

The logo for AST SpaceMobile. 'AST' is in large, white, bold, sans-serif capital letters. 'SpaceMobile' is in a smaller, orange, bold, sans-serif font. The background is a dark space with a bright, glowing orange arc representing a satellite or orbital path.

AST SpaceMobile

Transforming how
the world connects



NASDAQ: ASTS

Business Update – Third Quarter 2023

November 14, 2023

Forward Looking Statements

The information in this presentation and the oral statements made in connection therewith includes “forward-looking statements” for the purposes of federal securities laws that are not historical facts and involve risks and uncertainties that could cause actual results to differ materially from those expected and projected. All statements, other than statements of historical fact in this presentation and the oral statements made in connection therewith regarding AST SpaceMobile, Inc.’s, collectively with its subsidiaries (“SpaceMobile” or the “Company”), financial position, business strategy and the plans and objectives of management for future operations, are forward-looking statements. Words such as “expect,” “believe,” “anticipate,” “intend,” “estimate,” “seek” and variations and similar words and expressions are intended to identify such forward-looking statements. Such forward-looking statements relate to future events or future performance, but reflect management’s current beliefs, based on information currently available. A number of factors could cause actual events, performance or results to differ materially from the events, performance and results discussed in the forward-looking statements. For information identifying important factors that could cause actual results to differ materially from those anticipated in the forward-looking statements, please refer to the Risk Factors contained in AST SpaceMobile’s Annual Report on Form 10-K, filed with the SEC on March 31, 2023. The Company’s securities filings can be accessed on the EDGAR section of the SEC’s website at www.sec.gov. Except as expressly required by applicable securities law, the Company disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

Use of Non-GAAP Financial Measures

Adjusted operating expense is an alternative financial measure used by management to evaluate our operating performance as a supplement to our most directly comparable U.S. GAAP financial measure. We define Adjusted operating expense as Total operating expenses adjusted to exclude amounts of stock-based compensation expense and depreciation and amortization expense. We believe Adjusted operating expenses is a useful measure across time in evaluating the Company's operating performance as we use Adjusted operating expenses to manage the business, including in preparing our annual operating budget and financial projections. Adjusted operating expense is a non-GAAP financial measure that has no standardized meaning prescribed by U.S. GAAP, and therefore has limits in its usefulness to investors. Because of the non-standardized definition, it may not be comparable to the calculation of similar measures of other companies and are presented solely to provide investors with useful information to more fully understand how management assesses performance. This measure is not, and should not be viewed as, a substitute for its most directly comparable GAAP measure of Total operating expenses.

Industry and Market Data

This presentation includes market data and other statistical information from sources believed to be reliable, including independent industry publications, governmental publications or other published independent sources. Although AST SpaceMobile believes these sources are reliable, we have not independently verified the information and cannot guarantee its accuracy and completeness.

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Building the first and only space-based cellular broadband network



Key highlights



BlueWalker 3 Makes History Again

- Demonstrated space-based 5G cellular broadband capabilities
- Increased performance to 14 Mbps data rates per 5MHz channels



First Five Commercial Satellites Expected to be Launched in Q1 2024

- Manufacturing at full speed in Midland, Texas facilities
- Approximately 85% of planned capital expenditures paid¹



Updated Cost Structure Following Completion of Non-Recurring R&D

- Adjusted operating expenses expected to be \$25 million to \$30 million per quarter beginning from Q1 2024²



Strategic Investment Process Continues to Move Forward³

- Seeking to close and fund with multiple strategic partners in November or December 2023

1. Includes launch costs, as of September 30, 2023.
2. Total expected operating expense run rate per quarter starting in Q1 2024 is \$47-\$54 million, including depreciation and amortization and stock-based compensation expense of \$22-24 million.
3. There can be no assurance that we will enter into any such transactions on acceptable terms, on this timing, or at all.

Strategic investment process continues to move forward

- ◆ We are moving forward on definitive documentation and completion of diligence with multiple strategic partners
- ◆ The strategic investment process is intended to result in new capital and establish new and incremental financial, commercial and strategic relationships within the wireless ecosystem
- ◆ This new investment is intended to fund the manufacturing, launch and operations of additional BlueBird satellites beyond our first five commercial satellites
- ◆ We are seeking to close and fund the strategic investment process in November or December 2023

Note: There can be no assurance that we will enter into any such transactions on acceptable terms, on this timing, or at all.

