Imperial College London and HP: Approved Range of Devices 2018

“help IT and the business align better to achieve strategic goals”
Table of Contents:

• Smart Worker
• Desktop (Fixed Location) Worker
• EliteDesk 800 Series Desktop / Desktop Mini/ AIO (All-In-One)
• ProBook 400 G5 Series
• EliteBook 800 G5 Series
• EliteBook x360 Series
• Elite x2 1013 Series
• Z Desktop Workstation Series
• Z Book X2 Mobile Workstation Series (Z4, Z6 and Z8)
• Elite Displays E-Series
• USB-Type C Series Docks & Pens
ICT Approved Range of Devices

THE WORLD'S MOST SECURE & MANAGEABLE PCs

EliteBook 840 G5
1013 G3, ProBook 430
and 450 G5 range

EliteBook x360

Elite Desk 800 G3
range including SFF,
DM, AIO (all-in-one) devices

HP Manageability Integration Kit
HP Sure View Integrated Privacy Screen

HP ELITE PCs WITH INTEL® 7 & 8TH GENERATION PROCESSORS
Smart Workers:

1. Majority of work is carried out in common facilities (e.g. meeting rooms, open shared spaces)
2. No dedicated office space and/or Smart/Flexible Worker/Desk Sharing
3. Typically a regular traveller – spends majority of time with customers / clients / meetings
4. Typically a great user of mobile technology – has mobile access to network.
5. Over 60% of time is spent in the common facility.

ICT and HP offer agile workers 4 choices in regard to Form Factor, supporting both Mainstream (Administrative and Support Function) and Power Specifications (Academic, Teaching and Research Function) for all categories.

* HP Sureview – Built in privacy screen available on selected products.
## Option 1: Standard laptop, low cost, limited performance/expandability up to 15” screen.

### HP ProBook 430 G5

**Mainstream Specification**

*Administrative and Support Function*

| Screen Size: | 13.3 |
| Screen Resolution: | HD LED |
| Touch Screen: | No |
| Operating System: | Win 10 x64 |
| Processor: | Core i5-8250U - 430 GS, Integrated HD 720p DM Webcam |
| Memory: | 8GB |
| Storage: | 256GB |
| Wireless: | Intel 8265 ac 2x2 nvP +BT 4.2 WW 2Ant |
| WWAN (4G): | Optional |
| Weight(Kg): | 1.49 |
| Battery: | 3 Cell 48 WHR Long Life Battery |
| Ports: | 1x USB 3 Type C, 2x USB 3, HDMI 1.4, VGA, RJ-45, Network Port, Multi-Format Digital Media Reader (SD, SDHC, SDXC), Headphone\Microphone Combo Jack |
| Docking: | Type-C |
| Warranty: | HP 4 year Next Business Day Onsite Notebook Only Hardware Support |

### HP ProBook 450 G5

**Mainstream Specification**

*Administrative and Support Function*

| Screen Size: | 15.6 |
| Screen Resolution: | FHD LED |
| Touch Screen: | No |
| Operating System: | Win 10 x64 |
| Processor: | Core i5-8250U - 430 GS, Integrated HD 720p DM Webcam |
| Memory: | 8GB |
| Storage: | 256GB |
| Wireless: | Intel 8265 ac 2x2 nvP +Bluetooth 4.2 WWAN (4G): Optional |
| Weight(Kg): | 2.1 |
| Battery: | 3 Cell 48 WHR Long Life Battery |
| Ports: | 1x USB 3 Type C, 2x USB 3, HDMI 1.4, VGA, RJ-45, Network Port, Multi-Format Digital Media Reader (SD, SDHC, SDXC), Headphone\Microphone Combo Jack |
| Docking: | Type-C |
| Warranty: | HP 4 year Next Business Day Onsite Notebook Only Hardware Support |

### Optional Accessories

- **HP Active Pen with App Launch**
- **HP Elite USB-C Docking Station**
  - 2 x DisplayPort, 1 x HDMI 2.0, 1 x USB-C, 1 x USB 3, 1 x USB 3 (powered) 2x USB 2, RJ-45 Network Port, Headphone, Microphone, Combo Jack, Kensington Lock Slot
- **HP USB-C Travel Dock**
  - 1 x HDMI, 1 x VGA, 2 x USB, RJ-45 Network Port
- **Kensington Lock**

