

Valuing SPCX: Four Businesses, Four Costs of Capital

SpaceX is more than one business, and each carries its own risk. This presentation introduces a sum-of-the-parts valuation of Space, Connectivity, AI, and Expansion, each priced at its own cost of capital rather than blended into a single company-wide discount rate. What follows: terminal value, capital intensity, and a share count that moves fast.

Visit spcx-valuation-analysis.vercel.app for the full model.

Conclusions

The \$85 per share intrinsic value estimate the model yields reflects starting assumptions. They are there to be changed. Whatever inputs are decided, however, the long-duration characteristic applies in describing the equity. Add to it the share unlocks.

70%+

It's all in the terminal value — over 70% of total enterprise value comes from the terminal year alone, not the explicit 2026–2035 forecast.

55%+

Can't get something for nothing — capex/revenue tops 58% during early build-out, and that efficiency curve is assumed, not proven. Expansion leans on it hardest.

~49%

Shares coming to market — nearly half of all shares outstanding unlock in a single day when Musk's 366-day cliff releases in June 2027.

Approach

A sum-of-the-parts valuation of Space, Connectivity, AI, and Expansion.

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- 01 **Not one discount rate, four** — WACC ranges from 8.1% (Connectivity) to 16.4% (Expansion). Beta captures each segment's systematic, market-correlated risk; AI and Expansion also carry an idiosyncratic risk premium on top of that — 1.5% and 5.0%, respectively — for segment-specific risk that beta alone doesn't price. Space and Connectivity carry none.
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- 02 **Forecasts anchored in disclosed data, not assumed from scratch** — Space, Connectivity, and AI all start from real contracts, launch cadence, or subscriber counts; Expansion has no such anchor, so it's priced as convex optionality (Bear/Base/Bull) instead.
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- 03 **Every major driver gets stress-tested** — terminal growth, the WACC spread, and Expansion's addressable market are all sensitized, not treated as fixed.
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- 04 **Growth is modeled bottom-up, not assumed** — each segment starts from a real, disclosed volume driver, not a top-down growth rate. How that actually works is next.

How growth and margins work

Each segment's revenue and margin follow the same underlying mechanics: an S-curve build-out, converging margins, and Expansion's structural dependence on the other three.

ALL SEGMENTS

Top-line growth, segment by segment — Space scales off external launches, Connectivity off subscribers, and AI off megawatts of capacity, each following an S-curve that accelerates then tapers toward a ceiling. Expansion's growth is a weighted composite of the other three's own S-curves, not an independent driver.

SPACE · AI

Margins converge as segments scale, not on a calendar — Space and AI both start deeply unprofitable during build-out and climb toward a mature-state target as each segment's own build-out progresses. AI carries an added penalty while capacity is still actively expanding.

EXPANSION

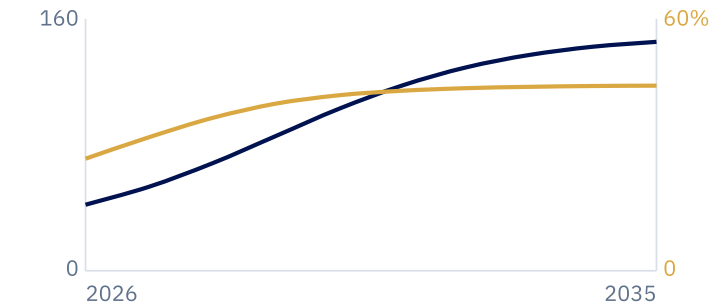
Expansion borrows its margin, not just its growth — its operating margin is the blended margin of Space, Connectivity, and AI, and revenue only turns on once their combined build-out clears a threshold.

ALL SEGMENTS

ROIC steady-state sets the reinvestment rate — $RR_{ss} = \text{growth} \div ROIC_{ss}$ determines how much of terminal-year profit funds future growth versus flows out as cash. The wider the ROIC-WACC spread (see "It's all in the terminal value"), the more that reinvestment actually creates value. Expansion's is defined to be zero, by construction.