History made:
connecting
everyday
smartphones
directly from space
using BlueWalker 3



September 2023

5G Voice Calls
14 Mbps Data Rate
(Per 5MHz Channels)

In a 5G first-ever, we demonstrated space-based 5G connectivity by placing a call from Maui, Hawaii, USA, to a Vodafone engineer in Madrid, Spain, using AT&T spectrum



June 2023

4G LTE Voice Calls
10 Mbps Data Rate

In a LTE first-ever, using AT&T spectrum, we again connected everyday smartphones to BlueWalker 3



April 2023

2G Voice Calls

The first voice call was made from the Midland, Texas area to Rakuten in Japan over AT&T spectrum using a Samsung Galaxy S22 smartphone



Less than half of the geographic US has 5G coverage with download speeds $\geq 7\text{Mbps}$

“The entire country benefits when everyone, including those living and working in rural areas, can communicate and innovate equally through access to high-speed, mobile broadband services. Access to high-speed, mobile services allows connections to essential civic, economic, and social opportunities. It touches almost all aspects of daily life, including work and education, access to news and entertainment, public safety information and services, and healthcare, and allows interconnection in times of national crisis. The importance of expanding access to high-speed, 5G services in rural communities cannot be overstated.”

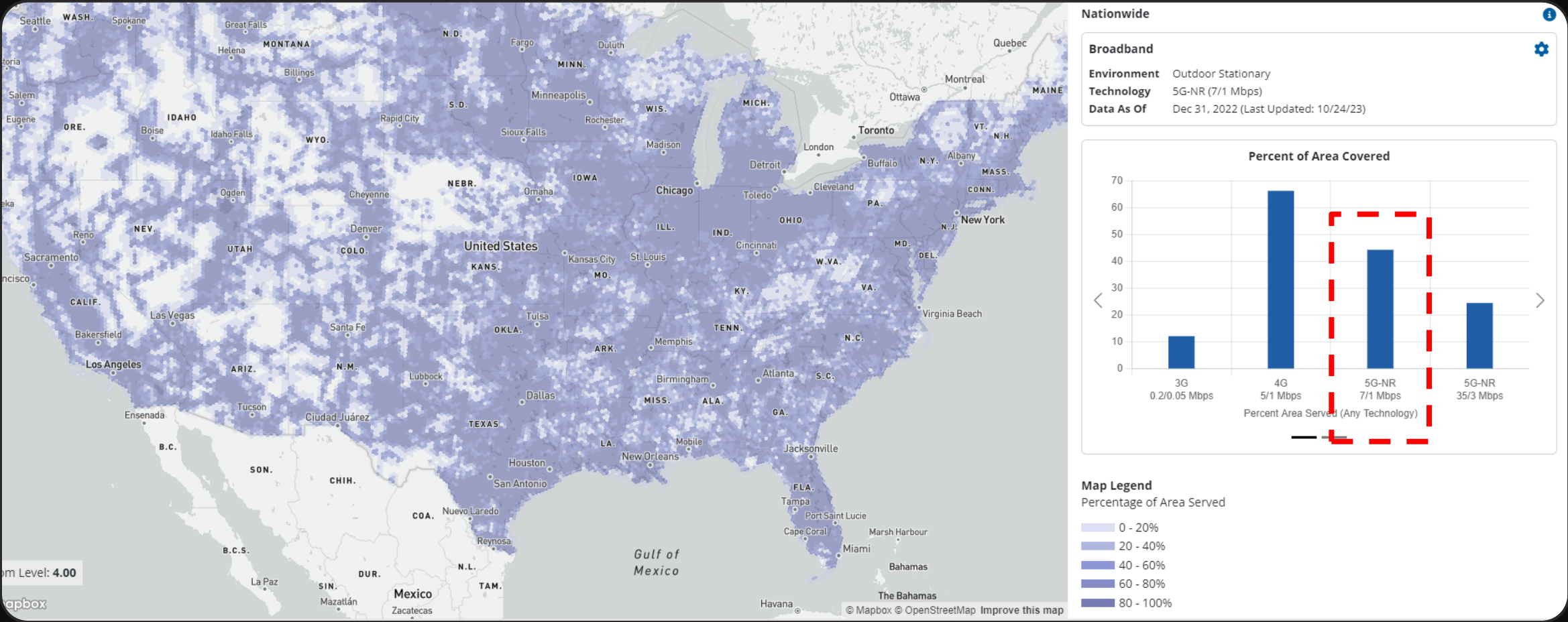
FCC Further Notice of Proposed Rulemaking Establishing a 5G Fund for Rural America



“And the reality of finding those spots where there are no services today...satellite's going to become an important element in doing that, in getting ubiquitous connectivity everywhere.”

