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>Feature</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>Artificial Intelligence in every device</td>
<td>✔️</td>
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<tr>
<td>Autonomous machines</td>
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<td>Security and Privacy</td>
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</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 created by the Internet of Things

• 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

Mobile and Consumer

- Smartphones, tablets and laptops
- Apps processor, modem, connectivity, touchscreen and image sensors
- Growth coming from higher-value Arm technology such as Arm v8-A, more cores per chip, multimedia

$89bn
TAM 2029

Networking & Servers

- Base stations, routers, switches, and servers for cloud and data centres
- Networks evolve to cope with increased data at lower latency: virtualisation, integration and programmability
- Most major chip vendors have announced Arm-based products

$67bn
TAM 2029

Embedded Markets

- Automotive, white-goods, wearables, smart devices in industrial and utilities
- Microcontrollers, smartcards, embedded connectivity chips
- Over 300 companies have licenced Arm processors for use in embedded computing devices

$76bn
TAM 2029
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

≈172bn
Arm-based chips shipped to date

34%
Market share in 2019

Calendar Years 2019
Licensing enables future royalties

- Arm signed 42 processor licences in Q1 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

~700 licences signed since Q1 2015
## Arm’s expanding opportunity

<table>
<thead>
<tr>
<th>Segment</th>
<th>Market Share</th>
<th>2019 Market Value</th>
<th>2029 Market Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mobile</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applications processor</td>
<td>90%</td>
<td>$41bn</td>
<td>$43bn</td>
</tr>
<tr>
<td>Other mobile chips</td>
<td>40%</td>
<td>$10bn</td>
<td>$13bn</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Networking</td>
<td>32%</td>
<td>$17bn</td>
<td>$36bn</td>
</tr>
<tr>
<td>Data Center/Cloud</td>
<td>5%</td>
<td>$20bn</td>
<td>$32bn</td>
</tr>
<tr>
<td><strong>Automotive</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IVI and ADAS</td>
<td>75%</td>
<td>$3bn</td>
<td>$12bn</td>
</tr>
<tr>
<td>Other automotive chips</td>
<td>10%</td>
<td>$7bn</td>
<td>$10bn</td>
</tr>
</tbody>
</table>

- **2019:** $30bn in Market Value, $20bn in Market Share
- **2029:** $43bn in Market Value, $36bn in Market Share
Arm’s expanding opportunity

<table>
<thead>
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<th>Market</th>
<th>2019 Market Share</th>
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<th>2029 Market Value</th>
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<tr>
<td>Embedded</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microcontrollers/SIM Cards</td>
<td>25%</td>
<td>$10bn</td>
<td>$15bn</td>
</tr>
<tr>
<td>Controller in IoT Devices</td>
<td>90%</td>
<td>$4bn</td>
<td>$16bn</td>
</tr>
<tr>
<td>Other Markets</td>
<td></td>
<td></td>
<td></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>Total Market</td>
<td>34%</td>
<td>$138bn</td>
<td>$232bn</td>
</tr>
</tbody>
</table>

- **Controller in IoT Devices**
  - Market Share: 90%
  - Market Value in 2019: $4bn
  - Market Value in 2029: $16bn

- **Microcontrollers/SIM Cards**
  - Market Share: 25%
  - Market Value in 2019: $10bn
  - Market Value in 2029: $15bn

- **Consumer Electronics**
  - Market Share: 42%
  - Market Value in 2019: $15bn
  - Market Value in 2029: $33bn

- **Other chips**
  - Market Share: 38%
  - Market Value in 2019: $11bn
  - Market Value in 2029: $23bn

- **All chips with processors**
  - Market Share: 34%
  - Market Value in 2019: $138bn
  - Market Value in 2029: $232bn
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.
Accelerating investment to increase share gains

Generating profits and cash to be reinvested

Investing in new processor technology
- Machine learning processors
- Computer vision
- Augmented reality
- Platform security

Investing in new IoT software and services
- Device Management
- Connectivity as a Service
- Data Management as a Service
- Pelion platform
Pelion – Combining physical and digital insights

Simplifying deployment and enabling scale
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

Architecture development and processor design

First generation of processors

Multiple processors in development

• Until 2016 revenues grew faster than costs as Arm constrained investment in R&D to enable increasing profits

• For the current phase of investment Arm expects costs to grow faster than revenues

• This should yield even greater profits in the future

• Note: Headcount since Fiscal 2018 excludes employees transferred to Arm China Joint Venture (341 employees as of June 2018).
Arm Investor Relations Contact

<table>
<thead>
<tr>
<th>Contact</th>
<th>Title</th>
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</table>
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More content available on

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