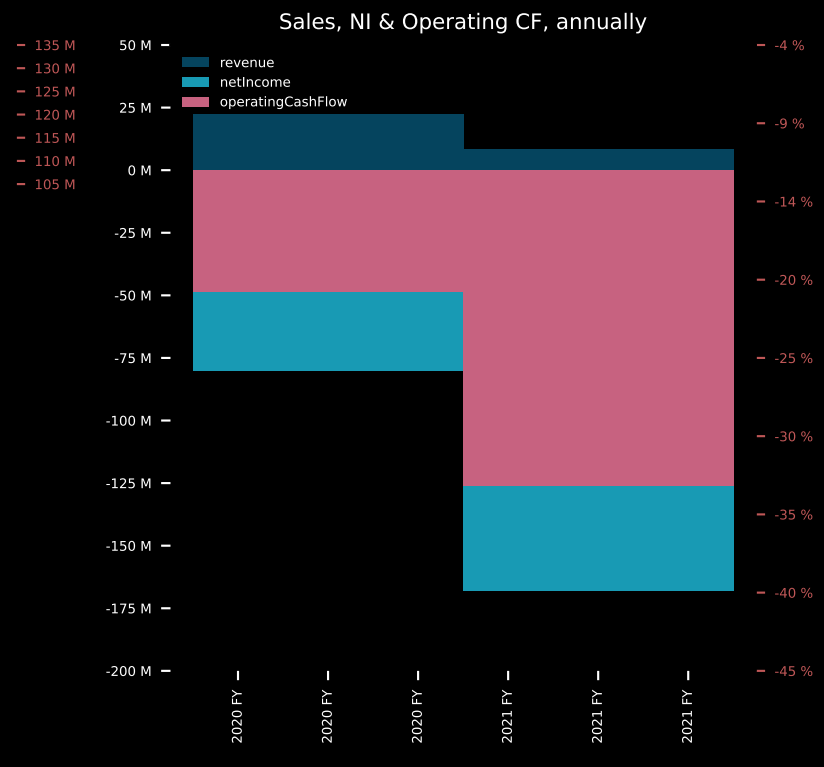
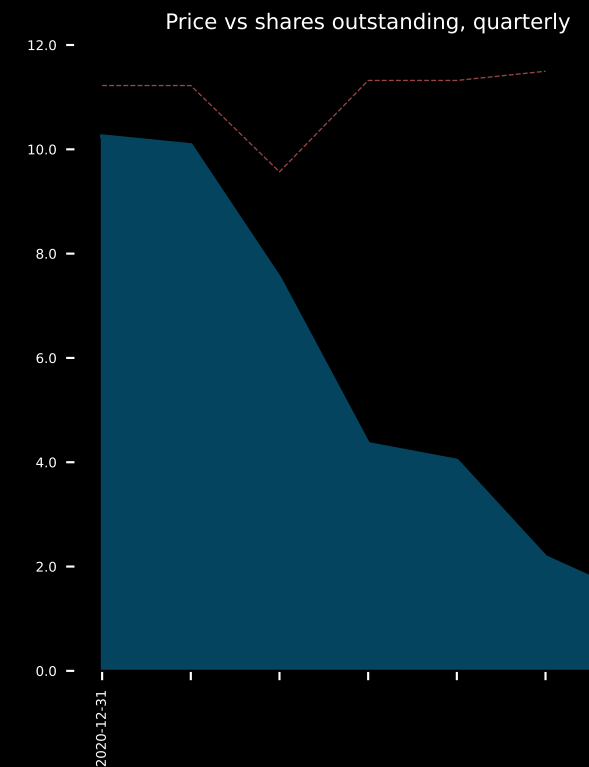
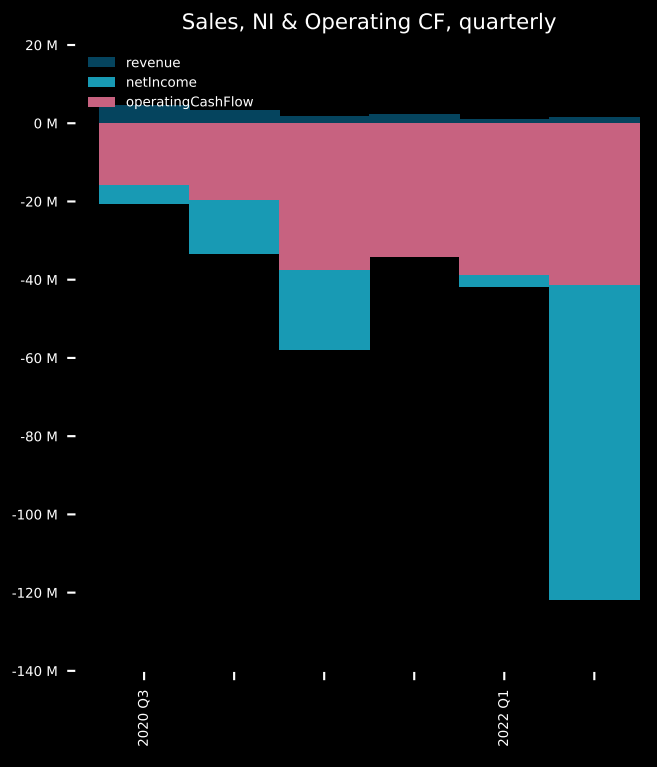
Owners Earnings, annually



NVE Corporation develops and sells devices that use spintronics, a nanotechnology that relies on electron spin to acquire, store, and transmit information in the United States and internationally. The company manufactures spintronic products, including sensors and couplers for use in acquiring and transmitting data. Its products comprise standard sensors to detect the presence of a magnetic or metallic material to determine position or speed primarily for the factory automation market; and custom and medical sensors for medical devices to replace electromechanical magnetic switches. The company also offers spintronic couplers for industrial Internet of Things market. In addition, it engages in the research and development, and licensing of spintronic magnetoresistive random access memory technology. NVE Corporation was founded in 1989 and is headquartered in Eden Prairie, Minnesota.

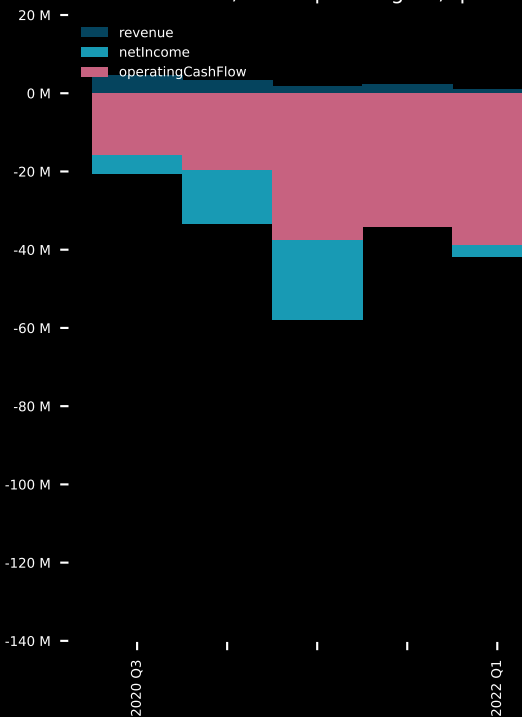


Rockley Photonics Holdings Limited develops and supplies silicon photonics in the United Kingdom and internationally. It offers a platform, which comprises photonic integrated circuits in silicon with integrated III-V devices; application-specific electronic integrated circuits; photonic and electronic co-packaging, which are supported by and coupled with biosensing algorithms, artificial intelligence, cloud analytics, firmware/software, system architecture, and hardware design. The company also provides a biosensing platform for consumer wellness, long-term health trend monitoring, patient monitoring, early disease detection, nutrition management, and treatment of certain chronic diseases. Rockley Photonics Holdings Limited was founded in 2013 and is headquartered in Altrincham, the United Kingdom.

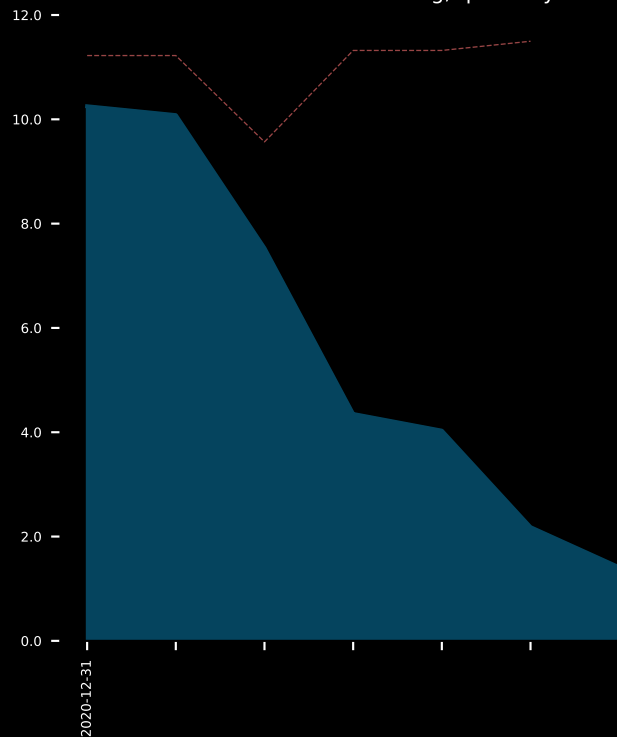


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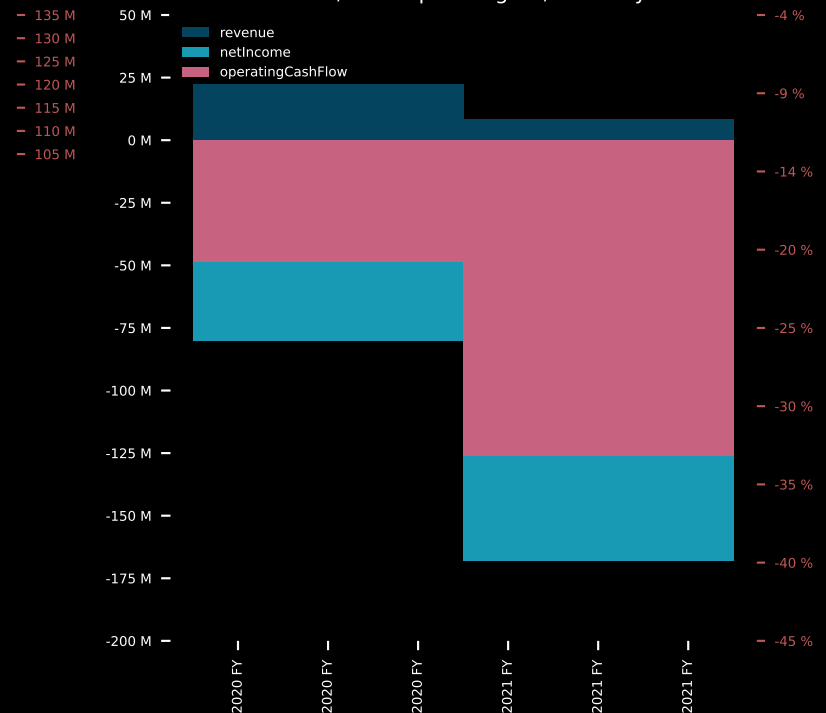
Sales, NI & Operating CF, quarterly



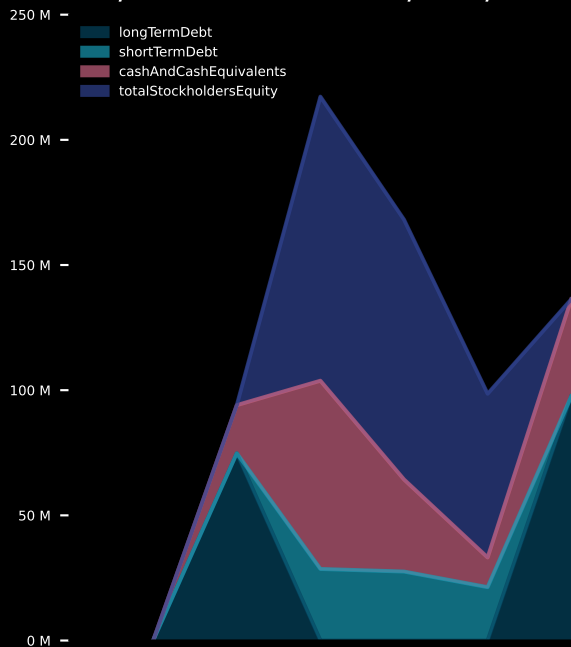
Price vs shares outstanding, quarterly



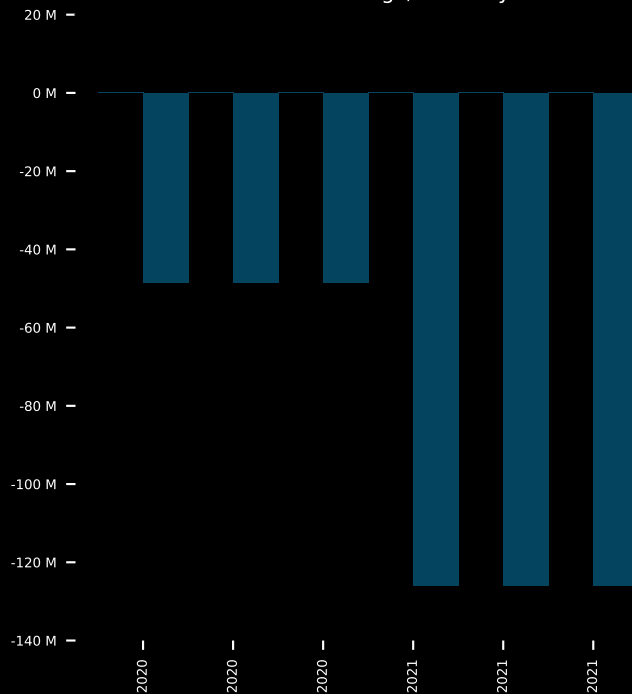
Sales, NI & Operating CF, annually



RKLY / Semiconductors / GB / 2022-08-23

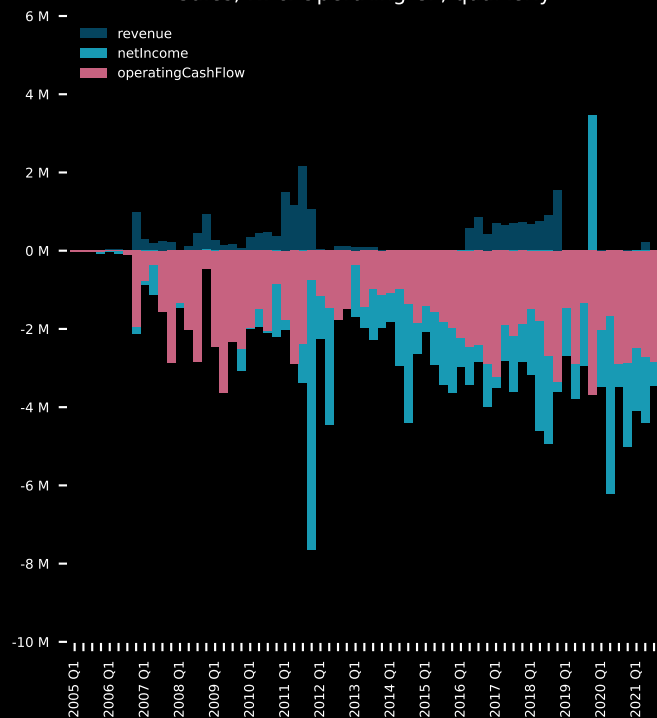


Owners Earnings, annually

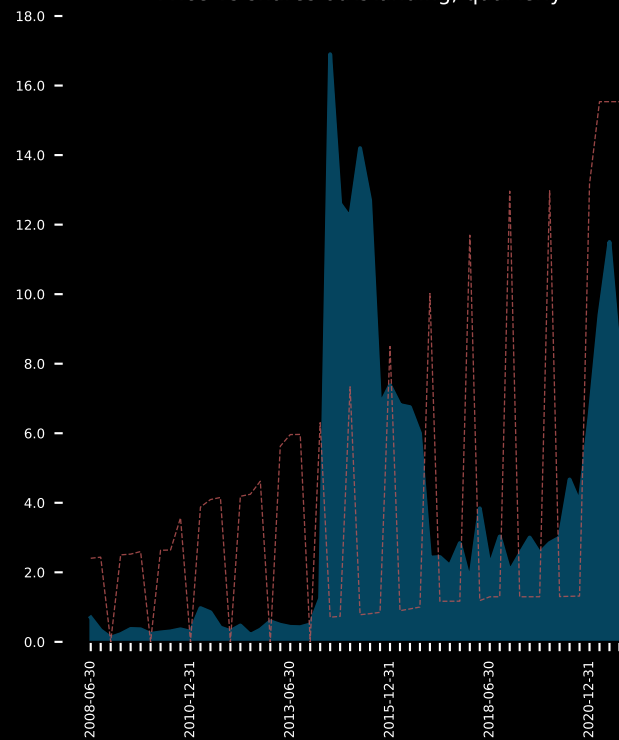


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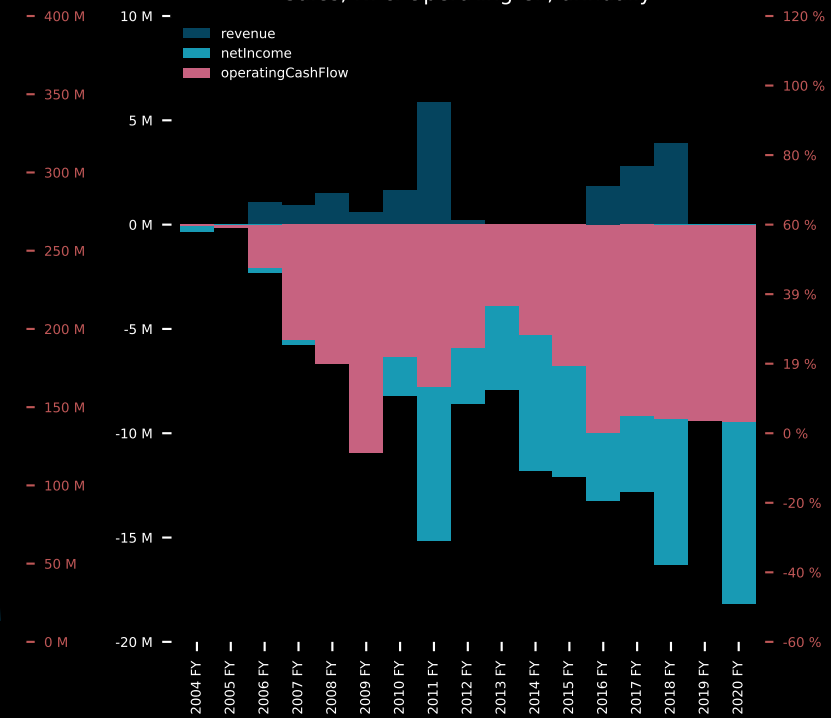
Sales, NI & Operating CF, quarterly



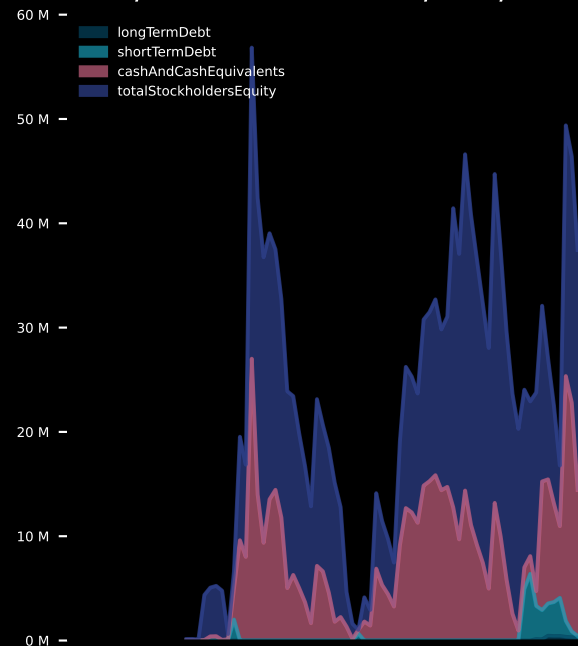
Price vs shares outstanding, quarterly



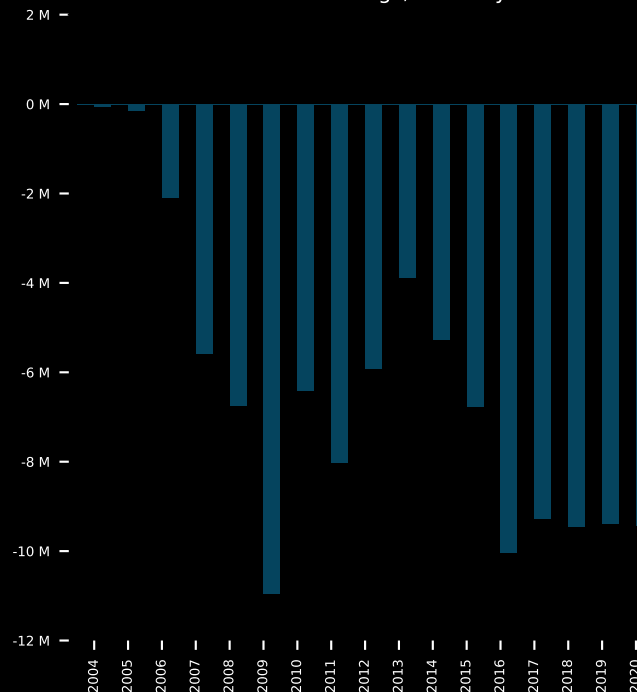
Sales, NI & Operating CF, annually



POETF / Semiconductors / CA / 2022-08-23

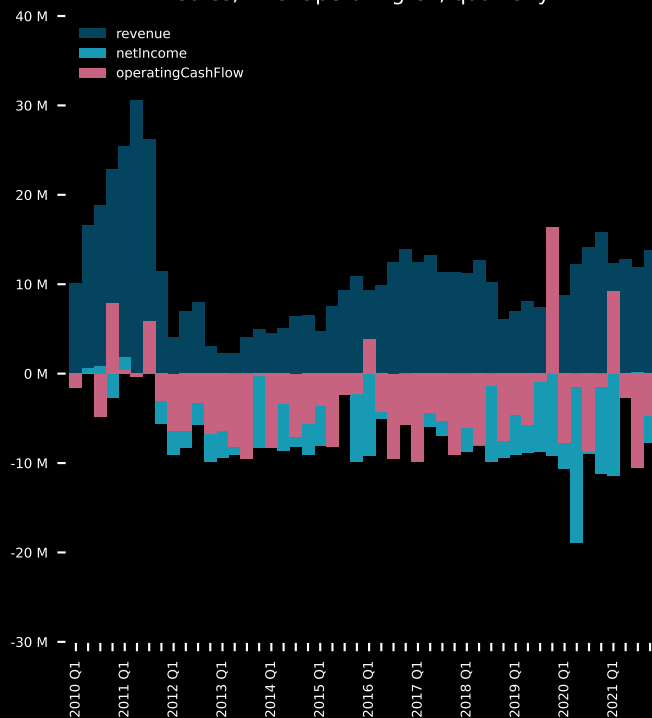


Owners Earnings, annually

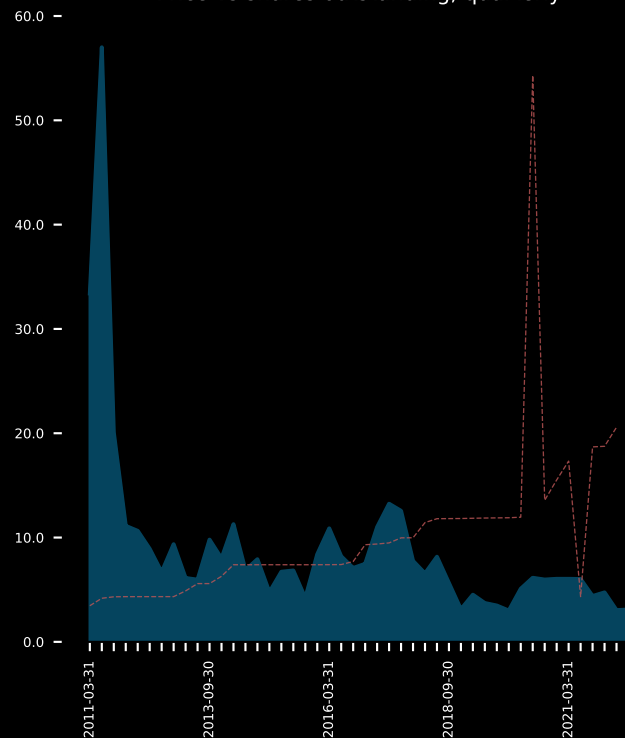


POET Technologies Inc. designs, develops, manufactures, and sells discrete and integrated opto-electronic solutions in Canada, the United States, and Singapore. It offers integration solutions based on the POET Optical Interposer, a novel platform that allows the seamless integration of electronic and photonic devices into a single multi-chip module using advanced wafer-level semiconductor manufacturing techniques and packaging methods. It also develops photonic integrated components. The company serves the data center, telecommunications, Internet of things and industrial sensing, automotive LIDAR, and on-board optic markets. The company was formerly known as Opel Technologies Inc. and changed its name to POET Technologies Inc. in June 2013. POET Technologies Inc. was incorporated in 1972 and is headquartered in Toronto, Canada.

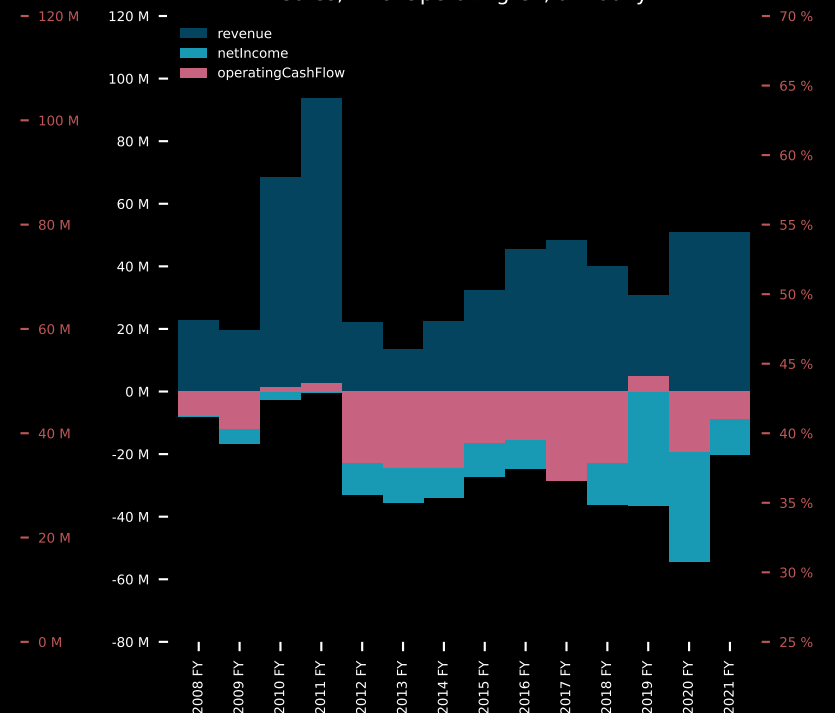
Sales, NI & Operating CF, quarterly



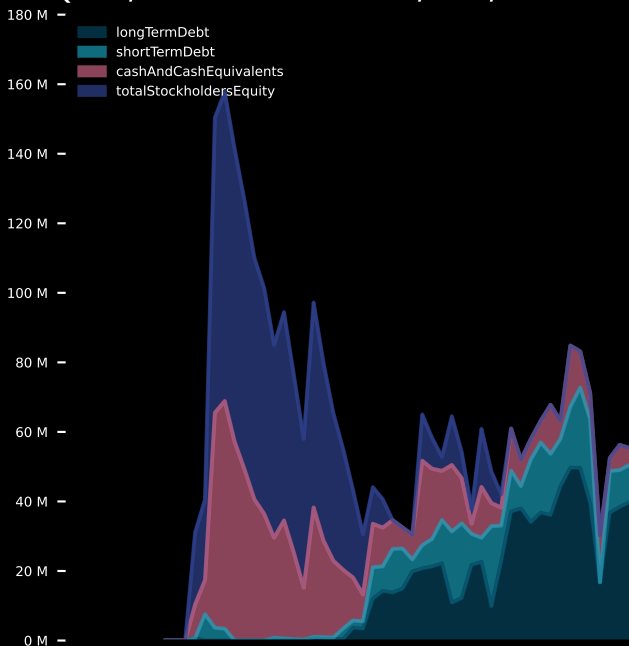
Price vs shares outstanding, quarterly



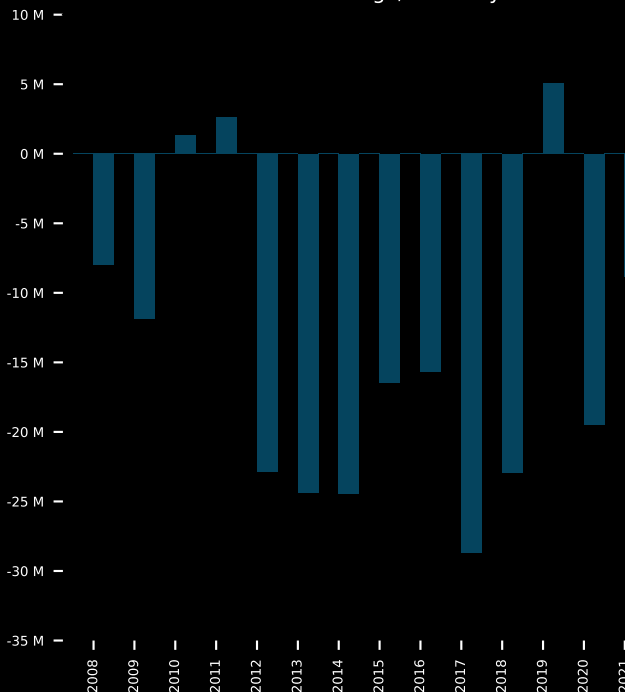
Sales, NI & Operating CF, annually



SQNS / Semiconductors / FR / 2022-08-23

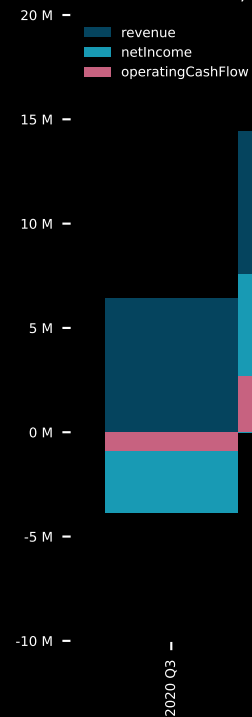


Owners Earnings, annually

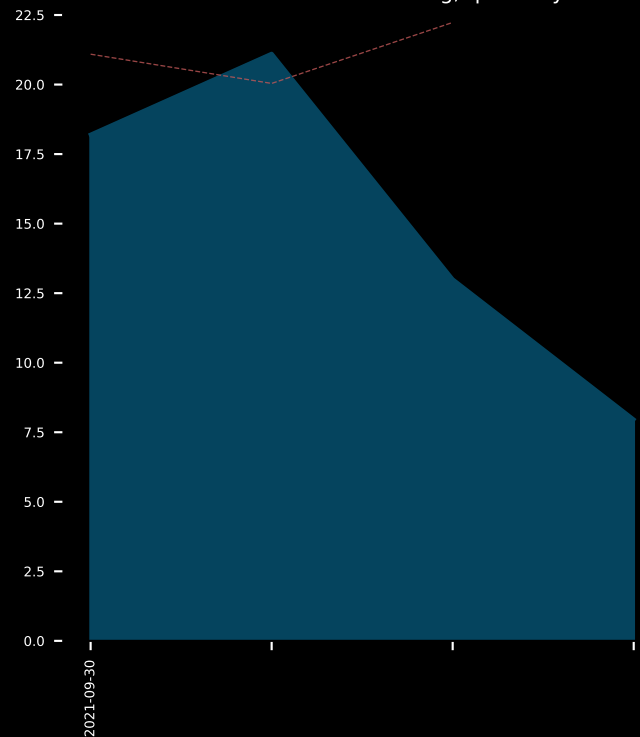


Sequans Communications S.A. designs, develops, and supplies cellular semiconductor solutions for massive and broadband Internet of Things (IoT) markets in Taiwan, South Korea, China, rest of Asia, the United States, and internationally. It offers a set of 5G/4G chips and modules for non-smartphone devices. The company provides a comprehensive product portfolio for 5G/4G massive IoT applications based on its Monarch LTE-M/NB-IoT and Calliope Cat 1 chip platforms featuring low power consumption, a set of integrated functionalities, and deployment capability. It also offers a product portfolio for 5G/4G broadband and critical IoT applications based on its Cassiopeia Cat 4/Cat 6 and Taurus 5G chip platforms optimized for residential, enterprise, and industrial applications. The company serves OEMs and ODMs Customers, as well as 4G and 5G wireless carriers. Sequans Communications S.A. was incorporated in 2003 and is headquartered in Paris, France.

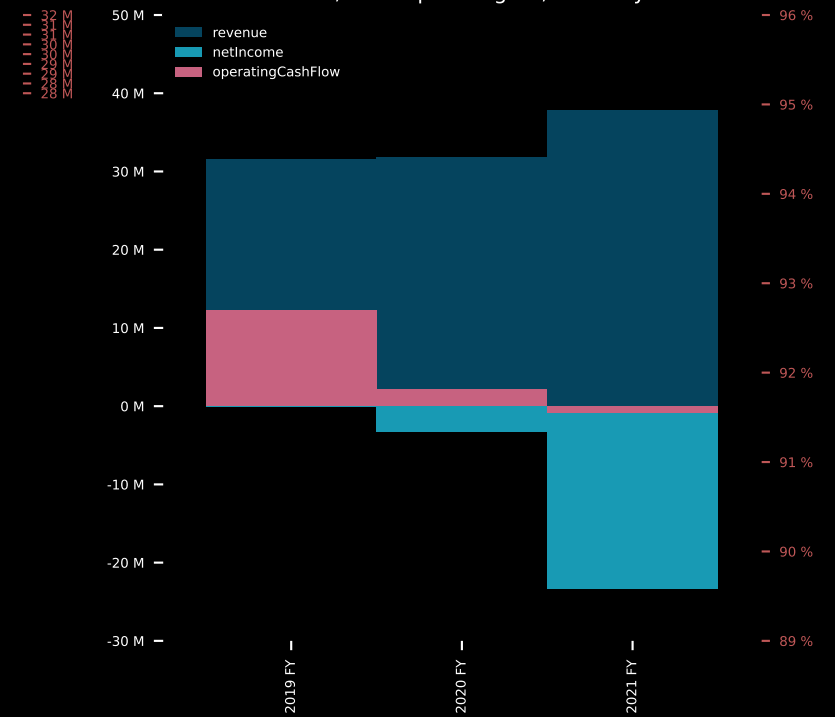
Sales, NI & Operating CF, quarterly



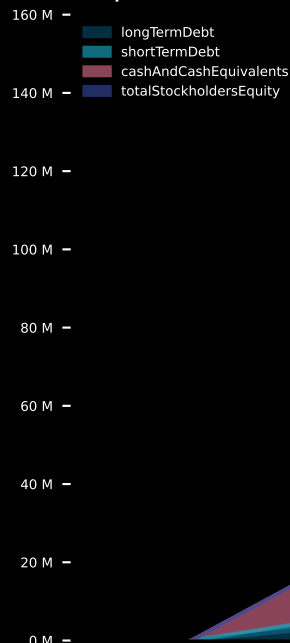
Price vs shares outstanding, quarterly



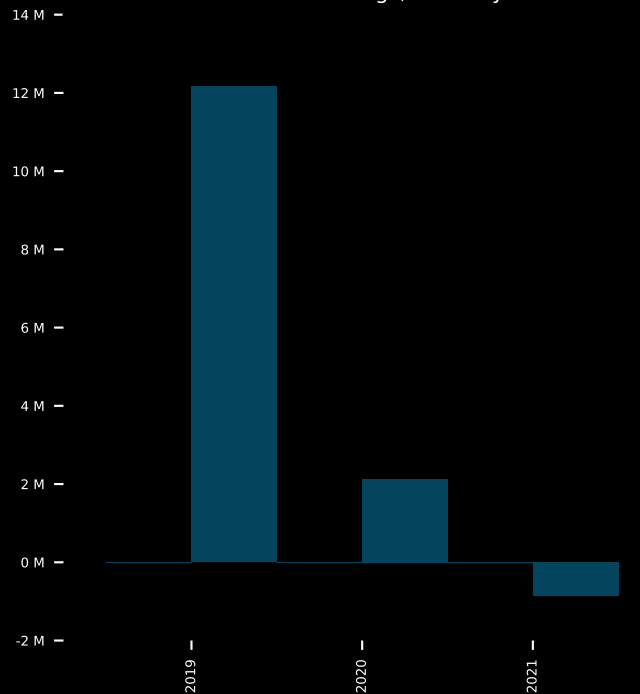
Sales, NI & Operating CF, annually



AIP / Semiconductors / US / 2022-08-23



Owners Earnings, annually

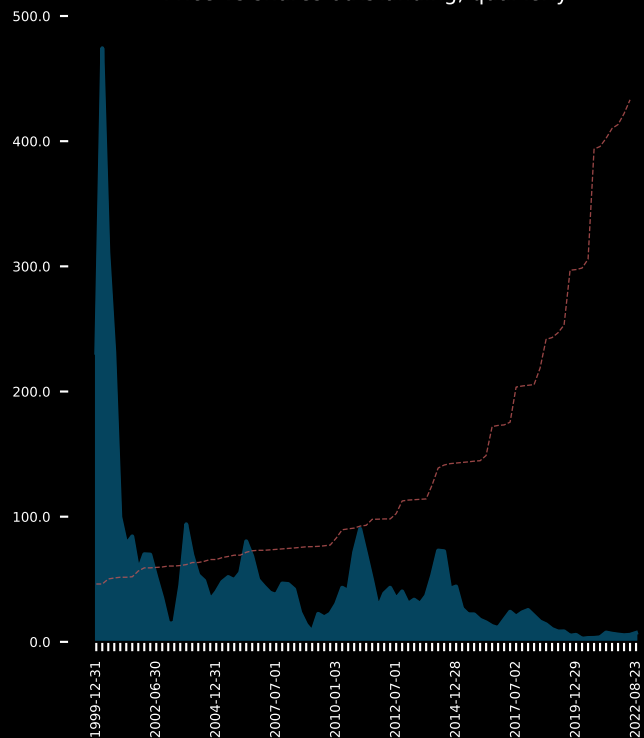


Arteris, Inc. provides semiconductor interconnect intellectual property (IP) and IP deployment solutions in the Americas, the Asia Pacific, Europe, and the Middle East. The company develops, licenses, and supports the on-chip interconnect fabric technology used in System-on-Chip (SoC) designs and Network-on-Chip (NoC) interconnect IP. Its products include FlexNoC, a silicon-proven interconnect IP product; FlexNoC Resilience Package, which provides on-chip data protection; Ncore, a silicon-proven and cache coherent interconnect IP product that provides scalable, configurable, and area efficient characteristics; CodaCache, a last-level cache semiconductor IP product; and Physical interconnect aware NoC optimizer, a software tool that estimates physical layout effects during the architecture and logic development stages of an SoC interconnect design; The company also offers FlexWay for IP subsystem interconnect; FlexPSI for All-digital inter chip link; and FlexNoC Physical for linking physical placement and routing tools. In addition, it provides IP deployment software solutions, including specification, design, documentation, verification, and deployment.

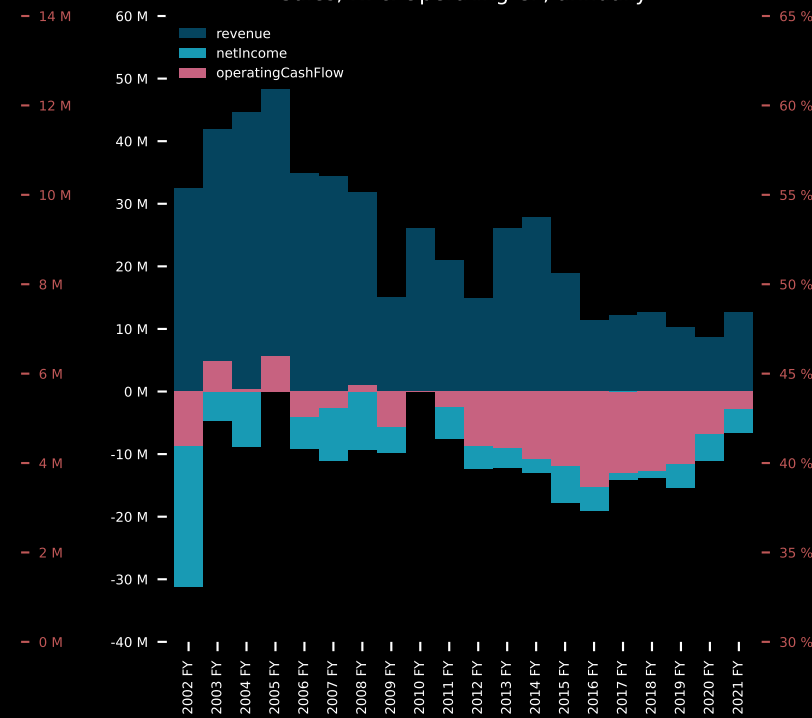
Sales, NI & Operating CF, quarterly



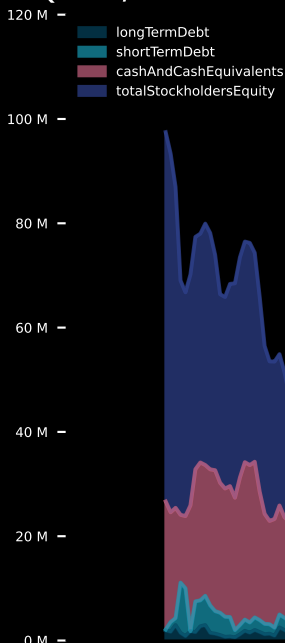
Price vs shares outstanding, quarterly



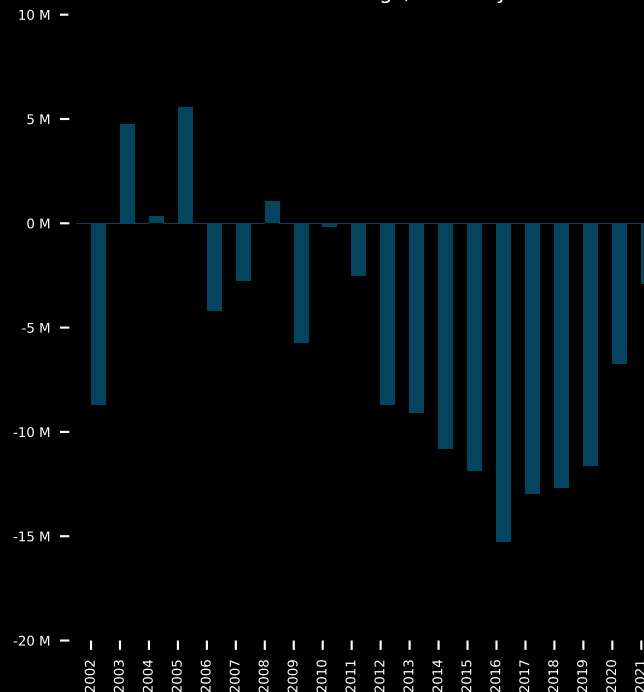
Sales, NI & Operating CF, annually



QUIK / Semiconductors / US / 2022-08-23



Owners Earnings, annually

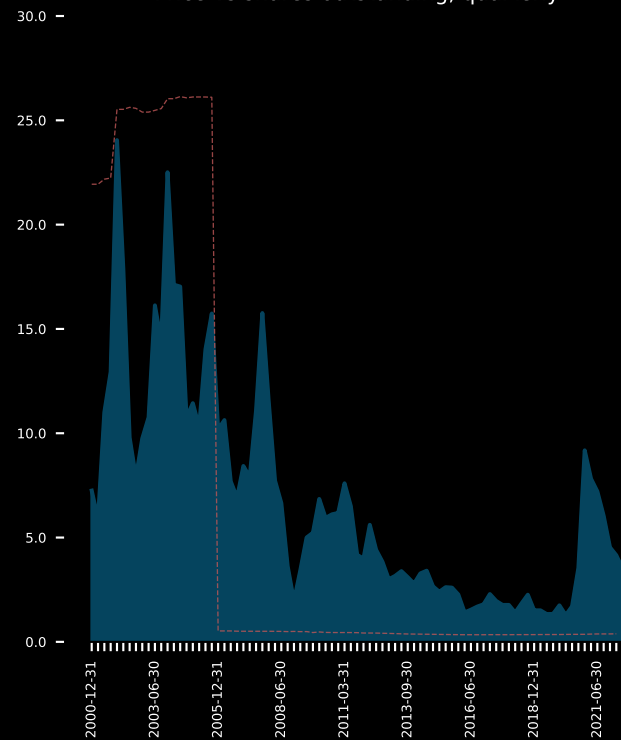


QuickLogic Corporation, a semiconductor company, develops semiconductor platforms and intellectual property solutions for smartphones, wearable, hearable, tablets, and the Internet-of-Things devices. It also provides flexible sensor processing solutions, ultra-low power display bridges, ultra-low power field programmable gate arrays (FPGAs); and analytics toolkit, an end-to-end software suite that offers processes for developing pattern matching sensor algorithms using machine learning technology, as well as programming hardware and design software solutions. The company's products include pASIC 3, QuickRAM, QuickPCI, EOS, QuickAI, SensiML Analytics Studio, ArcticLink III, PolarPro 3, PolarPro II, PolarPro, and Eclipse II, as well as silicon platforms, IP cores, software drivers, firmware, and application software. It delivers its solutions through ultra-low power customer programmable System on Chip (SoC) semiconductor solutions, embedded software, and algorithm solutions for always-on voice and sensor processing, and enhanced visual experiences. In addition, the company licenses FPGA technology for use in other semiconductor products.

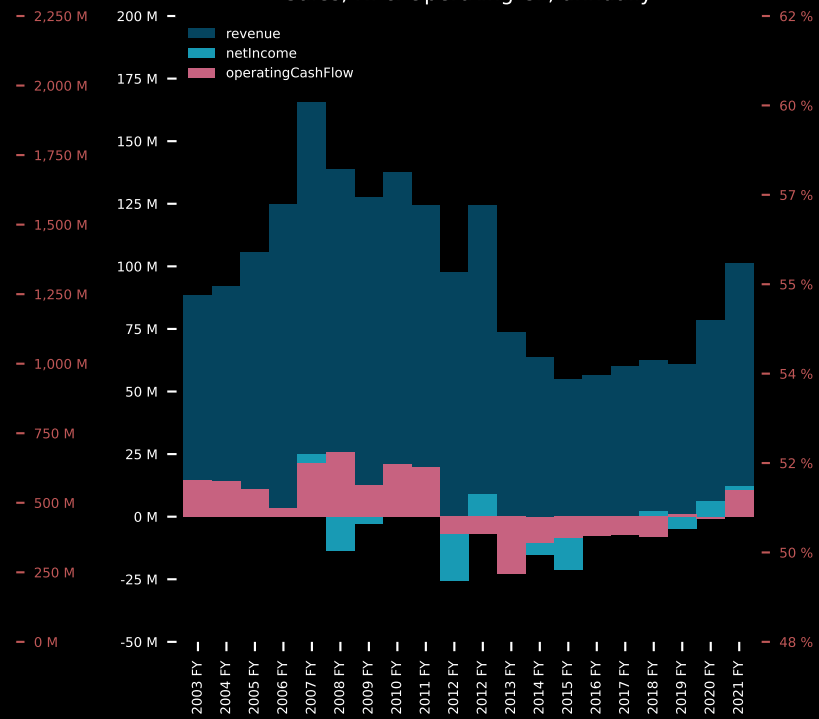
Sales, NI & Operating CF, quarterly



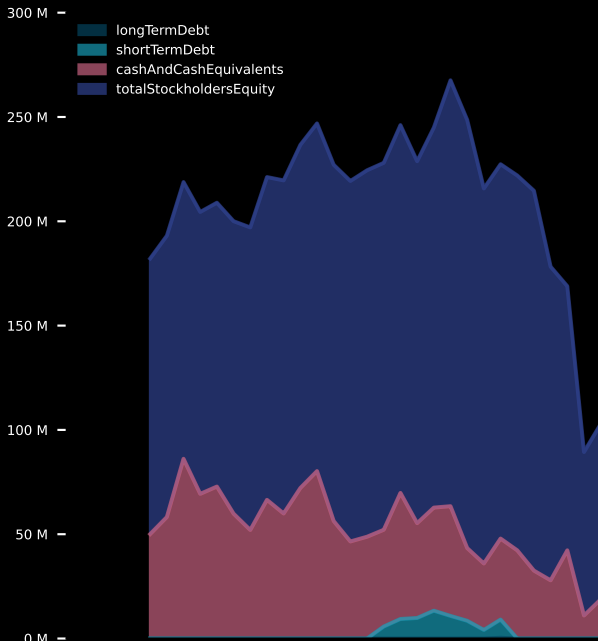
Price vs shares outstanding, quarterly



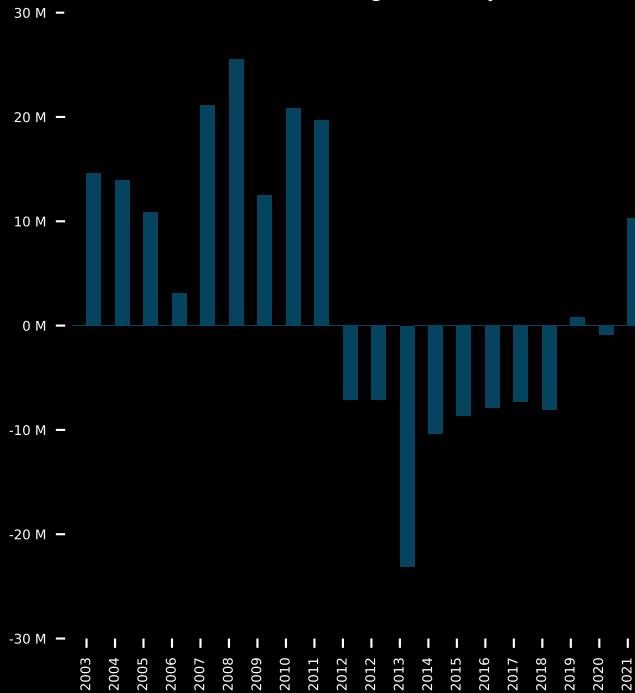
Sales, NI & Operating CF, annually



OIIM / Semiconductors / KY / 2022-08-23



Owners Earnings, annually

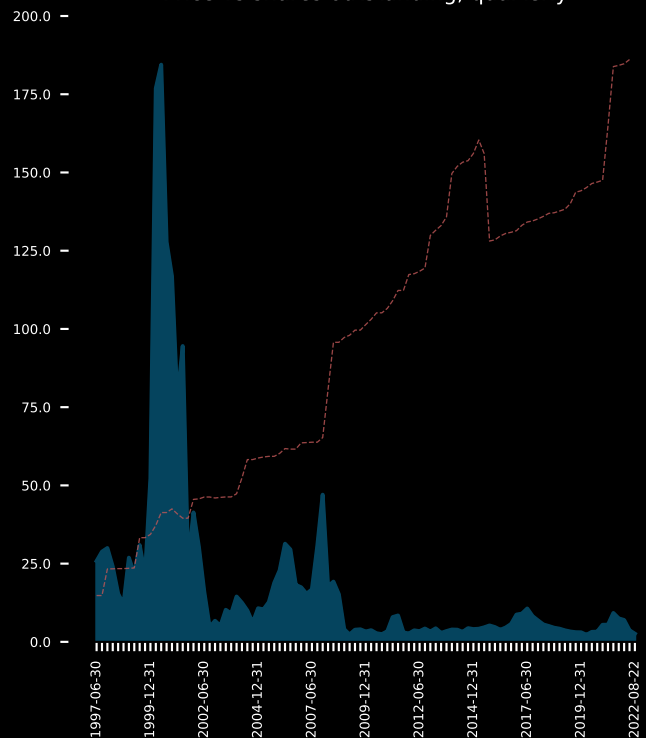


O2Micro International Limited, together with its subsidiaries, designs, develops, and markets integrated circuits and solutions for power management components and systems in China, Singapore, Taiwan, Malaysia, Korea, the Philippines, Japan, the United States, and internationally. The company offers analog and mixed-signal integrated circuits that manages and provides power for LCD and LED lighting; controls and monitors battery charging and discharging in portable electronic devices and vehicles; performs DC/DC and AC/DC conversion; and provides select and switch functionality between power sources. Its products are primarily used in the consumer electronics, computer, industrial, communication, and automotive markets for applications, including LCD and LED monitors, LCD and LED televisions, notebook and tablet computers, low/zero emission vehicles, mobile phones, power tools, energy efficient technology relating to batteries, LED lighting, and portable electronics devices. The company sells its products through direct sales force, independent sales representatives, or distributors to OEMs, ODMs, and module makers. It

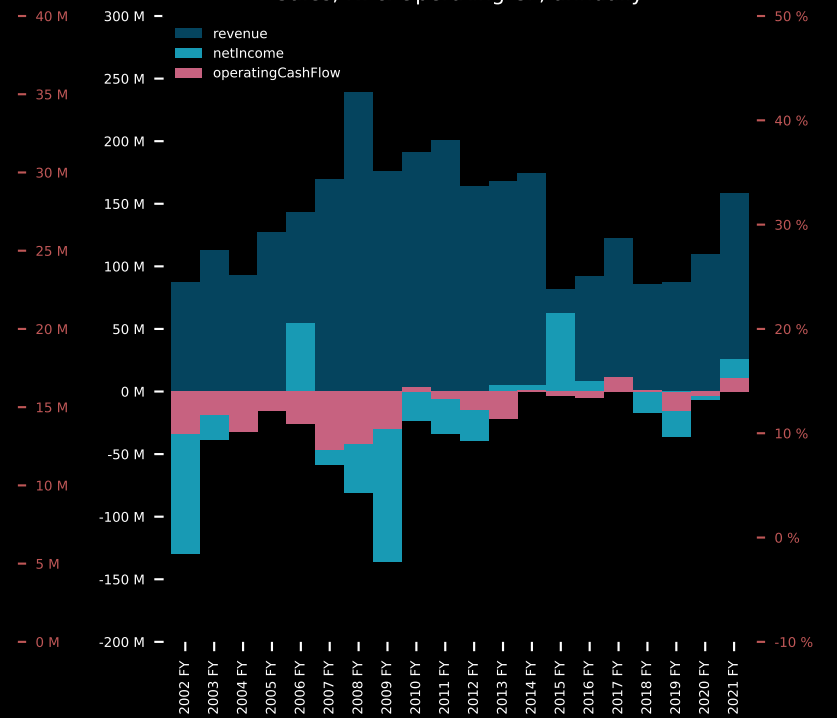
Sales, NI & Operating CF, quarterly



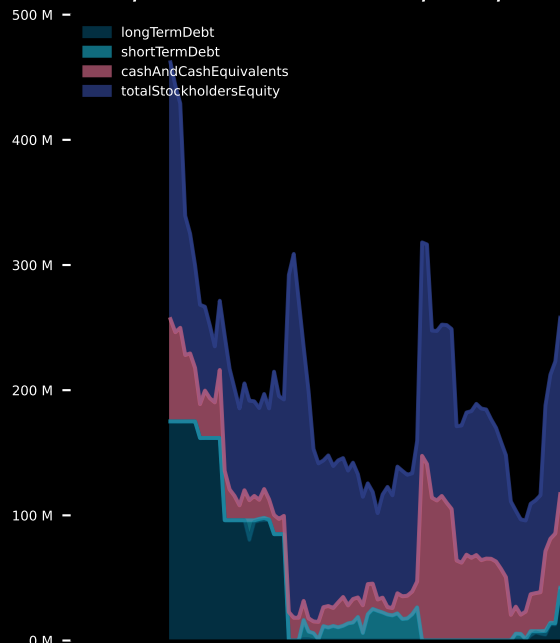
Price vs shares outstanding, quarterly



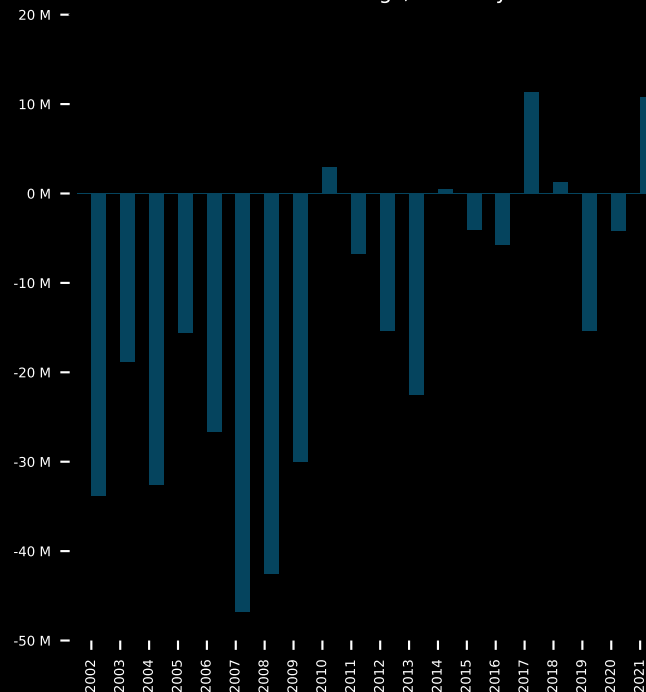
Sales, NI & Operating CF, annually



EMKR / Semiconductors / US / 2022-08-22

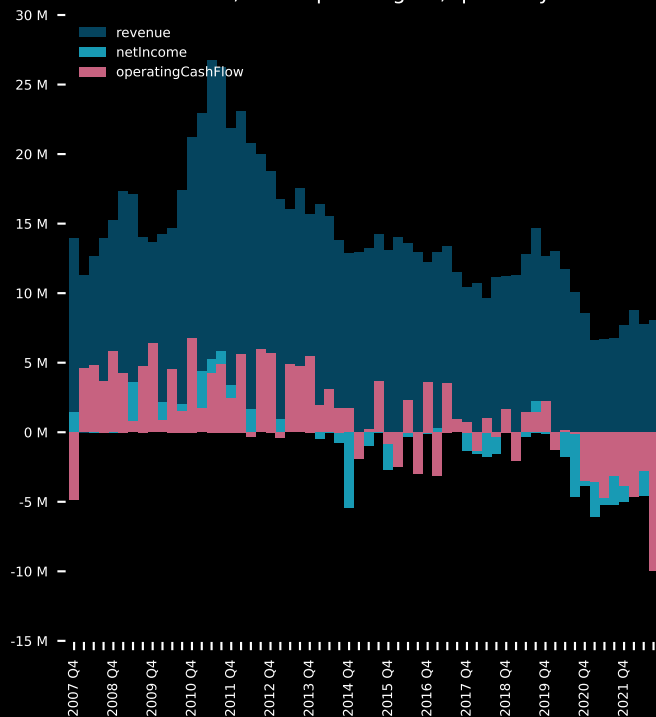


Owners Earnings, annually

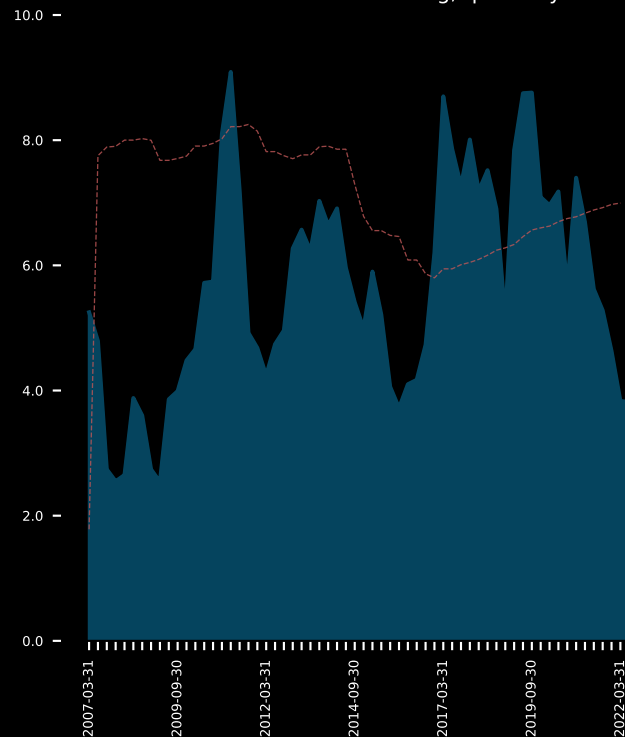


EMCORE Corporation, together with its subsidiaries, provides advanced mixed-signal optics products in the United States, Canada, Asia, Europe, and internationally. It operates in two segments, Aerospace and Defense, and Broadband. The company offers navigation system and inertial sensing products, such as fiber optic gyros products that includes gyroscopes, inertial measurement units (IMU), and inertial navigation systems (INS), as well as QMEMS gyroscopes, accelerometers, IMUs, and INS products primarily for the aerospace and defense markets; and defense optoelectronics comprising optiva platform fiber optic transport systems and erbium doped fiber amplifiers, as well as ruggedized microwave flange-mount transmitters, receivers, and optical delay line products. It also provides cable TV (CATV) lasers and transmitters that are used in forward-and return-path broadband, subassembly components, analog fiber-optic transmitters, quadrature amplitude modulation transmitters, and CATV fiber amplifiers. In addition, the company offers high-power gain chips products, photodiode products, and GPON fiber-to-the-premises (FTTP) products.

