CHALLENGES AND OPPORTUNITIES FOR RISC V

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Market for RISC V is growing rapidly!

Total market for RISC V IP and Software is expected to reach $1.07 billion by 2025 at a CAGR of 54.1%

Source: Tractica
• Open Source and generous licensing terms
• Evolving algorithms and applications
• Increased need for processors per SoC
• Need to differentiate
• Support from key industry players
Key challenges

• The ARM wall
  – RISC V as a secondary processor
• Ecosystem
• Switching costs
• Availability of expertise
Who is buying

<table>
<thead>
<tr>
<th>Vertical</th>
<th>Volume</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage</td>
<td>Medium</td>
<td>Storage is being driven by Western Digital, which plans to incorporate RISC-V in each of its chipsets.</td>
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<tr>
<td>Communications</td>
<td>Medium</td>
<td>RISC-V tends to be attractive for areas that are emerging and evolving and is seeing traction in 5G, which is also evolving.</td>
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<tr>
<td>Computers</td>
<td>Medium</td>
<td>NVIDIA is already shipping RISC-V in a graphics processing unit (GPU) SoCs.</td>
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<td>AI</td>
<td>High</td>
<td>Due to its extendibility and low power, RISC-V is being used on the edge by many startups and enterprises.</td>
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<tr>
<td>Internet of Things (IoT)</td>
<td>High</td>
<td>The most prominent player shipping in this market is Huami (Xiaomi’s brand name for wearables).</td>
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<tr>
<td>Other</td>
<td>Unknown</td>
<td>There are many other markets, such as automotive, where RISC-V is being used, but no clear trends have emerged just yet.</td>
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Road forward

• RISC V as a secondary processor
  – Rapid volume increase 2020 onwards (82% CAGR vs 52%)

• Market growth depends on consumer’s willingness to pay
  – Linux like business model
  – Average licensing and royalty

• Exciting times ahead
  – IP market dynamics
  – Ecosystem, standardization and corporate support will be crucial
Questions and answers

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