Technology trends that will redefine all industries

- Artificial Intelligence in every device
- Autonomous machines
- Augmented reality
- Hyperscale cloud and connectivity

Security and Privacy
Arm defines the technology that will redefine all industries

<table>
<thead>
<tr>
<th>Artificial Intelligence in every device</th>
<th>Mobile and Consumer</th>
<th>Networking and Servers</th>
<th>Automotive and Robotics</th>
<th>Internet of Things</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checking mark</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Autonomous machines</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Augmented reality</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>Hyperscale cloud and connectivity</td>
<td>✓</td>
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<tr>
<td>Security and Privacy</td>
<td>✓</td>
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</tbody>
</table>
Arm introduction

- Global leader in technology licensing
  - R&D outsourcing for semiconductor companies
- Innovative business model
  - Upfront licence fee – flexible licensing models
  - Ongoing royalties on customer sales
  - Technology can be reused across multiple applications
- Long-term, secular growth markets
Arm’s business model

- Arm develops technology that is licensed to semiconductor companies
- Arm receives an upfront license fee and a royalty on every chip that contains its technology
Arm’s strategy

• Maintain or gain share in long-term growth markets
  • From mobile phones to networking infrastructure and servers to embedded smart devices and automotive

• Increase value of Arm technology per smart device
  • Invest in developing more advanced processors with higher royalty rates
  • Physical IP and multimedia IP further increase Arm’s value per chip

• Explore and exploit new opportunities in emerging applications such as machine learning

• Invest to create a sustainable business, fit for the long term
  • Create superior returns by developing new technology that will deliver increased profits and cash generation in the future
Arm’s main growth markets

<table>
<thead>
<tr>
<th>Mobile and Consumer</th>
<th>Networking &amp; Servers</th>
<th>Embedded Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>$89bn TAM 2029</td>
<td>$67bn TAM 2029</td>
<td>$76bn TAM 2029</td>
</tr>
<tr>
<td>- Smartphones, tablets and laptops</td>
<td>- Base stations, routers, switches, and servers for cloud and data centres</td>
<td>- Automotive, white.goods, wearables, smart devices in industrial and utilities</td>
</tr>
<tr>
<td>- Apps processor, modem, connectivity,</td>
<td>- Networks evolve to cope with increased data at lower latency: virtualisation,</td>
<td>- Microcontrollers, smartcards, embedded connectivity chips</td>
</tr>
<tr>
<td>touchscreen and image sensors</td>
<td>integration and programmability</td>
<td>- Over 300 companies have licenced Arm processors for use in embedded computing</td>
</tr>
<tr>
<td>- Growth coming from higher-value Arm</td>
<td>- Most major chip vendors have announced Arm-based products</td>
<td>devices</td>
</tr>
<tr>
<td>technology such as Arm v8-A, more</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cores per chip, multimedia</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
History of Arm

Joint venture between Acorn Computers and Apple

1990

Designed into first mobile phones and then smartphones

1993 onwards

Now all electronic devices can use smart Arm technology

Today
Arm-based chip shipments

~184bn

Arm-based chips shipped to date

34%

Market share in 2019

~184bn

Market share in 2019

~184bn

Calendar Years 1991 2019

Arm-based chips shipped (billions)
Licensing enables future royalties

- Arm signed 141 processor licences YTD in 2020
- Arm’s current royalty revenues are derived from licences signed many years ago
- Growing base yields royalty revenues over long period

>30% of Arm’s most recent licences are drivers of future royalty revenue

Significant Royalty Potential from Recent Licences

~600 licences signed since Q1 2016
Arm’s expanding opportunity

<table>
<thead>
<tr>
<th>Market Share</th>
<th>Market Value</th>
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</thead>
<tbody>
<tr>
<td>90%</td>
<td>$41bn</td>
</tr>
<tr>
<td>40%</td>
<td>$10bn</td>
</tr>
<tr>
<td>32%</td>
<td>$17bn</td>
</tr>
<tr>
<td>5%</td>
<td>$20bn</td>
</tr>
<tr>
<td>75%</td>
<td>$3bn</td>
</tr>
<tr>
<td>10%</td>
<td>$7bn</td>
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</tbody>
</table>

**2029**

<table>
<thead>
<tr>
<th>Market Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$43bn</td>
</tr>
<tr>
<td>$13bn</td>
</tr>
<tr>
<td>$36bn</td>
</tr>
<tr>
<td>$32bn</td>
</tr>
<tr>
<td>$12bn</td>
</tr>
<tr>
<td>$10bn</td>
</tr>
</tbody>
</table>

**Other mobile chips**

**Applications processor**

**Mobile**

**Infrastructure**

**Networking**

**Data Center/Cloud**

**Automotive**

**IVI and ADAS**

**Other automotive chips**
## Arm’s expanding opportunity

### Embedded
- Controller in IoT Devices
  - Market Share: 90%
  - Market Value: $4bn
- Microcontrollers/SIM Cards
  - Market Share: 25%
  - Market Value: $10bn

### Other Markets
- Consumer Electronics
  - Market Share: 42%
  - Market Value: $15bn
- Other chips
  - Market Share: 38%
  - Market Value: $11bn

### Total Market
- All chips with processors
  - Market Share: 34%
  - Market Value: $138bn

<table>
<thead>
<tr>
<th></th>
<th>2019 Market Share</th>
<th>2019 Market Value</th>
<th>2029 Market Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controller in IoT Devices</td>
<td>90%</td>
<td>$4bn</td>
<td>$16bn</td>
</tr>
<tr>
<td>Microcontrollers/SIM Cards</td>
<td>25%</td>
<td>$10bn</td>
<td>$15bn</td>
</tr>
<tr>
<td>Consumer Electronics</td>
<td>42%</td>
<td>$15bn</td>
<td>$33bn</td>
</tr>
<tr>
<td>Other chips</td>
<td>38%</td>
<td>$11bn</td>
<td>$23bn</td>
</tr>
<tr>
<td>All chips with processors</td>
<td>34%</td>
<td>$138bn</td>
<td>$232bn</td>
</tr>
</tbody>
</table>
Arm's current business

Arm primary business is the development of intellectual property (IP) blocks which are used in silicon chips.

Our partners combine Arm IP with their own IP to create complete chip designs.

We earn license fees when we deliver Arm IP to our partners and royalties when our partners ship chips that contain Arm IP.

Highly profitable and cash generative enabling Arm to reinvest into new products.
Return on Investments – Arm v8-A case study

- Arm incurs R&D costs many years before revenue starts

- Research into 64-bit computing started in 2000

- Arm v8-A development starts

- First generation of processors

- Multiple processors in development
Revenues, investments and profits

- Until 2016 revenues grew faster than costs as Arm constrained investment in R&D to enable increasing profits.
- For FY2017 to FY2018 Arm grew investment faster than revenues.
- From FY2019 Arm is matching investment to revenue growth and expects revenue to grow faster than investments in the future leading to greater profitability.
Arm Investor Relations Contact

<table>
<thead>
<tr>
<th>Contact</th>
<th>Title</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ian Thornton</td>
<td>Head of Investor Relations</td>
<td>+44 776 885 6503</td>
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<tr>
<td></td>
<td></td>
<td><a href="mailto:ian.thornton@arm.com">ian.thornton@arm.com</a></td>
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</table>

More content available on

- Arm’s website: arm.com
- SoftBank Group’s website: group.softbank/en/ir