*- John Stankey, CEO, AT&T
September 21, 2023*

FCC National Mobile Broadband Map



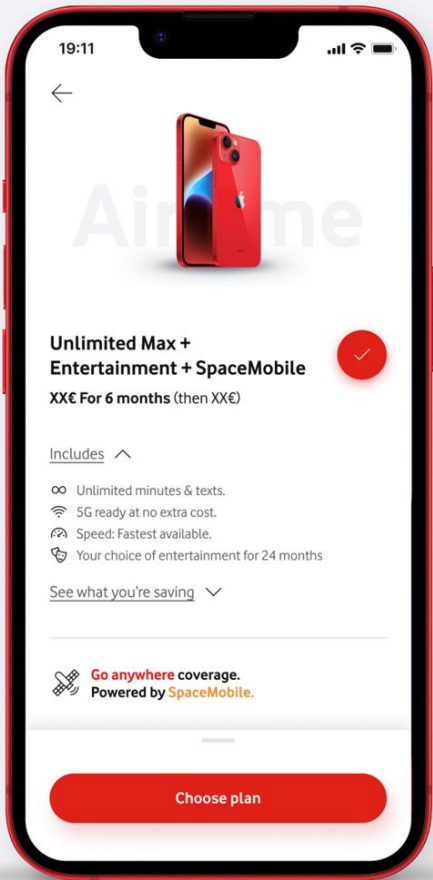
Our collaboration
has been highlighted
by our MNO partners



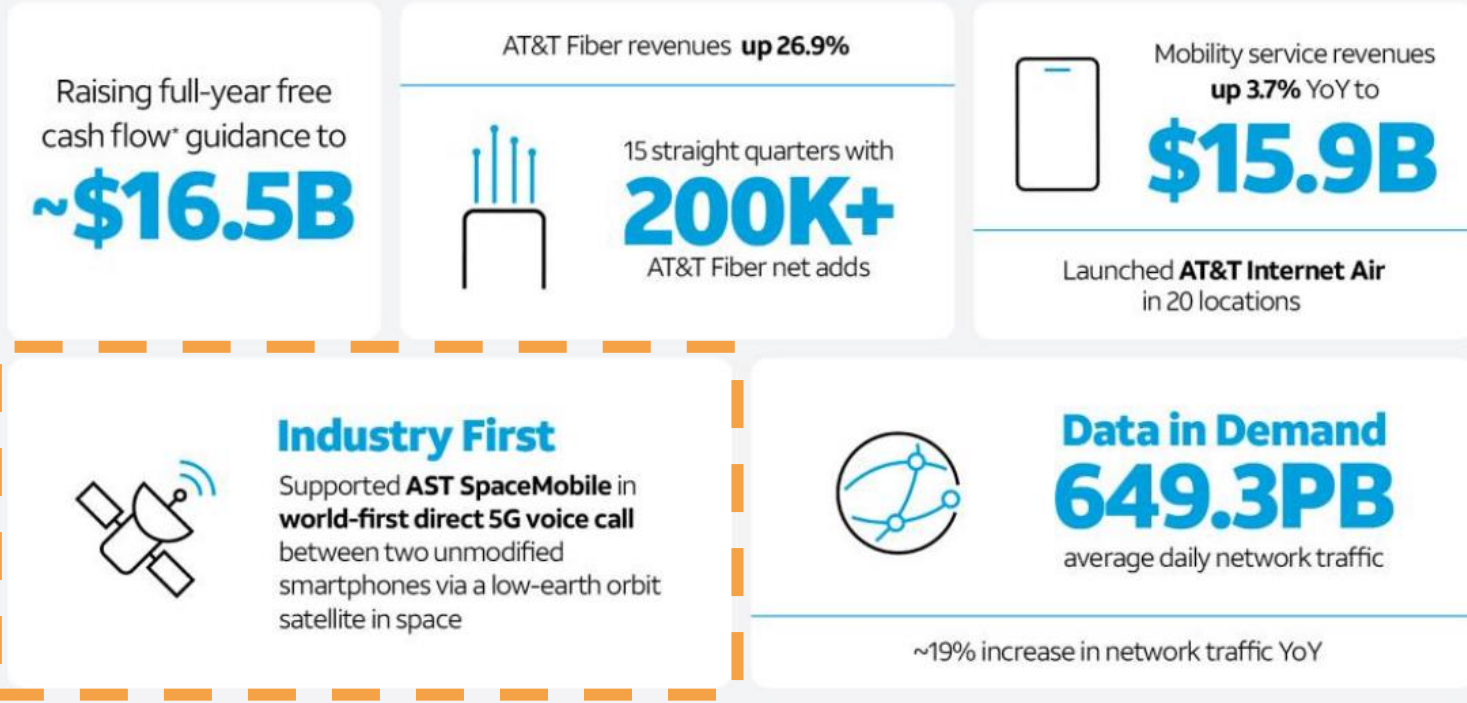
Vodafone offering
SpaceMobile services

Vodafone customers will benefit from the assurance
of go-anywhere coverage. Seamlessly augmenting
Vodafone's market-leading terrestrial networks.