---

From **£498.00 +VAT (430 GS)**

From **£514.00 +VAT (450 GS)**
| Option 2: Traditional Laptop (recommended all rounder, light and powerful) |
|---|---|---|
| HP EliteBook 840 G5 | HP EliteBook 840 G5 |
| **Mainstream Specification** | **Power Specification** |
| *Administrative and Support Function* | *Academic, Teaching and Research Function* |
| **Screen Size:** 14” | **Screen Size:** 14” |
| **Screen Resolution:** FHD | **Screen Resolution:** UHD |
| **Touch Screen:** No | **Touch Screen:** No |
| **Operating System:** Win 10 x64 | **Operating System:** Win 10 x64 |
| **Processor:** Core i5-8350U | **Processor:** Core i7-8650U |
| **Memory:** 8GB | **Memory:** 16GB |
| **Storage:** 256GB | **Storage:** 512GB |
| **Wireless (Wave 2):** AC WWAN (4G): Optional | **Wireless (Wave 2):** AC WWAN (4G): Optional |
| **Weight(Kg):** 1.48 | **Weight(Kg):** 1.48 |
| **Battery:** Long Life Battery up to 16 hours | **Battery:** Long Life Battery up to 16 hours |
| **Ports:** 1 x USB 3, 1 x USB 3 Charging, 1 x USB 3 Type-C, DisplayPort, VGA, RJ-45 Network Port, Multi-Format, Digital Media Reader (SD, SDHC, SDXC) Headphone\Microphone Combo Jack | **Ports:** 1 x USB 3, 1 x USB 3 Charging, 1 x USB 3 Type-C, DisplayPort, VGA, RJ-45 Network Port, Multi-Format, Digital Media Reader (SD, SDHC, SDXC) Headphone\Microphone Combo Jack |
| **Docking:** Type-C | **Docking:** Type-C |
| **Warranty:** HP 4 year Next Business Day Onsite Notebook Only Hardware Support | **Warranty:** HP 4 year Next Business Day Onsite Notebook Only Hardware Support |

---

From £720.20 + VAT

**Optional Accessories**

- HP Active Pen with App Launch
- HP Elite USB-C Docking Station
  - 2 x DisplayPort, 1 x HDMI 2.0, 1 x USB-C, 1 x USB 3, 1 x USB 3 (powered) 2x USB 2, RJ-45 Network Port, Headphone, Microphone, Combo Jack, Kensington Lock Slot
- HP USB-C Travel Dock
  - 1 x HDMI, 1 x VGA, 2 x USB, RJ-45 Network Port
- Kensington Lock
- HP Slim 14” Sleeve

---

*76% consider extended battery life as the most important feature when working on the go*
**Option 3: Convertible Notebook/Tablet**
*(Create, Type, Multitask, Present, Collaborate)*

**From £829.40 +VAT**

**Optional Accessories**
- HP Active Pen with App Launch
- HP Elite USB-C Docking Station
  - 2x DisplayPort, 1 x HDMI 2.0, 1 x USB-C, 1 x USB 3, 1 x USB 3 (powered) 2x USB 2, RJ-45 Network Port, Headphone, Microphone, Combo Jack, Kensington Lock Slot
- HP USB-C Travel Dock
  - 1 x HDMI, 1 x VGA, 2 x USB, RJ-45 Network Port
- Kensington Lock

---

**HP EliteBook x360 1030 G2**

**Mainstream Specification**

*Administrative and Support Function*

- **Screen:** 13.3"
- **Screen Resolution:** FHD
- **Touch Screen:** Yes
- **Operating System:** Win 10 x64
- **Processor:** Core i5-7200U
  - Intel HD Graphics 620
  - (2.5 GHz, up to 3.1 GHz with Intel Turbo Boost Technology, 3 MB cache, 2 cores)
- **Memory:** 8GB
- **Storage (SSD):** 256GB
- **Wireless (Wave 2):** AC  WWAN (4G LTE): Optional
- **Weight (KG):** 1.28
- **Battery:** upto 16hrs
- **Ports:** 2x USB 3.1
  - USB-C (3.1, Thunderbolt, Power, DisplayPort), HDMI, Headphone/Mic Combo Type-C
- **Docking:** Type C
- **Warranty:** HP 4 year Next Business Day Onsite Notebook Only Hardware Support

**Power Specification**

*Academic, Teaching and Research Function*

- **Screen:** 13.3"
- **Screen Resolution:** UHD
- **Touch Screen:** Yes
- **Operating System:** Win 10 x64
- **Processor:** Core i7-7600U
  - Intel HD Graphics 620
  - (2.9 GHz, up to 3.9 GHz with Intel Turbo Boost Technology, 4 MB cache, 2 cores)
- **Memory:** 16GB
- **Storage (SSD):** 512 GB
- **Wireless (Wave 2):** AC  WWAN (4G LTE): Optional
- **Weight (KG):** 1.28
- **Battery:** upto 16hrs
- **Ports:** 2x USB 3.1
  - USB-C (3.1, Thunderbolt, Power, DisplayPort), HDMI, Headphone/Mic Combo Type-C
- **Docking:** Type C
- **Warranty:** HP 4 year Next Business Day Onsite Notebook Only Hardware Support

---

**Stylish Design**
- CNC Aluminum
- Thin and Light
  - 14.9mm & 1.28kg
- Long Battery Life
  - 16.5 hours
- High Resolution FHD and UHD touch, 360° opening