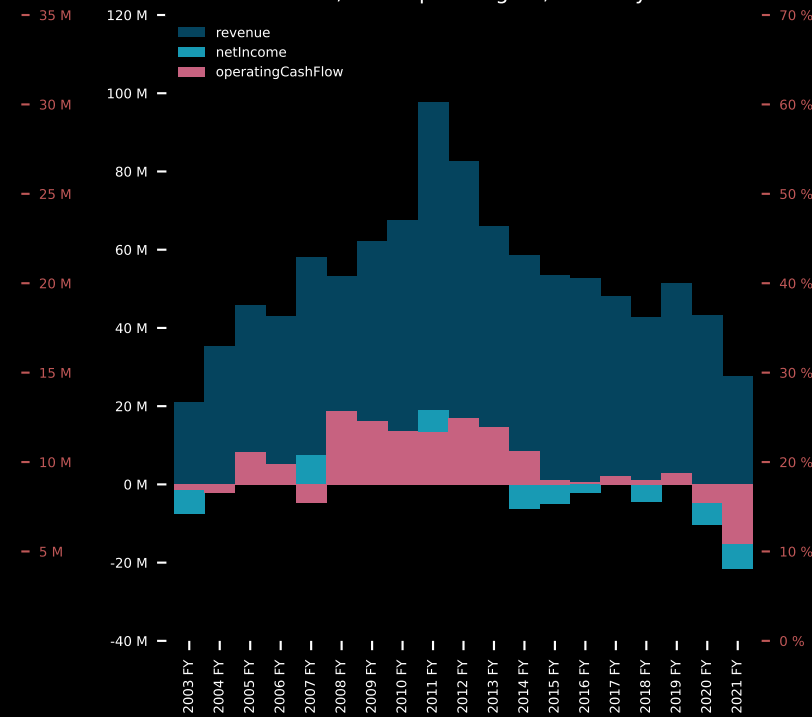
Sales, NI & Operating CF, quarterly



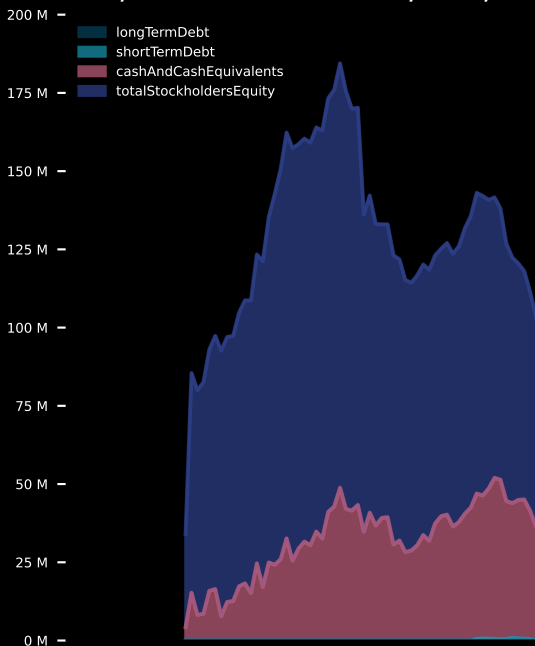
Price vs shares outstanding, quarterly



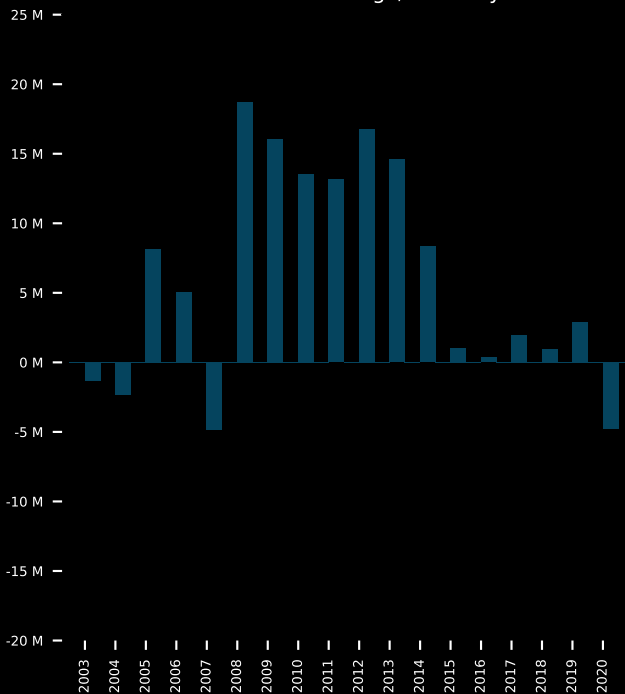
Sales, NI & Operating CF, annually



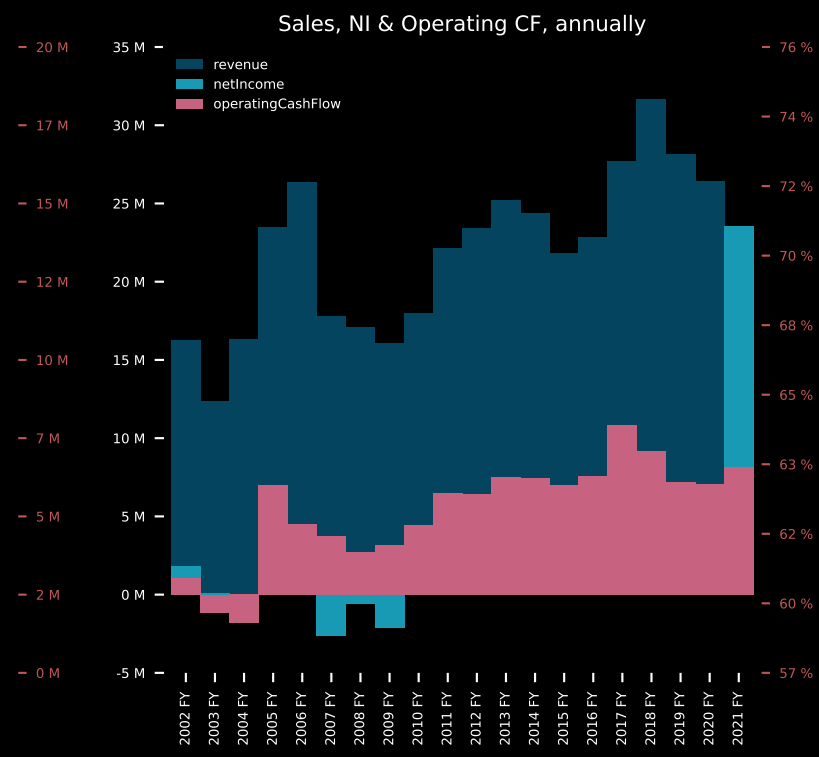
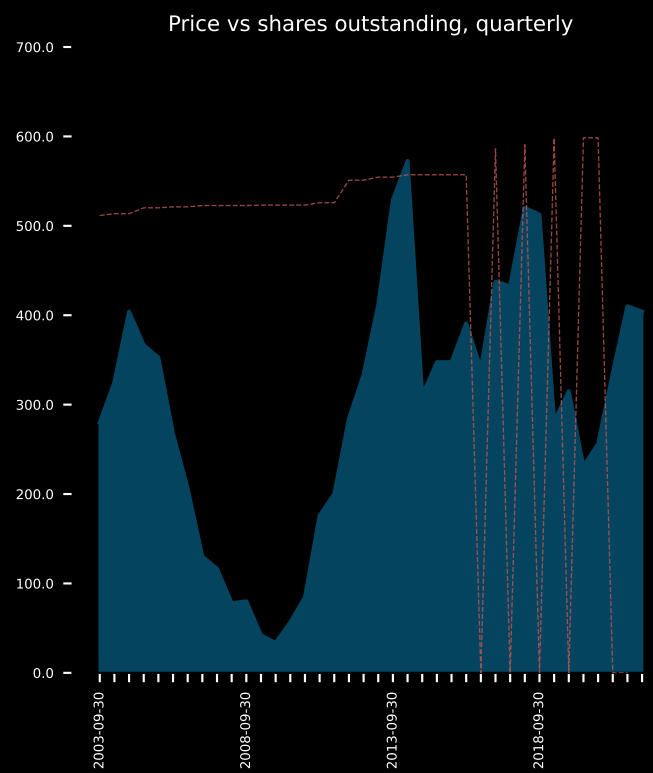
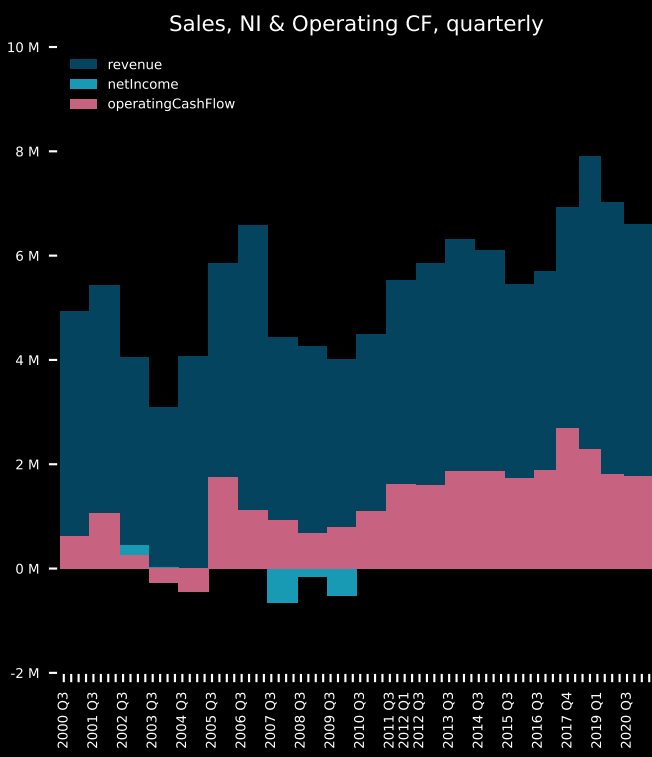
GSIT / Semiconductors / US / 2022-08-23



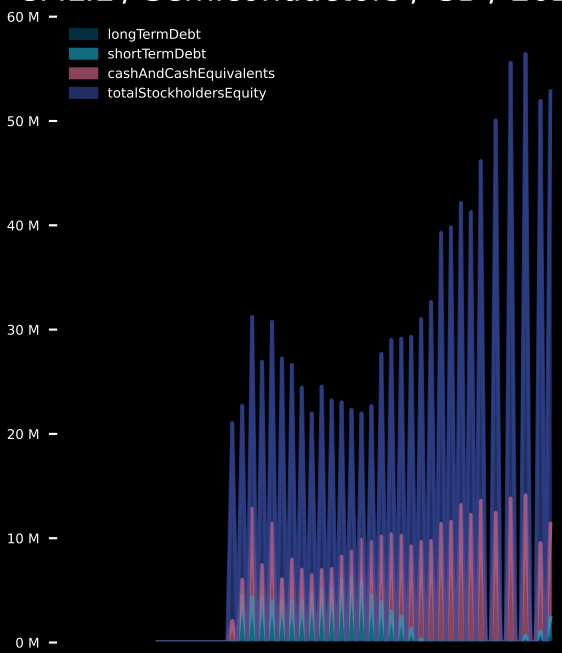
Owners Earnings, annually



GSI Technology, Inc., a fabless semiconductor company, designs, develops, and markets semiconductor memory solutions to networking, industrial, medical, aerospace, and military customers in the United States, China, Singapore, Germany, the Netherlands, and internationally. It offers static random access memory (SRAM) products, such as SyncBurst for microprocessor cache and other applications; No Bus Turnaround SRAMs to address the needs of networking and telecom applications; SigmaQuad and SigmaDDR products for density and random transaction rate requirements of networking and telecom applications; and radiation-hardened and radiation-tolerant SRAMs for aerospace and military applications, such as networking satellites and missiles. Its products are used in a range of networking and telecommunications equipment, including core routers, multi-service access routers, universal gateways, enterprise edge routers, service provider edge routers, optical edge routers, fast Ethernet switches, wireless base stations, and network access equipment; military and aerospace applications, such as radar and



CML.L / Semiconductors / GB / 2022-08-23

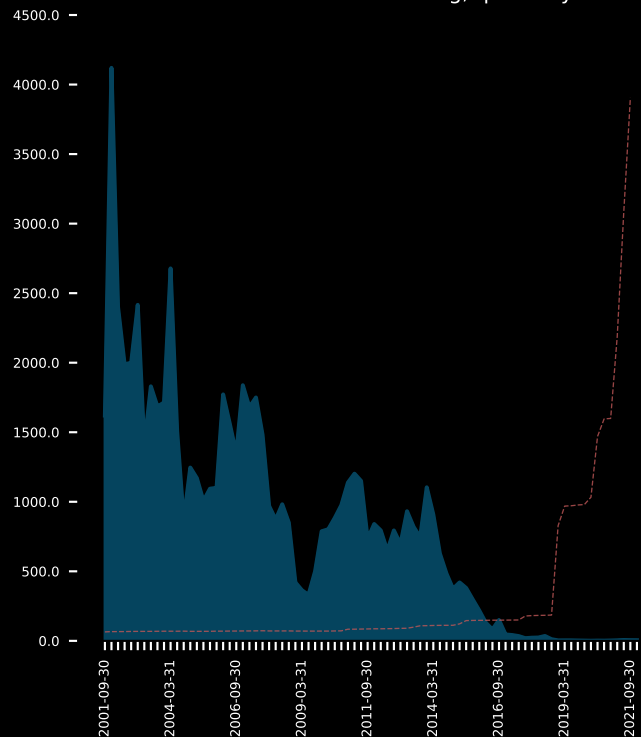


CML Microsystems Plc, through its subsidiaries, designs, manufactures, and markets mixed-signal, radio frequency (RF), and microwave semiconductors for communications markets worldwide. It primarily offers high performance RF products and mixed-signal baseband/modem processors, as well as microwave/millimetre wave semiconductors for wireless voice and data communications. The company provides its products for professional and industrial voice and/or data communications products. It serves communications equipment providers and industrial product manufacturers. CML Microsystems Plc was founded in 1968 and is headquartered in Maldon, the United Kingdom.

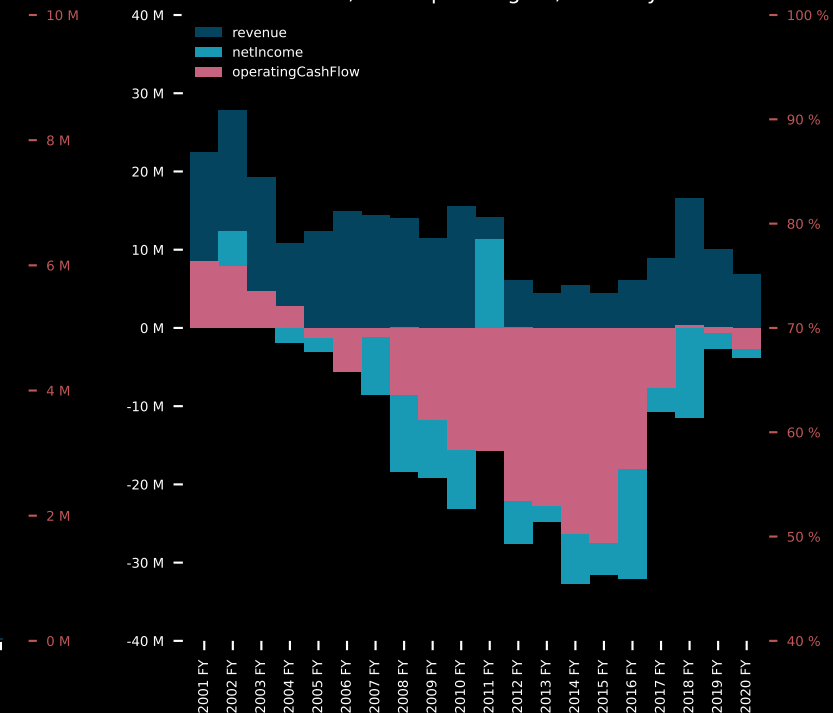
Sales, NI & Operating CF, quarterly



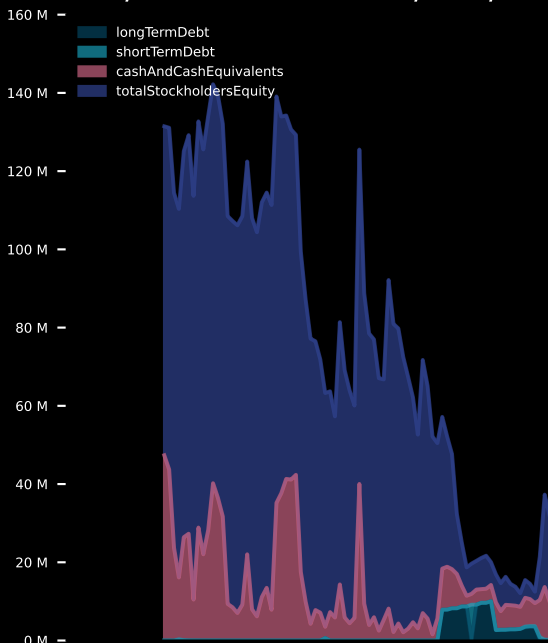
Price vs shares outstanding, quarterly



Sales, NI & Operating CF, annually



MOSY / Semiconductors / US / 2022-08-22



Owners Earnings, annually

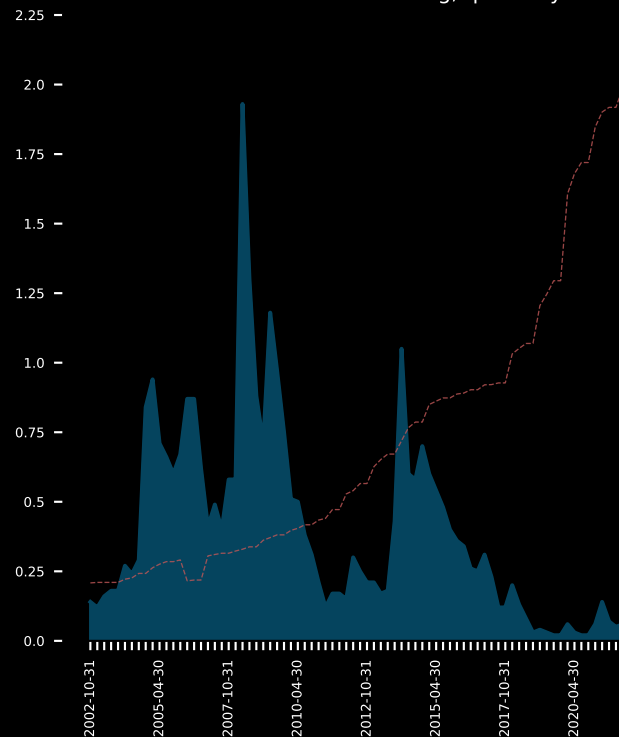


MoSys, Inc. is a provider of semiconductor solutions. The company is headquartered in San Jose, California and currently employs 21 full-time employees. The firm has developed approximately two IC product lines under the Bandwidth Engine and LineSpeed product names. Bandwidth Engine ICs integrate its 1T-SRAM high-density embedded memory with its integrated macro function technology and a serial interface protocol resulting in a monolithic memory IC solution optimized for transaction performance. The LineSpeed IC product line consists of non-memory, high-speed serialization-deserialization (SerDes), input/output (I/O) physical layer (PHY) devices with clock data recovery, gearbox and retimer functionality, which convert lanes of data received on line cards or by optical modules into various configurations and/or ensure signal integrity.

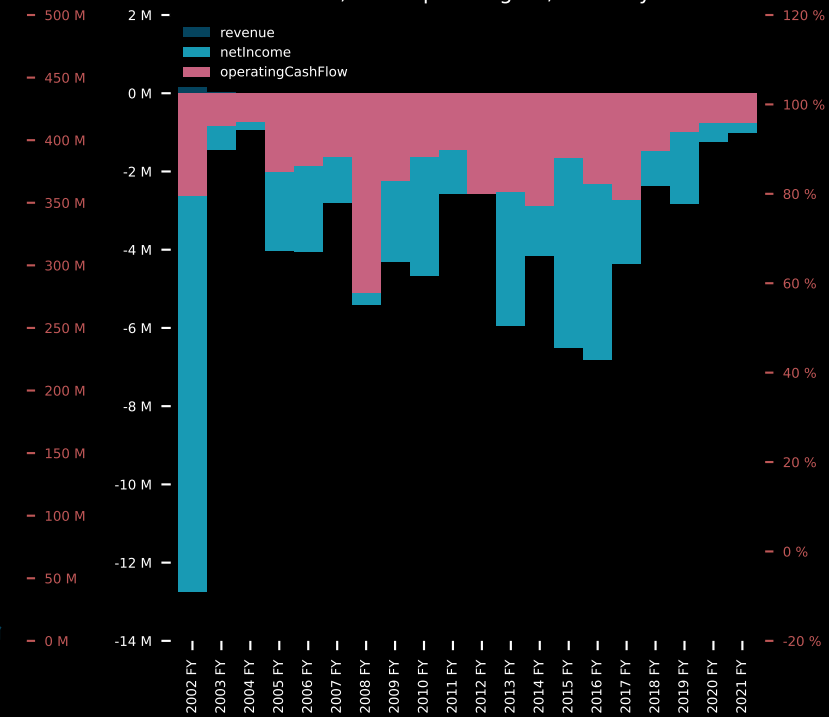
Sales, NI & Operating CF, quarterly



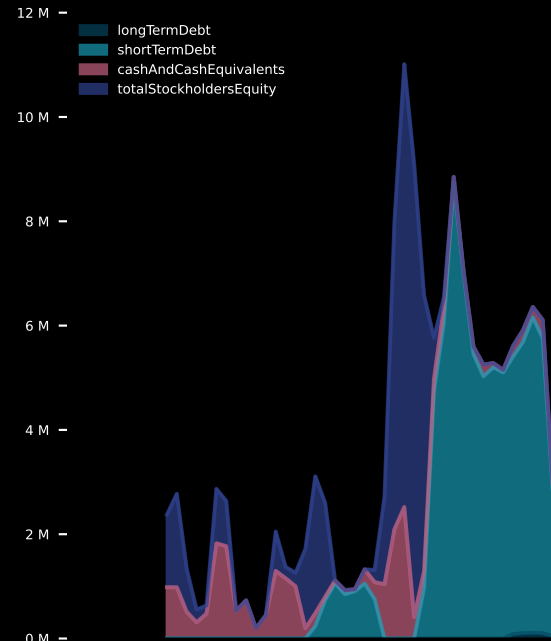
Price vs shares outstanding, quarterly



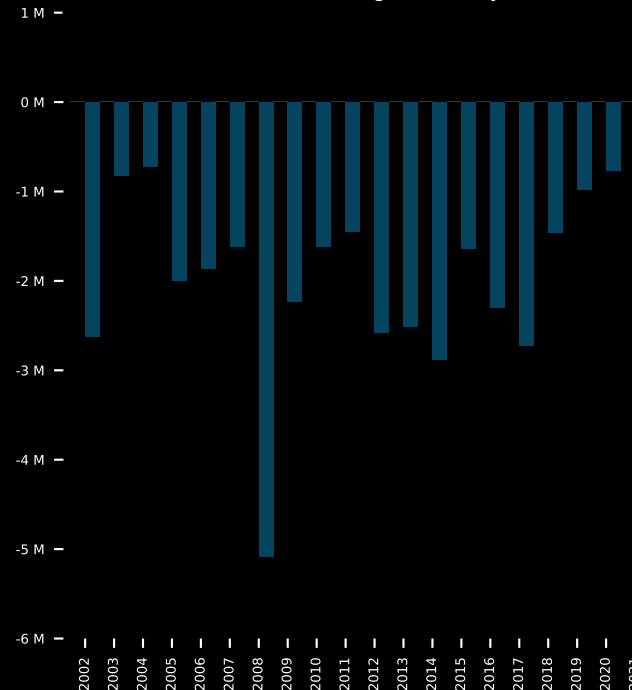
Sales, NI & Operating CF, annually



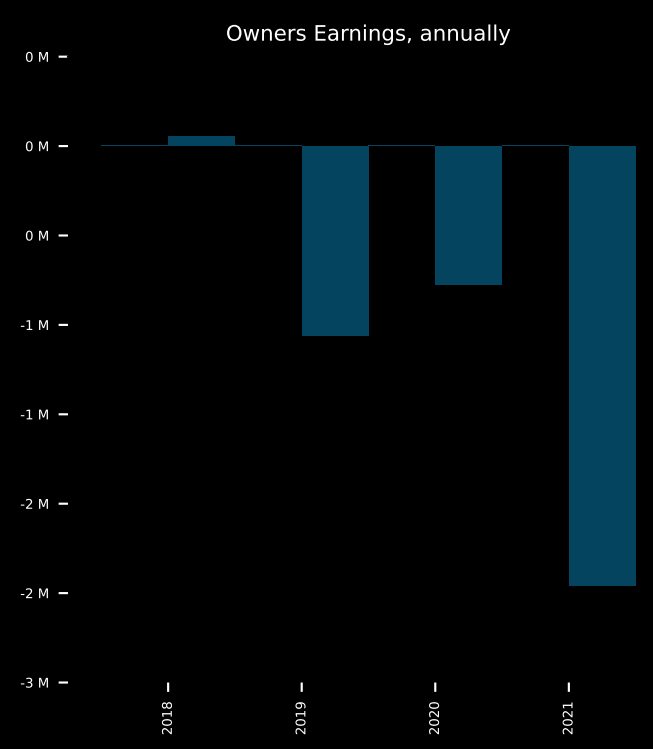
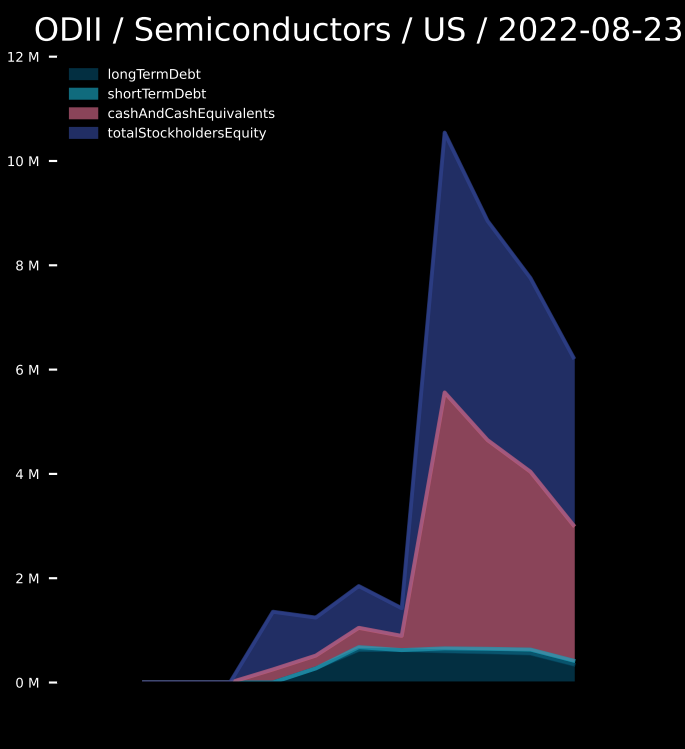
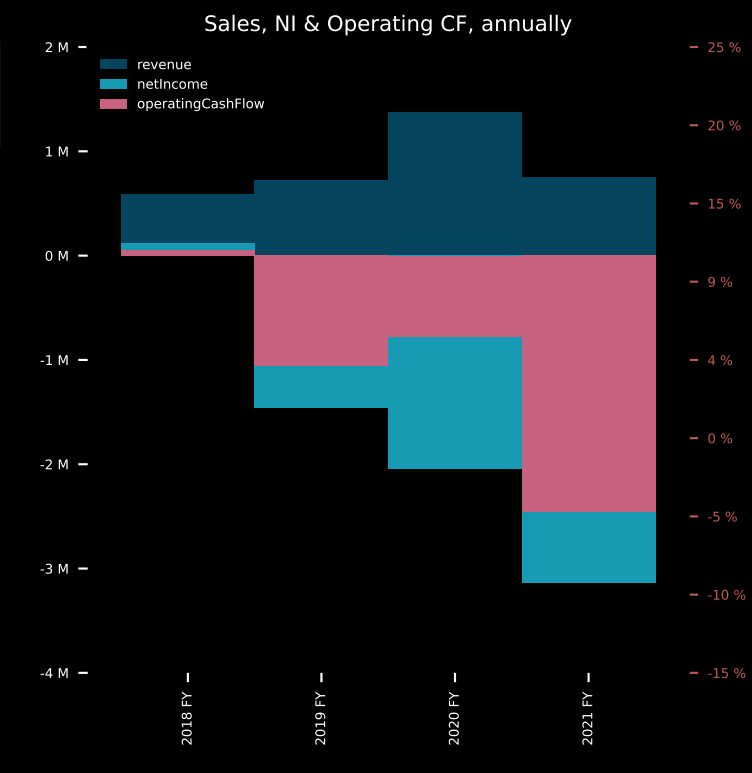
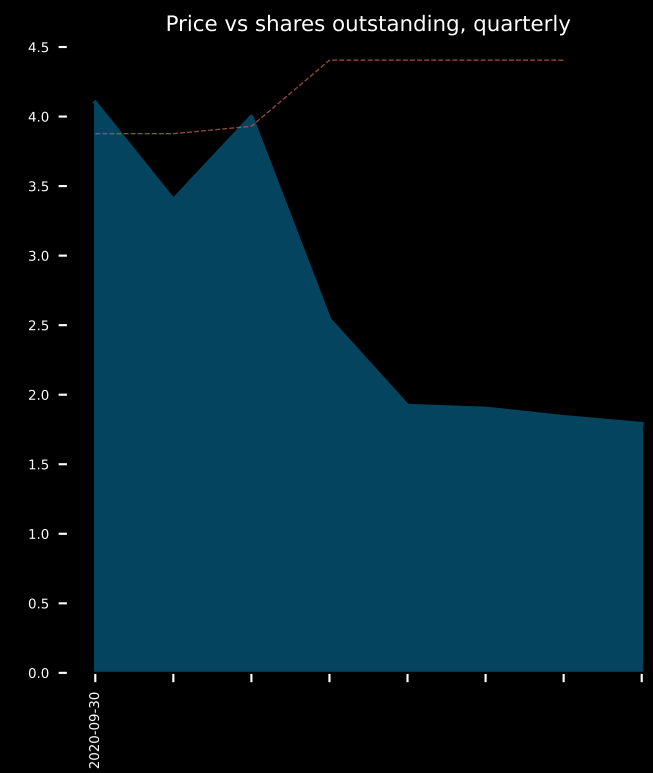
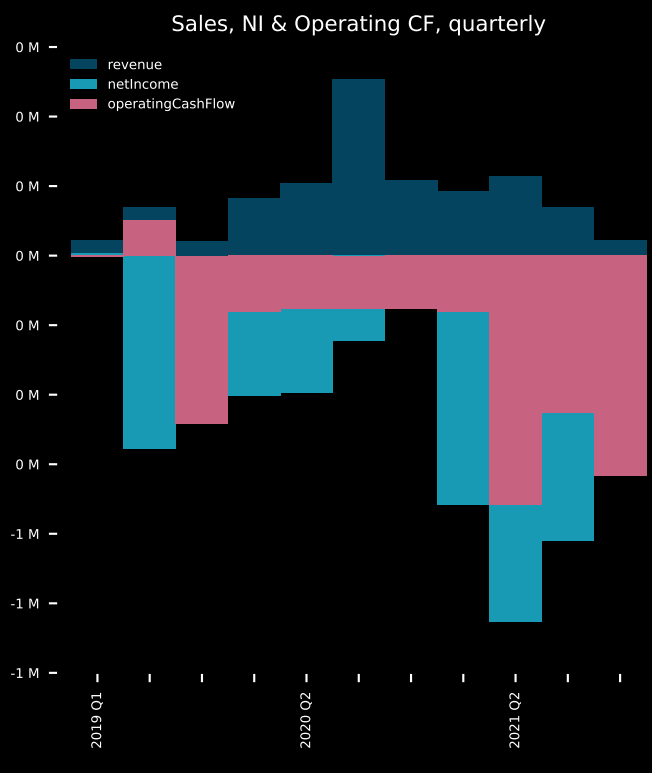
MMTIF / Semiconductors / CA / 2022-08-23



Owners Earnings, annually



Micromem Technologies Inc., through its subsidiary, Micromem Applied Sensor Technology, Inc., develops and markets customized sensor applications based on its proprietary technology in Canada and internationally. It serves companies in various industry segments, including defense, life sciences, automotive, consumer, and mining. The company was formerly known as Avanti Corp International Inc. and changed its name to Micromem Technologies Inc. in January 1999. Micromem Technologies Inc. was incorporated in 1985 and is headquartered in Toronto, Canada.

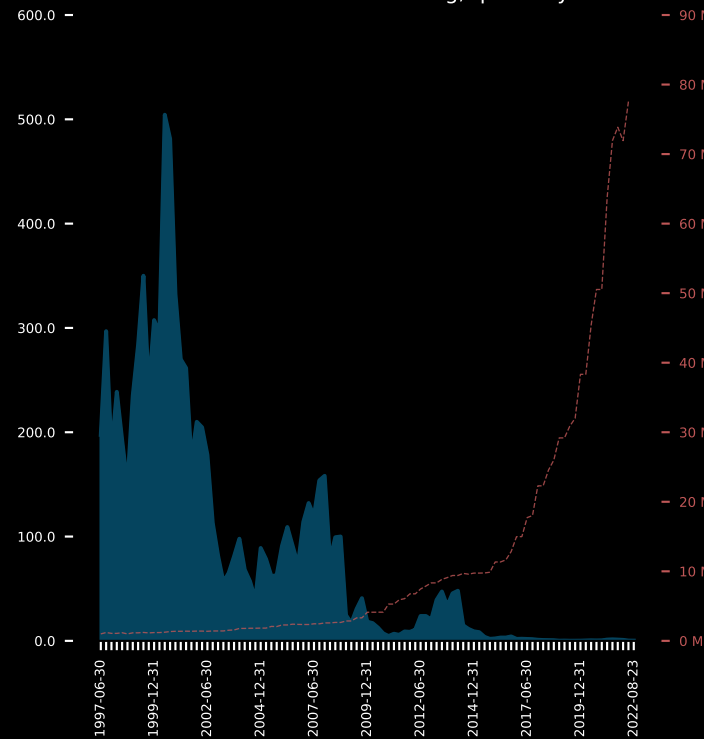


Odyssey Semiconductor Technologies, Inc., a semiconductor device company, develops and sells high-voltage power switching components and systems based on proprietary gallium nitride processing technology. The company was incorporated in 2019 and is based in Ithaca, New York.

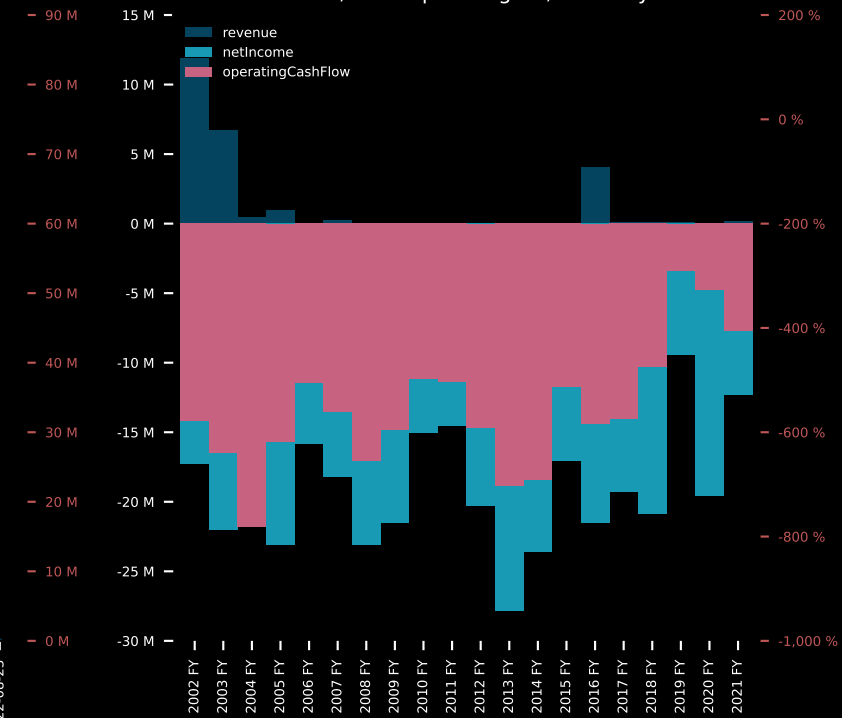
Sales, NI & Operating CF, quarterly



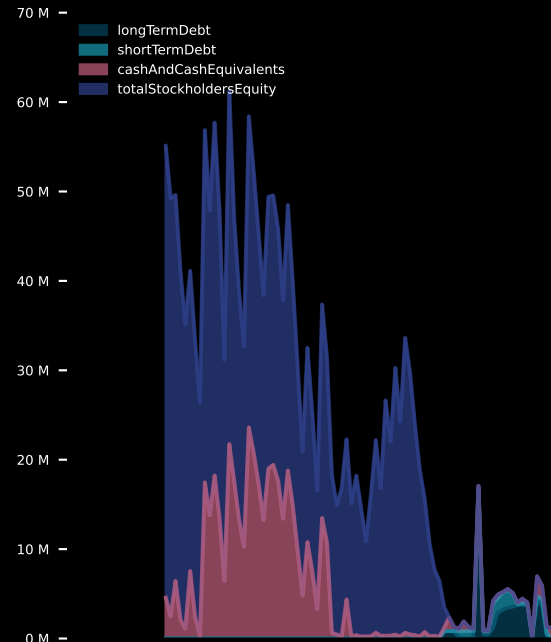
Price vs shares outstanding, quarterly



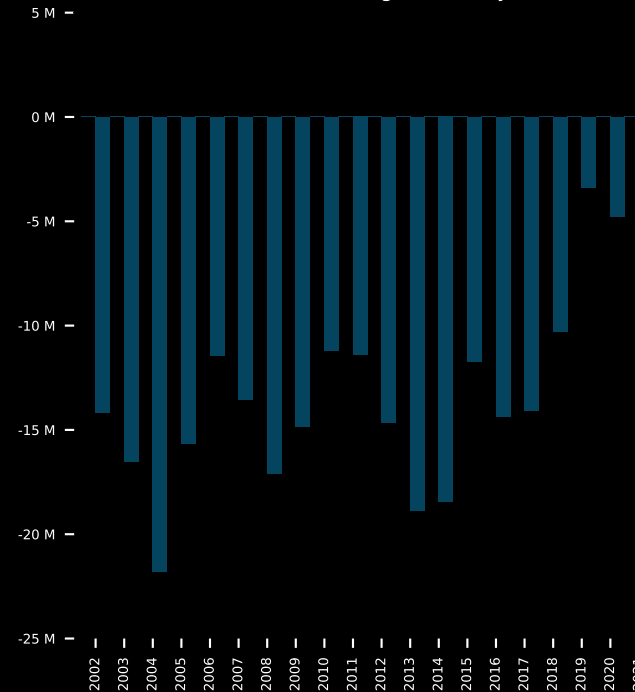
Sales, NI & Operating CF, annually



PRKR / Semiconductors / US / 2022-08-23

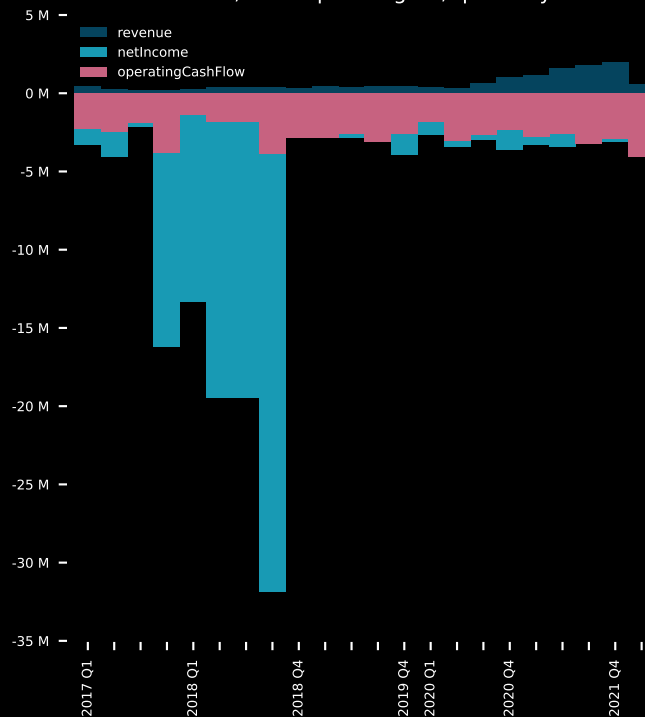


Owners Earnings, annually

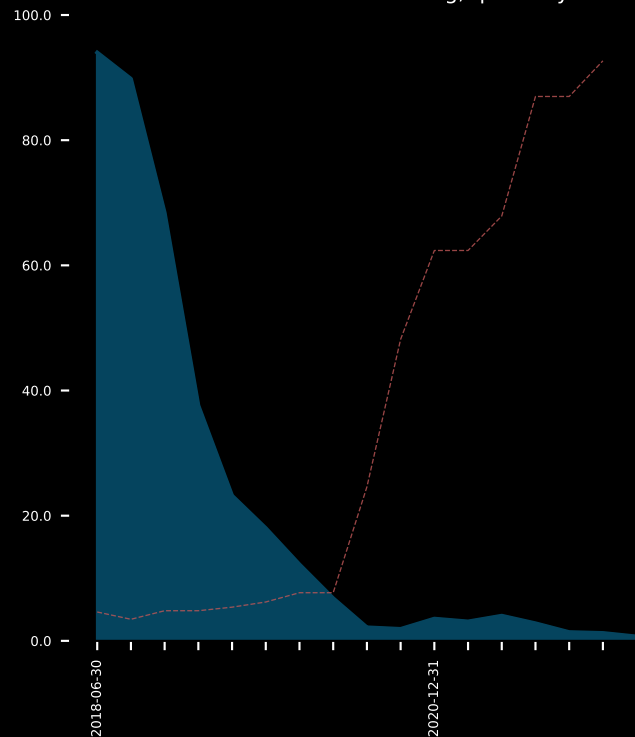


ParkerVision, Inc. develops and markets radio frequency technologies and integrated circuits for use in wireless communication products. The company was incorporated in 1989 and is headquartered in Jacksonville, Florida.

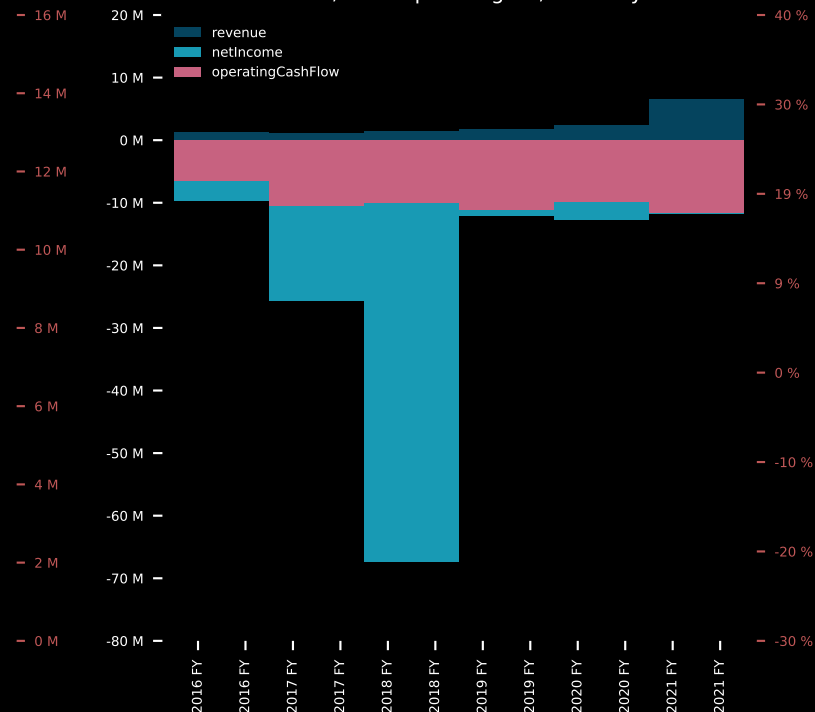
Sales, NI & Operating CF, quarterly



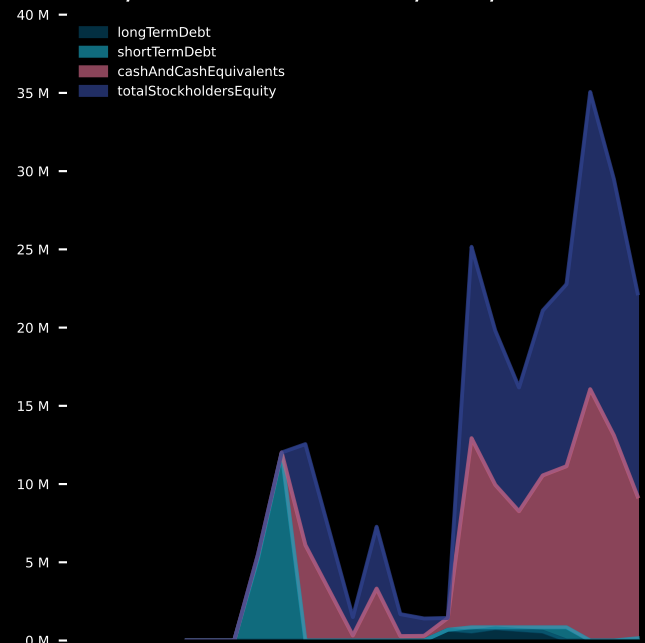
Price vs shares outstanding, quarterly



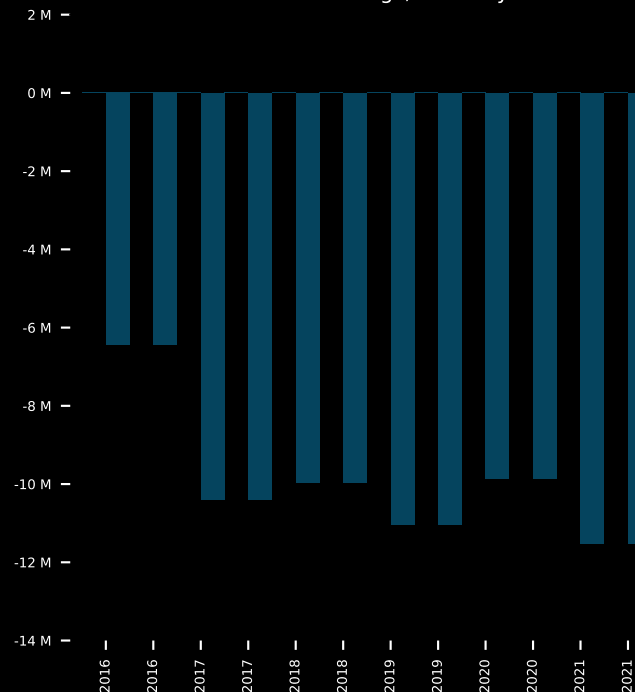
Sales, NI & Operating CF, annually



WISA / Semiconductors / US / 2022-08-23

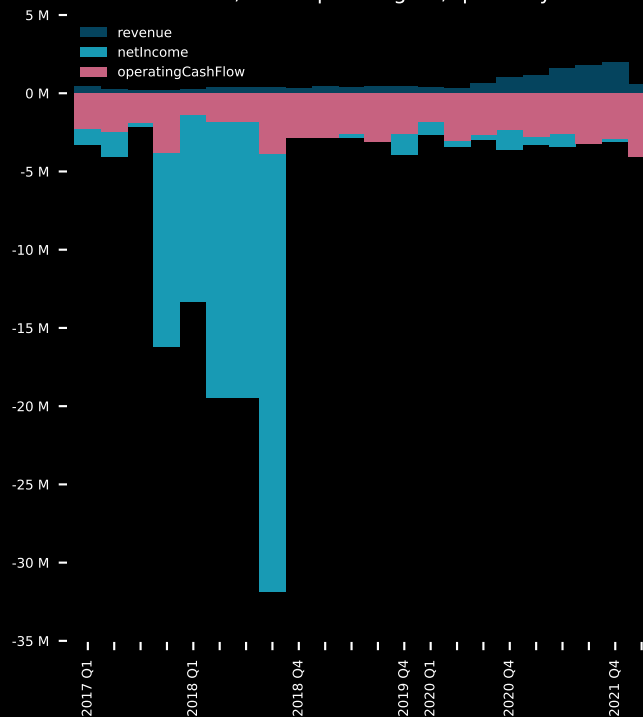


Owners Earnings, annually

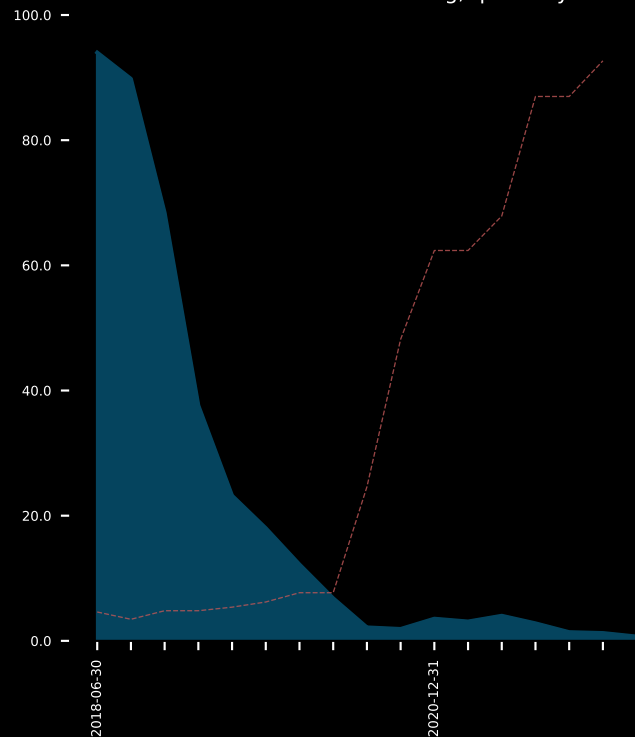


WiSA Technologies, Inc. develops, manufactures, and sells audio wireless technology for smart devices and next-generation home entertainment systems under the WiSA brand name in the United States, Taiwan, China, Japan, and Korea. It delivers immersive audio experiences for high-definition content, including movies, video, music, sports, gaming/esports, and others. The company was formerly known as Summit Wireless Technologies, Inc. and changed its name to WiSA Technologies Inc. in March 2022. WiSA Technologies, Inc. was incorporated in 2010 and is headquartered in Beaverton, Oregon.

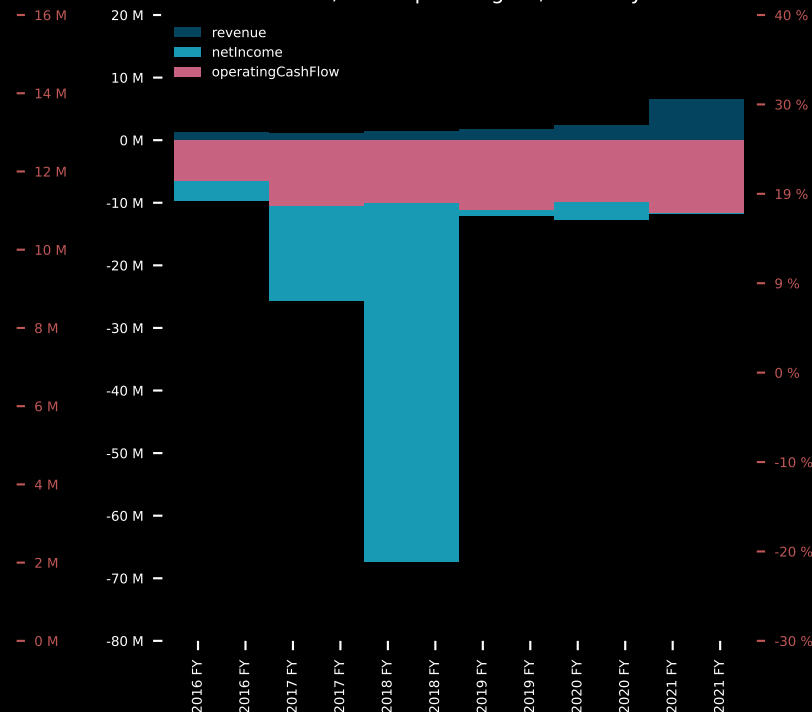
Sales, NI & Operating CF, quarterly



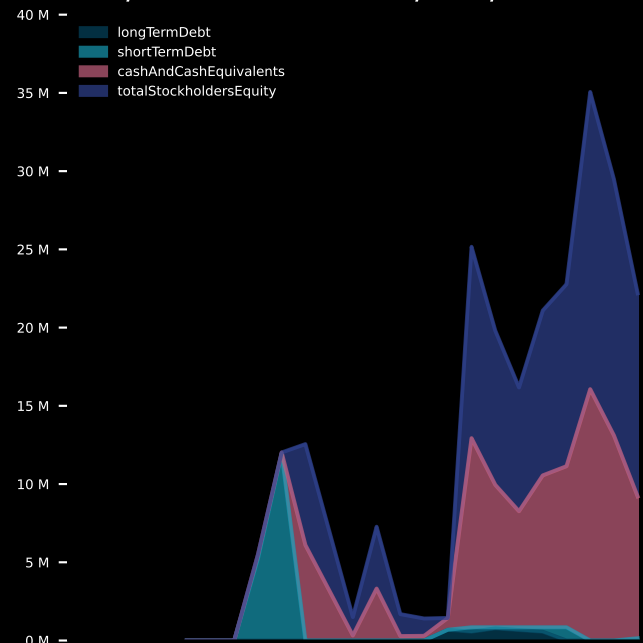
Price vs shares outstanding, quarterly



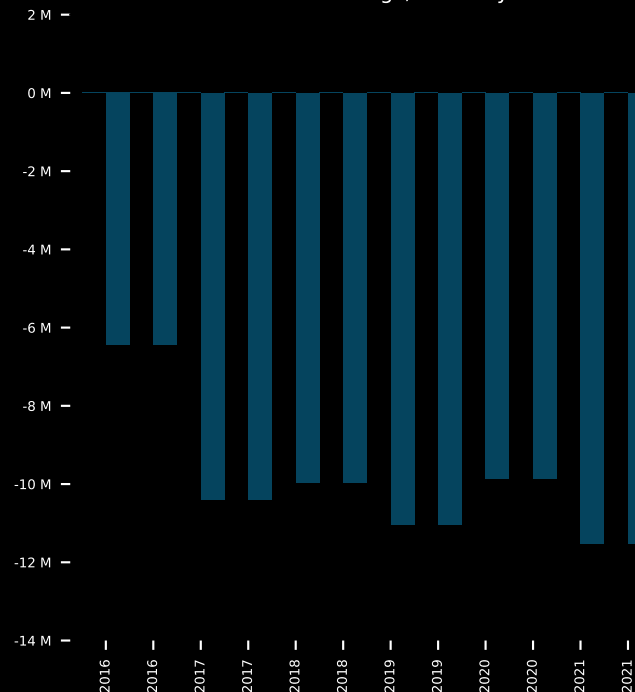
Sales, NI & Operating CF, annually



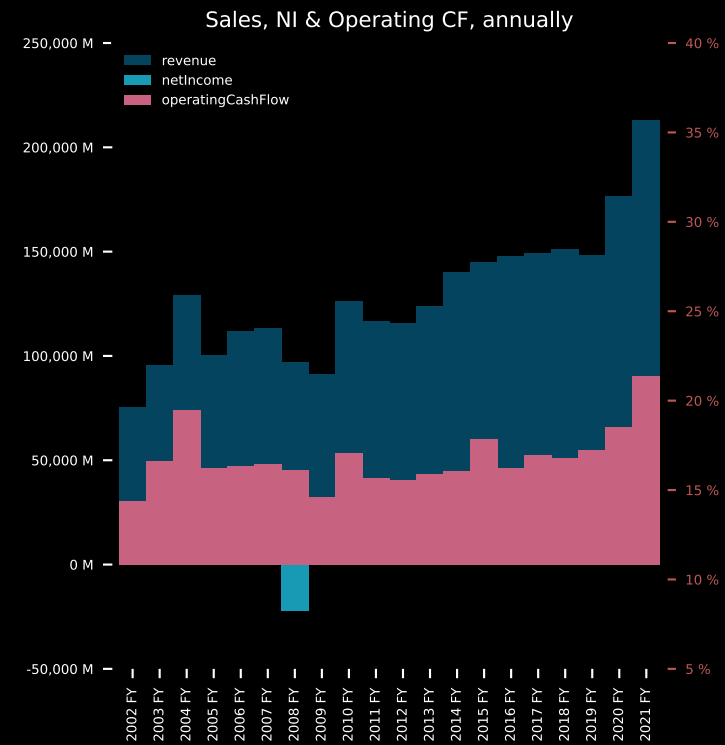
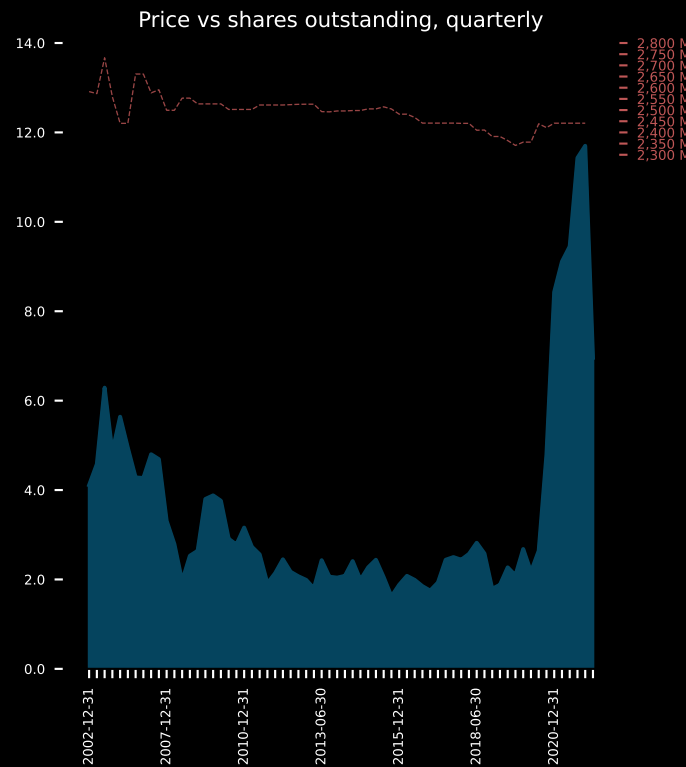
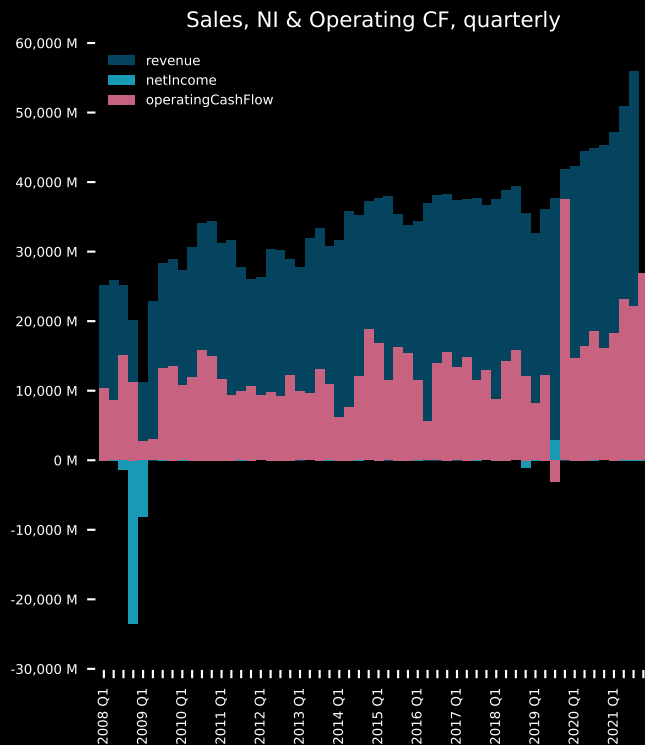
WISA / Semiconductors / US / 2022-08-23



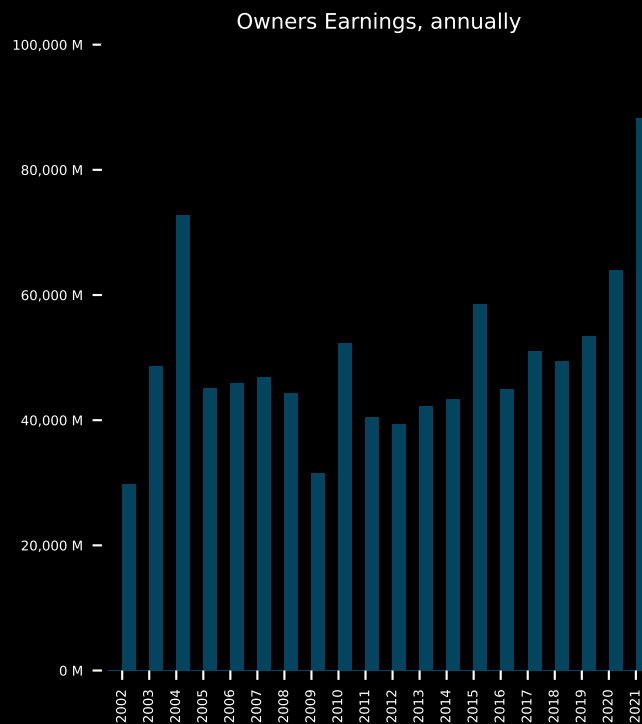
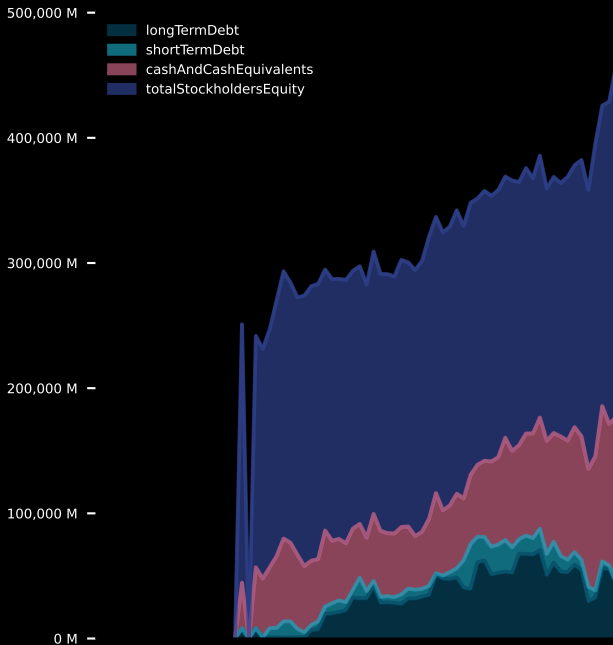
Owners Earnings, annually



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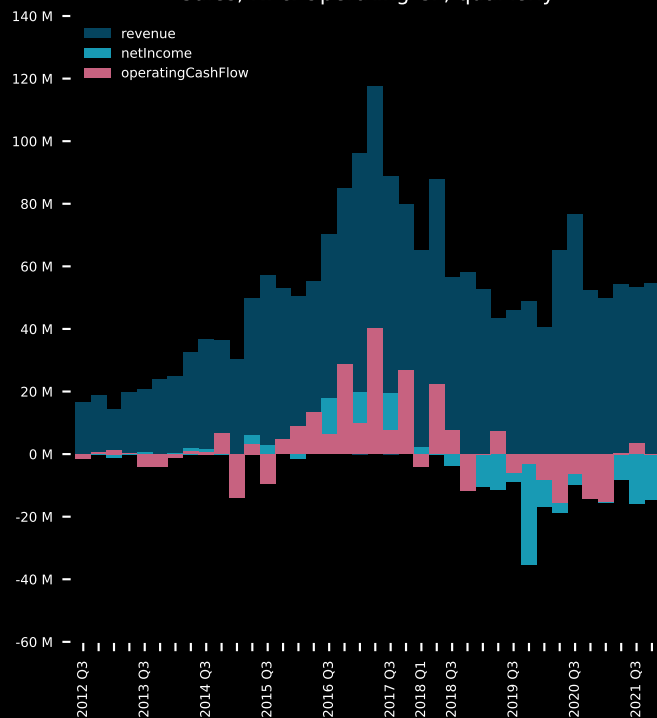


UMC / Semiconductors / TW / 2022-08-23

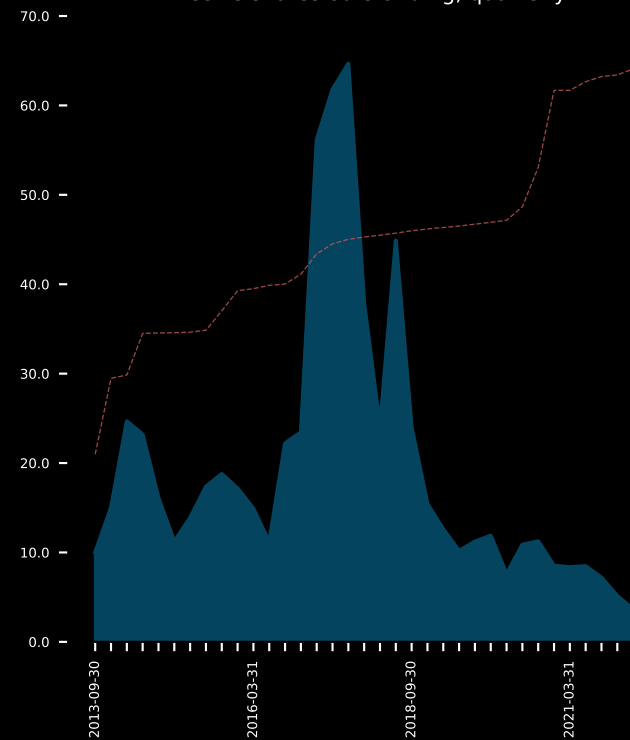


United Microelectronics Corporation operates as a semiconductor wafer foundry in Taiwan, Singapore, China, Hong Kong, Japan, the United States, Europe, and internationally. The company provides circuit design, mask tooling, wafer fabrication, and assembly and testing services. It serves fabless design companies and integrated device manufacturers. United Microelectronics Corporation was incorporated in 1980 and is headquartered in Hsinchu City, Taiwan.

