Boom Supersonic

Company Information

Founder & CEO:	Blake Scholl
Year Founded:	2014
Headquarters:	Denver, CO
Manufacturing Site:	Greensboro, NC
Funding:	Over $600M from investment
Select Investors:	Bessemer Venture Partners, Y Combinator, Alex Gerko, Michael Moritz, Paul Graham, Reid Hoffman, Sam Altman, Emerson Collective

Overture: The World's Fastest Airliner – Optimized for Speed, Safety, and Sustainability

Specifications

Capacity:	60-80 passengers
Sustainability:	Optimized for up to 100% SAF
Cruising Altitude:	60,000 feet
Profitable Routes	600+
Length:	201 feet
Wingspan:	106 feet
Speed:	Mach 1.7
Max Range:	4,250 NM (7,871 KM)

Airlines

Order Book	Overture's order book stands at 130 aircraft, including orders and pre-orders from American Airlines, United Airlines, and Japan Airlines.
American Airlines	American Airlines made a deposit on up to 20 aircraft, with an option for 40 more, in August 2022. With this order, American is poised to have the world's largest supersonic fleet.

United Airlines	In June 2021, United became the first U.S. airline to sign an aircraft purchase agreement with Boom Supersonic for 15 aircraft with an option for 35 more.
Japan Airlines	In 2017, Japan Airlines (JAL) and Boom announced a strategic partnership to bring commercial supersonic travel to passengers with an option for 20 aircraft.

Global Tier-1 Suppliers

Aciturri	Overture's empennage supplier.
Advanced Integration Technology (AIT)	Tooling and automation supplier for Overture Superfactory.
Aernnova	Overture's wing supplier.
Eaton	Hydraulic system analysis and design as well as fuel and inerting systems collaboration.
Honeywell	Overture's integrated flight deck and avionics platform supplier.
Latecoere	Overture and Symphony's electrical wiring interconnect system (EWIS) architecture supplier.
Leonardo	Overture's primary engineering lead for fuselage structural components integration, design and build partner for fuselage sections.
Safran	Overture's landing gear system and controls supplier.
Universal Avionics	Overture's external vision system supplier, providing aircraft cameras, synthetic digital environments, and flight data during takeoff and landing through a head-worn device.

Overture Superfactory: The first Supersonic Airliner Factory in the United States

Final Assembly Line for Overture

The first assembly line will produce 33 Overture supersonic aircraft annually. A planned second assembly line will double aircraft production to 66 each year.

Milestones

2022	Site Selection: Piedmont Triad International Airport in Greensboro, NC
2023	Groundbreaking
2024	Construction Completion

XB-1: The World's First Independently Developed Supersonic Jet

XB-1 is Boom's technology demonstrator aircraft and the first civil supersonic jet built in America. First taking flight in March 2024, XB-1 completed a series of flight tests in Mojave, CA, culminating in successful supersonic test flights in January and February 2025.

Specifications

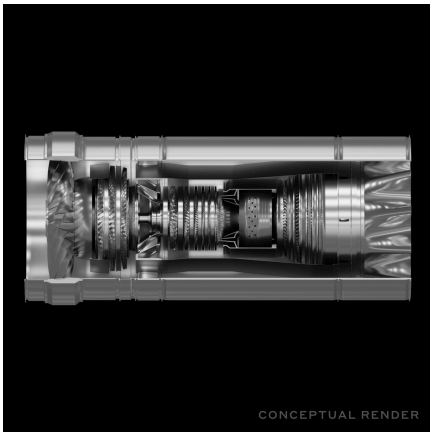
Engine	3 GE J85-15 Engines
Max thrust	12,300 pounds of force (lbf)
Length	62.6 feet
Wingspan	21 feet

Milestones

2020	Rollout
2021	Systems integration
2022	Ground testing in Centennial, CO
2023	Relocation and ground testing in Mojave, CA
2024	XB-1 completes 10 test flights in Mojave, CA
2025	XB-1 achieves supersonic flight in Mojave, CA

2025	Boom partners with NASA to capture Schlieren imagery of XB-1 breaking the sound barrier
2025	XB-1 demonstrates Mach cutoff, breaking the sound barrier six times without creating an audible sonic boom
2025	XB-1 flight test program concludes, following 13 successful test flights and six supersonic runs
2025	XB-1 comes home to Boom HQ in Denver, CO

Symphony™: The purpose-built Turbofan Optimized for Supersonic Flight



Key Engine Features

40,000 lb thrust class

72” diameter hollow-core fan blades

Medium bypass ratio

Vertically integrated manufacturing

Compatible with up to 100% Sustainable Aviation Fuel (SAF)

Compliant with global noise standards

FAA Part 33 / EASA CS-E certified

Engine Architecture & Dimensions

Overall size: 42 ft length × 84 in diameter

12 ft supersonic inlet with auxiliary intake

11 ft turbofan

19 ft variable-geometry exhaust with integrated thrust reverser

Turbomachinery Configuration

Single stage fan

Three stage low-pressure compressor (LPC)

Six stage high-pressure compressor (HPC)

Single stage high pressure turbine (HPT)

Three stage low-pressure turbine (LPT)

Partners & Suppliers

ATI	Advanced high-temperature materials and components for Symphony's high pressure compressor integrated blade and disk stages and for its turbine assembly.
Florida Turbine Technologies (FTT)	Symphony engine design and lead partner on the initial production units for ground test, flight test, and certification.
StandardAero	StandardAero is Boom's engine production and MRO supplier. StandardAero will assemble and test Symphony engines at its facility in San Antonio, Texas.