- Video Calls
- SMS Texts
- Internet Browsing
- Email
- Music Streaming
- Social Media

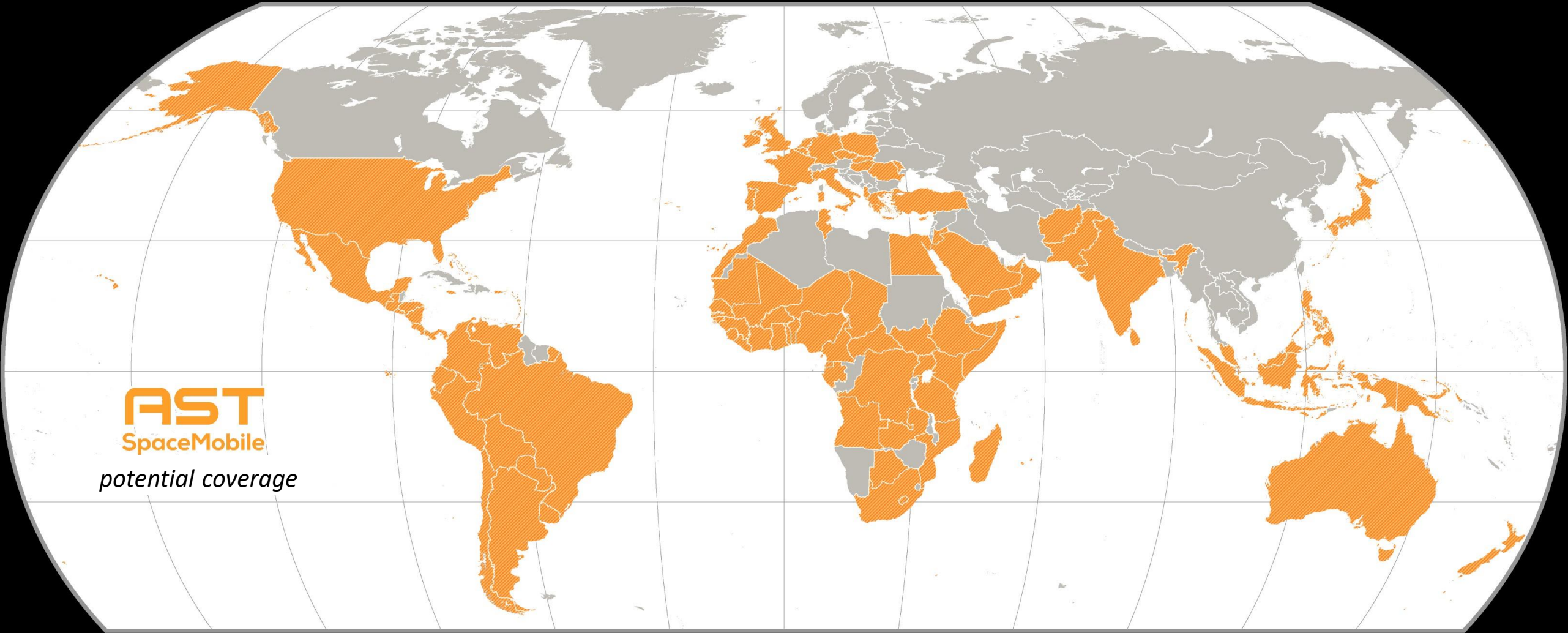


3Q 2023 Earnings and Highlights







MOUs and agreements with over 40 of largest mobile network operators around the world










Note: Memoranda of understanding and preliminary agreements are not binding and are subject to negotiation of definitive documentation.





















Over 2 billion subscribers represented by MNOs with whom we have MOUs and agreements

