Arm Limited
Q4 2018 Roadshow Slides

Arm Limited is a subsidiary of SoftBank
Technology trends that will redefine all industries

- Artificial Intelligence in every device
- Autonomous machines
- Augmented reality
- Hyperscale cloud and connectivity
Arm defines the technology that will redefine all industries

<table>
<thead>
<tr>
<th></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>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Autonomous machines</td>
<td>✓</td>
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<tr>
<td>Augmented reality</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 partner sales
- Technology reused across multiple applications

Long-term, secular growth markets

>1,650 licences
Growing by >100 every year
>525 potential royalty payers

23 bn Arm-based chips shipped in 2018
~15% CAGR over previous 5 years

>525 potential royalty payers
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 Devices**
- Smartphones, tablets and laptops
- Apps processor, modem, connectivity, touchscreen and image sensors
- Growth coming from higher-value Arm technology such as Arm v8-A, octa core, multimedia

**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

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

$108bn TAM 2028
$48bn TAM 2028
$94bn TAM 2028
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
Smart devices contain many Arm processors

**Applications Processor** chips can contain multiple Arm technologies
- Arm v8-A processor for OS and apps
- Cortex-R controller for modem
- Cortex-M controllers for peripherals
- Arm Mali multimedia processors: GPU, video, display, camera, etc.
- Arm physical IP

When new functions are added to smartphones it creates opportunity for new Arm IP.
From revenue to profits

<table>
<thead>
<tr>
<th>FY 2018 Revenues</th>
<th>$m</th>
<th>%revs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensing</td>
<td>547</td>
<td>30%</td>
</tr>
<tr>
<td>Royalty</td>
<td>1,098</td>
<td>60%</td>
</tr>
<tr>
<td>Software and Services</td>
<td>191</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,836</td>
<td>100%</td>
</tr>
</tbody>
</table>

| Costs ($m)       | 1,557|        |
| Adjusted EBITDA ($m) | 279|        |
| Operating Margin | 15%  |        |
| Other expenses ($m) | (1,442)|    |
| IFRS EBIT ($m)   | 1,721|        |

License and royalty revenues similar to prior year reflecting weakness in industry

Software and services growing >50% following two acquisitions in mid-2018

Cost increase as Arm accelerates investment in R&D for future product developments

10% move in $/£ impacts profits by ~15% (forex impacts £ revenues and costs)

Operating margins will be lower than in recent periods as investments grow faster than revenues

Includes sale of 51% stake in Arm China
Excludes amortisation of intangibles related to the acquisition of Arm by SoftBank

Financial numbers aligned with SoftBank reporting periods (01 April 2018 to 31 March 2019)
# Qtr. ending Mar. 2019 – Financial summary

<table>
<thead>
<tr>
<th>Revenues ($m)</th>
<th>Q4 2017</th>
<th>Q4 2018</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensing</td>
<td>156</td>
<td>213</td>
<td>37%</td>
</tr>
<tr>
<td>Royalty</td>
<td>269</td>
<td>247</td>
<td>-8%</td>
</tr>
<tr>
<td>Software and Services</td>
<td>36</td>
<td>53</td>
<td>47%</td>
</tr>
<tr>
<td>Total ($m)</td>
<td>461</td>
<td>513</td>
<td>11%</td>
</tr>
</tbody>
</table>

| COGS ($m)             | 32      | 28      | -13%   |
| R&D ($m)              | 163     | 186     | 14%    |
| SG&A ($m)             | 160     | 175     | 9%     |
| Costs ($m)            | 355     | 389     | 10%    |
| Adjusted EBITDA ($m)  | 106     | 124     | 17%    |
| Depreciation & amortisation ($m) | 25 | 32 | 28% |
| Other operating expenses ($m) | 48 | 9 | -82% |
| IFRS EBIT ($m)        | 33      | 83      | 152%   |

Licensing can fluctuate quarter to quarter. In Q4, Arm delivered a major new processor triggering a revenue recognition event.

Royalty revenue growth declined, consistent with weakness in wider industry.

Includes $16m from recent acquisitions of Treasure Data and Stream Technologies.

Arm is continuing to increase investment in R&D capacity.
## Arm’s expanding opportunity

<table>
<thead>
<tr>
<th>Segment</th>
<th>2018</th>
<th>2028</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market Share</strong></td>
<td><strong>Market Value</strong></td>
<td><strong>Market Value</strong></td>
</tr>
<tr>
<td><strong>Mobile</strong></td>
<td></td>
<td></td>
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<tr>
<td>Applications processor</td>
<td>90%</td>
<td>$34bn</td>
</tr>
<tr>
<td>Other mobile chips</td>
<td>40%</td>
<td>$18bn</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td></td>
<td></td>
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<tr>
<td>Networking</td>
<td>30%</td>
<td>$15bn</td>
</tr>
<tr>
<td>Data Center/Cloud</td>
<td>4%</td>
<td>$20bn</td>
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<tr>
<td><strong>Automotive</strong></td>
<td></td>
<td></td>
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<tr>
<td>IVI and ADAS</td>
<td>75%</td>
<td>$7bn</td>
</tr>
<tr>
<td>Other automotive chips</td>
<td>10%</td>
<td>$5bn</td>
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<th>Other mobile chips</th>
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<th>Data Center/Cloud</th>
<th>IVI and ADAS</th>
<th>Other automotive chips</th>
<th>Total Market Share</th>
<th>Total Market Value</th>
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*Market Share and Market Value projections for 2028 are based on current trends and market growth projections.*

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## Arm’s expanding opportunity

### Embedded
- Controller in IoT Devices: 90% market share, $7bn value, $20bn in 2026.
- Microcontrollers/SIM Cards: 25% market share, $18bn value, $22bn in 2026.

