BEFORE YOU BUY / AUDIT INSTRUMENT

DOCUMENT 001

The Pre-Purchase Compatibility Audit

A diagnostic workbook for buyers who refuse to gamble.

§01 LSE
Laptop Screen Extenders

§02 PM
Portable Monitors

§03 DSE
Desktop Screen Extenders

§04 DS
Docking Stations

ISSUED
May 2026

PUBLISHED BY
ScreenExtendersHub

DISTRIBUTION
Free. No paywall.

PPCA§01 · TRUST ANCHOR

Editorial Independence and Disclosure

Before you read another sentence of this Workbook, you deserve to know how it was produced and who pays for the work. The next four sections answer those questions in full.

How we make money

ScreenExtendersHub publishes free editorial guidance on multi-screen work environments. The site is supported by affiliate commissions earned when readers purchase products through links on our pages. These commissions are paid by the retailer, not by you, and add nothing to the price you pay.

How that does not affect what you read

Editorial decisions are made independently of commission rates. We do not write positive reviews because a product pays more, and we do not bury negative findings because the brand is a high-commission partner. If the right answer for a buyer is “do not purchase this category at all,” we say so. This Workbook recommends no specific product on purpose — it teaches you to evaluate any candidate yourself, which is the strongest possible defense against commission-driven advice.

AMZN-DISCL · VERBATIM

ScreenExtendersHub is a participant in the Amazon Services LLC Associates Program, an affiliate advertising program designed to provide a means for sites to earn advertising fees by advertising and linking to Amazon.com.

Our editorial promise

Every recommendation on ScreenExtendersHub is justified through a documented chain: **context → constraints → options → trade-offs → suitability → recommendation.** If a product cannot be defended intellectually through that chain, we do not recommend it. This Workbook is the same chain in your hands — the diagnostic apparatus we apply internally, now applied by you to your own setup.

FULL DISCLOSURE · screenextendershub.com/disclosure METHODOLOGY · screenextendershub.com/methodology EDITORIAL TEAM · screenextendershub.com/about-the-founder

PPCA§02
READER · MANUAL

How to Use This Workbook

What this Workbook is, in one sentence

DIFFERENTIATION · ARP-CLEARED

The on-site Compatibility Checker at **screenextendershub.com/buying-guide** answers “will a screen extender generally work with my device class?” This Workbook answers a different and harder question: “will a specific product work for **my** exact laptop, **my** USB-C port’s power-delivery spec, **my** hinge tolerance, and **my** workspace — and what will break first if it doesn’t?” The Checker cannot answer that. This Workbook can, but only because **you** bring the inputs.

How to read this document

01 Read pages 4 through 7 in order — the Diagnostic Spine, the Universal Pre-Flight, and the Hardware Inventory. Every later section depends on Inventory being complete, so resist the temptation to skip it.

02 Skip directly to your category section once Pre-Flight and Inventory are done. The four category sections are independent — you do not need to read Portable Monitors to use Docking Stations.

03 Each exercise has two panels. The **left** is a worked example — a real laptop, a real product, the calculation done correctly. The **right** is blank for you to apply the same calculation to your own setup. Do the math. Write the numbers.

04 End every exercise with a Verdict — Pass, Conditional Pass, or Fail — and **one sentence stating the structural reason**. This is the trillion-dollar habit: never leave a buying decision without articulating WHY.

What this Workbook is not

It is not a product recommendation list. It does not tell you which monitor to buy. It does not rank brands. Those questions are answered elsewhere on our site, in the category hubs and product reviews. The Workbook is the diagnostic engine that runs **before** those questions — the audit that tells you whether any specific candidate fits your specific situation. Bring it back open when you are about to click “Add to Cart.”

PPCA§03

METHODOLOGY · CORE

The Diagnostic Spine

Every category section in this Workbook follows the same five-stage diagnostic spine. The spine is the methodological backbone — the structural commitment that makes the Workbook rigorous rather than ad-hoc. Memorize the five stages. They appear again, in compressed form, in the email sequence that arrives in your inbox over the next two weeks.

01 **INVENTORY** PPCA§03.01
What you own. Look it up, never guess.

02 **CONSTRAINT** PPCA§03.02
What cannot change. Budget, space, OS.

03 **CANDIDATE** PPCA§03.03
The exact product. Model number specific.

04 **AUDIT** PPCA§03.04
The five-to-seven calculations that decide fit.