Select MNO Partners



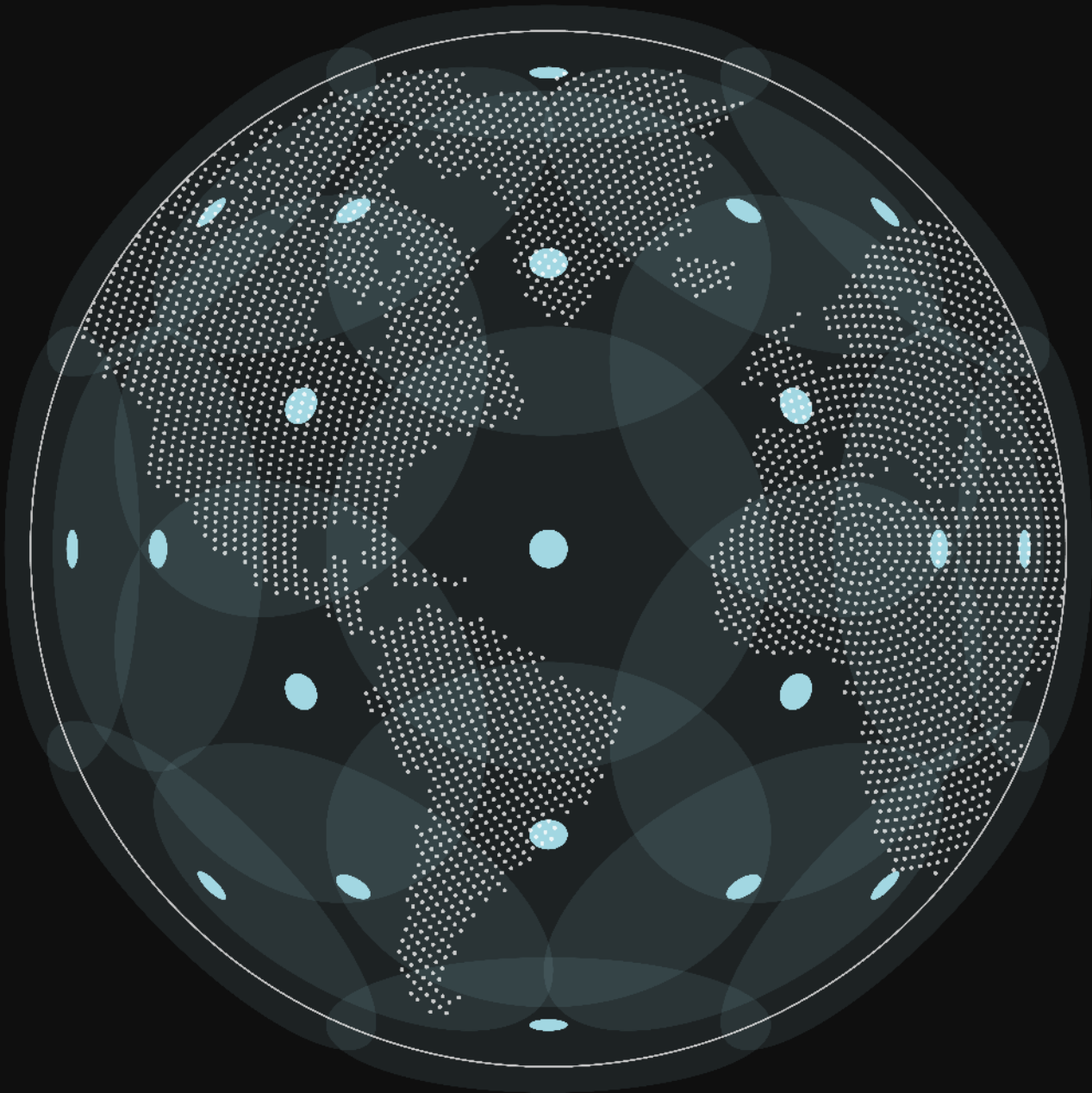






Substantial tech
advantage from
proprietary IP,
R&D investments
and patent
portfolio

Thousands of patent claims to maintain and sustain competitive advantage



3,100+

Patent and patent
pending claims



30+

Patent families



25+

US patent applications



10+

Additional patents
spanning countries from
Europe to Asia

Manufacturing in Midland, Texas is at full speed ahead of expected Q1 2024 launch

- Approximately 85% of planned capital expenditures paid (including launch costs)
- Ramped to approximately 160 employees in Midland to support manufacturing
- Production lines running 3 shifts
- First five BlueBird commercial satellites expected to be launched in Q1 2024



Production of key subsystems for the first five commercial satellites is in advanced stages