### Other Markets
- Consumer Electronics: 40% market share, $12bn value, $37bn in 2026.
- Other chips: 35% market share, $15bn value, $21bn in 2026.

### Total Market
- All chips with processors (current TAM): 33% market share, $150bn value, $250bn in 2026.
- All addressable chips (future TAM): 25% market share, $165bn value, $300bn in 2026.
Arm's current business

Arm develops **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

Investing to create new revenue streams

- Arm Pelion IoT Platform SaaS business
- Early-stage investment but many years in research
- Securely connect and manage any device, using any communications technology, supporting any cloud platform
  - Device Management: secure device identification, on-boarding and configuring
  - Connectivity Management: manage IoT networks using standard-based comms
  - Data Management: Ingestion and aggregation of data

Arm Pelion Partners

Generating profits and cash to be reinvested
Pelion IoT Platform Overview

**Pelion IoT Platform**

**Data Management Services**
- Ingest
- Integrate
- Store
- Prepare

**Device Management Services**
- Identity
- Access Mgt.
- Lifecycle Mgt.

**Connectivity Management**
- SIM Mgt.
- Network Orchestration
- Service Quality

**One View of Data**
**Unified operational view**
**One View of Devices**
**Unified Security Model**
**One View of Networks**
**Unified Identity**

**Business Systems**
- Marketing
- Visualization
- Business Intelligence
- Energy Management
- Workflow SaaS
- Email
- Analytics
- Industrial Automation
- Machine Learning
- Partner and Customer Applications
  - Marketing
  - Asset Visibility
  - Energy Management
  - In-home Patient Care
  - Smart Lighting

**Deployment diversity**
**Simplification for faster time to value**
**Business value creation**

**Partner and Customer Applications**
- Marketing
- Asset Visibility
- Energy Management
- Workflow SaaS
- Email
- Analytics
- Industrial Automation
- Machine Learning
- Partner and Customer Applications

**Business Systems**
- Marketing
- Visualization
- Business Intelligence
- Energy Management
- Workflow SaaS
- Email
- Analytics
- Industrial Automation
- Machine Learning
- Business value creation

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How Arm makes money from IoT Devices
Semiconductor technology

Arm Integrated SIM technology
(Arm iSIM)

2x Arm Cortex-M3
How Arm makes money from IoT Services
Connectivity, Device and Data Management

Data collected from IoT devices

Control of IoT devices

Other data sources

Recurring Device and Data Management Fees

Control of devices

Data from devices

OEM
 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 in 2018 excludes 341 employees transferred to Arm China Joint Venture in June. By the end of Fiscal 2018, Arm China had 439 employees.
Investment philosophy

“Now is the time to be sowing, not harvesting”

- Rate of investment is discretionary and under Arm's control
- SoftBank has asked Arm to accelerate investments and to increase risk appetite
- All costs are expected to be financed from IP business’ revenue streams
- During this accelerated investment phase, costs are expected to grow faster than revenues

Arm has $1.4bn of net cash and no debt
Cash balance maintained as sale of Arm’s stake in the Arm China Joint Venture was balanced with the acquisition of Treasure Data Inc. and Stream Technologies Ltd.
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

Return on Investments – General case

Arm incurs R&D costs many years before revenue starts

Research into 64-bit computing started in 2000

- New technology development starts
- Initial development phase
- New technology announced
- First technology agreements
- Investment ramps
- Technology delivery
- Recurring revenue starts
- New technology development starts
- Initial development phase

Revenue continues for many years after the investment phase, yielding high profits over time
Investing in people, infrastructure to create new products

Costs are higher in 2018 as Arm expands R&D capability

Cost increases are expected to be consistent with increases in headcount

<table>
<thead>
<tr>
<th>Q4 2017 Costs</th>
<th>2% increase in headcount</th>
<th>Increased IT, facilities and other investments</th>
<th>Annual Bonus Accrual</th>
<th>Impact of stronger dollar</th>
<th>Q4 2018 Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$355m</td>
<td>$7m</td>
<td>$33m</td>
<td>$8m</td>
<td>($1m)</td>
<td>$389m</td>
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</table>
Arm Investor Relations Contact

<table>
<thead>
<tr>
<th>Contact</th>
<th>Title</th>
<th>Contact</th>
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<tbody>
<tr>
<td>Ian Thornton</td>
<td>Head of Investor Relations</td>
<td>+44 1223 400796 <a href="mailto:ian.thornton@arm.com">ian.thornton@arm.com</a></td>
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</tbody>
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More content available on

- Arm’s website:  [arm.com/ir](http://arm.com/ir)