---
Option 4: Notebook with Detachable Keyboard for Full tablet functionality

From £832.91 + VAT

Optional Accessories

HP Active Pen with App Launch

HP Elite USB-C Docking Station G3
2 x DisplayPort, 1 x HDMI 2.0, 1 x USB-C, 1 x USB 3, 1 x USB 3 (powered) 2x USB 2, RJ-45 Network Port, Headphone, Microphone, Combo Jack, Kensington Lock Slot

HP USB-C Travel Dock
1 x HDMI, 1 x VGA, 2 x USB, RJ-45 Network Port

Kensington Lock
HP Slim 12.5” Sleeve

HP Elite x2 1012 G2

Mainstream Specification
*Administrative and Support Function

Screen Size: 12.3
Screen Resolution: QHD
Touch Screen: Yes
Operating System: Win 10  x64
Processor : Core i5-7200U – Intel HD Graphics 620 (2.5 GHz, up to 3.1 GHz with Intel Turbo Boost Technology, 3MB cache, 2 cores)
Memory: 8GB
Storage : 256GB
Wireless (Wave 2): AC
WWAN (4G): Optional
Weight(Kg): 1.16
Battery: Long Life Battery up to 10 hours
Ports: 1 x USB 3.0, 1x USB-C 3.1, Thunderbolt Power, DisplayPort, Headphone\Microphone Combo Jack
Docking: Type-C
Warranty: HP 4 year Next Business Day Onsite Notebook Only Hardware Support

Power Specification
*Academic, Teaching and Research Function

Screen Size: 12.3
Screen Resolution: QHD
Touch Screen: Yes
Operating System: Win 10  x64
Processor : Core i7-7600U – Intel HD Graphics 620 (2.9 GHz, up to 3.9 GHz with Intel Turbo Boost Technology, 4MB cache, 2 cores)
Memory: 16GB
Storage : 512GB
Wireless (Wave 2): AC
WWAN (4G): Optional
Weight(Kg): 1.16
Battery: Long Life Battery up to 10 hours
Ports: 1 x USB 3.0, 1x USB-C 3.1, Thunderbolt Power, DisplayPort, Headphone\Microphone Combo Jack
Docking: Type-C
Warranty: HP 4 year Next Business Day Onsite Notebook Only Hardware Support
Desktop Workers (Fixed Location):

1. Based in one building
2. Has a requirement for a desk in the office everyday
3. Very rarely works away for the desk
4. Location fixed by role or systems access
5. Solo work carried out at the desk
6. 70% to 75% of working time spent at the desk
7. Likely to have a need to be visible and accessible

ICT and HP offer agile workers 4 choices in regard to Form Factor, supporting both Mainstream (Administrative and Support Function) and Power Specifications (Academic, Teaching and Research Function) for all categories.
## HP EliteDesk 800 Series

New ID for the modern workplace

### Standard Specification DM /SFF/ TWR

<table>
<thead>
<tr>
<th>800 G3 Series OM /SFF/ TWR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Core i5 7600 7th Gen 3.5 2400MHz Quad Core CPU</td>
</tr>
<tr>
<td>8GB DDR 42400</td>
</tr>
<tr>
<td>256GB Solid State Drive</td>
</tr>
<tr>
<td>5yr On-Site Next Business Day Warranty.</td>
</tr>
</tbody>
</table>

### Performance Specification DM /SFF/ TWR

<table>
<thead>
<tr>
<th>800 G3 Series OM /SFF/ TWR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Core i7 7700 7th Gen 3.6 2400MHz Quad Core CPU</td>
</tr>
<tr>
<td>8116GB DDR 42400</td>
</tr>
<tr>
<td>2561512GB Solid State Drive</td>
</tr>
<tr>
<td>5yr On-Site Next Business Day Warranty.</td>
</tr>
</tbody>
</table>

## HP EliteOne 800 G3 AiO

First commercial AiO with dual-facing cameras and First commercial AiO with non-glare touch screen

### Standard Specification AIO

<table>
<thead>
<tr>
<th>Elite 800 G3 All in One</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel 7500 7th Gen Core i5-4C</td>
</tr>
<tr>
<td>8GB DDR 42400</td>
</tr>
<tr>
<td>256GB Solid State Drive</td>
</tr>
<tr>
<td>5yr On-Site Next Business Day Warranty.</td>
</tr>
</tbody>
</table>

### Performance Specification AIO

<table>
<thead>
<tr>
<th>Elite 800 G3 All in One</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel 7700 7th Gen Core i7-4C</td>
</tr>
<tr>
<td>8116GB DDR 42400</td>
</tr>
<tr>
<td>2561512GB Solid State Drive</td>
</tr>
<tr>
<td>5yr On-Site Next Business Day Warranty.</td>
</tr>
</tbody>
</table>
HP EliteDesk
800 Series

*Demonstration devices available to view - Please contact ICT Service Desk
HP EliteDesk 800 Series

