Investor Update Call Presentation

July 31, 2025

Forward Looking Statements

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This slide presentation contains “forward-looking statements” and “forward-looking information” within the meaning of the Private Securities Litigation Reform Act of 1995. This information and these statements, which can be identified by the fact that they do not relate strictly to historical or current facts, are made as of the date of this presentation or as of the date of the effective date of information described in this presentation, as applicable. The forward-looking statements herein relate to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, using words or phrases such as “expects”, “anticipates”, “plans”, “projects”, “estimates”, “envisages”, “assumes”, “intends”, “strategy”, “goals”, “objectives” or variations thereof or stating that certain actions, events or results “may”, “can”, “could”, “would”, “might” or “will” be taken, occur or be achieved, or the negative of any of these terms and similar expressions) and include, without limitation, statements with respect to projected financial targets that the company is looking to achieve.

All forward-looking statements are based on current beliefs as well as various assumptions made by, and information currently available to the company’s management team. A more detailed description of the risks presented by those assumptions and other risks are more fully described by the company under the caption “Risk Factors” included in our SEC filings and other risks to which our company is subject, and various other factors beyond the company’s control.

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and risks exist that estimates, forecasts, projections and other forward-looking statements will not be achieved or that assumptions do not reflect future experience. We caution any person reviewing this presentation not to place undue reliance on these forward-looking statements as a number of important factors could cause the actual outcomes to differ materially from the beliefs, plans, objectives, expectations, anticipations, estimates assumptions and intentions expressed in such forward-looking statements.

The company does not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by company or on behalf of the company except as may be required by law.

Perkinamine® Reliability Breakthrough

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Successful passing of Telcordia GR-468 85/85 environmental stress test validates long-term reliability

1. **Sample Selection**
   - Thin-film devices with second-generation proprietary encapsulation barrier
2. **Stress Conditions**
   - 85 °C and 85 % relative humidity for 1,000 hours
     - **Industry standard rigorous conditions**
3. **Performance**
   - Change in absorbance measurements showed **only 1.6% average loss** after 1,000 hours
4. **Pass Rate**
   - More than 11 samples **exceeded Telcordia GR-468 requirements** by a wide margin

- ✓ *Confirmation that our EO polymer materials can **maintain performance** over time in harsh operating conditions*
- ✓ *Similarities with the **trajectory of Organic LEDs** before deployment in real-world applications*
- ✓ *Robust **protection against moisture and oxygen***
- ✓ *Significant breakthrough with **fourth-generation atomic layer deposition** (ALD) encapsulation material*

Proof of reliability is critical to convince customers to proceed in design win cycle

Commercial Impact & Next Steps

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Critical milestone for Stage 1 & 2 customers, preparing material for on-device reliability

1

Results have been shared with key customers

- Very positive reception and increasing industry's confidence on materials readiness

2

85/85 Success

- Demonstrates we can protect from oxygen/moisture even with second generation encapsulation addressing historical challenges of EO polymers

3

Fourth-generation atomic layer deposition (ALD) encapsulation for future requirements

- Oxygen transmission rate (OTR) of 1.4×10^{-6} g/m²/day-approaching the measurement limit of state-of-the-art OTR instrumentation
- This performance far exceeds the "gold-box" standard of 7×10^{-6} g/m²/day for lifetime reliability
- Preparing this fourth-generation encapsulation material for its next-release back-end-of-line (BEOL) Process Design Kit (PDK) for integration into silicon photonics foundries

4

Next step is to demonstrate reliability *on devices in partnership with customers*