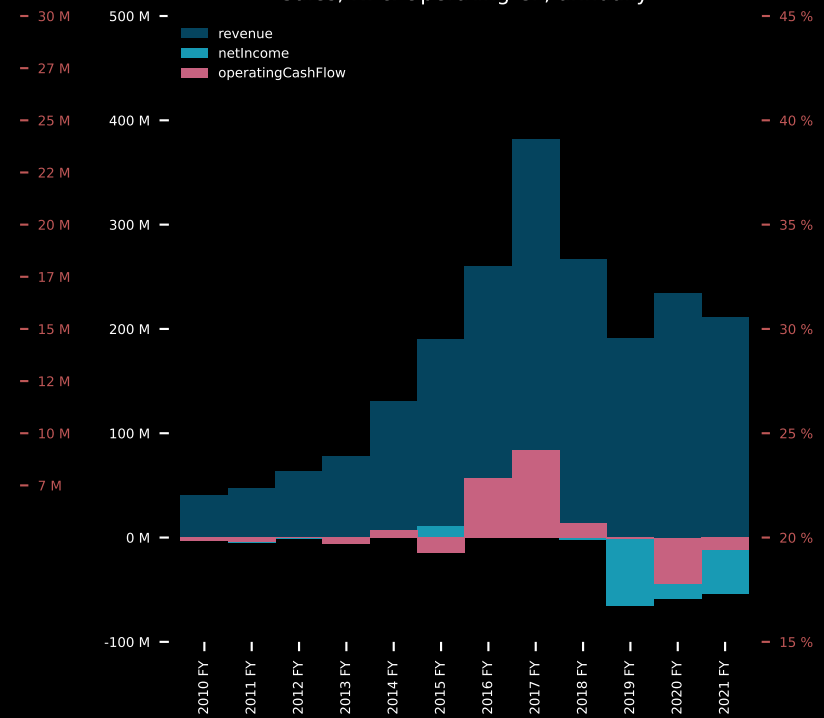
Sales, NI & Operating CF, quarterly



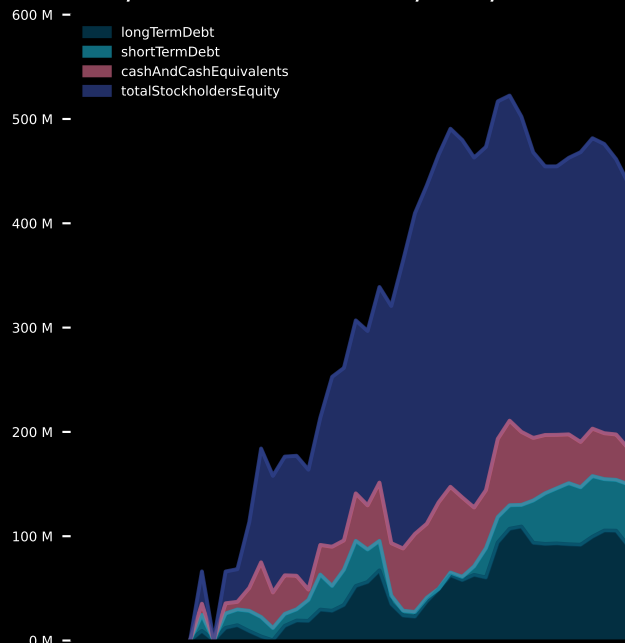
Price vs shares outstanding, quarterly



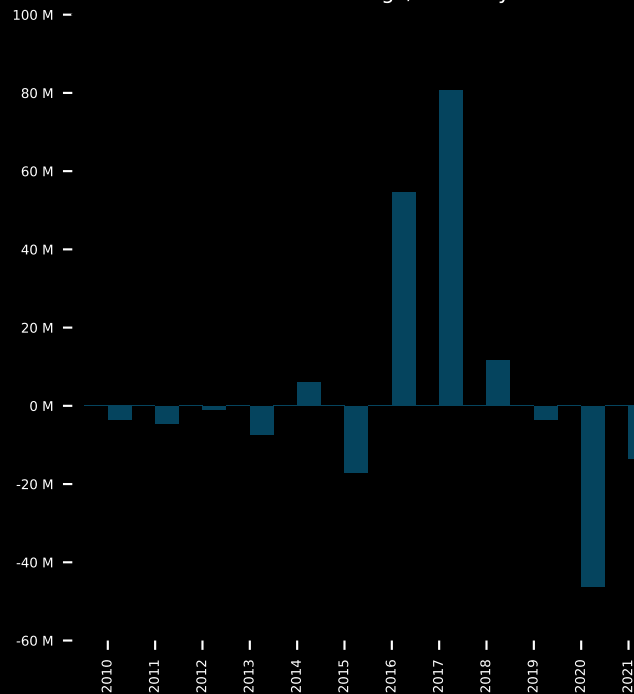
Sales, NI & Operating CF, annually



AAOI / Semiconductors / US / 2022-08-22

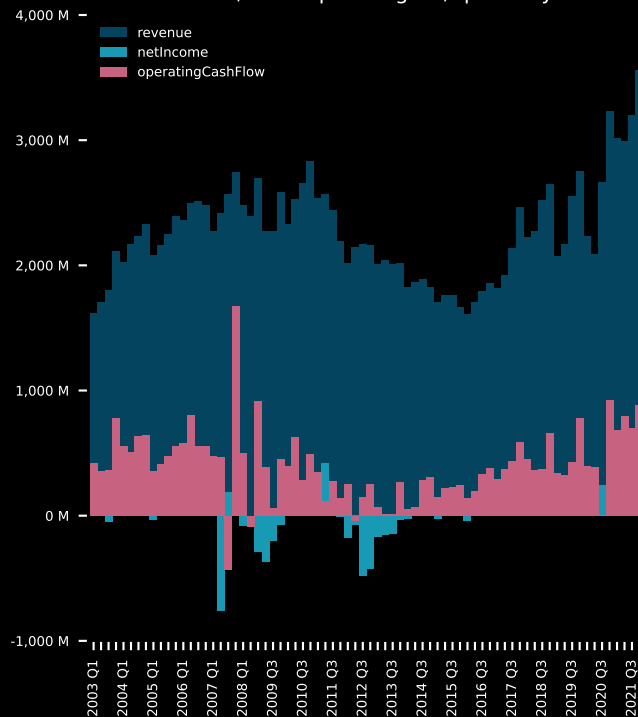


Owners Earnings, annually

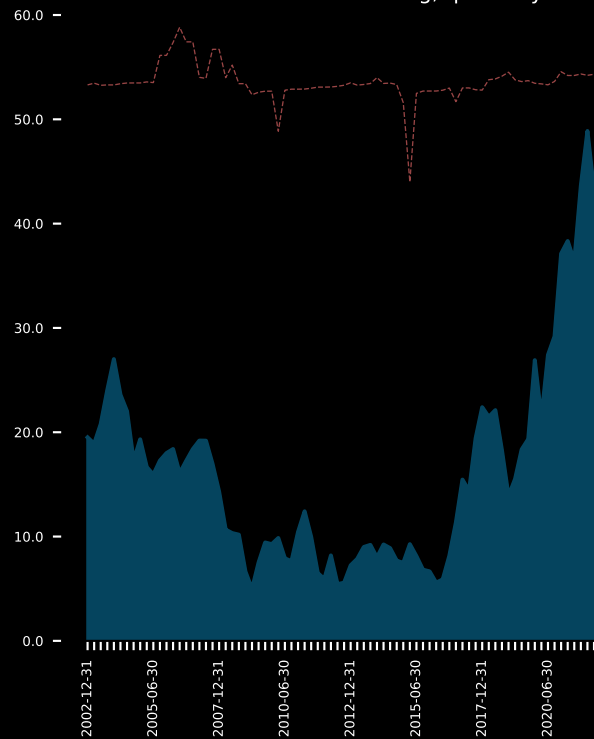


Applied Optoelectronics, Inc. designs, manufactures, and sells various fiber-optic networking products worldwide. It offers optical modules, lasers, subassemblies, transmitters and transceivers, and turn-key equipment, as well as headend, node, and distribution equipment. The company sells its products to internet data center operators, cable television and telecom equipment manufacturers, and internet service providers through its direct and indirect sales channels. Applied Optoelectronics, Inc. was incorporated in 1997 and is headquartered in Sugar Land, Texas.

Sales, NI & Operating CF, quarterly



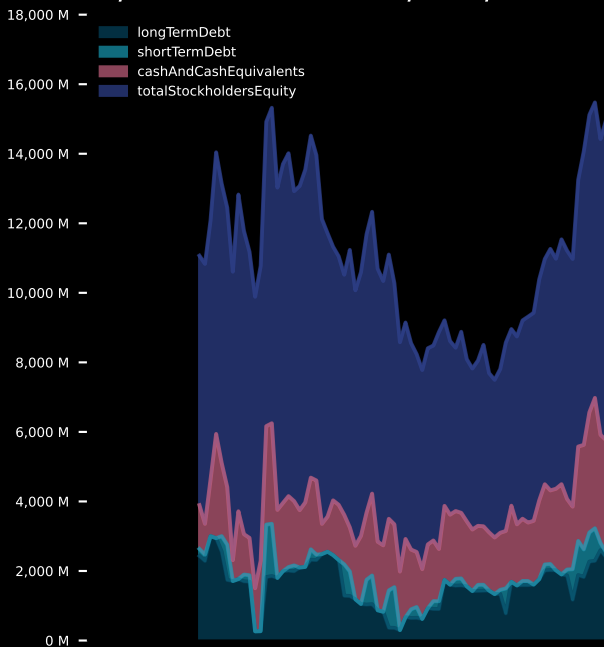
Price vs shares outstanding, quarterly



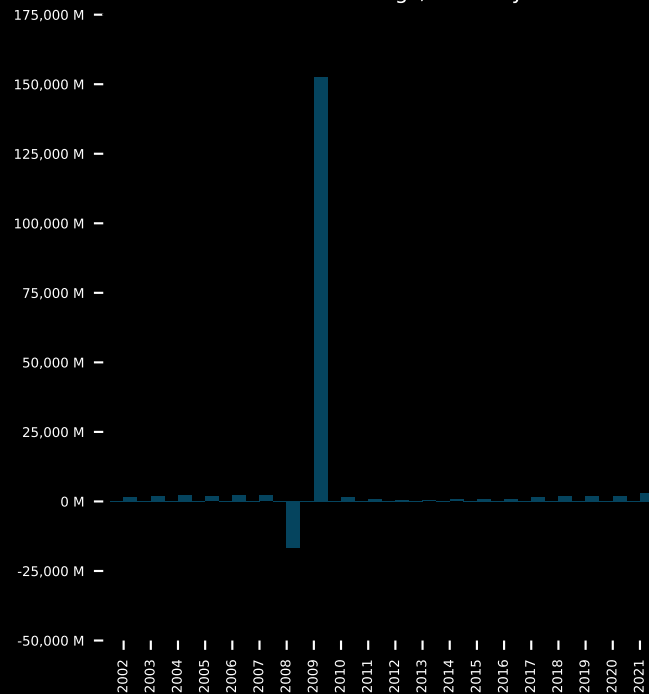
Sales, NI & Operating CF, annually



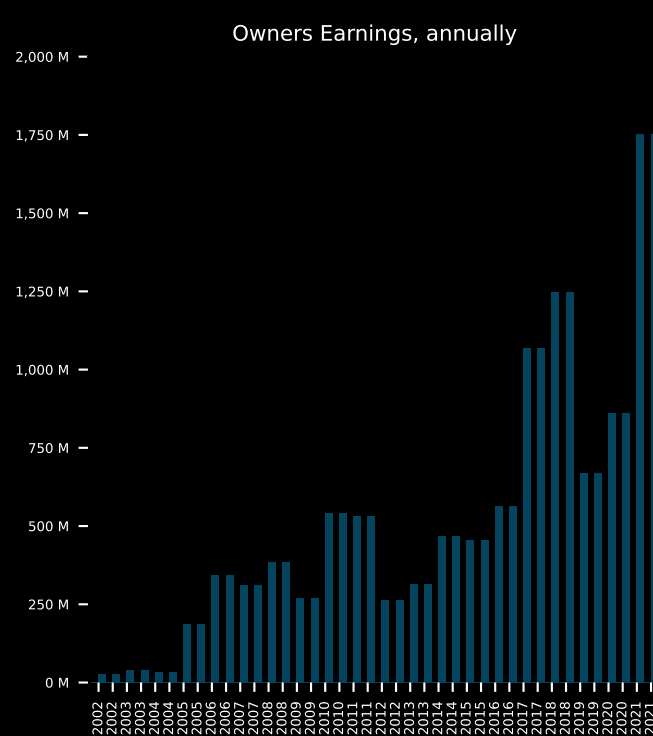
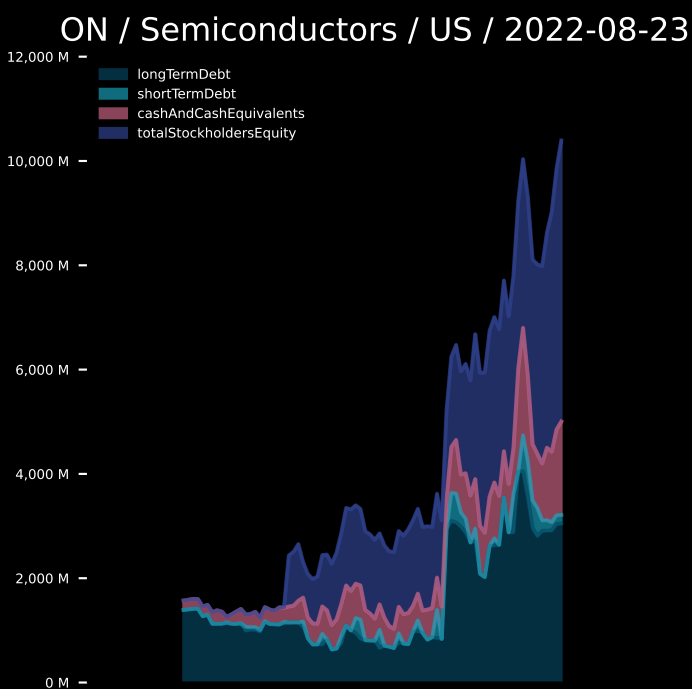
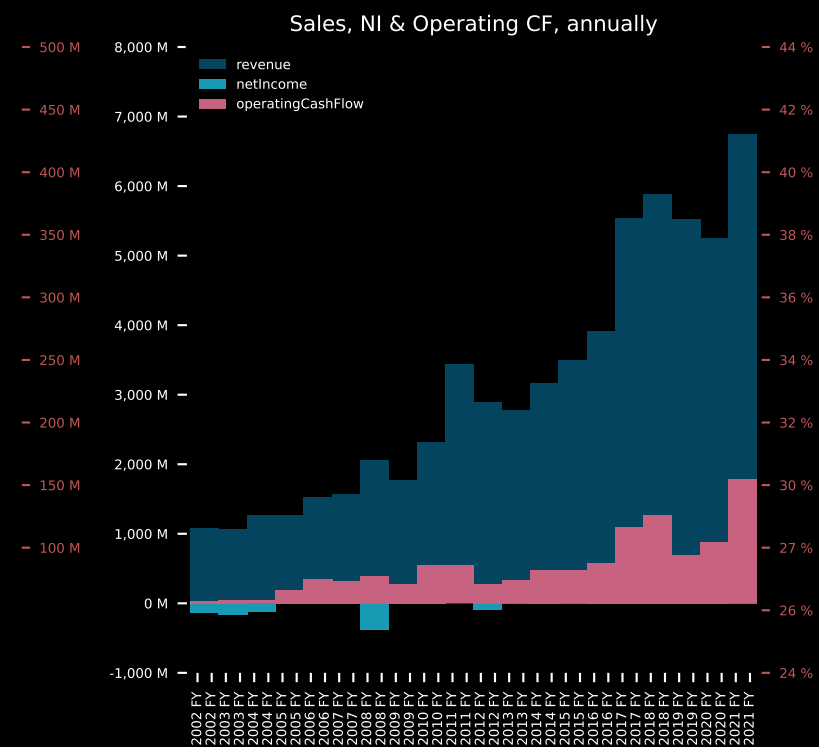
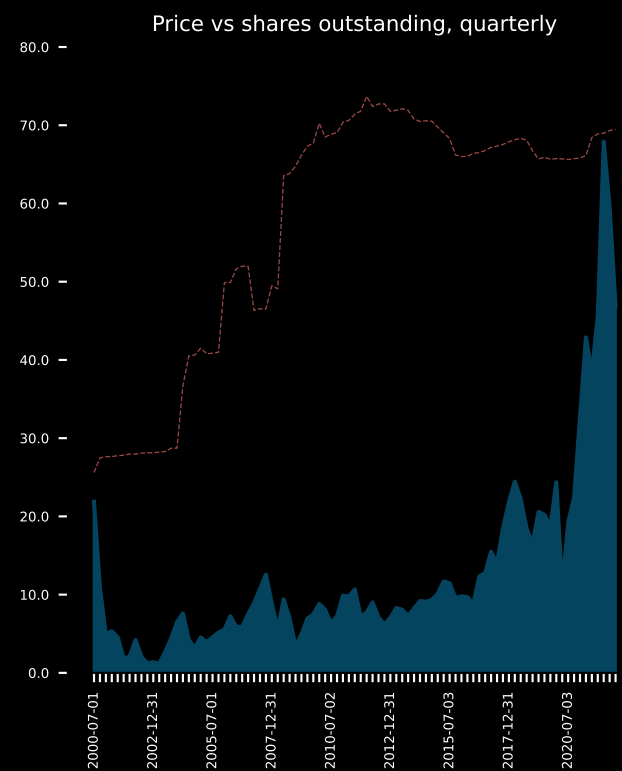
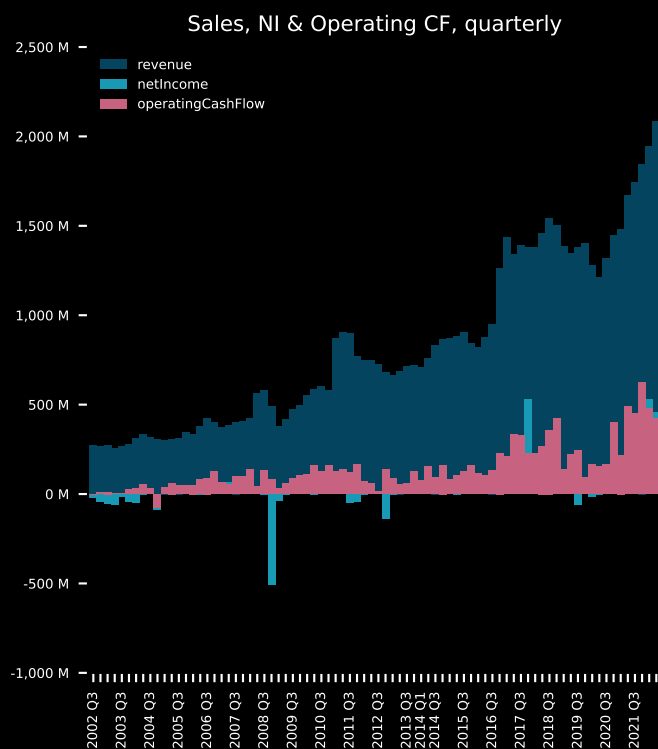
STM / Semiconductors / CH / 2022-08-23



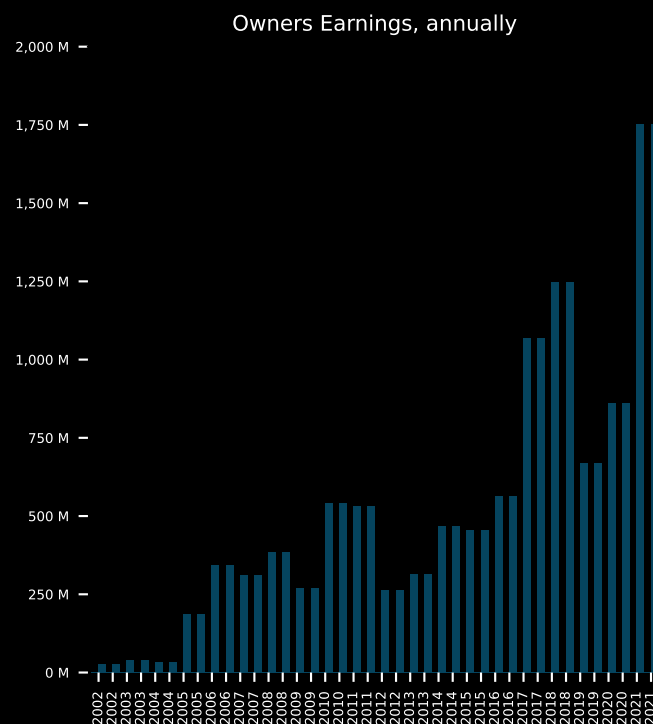
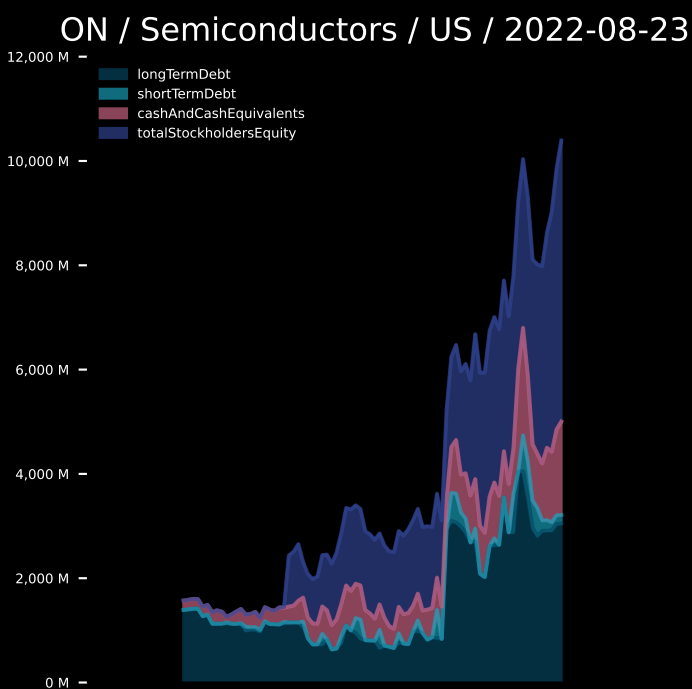
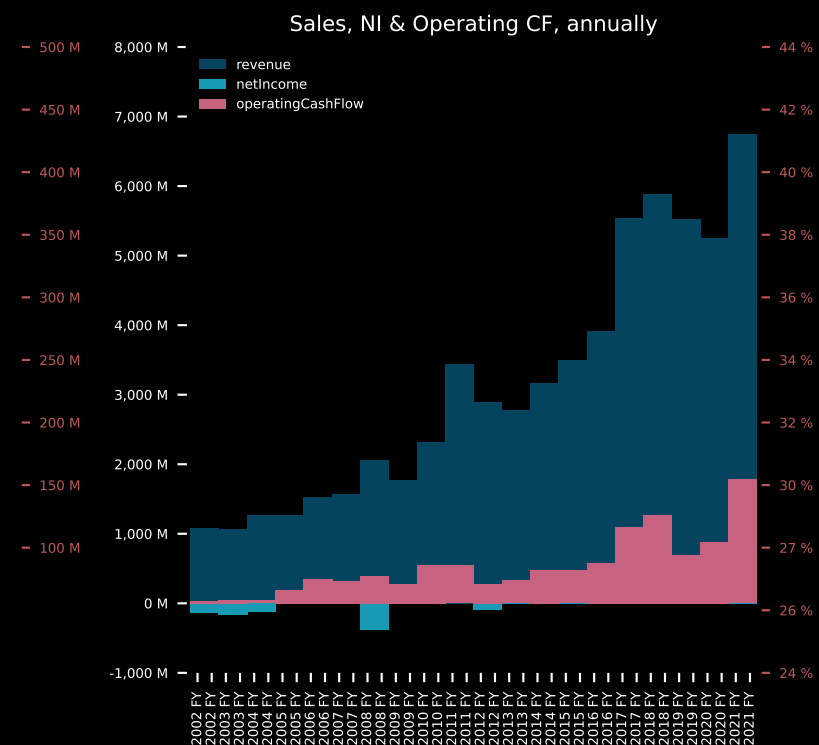
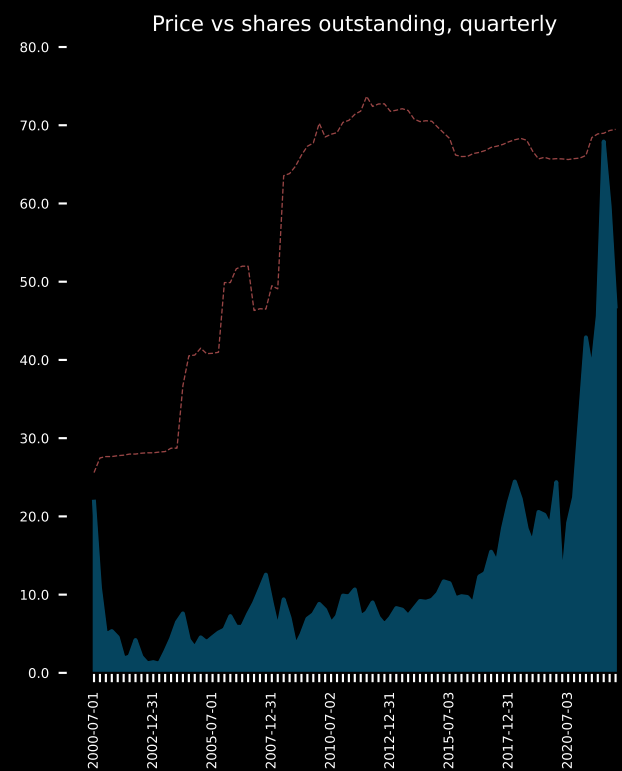
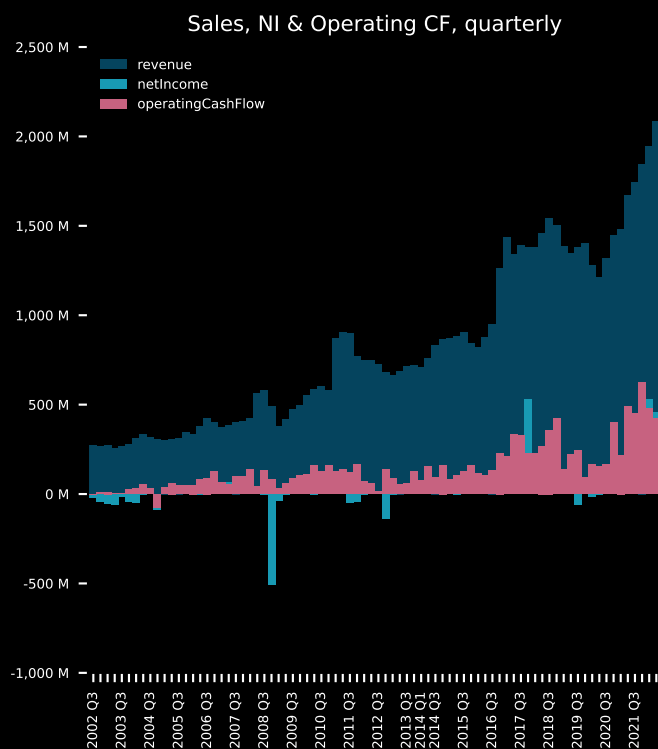
Owners Earnings, annually



STMicroelectronics N.V., together with its subsidiaries, designs, develops, manufactures, and sells semiconductor products in Europe, the Middle East, Africa, the Americas, and the Asia Pacific. The company operates through Automotive and Discrete Group; Analog, MEMS and Sensors Group; and Microcontrollers and Digital ICs Group segments. The Automotive and Discrete Group segment offers automotive integrated circuits (ICs); and discrete and power transistor products. The Analog, MEMS and Sensors Group segment provides industrial application-specific integrated circuits (ASICs) and application-specific standard products (ASSPs); general purpose analog products; custom analog ICs; wireless charging solutions; galvanic isolated gate drivers; low and high voltage amplifiers, comparators, and current-sense amplifiers; MasterGaN, a solution that integrates a silicon driver and GaN power transistors in a single package; wireline and wireless connectivity ICs; touch screen controllers; micro-electro-mechanical systems (MEMS) products, including sensors or actuators; and optical sensing solutions. The Microcontrollers and Digital ICs Group segment offers microcontrollers, digital ICs, and digital ICs with analog peripherals.



ON Semiconductor Corporation provides intelligent sensing and power solutions worldwide. Its intelligent power technologies enable the electrification of the automotive industry that allows for lighter and longer-range electric vehicles, empowers fast-charging systems, and propels sustainable energy for the solar strings, industrial power, and storage systems. The company operates through three segments the Power Solutions Group, the Advanced Solutions Group, and the Intelligent Sensing Group segments. It offers analog, discrete, module, and integrated semiconductor products that perform multiple application functions, including power switching and conversion, signal conditioning, circuit protection, signal amplification, and voltage regulation functions. The company also designs and develops analog, mixed-signal, advanced logic, application specific standard product and ASICs, radio frequency, and integrated power solutions for end-users in end-markets, as well as provides foundry and design services for government customers. In addition, it develops complementary metal oxide semiconductor image sensors, image

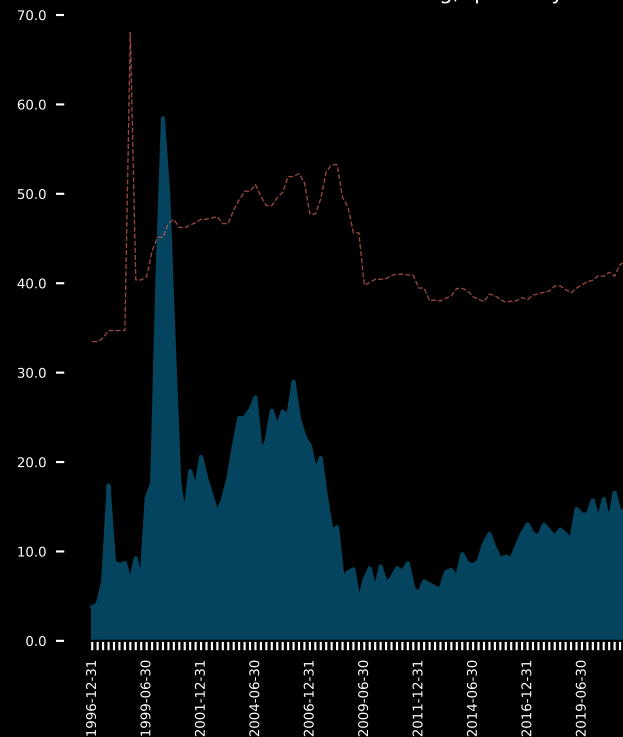


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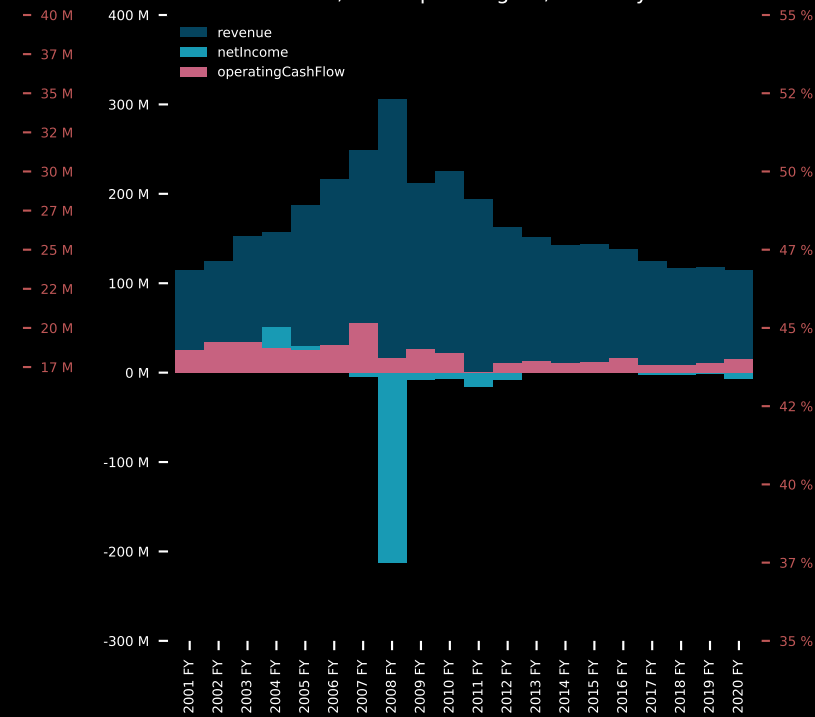
Sales, NI & Operating CF, quarterly



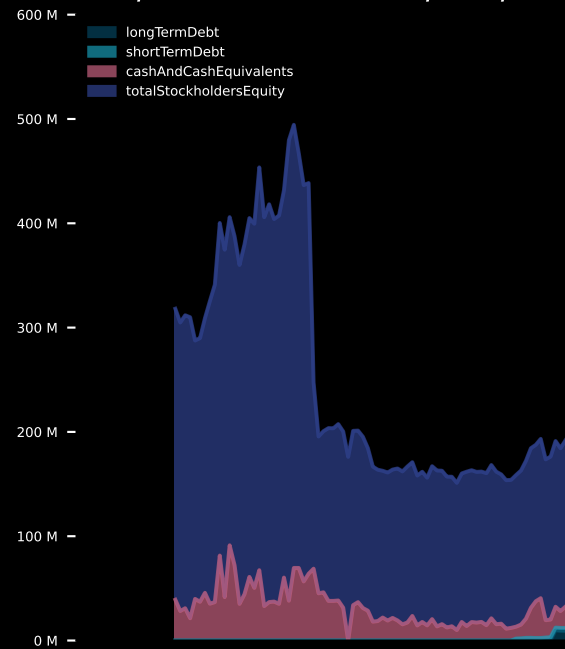
Price vs shares outstanding, quarterly



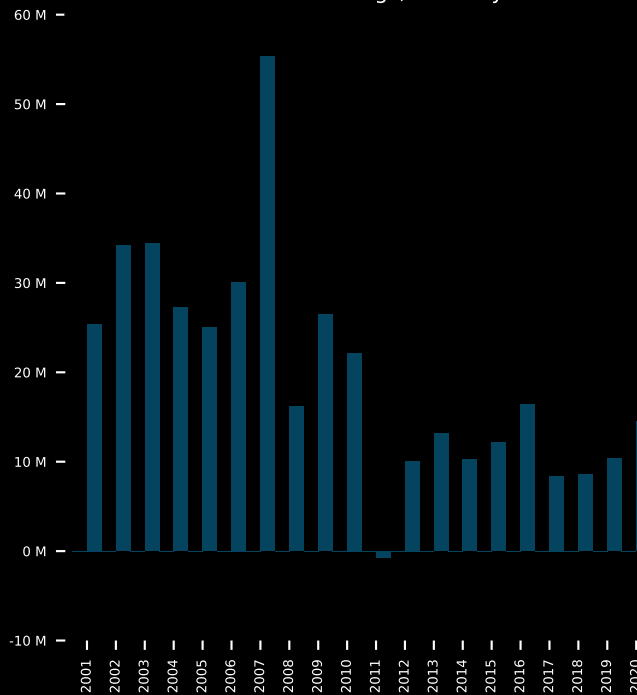
Sales, NI & Operating CF, annually



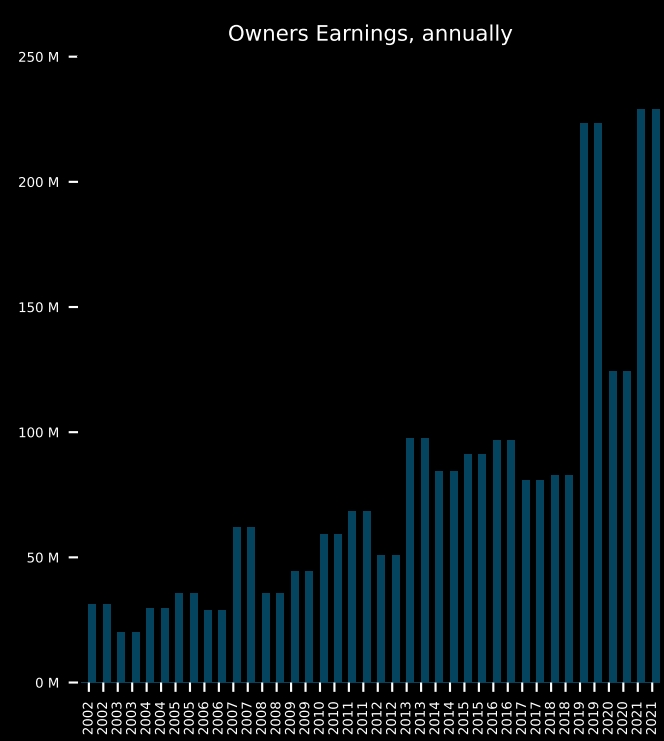
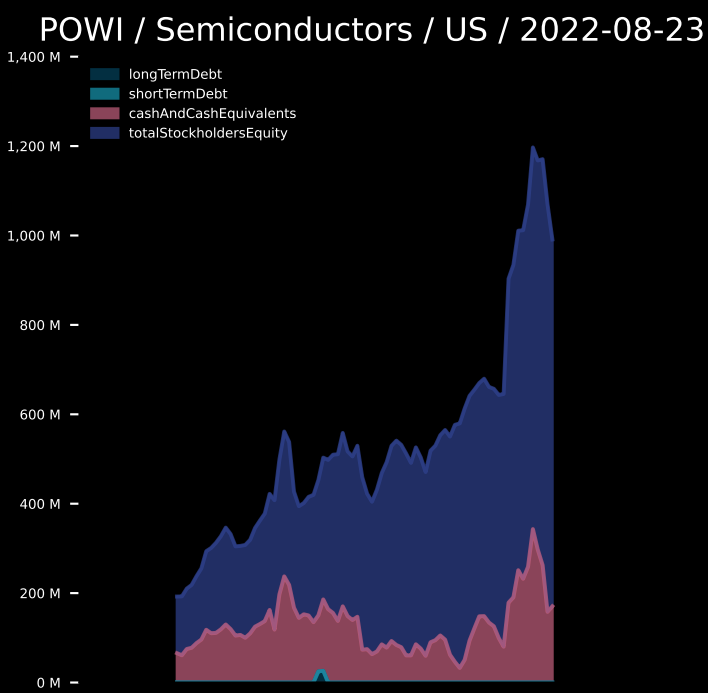
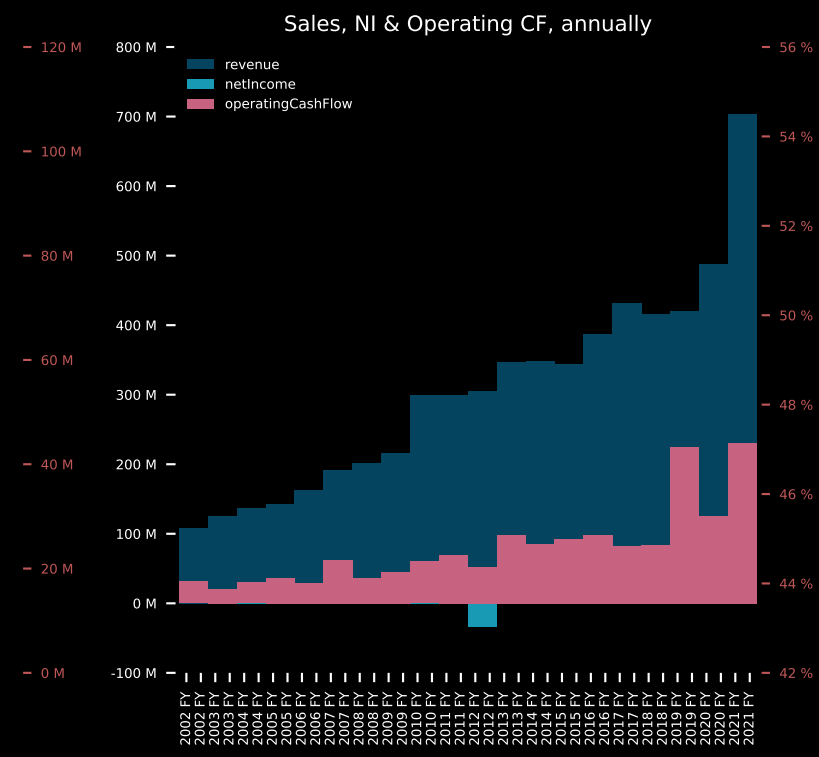
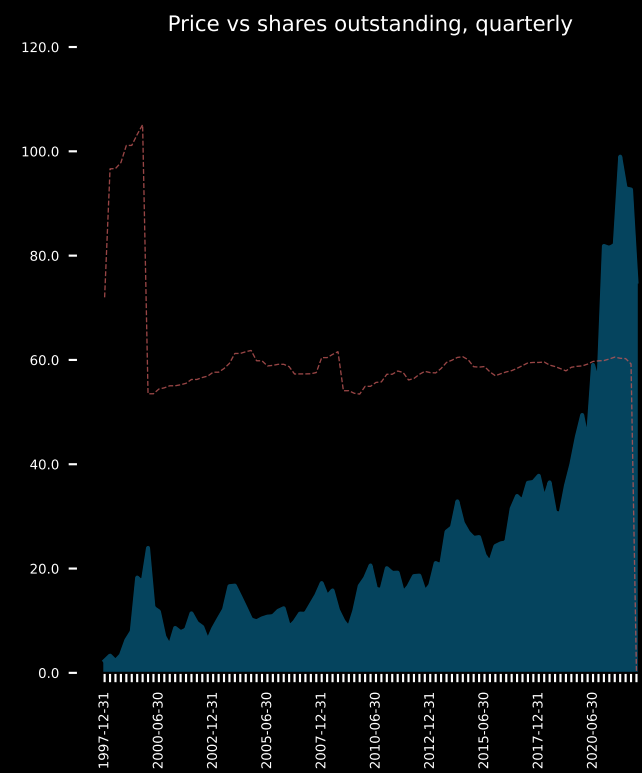
DSPG / Semiconductors / US / 2022-08-23



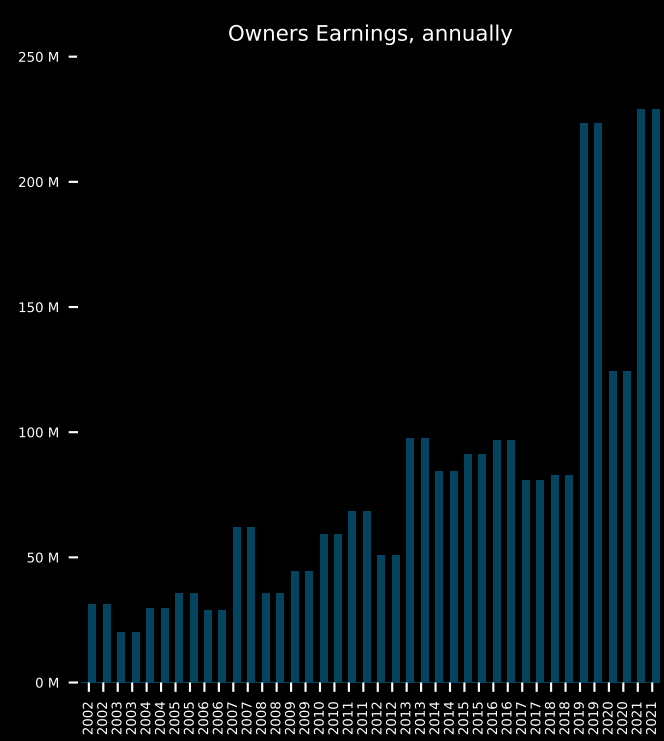
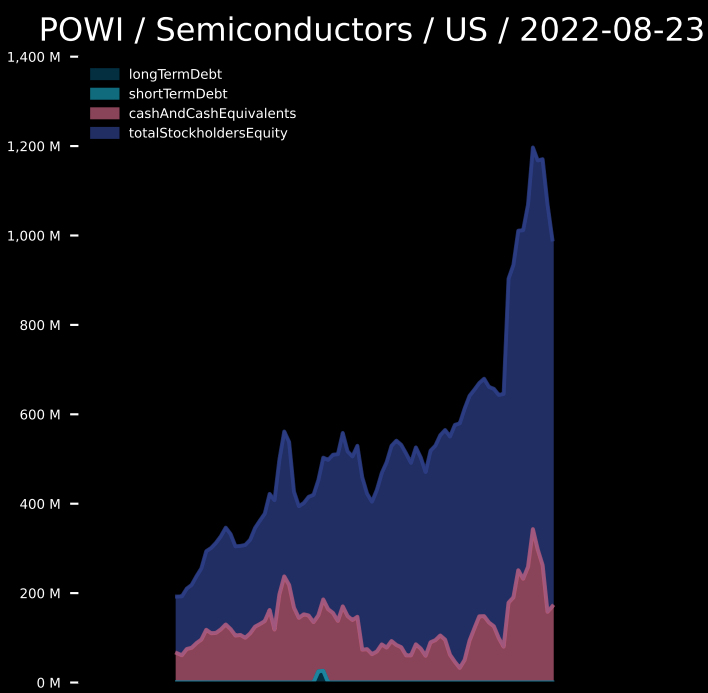
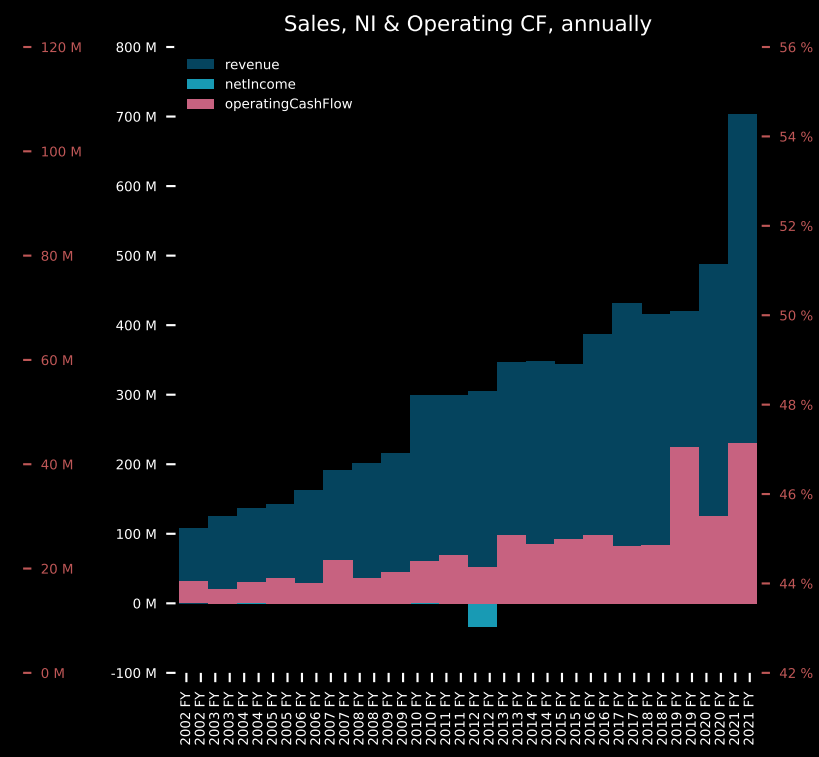
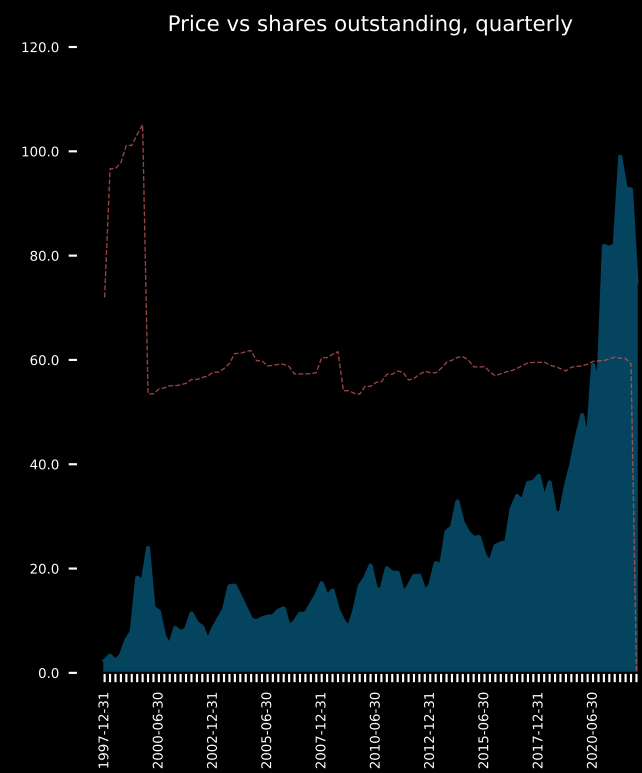
Owners Earnings, annually



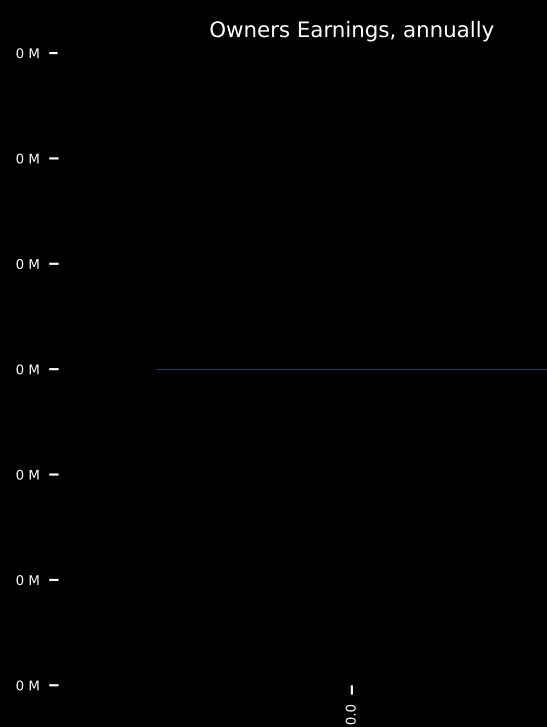
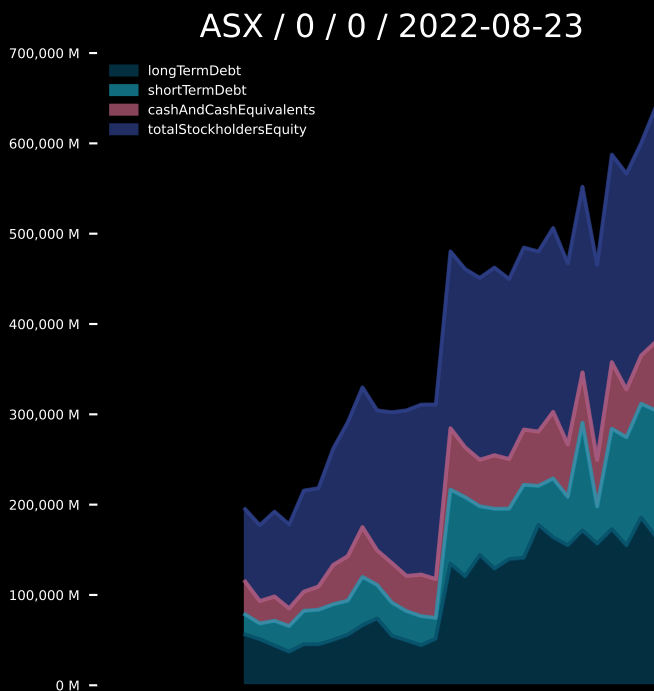
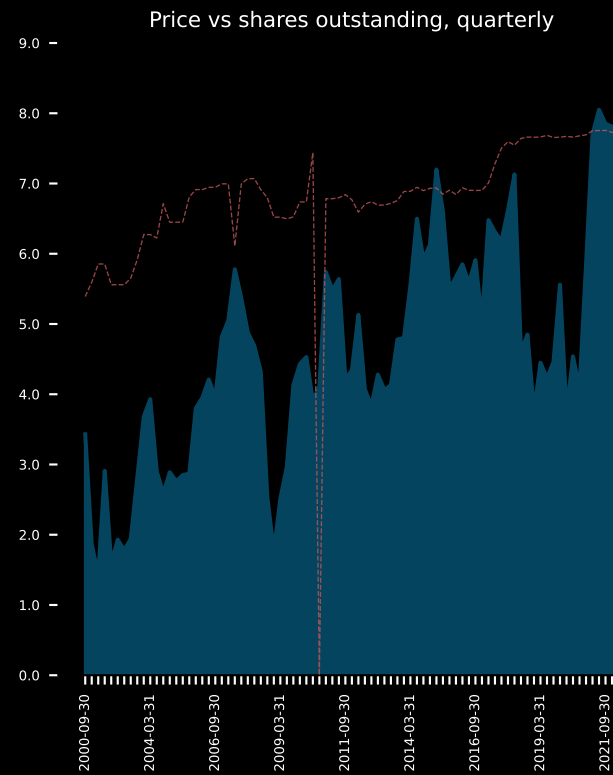
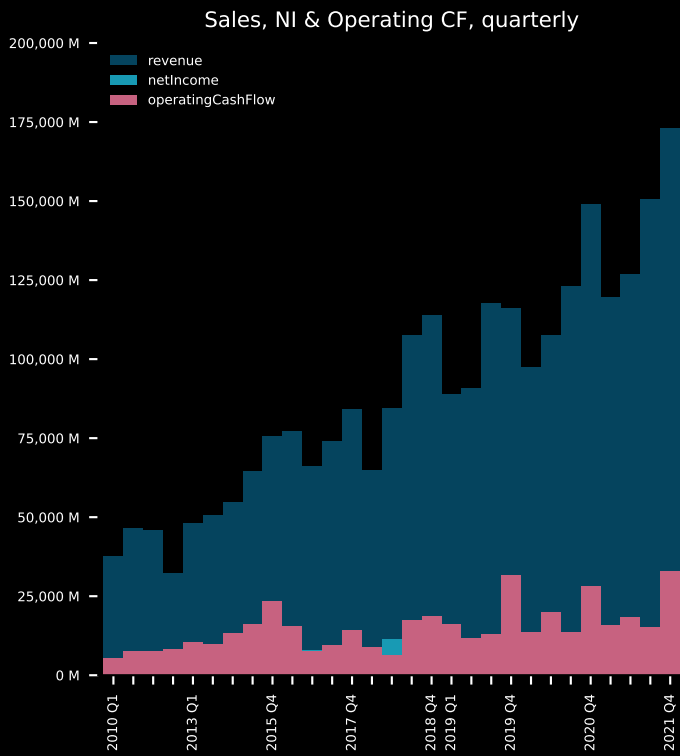
DSP Group, Inc., a fabless semiconductor company, provides wireless, audio, voice, and AI chipsets for smart-enabled devices. It operates through three segments: Home, Unified Communications, and SmartVoice. The Home segment offers wireless chipset solutions for converged communication at home, including integrated circuits for cordless phones, home gateway devices, integrated circuits addressing home automation applications, and fixed-mobile convergence solutions. The Unified Communications segment offers solution for unified communications products, including office solutions that offer businesses of all sizes VoIP terminals with converged voice and data applications. The SmartVoice segment offers products for the SmartVoice market that provide voice activation and recognition, voice enhancement, always-on and far-end noise elimination that target mobile phones, mobile hearables and headsets, and other devices that incorporate the company's noise suppression and voice quality enhancement HDClear technology. The company markets and distributes its products through direct sales and marketing offices; and a network of independent distributors.



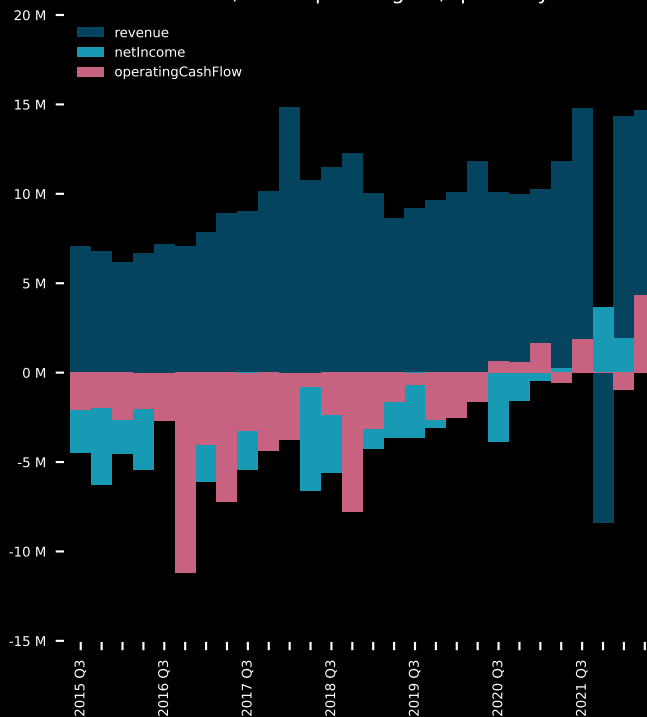
Power Integrations, Inc. designs, develops, manufactures, and markets analog and mixed-signal integrated circuits (ICs), and other electronic components and circuitry used in high-voltage power conversion worldwide. The company provides a range of alternating current to direct current power conversion products that address power supply ranging from less than one watt of output to approximately 500 watts of output for mobile-device chargers, consumer appliances, utility meters, LCD monitors, main and standby power supplies for desktop computers and TVs, LED lighting, and various other consumer and industrial applications, as well as power conversion in high-power applications comprising industrial motors, solar and wind-power systems, electric vehicles, and high-voltage DC transmission systems. It also offers high-voltage diodes; high-voltage gate-driver products used to operate high-voltage switches, such as insulated-gate bipolar transistors and silicon-carbide MOSFETs under the SCALE and SCALE-2 product-family names; and SCALE-iDriver for use in powertrain and charging applications for electric vehicles. In addition, the company provides analog ICs.