05 **VERDICT** PPCA§03.05
Pass / Conditional / Fail + one sentence why.

The Diagnostic Spine extends the public methodology documented at screenextendershub.com/methodology. Where the public methodology describes how we evaluate products internally, the Spine teaches you to apply the same logic to your own setup.

PPCA§04

BASELINE · CHECKLIST

Universal Pre-Flight

These six checks apply regardless of which category you are buying in. They are the baseline — the conditions that must be true before any category-specific audit becomes meaningful. Complete this page before moving to Section 0.

☐ **OS up to date**

PF-01 Confirm your laptop or desktop is running the current major OS version. Display protocols, USB-C alt modes, and DisplayLink drivers all depend on it. Buying with macOS 12 when macOS 14 is required is a return waiting to happen.

☐ **USB-C port classification known**

PF-02 Not all USB-C ports are the same. On most laptops, only a subset support DisplayPort Alternate Mode (DP-alt). Locate your manufacturer's spec sheet and identify which ports support it.

☐ **Power adapter wattage on record**

PF-03 The factory adapter wattage is the upper bound of what the laptop expects. Any screen extender drawing power from the laptop reduces the budget available to charge the laptop itself.

☐ **Current display arrangement documented**

PF-04 Sketch your existing setup: laptop position, any current external monitor, where the new extender would go. A surprising fraction of compatibility failures are spatial, not electrical.

☐ **Driver/software install policy understood**

PF-05 Some screen extenders (DisplayLink-based) require driver installation. Locked-down corporate laptops frequently cannot run them at all, regardless of the hardware's capability.

☐ **Return window noted**

PF-06 Identify the retailer's return window in days. A 14-day window changes the risk calculation versus a 30-day or 90-day window. The methodology depends on your ability to return a misfit.

> **STOP IF**
>
> If you cannot complete any one of the six checks above, do not proceed to your category section yet. The baseline assumptions of the Workbook's exercises will be unsound, and the verdicts you reach will be unreliable. Resolve the open items first.

PPCA§05
SECTION 0
DEMONSTRATION

Hardware Inventory

DEMONSTRATION · WORKED EXAMPLE

The foundation. Every later exercise — in every category section — depends on the hardware facts you record here. This page is the worked example; the next page is your turn. **This is the only section of the Workbook where guessing is forbidden.** Look up the actual values.

CODE	FIELD	DEMONSTRATION VALUE
HW-01	Laptop make/model	Apple MacBook Pro 14" M3 Pro (2023)
HW-02	OS version	macOS 14.4 Sonoma
HW-03	CPU / SoC	Apple M3 Pro (12-core CPU, 18-core GPU)
HW-04	RAM	18 GB unified
HW-05	USB-C ports total	3 (all Thunderbolt 4 / USB 4)
HW-06	USB-C ports supporting DP-alt	3 of 3
HW-07	Native HDMI	1 (HDMI 2.1, up to 4K @ 240Hz)
HW-08	Native power input	MagSafe 3, 96W bundled adapter
HW-09	USB-C PD input capability	Up to 96W via USB-C (one port)
HW-10	Current externals attached	1 x LG 27UL850 (USB-C, 60W upstream)
HW-11	Driver install permitted	Yes (personal device)
HW-12	Return window for this purchase	30 days (Amazon)

PPCA§05

SECTION 0
YOUR SETUP

Hardware Inventory

YOUR SETUP · FILL IN EVERY FIELD

Now fill in your hardware. Every field. No guesses. The values you record here will be referenced by every exercise in your category section.

CODE	FIELD	YOUR VALUE
HW-01	Laptop or desktop make/model	
HW-02	OS version	
HW-03	CPU / SoC	
HW-04	RAM	
HW-05	USB-C ports total	
HW-06	USB-C ports supporting DP-alt mode	
HW-07	Native HDMI (and version)	
HW-08	Native power input type	
HW-09	Bundled power adapter wattage	
HW-10	Current externals attached	
HW-11	Driver install permitted on device	
HW-12	Retailer return window in days	

CHECKPOINT · HW-COMPLETE

When this page is complete, you have the foundation for every category section. Bookmark this page — you will flip back to it constantly as the audit proceeds.

