

SOFTWARE & DIGITALIZATION



MAY 16, 2024
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RENESAS ELECTRONICS CORPORATION


VISION


**To make electronics design accessible to
broader market to allow more innovation**


by creating an Electronics System Design & Lifecycle Management platform
together with **Altium**

BETTER TOGETHER





 Components	<ul style="list-style-type: none">▪ Extensive MCU footprint and broadest product portfolio▪ 400+ winning combos
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 Complementary customer base	<ul style="list-style-type: none">▪ Engagement with enterprises▪ Skilled support workforce
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 Financial capacity	<ul style="list-style-type: none">▪ Scale for bolt-ons
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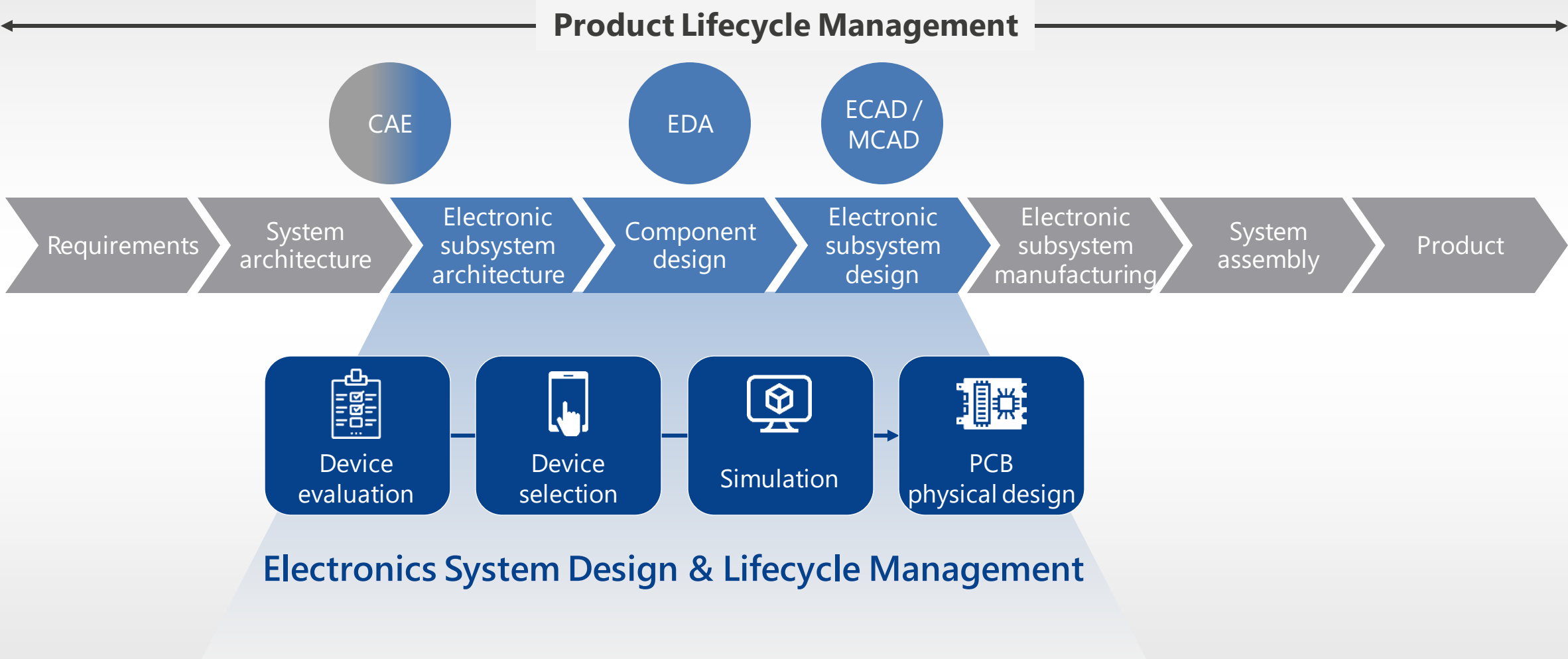