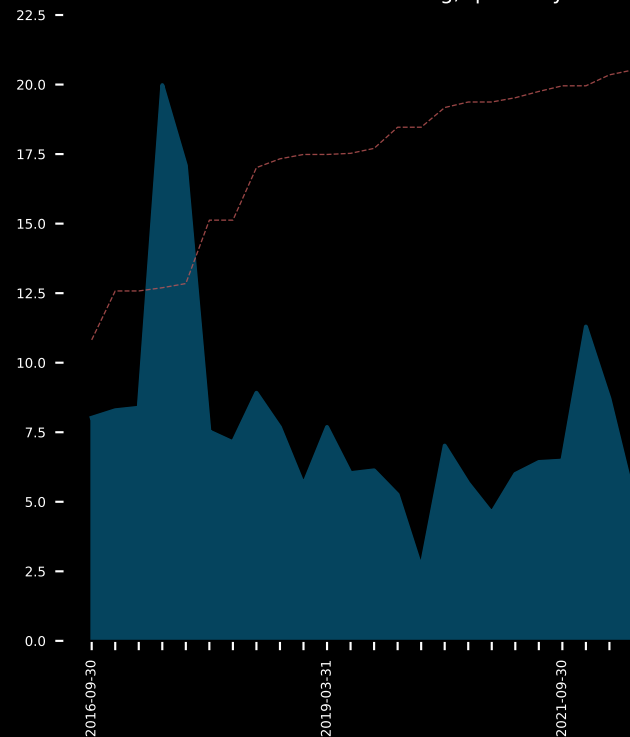
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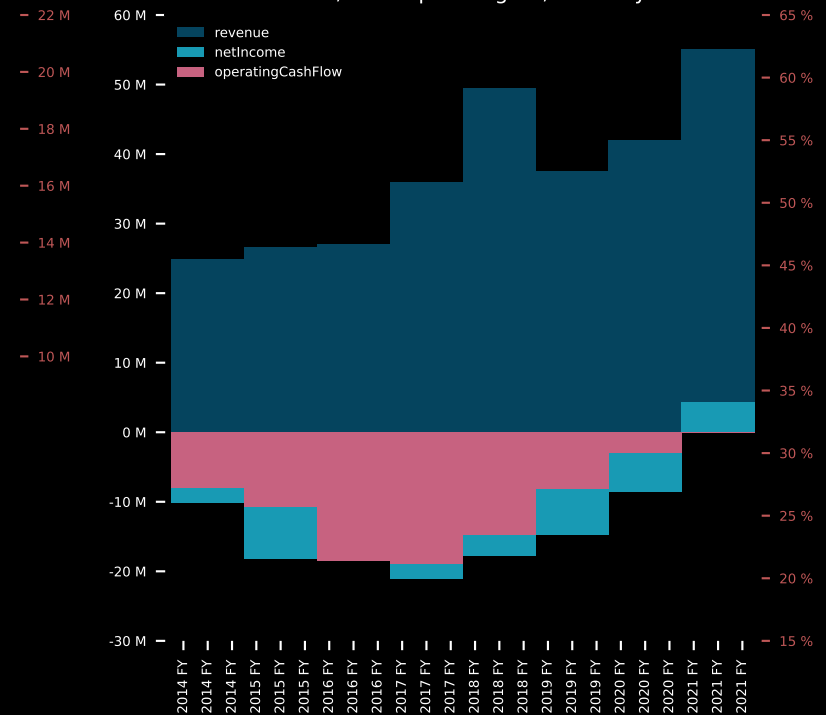
Sales, NI & Operating CF, quarterly



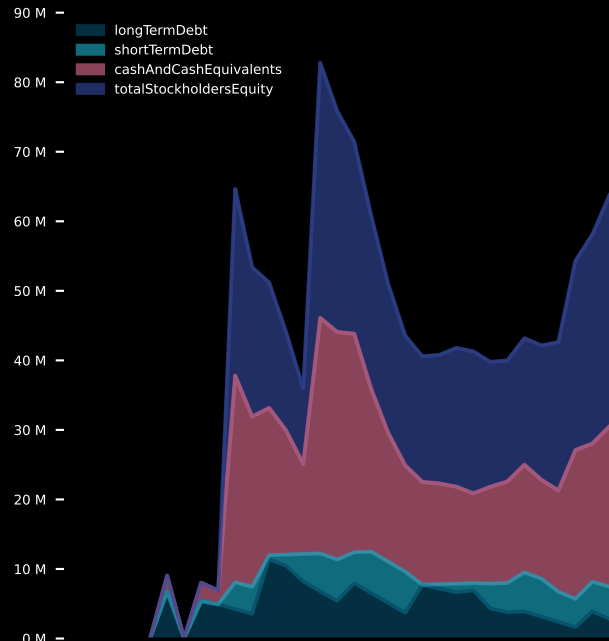
Price vs shares outstanding, quarterly



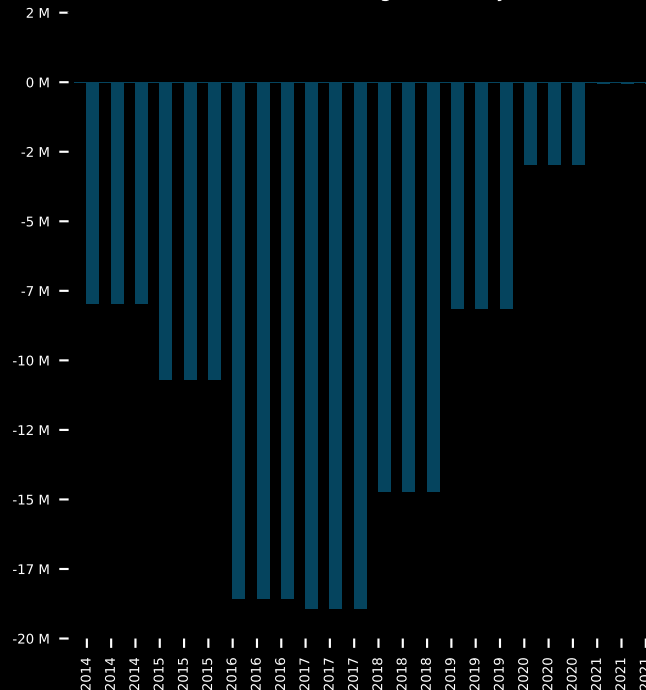
Sales, NI & Operating CF, annually



MRAM / Semiconductors / US / 2022-08-23

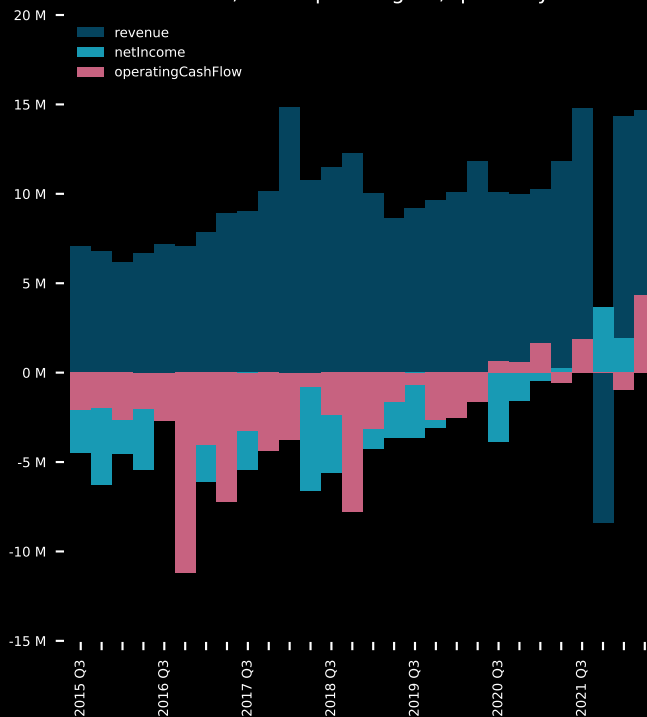


Owners Earnings, annually

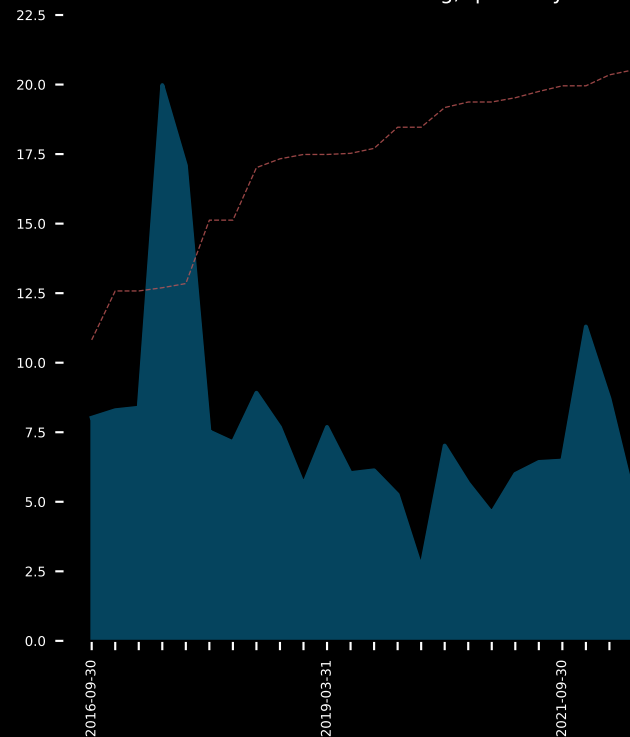


Everspin Technologies, Inc. manufactures and sells magnetoresistive random access memory (MRAM) products in the United States, Hong Kong, Japan, China, Canada, and internationally. It offers Toggle MRAM, spin-transfer torque MRAM, and tunnel magneto resistance sensor products, as well as foundry services for embedded MRAM. The company provides its products for applications, including data center, industrial, medical, automotive/transportation, and aerospace markets. It serves original equipment manufacturers and original design manufacturers through a direct sales channel and a network of representatives and distributors. Everspin Technologies, Inc. was incorporated in 2008 and is headquartered in Chandler, Arizona.

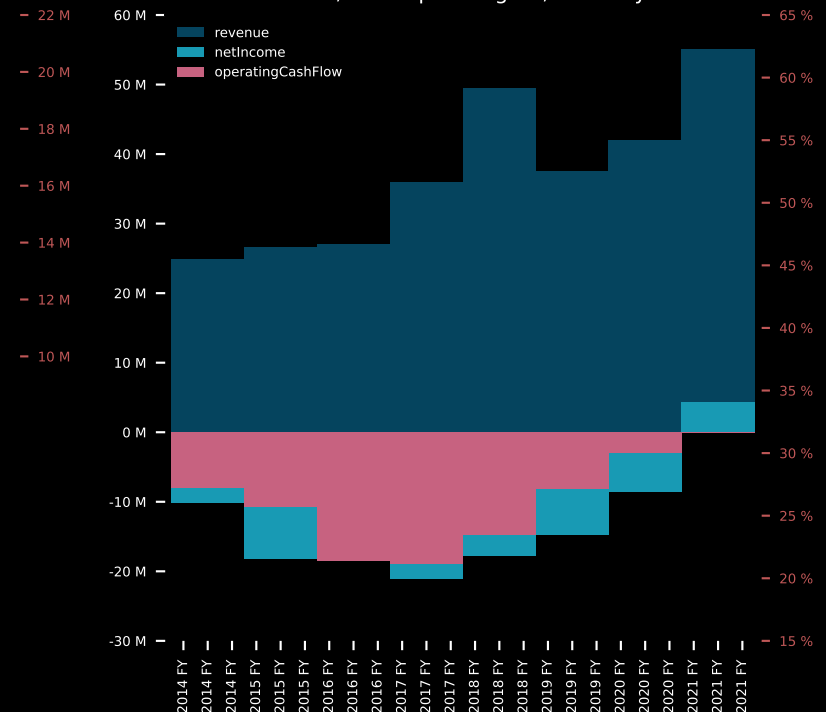
Sales, NI & Operating CF, quarterly



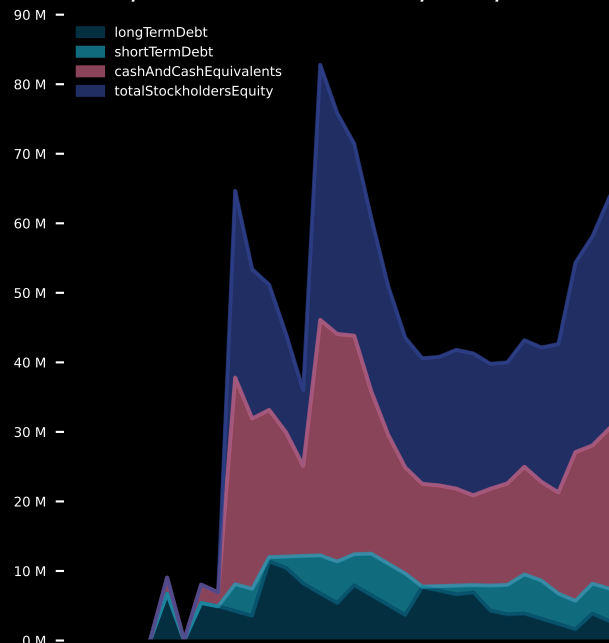
Price vs shares outstanding, quarterly



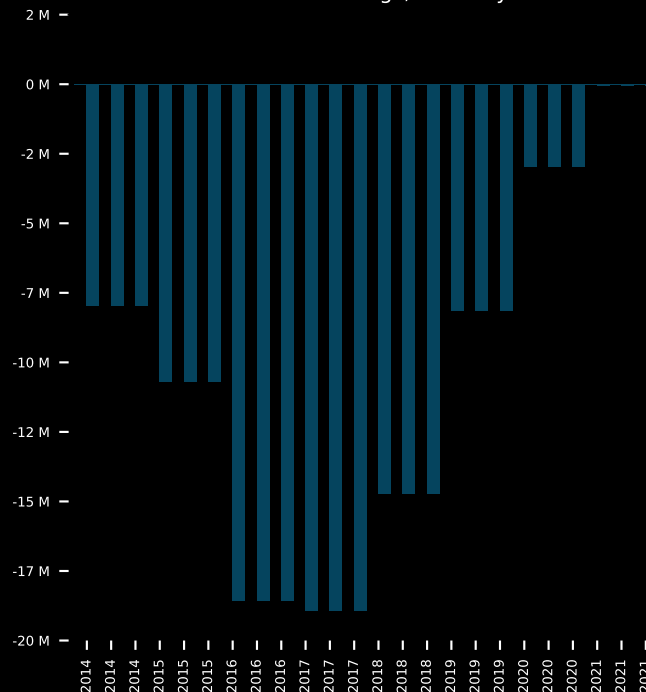
Sales, NI & Operating CF, annually



MRAM / Semiconductors / US / 2022-08-23



Owners Earnings, annually

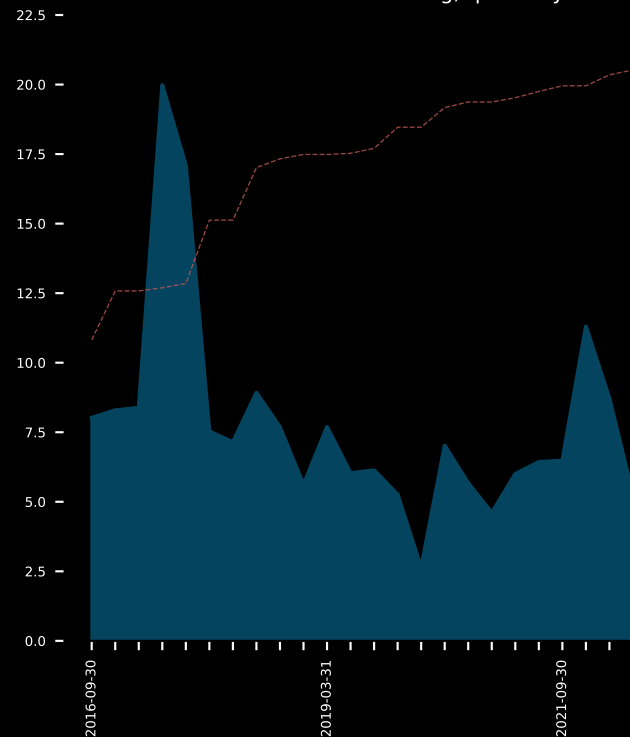


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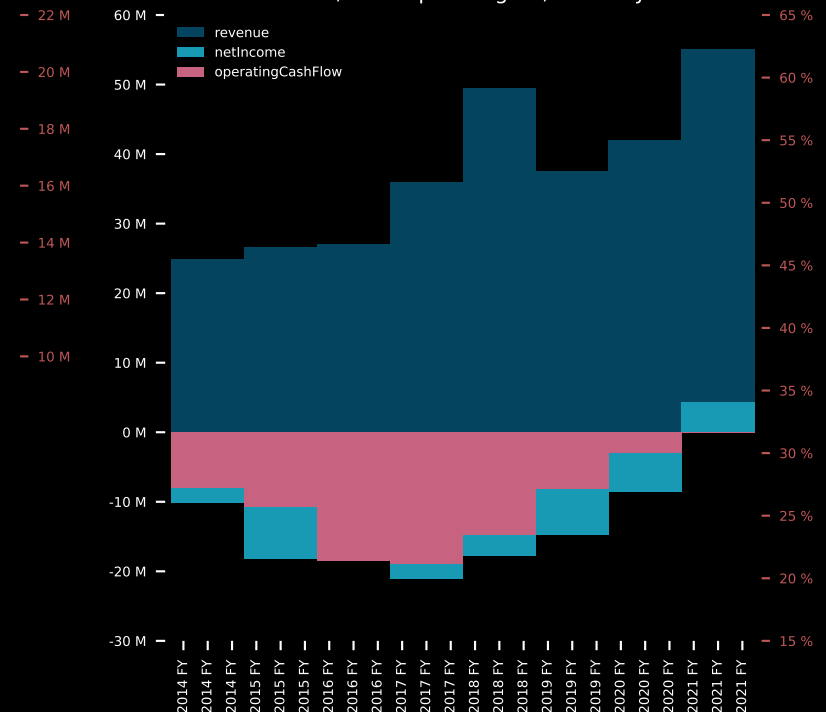
Sales, NI & Operating CF, quarterly



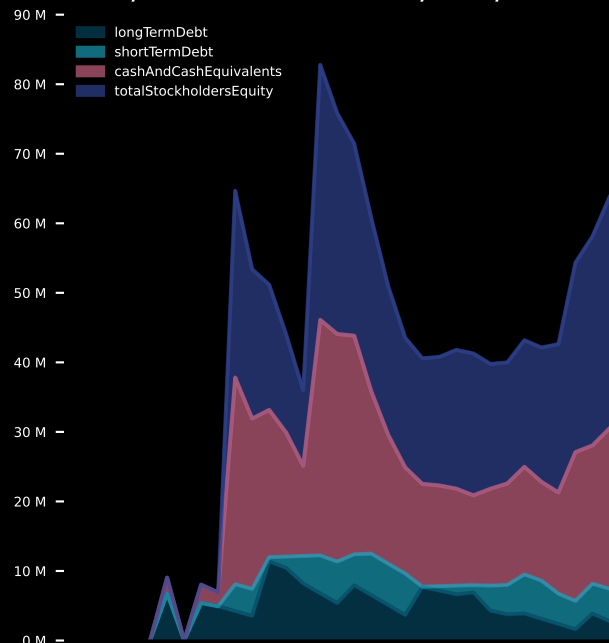
Price vs shares outstanding, quarterly



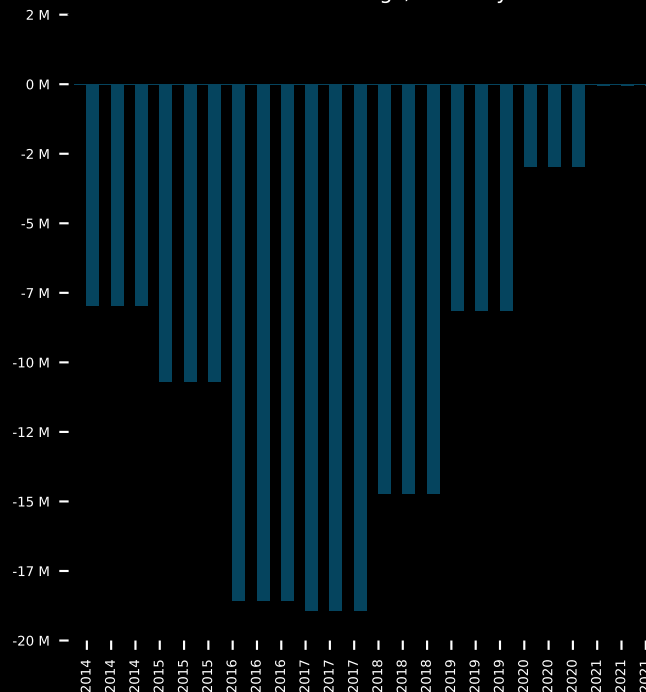
Sales, NI & Operating CF, annually



MRAM / Semiconductors / US / 2022-08-23

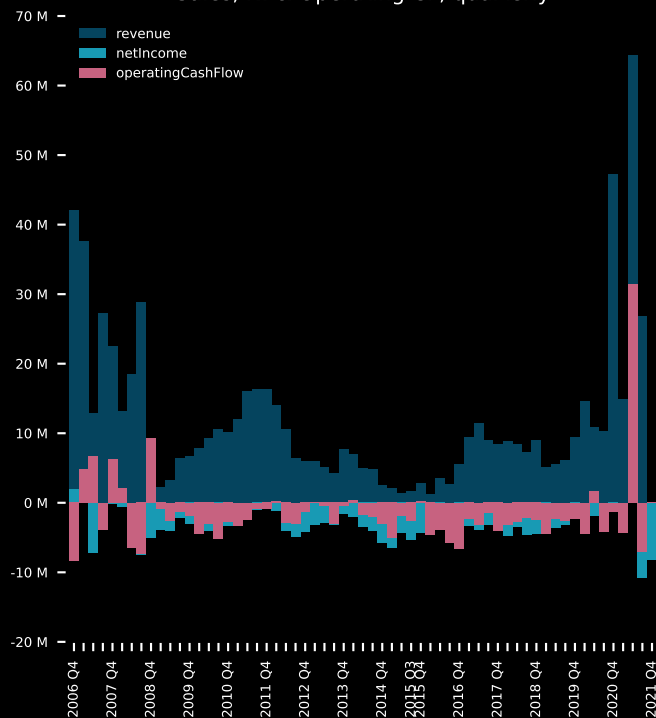


Owners Earnings, annually

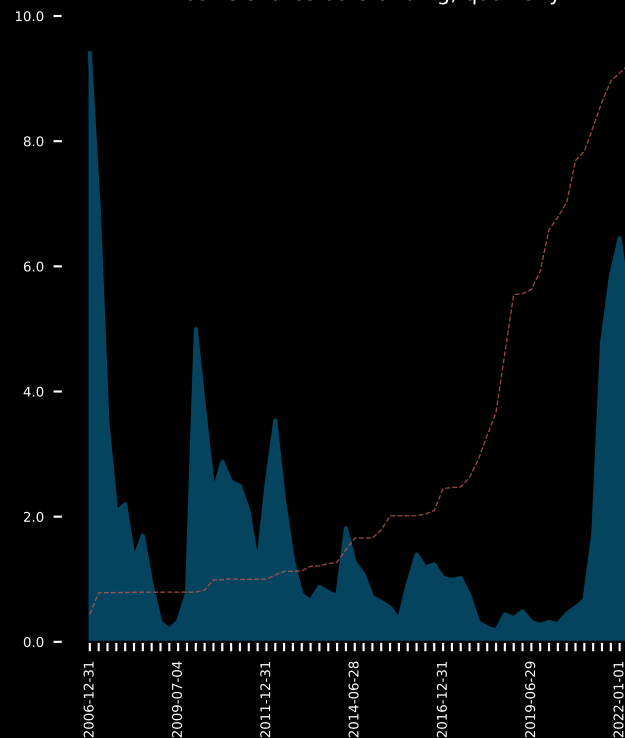


Everspin Technologies, Inc. manufactures and sells magnetoresistive random access memory (MRAM) products in the United States, Hong Kong, Japan, China, Canada, and internationally. It offers Toggle MRAM, spin-transfer torque MRAM, and tunnel magneto resistance sensor products, as well as foundry services for embedded MRAM. The company provides its products for applications, including data center, industrial, medical, automotive/transportation, and aerospace markets. It serves original equipment manufacturers and original design manufacturers through a direct sales channel and a network of representatives and distributors. Everspin Technologies, Inc. was incorporated in 2008 and is headquartered in Chandler, Arizona.

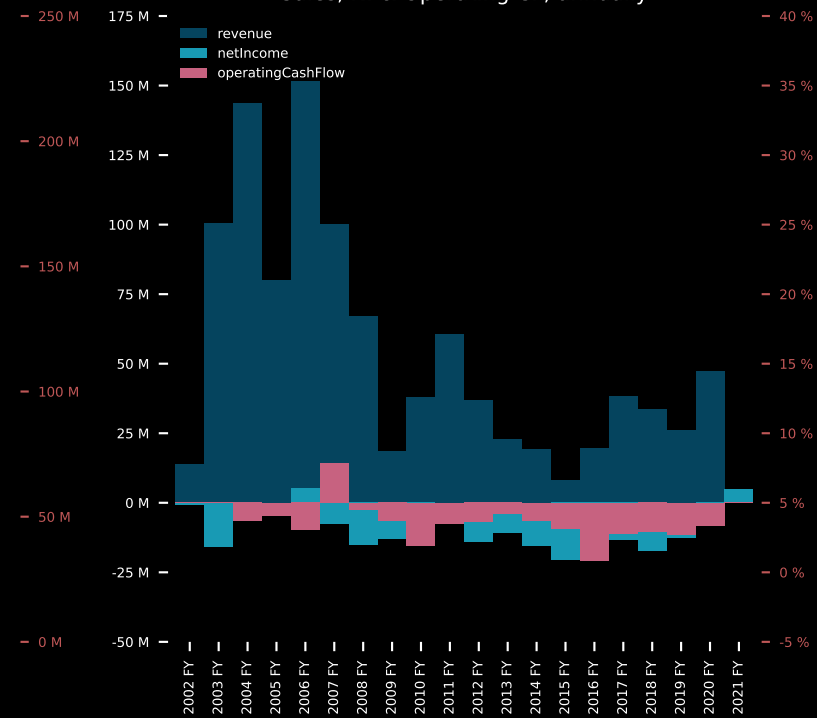
Sales, NI & Operating CF, quarterly



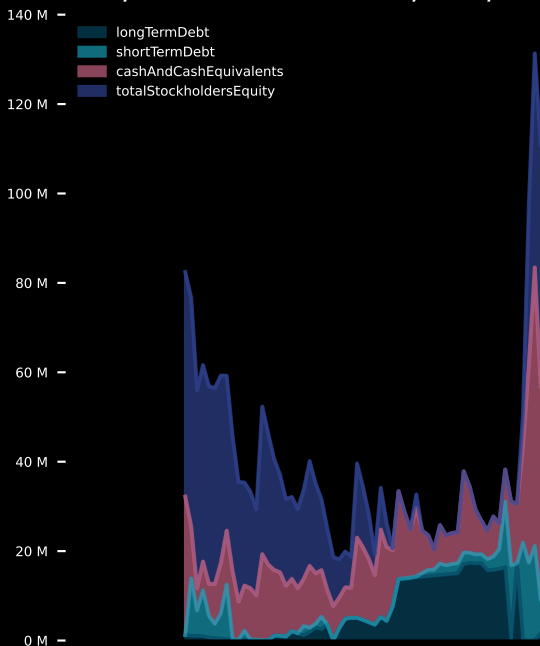
Price vs shares outstanding, quarterly



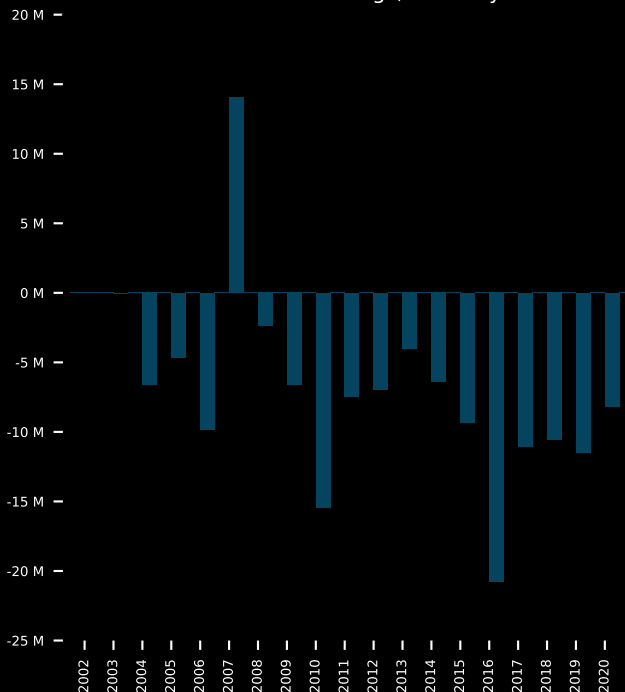
Sales, NI & Operating CF, annually



NLST / Semiconductors / US / 2022-08-23

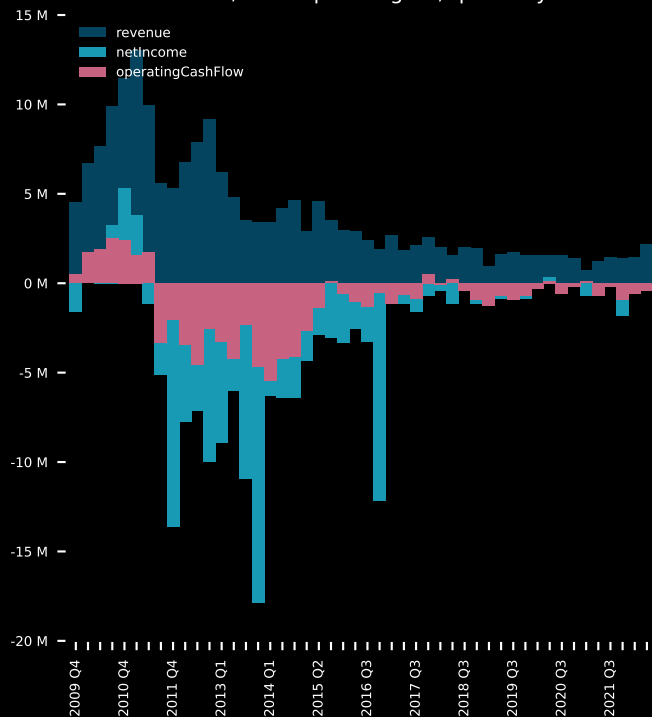


Owners Earnings, annually

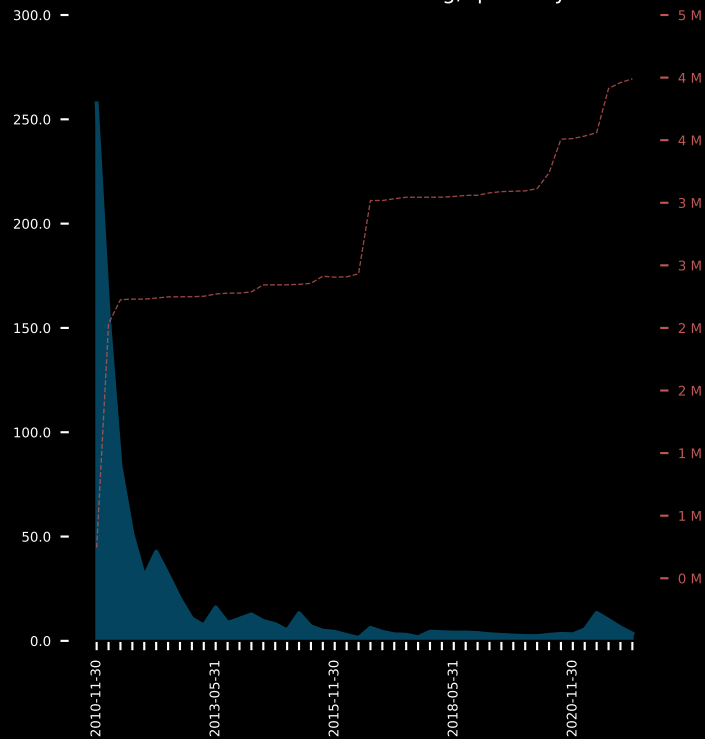


Netlist, Inc. designs, manufactures, and markets memory subsystems for the server, high-performance computing, and communications markets in the United States and internationally. It offers HybridDIMM, a storage class memory product, which unifies dynamic random-access memory (DRAM) and NAND flash in a plug-and-play module delivering terabyte storage capacities operating at nanosecond memory speeds. The company also provides nonvolatile (NV) memory products, such as NVvault DDR4 NVDIMM that provides data acceleration and protection in a joint electron device engineering council standard DDR4 interface; and specialty DIMMs and embedded flash products for use in data center and industrial applications. It resells component products, including solid state drive (SSDs), NAND flash, and DRAM products to storage customers, appliance customers, system builders, and cloud and datacenter customers; and sells component inventory to distributors and other users of memory integrated circuits. The company markets and sells its products through a direct sales force and a network of independent sales representatives. Netlist is a public company listed on the New York Stock Exchange under the ticker symbol NLST.

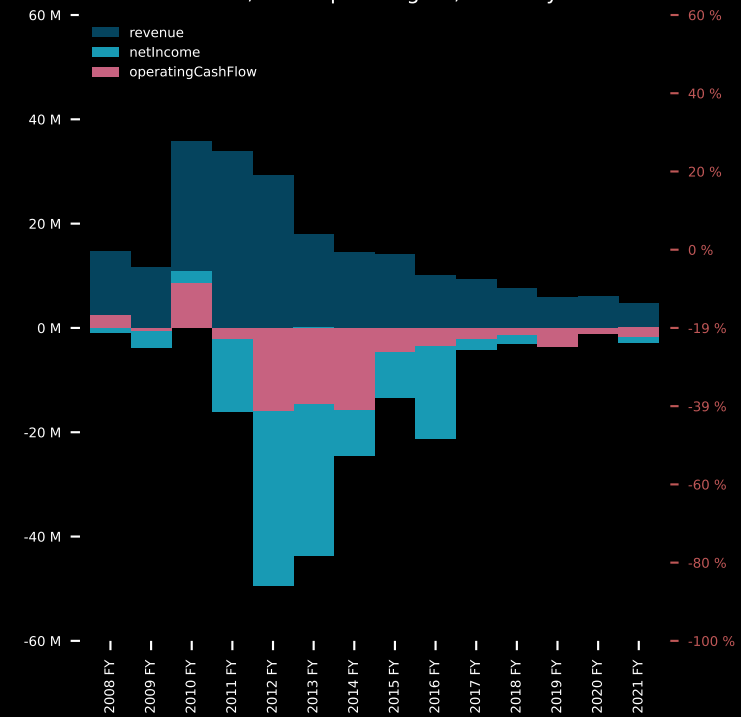
Sales, NI & Operating CF, quarterly



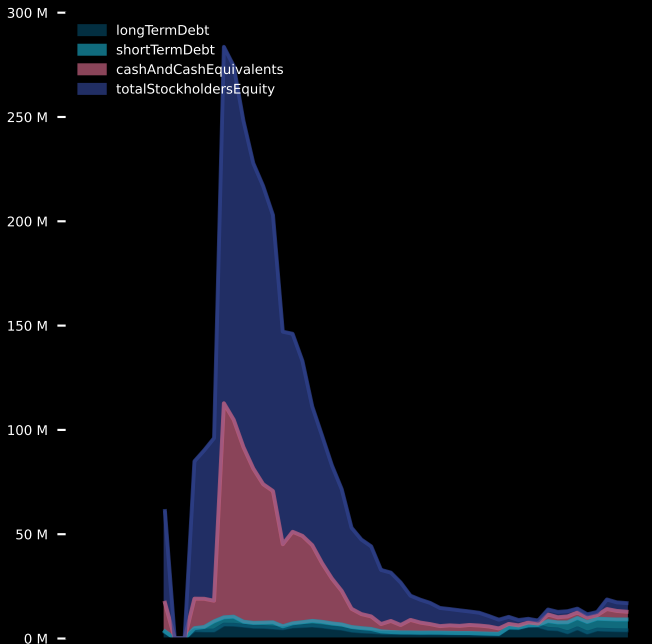
Price vs shares outstanding, quarterly



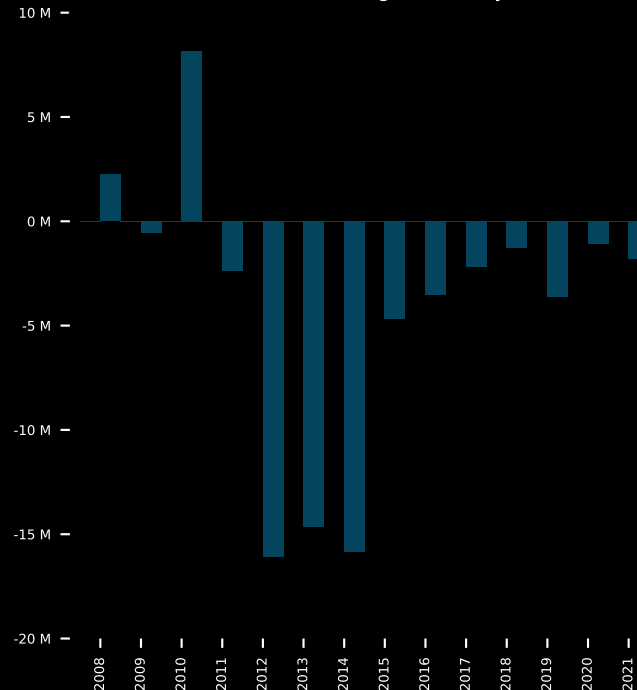
Sales, NI & Operating CF, annually



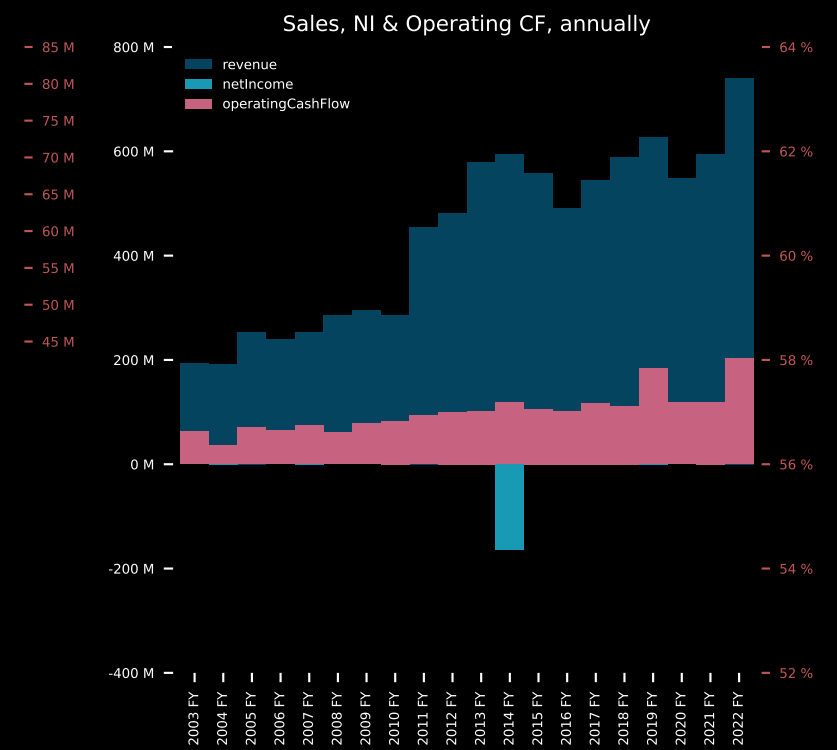
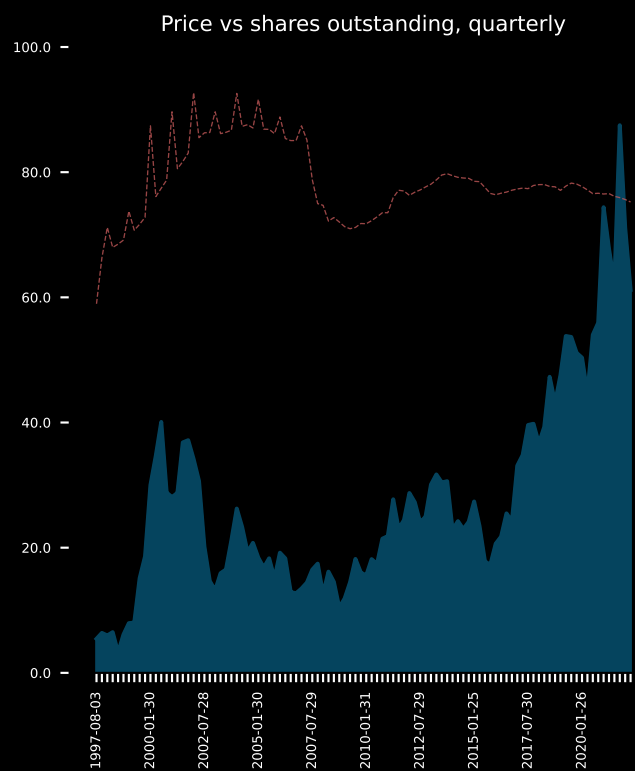
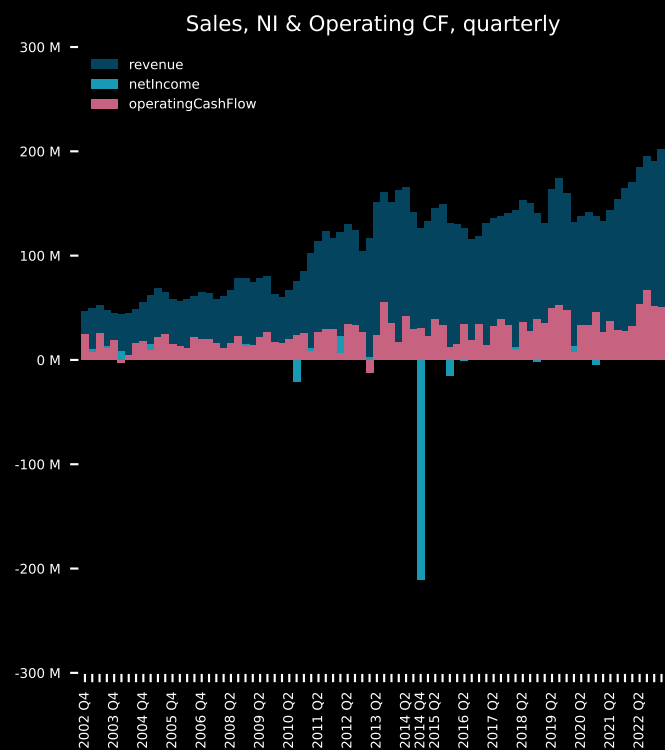
LEDS / Semiconductors / TW / 2022-08-23



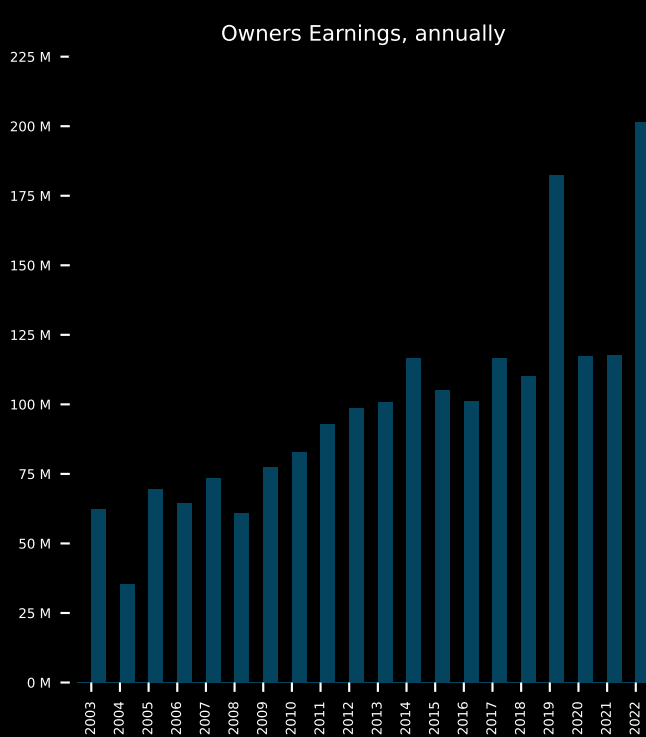
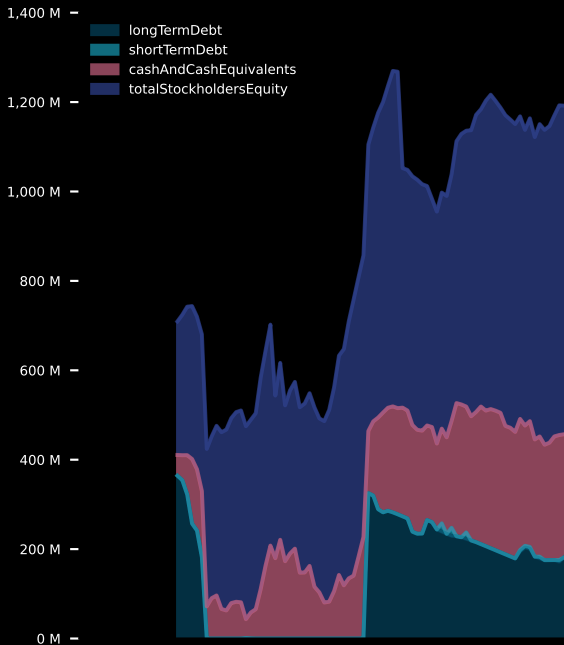
Owners Earnings, annually



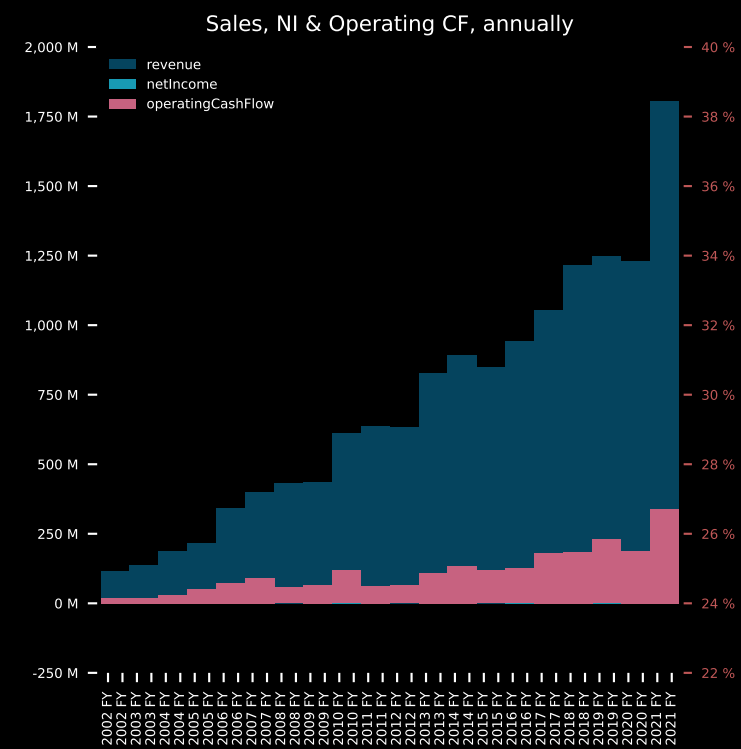
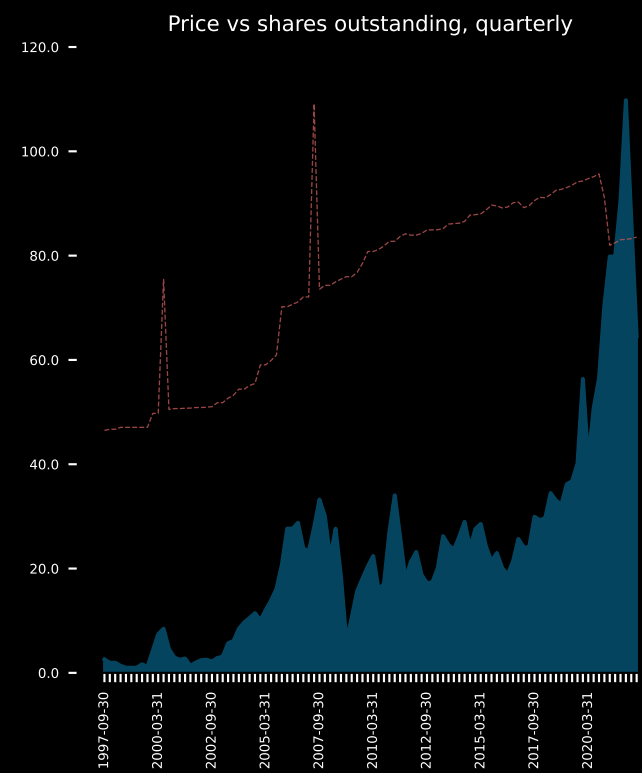
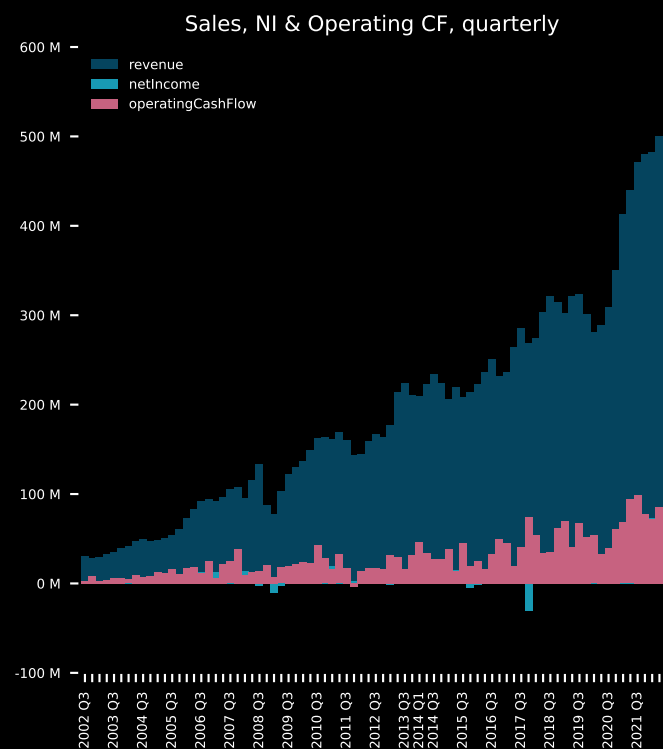
SemiLEDs Corporation develops, manufactures, and sells light emitting diode (LED) chips, LED components, and LED modules and systems in the United States, Taiwan, the Netherlands, Germany, Japan, Ireland, and internationally. The company also sells enhanced vertical, LED product series in blue, white, green, and UV; LED chips to packagers or distributors; and lighting products primarily to original design manufacturers of lighting products and the end-users of lighting devices, as well as packages and sells its LED chips into LED components to distributors. Its products are used for general lighting applications, including commercial, industrial, and residential lighting; and specialty industrial applications, such as ultraviolet or UV, curing of polymers, LED light therapy in medical/cosmetic applications, counterfeit detection, germicidal and viricidal devices LED lighting for horticulture applications, architectural lighting, and entertainment lighting. SemiLEDs Corporation was incorporated in 2005 and is based in Chunan, Taiwan.



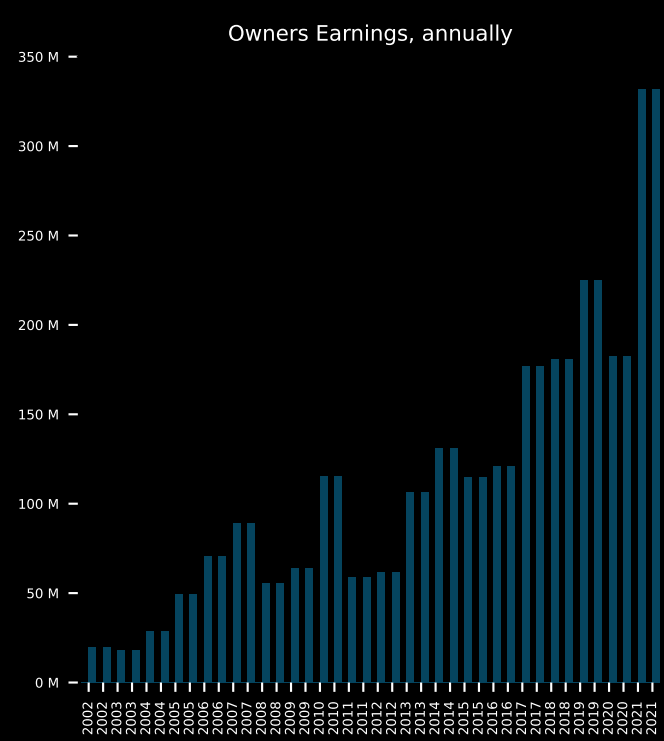
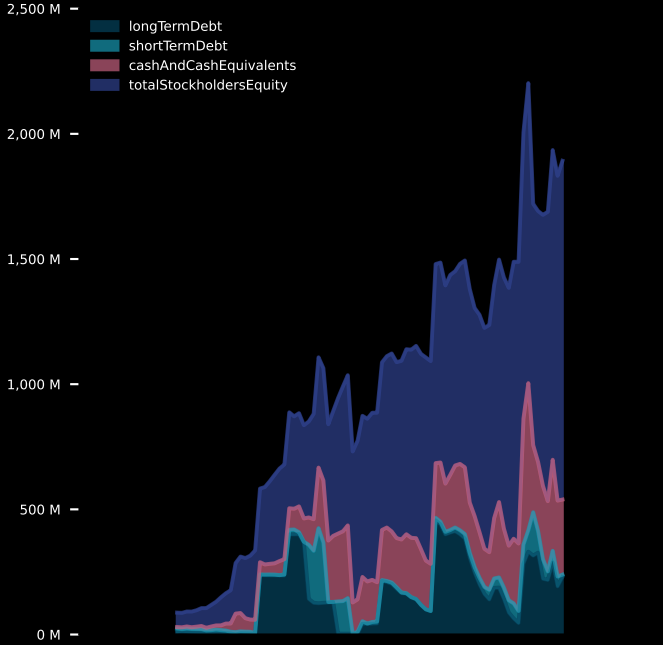
SMTC / Semiconductors / US / 2022-08-23



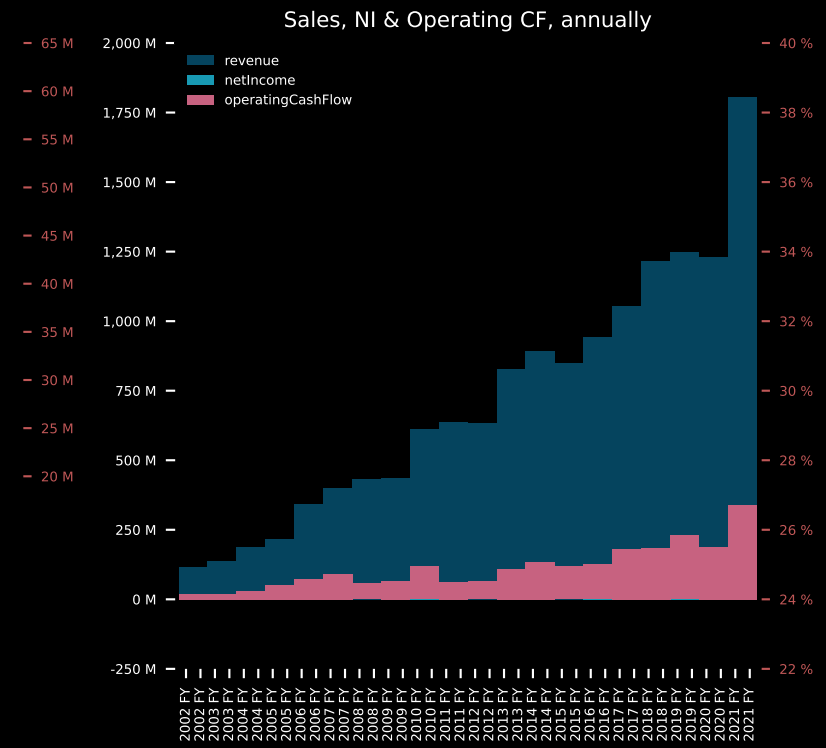
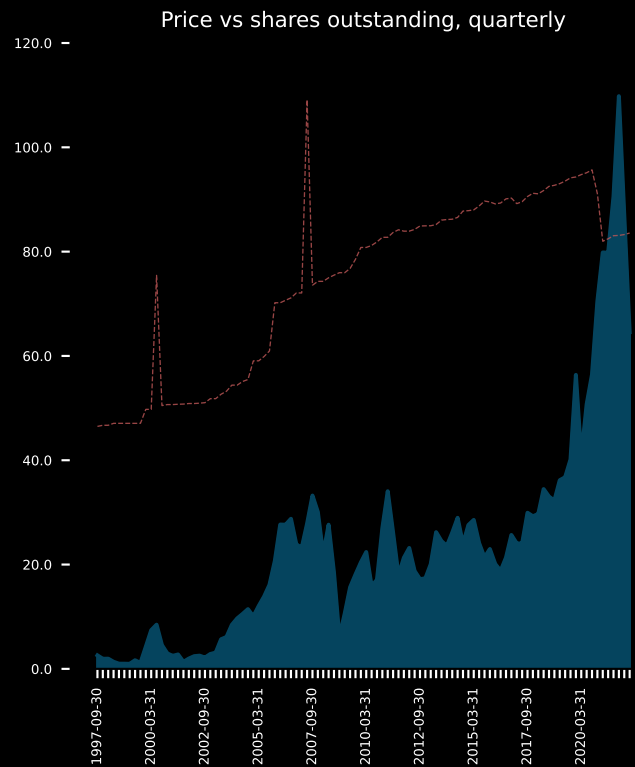
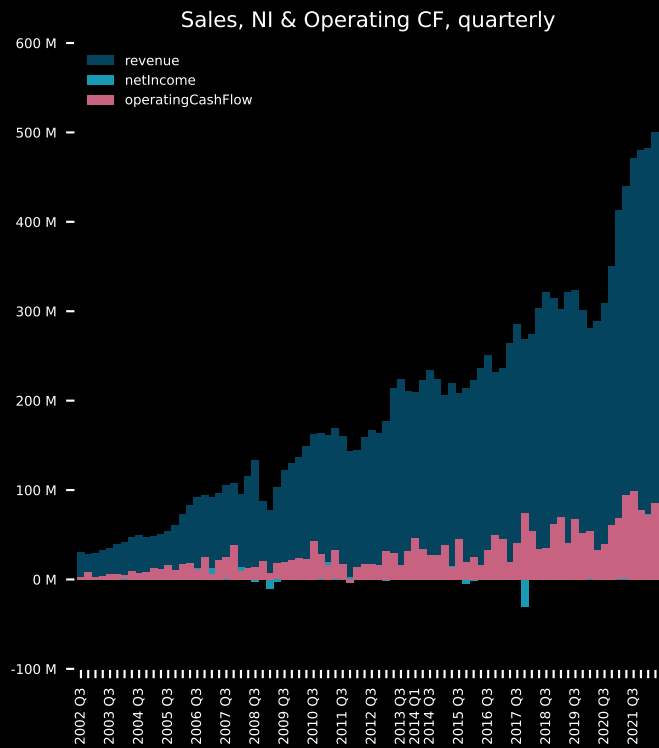
Semtech Corporation designs, develops, manufactures, and markets analog and mixed-signal semiconductor products and advanced algorithms. It provides signal integrity products, including a portfolio of optical data communications and video transport products used in various infrastructure, and industrial applications; a portfolio of integrated circuits for data centers, enterprise networks, passive optical networks, wireless base station optical transceivers, and high-speed interface applications; and video products for broadcast applications, as well as video-over-IP technology for professional audio video applications. The company also offers protection products, such as filter and termination devices that are integrated with the transient voltage suppressor devices, which protect electronic systems from voltage spikes; and wireless and sensing products comprising a portfolio of specialized radio frequency products used in various industrial, medical, and communications applications, as well as specialized sensing products used in industrial and consumer applications. In addition, it provides



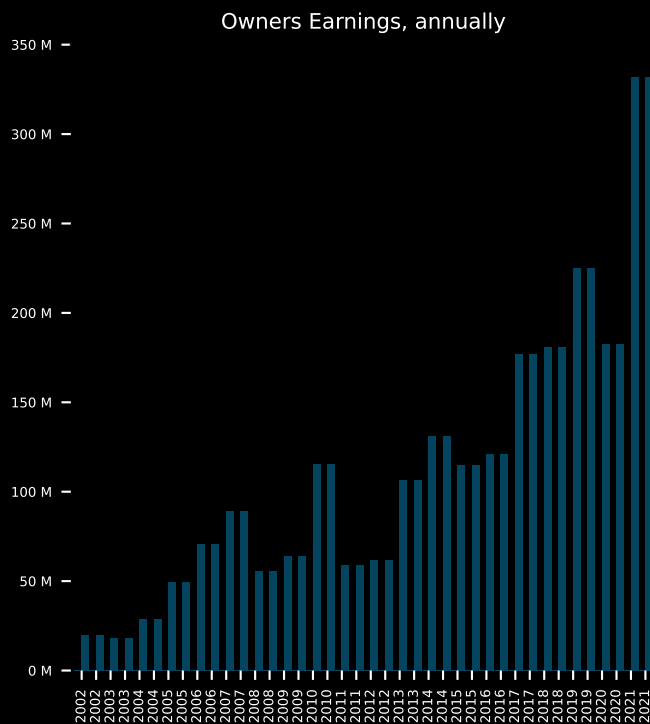
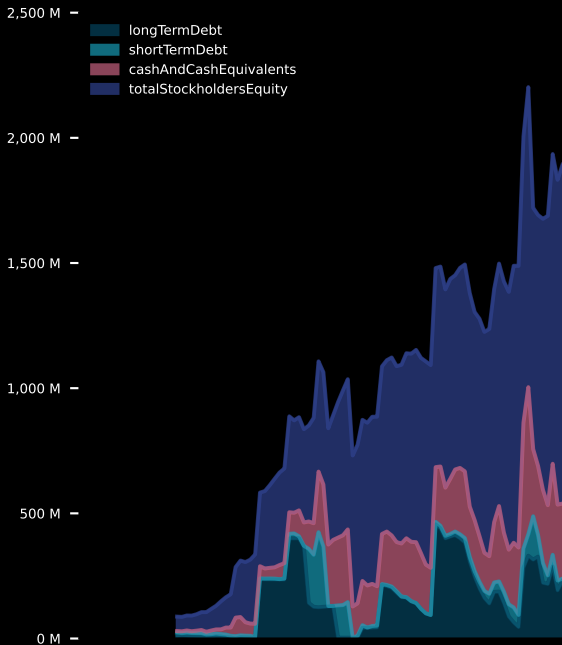
DIOD / Semiconductors / US / 2022-08-23



Diodes Incorporated designs, manufactures, and supplies application-specific standard products in the discrete, logic, analog, and mixed-signal semiconductor markets worldwide. It focuses on low pin count semiconductor devices with one or more active or passive components. The company offers discrete semiconductor products, such as MOSFET, TVS, and performance Schottky rectifiers; GPP bridges and rectifiers, and performance Schottky diodes; Zener and performance Zener diodes, including tight tolerance and low operating current type; standard, fast, super-fast, and ultra-fast recovery rectifiers; bridge rectifiers; switching diodes; small signal bipolar and prebiased transistors; thyristor surge protection devices; and transient voltage suppressors. It also provides analog products, such as power management devices comprising AC-DC and DC-DC converters, USB power switches, and low dropout and linear voltage regulators; linear devices, such as operational amplifiers and comparators, current monitors, voltage references, and reset generators; LED lighting drivers; audio amplifiers; and sensor products, including