High level of vertical integration across key satellite subsystems

Microns



Solar Panels



Batteries



Electronics



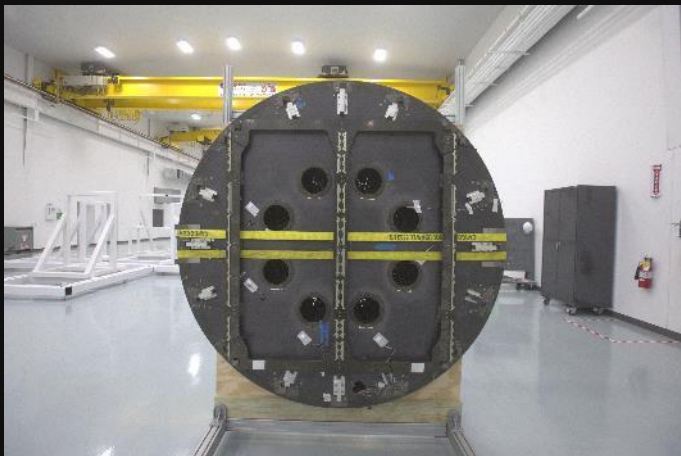
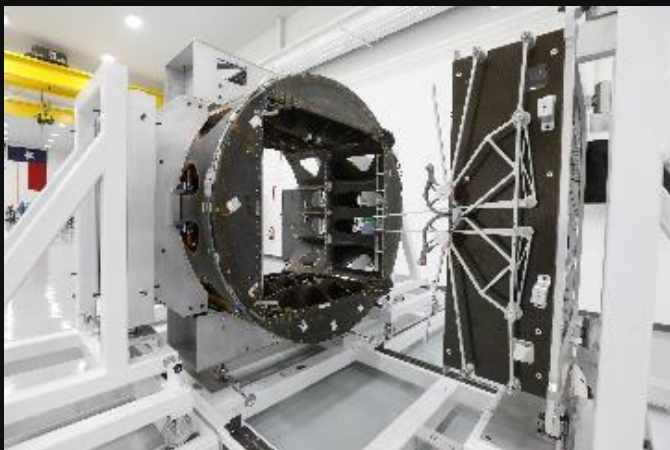
Antennas



Production of key subsystems for the first five commercial satellites is in advanced stages (cont'd)

High level of vertical integration across key satellite subsystems

ControlSat



Avionics



Software

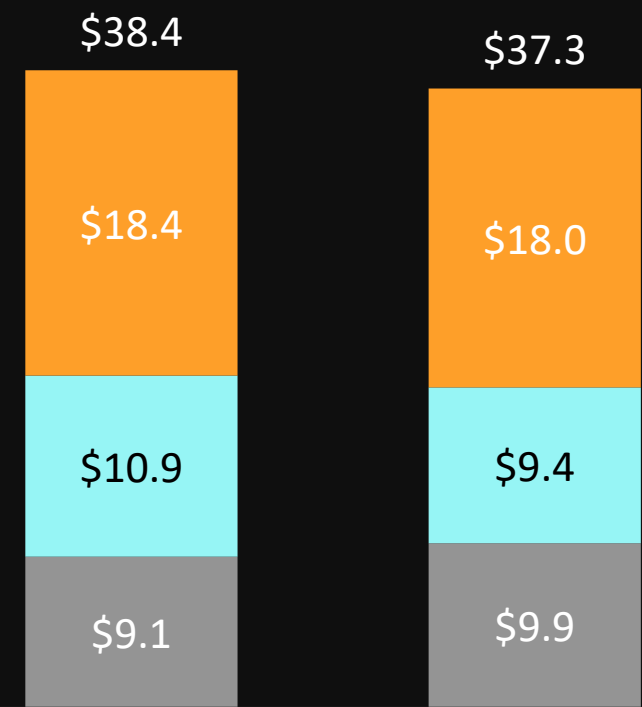


Third quarter 2023 financial metrics

- 1. Non-GAAP. See appendix for a reconciliation. Adjusted operating expenses is equal to total operating expense less non-cash operating expense such as depreciation and amortization and stock based-compensation expense. Depreciation and amortization for the three months ended September 30, 2023 and June 30, 2023 was \$19.0 million and \$14.1 million, respectively. Stock-based compensation for the three months ended September 30, 2023 and June 30, 2023 consisted of \$1.5 million and \$4.5 million of engineering services expense and \$1.1 million and \$1.1 million of general and administrative costs, respectively.
- 2. Amounts depicted in chart represent gross property and equipment costs. \$26.8 million and \$71.7 million of gross property and equipment costs during the second and third quarters of 2023, respectively, disclosed herein include advance launch payments reclassified to property and equipment during the second and third quarters of 2023, respectively. Gross property and equipment as of September 30, 2023, June 30, 2023, and December 31, 2022 was \$265.8 million, \$194.1 million, and \$153.0 million, respectively. Accumulated depreciation as of September 30, 2023, June 30, 2023, and December 31, 2022 was \$41.6 million, \$22.5 million, and \$7.0 million, respectively.
- 3. \$12.1 million of gross property and equipment costs disclosed during the second quarter of 2023 excluded advance launch payments reclassified to property and equipment during the second quarter of 2023 which has been included herein.
- 4. Cash Position as of September 30, 2023 and June 30, 2023 includes \$2.4 million and \$0.7 million of restricted cash, respectively.