 Platform(s)	<ul style="list-style-type: none">▪ Leading collaboration platform▪ Leading parts search platform
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 Complementary customers	<ul style="list-style-type: none">▪ Most popular PCB software▪ Instantly usable functionalities
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 Digital expertise	<ul style="list-style-type: none">▪ 850+ headcount well versed in cloud and software technology
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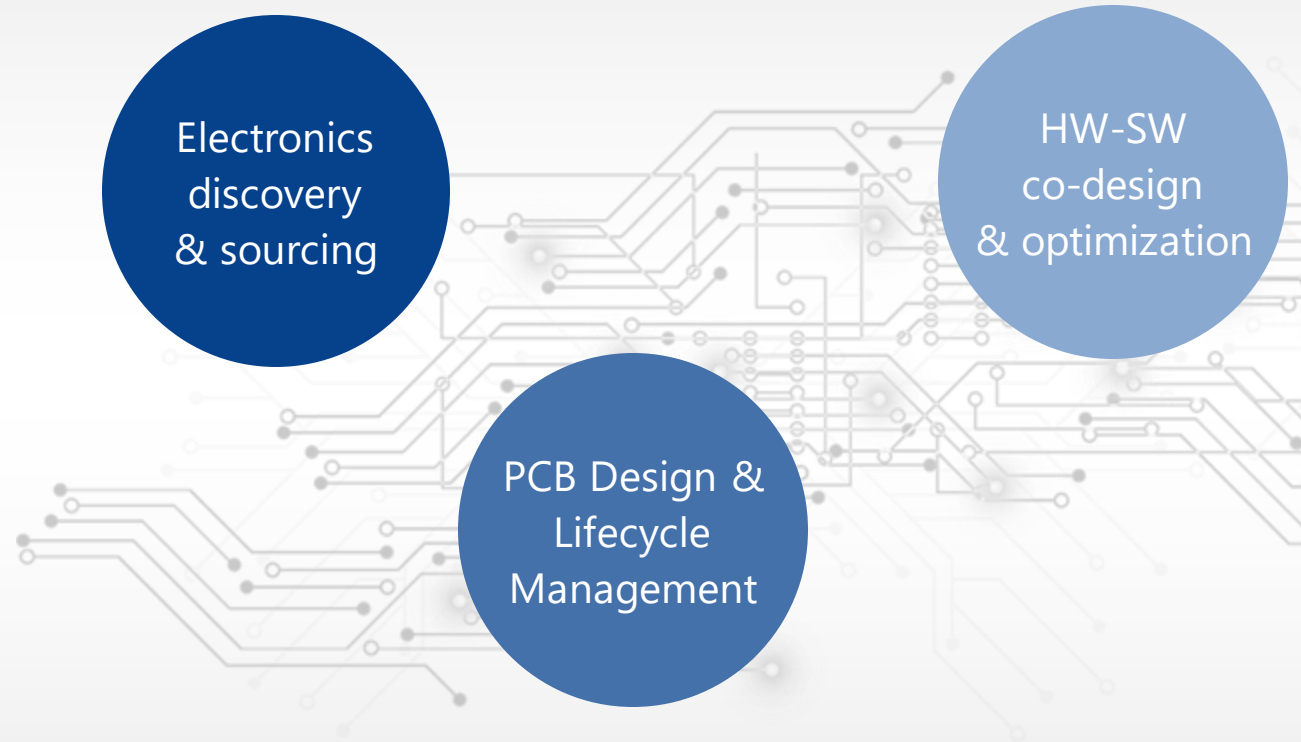
WHERE WE FIT



CAE: Computer Aided Engineering EDA: Electronic Design Automation ECAD: Electrical CAD MCAD: Mechanical CAD