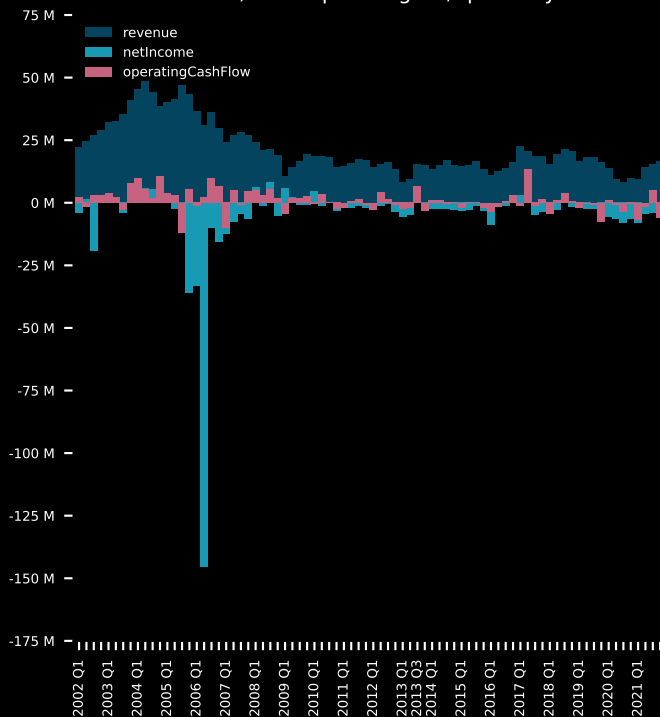


DIOD / Semiconductors / US / 2022-08-23

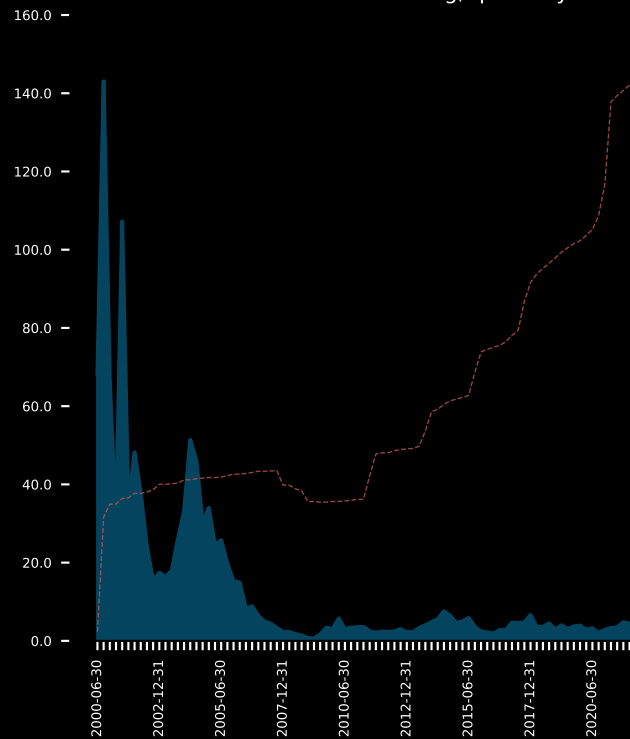


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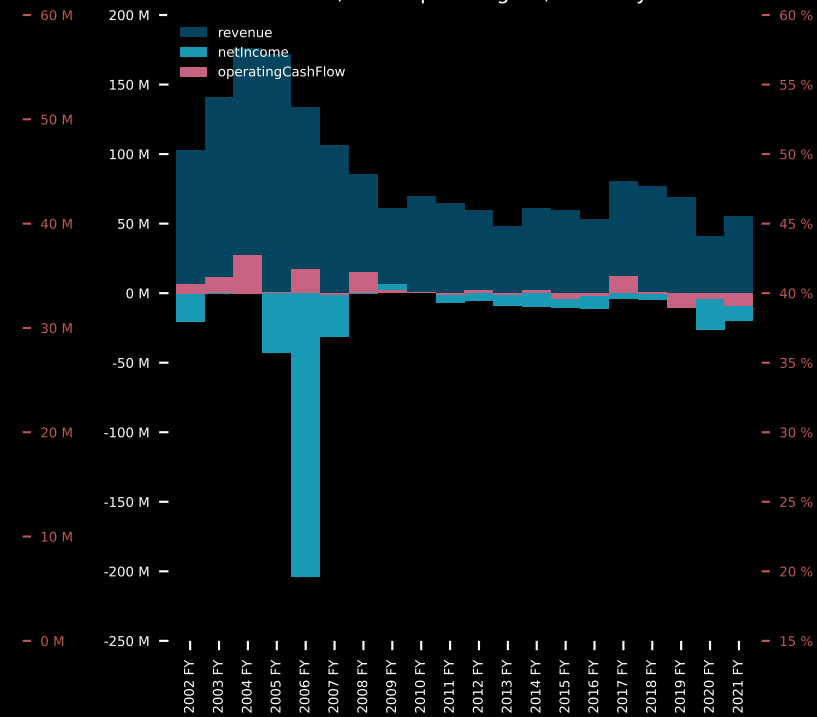
Sales, NI & Operating CF, quarterly



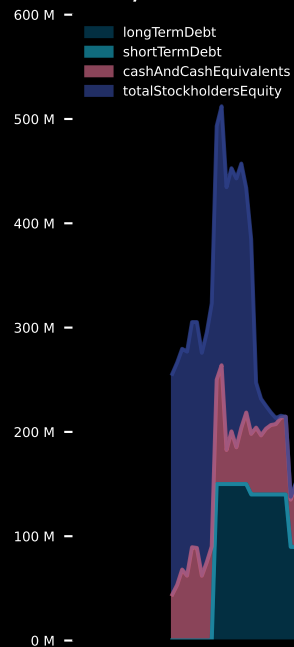
Price vs shares outstanding, quarterly



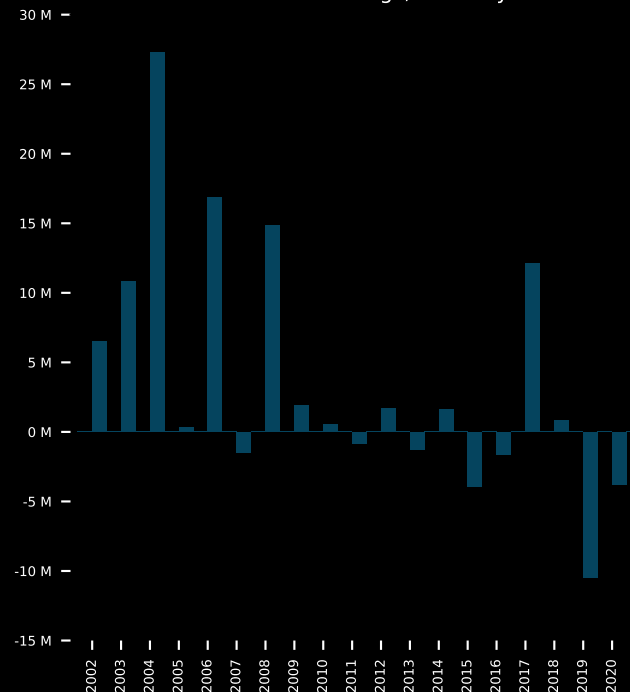
Sales, NI & Operating CF, annually



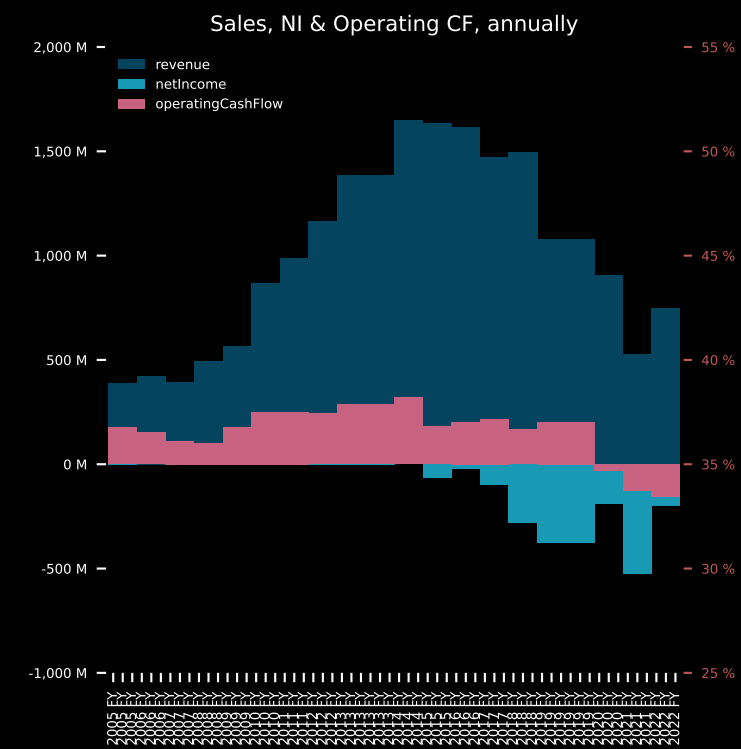
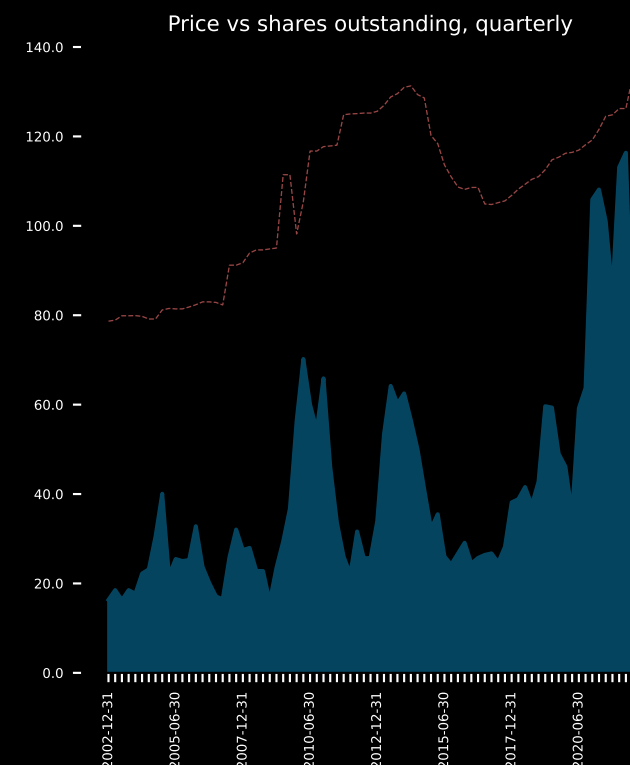
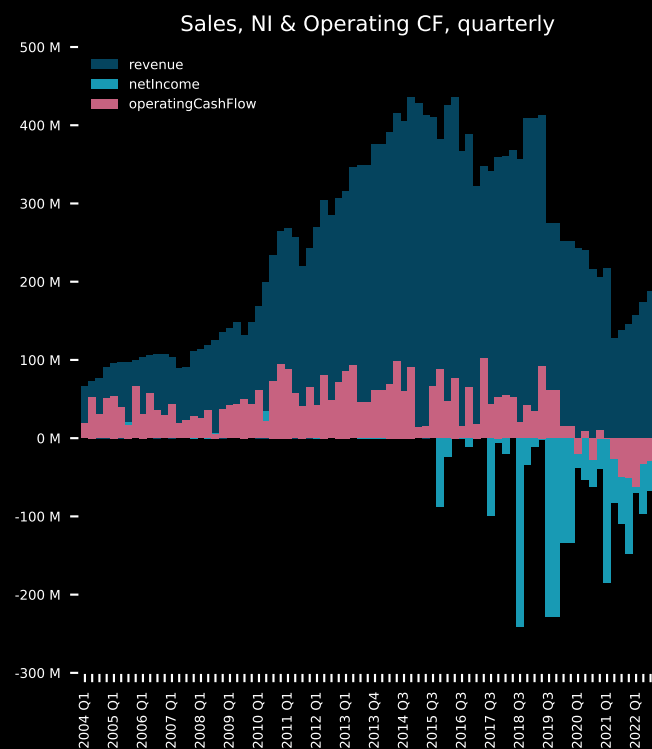
PXLW / Semiconductors / US / 2022-08-23



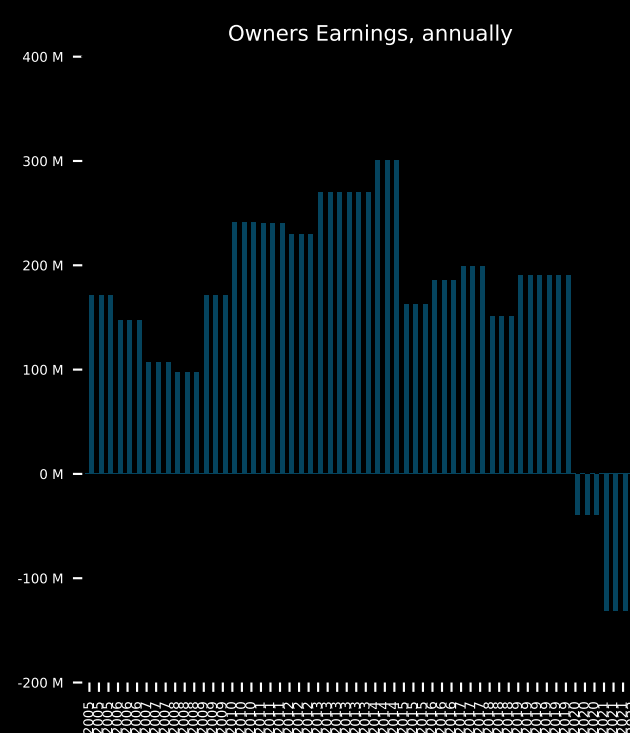
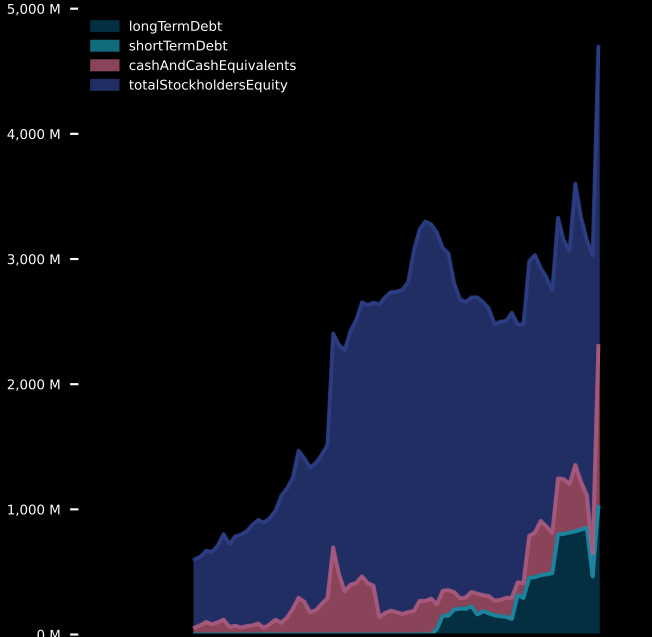
Owners Earnings, annually



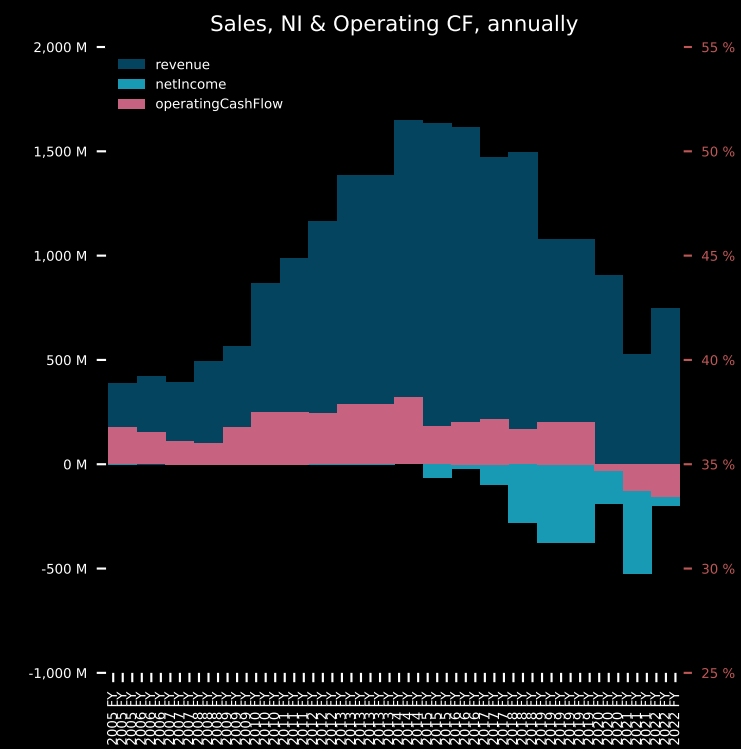
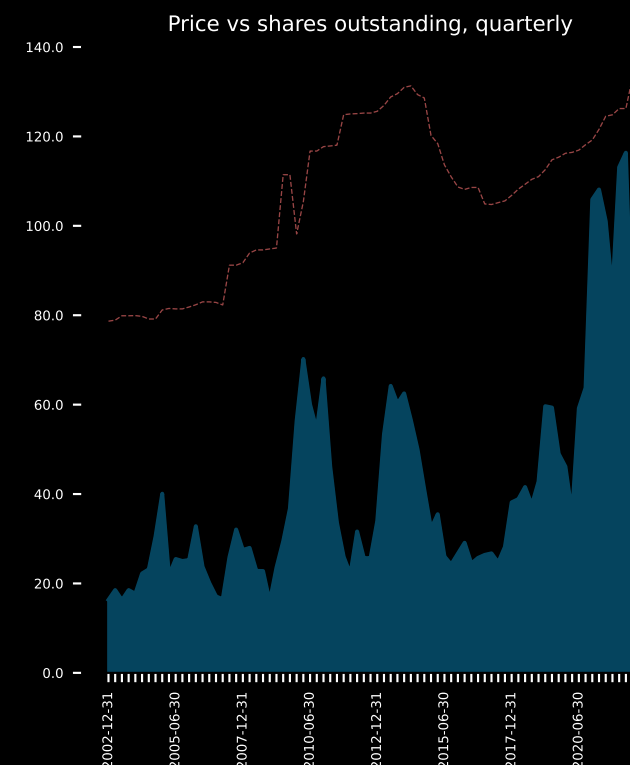
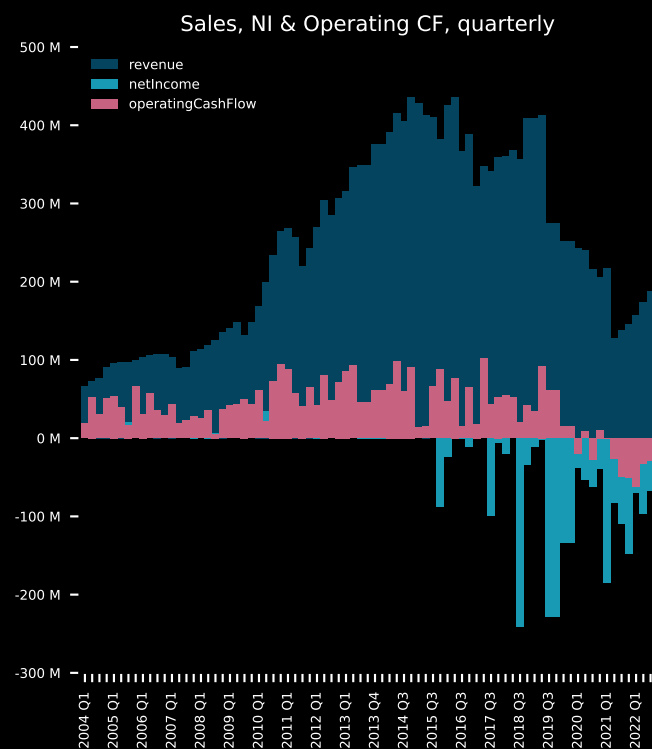
Pixelworks, Inc. develops and markets semiconductor and software solutions. The company provides video display processor products comprises image processor ICs, such as embedded microprocessors, digital signal processing technology, and software that control the operations and signal processing within high-end display systems; video co-processor ICs that work with an image processor to post-process video signals to enhance the performance or feature set of the overall video solution; and transcoder ICs, such as embedded microprocessors, digital signal processing technology, and software that control the operations and signal processing for converting bitrates, resolutions, and codecs. As of December 31, 2021, it had an intellectual property portfolio of 335 patents related to the visual display of digital image data. The company's products are used in smartphones, tablets, and projectors. It serves in Japan, China, Taiwan, the United States, Europe, and Korea through a direct sales force, as well as distributors and manufacturers' representatives. The company was incorporated in 1997 and is headquartered in San Jose, California.



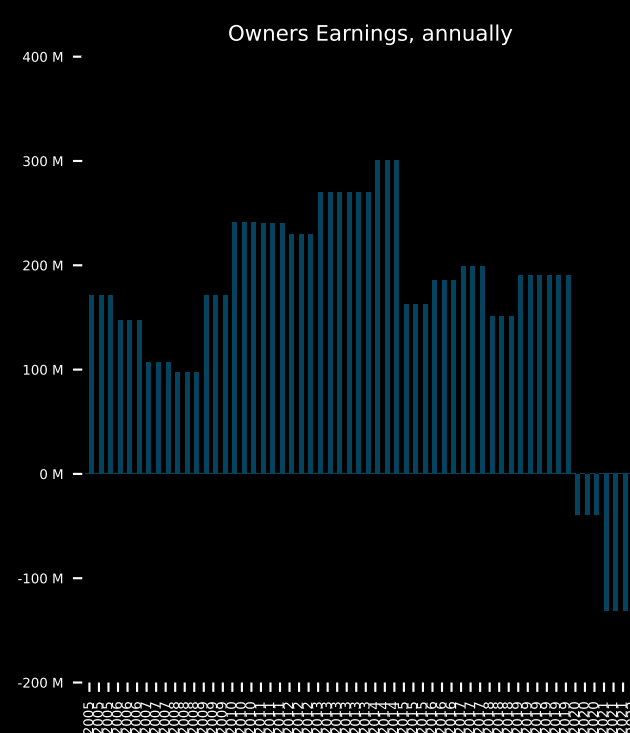
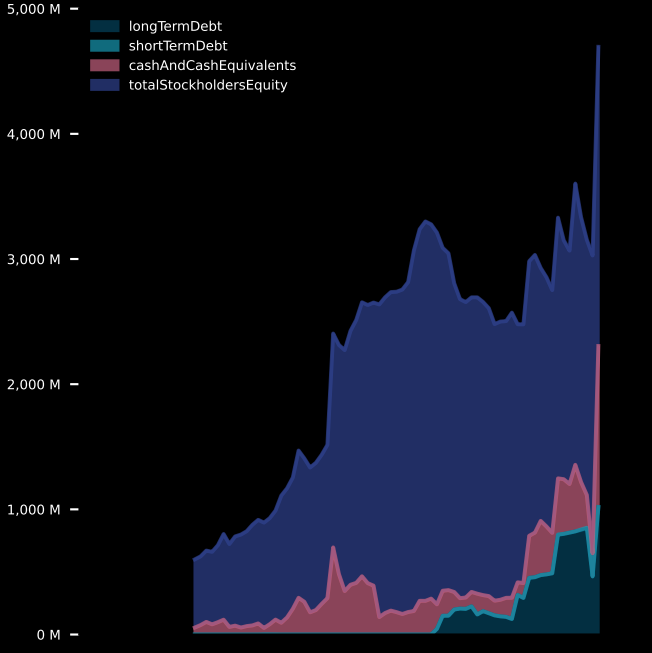
WOLF / Semiconductors / US / 2022-08-23



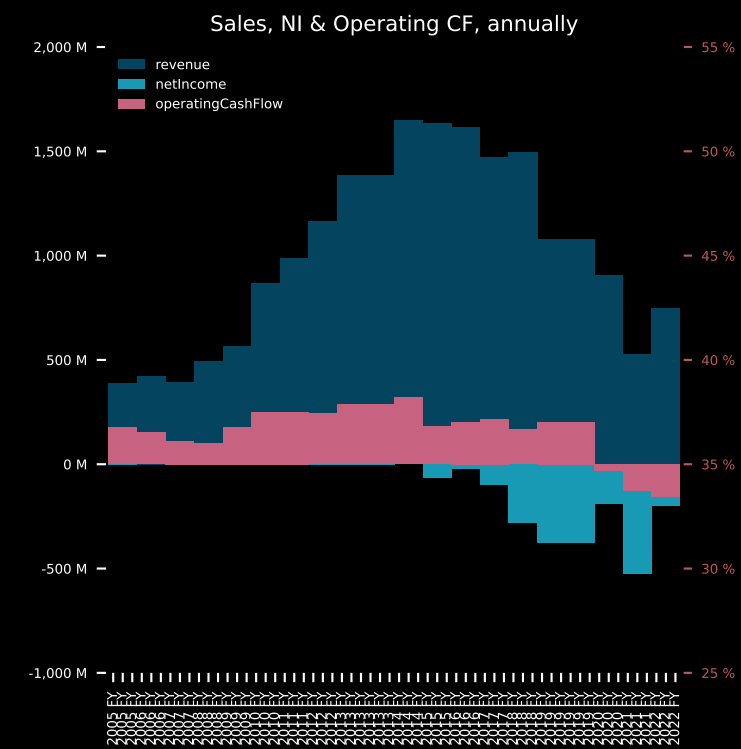
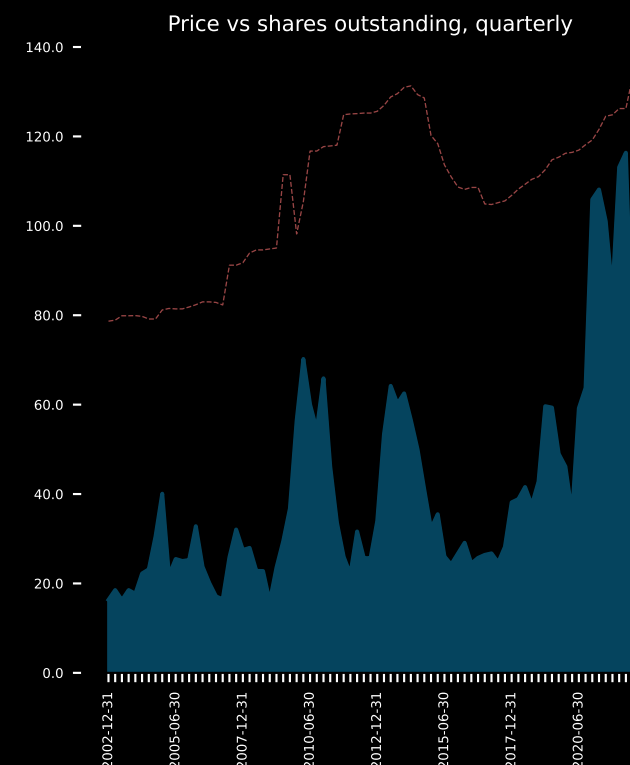
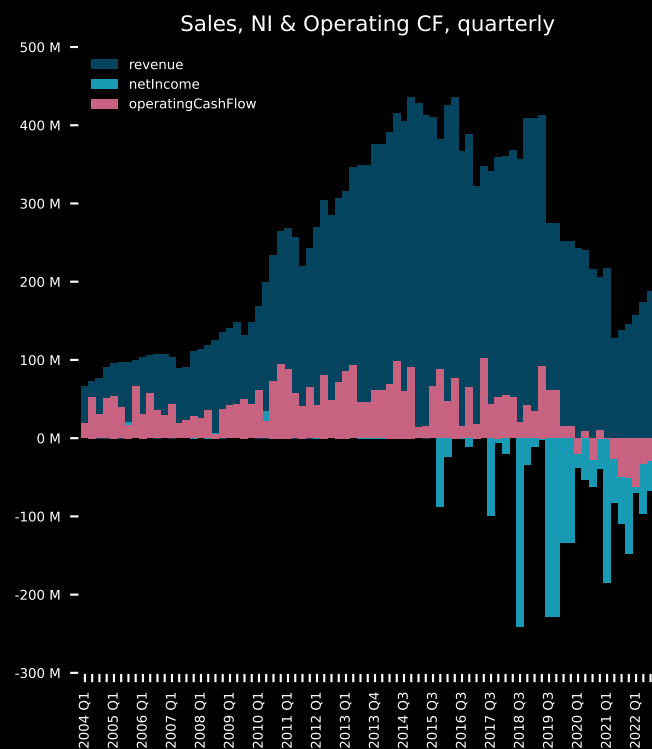
Wolfspeed, Inc. provides silicon carbide and gallium nitride (GaN) materials, power devices, and radio frequency (RF) devices based on wide bandgap semiconductor materials and silicon. The company's silicon carbide and GaN materials comprise silicon carbide bare wafers, epitaxial wafers, and GaN epitaxial layers on silicon carbide wafers. It offers silicon carbide materials for customers to manufacture products for RF, power, and other applications. The company's power devices include silicon carbide Schottky diodes, metal oxide semiconductor field effect transistors (MOSFETs), power modules, and gate driver boards for customers and distributors to use in applications, such as electric vehicles comprising charging infrastructure, server power supplies, solar inverters, uninterruptible power supplies, industrial power supplies, and other applications. Its RF devices comprise GaN-based die, high-electron mobility transistors, monolithic microwave integrated circuits, and laterally diffused MOSFET power transistors for telecommunications infrastructure, military, and other commercial applications. The company's



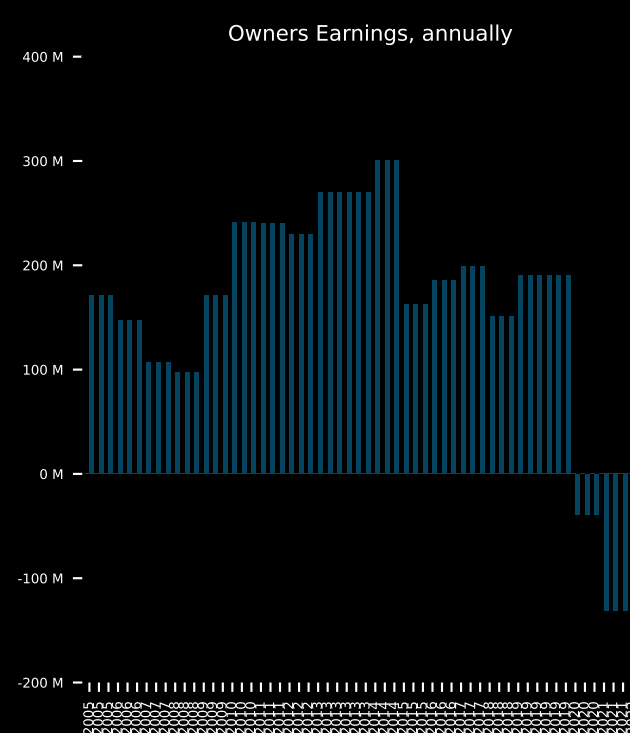
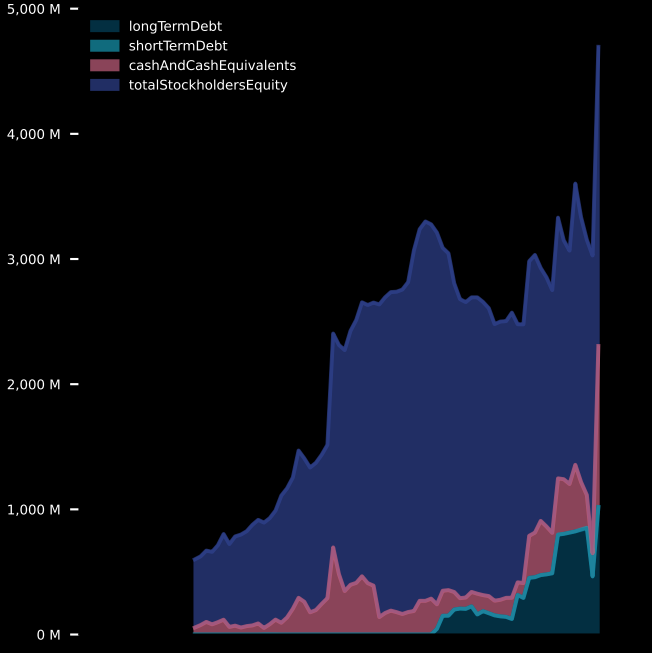
WOLF / Semiconductors / US / 2022-08-23



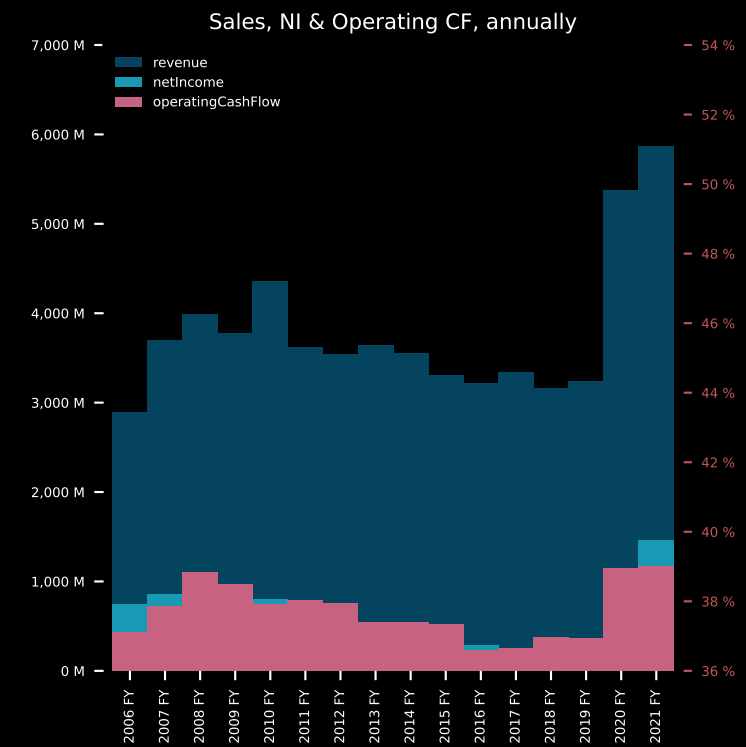
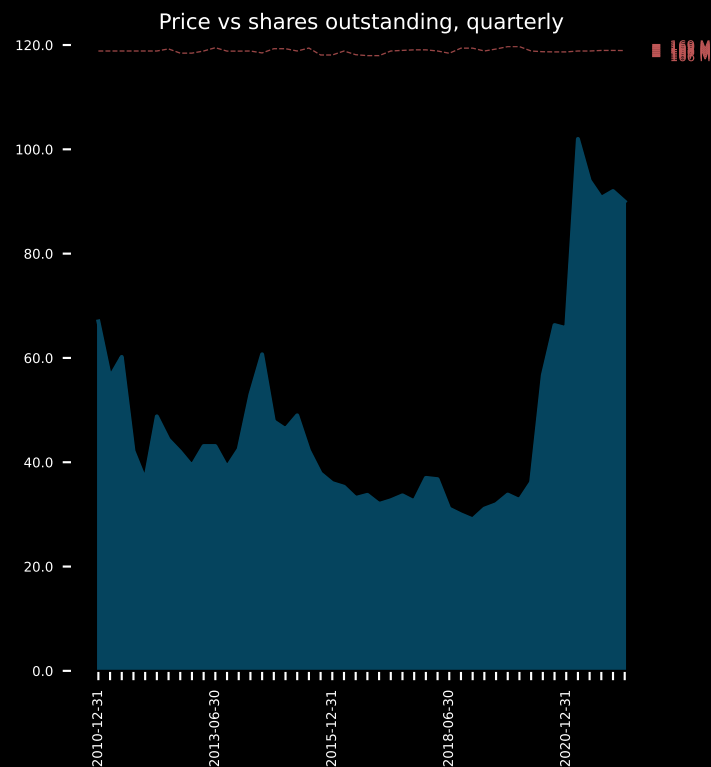
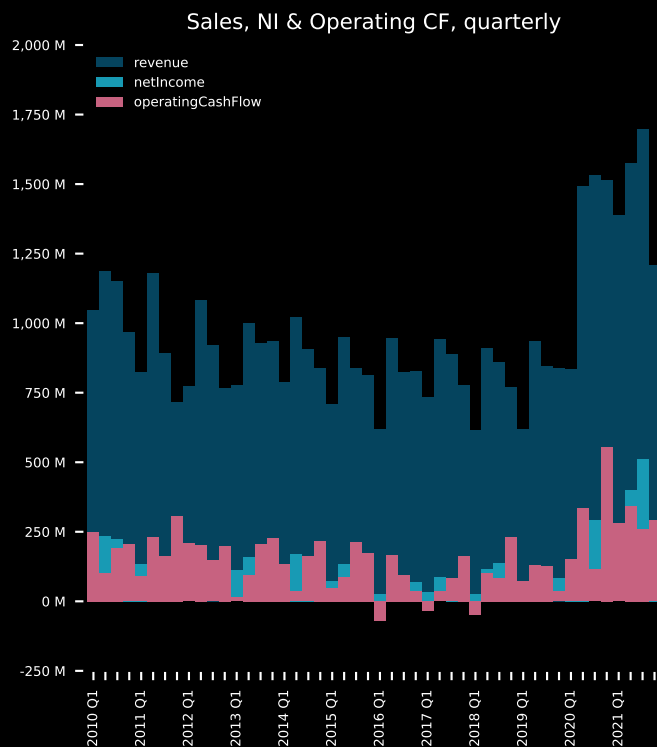
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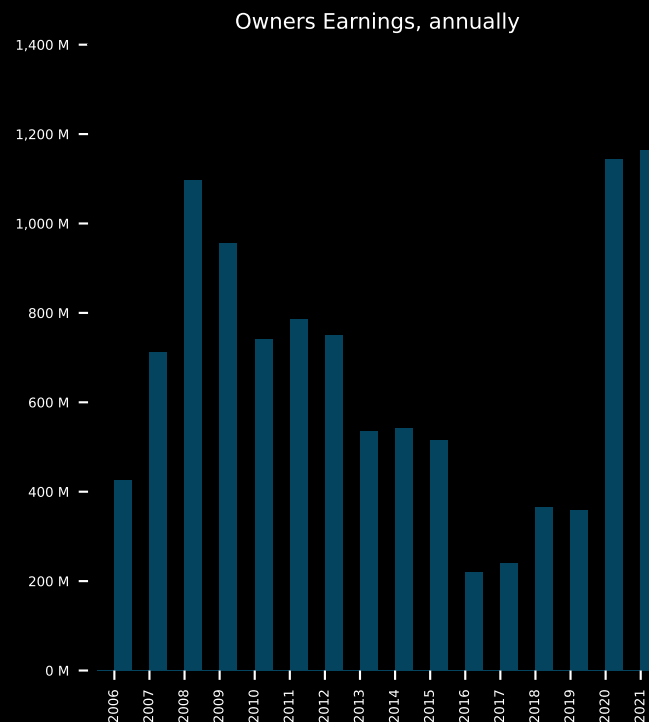
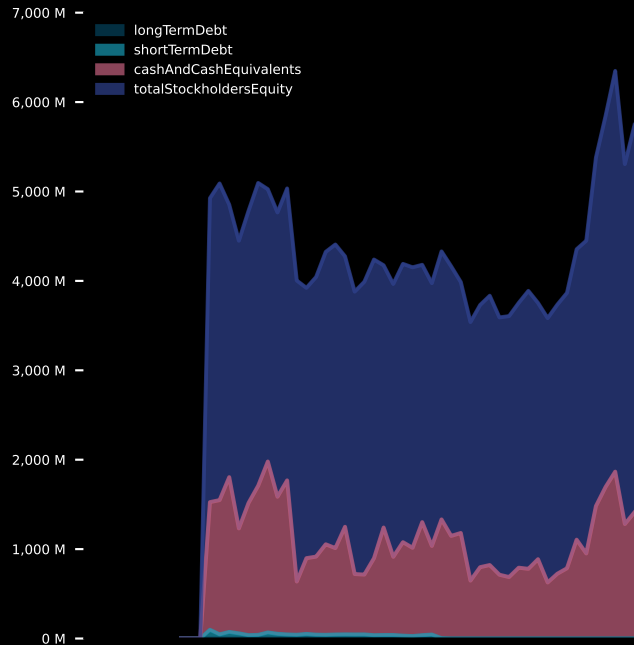
WOLF / Semiconductors / US / 2022-08-23



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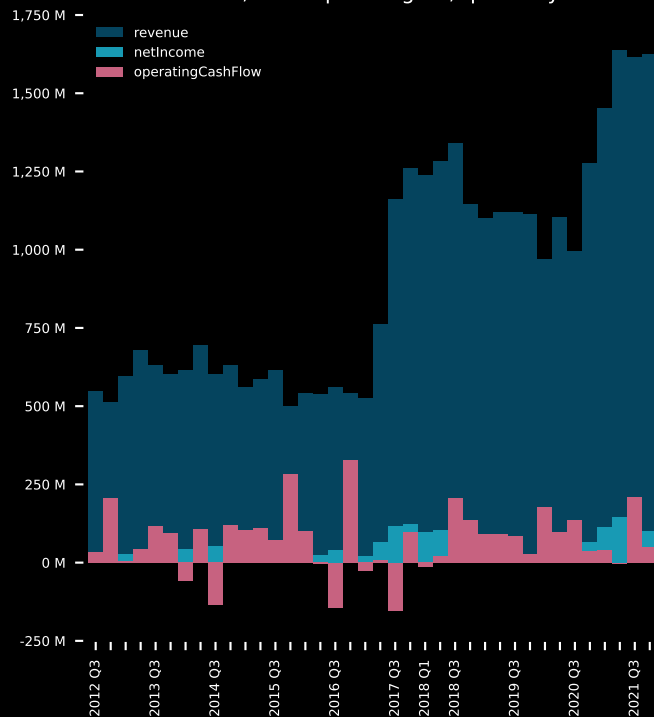


5471.TW / Semiconductors / US / 2022-08-23

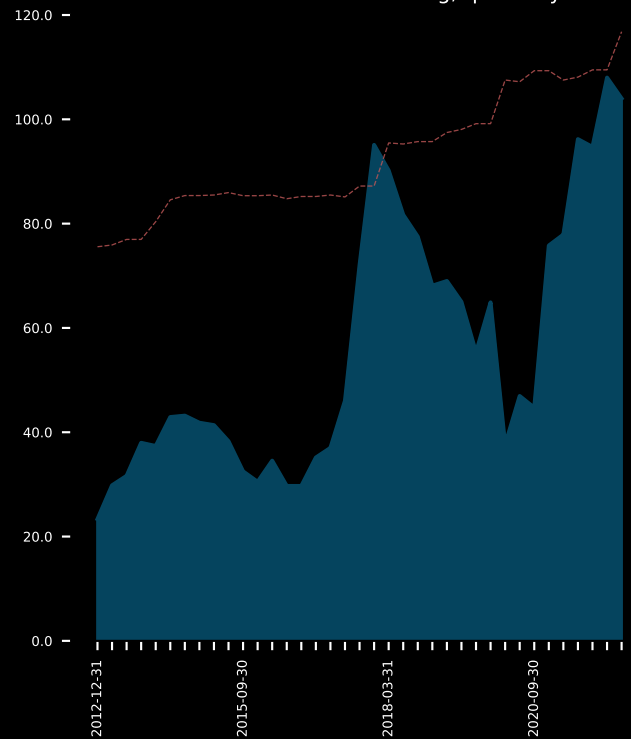


Sonix Technology Co.,Ltd. designs, develops, manufactures, and sells integrated circuits (ICs) in Taiwan and internationally. The company provides microcontrollers for use in computer peripherals, communication products, remote controllers, intelligent charging, home appliances, car alarm systems, security systems, electronic scales, thermometers, blood pressure monitors, tire gauges, and health equipment. It also offers voice controllers for interactive and educational electronic toys, handheld games, educational learning appliances, and other devices; and a range of video/image controllers. In addition, the company provides wireless video and audio solutions for remote control toys, baby monitors, and wireless home security systems; optical identification device chipsets for education, entertainment, and digital home appliances; multimedia network platforms for consumer Wi-Fi IP cameras makers; and USB controllers. Sonix Technology Co.,Ltd. was incorporated in 1996 and is headquartered in Zhubei, Taiwan.

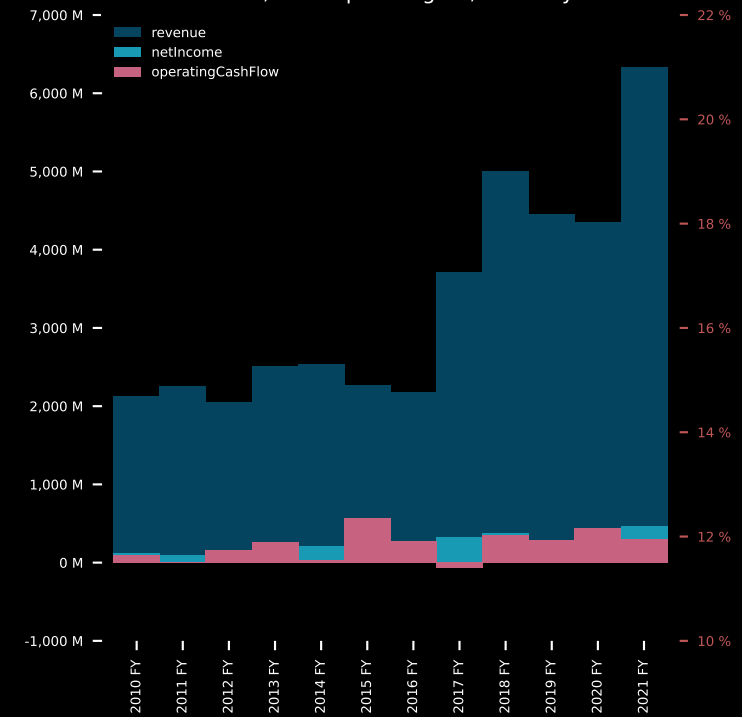
Sales, NI & Operating CF, quarterly



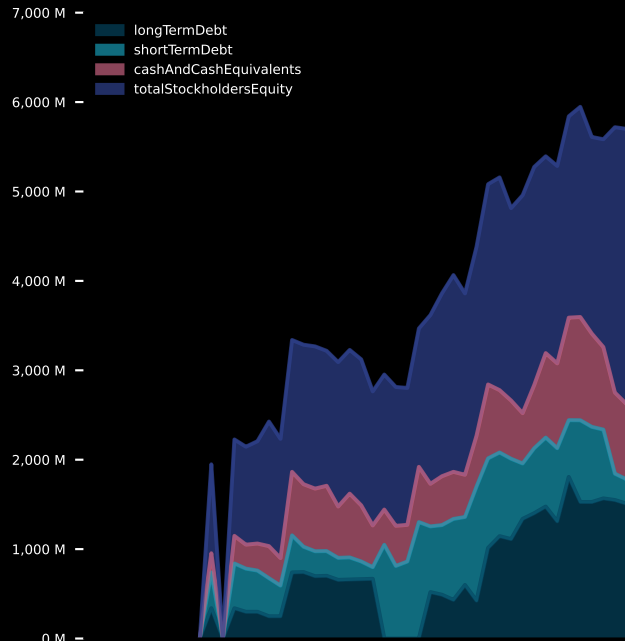
Price vs shares outstanding, quarterly



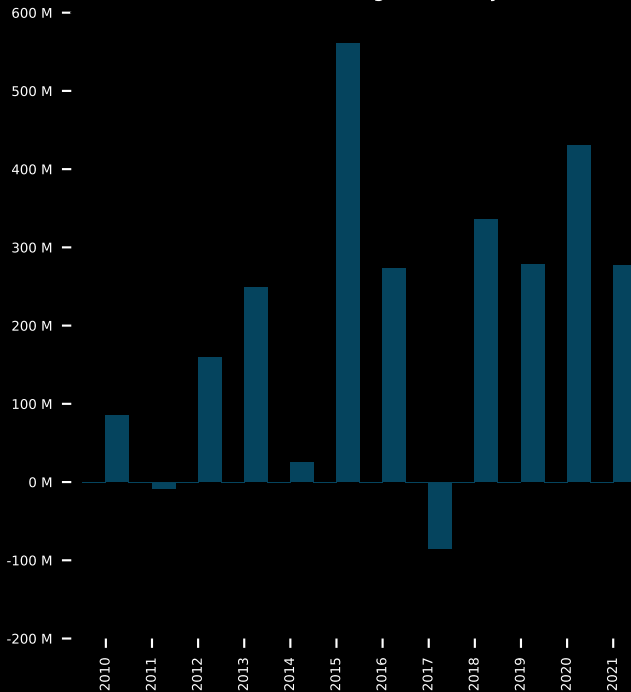
Sales, NI & Operating CF, annually



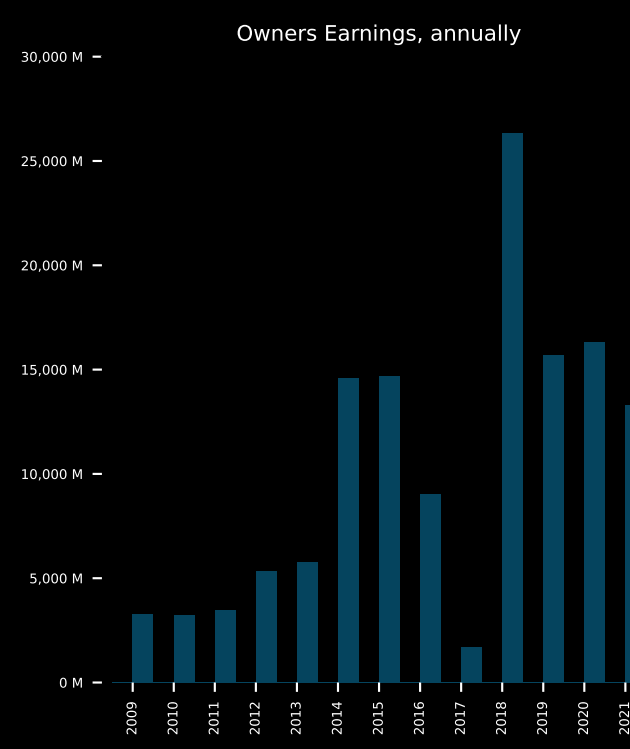
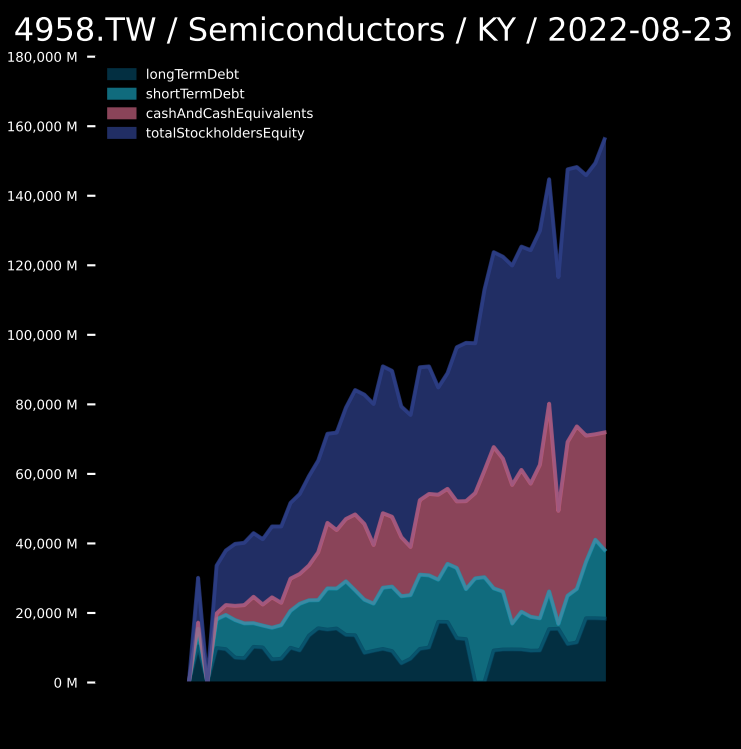
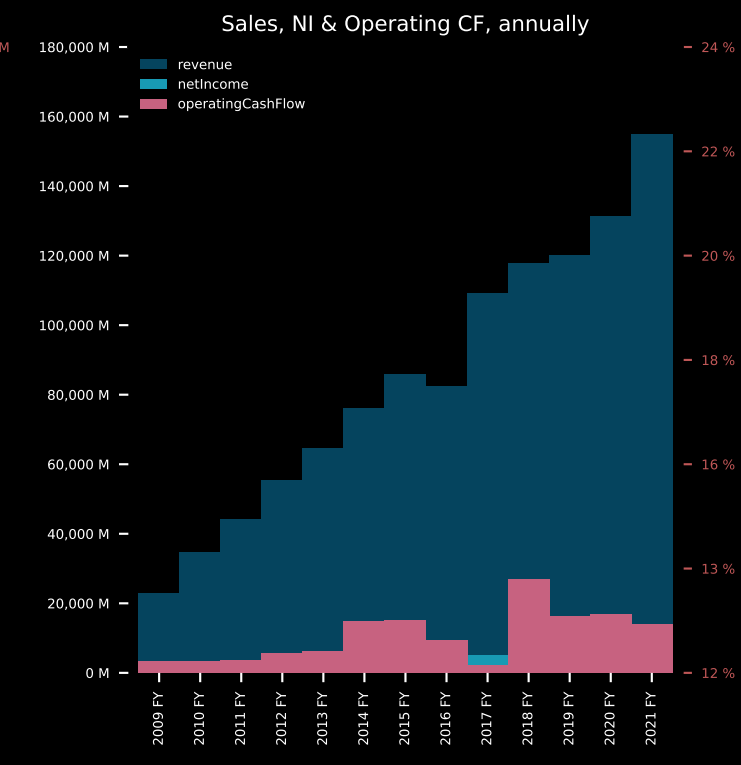
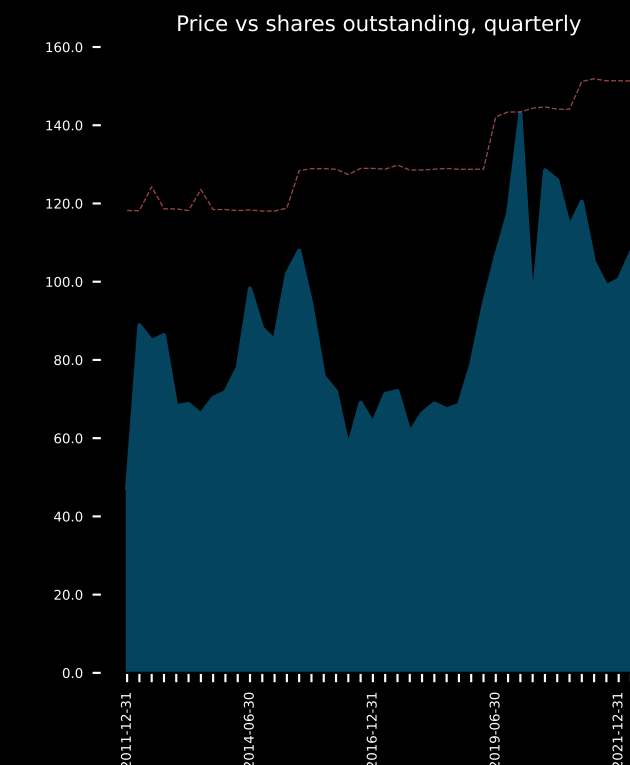
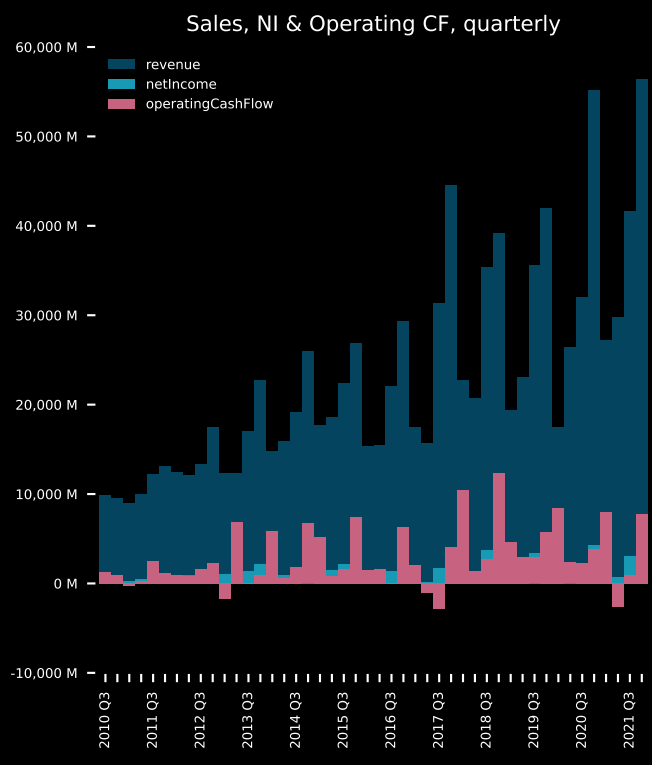
5285.TW / Semiconductors / US / 2022-08-23



Owners Earnings, annually

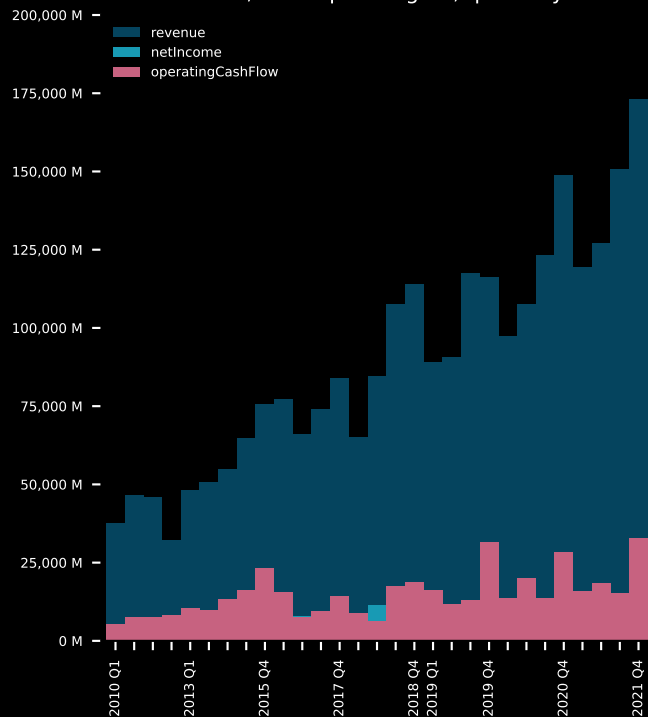


Jih Lin Technology Co., Ltd. manufactures and sells lead frames in Taiwan and internationally. The company provides high and low power discrete transistor, surface mount devices, bridge/DIP rectifier, opto/LED, power discrete clip, and integrated circuit lead frames, as well as intelligent power modules and diode lead wires. Its products are used in computer vehicle component, power supply, smartphone, TV power converter, and air conditioner refrigerator applications. The company was founded in 2000 and is based in Kaohsiung, Taiwan.

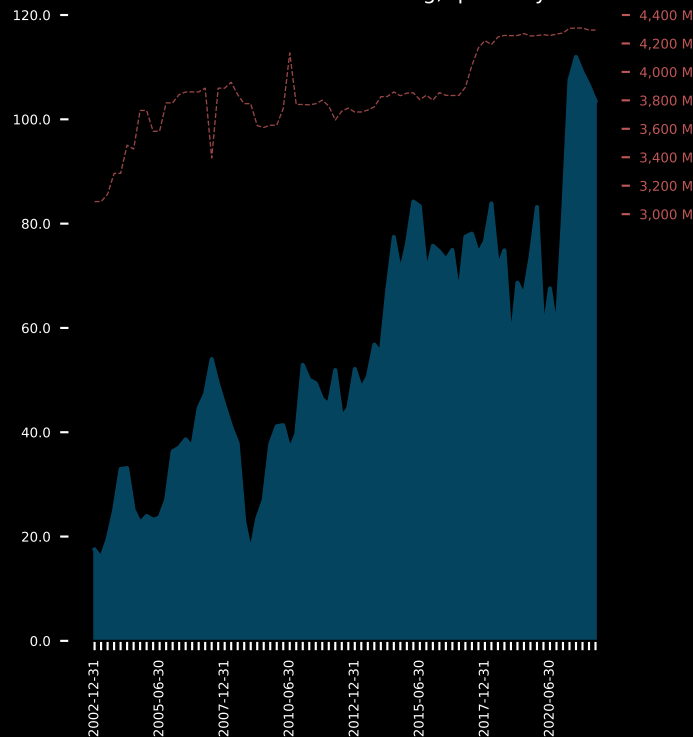


Zhen Ding Technology Holding Limited, together with its subsidiaries, engages in the manufacturing and sale of various printed circuit board (PCB) products in the United States, Mainland China, Taiwan, Singapore, and internationally. The company offers rigid PCBs for use in automotive electronics, servers/storage devices, desktop computers, laptop computers, monitors, hard drives, TVs, game consoles, etc.; flexible PCBs for use in wearable devices, mobile phones, tablet computers, notebook computers, handheld game consoles, touch panels, camera lenses, etc.; high density interconnection PCBs for use in Wearable devices, mobile phones, tablet computers, ultra-thin notebook computers, smart speakers, servers/storage, memory modules, etc.; and IC substrates for application processors, baseband chips, power management chips, NFC chips, RF chips, graphics chips, power amplifiers, flash memory, MEMS, etc. The company was formerly known as Foxconn Advanced Technology Limited and changed its name to Zhen Ding Technology Holding Limited in June 2011. Zhen Ding Technology Holding Limited was incorporated in 2006 with its headquarters in Guangzhou, China.