Segment by segment

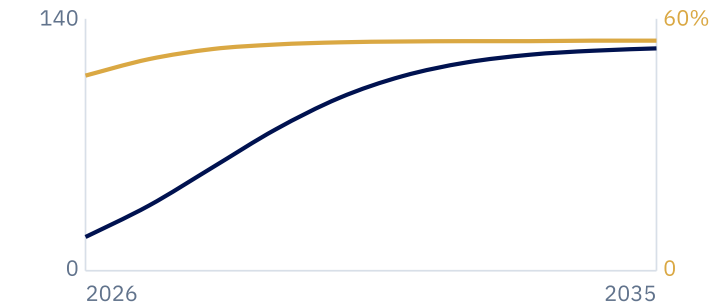
SPACE



■ Launches ■ Operating Margin (right axis)

A launch-volume S-curve paired with a steadily rising price per launch; margins improve in step with scale. Government contracts make this the most conservative segment of the four.

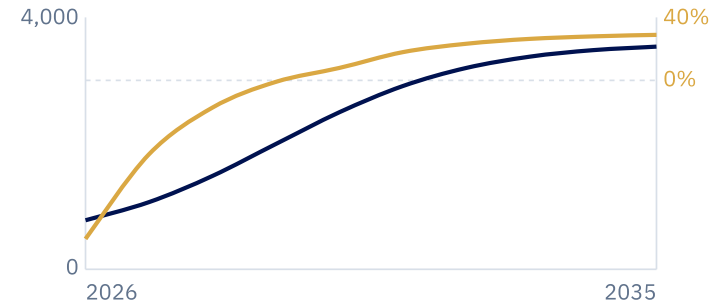
CONNECTIVITY



■ Subscribers (M) ■ Operating Margin (right axis)

Same S-curve subscriber ramp, paired with declining per-subscriber revenue and a fading hardware layer. The most proven segment, and the single largest driver of total value.

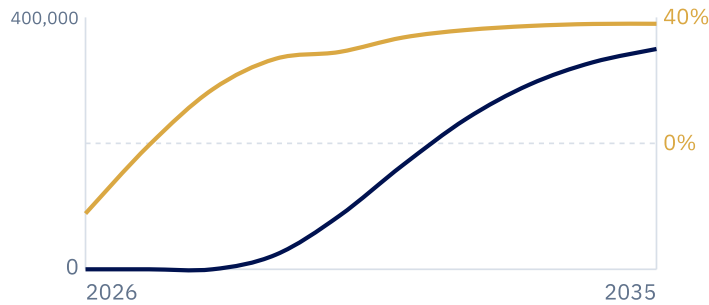
AI



■ Capacity (MW) ■ Operating Margin (right axis)

Same S-curve capacity growth, split between contracted and merchant compute revenue. The least-proven of the three real segments, potentially facing better-funded rivals.