New ID for the modern workplace

SFF: 20% smaller*
TWR: 26% smaller*

New ID

• New premium silver look and precision feel
• I/O looks highly engineered and also designed to be as accessible as possible
• Vents are diagonal to give it a visual dynamic "flash"
• Rounded edges to give it a more distinctive look and differentiate it from competitors
HP EliteDesk 800 G4 Desktop Mini

More Powerful Processing and Graphics
- 8th Generation Intel® Core™ Processors up to i7
- Superior Security with SureStart 4.0 and HP Workwise Gen2.5
- Supporting up to 95W Processor options
- Q370 chipset with vPro™ standard*
- 35W Radeon RX560 Discrete Graphics option **
- Dual M.2 SSDs with RAID

Industry Leading Flexible Rear I/O
Choice of
- Serial Port
- VGA
- HDMI 2.0a with HDR and HDCP 2.2
- DisplayPort 1.2
- USB-C 3.1 Gen2 with Alt Mode and Power Delivery from Display
- Thunderbolt 3.0
- Fiber Network Adapter

* vPro™ requires a Core i5 or i7 processor, a Windows OS, and no WLAN or an Intel® vPro™ WLAN
** Supported with 35W Processors only
HP EliteOne 800 G3 AiO

First commercial AiO with dual-facing cameras and First commercial AiO with non-glare touch screen

- Popup webcam enhances security
  - 2MP HD webcam or optional IR Camera and rear facing 2MP webcam
- In-cell touch technology significantly reduces glare and fingerprints improving usability
- World's most secure and manageable AiO
- Dual Microphone Array
- Micro-edge bezel
  - 6mm
- Audio by Bang & Olufsen speaker grille
HP EliteBook 840 G5, EliteBook X360 1030 G2-3 & Elite x2 1012 G2-3 and ProBook 430 & 450 G4-5 Series

*Demonstration devices available to view – Please contact ICT Service Desk

* Polite Notice: Prices can fluctuate against the US$
HP ProBook 400 Series

*Demonstration devices available to view – Please contact ICT Service Desk
Power, style, and value - just what your growing college needs

HP ProBook 400 G5
The Design Experience: HP ProBook 400 G5

Ultralight design
Less than 20mm on 430/440
Ultraslim on 450/455
All with full-size ports

Powerful processing
7th and 8th Gen Intel® Core™ Processors8,9
7th Gen AMD APUs9,
and NVIDIA graphics

Long battery life
+ fast charging
Long-life battery with HP Fast
Charge technology that charges 90% in 90 minutes10

Tested to go the distance
Reliability backed by HP Total Test Process
and MIL-STD 810G

* 470 is 22.5mm
ProBook 400 G5 Product Walk Through

Enhanced audio conferencing
Top firing speakers

HP Premium Keyboard
Comfortable, Quiet, Backlit*
Spill resistant

Built to last
Stylish and durable, reinforced by an aluminum keyboard deck

ClickPad
More surface area for gestures

Long-life battery
Embedded 48Whr Long-life battery with Fast Charge Technology
Charges 90% in 90 minutes

Commercial grade security
Fingerprint reader* to support multi-factor authentication

Select models only
The power to get things done
Choices of Intel 8th Gen Quad Core Processors provides uncompromised performance that meet the needs of various kinds of business out there.

Real business docking
Supports One Cable Docking to connect to multiple external displays, a power source, gigabit network, and mouse/keyboard in one USB Type-C™ cable, thanks to DisplayPort™ out and Power Delivery support.

Easy conferencing
Easy virtual conferencing with Skype for Business Certification, HP Noise Cancellation SW and other key collaboration accessories.

ProBook 400 G5 Series
Power, style and value - just what your growing business needs
Full-Featured Thin & Light Design with Quad Core Performance and Long battery Life

Key Features
- The power to get things done
- Real business docking
- Easy conferencing

Key Accessories & Services
- HP Elite USB-C Dock
- HP External USB Optical Drive
- HP Business Top Load & Business Backpack

Quad Core Processor
Introducing Intel 8th Gen Core i5 & i7 QCCPU

Impressive New ID
Sleek design in Natural Silver and Aluminum KB deck in Flint Grey

Power to go places
Long battery life with HP Fast Charge

One Cable Docking
USB-C data + Power + Video
HP Elitebook 800 Series

*Demonstration devices available to view – Please contact ICT Service Desk
INTRODUCING

THE HP ELITEBOOK 840 G5 SERIES

Reinventing HP’s best selling mainstream notebook for the modern workforce
YOUR WORK PC NEVER LOOKED SO GOOD

WORLD’S FIRST BUSINESS NOTEBOOK WITH AN ULTRA-BRIGHT DISPLAY THAT AUTOMATICALLY ADAPTS TO CHANGING LIGHT CONDITIONS

Optional*

62% work from more than one location

52% of millennials say design is important when choosing a PC

narrow border IPS displays to maximize the amount of visible display

corning® gorilla® glass

stylish precision-crafted, machined aluminum cover

natural silver color for premium look and feel

Ultra-bright displays:
Up to 400 nits with Ambient Light Sensor (ALS)
Up to 700 nits with HP Sure View (without ALS)
GO LONG, CHARGE FAST