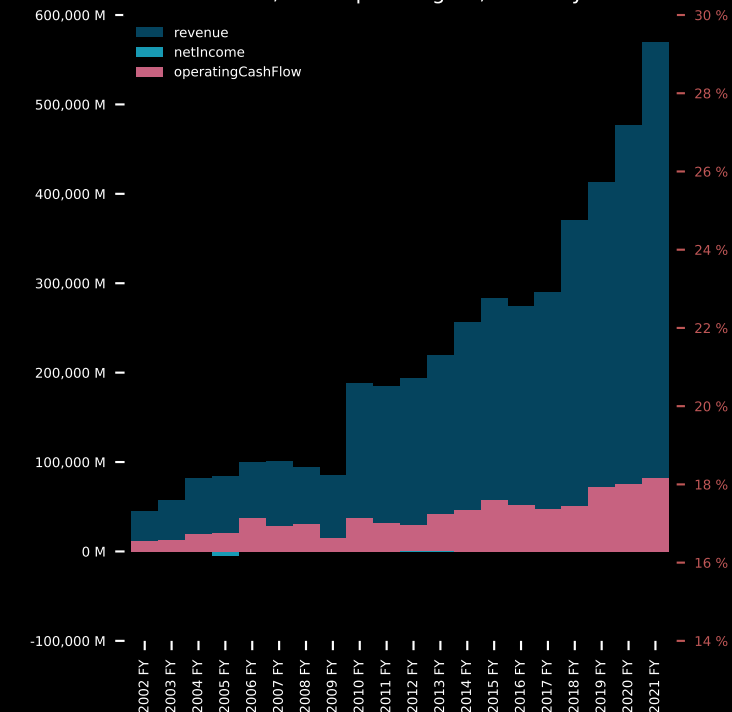
Sales, NI & Operating CF, quarterly



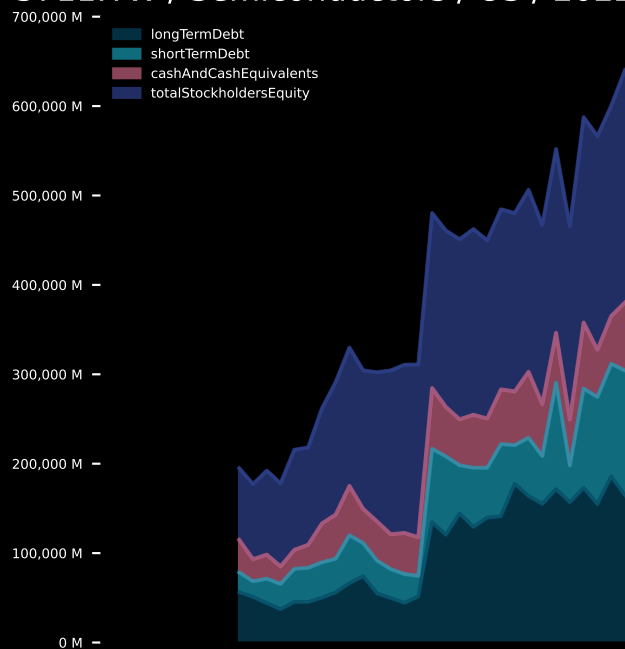
Price vs shares outstanding, quarterly



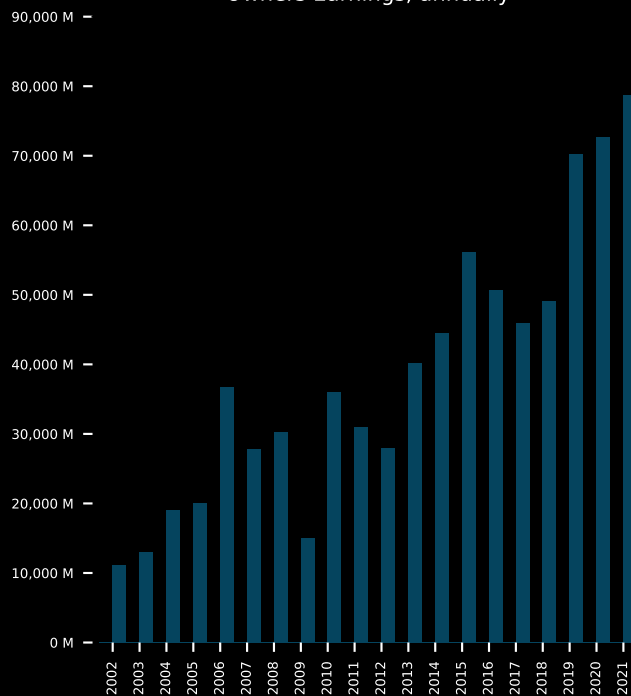
Sales, NI & Operating CF, annually



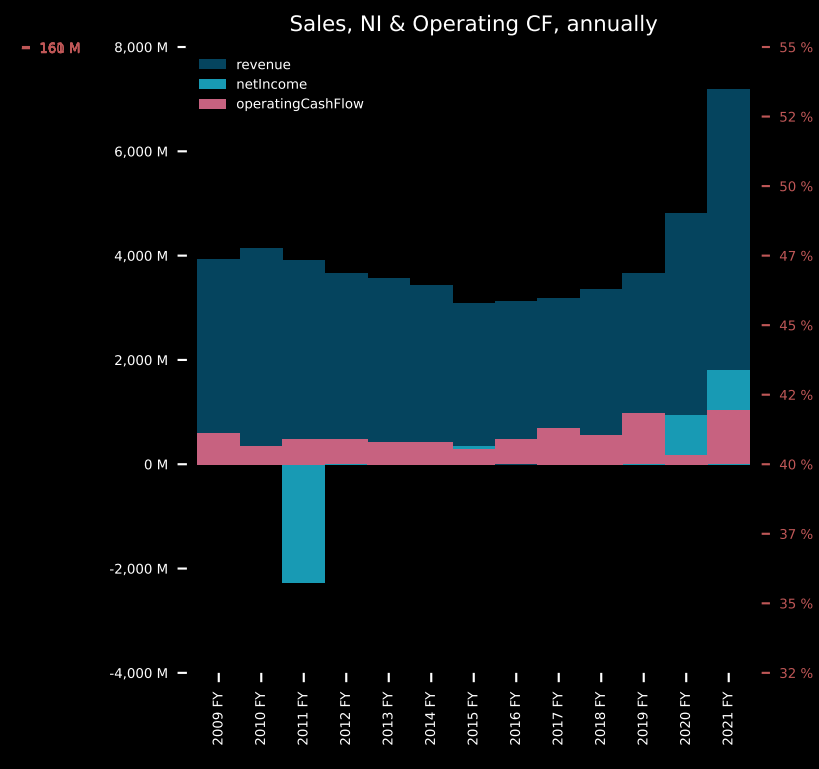
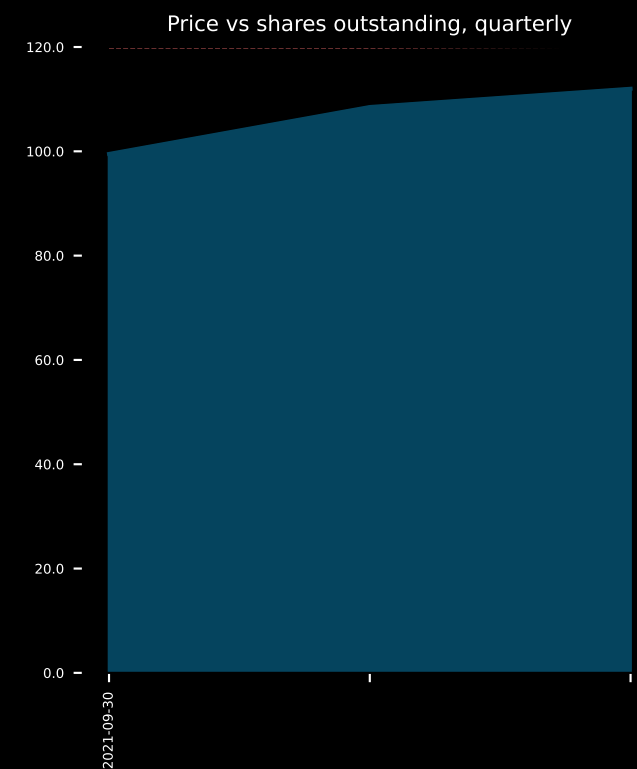
3711.TW / Semiconductors / US / 2022-08-23



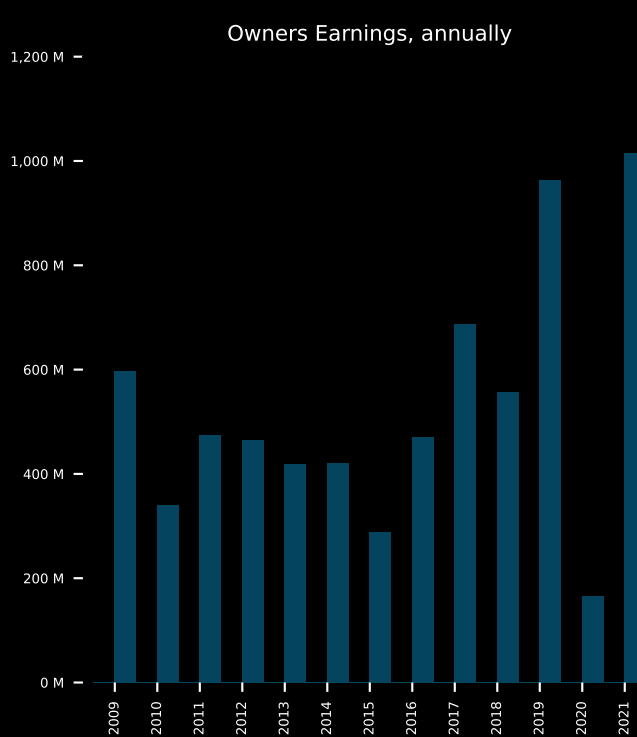
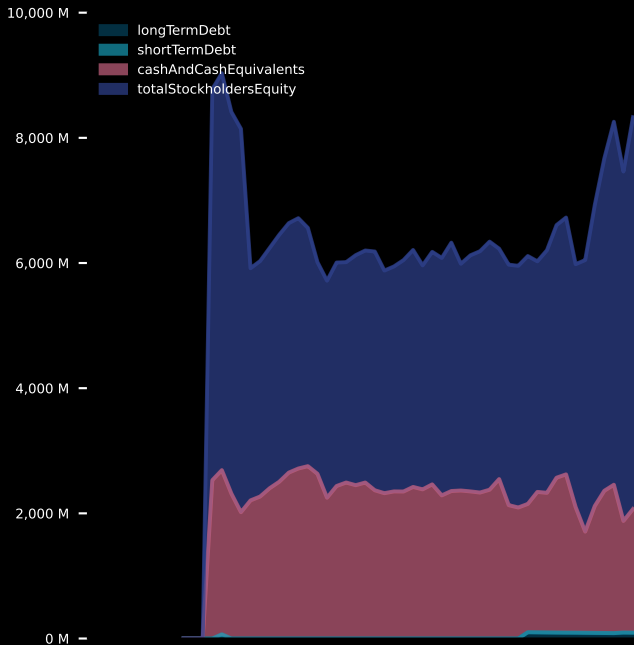
Owners Earnings, annually



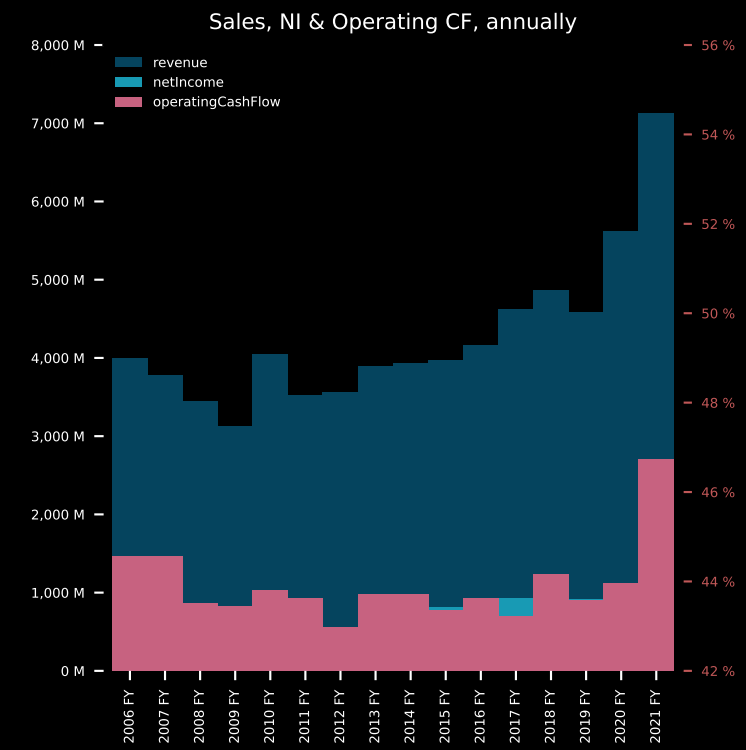
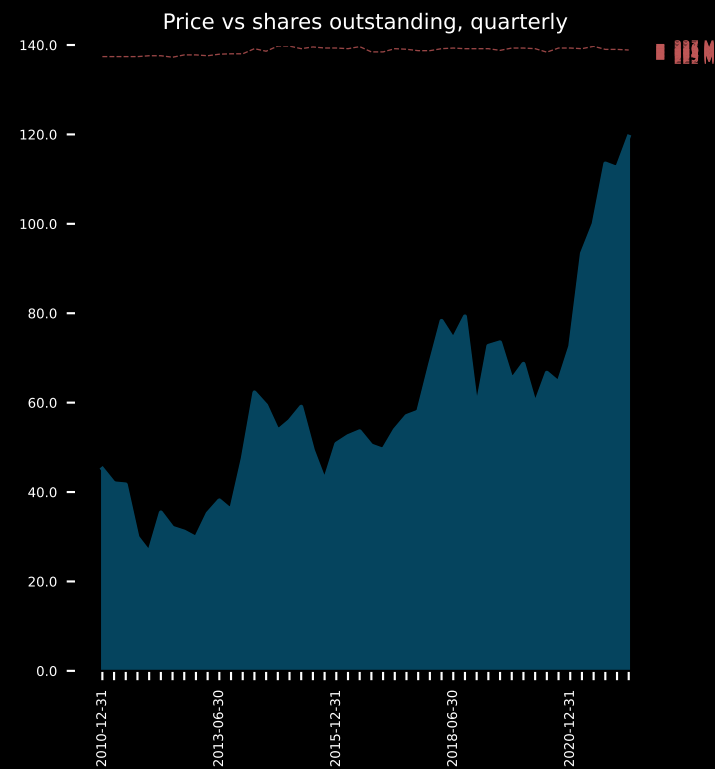
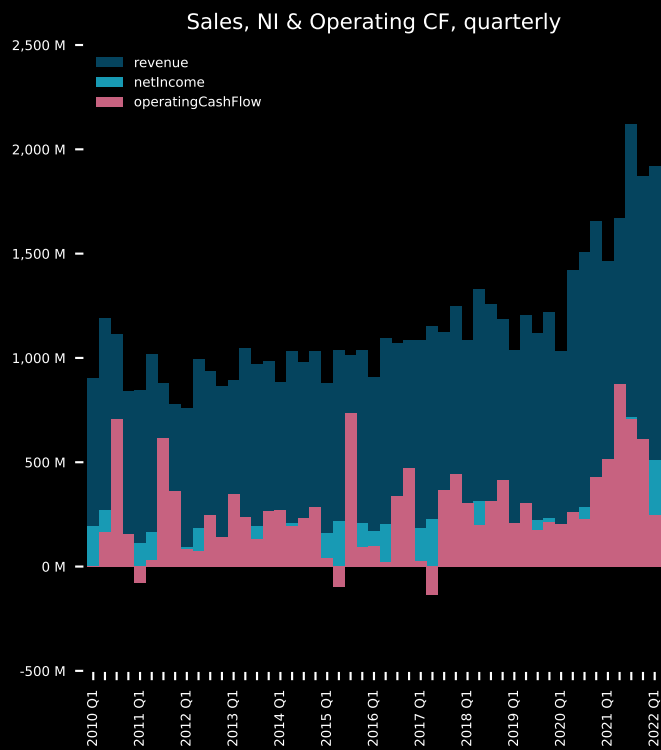
ASE Technology Holding Co., Ltd. provides a range of semiconductors packaging and testing, and electronic manufacturing services in the United States, Taiwan, rest of Asia, Europe, and internationally. It offers packaging services, including flip chip ball grid array (BGA) and chip scale package (CSP), advanced chip scale packages, quad flat packages, low profile and thin quad flat packages, bump chip carrier and quad flat no-lead (QFN) packages, advanced QFN packages, plastic BGAs, and 3D chip packages; stacked die solutions in various packages; and copper and silver wire bonding solutions. The company also provides advanced packages, such as flip chip BGA; heat-spreader FCBGA; flip-chip CSP; hybrid FCCSP; flip chip package in package and package on package (POP); advanced single sided substrate; high-bandwidth POP; fan-out wafer-level packaging; SESUB; and 2.5D silicon interposer. In addition, it offers IC wire bonding packages; system-in-package products (SiP) and modules; and interconnect materials, as well as assembles automotive electronic products. Further, the company provides a range of semiconductor



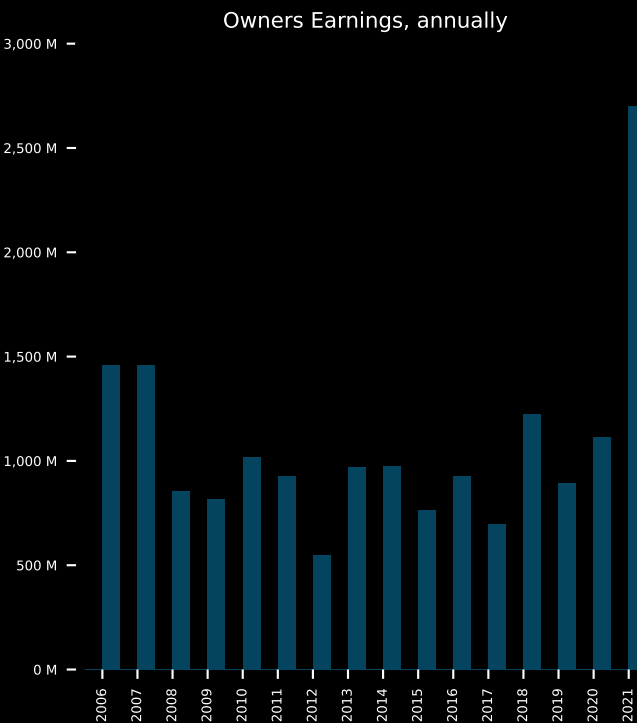
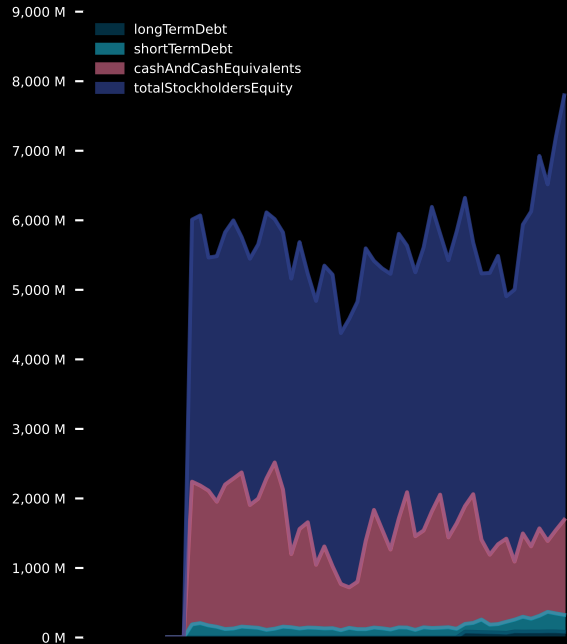
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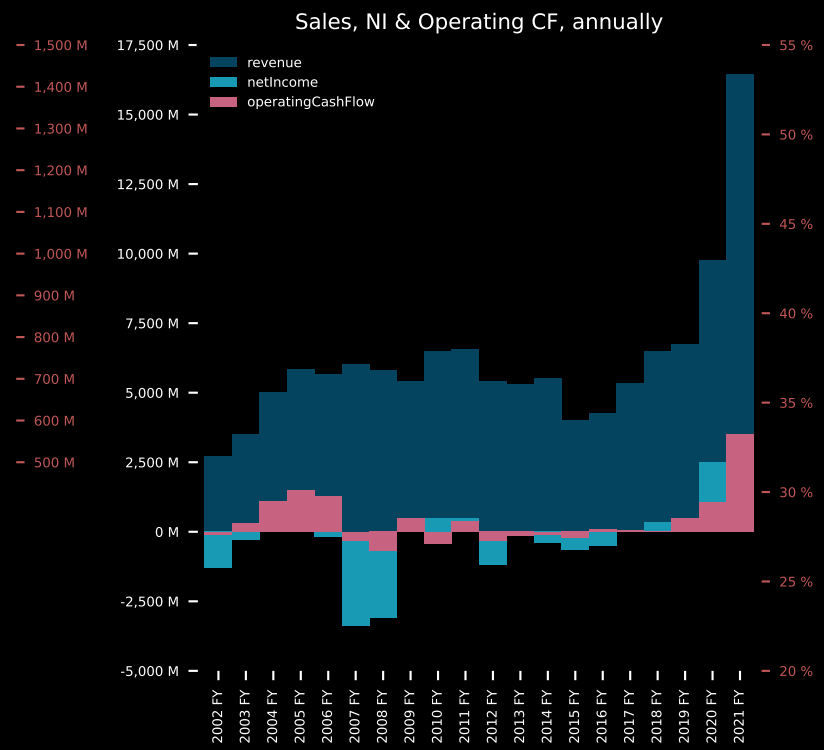
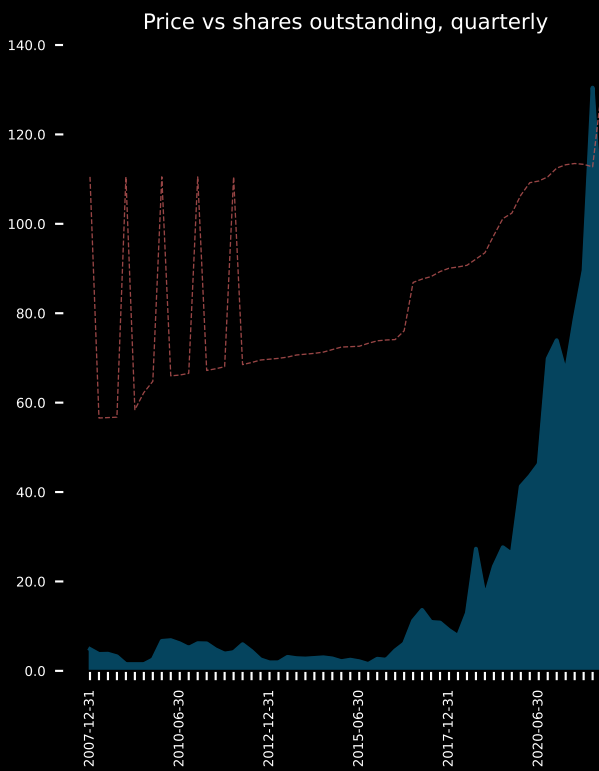
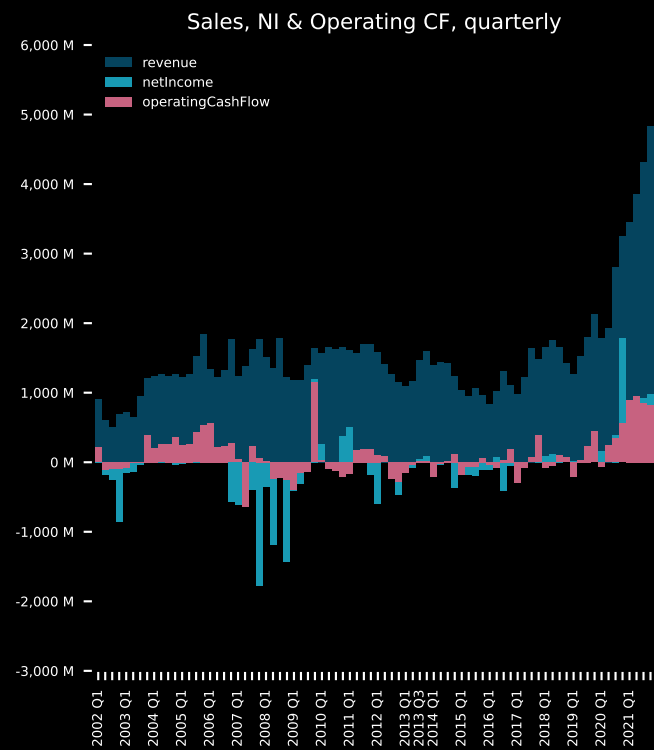
ITE Tech. Inc, a fabless IC design company, provides I/O, keyboard, and embedded controller technology products in Taiwan and internationally. It offers video link products, including HDMI, display port, MIPI, and high-speed ADC/DAC products; PC I/O and notebook product lines; and digital TV products, such as DTV modulators, front-end receivers, and bridges. The company also provides ccHDTV transmitters and receivers; USB type C products; EPD e-paper IC products; and sensor hub/IOT products. ITE Tech. Inc was founded in 1996 and is headquartered in Hsinchu, Taiwan.



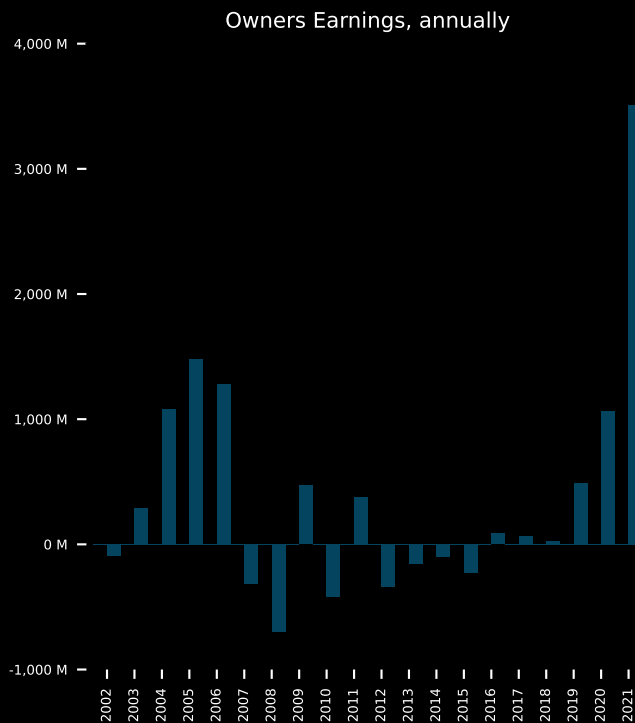
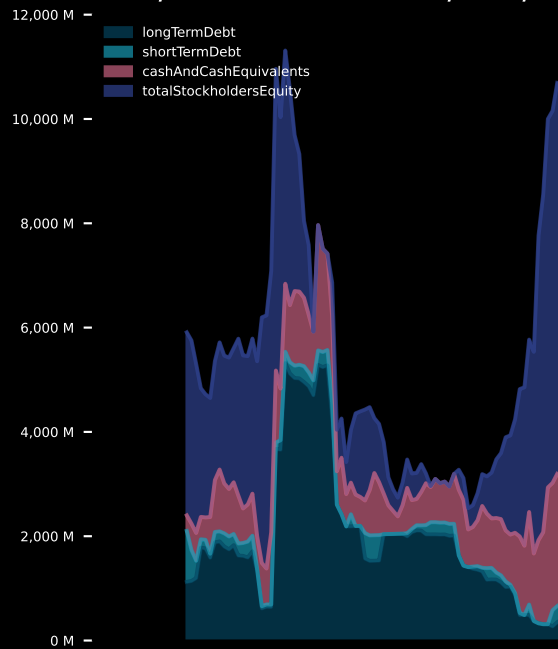
6202.TW / Semiconductors / US / 2022-08-23



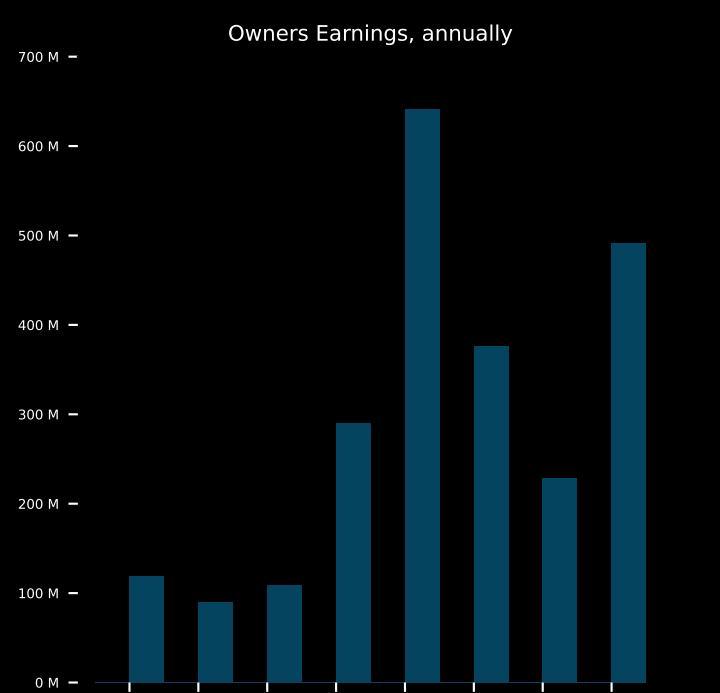
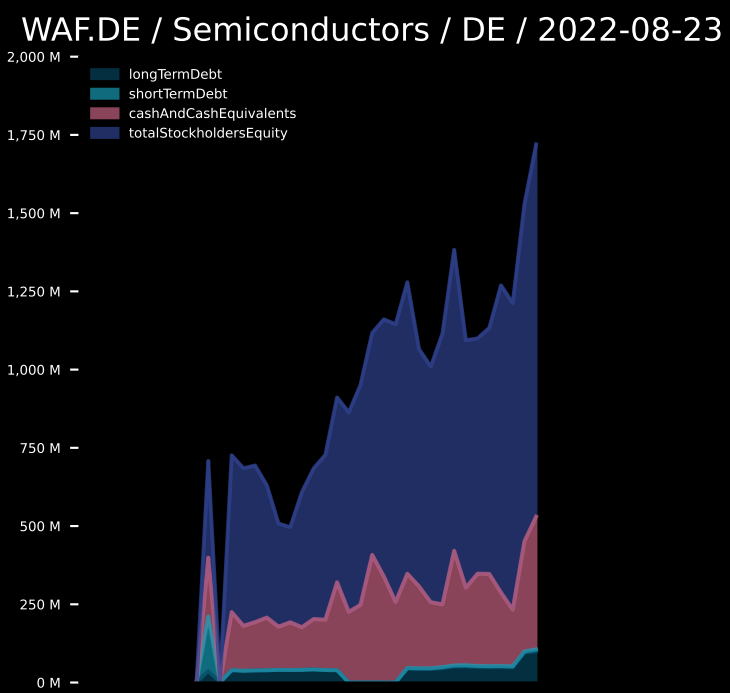
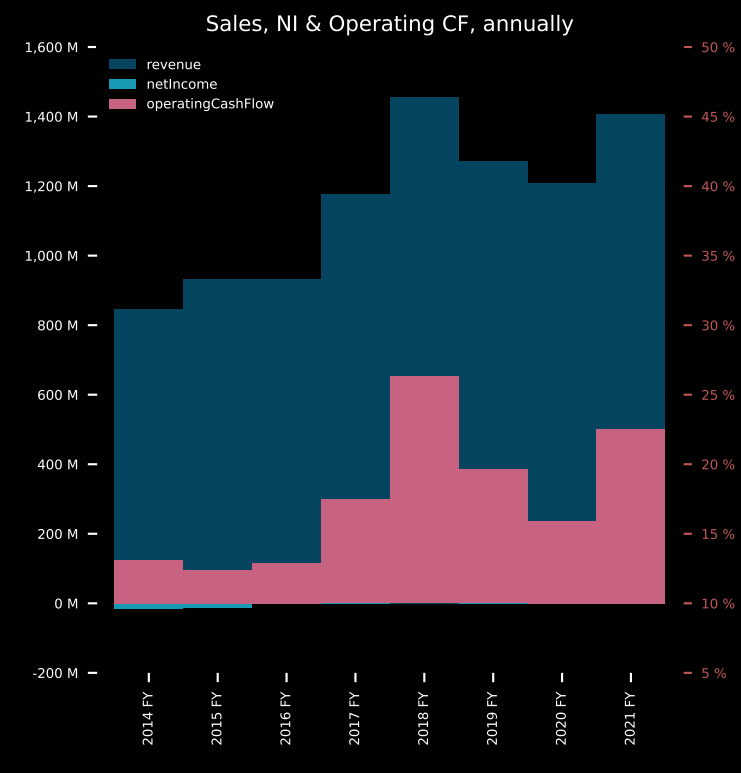
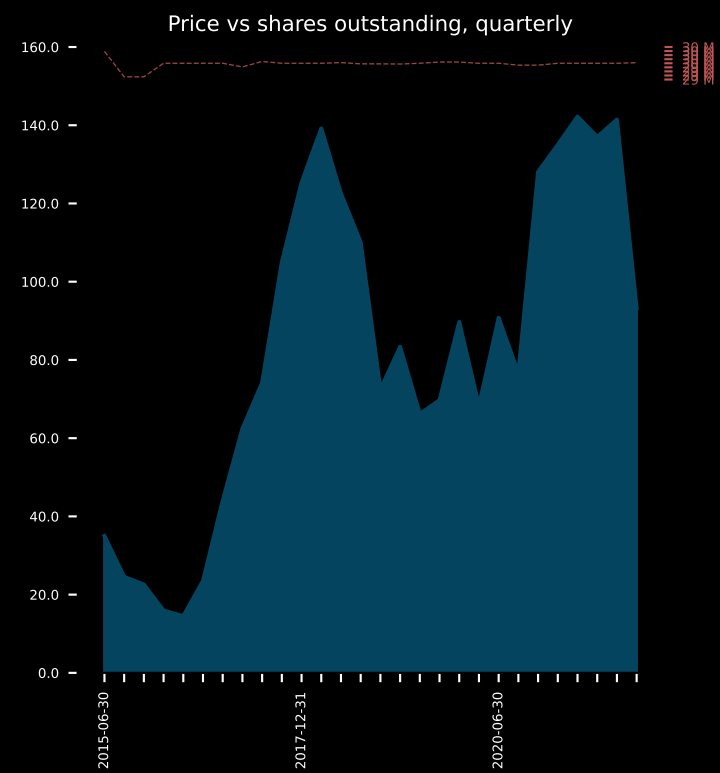
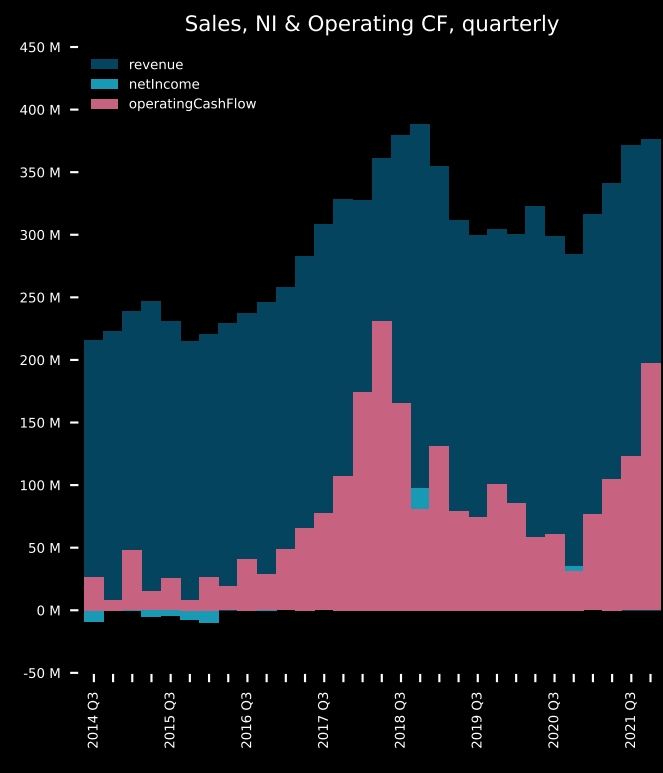
Holtek Semiconductor Inc. researches, develops, manufactures, and sells integrated circuits in Taiwan, China, and internationally. The company provides a range of general purpose and specialized types of microcontrollers for use in the areas of voice, communication, computer peripheral, household appliance, medical equipment, automotive, security, etc.; and power management devices, LCD and LED drive/control chips, ultra-high resolution fingerprint identification sensors, various sensor modules, and other peripheral devices. It also offers MCU that are used for general purpose, LCD display, USB, motor control, OPA, health and measurement, security and safety, touch, voice and music, battery and power management, and special purpose; and wireless and communication devices, display drivers, modules, EEPROM memory, and analog and video devices. The company was incorporated in 1998 and is headquartered in Hsinchu City, Taiwan.



AMD.DE / Semiconductors / US / 2022-08-23



Advanced Micro Devices, Inc. operates as a semiconductor company worldwide. The company operates in two segments, Computing and Graphics; and Enterprise, Embedded and Semi-Custom. Its products include x86 microprocessors as an accelerated processing unit, chipsets, discrete and integrated graphics processing units (GPUs), data center and professional GPUs, and development services; and server and embedded processors, and semi-custom System-on-Chip (SoC) products, development services, and technology for game consoles. The company provides processors for desktop and notebook personal computers under the AMD Ryzen, AMD Ryzen PRO, Ryzen Threadripper, Ryzen Threadripper PRO, AMD Athlon, AMD Athlon PRO, AMD FX, AMD A-Series, and AMD PRO A-Series processors brands; discrete GPUs for desktop and notebook PCs under the AMD Radeon graphics, AMD Embedded Radeon graphics brands; and professional graphics products under the AMD Radeon Pro and AMD FirePro graphics brands. It also offers Radeon Instinct, Radeon PRO V-series, and AMD Instinct accelerators for servers; and Radeon Instinct, Radeon PRO V-series, and AMD Instinct accelerators for servers; and Radeon Instinct, Radeon PRO V-series, and AMD Instinct accelerators for servers.

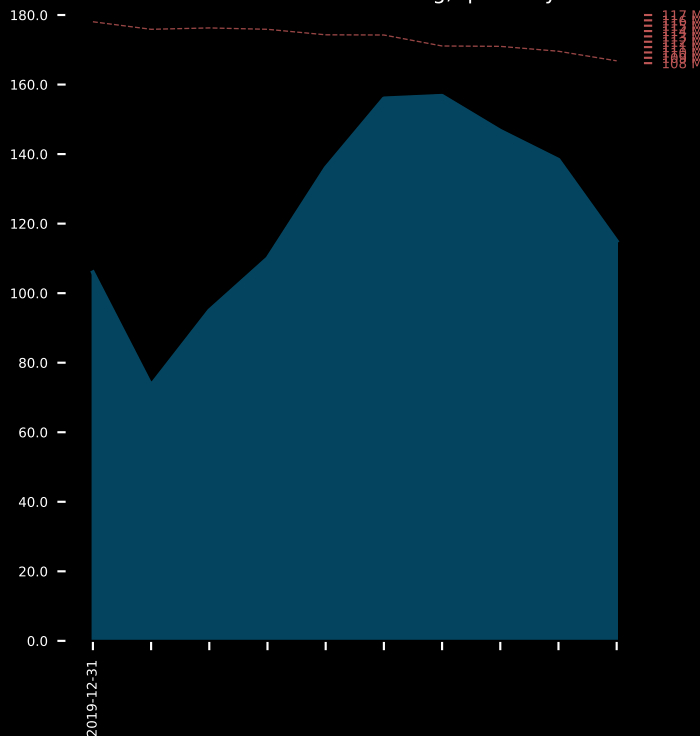


Siltronic AG, together with its subsidiaries, manufactures and sells hyperpure semiconductor silicon wafers with diameters of up to 300 mm worldwide. It offers polished and epitaxial wafers. The company also provides special products, such as Ultimate Silicon, an optimal crystal for polished wafers; PowerFZ, a wafer product based on the float zone method; and HIREF, a high reflective non-polished wafer product. Its silicon wafers are used in computers, smartphones, flat screens, sensors, industrial equipment, navigation systems, electric cars, wind turbines, and other applications. The company was formerly known as Wacker Siltronic AG and changed its name to Siltronic AG in 2004. Siltronic AG was founded in 1953 and is headquartered in Munich, Germany.

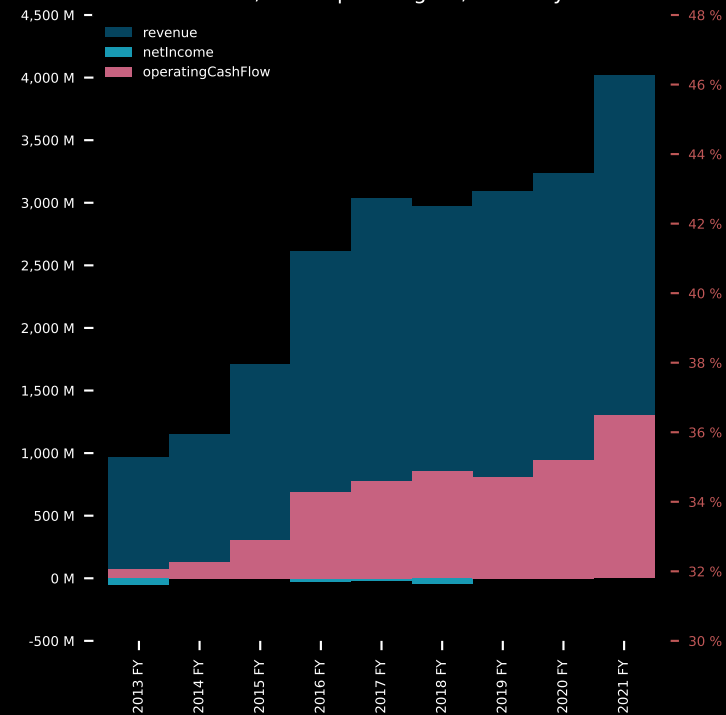
Sales, NI & Operating CF, quarterly



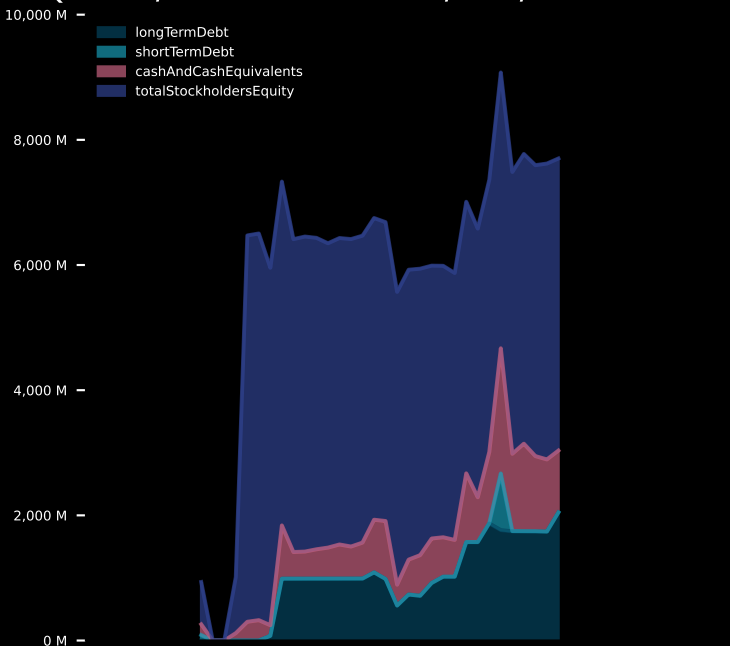
Price vs shares outstanding, quarterly



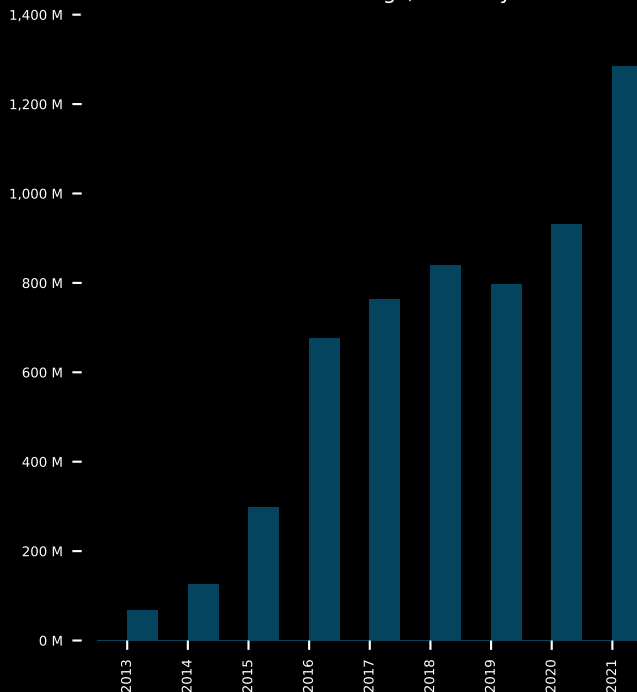
Sales, NI & Operating CF, annually



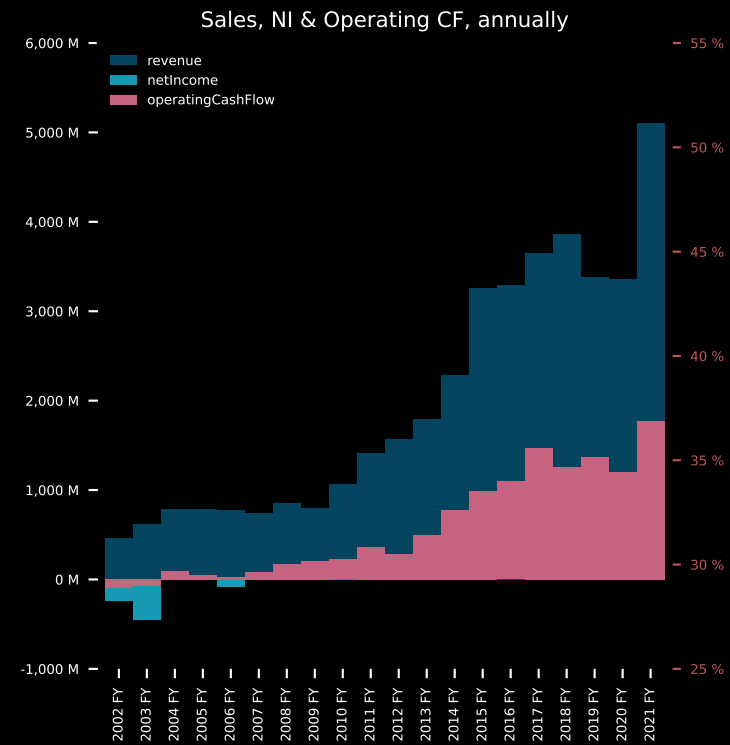
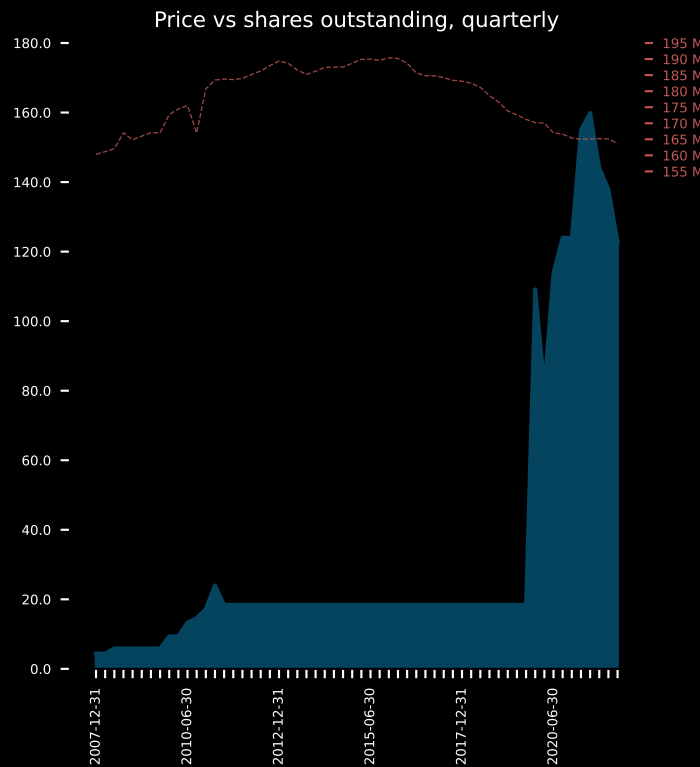
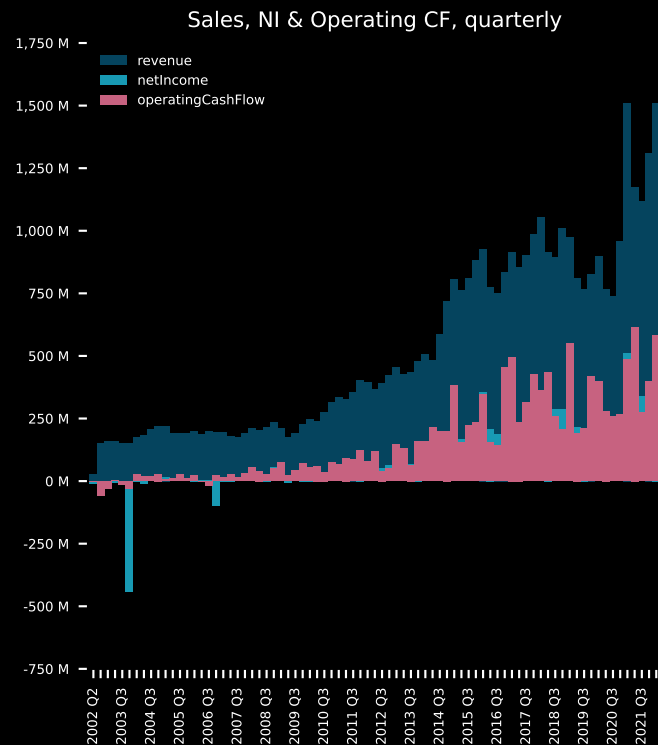
2QO.DE / Semiconductors / US / 2022-08-23



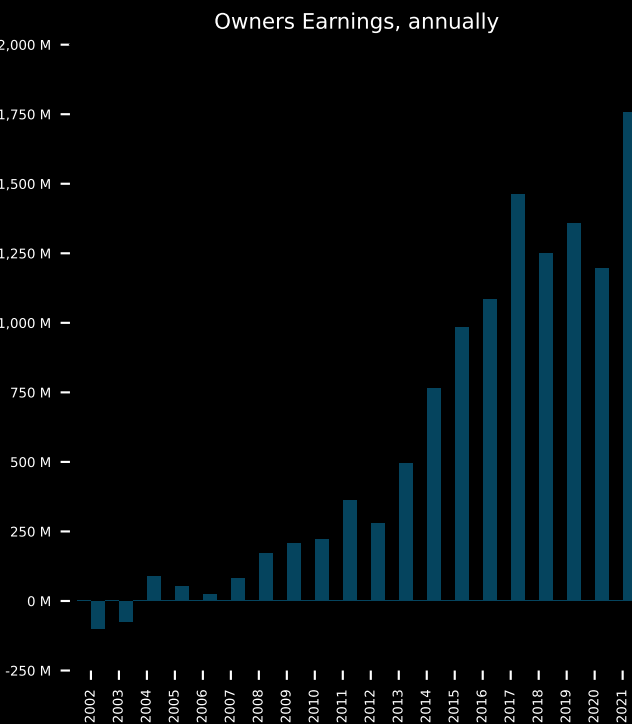
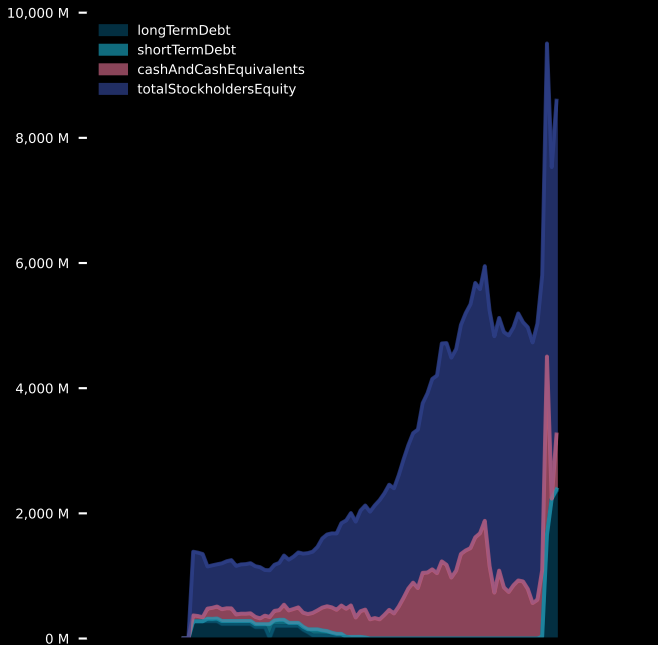
Owners Earnings, annually



Qorvo, Inc. develops and commercializes technologies and products for wireless and wired connectivity worldwide. The company operates through two segments, Mobile Products, and Infrastructure and Defense Products. The company offers integrated modules incorporating switches, power amplifiers, filters, multiplexers and other components, radio frequency (RF) power management integrated circuits, antenna tuners, antenna-plexers, discrete filters and duplexers, discrete switches, and ultra-wideband (UWB) system solutions. It also provides integrated solutions that include switch-LNA modules, variable gain amplifiers, discrete power amplifiers (PA), and integrated PA Doherty modules for massive multiple-input/multiple-output systems; RF products and compound semiconductor foundry services to defense primes and other global defense and aerospace customers; Wi-Fi customer premises equipment, including power amplifiers, switches, low noise amplifiers, and bulk acoustic wave filters; system-on-a-chip (SoC) hardware, firmware, and application software for smart home applications; automotive RF connectivity products

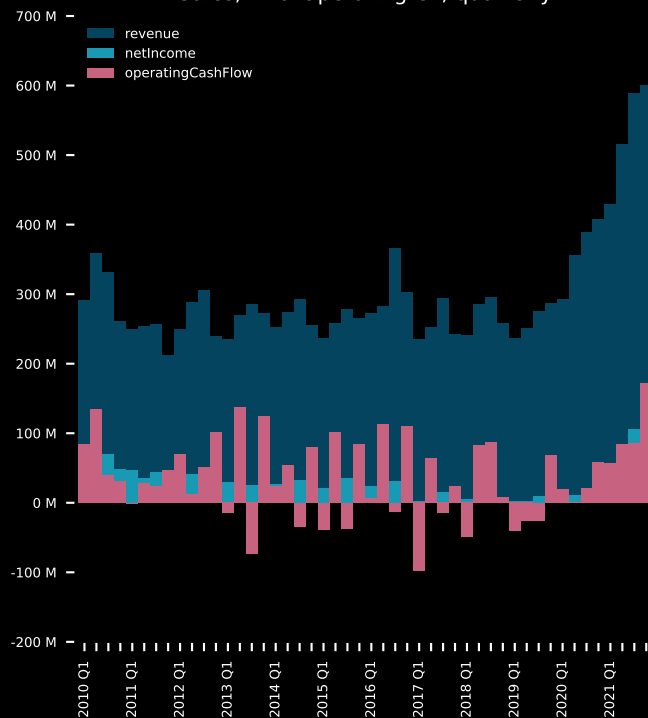


AWM.DE / Semiconductors / US / 2022-08-23

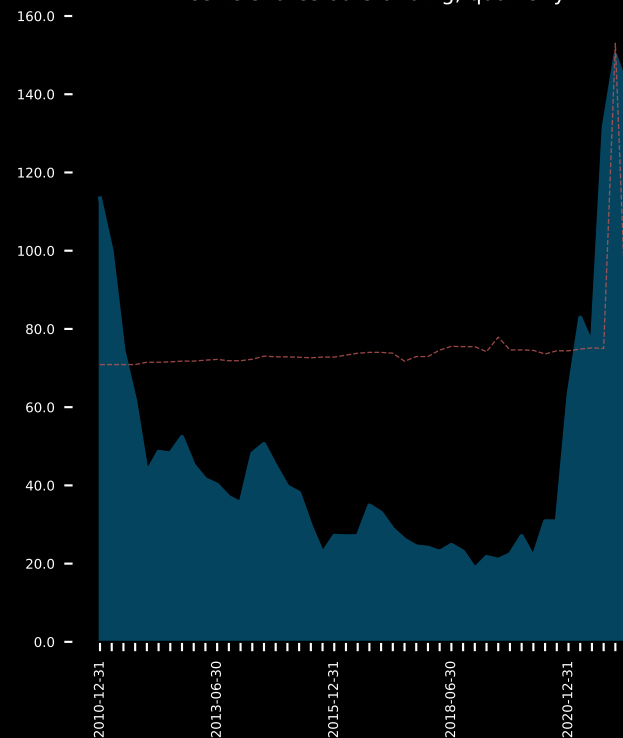


Skyworks Solutions, Inc., together with its subsidiaries, designs, develops, manufactures, and markets proprietary semiconductor products, including intellectual property in the United States, China, South Korea, Taiwan, Europe, the Middle East, Africa, and rest of Asia-Pacific. Its product portfolio includes amplifiers, antenna tuners, attenuators, automotive tuners and digital radios, circulators/isolators, DC/DC converters, demodulators, detectors, diodes, wireless analog system on chip products, directional couplers, diversity receive modules, filters, front-end modules, hybrids, light emitting diode drivers, low noise amplifiers, mixers, modulators, optocouplers/optoisolators, phase locked loops, phase shifters, power dividers/combiners, receivers, switches, synthesizers, timing devices, technical ceramics, voltage controlled oscillators/synthesizers, and voltage regulators. The company provides its products for use in the aerospace, automotive, broadband, cellular infrastructure, connected home, entertainment and gaming, industrial, medical, military, smartphone, tablet, and wearable markets. It sells its products

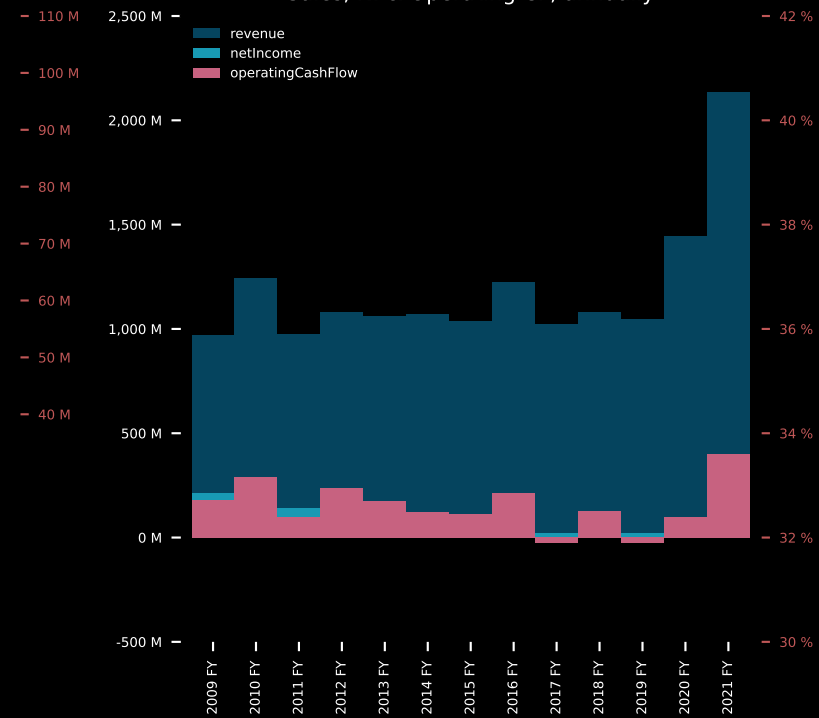
Sales, NI & Operating CF, quarterly



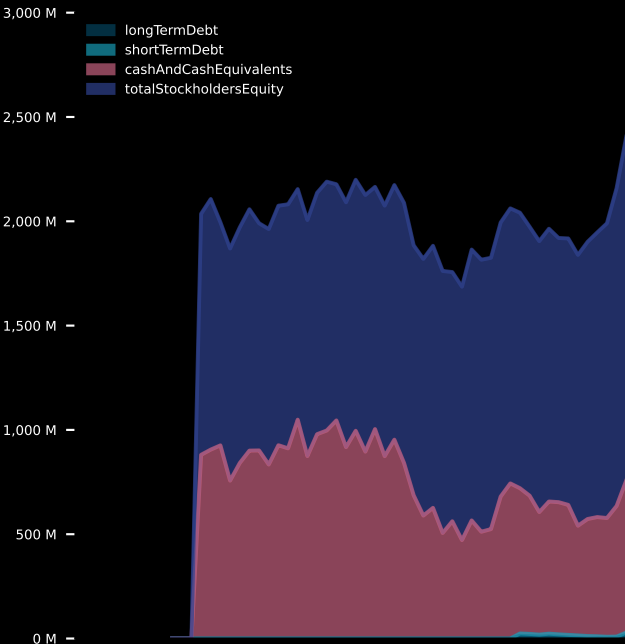
Price vs shares outstanding, quarterly



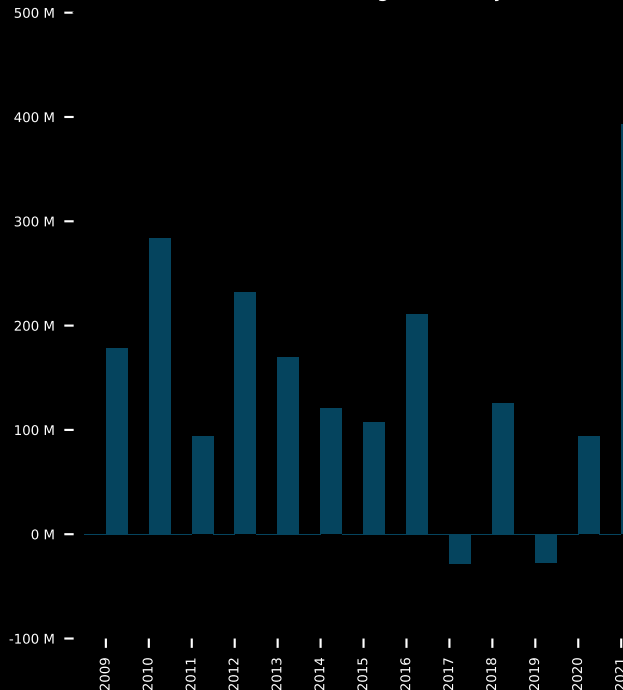
Sales, NI & Operating CF, annually



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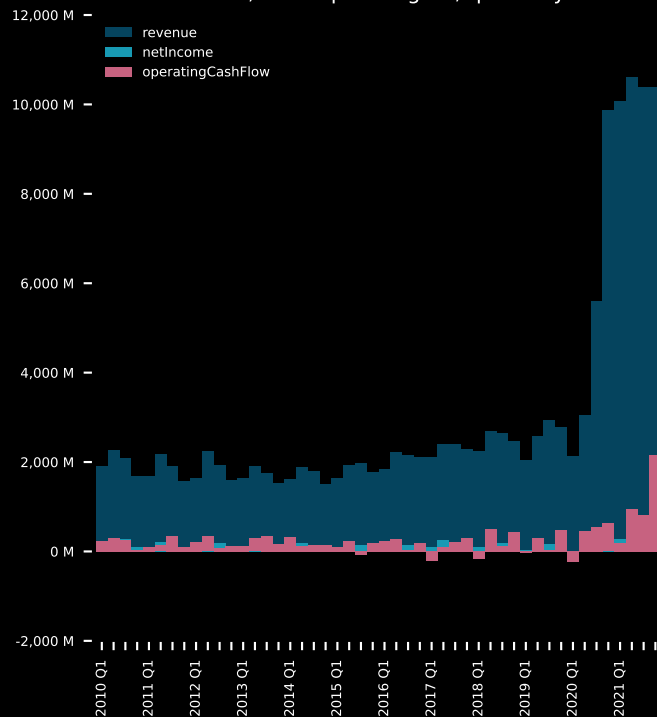


Owners Earnings, annually

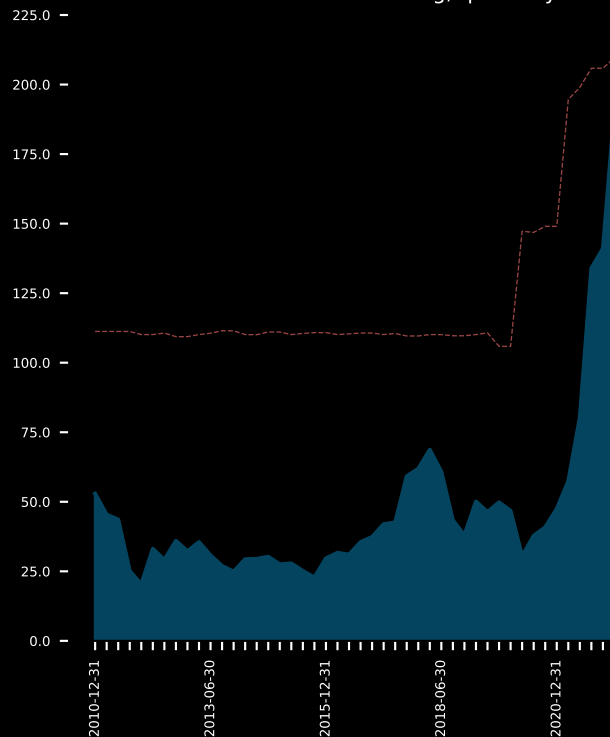


Leadtrend Technology Corporation operates as a fabless company for AC-DC mid and high-power application solutions primarily in Taiwan. It offers mid-power controllers, such as primary side regulator controllers, isolated green mode products, isolated high voltage green mode products, PSR and SSR MOS combo, and isolated HV MOS combo; USB power delivery and type C controllers; and LED application products, including 3 in 1 flexible dimming processors, active-PFC primary side regulator controllers, active-PFC secondary side regulator controllers, current ripple suppressors, and secondary side CC/CV controllers. The company also provides hi-power controller comprising transition mode PFC controllers, PFC with QR controllers, and asymmetric half-bridge LLC controllers; and SR controller, which includes SR MOS combo and synchronous rectification drivers. Its products are used in TV/monitor, adapter, networking, and LED lighting applications. The company was founded in 2002 and is headquartered in Hsinchu, Taiwan.