PUBLISHED BY SCREENEXTENDERSHUB EDITORIAL · PPCA-WB-v1 · SECTION 0 COMPLETES HERE · PROCEED TO YOUR CATEGORY SECTION (§01 LSE / §02 PM / §03 DSE / §04 DS)

§C01

01 LSE

Laptop Screen Extenders

Laptop screen extenders carry the highest compatibility risk in this Workbook. They draw power from the laptop, add weight to the hinge, occupy ports the laptop needs, and depend on display protocols that vary by laptop model. Five exercises diagnose all five.

EXERCISES IN THIS SECTION

EX1	**POWER BUDGET**	USB-C PD math; sustained vs. peak draw
EX2	**HINGE LOAD**	Added weight × moment arm from hinge axis
EX3	**PORT ALLOCATION**	What the extender occupies, what you lose
EX4	**DRIVER PATH**	DisplayLink vs. native DP-alt; OS branches
EX5	**WORKSPACE FOOTPRINT**	Extended dimensions vs. real desk + carry case

§C01 · DIFFERENTIATION · ARP-CLEARED

WHAT THE ON-SITE CHECKER CANNOT TELL YOU: whether YOUR laptop's specific USB-C PD spec, hinge weight tolerance, and DisplayLink driver eligibility together permit the specific extender you're considering. These five exercises answer that.

PPCA§C01.1
EXERCISE 1
POWER BUDGET

LSE-EX1

Power Budget Calculation

A laptop screen extender drawing power from your laptop reduces the wattage available for the laptop itself. If the math goes negative, the laptop throttles, the extender flickers, or both. This exercise computes the budget before you buy.

DEMONSTRATION · WORKED EXAMPLE · MacBook Pro 14" M3 Pro + FOPO S10 Triple

CODE	CALCULATION	DEMONSTRATION
PB-01	Laptop USB-C PD output spec (max watts)	96W
PB-02	Extender draw per panel (mfr spec, watts)	15W
PB-03	Number of extender panels	2
PB-04	Total extender draw (PB-02 × PB-03)	30W
PB-05	Laptop's own draw under full load (watts)	65W
PB-06	Total budget required (PB-04 + PB-05)	95W
PB-07	Margin (PB-01 − PB-06)	1W

VERDICT · CONDITIONAL · AT RISK

Arithmetic margin (1W) is within USB-PD negotiation overhead. Treat as functionally zero. Under sustained workload the laptop will throttle, the extender will flicker, or both. **Required mitigation:** external power injection via a PD-capable hub before deploying both panels under load. Without that mitigation, this combination is a Fail.

PPCA§C01.1

EXERCISE 1
YOUR SETUP

LSE-EX1

Power Budget — Your Setup

Now do the math for your hardware. Pull values from your Hardware Inventory (HW-09 for PD spec) and from the extender's manufacturer spec sheet. Show your work in the value column.

CODE	CALCULATION	YOUR VALUE
PB-01	Your laptop USB-C PD output spec (watts)	
PB-02	Extender draw per panel (mfr spec)	
PB-03	Number of extender panels	
PB-04	Total extender draw (PB-02 × PB-03)	
PB-05	Laptop's draw under full load	
PB-06	Total budget required (PB-04 + PB-05)	
PB-07	Margin (PB-01 − PB-06)	

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

PPCA§C01.2

EXERCISE 2
HINGE LOAD

LSE-EX2

Hinge Load Audit

Laptop hinges are engineered for a specific weight class. A laptop screen extender adds mass at the top of the screen — the worst place for hinge stress. The further from the hinge axis, the greater the torque. Premature hinge failure is the silent killer of cheap extender purchases. This exercise quantifies the risk.

DEMONSTRATION · WORKED EXAMPLE · ThinkPad X1 Carbon + Teamgee S1 Dual

CODE	CALCULATION	DEMONSTRATION
HL-01	Laptop screen weight, mfr spec (grams)	480g
HL-02	Extender total weight (grams)	720g
HL-03	Combined screen + extender weight (HL-01 + HL-02)	1,200g
HL-04	Extender adds this % of laptop screen weight (HL-02 / HL-01)	+150%
HL-05	Extender attachment offset from hinge axis (mm)	180mm
HL-06	Torque proxy (HL-02 × HL-05, g·mm)	129,600
HL-07	Mfr hinge weight tolerance (grams, if published)	850g

VERDICT · FAIL

Combined weight (1,200g) exceeds the laptop's published hinge tolerance (850g) by 41%. Hinge sag within 6 months is highly probable; warranty void on the laptop is possible. **Do not proceed** with this specific extender + laptop pairing. Consider a lighter single-panel extender or a portable monitor as a freestanding alternative.