- Focused on continuous improvement of materials, process and encapsulation

Focus on Execution & Planning for Production Scale

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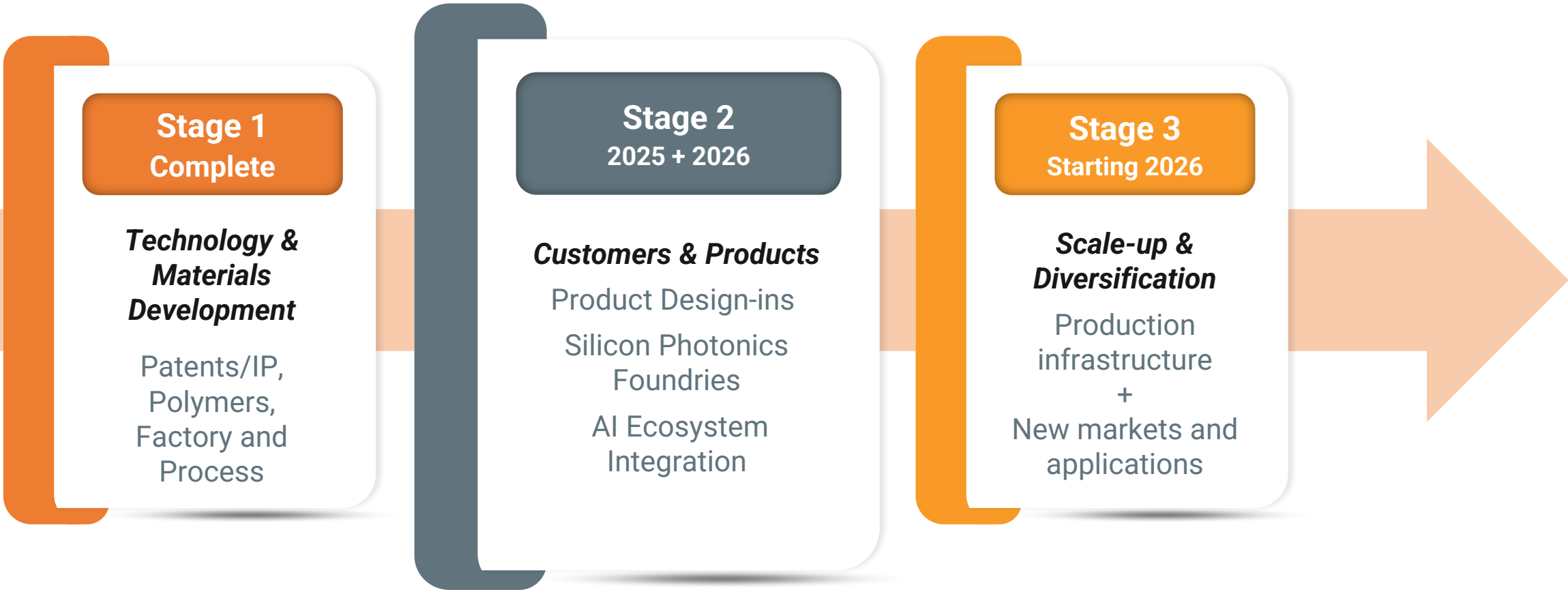
Seizing growth opportunities presented by AI market



The Emergence of CPO (Co-Packaged Optics)