Battery Life\textsuperscript{15}
Up to 14 hrs

HP Fast Charge\textsuperscript{16}
Half the battery in half an hour

Battery Cycle Life\textsuperscript{17}
1000 cycles or 3 years\textsuperscript{64}

76% consider extended battery life as the most important feature when working on the go\textsuperscript{12}

30 mins can take you a long way
Use the port you need without additional dongles

**CONNECT WITH CONFIDENCE**

1. USB Type-C™ with Thunderbolt™
2. HP UltraSlim Dock Connector
3. RJ-45
4. HDMI
5. 2 USB Type-A ports
6. Combo Headphone/Mic
7. Optional WWAN SIM
8. Smart Card Reader

TWO WAYS TO DOCK

- Enjoy a stable and fast WiFi experience with HP Connection Optimizer
- Boost up your network with HP Velocity
- Enjoy high WWAN speeds with the newest CAT9 450Mbps 4G LTE

Laptop users rate WiFi connectivity as the #1 productivity feature in their work PC

Perform your best at your desk or on the go
HP EliteBook x360 Series

*Demonstration devices available to view – Please contact ICT Service Desk
PREMIUM VERSATILITY

USE IT THE WAY YOU WANT FOR WORK & LEISURE

Create, type, multitask
Write, Consume
Browse, Listen
Present, Collaborate
Group Call, Share

CHOICE OF MULTIPLE MODES
Take it for a spin!
STYLISH DESIGN

COMPLEMENTS YOUR PROFESSIONAL STYLE

STUNNING ALL METAL UNI-BODY DESIGN

Asteroid Silver Finish
Diamond Cut Accents
MOBILE DESIGN

THINNEST BUSINESS CONVERTIBLE IN THE WORLD

EASY TO CARRY

14.95mm

AA battery

Starting weight 2.82 lbs. / 1.28 kg
**Mobile Design**

**All-Day Battery Life**

- **Battery Life:** 16h 30m
- **Fast Charge:** Half a battery in half an hour
- **Battery Cycle Life:** 1000 cycles, 3 years

**Longest Battery Life in a Convertible in the World**

*2014*
PREMIUM
CREATE

CONNECT MULTIPLE
PERIPHERALS WITHOUT
ADDITIONAL DONGLES

MULTIPLE BUILT-IN PORTS

Smart Card Reader

Audio Combo

USB 3.0 TypeA

Full-Sized HDMI

Micro SD-Card reader

USB Type C™ Thunderbolt Docking

Power

USB 3.0 TypeA

HP

CONNECT MULTIPLE
PERIPHERALS WITHOUT
ADDITIONAL DONGLES

MULTIPLE BUILT-IN PORTS

Smart Card Reader

Audio Combo

USB 3.0 TypeA

Full-Sized HDMI

Micro SD-Card reader

USB Type C™ Thunderbolt Docking

Power

USB 3.0 TypeA
HP EliteBook x360 1030 Series

Driving Innovation in Business Class Convertibles

Precision craftsmanship and premium collaboration tools are infused in the HP EliteBook x360, the world’s thinnest convertible notebook for business. With best in class battery life, unmatched security, and the ultimate versatility for work and fun, it’s the new favorite carry-on for mobile professionals.

Key Selling Points

1. Impressively stylish with MiL-STD durability at only 14.9 mm thick. CNC Aluminum x360 design includes the longest battery life and the 1st 4K display in a commercial-grade convertible.
2. Incredibly Productive Collaboration with x360 design with touch, B&O Speakers, HP Advanced Collaboration Keyboard, and Wacom Active Pen
3. The World’s Most Secure Convertible PC with HP BIOS with SureStart G3, Smart Card Reader, NFC, and IR Camera & Fingerprint Sensor for Windows Hello. Keep your PC’s security software up-to-date with HP Client Manager with Remote Manageability
4. Power to Get the Job Done – All Day Long! Featuring Intel Core-i7 vPro, 16GB DDR4, PCIe SSD drive with battery life up to 16.5 hours,
5. Enterprise docking capabilities via Thunderbolt™ enables one cable enhanced productivity and Mobile Broadband (EMEA/APJ) for connectivity on the go.