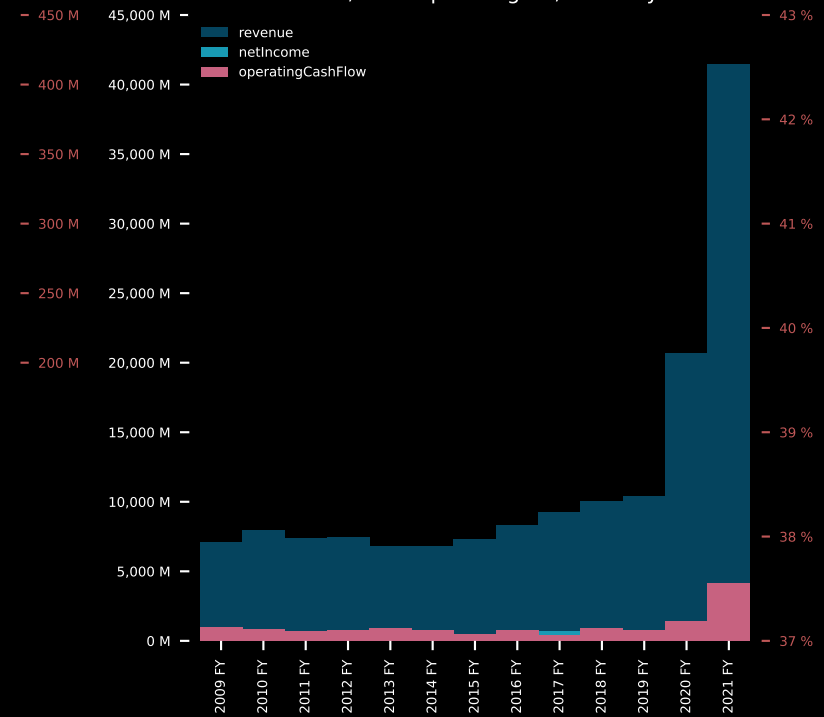
Sales, NI & Operating CF, quarterly



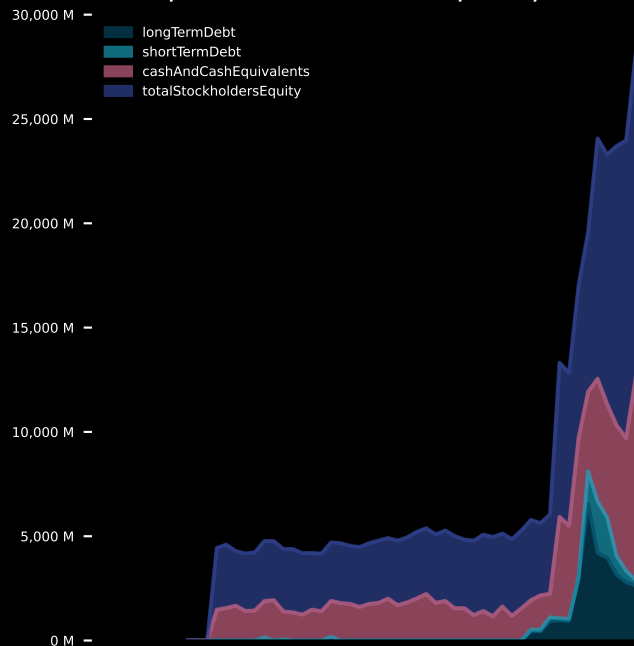
Price vs shares outstanding, quarterly



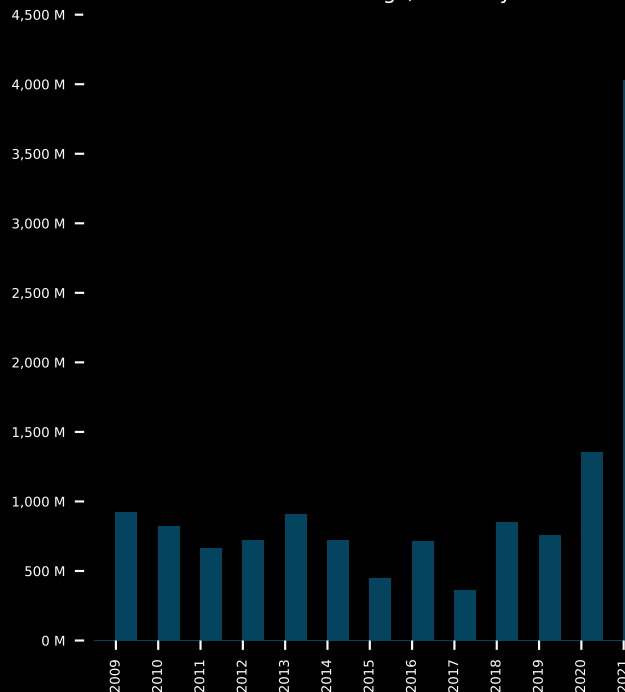
Sales, NI & Operating CF, annually



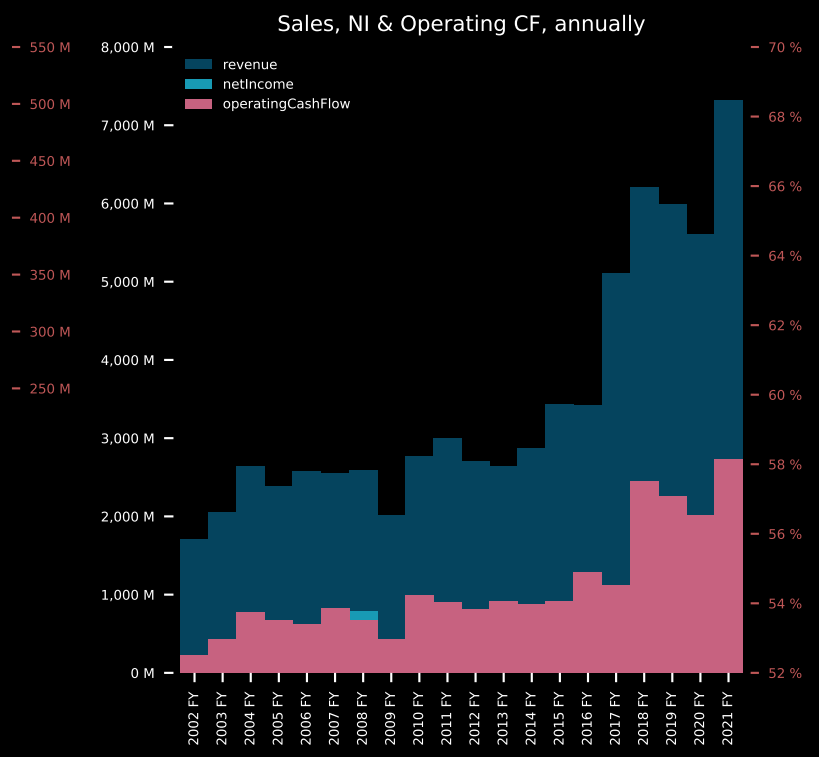
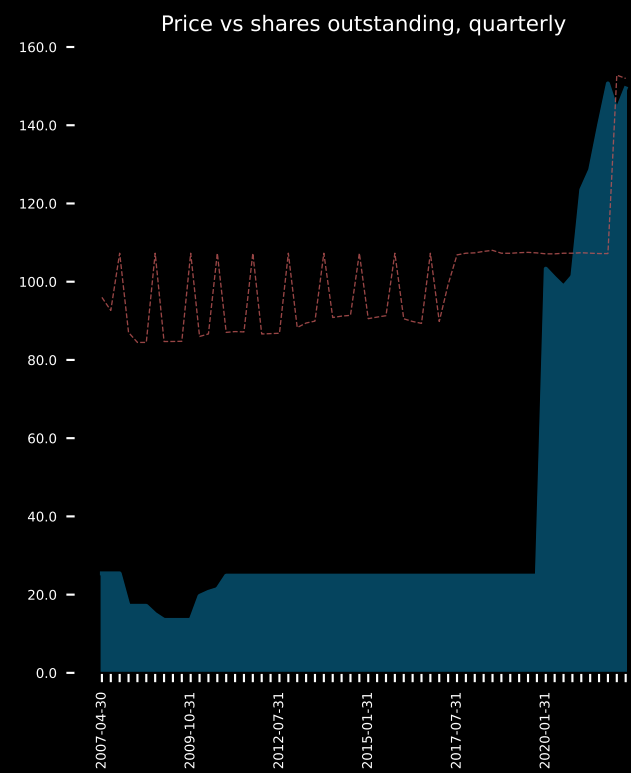
4919.TW / Semiconductors / US / 2022-08-23



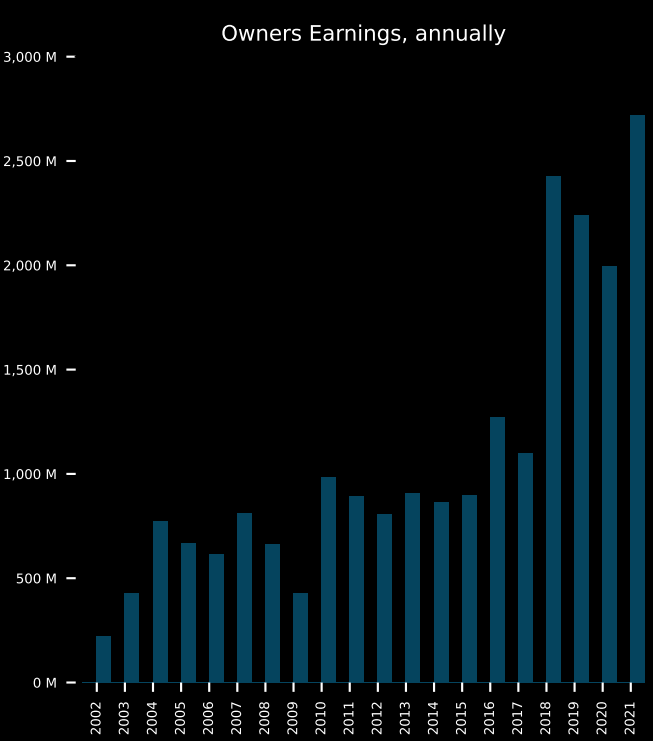
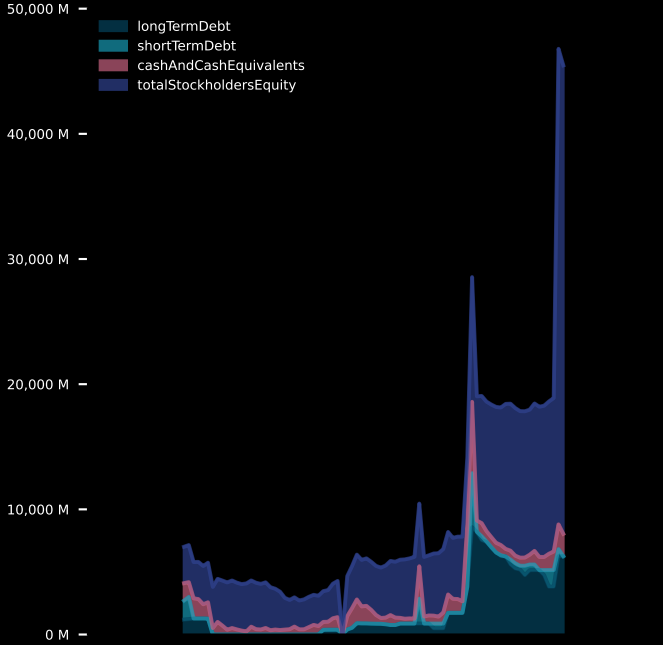
Owners Earnings, annually



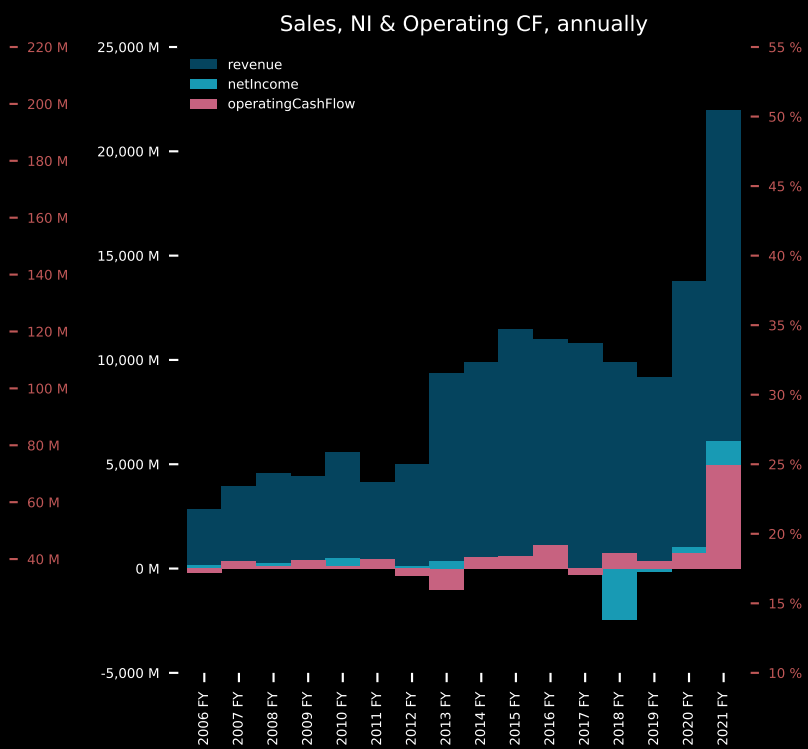
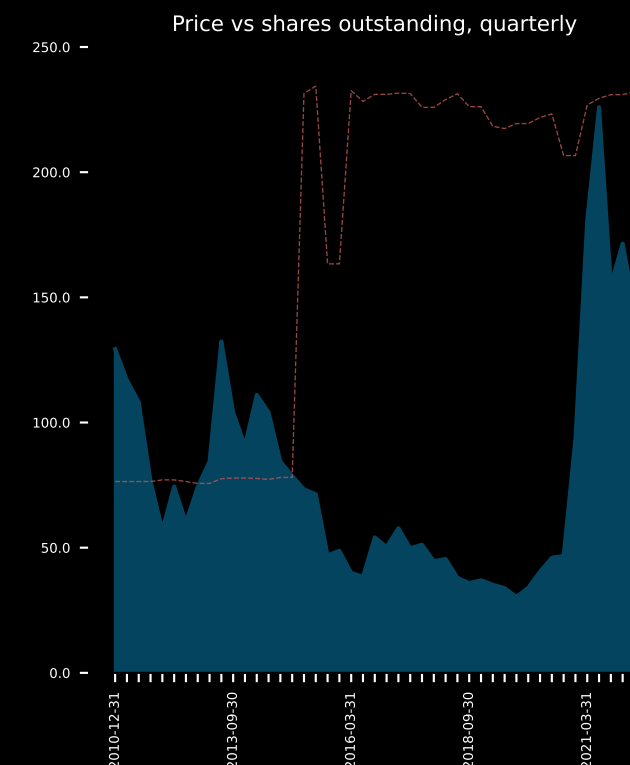
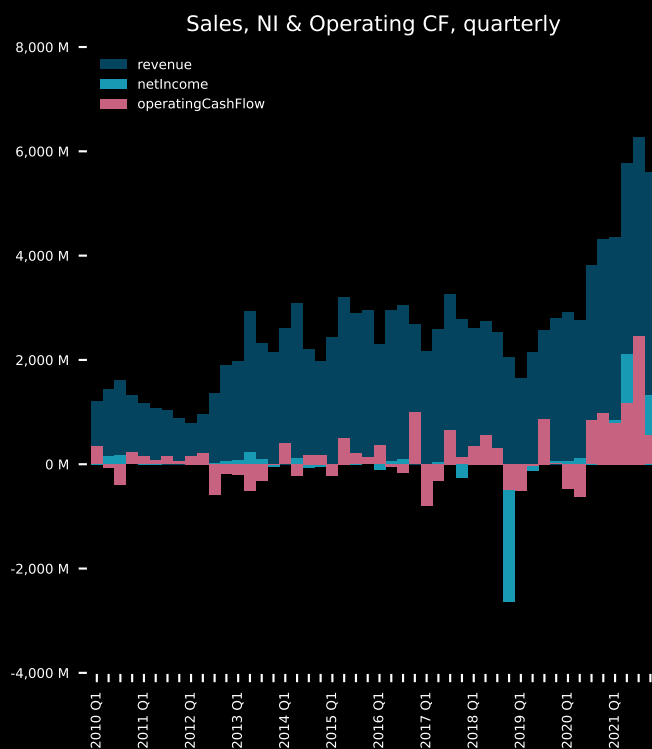
Nuvoton Technology Corporation, together with its subsidiaries, operates as a semiconductor company. The company engages in the research, design, development, manufacture, and sale of logic integrated circuits ICs; and manufacture, testing, and OEM of 6-inch wafers. It also offers microcontrollers; microprocessors; application specific SoCs devices; baattery monitoring ICs; communication and interface, human machine interface display, and audio integrated LSIs; image and gas sensors; laser diodes; analog ICs; CSP MOSFET products; and audio SoCs, amplifiers, converters, enhancements, and speech controllers, as well as digital chipcorder products. In addition, the company provides cloud computing products comprising embedded controllers, hardware monitors, I/O and security devices, iBMC products, and voltage level shifters; power management products, which consist of power switches and voltage regulators; and optical transceiver solutions. Further, it operates IoT platform for various IoT solutions; operates graphical user interface (GUI) platform for GUI solution to create graphics for the embedded system; and provides solutions for GUI solution to create graphics for the embedded system; and provides solutions for GUI solution to create graphics for the embedded system.



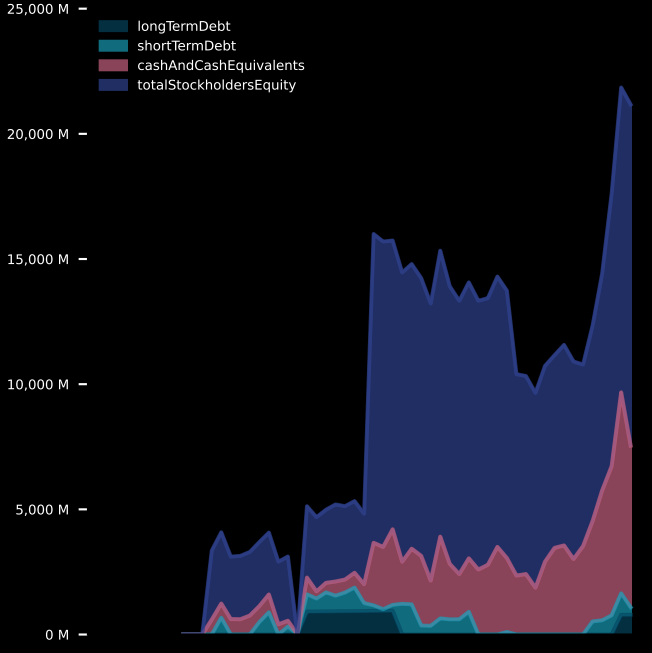
ANL.DE / Semiconductors / US / 2022-08-23



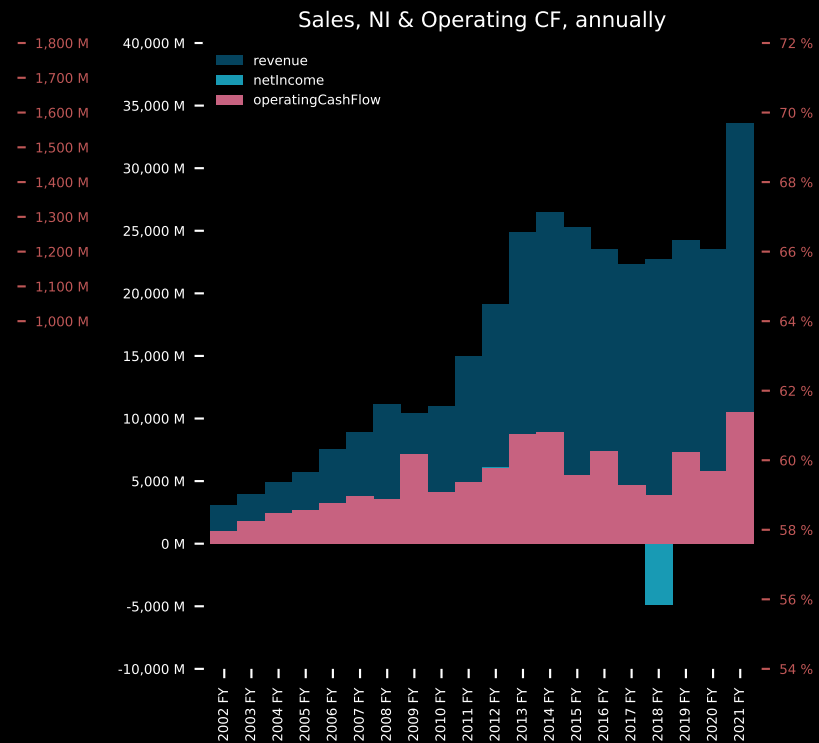
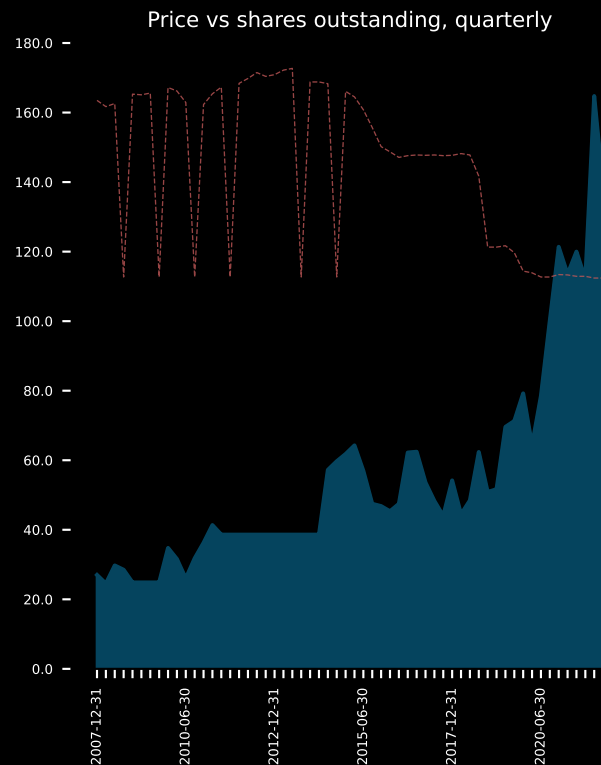
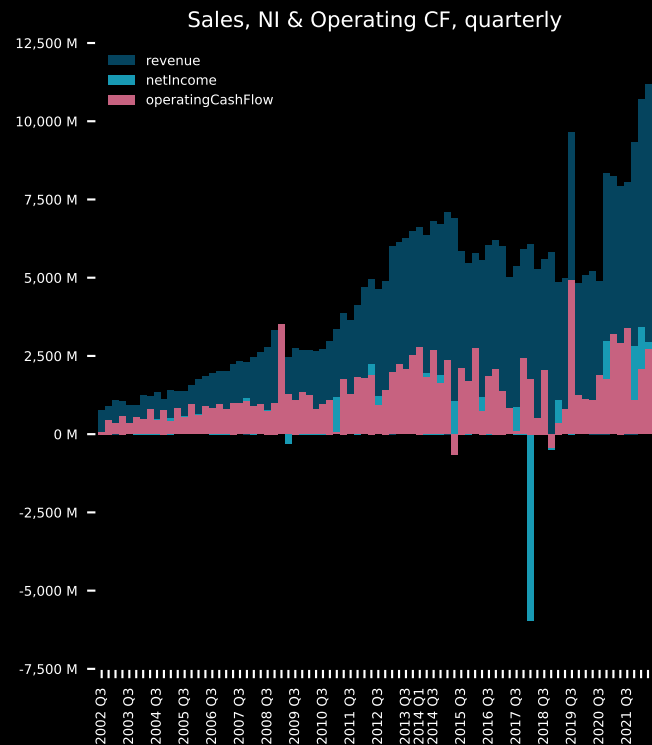
Analog Devices, Inc. designs, manufactures, tests, and markets integrated circuits (ICs), software, and subsystems that leverage analog, mixed-signal, and digital signal processing technologies. The company provides data converter products, which translate real-world analog signals into digital data, as well as translates digital data into analog signals; power management and reference products for power conversion, driver monitoring, sequencing, and energy management applications in the automotive, communications, industrial, and high-end consumer markets; and power ICs include performance, integration, and software design simulation tools for accurate power supply designs. It also offers high-performance amplifiers to condition analog signals; and radio frequency and microwave ICs to support cellular infrastructure; and microelectromechanical systems technology solutions, including accelerometers used to sense acceleration, gyroscopes for sense rotation, inertial measurement units to sense multiple degrees of freedom, and broadband switches for radio and instrument systems, as well as isolators. In addition, the company offers digital signal



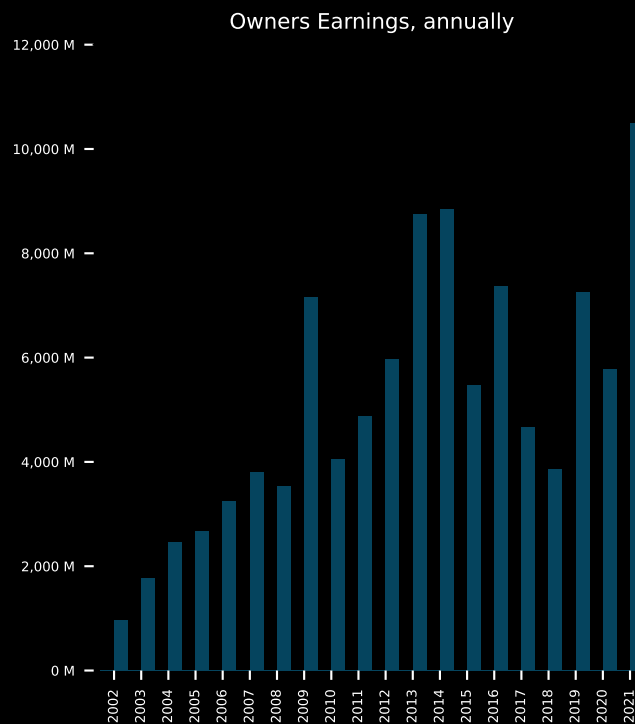
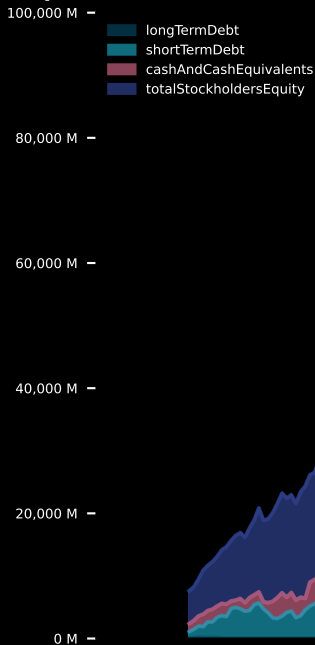
3545.TW / Semiconductors / US / 2022-08-23



FocalTech Systems Co., Ltd. provides LCD display driver solutions worldwide. The company offers IDC, fingerprint identification, display driver, and touch chips. It also provides human-machine interface solutions, including 2D/3D touch controller, super in- cell IDC, fingerprint sensor, and display driver for smart electronic devices. The company was incorporated in 2005 and is headquartered in Hsinchu City, Taiwan.

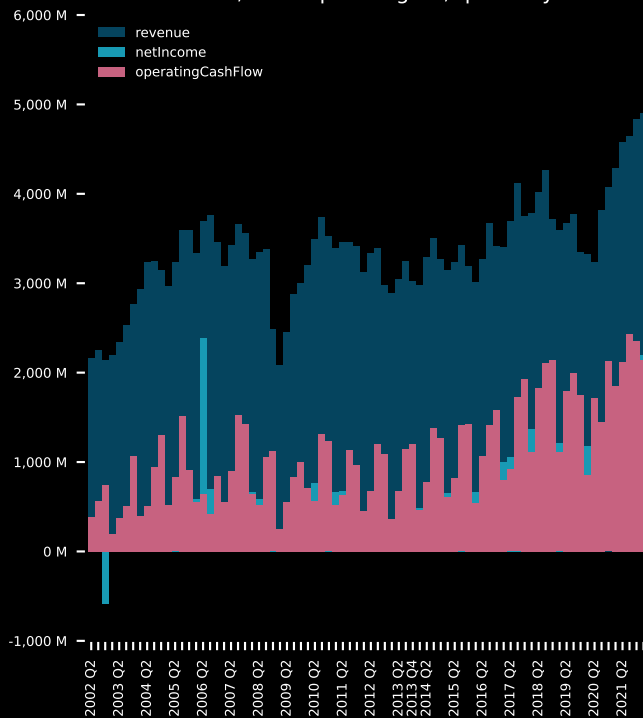


QCI.DE / Semiconductors / US / 2022-08-23

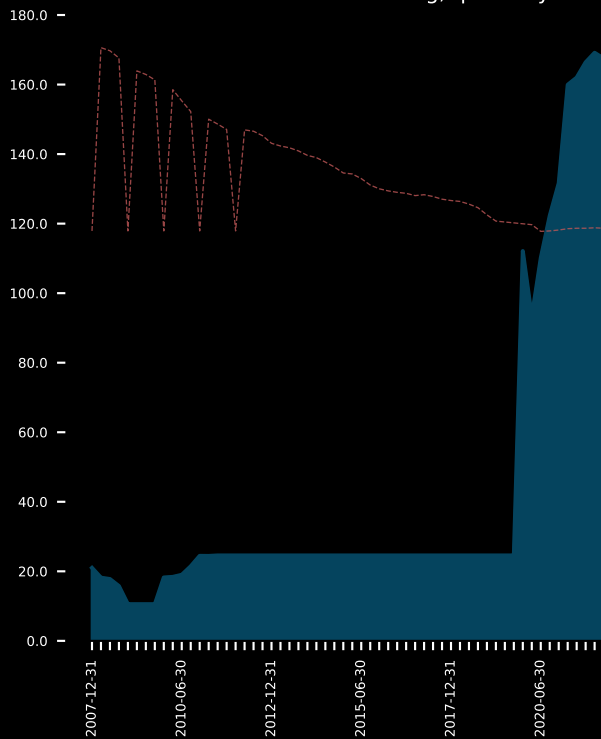


QUALCOMM Incorporated engages in the development and commercialization of foundational technologies for the wireless industry worldwide. The company operates through three segments: Qualcomm CDMA Technologies (QCT); Qualcomm Technology Licensing (QTL); and Qualcomm Strategic Initiatives (QSI). The QCT segment develops and supplies integrated circuits and system software based on 3G/4G/5G and other technologies for use in wireless voice and data communications, networking, application processing, multimedia, and global positioning system products. The QTL segment grants licenses or provides rights to use portions of its intellectual property portfolio, which include various patent rights useful in the manufacture and sale of wireless products comprising products implementing CDMA2000, WCDMA, LTE and/or OFDMA-based 5G standards and their derivatives. The QSI segment invests in early-stage companies in various industries, including 5G, artificial intelligence, automotive, consumer, enterprise, cloud, and IoT, and investment for supporting the design and introduction of new products and

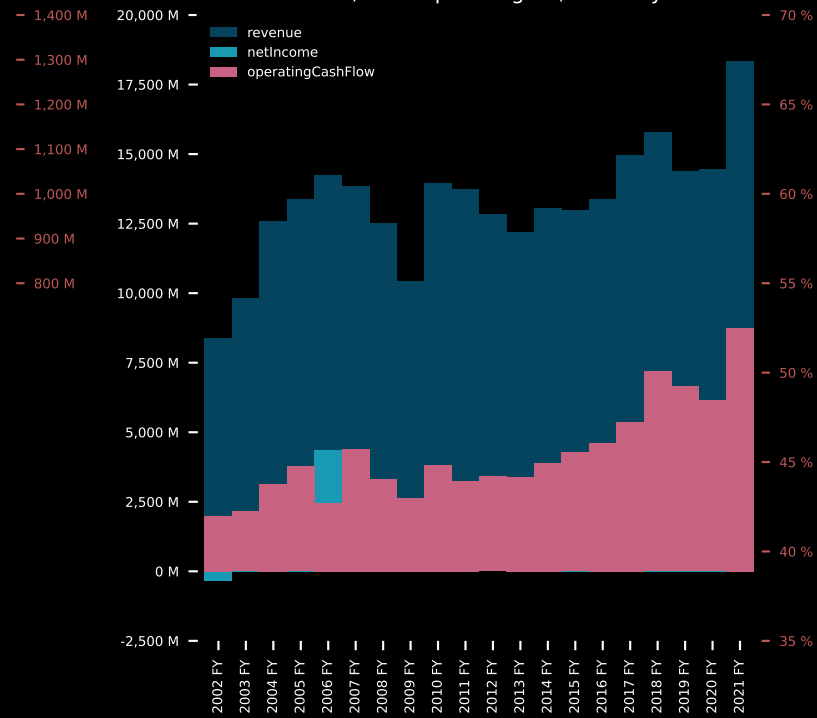
Sales, NI & Operating CF, quarterly



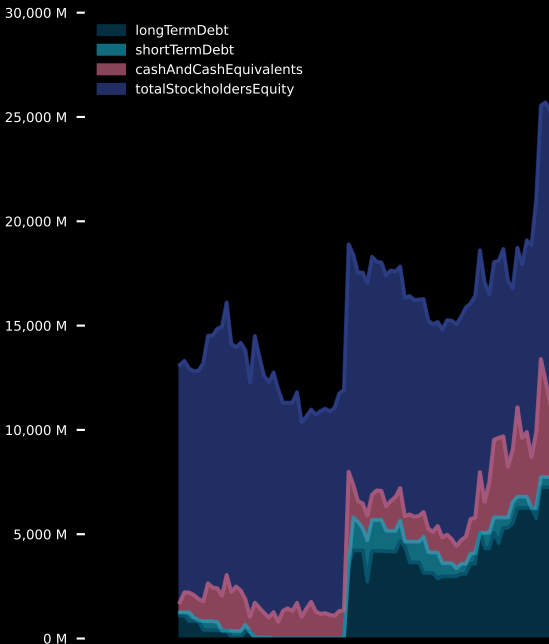
Price vs shares outstanding, quarterly



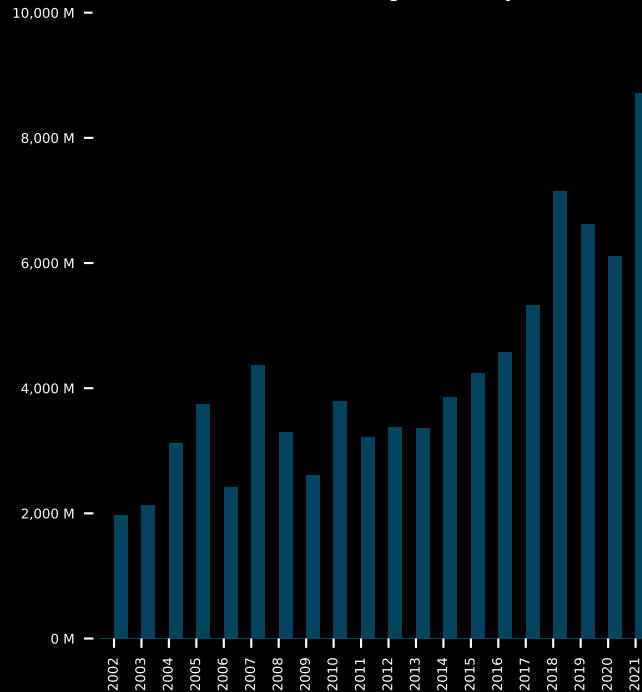
Sales, NI & Operating CF, annually



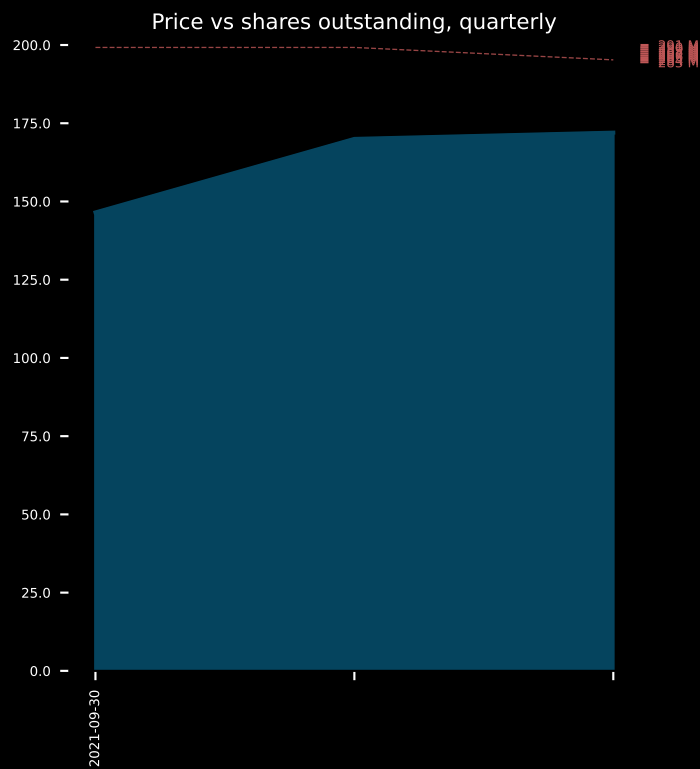
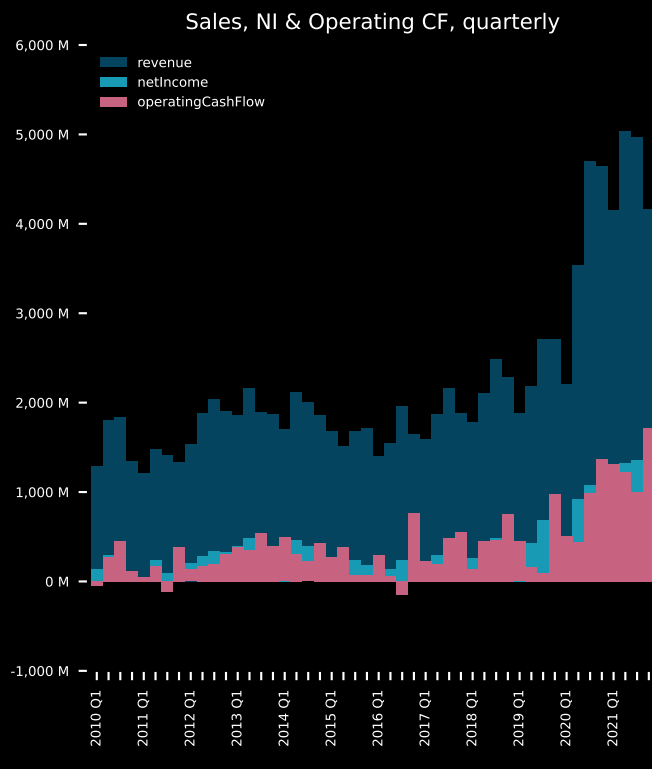
TII.DE / Semiconductors / US / 2022-08-23

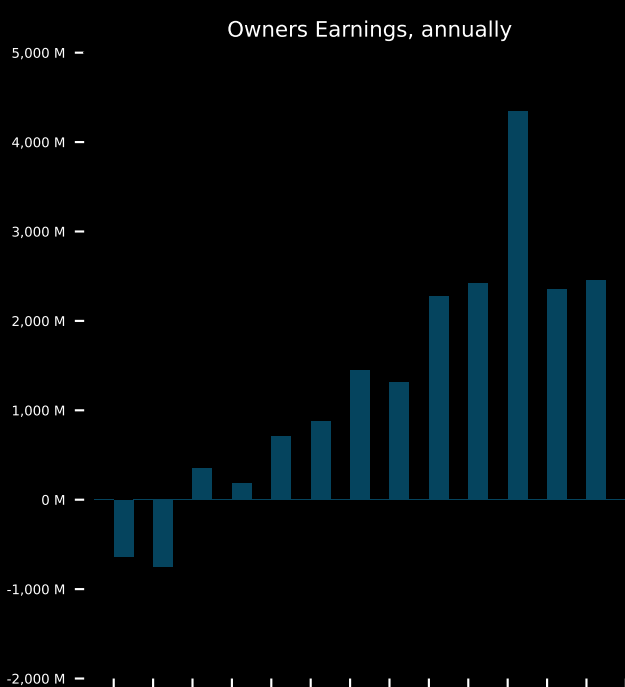
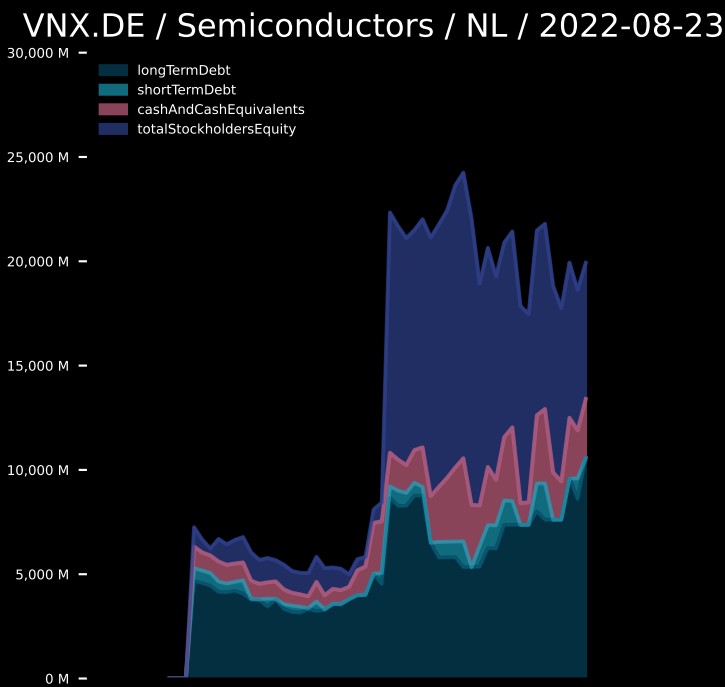
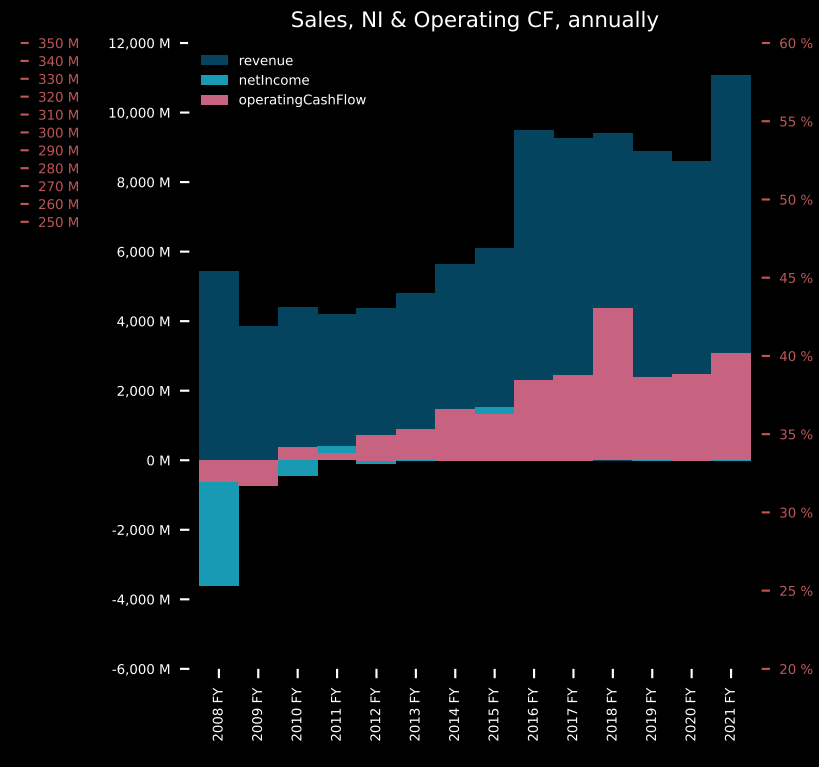
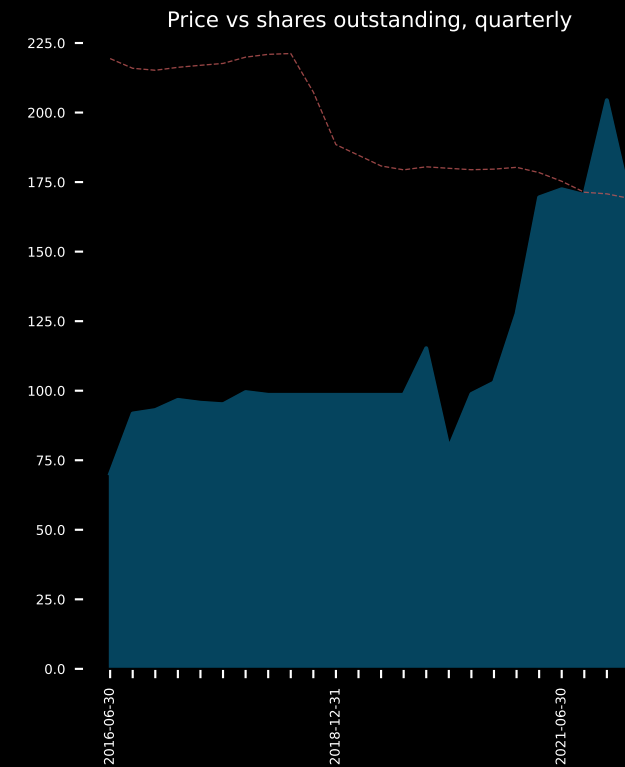
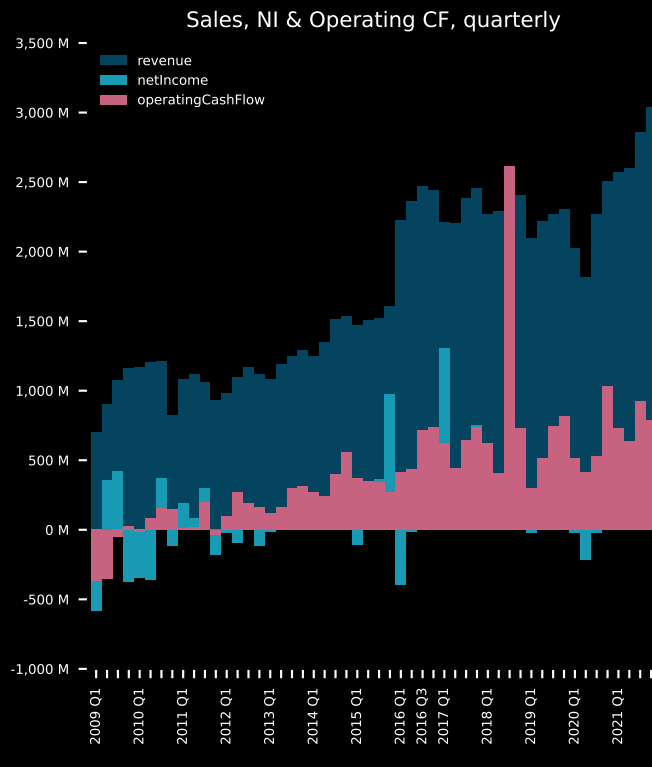


Owners Earnings, annually



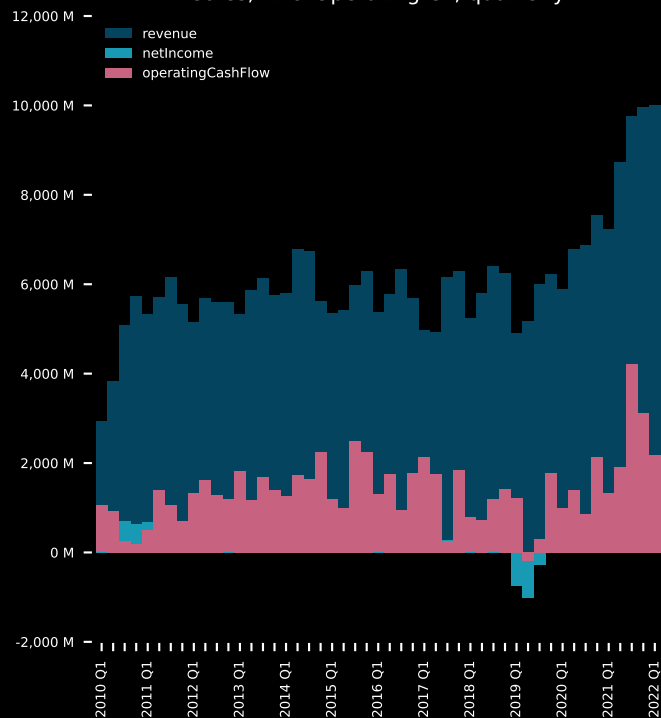
Texas Instruments Incorporated designs, manufactures, and sells semiconductors to electronics designers and manufacturers worldwide. It operates in two segments, Analog and Embedded Processing. The Analog segment offers power products to manage power requirements in various levels using battery-management solutions, DC/DC switching regulators, AC/DC and isolated controllers and converters, power switches, linear regulators, voltage supervisors, voltage references, and lighting products. This segment also provides signal chain products that sense, condition, and measure signals to allow information to be transferred or converted for further processing and control for use in end markets, including amplifiers, data converters, interface products, motor drives, clocks, and sensing products. The Embedded Processing segment offers microcontrollers that are used in electronic equipment; digital signal processors for mathematical computations; and applications processors for specific computing activity. This segment offers products for use in various markets, such as industrial, automotive,



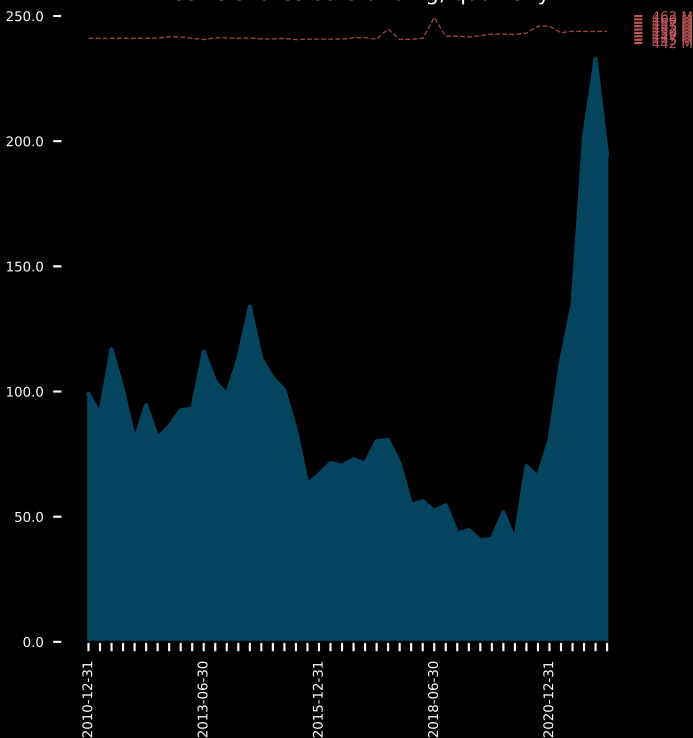


NXP Semiconductors N.V. offers various semiconductor products. The company's product portfolio includes microcontrollers; application processors, including i.MX application processors, and i.MX 8 and 9 family of applications processors; communication processors; wireless connectivity solutions, such as near field communications, ultra-wideband, Bluetooth low-energy, Zigbee, and Wi-Fi and Wi-Fi/Bluetooth integrated SoCs; analog and interface devices; radio frequency power amplifiers; and security controllers, as well as semiconductor-based environmental and inertial sensors, including pressure, inertial, magnetic, and gyroscopic sensors. The company's product solutions are used in a range of applications, including automotive, industrial and Internet of Things, mobile, and communication infrastructure. The company markets its products to various original equipment manufacturers, contract manufacturers, and distributors. It operates in China, the Netherlands, the United States, Singapore, Germany, Japan, South Korea, Malaysia, and internationally. The company was formerly known as KASLION Acquisition B.V and changed its name to NXP Semiconductors N.V. in May 2016.

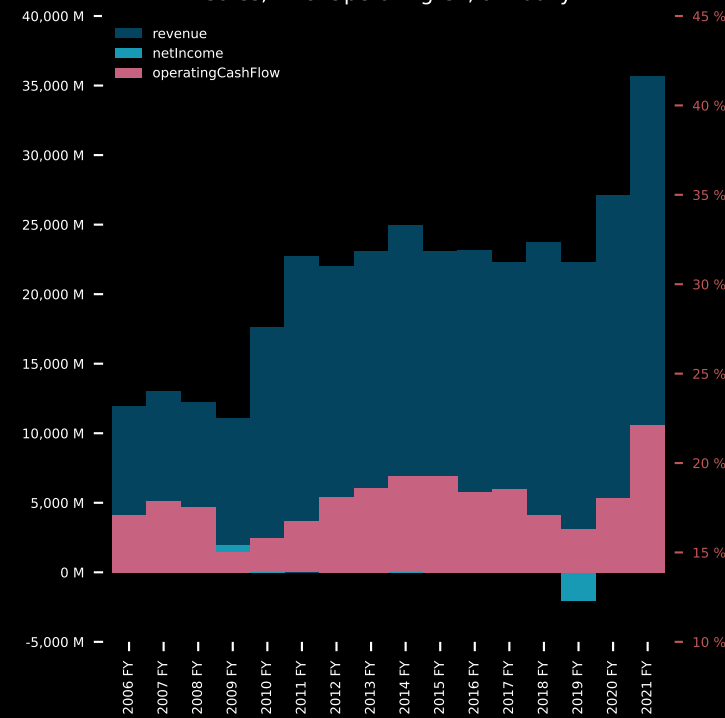
Sales, NI & Operating CF, quarterly



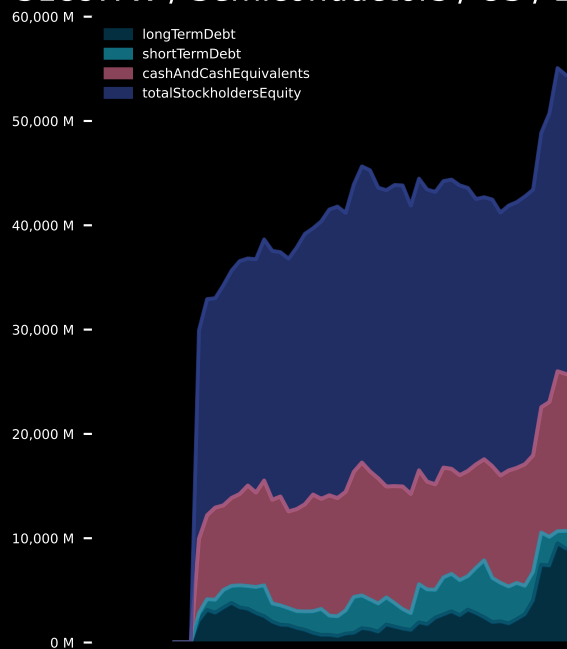
Price vs shares outstanding, quarterly



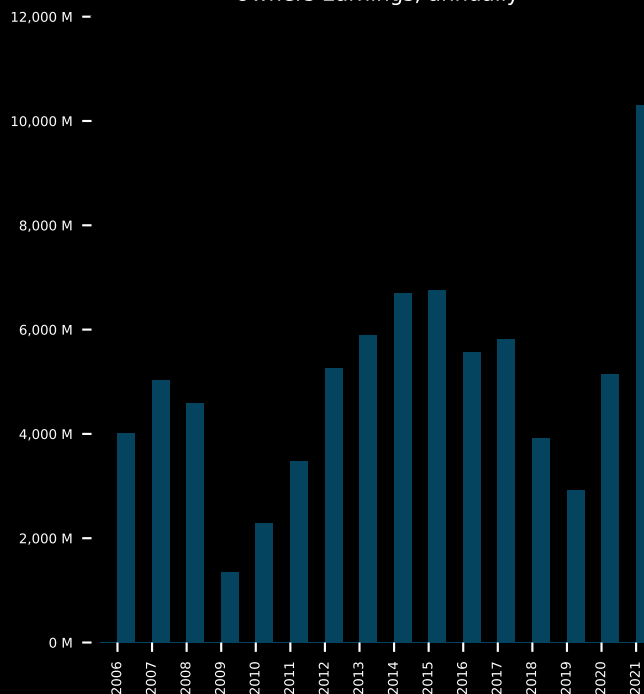
Sales, NI & Operating CF, annually



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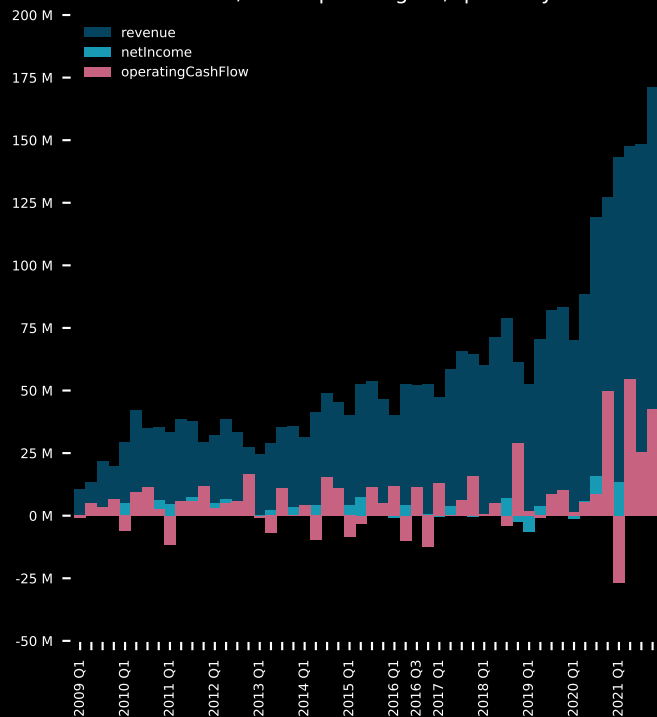


Owners Earnings, annually

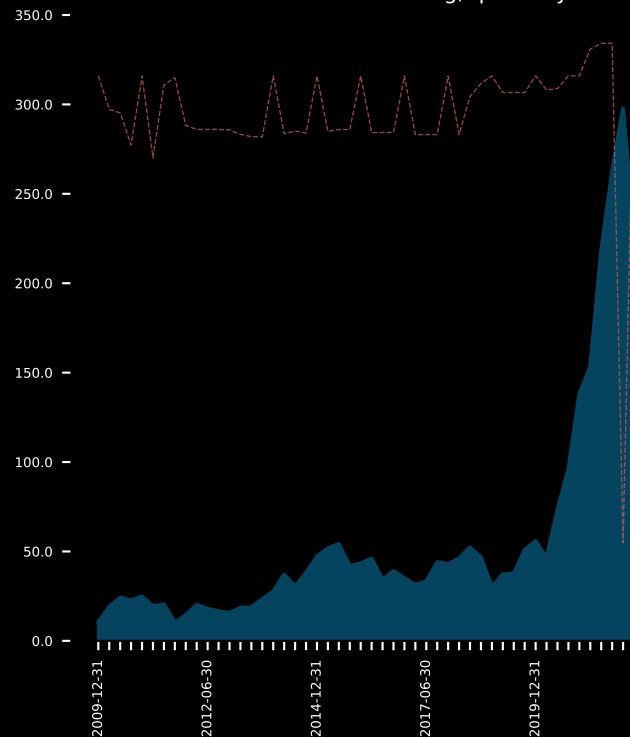


Kinsus Interconnect Technology Corp. manufactures and sells electronic products in Taiwan and internationally. It operates through three segments: IC Substrate, Printed Circuit Board (PCB), and Optics. The company offers system in package, a carrier substrate that provides a platform for multiple chips or packages or passive components assembly for modules in handset and wearable devices; plastic ball grid array substrate for microprocessors, controllers, graphic processors, ASIC, and PC chipsets; and flip chip chip scale package substrate for application processors and connectivity applications. It also provides wire bond chip scale package substrate for application processor, connectivity, power management, and memory applications; radio frequency modules substrate for power amplifier, front end modules, and WiFi connectivity modules applications; and flip chip ball grid array substrate for micro and graphic processors, ASIC, and field programmable gate array applications. In addition, the company provides PCBs and related products, and electronic parts and components, as well as after sales services. Further, it is involved in the