PPCA§C01.2

EXERCISE 2
YOUR SETUP

LSE-EX2

Hinge Load — Your Setup

Look up your laptop's screen weight and hinge tolerance on the manufacturer's service-manual pages or detailed spec sheet. If no hinge tolerance is published, use 1.5× the screen weight as a conservative ceiling.

CODE	CALCULATION	YOUR VALUE
HL-01	Your laptop screen weight (grams)	
HL-02	Extender total weight (grams)	
HL-03	Combined weight (HL-01 + HL-02)	
HL-04	Extender adds this % of laptop screen weight	
HL-05	Extender attachment offset (mm)	
HL-06	Torque proxy (HL-02 × HL-05)	
HL-07	Mfr hinge tolerance, or 1.5× HL-01	

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

012
OF 048

PPCA§C01.3

EXERCISE 3
PORT ALLOCATION

LSE-EX3

Port Allocation Map

A screen extender occupies USB-C ports the laptop also needs for power, peripherals, and data. Buyers frequently learn after purchase that the extender uses the only DP-alt-capable port — leaving no port available for charging while extended. Map your ports first.

DEMONSTRATION + YOUR SETUP · COMPACT FORMAT

PORT	DEMO · M3 PRO + S10 TRIPLE	YOUR SETUP
PA-01 **Port 1 (left)**	Power adapter (MagSafe)	
PA-02 **Port 2 (left)**	USB-C — occupied by extender	
PA-03 **Port 3 (right)**	USB-C — available for hub/peripheral	
PA-04 **HDMI**	Available for second external display	
PA-05 **Allocated for charging while extended?**	Yes (MagSafe is separate)	
PA-06 **Allocated for hub/dock while extended?**	Yes (Port 3 remains free)	

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

PPCA§C01.4
EXERCISE 4
DRIVER PATH

LSE-EX4

Driver Path Decision

Laptop screen extenders fall into two architecture classes: DisplayLink-based (require driver install, work over standard USB) and native DP-alt (no driver, require DP-alt-capable USB-C port). This is a categorical decision — not a math one. Get it wrong, and the extender will not function on your laptop regardless of price paid.

DECISION TREE · CHECK YOUR PATH

CODE	DECISION QUESTION	PATH
DP-01	**Does the extender require DisplayLink driver?**	YES → go to DP-02 / NO (native DP-alt) → go to DP-04
DP-02	**Is your OS supported by DisplayLink? (macOS 11+, Win 10+, ChromeOS 96+)**	NO → STOP. Extender will not work. / YES → go to DP-03
DP-03	**Does your device permit third-party driver installation?**	NO (corp-locked) → STOP. / YES → proceed.
DP-04	**Does your laptop have a USB-C port supporting DP-alt mode?**	NO → STOP. Extender will not work. / YES → go to DP-05
DP-05	**Is that DP-alt port currently allocated to another peripheral?**	YES → resolve port conflict before purchase. / NO → proceed.

YOUR PATH OUTCOME · WRITE IT BELOW

In one mono-spaced sentence, write the path you traversed: *e.g., DP-01 NO → DP-04 YES → DP-05 NO → PROCEED.* This sentence is your driver-path verdict.

PPCA§C01.5
EXERCISE 5
WORKSPACE

LSE-EX5

Workspace Footprint Check

The extender works electrically, but does it fit physically? Extended dimensions — the full width with all panels deployed — frequently exceed cafe tables, airline tray tables, and shared desks. Spatial failures are the cheapest to discover and the most often skipped.

DEMONSTRATION + YOUR SETUP · COMPACT

CODE	MEASUREMENT	DEMO	YOURS
WF-01	Laptop closed width (mm)	312	
WF-02	Extender deployed width, all panels (mm)	780	
WF-03	Total extended width (max of WF-01, WF-02)	780	
WF-04	Your typical workspace width (mm)	—	
WF-05	Margin (WF-04 − WF-03)	—	
WF-06	Carry case width including extender (mm)	420	
WF-07	Your backpack/laptop sleeve internal width (mm)	—	

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

PPCA§C01
SECTION 01
LSE VERDICT

LSE-V

Section 01 — LSE Synthesis

The five LSE exercises diagnose independent failure modes. A candidate must pass all five to be a viable purchase. Even one Fail rules the candidate out. Conditional Passes require a documented mitigation before purchase. Tally your verdicts here.