Accessories

- HP Thunderbolt Dock
- HP Notebook Power Bank
- HP Executive 15.6” Brown Top Load
- HP Elite s240u Display

Stylish Design
CNC Aluminum

Thin and light
14.9mm & 1.28kg

Long BatteryLife
16.5 hours

High Resolution
FHD and UHD touch, 360° opening

I/O
2 USB A, 1 USB C Thunderbolt, HDMI, Micro SD, Collaboration KB

Premium Security
HP Sure Start 3.0, SC, FPR, IRcamera

Durability
MIL-STD 810G
HP Elite x2
1013 Series

*Demonstration devices available to view - Please contact ICT Service Desk
WORLD’S SMALLEST
13” 2-in-1
HP ELITE X2 1013 G3

13.3 mm, 2.59 lbs

CNC aluminum with diamond cut accents
Natural silver
Mil-STD 810G testing including shock and drop
Leading the way in serviceability
The HP Elite x2 scored a perfect 10 from iFixit

**HP Elite x2 – 10 out of 10!**

With pull-out adhesive tabs, we were able to remove the battery from the iPad Pro in record time—without the mess, sticky residue. Recycling win! Messy loser win. We’ve been campaigning for something better since the first iPad, and we’re glad Apple has streamlined it in a repair-friendly direction. In light of this improvement, the iPad Pro scored an extra point over its smaller siblings, earning a 3 out of 10.

HP Elite x2 10/10 (Repairability Score: 10 out of 10: (10 is the easiest to repair):

- Except for a minor amount of tape over the sensor array, there is no adhesive.
- All screws are standard T6 Torx or Phillips #0.
- Easy access to repair documentation and replacement parts by HP makes self-repair more feasible.
- A modular and flat overall construction allows access to most components without a lengthy disassembly process.

**iPad Pro – 3 out of 10**

iPad Pro teardown highlights:

- Inside, the iPad Pro is very symmetrical—the logic board runs down the center, flanked by the two battery cells. The central logic board made for a challenging opening, as the display cables connect to the center of the panel.

**Surface Pro – 1 out of 10**

Surface Pro 10/10 (Repairability Score: 1 out of 10: (10 is the easiest to repair):

- There’s no method.
- All folk’s withメール at its perilousness—so far from the last 10, and now it replaces the last repair-friendly component, the modular 300-yard Microsoft impressed us—by being very worse than we expected.
- For more teardown action, check out our Surface Pro teardown.

Post-Paris, extra talk at a panel at the Core I7 Surface Pro!... Thanks to Creative Director, we got the goods.

- Hot much difference between the models, but that massive empty space under the heat area is a real feat with extra cooling power inclusions of a fan.

---

**Final Thoughts**

- Although we’re confident, the case pressed in the Surface Pro isn’t standard. Leaking display removal is nuts.
- The display removal process is simplified by the use of the foam adhesive and the in-panel display, but it is still difficult.
- A different bridge name component is in effect, including the display and battery.
- Replacement of any port requires removal of the display assembly, an easy port to damage.
- The structure is more replaceable.
HP Z Desktop Workstation Series
HP Z DESKTOP WORKSTATION LINEUP

- Fast, affordable, & small
- The versatile workstation
- Evolves with you
- The most powerful PC made by HP
Z4, Z6 and Z8 At a Glance

**Reliable**
- New Iconic industrial design with Aluminum Handle
- Designed for 24/7 reliability, up to 350 k hour of test
- ECC memory and server grade storage
- HP Z4 G4 dust filter

**Performance**
- HP VR Ready configurations*
- Dual Intel® Xeon® Scalable processors with up to 28C
- Up to 6 channel, 3TB memory
- Multiple NVIDIA® Quadro® and AMD Radeon® Pro

**Security**
- HP SureStart Gen3
- Secure Authentication
- HP Secure Erase®
- ISV certification

**Scalable**
- Future proof design – riser, front I/O, dual 10GBe
- Large number of PCIe slots, m2 on MB
- Up to 10 storages
- Tool less chassis
HP ZBOOK MOBILE WORKSTATION LINEUP

ROAD WARRIOR
Thin, powerful, affordable

SLEEK POWER
Looks stunning, works wonders

FULL PERFORMANCE/EXPANDABILITY
Portable powerhouse
Ultimate in performance
FIRST OF ITS KIND

A versatile creative tool that features 4,098 levels of pressure sensitivity in the pen experience, four powerful modes correlated to workflow, and the latest generation NVIDIA & Intel technology.

HP ZBook x2
World's first detachable workstation

Laptop mode
To review.

Detach mode
To create.

Dock mode
To produce.

Tablet mode
To capture.

Four modes

Twice the memory capacity of any other detachable PC

The world's most advanced detachable PC display

Over 25% higher graphics performance compared to Microsoft Surface Book
New on the HP ZBook G4

Design & Durability
- New 14” diagonal form factor
- New tool-less access*
- Same thin and light systems but with new, sleek top cover
- Dual 1 TB, TLC, and SED HP Z Turbo Drive options

Processors
- 7th Gen Intel® Core™ CPUs with faster speeds
- Quad core 7th Gen Intel® Xeon® options

Battery
- Higher wattage batteries
- Fast charge means 0-50% charge in 30 minutes
- Long life (3 year warranty) batteries standard

Software & Security
- HP SureStart Gen3 with BIOS level security and runtime firmware intrusion detection
- HP RGS22 included

Graphics
- HP VR Ready configurations*
- Updated & more powerful options from NVIDIA® and AMD