CUSTOMER CHALLENGES IN ELECTRONICS

FRAGMENTED ECOSYSTEM OF DISCONNECTED ISLANDS



Challenges in the ecosystem



Growing design complexity



Disparate and disconnected solutions



Many flavors of cloud, security and lifecycle solutions

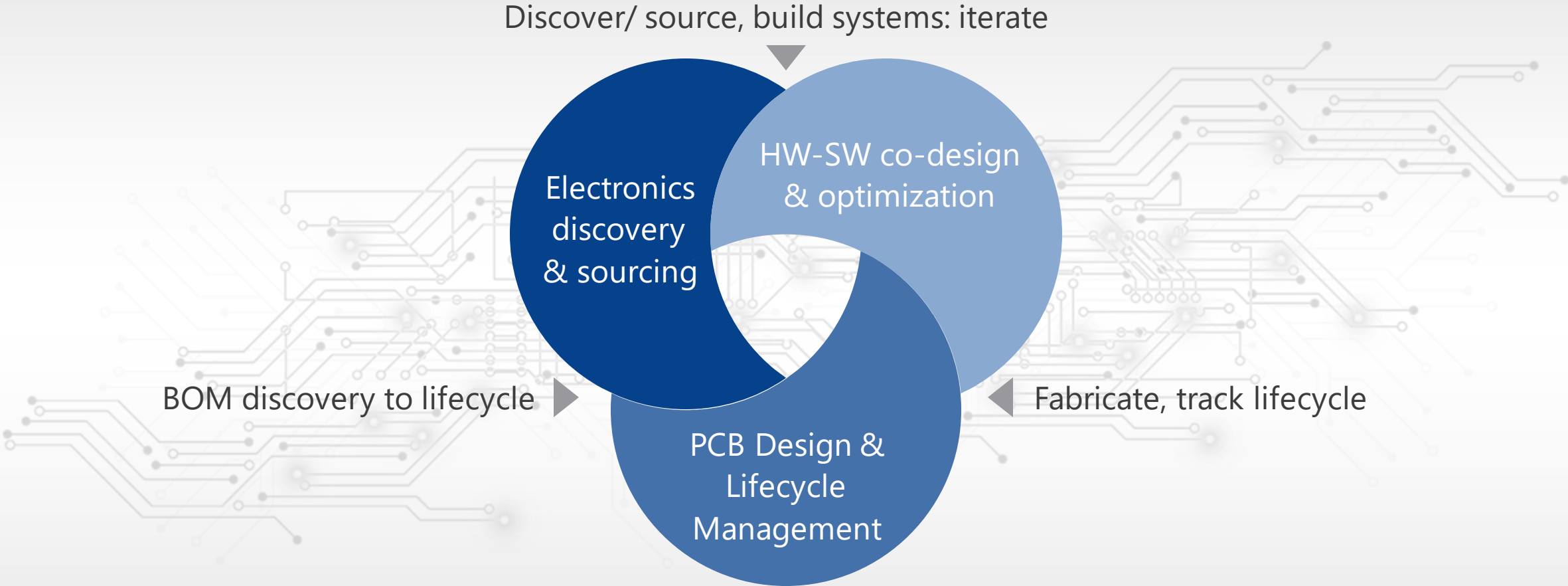


Time to market (TTM)

Need for an Integrated Discovery to Lifecycle Management solution to accelerate TTM and mitigate customer risk

THE SOLUTION: A CONNECTED DIGITALIZATION PLATFORM

ELECTRONICS SYSTEM DESIGN AND LIFECYCLE MANAGEMENT



Discover, Source, HW-SW Design, PCB and Lifecycle

ELECTRONICS SYSTEM DESIGN PLATFORM

ADDRESSING THE MAIN CHALLENGES



Integrated Digitalization Platform



Software

- Integrated SDK, tested for specific customer use case
- ~75% of customer required embedded SW



Design

- Assess IP options before finalizing design
- Simulate before building final board



Simulate/Emulate

- Iterative simulations to support HW & SW choices
- System simulations before finalizing HW & SW decisions