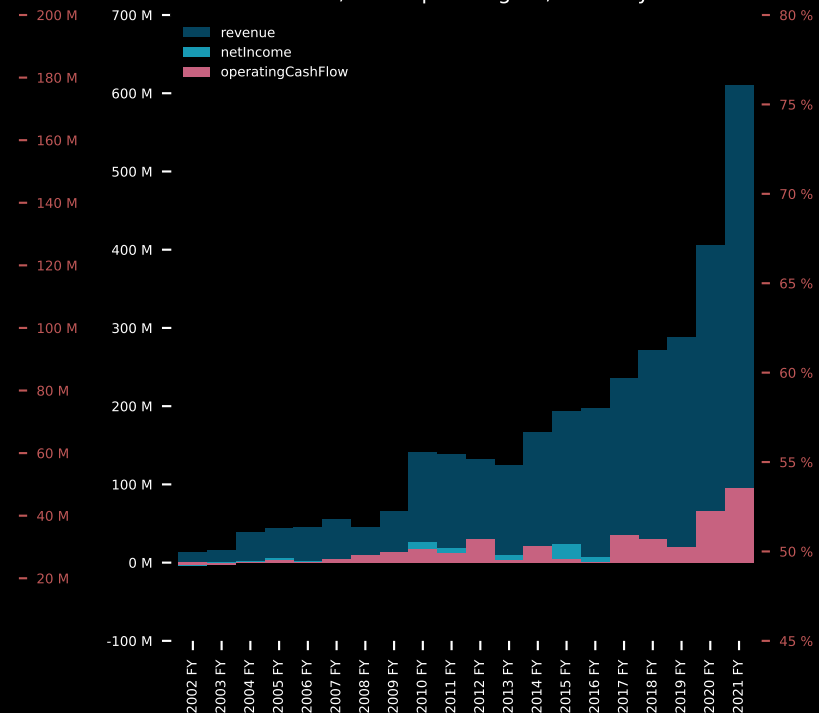
Sales, NI & Operating CF, quarterly



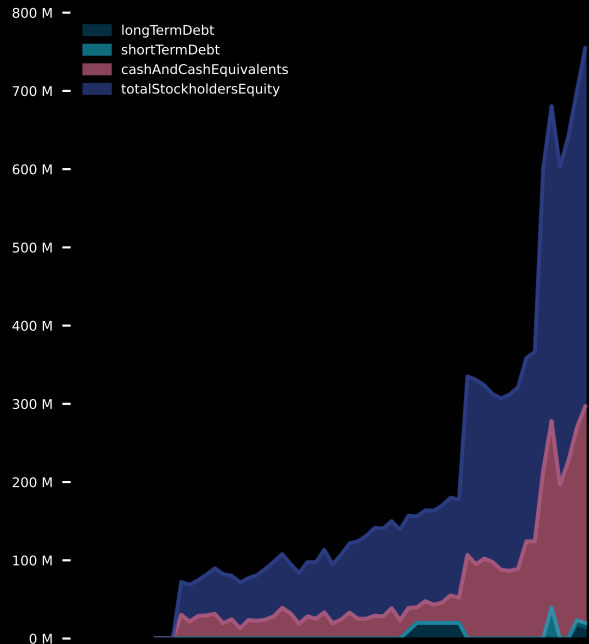
Price vs shares outstanding, quarterly



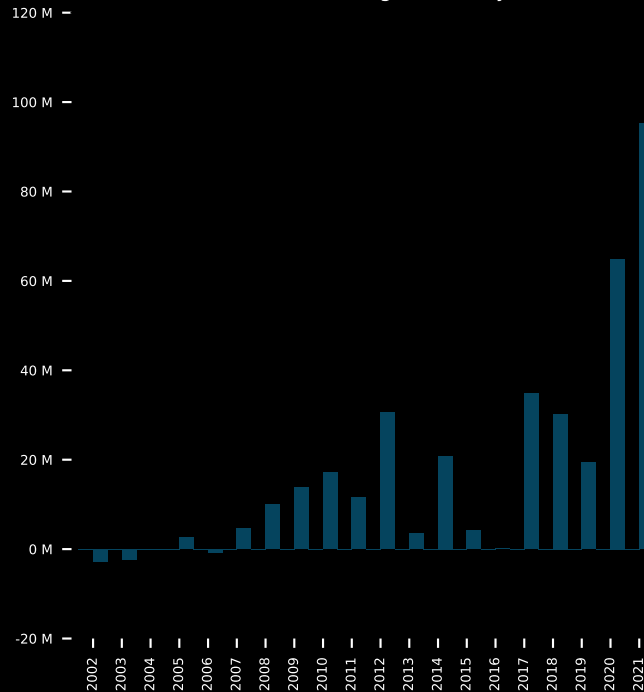
Sales, NI & Operating CF, annually



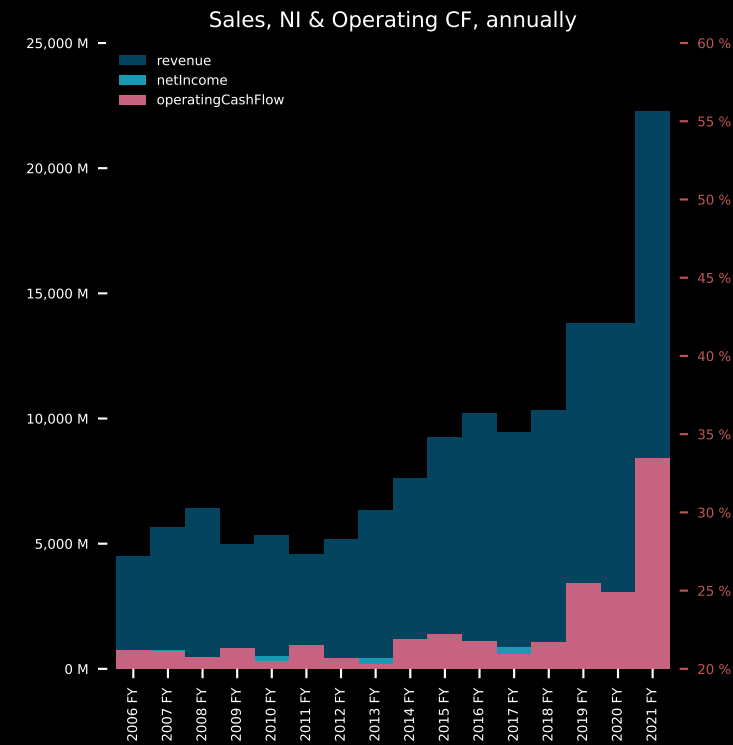
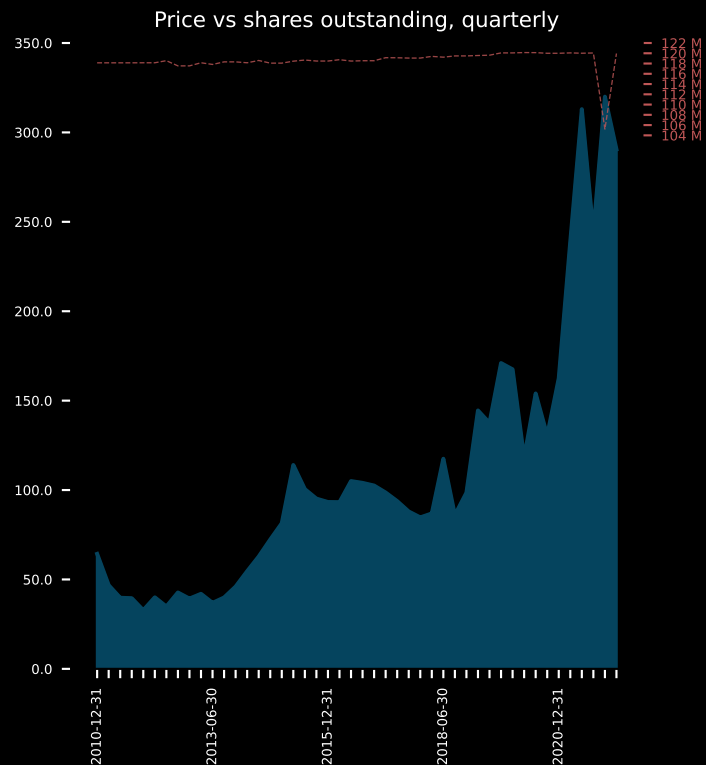
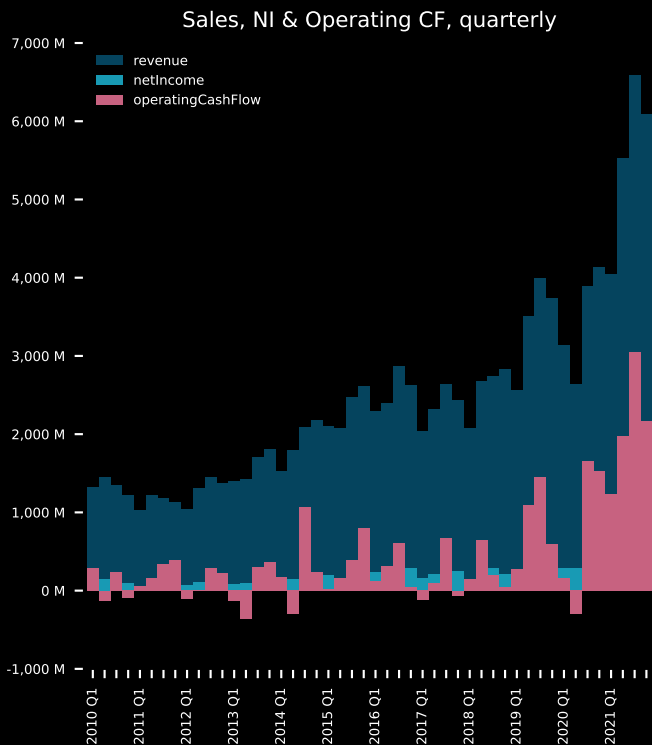
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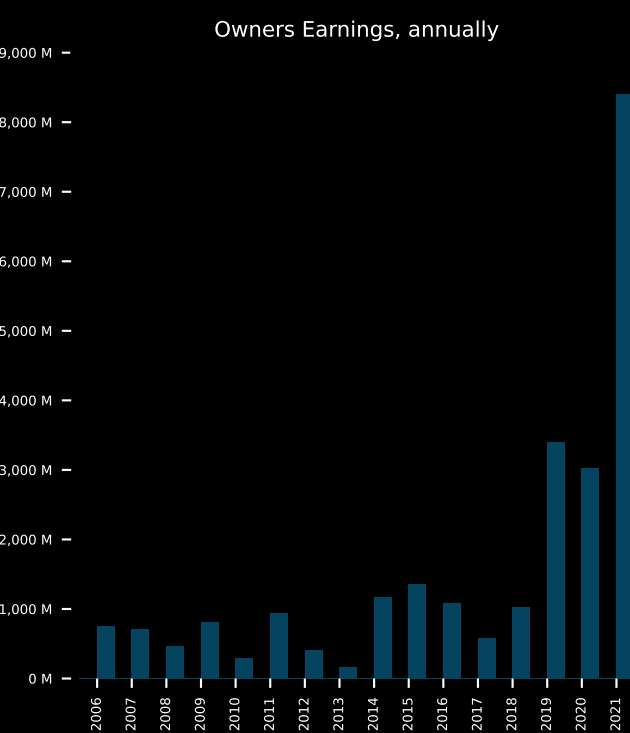
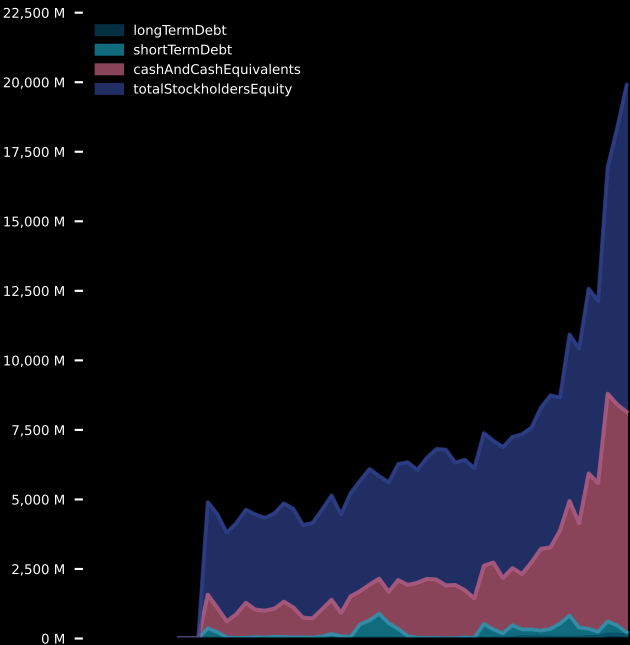
Owners Earnings, annually



Nordic Semiconductor ASA, a fabless semiconductor company, designs, develops, markets, and sells integrated circuits and related solutions for short-and long-range wireless applications in Europe, the Americas, and the Asia/Pacific. It offers ultra-low power components; and develops low power cellular IoT. The company also provides Bluetooth 5 solutions; low power cellular devices for the IoT; and Bluetooth 5.1 solutions for direction finding applications. In addition, it offers Zigbee 3.0 IoT solutions; Thread solution for low-power devices; nRF9160 system-in-package; nRF52 and nRF51 series system-on-chips, as well as nRF591, nRF53, nRF52, and nRF51 series software development kits; ANT, a proprietary ultra-low power wireless solution for battery operated products; and application specific integrated circuits and related consulting services. Further, the company provides software for system development, communication stacks, and application layer software, as well as development tools for desktops. Its products are used in various applications, such as audio, automotive, beacon, computer peripherals, drug delivery, patient

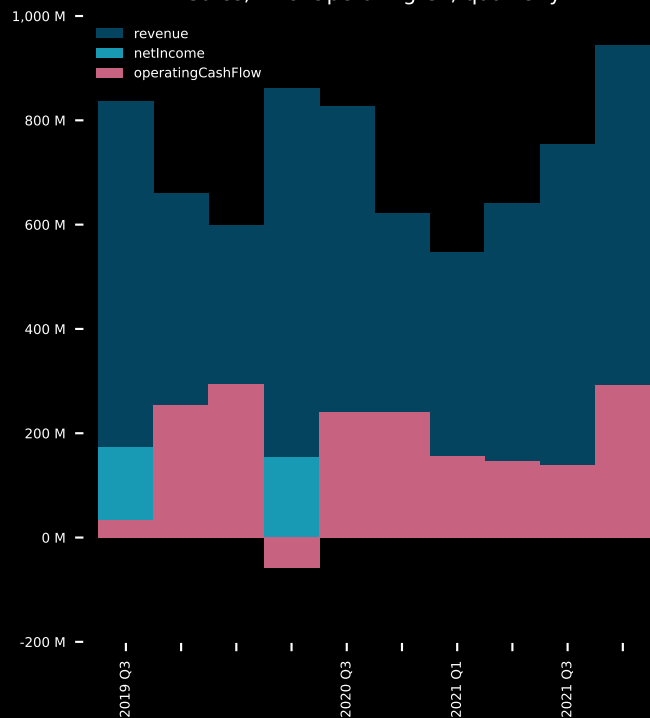


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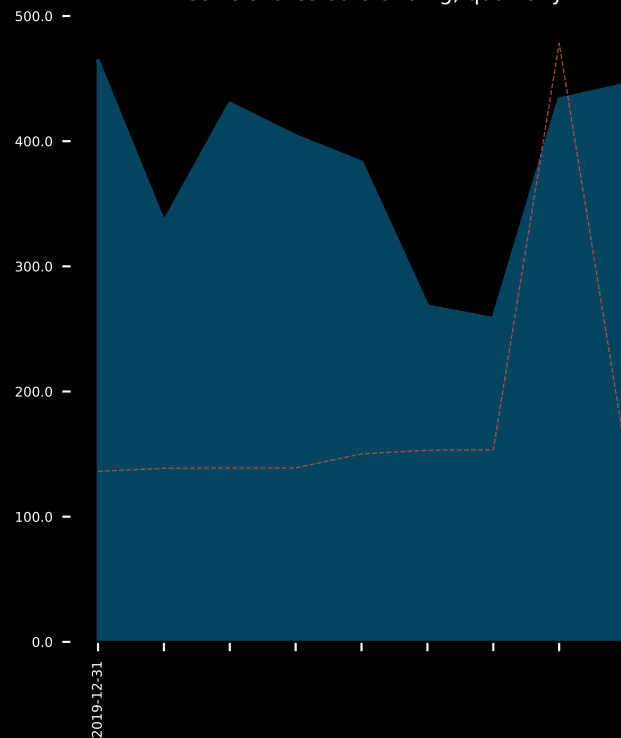


Sitronix Technology Corporation, a fabless semiconductor company, offers display driver integrated circuits (ICs). It offers industrial display driver ICs, automotive display driver ICs, projected capacitive touch controller ICs, and medium-size TFT-LCD driver ICs, as well as alternator regulators. The company also provides AIoT device display driver chip solutions for smart home, medical, and wearable mobile device applications. It sells its products in Africa, Latin America, Southeast Asia, and other regions. Sitronix Technology Corporation was incorporated in 1992 and is headquartered in Zhubei City, Taiwan.

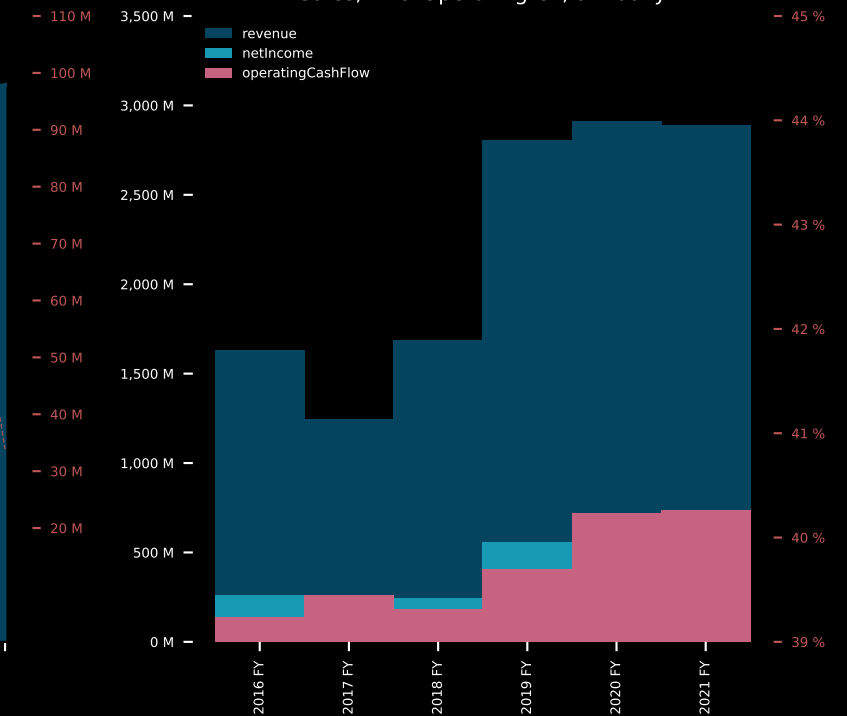
Sales, NI & Operating CF, quarterly



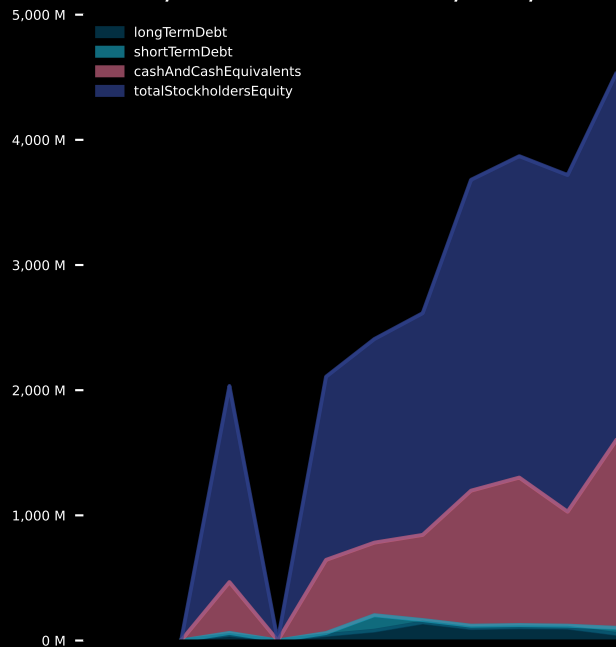
Price vs shares outstanding, quarterly



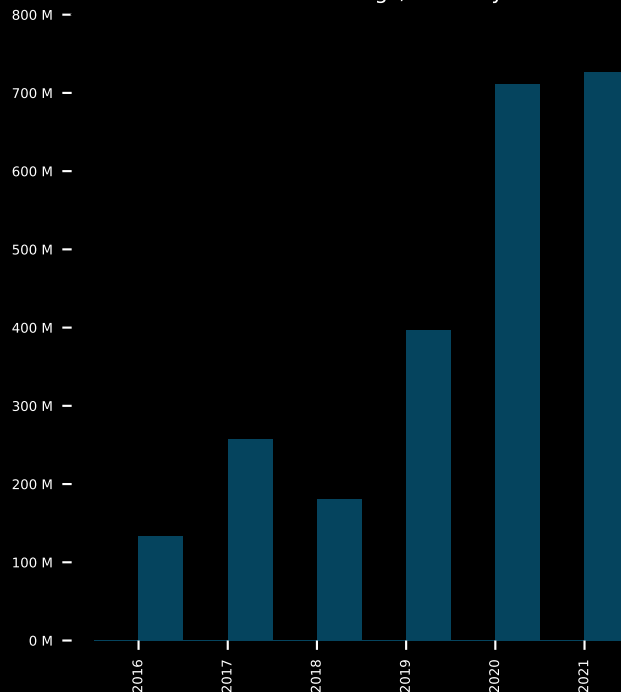
Sales, NI & Operating CF, annually



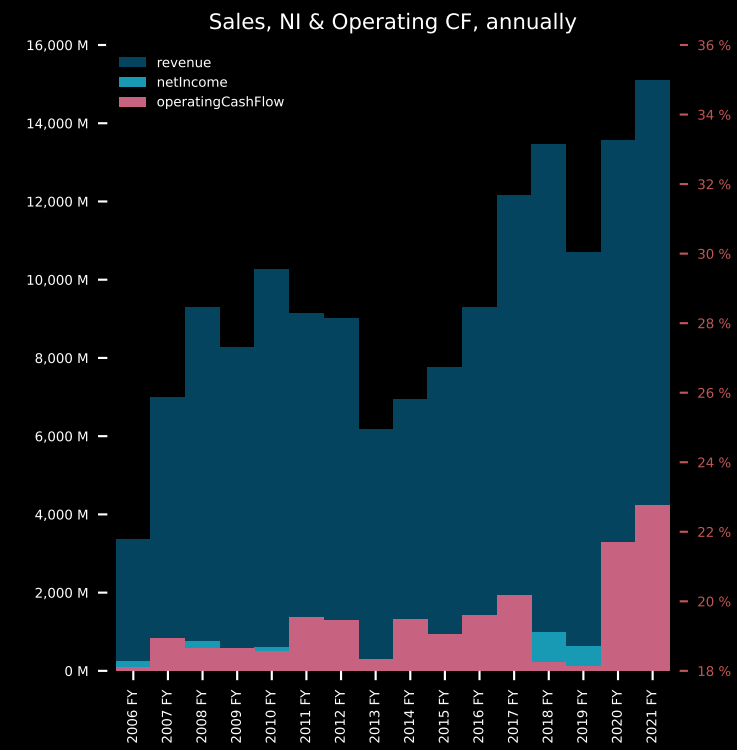
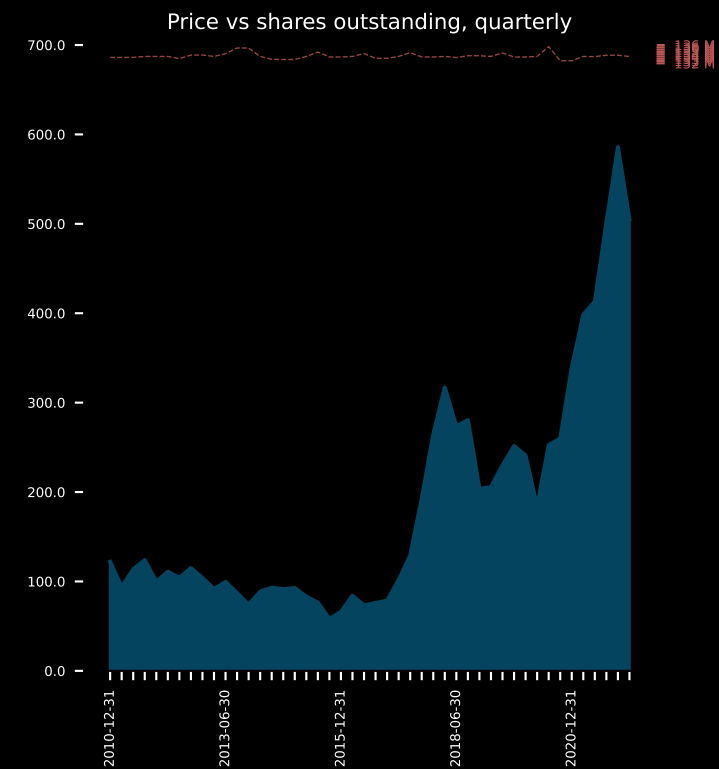
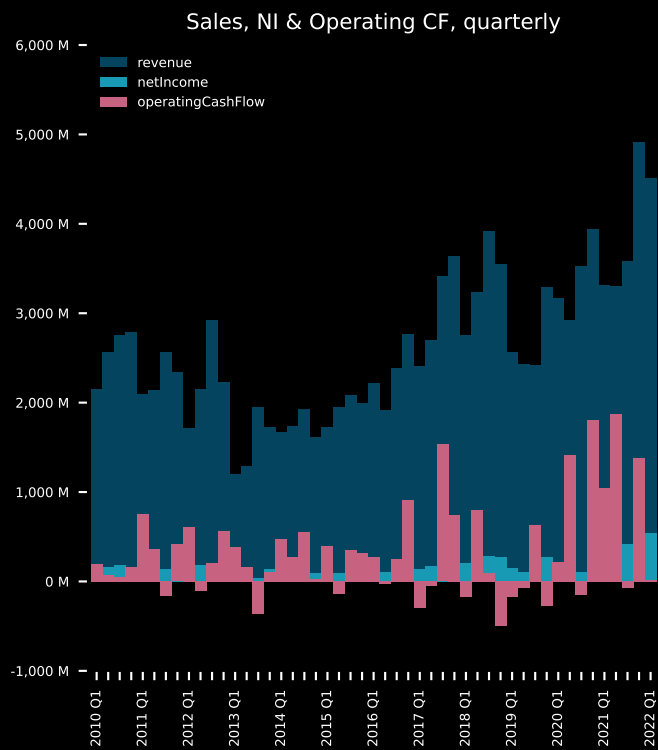
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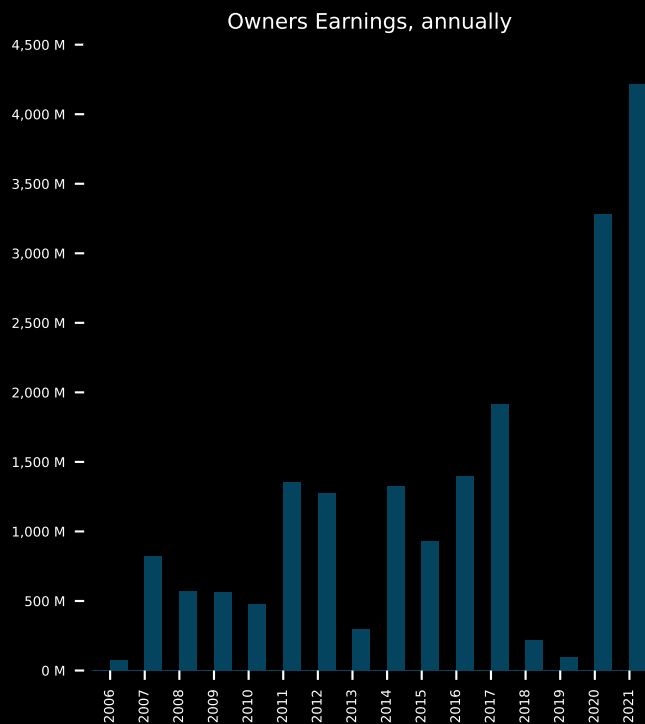
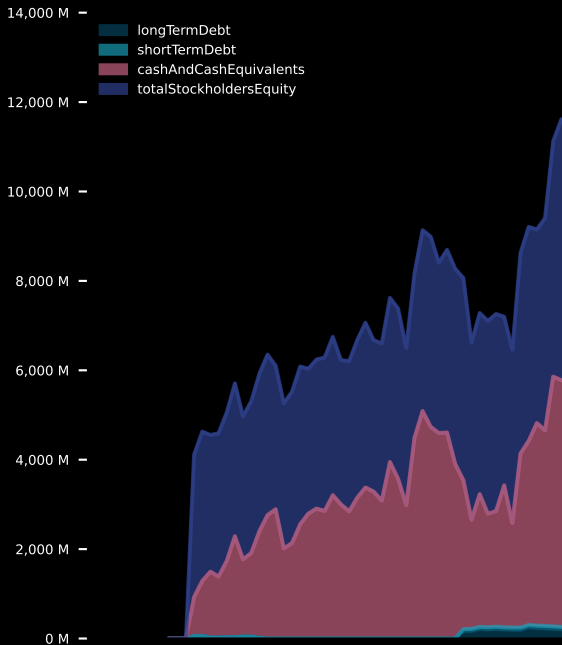
Owners Earnings, annually



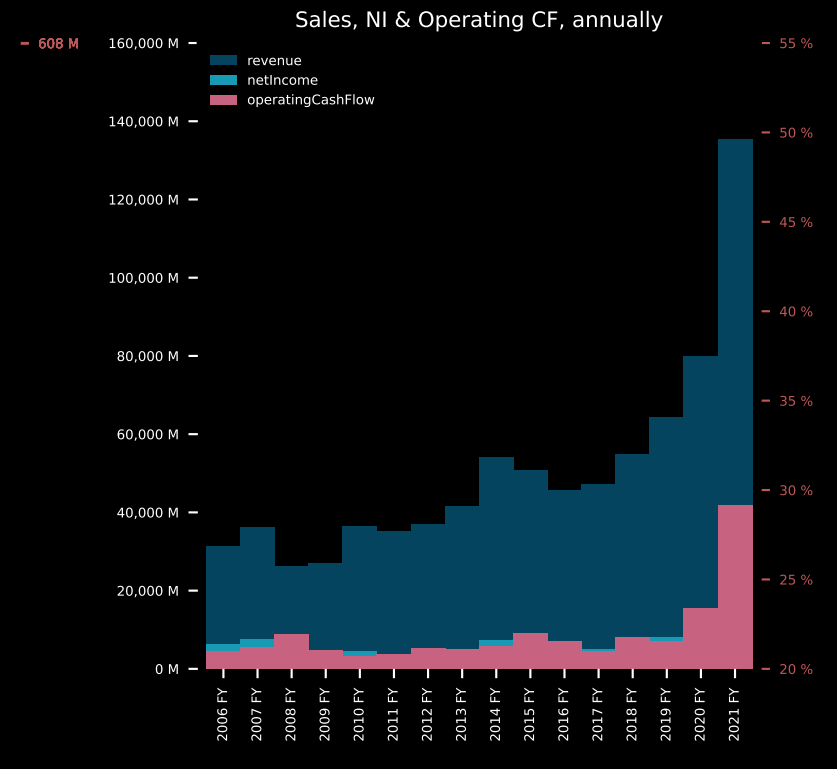
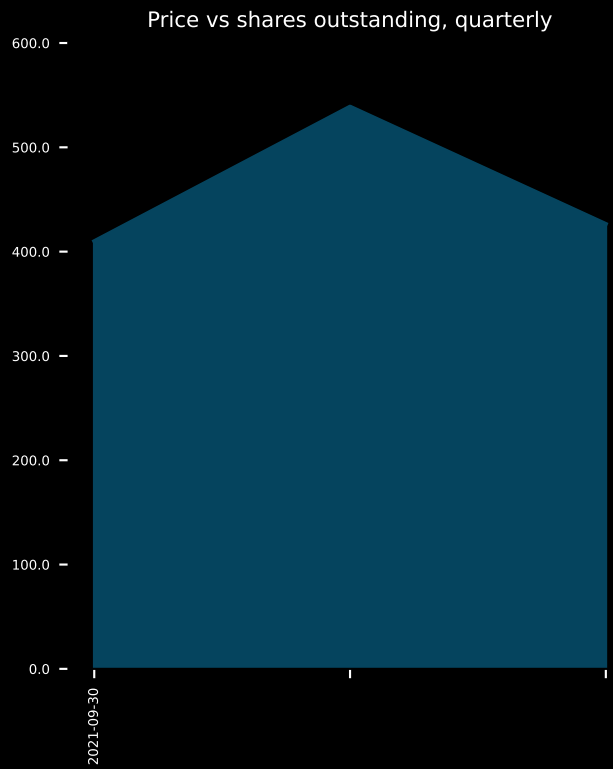
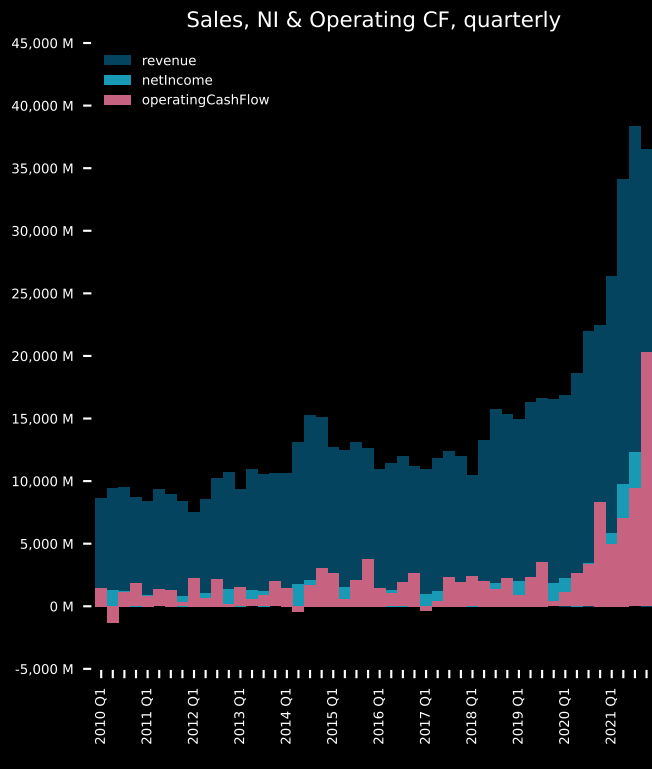
WinWay Technology Co., Ltd. designs, manufactures, processes, and sells optoelectronic product test fixtures, integrated circuit test interfaces, and fixtures and their components in Taiwan, the United States, China, Europe, Canada, and Asia. Its products include coaxial, spring probe, and PoP sockets; elastomers; vertical and WLCSP probe cards; and thermal control systems, high performance heat sink lids, high performance test sockets, changeover kits, direct docking probe cards, burn-in sockets, and contact element products. The company also engages in the provision of professional and technical support services; and import and export trade of related products. It serves semiconductor, optical, information technology, and optoelectronics industries. The company was incorporated in 2001 and is headquartered in Kaohsiung, Taiwan.



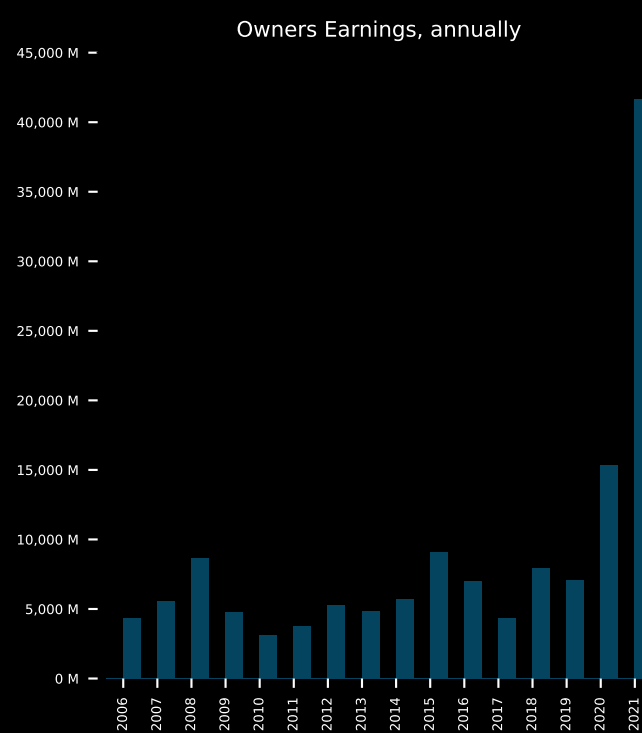
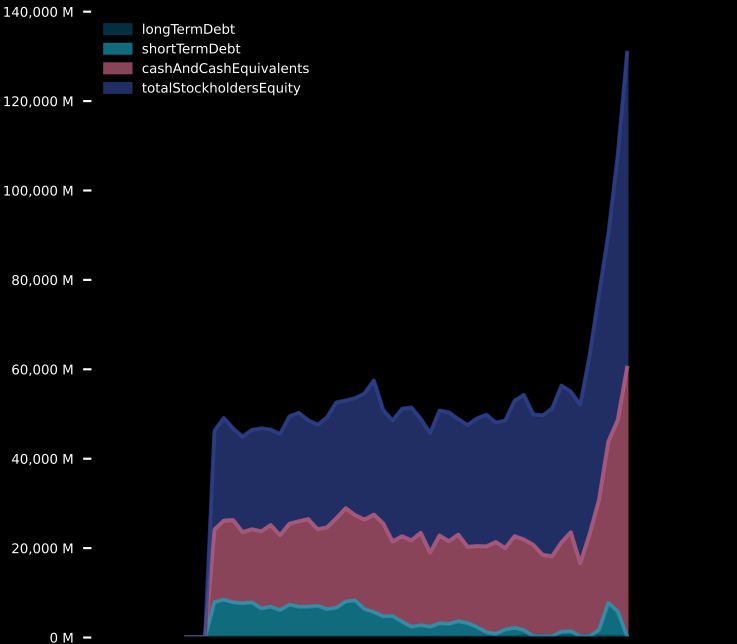
3443.TW / Semiconductors / US / 2022-08-23



Global Unichip Corp. researches, develops, produces, tests, and sells embedded memory and logic components, cell libraries, and EDA tools for various application ICs in China, the United States, Taiwan, Japan, Korea, and Europe. It offers ASIC and wafer products; and non-recurring engineering services. The company also provides products consulting, design, and technical support services. In addition, it offers SoC design services, such as technology design, design methodology, low power solution, and testability design services; SoC manufacturing services consisting of packaging, testing and product engineering, and quality and reliability, as well as supply chain management services; and IP portfolio, including synthesizable implementation IP, as well as hardened PHYs and verification IP for ASIC, FPGA, and SoC designs. The company was formerly known as Chuangyi Electronics Corporation and changed its name to Global Unichip Corp. in October 1998. Global Unichip Corp. was incorporated in 1998 and is headquartered in Hsinchu City, Taiwan.

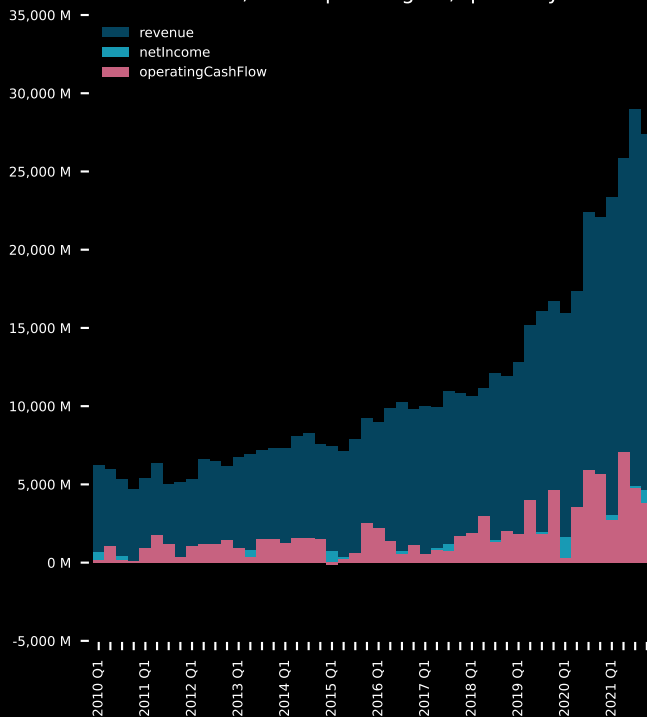


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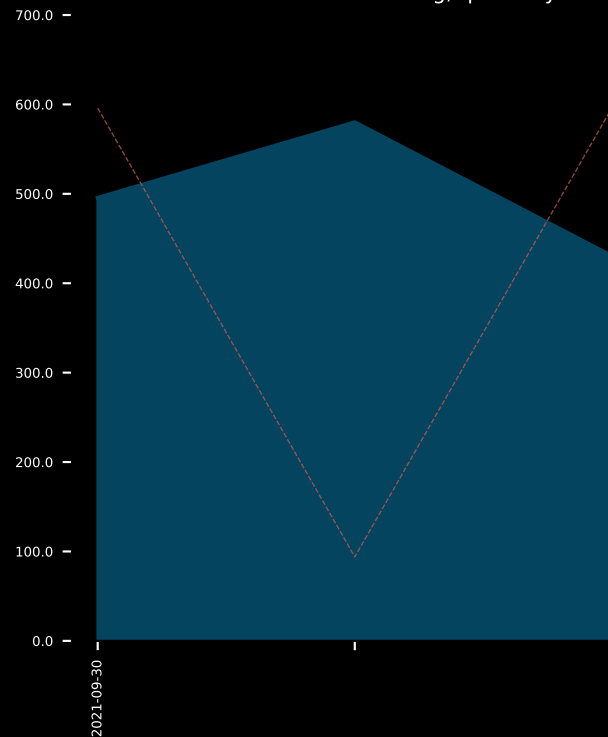


Novatek Microelectronics Corp., together with its subsidiaries, research, develop, manufacture, and sell integrated circuit chips for speech, communication, computer peripheral, LCD driver IC system, embedded MCU, DSP, and system applications. The company offers display driver ICs for LCD displays, televisions (TVs), notebook computers, desktop monitors, cameras, tablet PCs, automotive display screens, smart phones, and wearable products; and system on chips products for digital and smart TVs, notebook computers, desktop monitors, set-top boxes, mobile phones, tablet PCs, camera modules, dashcam recording, IP cams, car backup camera modules, automotive safety assistance systems, and multimedia and mobile phone camera module applications. It is also involved in the trading and consulting of electronic spare parts; and provision of design, development, amendment, testing, and related consulting services for multimedia VLSI software. The company has operations in Taiwan, Asia, and internationally. Novatek Microelectronics Corp. was incorporated in 1997 and is headquartered in Hsinchu, Taiwan.

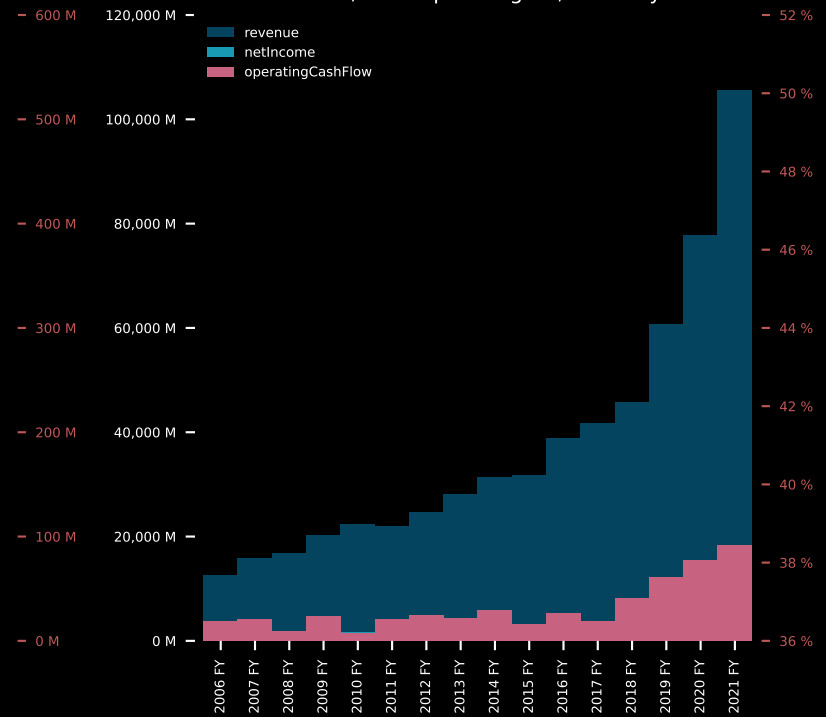
Sales, NI & Operating CF, quarterly



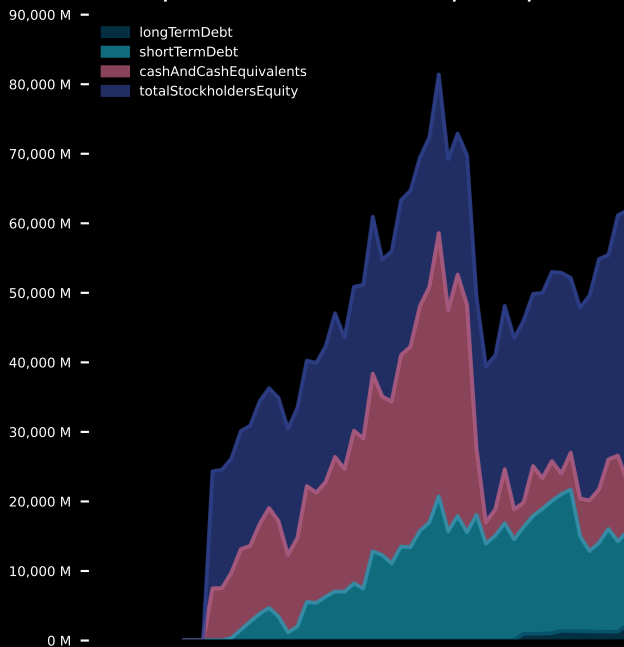
Price vs shares outstanding, quarterly



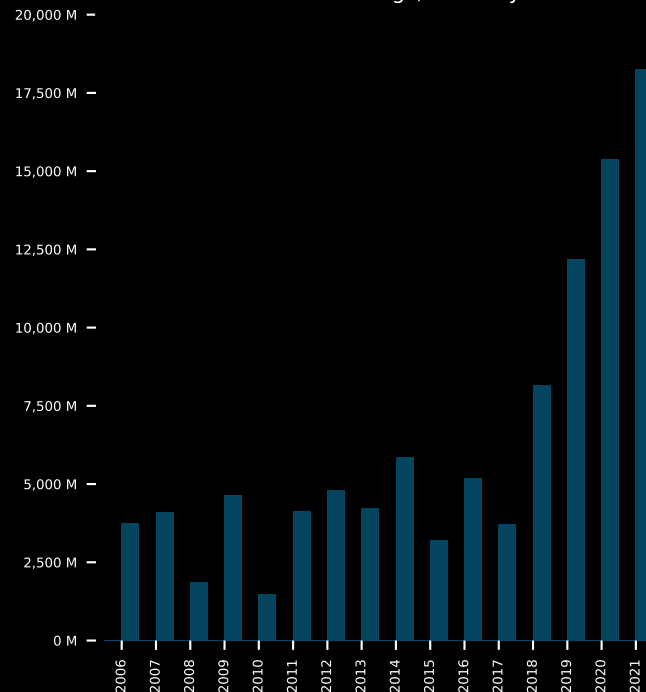
Sales, NI & Operating CF, annually



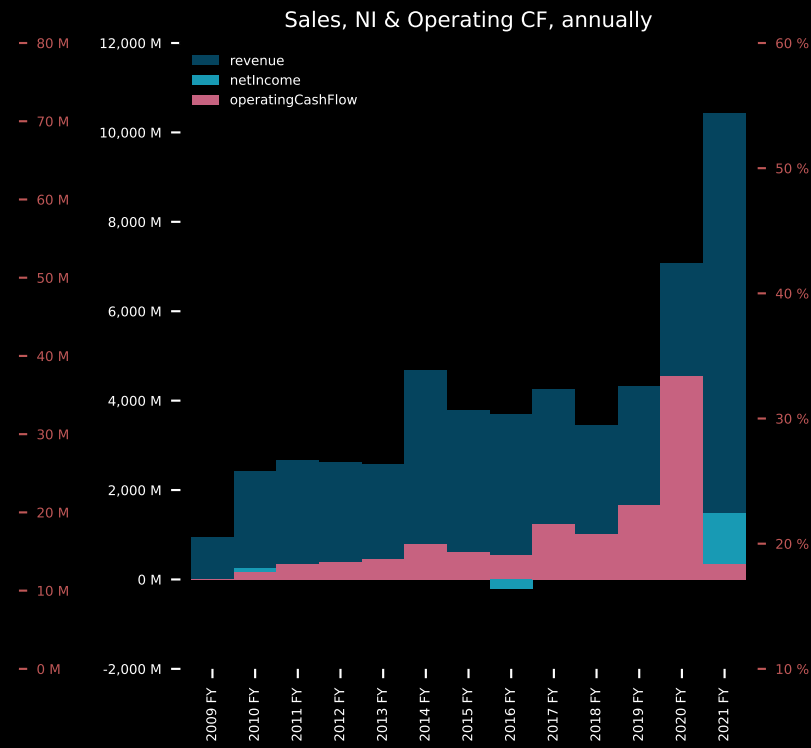
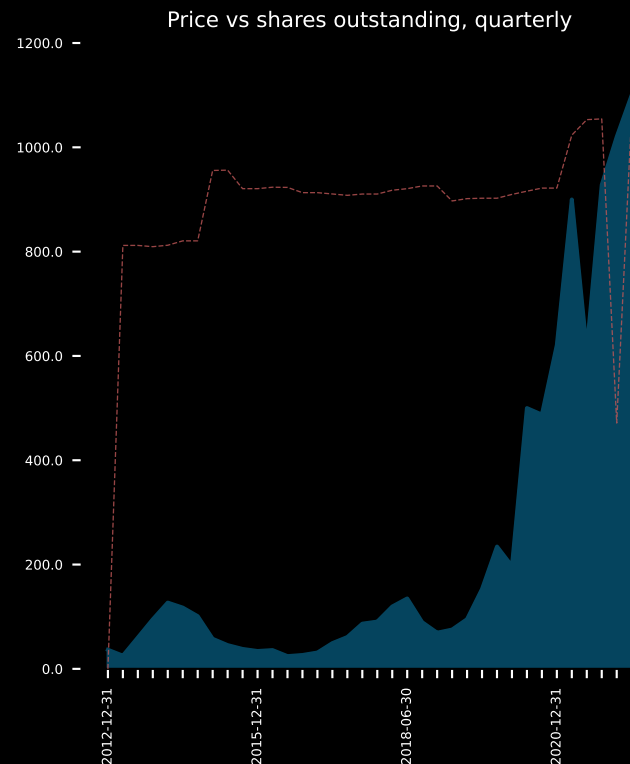
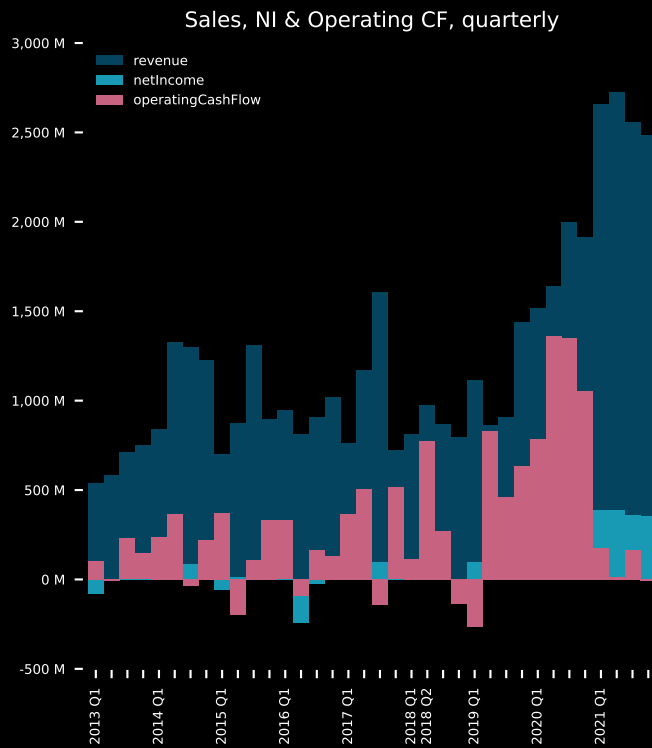
2379.TW / Semiconductors / US / 2022-08-23



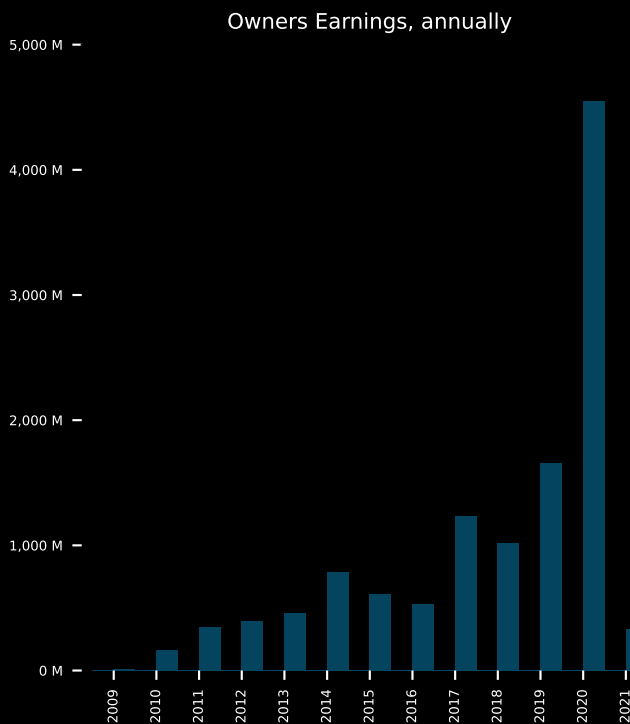
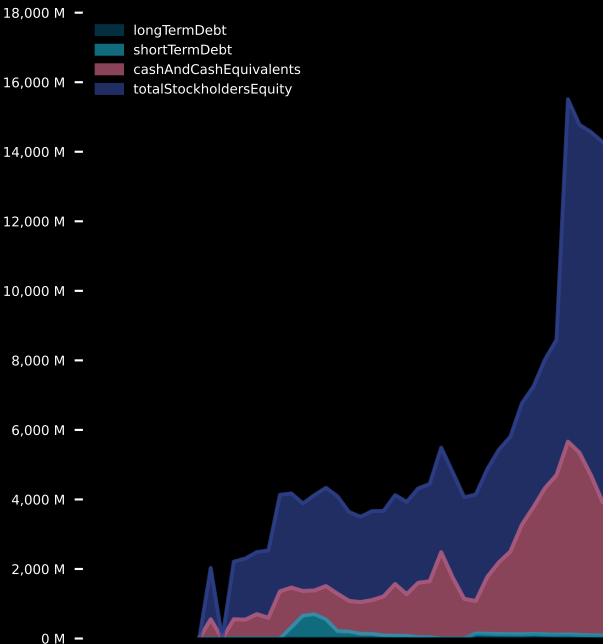
Owners Earnings, annually



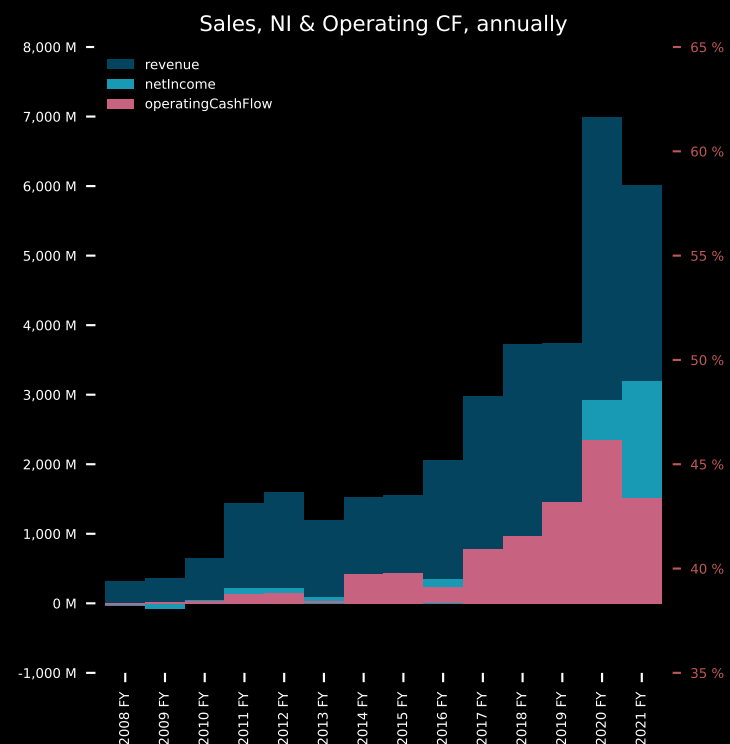
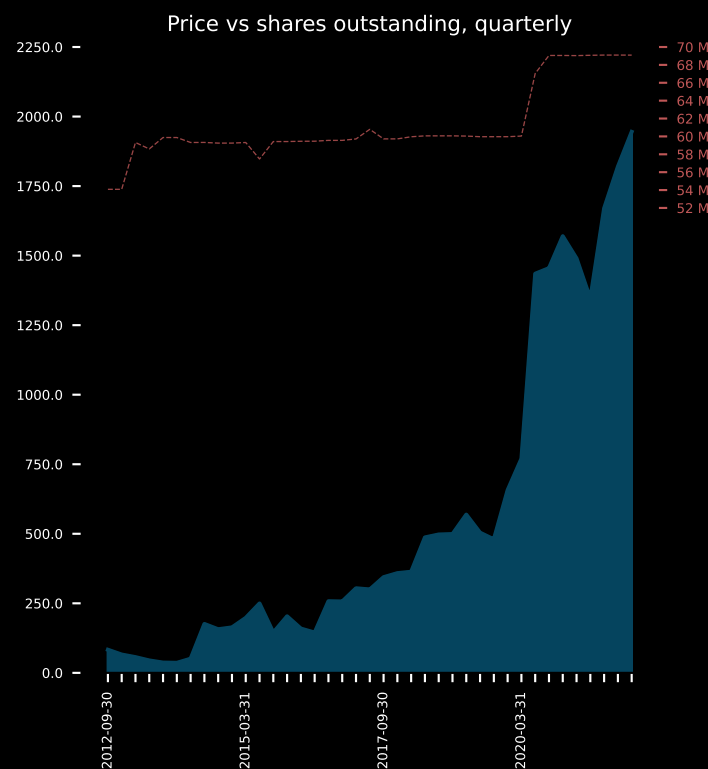
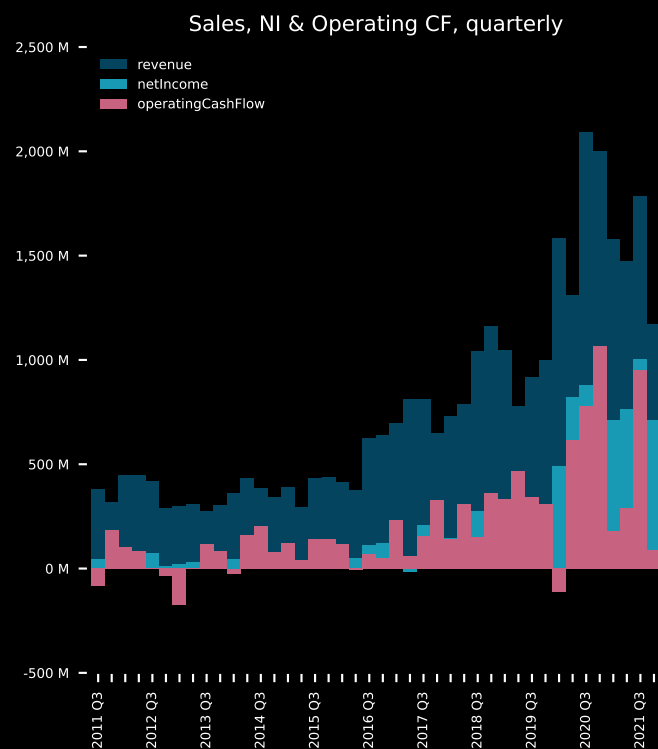
Realtek Semiconductor Corp., together with its subsidiaries, engages in the research, development, production, and sale of various integrated circuits (ICs) in Taiwan and internationally. The company provides communications network ICs, including broadband access controllers, gateway and network interface controllers, digital home centers, PHYceivers, switch controllers, wireless LAN ICs, and DTV demodulators, as well as Bluetooth, GNSS, and Internet of Things products. It also offers computer peripheral ICs, such as PC audio codecs, consumer audio codecs, card reader solutions, class-D audio amplifiers, PC camera controllers, and USB hubs; and multimedia ICs. The company was incorporated in 1987 and is headquartered in Hsinchu City, Taiwan.



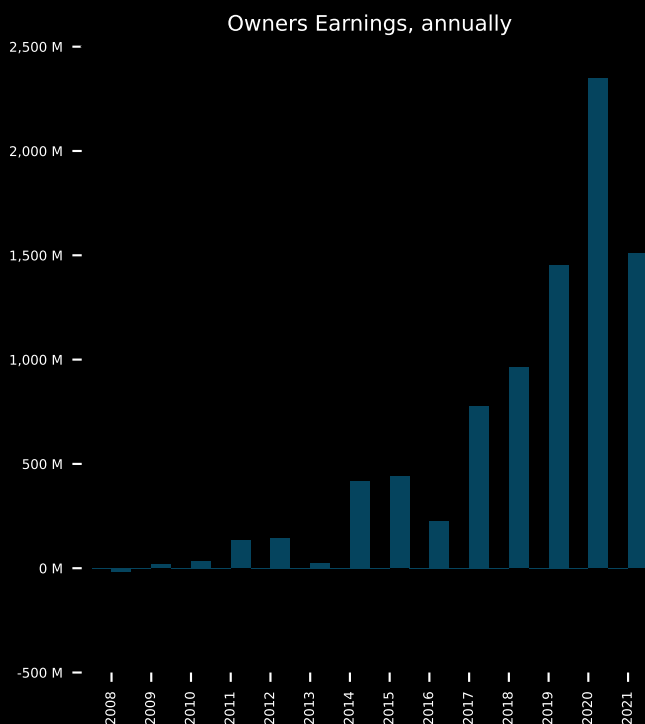
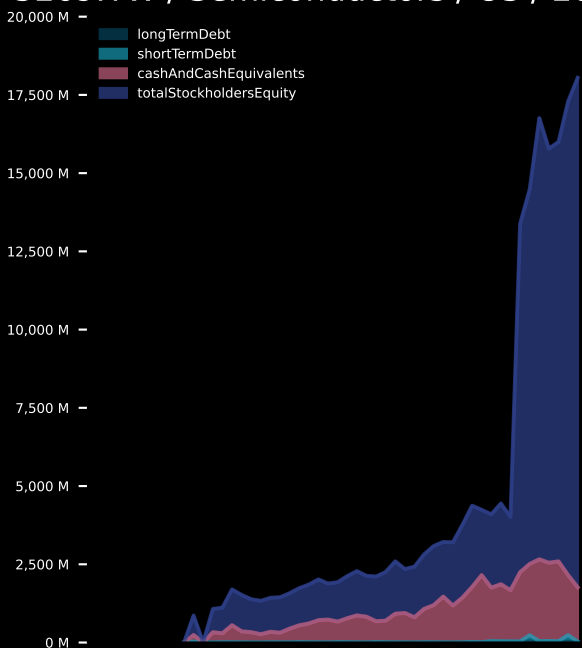
3661.TW / Semiconductors / US / 2022-08-23



Alchip Technologies, Limited, together with its subsidiaries, engages in the research and development, design, and manufacture of fabless application specific integrated circuits (ASIC) and system on a chip (SOC). It offers non-recurring engineering services for ASIC and SoC; mass production management services for wafer manufacturing, packaging, and testing; circuit design component database and silicon intellectual property for product designing, and producing circuit diagrams for mask process, as well as manufacturing masks, wafer, cutting, and packaging; and back-end wafer fabrication, packaging, and testing services. The company's products are primarily used in network, storage, and computing devices; HDTVs, mobile phones, digital cameras/video cameras, entertainment systems, portable media players, tablet PC master chips, and peripheral chips; and surveillance systems, entertainment machines, and medical equipment and instruments. It operates in Mainland China, Japan, the United States, Taiwan, Europe, and internationally. The company was incorporated in 2003 and is headquartered in Taipei, Taiwan.



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ASMedia Technology Inc., a fabless IC design company, designs, develops, and sells of high-speed interface and device controllers. The company offers USB host and device controllers, including USB3.2 Gen1, USB 3.2 Gen2x1, USB 3.2 Gen2x2, and USB4; PCIe bridge and SATA controllers; and high-speed signal switches. It serves motherboard vendors and branded OEMs worldwide. The company was founded in 2004 and is headquartered in New Taipei City, Taiwan.