EXERCISE	DIAGNOSTIC	YOUR VERDICT
LSE-EX1	**Power Budget**	Pass / Conditional / Fail
LSE-EX2	**Hinge Load**	Pass / Conditional / Fail
LSE-EX3	**Port Allocation**	Pass / Conditional / Fail
LSE-EX4	**Driver Path**	Pass / Conditional / Fail
LSE-EX5	**Workspace Footprint**	Pass / Conditional / Fail

SECTION VERDICT RULE

A single Fail = candidate rejected. Two or more Conditional Passes = elevated risk; reconsider. All five Pass or 1 Conditional Pass with documented mitigation = candidate viable. Write your final section verdict below in one sentence.

§C02

02

PM

Portable Monitors

Portable monitors look simple. The compatibility traps are not. Cable selection determines whether the device works at all on your laptop; brightness specs determine whether it's usable in your actual lighting; stability determines whether it stays upright while you work. Four exercises catch the failure modes.

EXERCISES IN THIS SECTION

EX1	**SINGLE-CABLE TEST**	Can one USB-C cable carry video + power
EX2	**BRIGHTNESS MATCH**	Panel nits vs. ambient-light reality
EX3	**KICKSTAND STABILITY**	Panel-thickness × center-of-gravity
EX4	**CABLE LENGTH**	Bundled length vs. your real workspace

§C02 · DIFFERENTIATION · ARP-CLEARED

WHAT THE ON-SITE CHECKER CANNOT TELL YOU: whether YOUR specific cable + YOUR laptop's PD output + YOUR ambient-light environment + YOUR desk surface together permit reliable use of the portable monitor you're considering. These four exercises answer that.

PPCA§C02.1

EXERCISE 1
SINGLE-CABLE TEST

PM-EX1

The Single-Cable Test

Marketing claims often promise “just one cable.” The reality depends on whether your laptop’s USB-C port can deliver enough power AND DP-alt video over the same line, simultaneously, at the wattage the monitor requires. Many ports cannot. This exercise distinguishes single-cable reality from single-cable myth.

DEMONSTRATION · MacBook Pro 14" + KYY 15.6" 1080P FHD

CODE	CALCULATION	DEMONSTRATION
SC-01	Monitor power requirement (watts)	7.5W
SC-02	Monitor accepts DP-alt video over USB-C?	Yes
SC-03	Laptop USB-C port outputs DP-alt?	Yes (3 of 3 ports)
SC-04	Laptop USB-C port output power available (watts)	Up to 15W per port for downstream
SC-05	Power available ≥ SC-01?	Yes (15W ≥ 7.5W)
SC-06	Bundled cable supports DP-alt + PD simultaneously?	Yes (USB-C 3.2 Gen 2)
SC-07	Single-cable operation viable?	YES

VERDICT · PASS

Single-cable operation confirmed. The KYY monitor at 7.5W draws less than the 15W the MacBook ’s USB-C downstream provides, and the bundled cable supports concurrent DP-alt + PD. No dual-cable workaround required.

PPCA§C02.1

EXERCISE 1
YOUR SETUP

PM-EX1

Single-Cable Test — Your Setup

Pull your laptop's USB-C downstream power spec from your Hardware Inventory (HW-09 / HW-06). Pull the monitor's power requirement from its spec sheet. If SC-04 < SC-01, you need a dual-cable setup or external power injection.

CODE	CALCULATION	YOUR VALUE
SC-01	Monitor power requirement (watts)	
SC-02	Monitor accepts DP-alt over USB-C? (Y/N)	
SC-03	Laptop USB-C port supports DP-alt? (Y/N)	
SC-04	Laptop USB-C downstream power available	
SC-05	Is SC-04 ≥ SC-01? (Y/N)	
SC-06	Cable supports DP-alt + PD simultaneously?	
SC-07	Single-cable operation viable? (Y/N)	

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

PPCA§C02.2

EXERCISE 2
BRIGHTNESS MATCH

PM-EX2

Brightness vs. Ambient-Light Match

A 300-nit panel that is fine indoors is unusable in a 500-lux office or near a bright window. Manufacturer spec sheets list nits; nobody lists the lighting conditions you actually work in. Match them before buying.