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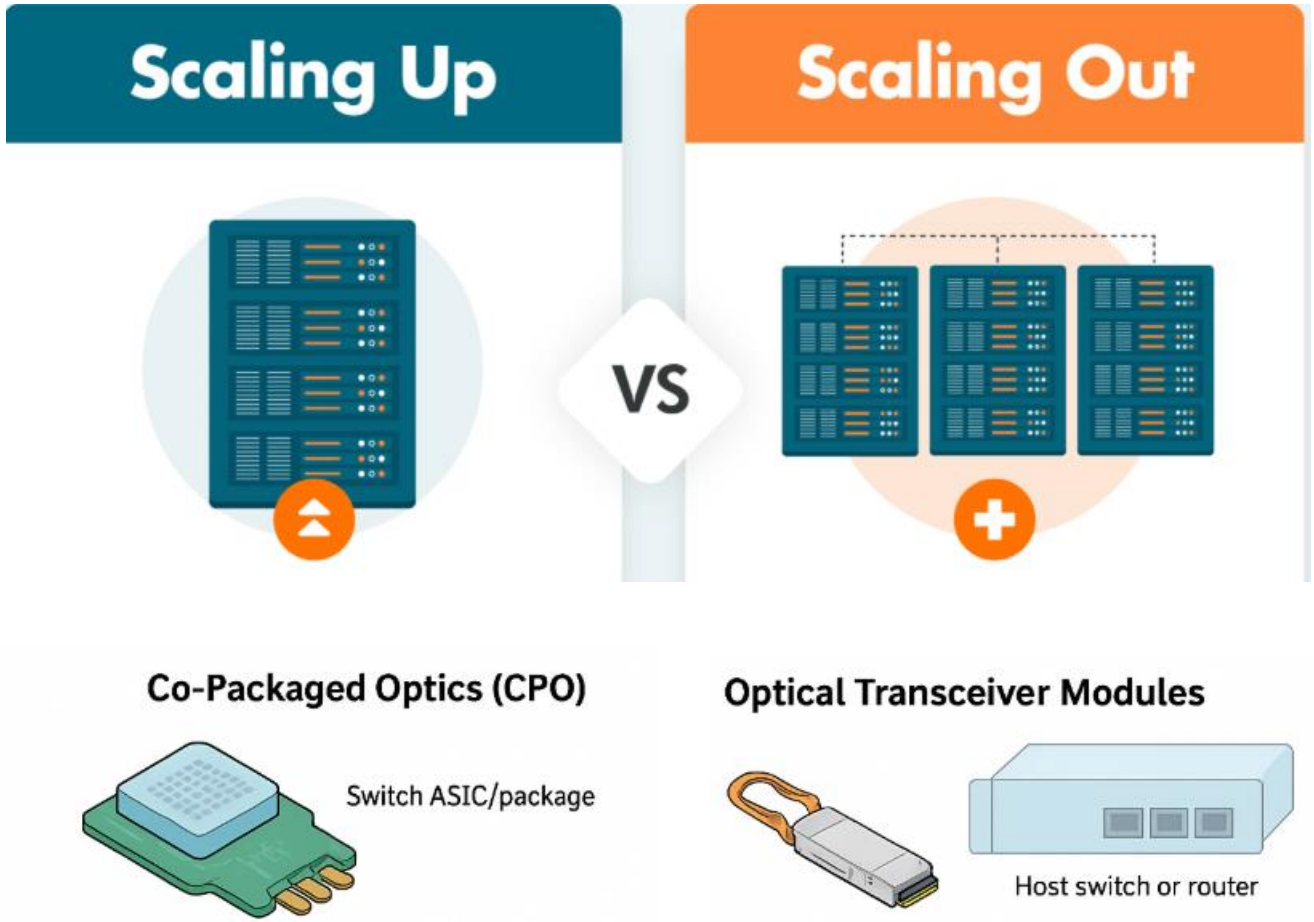
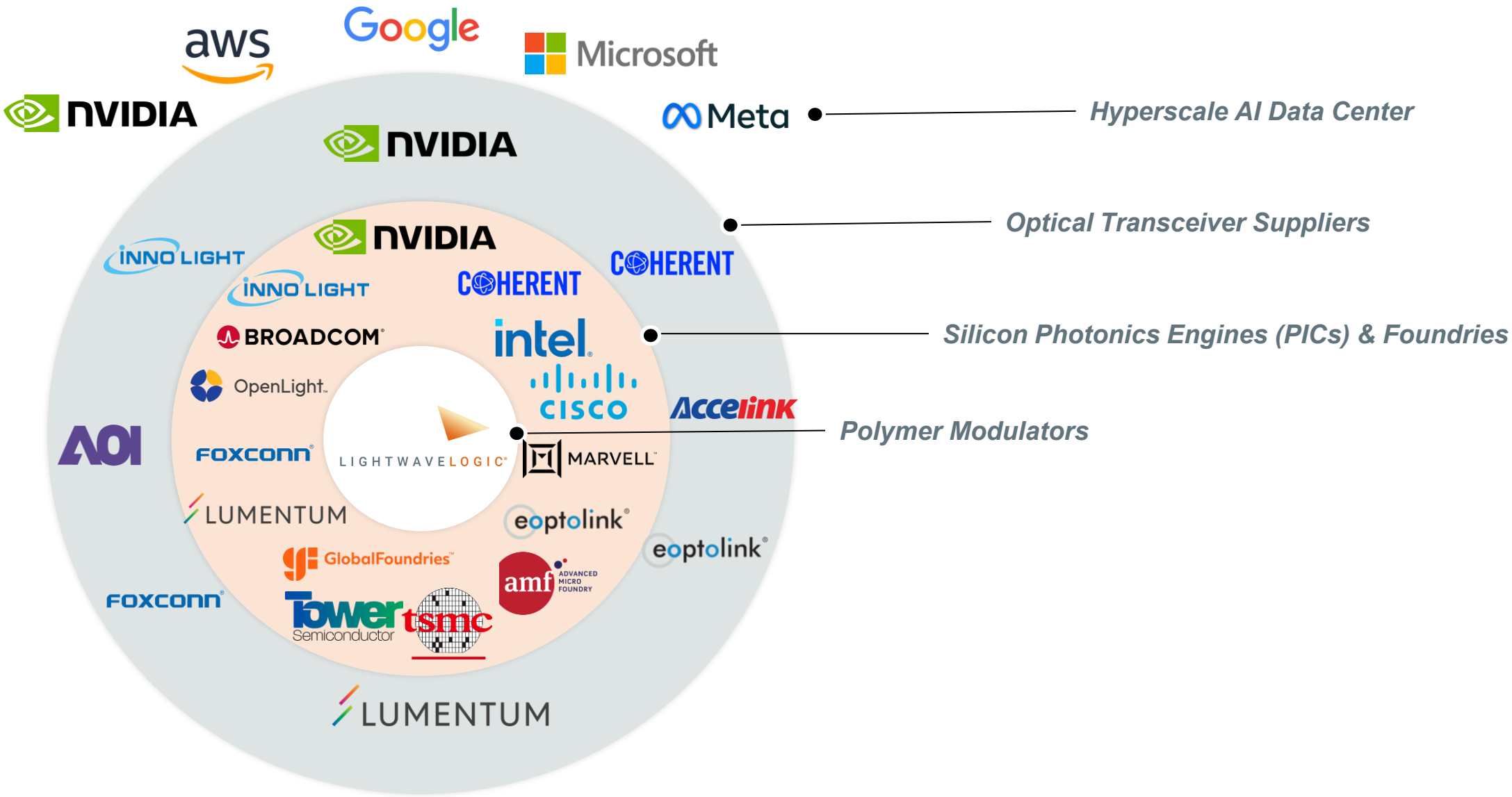