Adj. Operating Expenses ¹

\$mm



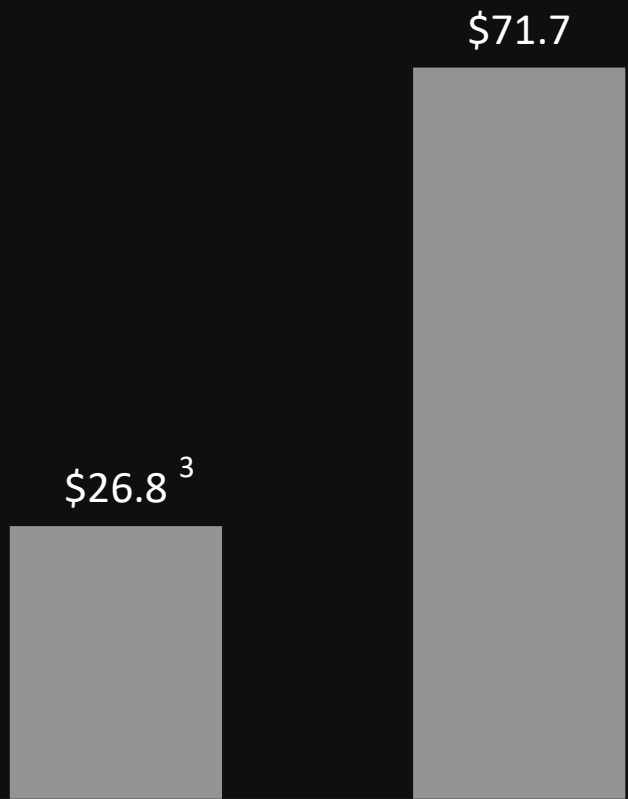
Q2 2023

Q3 2023

- Engineering services
- Research and development costs
- General and administrative costs