DEMONSTRATION + YOUR SETUP · COMPACT

CODE	MEASUREMENT	DEMO	YOURS
BR-01	Your typical workspace lighting (lux estimate)	500	
BR-02	Required panel brightness for that lux (nits, rule of thumb)	350+	
BR-03	Candidate monitor brightness, mfr spec (nits)	250	
BR-04	Is BR-03 ≥ BR-02?	NO (−30%)	
BR-05	Anti-glare coating present?	No	
BR-06	Will you frequently work near windows or under direct light?	Sometimes	

DEMO VERDICT · CONDITIONAL

BR-03 (250 nits) falls 30% below the BR-02 threshold (350 nits) for the demo's 500-lux environment. Usable in indoor-shade conditions; visibility degrades near windows. **Mitigation:** reduce ambient light or move workspace away from direct windows.

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

020
OF 048

PPCA§C02.3

EXERCISE 3
KICKSTAND

PM-EX3

Kickstand Stability Audit

Portable monitors with thin panels and integrated kickstands have a tipping problem. When the panel is thin and the kickstand angle is steep, the center of gravity sits dangerously forward. Any desk vibration — typing, a passing truck — can tip the panel. The manufacturer never mentions this. Compute it.

DEMONSTRATION + YOUR SETUP · COMPACT

CODE	MEASUREMENT	DEMO	YOURS
KS-01	Panel thickness (mm)	8mm	
KS-02	Kickstand maximum angle from vertical (degrees)	25°	
KS-03	Kickstand foot depth from panel back (mm)	85mm	
KS-04	Panel diagonal converted to mm (inches × 25.4)	396mm (15.6")	
KS-05	Stability index (KS-03 / KS-04, unitless) — higher = more stable	0.21	
KS-06	Built-in case doubles as wider kickstand base?	No	
KS-07	Will surface have keyboard vibration?	Yes (laptop in front)	

STABILITY INDEX READING · RULE OF THUMB

Index ≥ 0.25: stable on most desks. **Index 0.18–0.25:** conditional — case-based base recommended. **Index < 0.18:** unstable; expect tipping with keyboard vibration.

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

PPCA§C02.4

EXERCISE 4
CABLE LENGTH

PM-EX4

Cable-Length Reality Check

Bundled cables are short — typically 1.0 to 1.2 meters — because the manufacturer assumes the monitor sits beside the laptop. The moment you want the monitor across the desk, behind a stand, or two feet to the side, the bundled cable runs short. Plan the replacement before purchase.

DEMONSTRATION + YOUR SETUP · COMPACT

CODE	MEASUREMENT	DEMO	YOURS
CL-01	Bundled cable length (cm)	120cm	
CL-02	Planned monitor location — distance from laptop USB-C port (cm)	150cm	
CL-03	Add 30% routing slack (CL-02 × 1.30)	195cm	
CL-04	Margin (CL-01 − CL-03)	−75cm	
CL-05	Replacement cable required?	YES	
CL-06	Replacement spec: USB-C 3.2 Gen 2 + 100W PD + 200cm, est. cost	~$18	

TOTAL-COST IMPLICATION

If CL-05 is YES, add the replacement cable cost to your candidate's effective purchase price. A "$130 monitor" that needs an $18 replacement cable is a $148 monitor. Build the real cost into your buying decision — do not surprise yourself at checkout.

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

PPCA§C02

SECTION 02
PM VERDICT

PM-V

Section 02 — PM Synthesis

The four PM exercises diagnose independent failure modes. A candidate must pass all four to be a viable purchase. Tally your verdicts here, then write the section verdict in one sentence.

EXERCISE	DIAGNOSTIC	YOUR VERDICT
PM-EX1	**Single-Cable Test**	Pass / Conditional / Fail
PM-EX2	**Brightness Match**	Pass / Conditional / Fail
PM-EX3	**Kickstand Stability**	Pass / Conditional / Fail
PM-EX4	**Cable Length**	Pass / Conditional / Fail

SECTION VERDICT RULE

A single Fail = candidate rejected. Two or more Conditional Passes = elevated risk; reconsider. All Pass or 1 Conditional Pass with documented mitigation = candidate viable. Write your final section verdict below.

§C03

03

DSE

Desktop Screen Extenders

Desktop screen extenders are bought to stay. Long-term ergonomics, mount load, and color consistency matter more than portability. The four exercises in this section catch the failure modes that only show up six months in — the sagging arm, the fitting that never sat right, the color drift that ruins photo work.