- New market emerging to replace very short electrical copper connections with optical links
- Requires high density ports (size becomes critical), high bandwidth (400G+), low power and ability to integrate with silicon chips

Excellent fit for Perkinamine®; future proof technology unlike legacy material alternatives

Source: LightCounting

Enabling AI Connectivity Ecosystem



Note: Companies represent examples of established entities per segment only.

Design Win Cycle

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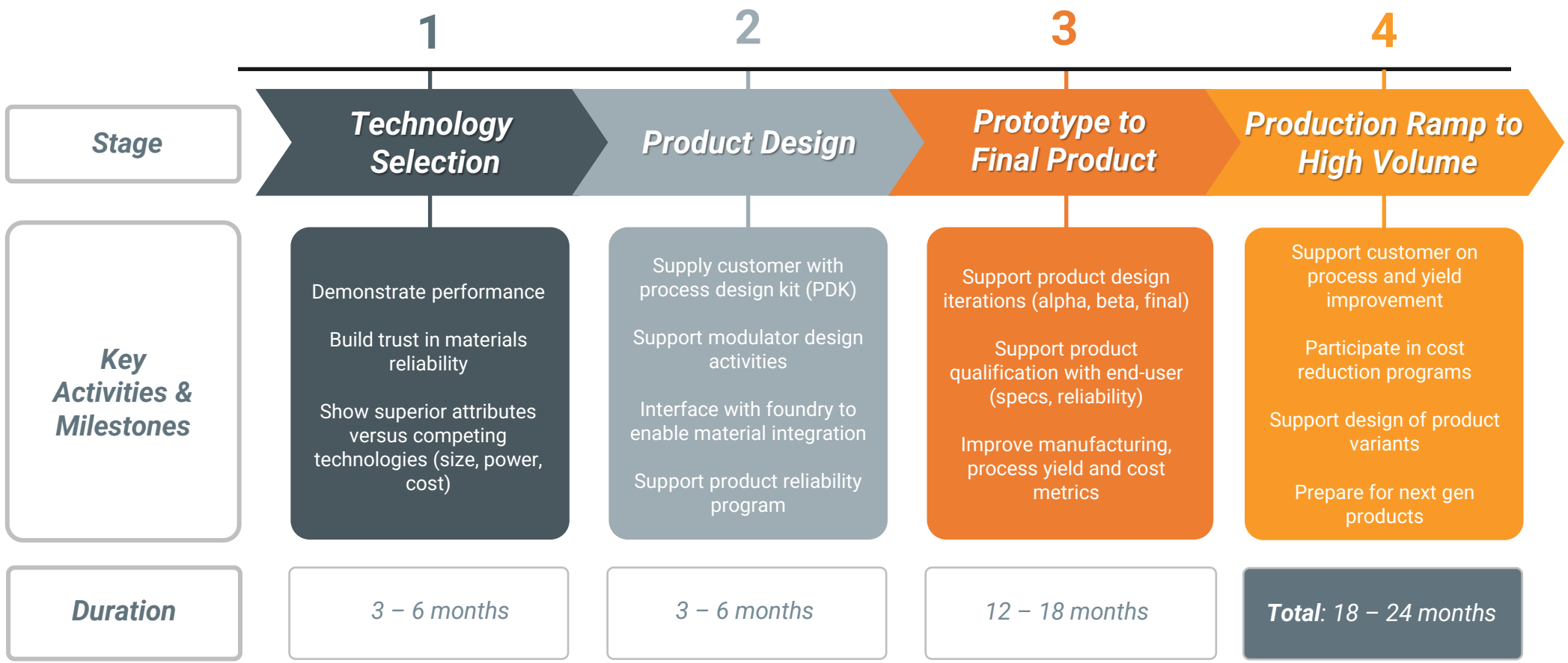

Reaffirming expectation to have 3-5 customers in Stage 3 by year-end 2025

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Q&A