Capital Expenditures ²

\$mm



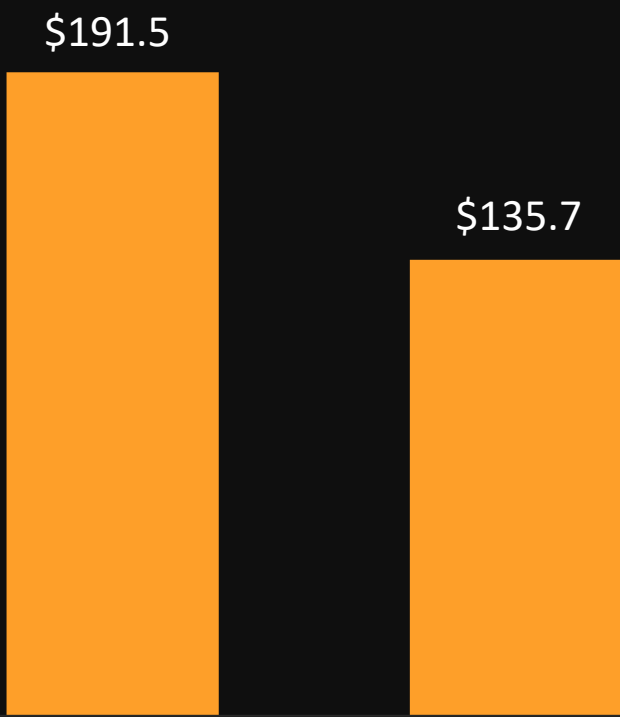
Q2 2023

Q3 2023

- Property and equipment

Liquidity ⁴

\$mm



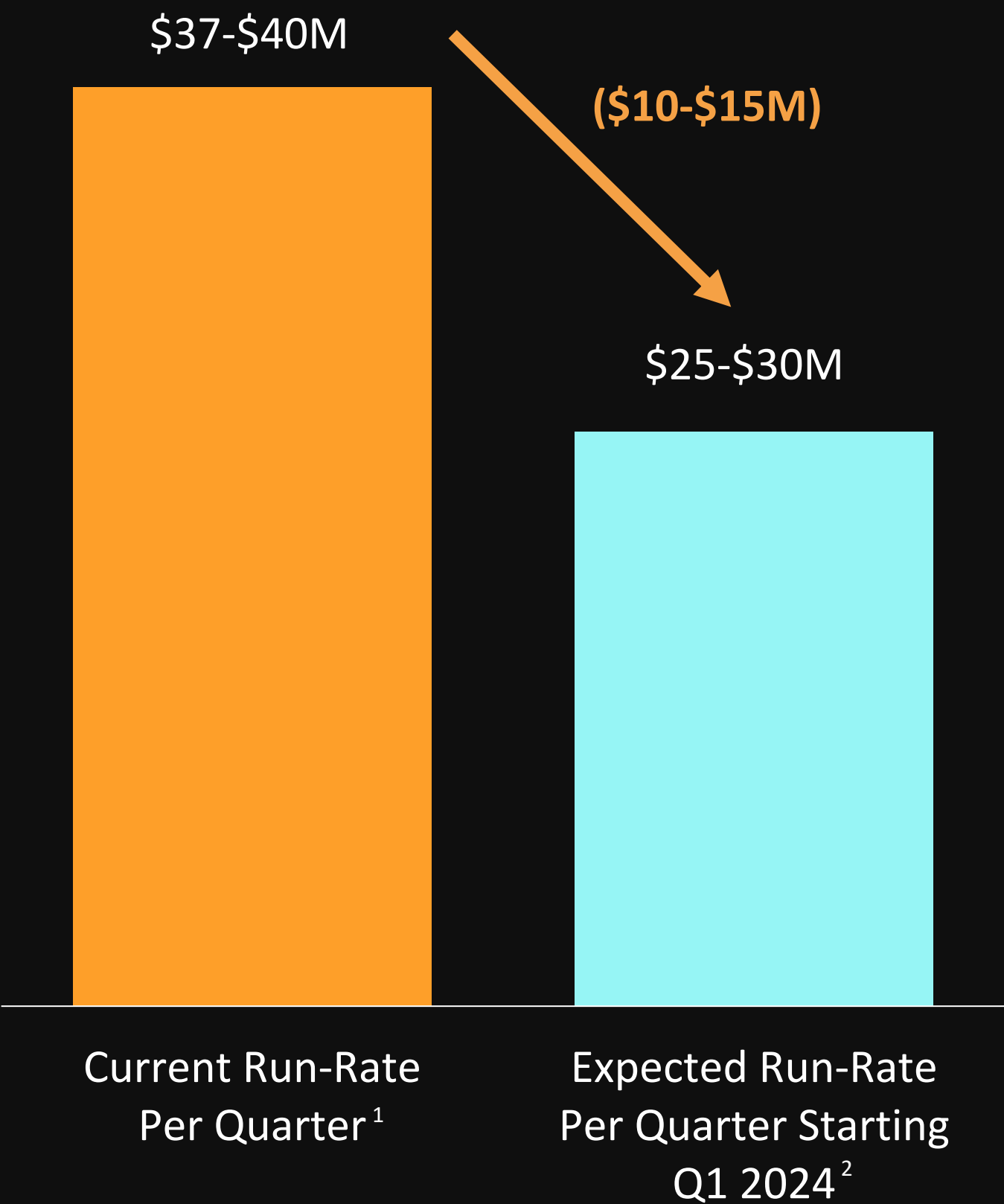
As of 6/30/2023

As of 9/30/2023

- Cash position

Guidance for Adjusted operating expenses: targeting \$25-\$30M recurring expenses

- 1. Current run rate per quarter is based on adjusted operating expenses reported in the last four quarters.
- 2. Total expected operating expense run rate per quarter starting in Q1 2024 is \$47-\$54 million, including depreciation and amortization and stock-based compensation expense of \$22-24 million.



- ✓ Completion of Block 1 design and development
- ✓ Substantial completion of the ASIC design
- ✓ Partial completion of Block 2 design
- ✓ No material change in headcount





Appendix

Reconciliation to
non-GAAP
measures –
adj. operating
expenses

1. Stock-based compensation for the three months ended September 30, 2023, June 30, 2023, and September 30, 2022 consisted of \$1.5 million, \$4.5 million, and \$1.3 million of engineering services expense and \$1.1 million, \$1.0 million, and \$1.1 million of general and administrative costs, respectively.
2. Stock-based compensation for the nine months ended September 30, 2023 and 2022 consisted of \$7.4 million and \$3.5 million of engineering services expense and \$3.2 million and \$3.6 million of general and administrative costs, respectively.

Adj. operating expenses – 3 months ended

<i>(\$ in thousands)</i>	Sept 30, '23	June 30, '23	Sept 30, '22
Engineering services	19,523	22,813	14,492
General and administrative costs	10,995	10,221	12,916
Research and development costs	9,418	10,921	13,543
Depreciation and amortization	19,029	14,115	1,172
Total operating expenses	58,965	58,070	42,123
Less: Depreciation and amortization	(19,029)	(14,115)	(1,172)
Less: Stock-based compensation expense ¹	(2,589)	(5,532)	(2,399)
Total adj. operating expenses	37,347	38,423	38,552

Adj. operating expenses – 9 months ended

<i>(\$ in thousands)</i>	Sept 30, '23	Sept 30, '22
Engineering services	58,818	38,208
General and administrative costs	31,073	37,634
Research and development costs	36,721	30,969
Depreciation and amortization	34,877	3,457
Total operating expenses	161,489	109,998
Less: Depreciation and amortization	(34,877)	(3,457)
Less: Stock-based compensation expense ²	(10,595)	(7,093)
Total adj. operating expenses	116,017	99,448