EXPANSION

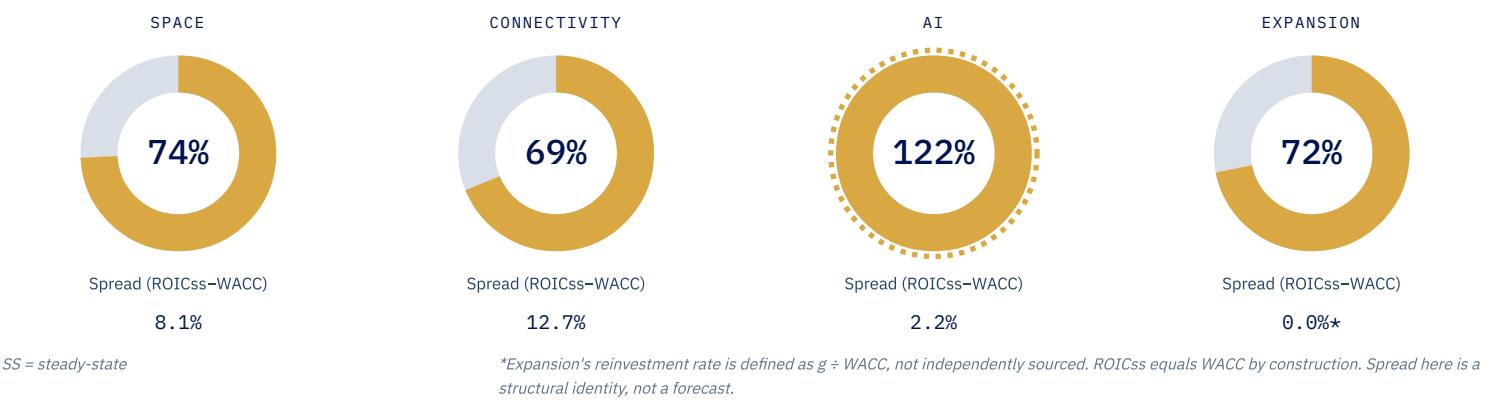


■ Revenue (\$M) ■ Operating Margin (right axis)

Products that don't exist yet, contributing only once Space, Connectivity and AI have matured. Bear/Base/Bull scenarios blend into one outcome via a phased H-model fade.

It's all in the terminal value

On average, more than 70% of EV for Space and Connectivity is terminal value, the payoff for reinvesting above each segment's own cost of capital. Detailed in the spread below and the WACC table. Expansion's 72% looks similar but reflects a probability-weighted convex payoff, not a standard TV calculation; its 0% spread is a structural identity, not a forecast. AI's >100% TV/EV arises because terminal value rescues a segment unprofitable over the explicit 2026–2035 horizon, as measured on present value basis.



WACC CALCULATION

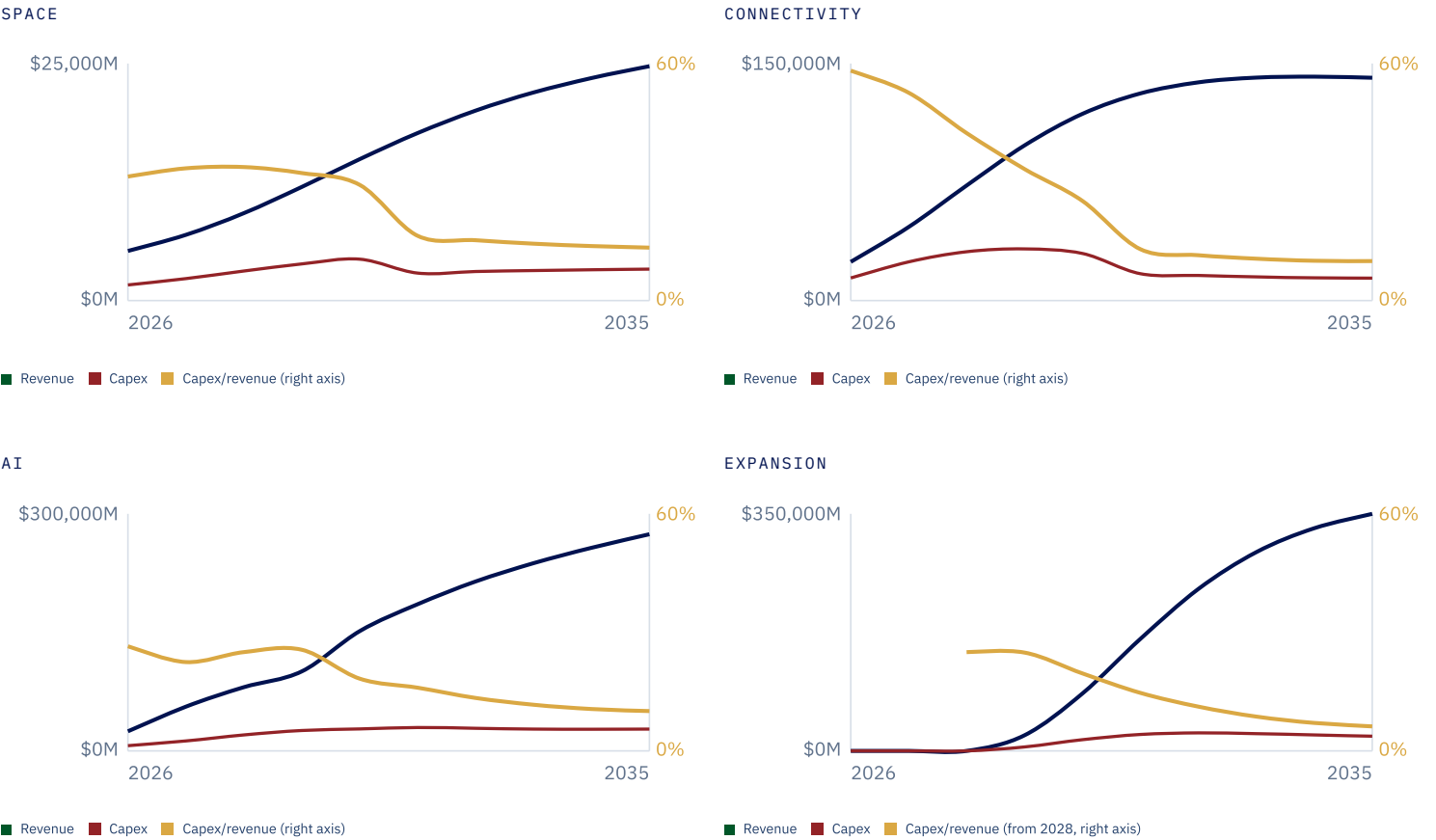
Shared across segments: RFR 4.3% · ERP 4.5% · Pre-tax CoD 6.0% (aft-tax 4.6%) · Capital structure 96.8% equity / 3.2% debt