It’s all in the family
EliteDisplays E-Series

Now with 5 Years Onsite Warranty as standard on all Elite and Z displays
Now with 5 Years Onsite Warranty as standard on all Elite and Z displays from 1st Feb 2018
<table>
<thead>
<tr>
<th></th>
<th>E223</th>
<th>E233</th>
<th>E243</th>
<th>E243i</th>
<th>E273</th>
<th>E273q</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td>21.5-inch</td>
<td>23-inch</td>
<td>23.8-inch</td>
<td>24-inch</td>
<td>27-inch</td>
<td>27-inch</td>
</tr>
<tr>
<td><strong>Panel</strong></td>
<td>IPS, 3-sided micro-edge</td>
<td>IPS, 3-sided micro-edge</td>
<td>IPS, 3-sided micro-edge</td>
<td>IPS, 3-sided micro-edge</td>
<td>IPS, 3-sided micro-edge</td>
<td>IPS, 3-sided micro-edge</td>
</tr>
<tr>
<td><strong>Resolution</strong></td>
<td>1920 x 1080 FHD</td>
<td>1920 x 1080 FHD</td>
<td>1920 x 1080 FHD</td>
<td>1920 x 1200 WUXGA</td>
<td>1920 x 1080 FHD</td>
<td>2560 x 1440 QHD</td>
</tr>
<tr>
<td><strong>Viewing Angle</strong></td>
<td>178° X 178°</td>
<td>178° X 178°</td>
<td>178° X 178°</td>
<td>178° X 178°</td>
<td>178° X 178°</td>
<td>178° X 178°</td>
</tr>
<tr>
<td><strong>Aspect Ratio</strong></td>
<td>16:9</td>
<td>16:9</td>
<td>16:9</td>
<td>16:10</td>
<td>16:9</td>
<td>16:9</td>
</tr>
<tr>
<td><strong>Contrast ratio</strong></td>
<td>5M:1 Dynamic 1000:1 Static</td>
<td>5M:1 Dynamic 1000:1 Static</td>
<td>5M:1 Dynamic 1000:1 Static</td>
<td>5M:1 Dynamic 1000:1 Static</td>
<td>5M:1 Dynamic 1000:1 Static</td>
<td>5M:1 Dynamic 1000:1 Static</td>
</tr>
<tr>
<td><strong>Connectivity</strong></td>
<td>VGA, DisplayPort™, HDMI, 2 – USB 3.0</td>
<td>VGA, DisplayPort™, HDMI, 2 – USB 3.0</td>
<td>VGA, DisplayPort™, HDMI, 2 – USB 3.0</td>
<td>VGA, DisplayPort™, HDMI, 2 – USB 3.0</td>
<td>VGA, DisplayPort™, HDMI, 2 – USB 3.0</td>
<td>VGA, DisplayPort™, HDMI, 2 – USB 3.0 and USB-C™</td>
</tr>
<tr>
<td><strong>Ergonomic Adjustments</strong></td>
<td>Height adjust, tilt, swivel, pivot</td>
<td>Height adjust, tilt, swivel, pivot</td>
<td>Height adjust, tilt, swivel, pivot</td>
<td>Height adjust, tilt, swivel, pivot</td>
<td>Height adjust, tilt, swivel, pivot</td>
<td>Height adjust, tilt, swivel, pivot</td>
</tr>
<tr>
<td><strong>Panel Features</strong></td>
<td>Flicker free &amp; low blue light*</td>
<td>Flicker free &amp; low blue light*</td>
<td>Flicker free &amp; low blue light*</td>
<td>Flicker free &amp; low blue light*</td>
<td>Flicker free &amp; low blue light*</td>
<td>Flicker free &amp; low blue light*</td>
</tr>
</tbody>
</table>

*User selectable on OSD menu
HP’s first Docking Monitor with USB-C Power Charging & Pop-up Webcam