Ease of use



Accelerate development time



Minimize risk and costly iterations



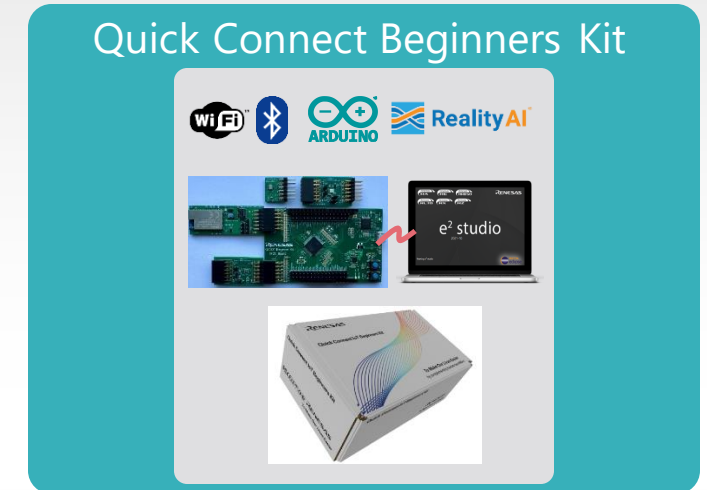
Low barrier to development

WHERE WE ARE TODAY | QUICK CONNECT STUDIO

ACCELERATING ELECTRONICS SYSTEM DESIGN

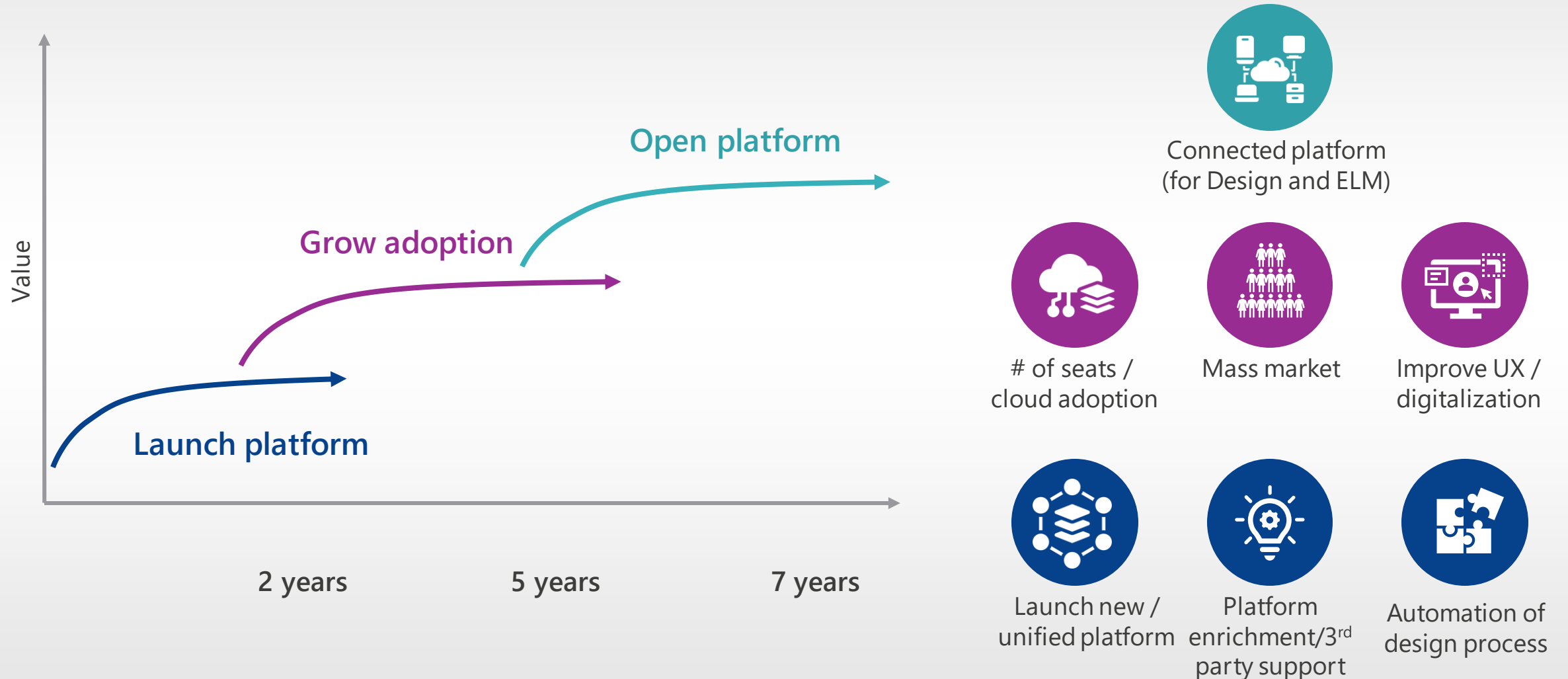
Drag & drop system design	Cloud based graphical configuration of HW blocks
Low code SW	Automated software generation & customization
Build & iterate	Iterate, debug in digital platform before physical board
Remote debug	Test system & SW on configurable remote board farms
Partner devices	Expanding portfolio of Renesas and partner devices

**Cloud based integrated platform
for accelerating electronics system design**



GOALS AND KPIs

MAKING ELECTRONICS DESIGN ACCESSIBLE TO BROADER MARKET TO ALLOW MORE INNOVATION





THANK YOU

(FORWARD-LOOKING STATEMENTS)

The statements in this presentation with respect to the plans, strategies and forecasts of Renesas Electronics and its consolidated subsidiaries (collectively "we") are forward-looking statements involving risks and uncertainties. Such forward looking statements do not represent any guarantee by management of future performance. In many cases, but not all, we use such words as "aim," "anticipate," "believe," "continue," "endeavor," "estimate," "expect," "initiative," "intend," "may," "plan," "potential," "probability," "project," "risk," "seek," "should," "strive," "target," "will" and similar expressions to identify forward looking statements. You can also identify forward-looking statements by discussions of strategy, plans or intentions. These statements discuss future expectations, identify strategies, contain projections of our results of operations or financial condition, or state other forward-looking information based on our current expectations, assumptions, estimates and projections about our business and industry, our future business strategies and the environment in which we will operate in the future. Known and unknown risks, uncertainties and other factors could cause our actual results, performance or achievements to differ materially from those contained or implied in any forward-looking statement, including, but not limited to: general economic conditions in our markets, which are primarily Japan, North America, Asia and Europe; demand for, and competitive pricing pressure on, our products and services in the marketplace; our ability to continue to win acceptance of its products and services in these highly competitive markets; and movements in currency exchange rates, particularly the rate between the yen and the U.S. dollar. Among other factors, a worsening of the world economy, a worsening of financial conditions in the world markets, and a deterioration in the domestic and overseas stock markets, would cause actual results to differ from the projected results forecast.

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