SEGMENT	BETA	IDIO PREMIUM	COST OF EQUITY	WACC
Space	1.00	0.0%	8.7%	8.6%
Connectivity	0.90	0.0%	8.3%	8.1%
AI	1.40	1.5%	12.0%	11.7%
Expansion	1.70	5.0%	16.8%	16.4%

Formula: $TV = NOPAT \times (1+g) \times (1-RR_{ss}) \div (WACC-g)$, capitalizing terminal-year cash flow at each segment's own WACC. Expansion uses an H-model variant reflecting Bear/Base/Bull weighting. See model for full derivation.

Can't get something for nothing

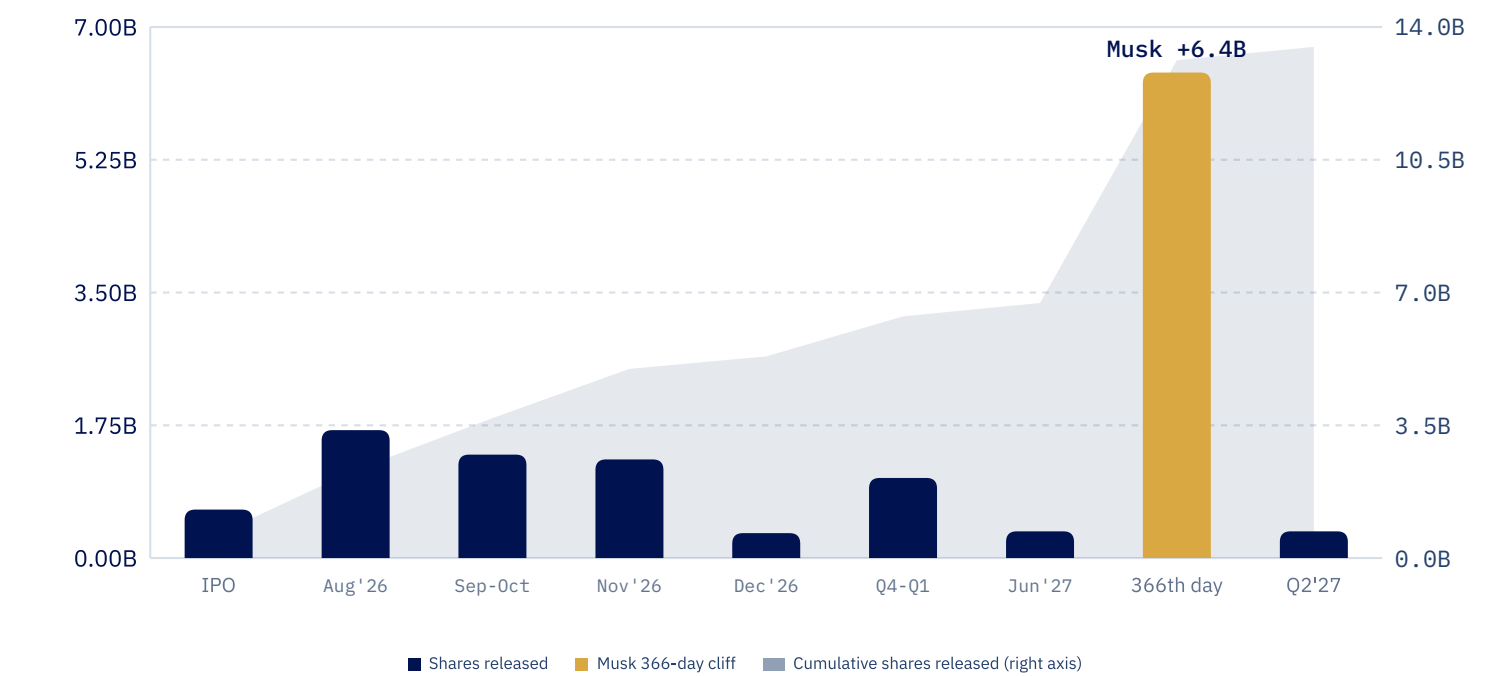
Capex/revenue runs heaviest during build-out, falling sharply as each segment matures. Expansion is structurally lighter, consistent with the platform-leverage thesis: it draws on infrastructure the other three segments already built. Our capital efficiency assumptions behind this could prove aggressive, particularly for Expansion: if the integrated platform doesn't materialize as modeled, its light capex path is the most exposed.



