

Alchip Technologies, Inc.

Alchip Technologies, Inc., headquartered in Taipei, Taiwan, is a leading provider of silicon design and manufacturing services for companies developing complex and high-volume system-on-chip (SoC) designs. Founded in 2002 by semiconductor veterans from Silicon Valley and Japan, Alchip provides services intended to enable customers to cost-effectively address the increasing technological complexity of silicon design and the need to reduce time to market. Alchip targets customers that focus on rapidly growing and high-volume end markets, such as entertainment devices, mobile phones, HDTV, communications equipment, computers and other electronic products. Alchip has a proven track record of delivering 100% first time silicon success which is based on its unique SoC design flows and solutions. Alchip is committed to exceeding its customers' expectations in terms of product quality, reliable and predictable service, fast time-to-volume, and to be customers' trusted silicon partner.

Founded

October, 2002

Locations

Alchip Technologies is headquartered in Taipei, Taiwan, with branch offices in the U.S. (Santa Clara, CA), Japan (Shin-Yokohama), China (Shanghai), and Taiwan (Hsinchu).

Employees

Alchip has over 200 employees worldwide.

Alchip's Total Solutions

Low Power Design

Alchip excels in advanced process power management, anticipating and addressing both static and dynamic power management needs. Our unique clocking architecture and timing methodology effectively reduce overall capacitance to achieve up to 30% dynamic power savings. We also support gated-clock designs and perform effective partitioning of multi-supply voltage designs to further reduce dynamic power usage.

High Performance Design

Alchip's integrated design methodology adopts an accurate timing model and a precise clock design approach to avoid over-design. We provide guidance on RTL modification based on initial place and route results.

We also customize cells to close timing on critical paths, and run system level noise simulation for high-speed IOs to ensure working silicon on both the chip and board levels.

Low Cost Design

Alchip's advanced design solutions save re-spin costs and optimize chip yield and die size. We achieve optimal silicon results and eliminate over-design with our proprietary clocking methodology, silicon accurate timing model, and advanced routing strategies.

Alchip's solution is production proven in over 200M SoC chips. Our advanced solution decreases die size up to 20% and increases yield of up to 20%. Additionally, we offer advanced technology migration services to smaller geometry process nodes, decreasing die sizes by as much as 50% and allowing our customers to enjoy tremendous cost benefits for high-volume products.

Prototype & Mass Production

Alchip offers the quickest path from innovation through design to production via its fast prototype and production solution. To ensure market leadership and competitiveness, Alchip provides an efficient solution to deliver engineering samples in the shortest amount of time so customers can quickly verify the design. This capability enables earlier demo systems and leads to faster productions.

Alchip's ASIC experts perform reliability and qualification tests, yield analysis, and time test reduction. With our experienced product engineering and test teams, we can achieve our customers' goals of getting to market in the shortest time. We can deliver stable, high quality manufacturing and fast ramp to production at over 2 million units per month within 60 days.

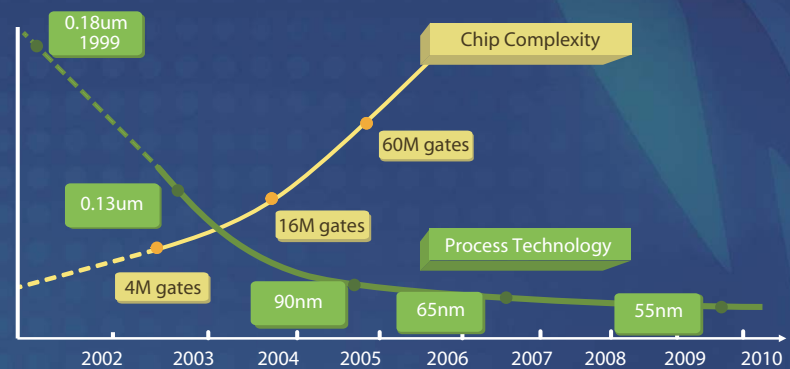
Technology Selection

Alchip partners with worldwide leading IP providers to offer a comprehensive IP portfolio. To ensure our IP Solutions fits our customers' specific needs, we have a dedicated IP team to qualify and maintain a seamless IP integration process with first silicon success. Our IP Solution can optimize the IP for a customer's application, whether it is low power, high performance, cost, or a combination thereof.

Packaging & Foundry

Alchip's close partnership with leading foundries and packaging and testing partners also helps speed up the whole engineering sample process from manufacturing to chip diagnosis. Through these close ties, Alchip also gains access to advanced processes, packaging and testing technologies.

Proven Record



Alchip Milestones

Alchip Milestones		
2004	November December	Certified member of TSMC VCA (Value Chain Aggregator) Program 90nm first-pass silicon success
2005	April August	Design win on 60M-gate processor for world's fastest supercomputer Achieved monthly record shipment 1 million SoCs
2006	June September December	Completed 65nm embedded ARM 1176 core development Design win on 65nm digital video SoC for top-tier consumer products company Achieved monthly record shipment of 2.5 million SoCs
2007	February March May June July	Design win on 65nm Camcorder SoC for top-tier consumer products company Established in-house package substrate design capability Design win on Digital TV chip for tier-one consumer products company Achieved monthly record shipment 2.5 million SoCs Implementation of in-house prototype testing (Verigy 93000 Pin-Scale 800)
2008	January February March April May June August October November December	Design win on mobile phone SoC for a top-tier telecommunications company Expanded semi-custom design services to provide power and area efficient ARM cores Joined Cadence's Power Forward Initiative (PFI) Achieved monthly record shipment 2.5 million SoCs Certified Member of ARM Connected Community Sony MD selected Alchip as its exclusive partner for packaging solutions Won Top 10 Most Outstanding China IC Design Company Award Adopted Synopsys' Eclypse Low Power Solution Started mass production for 65nm full turn-key Alchip's 1st 65nm full turn-key design win in China Awarded SONY Green Partner Certificate Set up thermal stream and auto handler for in-house SoC tester
2009	February June July September	Joined eBeam Initiative for e-Beam Technology Half node process adoption: Initiated 55nm design at TSMC Build up internal package substrate design capacity, completed 8 substrate designs Released 1st quad-site final test of 65nm turn-key for mass production Installed D10 tester of Credence in Alchip Hsinchu to support consumer products Passed R390 qualification of Sony

Broad Range of Applications