2018 HP EliteDisplay E243d Docking Monitor
USB-Type C Series Docks

*Demonstration devices available to view - Please contact ICT Service Desk
<table>
<thead>
<tr>
<th>Dock Type</th>
<th>Features</th>
<th>Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP UltraslimDock (Mechanical) (Quest)</td>
<td>• 1:1 (dedicated workspace)</td>
<td>P/N: D9Y32AA</td>
</tr>
<tr>
<td></td>
<td>• For large, enterprise-class deployments, with focus on stable and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>manageable proprietary docking at the desk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Supports dual 4K displays (2 DPs, 1 VGA)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Asset security - One locking mechanism for notebook + dock</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Easy to use, secure and manageable extension of the notebook</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Conveniently located power button to power notebook via dock</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Valued priced</td>
<td></td>
</tr>
<tr>
<td>HP Elite 90W TB3Dock (Thunderbolt™3) (Trump)</td>
<td>• 1:1 (dedicated workspace)</td>
<td>P/N: 1DT93AA</td>
</tr>
<tr>
<td></td>
<td>• For large, enterprise-class deployments needing high performance,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>modern workspace</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Supports two UHD/4K displays</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Delivers power and data in single cable connection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Network manageability: PXE, WoL, MAC Address Pass Through</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Designed to industry USB Type C™ Thunderbolt™ specs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Link up to 10 devices at once. 1 USB 3.0 charging port provides</td>
<td></td>
</tr>
<tr>
<td></td>
<td>power to mobile devices up to 15W when notebook isn’t docked.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Compact, light-weight design for the desk-based user</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Combo microphone/headphone audio port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Integrated security lock slot</td>
<td></td>
</tr>
<tr>
<td>HP USB-C Dock G4 (USB-C™Alt Mode) (MJ3)</td>
<td>• 1:1 (dedicated workspace)</td>
<td>P/N: 3FF69AA</td>
</tr>
<tr>
<td></td>
<td>• For Smaller enterprise-ready deployments of mobile professionals or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>executives needing basic docking and minimal manageability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Supports up to three displays</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Delivers power and data in single cable connection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Network manageability: PXE, WoL, MAC Address Pass Through</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Universal enterprise docking designed to industry USB Type C™ specs,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>enables compatibility with HP and non-HP PCs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Multi-generation compatibility with USB-C™ and USB-A adapter</td>
<td></td>
</tr>
<tr>
<td>HP USB-C Universal Dock + USB-C to A Adapter</td>
<td>• 1:Many (shared workspaces)</td>
<td>P/N: 1MK33AA</td>
</tr>
<tr>
<td>(USB-C™DisplayLink) (Crawford)</td>
<td>• For large, enterprise-class deployments needing high performance,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>universal, multi-generational docking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Supports two 4K displays</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Delivers power and data in single cable connection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Network manageability: PXE, WoL, MAC Address Pass Through</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Universal enterprise docking designed to industry USB Type C™ specs,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>enable compatibility with HP and non-HP PCs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Multi-generation compatibility with USB-C™ and USB-A adapter</td>
<td></td>
</tr>
<tr>
<td>HP Thunderbolt Dock G2 (Thunderbolt™ + USB-C™ Alt Mode) (Hook)</td>
<td>• 1:1 (dedicated workspace), 1:Many (shared workspaces)</td>
<td>P/N: 2UK37AA120W / 2UK38AA230W</td>
</tr>
<tr>
<td></td>
<td>• For large, enterprise-class deployments needing high performance in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>modern, flexible workspaces</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Supports two UHD/4K displays</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ultra-fast speeds with network, data, video and power charging with</td>
<td></td>
</tr>
<tr>
<td></td>
<td>one USB-C™ cable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Completely manageable. Create easy, secure methods to customize and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>deploy solutions remotely</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Maximum performance docking for the future, connect to almost any</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USB-C™ notebook</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Optional speakerphone module for integrated audio solution</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• First to market with Titan Ridge Thunderbolt™ technology that enables</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USB-C™ multi-function compatibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Compatibility across HP Commercial Notebook portfolio from X2 to MWS to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NB with an optional combo cable (May ‘18)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Small footprint</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Power button to power notebook via dock</td>
<td></td>
</tr>
</tbody>
</table>
HP USB-C Universal Dock

Universal enterprise docking for your fixed or shared workspaces

- **Full desktop experience**
  Turn your HP notebook or tablet into a complete desktop experience with the HP USB-C Universal Dock; it has USB-C™ charging and connections for your network, dual 4K displays, and accessories.

- **Expansion for all the ways you work**
  Connect to your accessories, displays, and network with one USB 3.0 charging port, three USB 2.0 ports, one USB-C™ charging/data port, two DisplayPort™ ports, and one RJ-45.3

- **Built with enterprise-class network manageability**
  Support network manageability of your device and the dock with PXE boot support, Wake-on LAN, MAC Address Pass Through, and LAN/WLAN switching; secure the dock with an integrated security lock slot.5

- **Universal compatibility**
  Use one dock for all of your devices with support for multi-generation HP notebooks and tablets through the included USB-C™ cable or the included USB-C™ to USB-A adapter.

---

| Optimized workspace | USB 3.0, USB 2.0, USB-C, DP, RJ45 | Dual 4K | USB-C notebook support | USB-A notebook support | HP Tested, Warranty & Support |
A New Rechargeable Pen
Annotate presentations, sign documents and more with ease

Enhanced performance & precision
• Wacom AES Active Stylus
• USB-C charging
• 4096 levels of pressure
• Bluetooth launch button
• Simultaneous pen and touch
• Enhanced tilt detection
• Designed for perfectly comfortable, non-slip grip
• Fast charging: 45 minutes charge for 30 hours of work

Simply put, it feels like a real pen

** Battery life estimation has considered BT button and tail eraser. Actual number will require real sample measurement.
Thank You

NDA Reminder

http://www.imperial.ac.uk/admin-services/ict/store/hardware/
https://www.imperial.ac.uk/admin-services/ict/

Twitter: Follow @theservicedesk for latest news & service updates