2025 figures (Space ~94%, AI ~398%) reflect pre-revenue build-out and are excluded above; Expansion capex begins 2028.

Shares coming to market

Large share count releases over the next 12 months, discrete and front-loaded. Musk's 366-day cliff alone adds a ~6.4B-share block (~49% of total shares), unlocking in a single day in June 2027 with no early-release mechanism.



~7.8B shares (incl. 100% of Musk's) locked >1 year (~60% of shares). The 6/12/27 Musk unlock has no early-release mechanism. Bars aggregate smaller unlock events into discrete monthly/quarterly blocks; Musk's cliff is broken out separately. "Unlock" reflects contractual eligibility per the lock-up schedule, not confirmed sale timing. Blackout windows, Rule 144 limits, and individual 10b5-1 plans may affect when shares actually trade.

Capital structure and valuation output

The math behind the \$85 figure: value bridge, net cash, and share count, compared against the \$135 IPO reference price.

EQUITY VALUE		NET CASH BRIDGE		SHARE COUNT BRIDGE	
EV — Space	\$71,149M	Cash, PF (pre-IPO)	\$15,852M	Class A (post-IPO)	7,463.5M
EV — Connectivity	\$632,057M	(+) IPO net proceeds	\$85,698M	Class B	5,695.7M
EV — AI	\$149,990M	(+) Bond proceeds	\$25,000M	Total Class A + B	13,159.2M
EV — Expansion	\$275,679M	(-) Repay bridge loan	-\$20,000M	(+) Anysphere (@ \$135)	444.4M
Total EV	\$1,128,876M	Cash, post all	\$106,550M	(+) EchoStar consid.	261.8M
(+) Net cash	\$72,439M	Total debt, PF	\$29,111M	Total basic shares	13,865.4M
(+) Anysphere acq.	\$32,000M	(-) Bridge repaid	-\$20,000M	(+) Options (@ \$135)	442.8M
(-) EchoStar/Spectrum	-\$2,069M	(+) New senior notes	\$25,000M	(+) RSUs (full)	153.2M
Equity value	\$1,231,246M	Total debt, post all	\$34,111M	Diluted shares	14,461.4M
÷ Diluted shares	14,461.4M	Net cash	\$72,439M		
Intrinsic value / share	\$85.00				
IPO price (reference)	\$135.00				

Give the model a spin

Visit spcx-valuation-analysis.vercel.app to make your own assumptions and draw your own conclusions.