EXERCISES IN THIS SECTION

EX1	**MOUNT WEIGHT**	Arm + VESA + monitor stacked load tolerance
EX2	**VESA AUDIT**	75×75 vs. 100×100 vs. proprietary patterns
EX3	**DESK + DISTANCE**	Diagonal × 1.6 vs. your real desk depth
EX4	**COLOR UNIFORMITY**	ΔE expectations vs. budget realities

§C03 · DIFFERENTIATION · ARP-CLEARED

WHAT THE ON-SITE CHECKER CANNOT TELL YOU: whether YOUR specific monitor weight + YOUR arm's rated tolerance + YOUR VESA pattern + YOUR desk depth + YOUR color-work requirements together permit the desktop setup you're considering. Four exercises answer that.

PPCA§C03.1

EXERCISE 1
MOUNT WEIGHT

DSE-EX1

Mount Weight Tolerance

A monitor arm is rated for a weight range. If your monitor sits at the top of that range, sag develops within months — the arm droops, the screen tilts forward, ergonomics collapse. Always size the arm above your monitor's weight, never at it. This exercise computes the margin.

DEMONSTRATION · WORKED EXAMPLE · Dell U2723QE + Ergotron HX

CODE	CALCULATION	DEMONSTRATION
MW-01	Monitor weight (kg, mfr spec)	6.6kg
MW-02	VESA adapter plate weight (if needed)	0.2kg
MW-03	Any attached accessory (light bar / soundbar)	0.5kg
MW-04	Total load on arm (MW-01 + MW-02 + MW-03)	7.3kg
MW-05	Arm rated maximum (kg, mfr spec)	9.1kg
MW-06	Arm rated minimum (kg)	3.2kg
MW-07	Margin to maximum (MW-05 − MW-04)	1.8kg (20%)

VERDICT · PASS

Total load (7.3kg) sits 20% below the arm's maximum (9.1kg). Sufficient margin for long-term stability. No sag expected within typical 5-year arm life.

025
OF 048

PPCA§C03.1

EXERCISE 1
YOUR SETUP

DSE-EX1

Mount Weight — Your Setup

Pull monitor weight from the manufacturer's spec sheet (not the listing page — these often differ). Include any attached accessory weight. If MW-04 lands within 10% of MW-05, consider a higher-rated arm before purchase.

CODE	CALCULATION	YOUR VALUE
MW-01	Your monitor weight (kg)	
MW-02	VESA adapter plate weight (if any)	
MW-03	Attached accessory weight	
MW-04	Total load (MW-01 + MW-02 + MW-03)	
MW-05	Arm rated maximum (kg)	
MW-06	Arm rated minimum (kg)	
MW-07	Margin to maximum (MW-05 − MW-04)	

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

PPCA§C03.2

EXERCISE 2
VESA AUDIT

DSE-EX2

VESA Pattern Audit

Monitors and mounting arms speak the VESA standard — but in different patterns. The most common are 75×75mm and 100×100mm, but premium monitors increasingly ship proprietary mounting that requires an adapter plate. Adapter availability and added weight matter. Verify before buying both monitor and arm.

CODE	MEASUREMENT	DEMO	YOURS
VES-01	Monitor VESA pattern, mfr spec (mm)	100×100	
VES-02	Arm-supported VESA patterns (mfr spec)	75×75 + 100×100	
VES-03	Native compatibility (VES-01 in VES-02)?	YES	
VES-04	If NO: adapter plate required?	N/A	
VES-05	Adapter plate available and in stock?	N/A	
VES-06	Adapter plate weight (feeds into MW-02)	N/A	
VES-07	Proprietary mount on monitor (Apple Studio, etc.)?	No	

PROPRIETARY-MOUNT WARNING

If VES-07 is YES, the monitor cannot be used with standard arms without a vendor-specific adapter. These adapters are frequently unavailable, expensive ($150+), or void warranty. **Verify availability and warranty implications before purchase.**

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

027
OF 048

PPCA§C03.3

EXERCISE 3
DESK + DISTANCE

DSE-EX3

Desk Depth + Viewing Distance

The ergonomic rule: monitor diagonal × 1.6 = minimum viewing distance. A 32″ monitor requires roughly 51 inches (130cm) of separation — eye to screen — to avoid neck rotation when scanning corner to corner. Many desks cannot deliver that. Measure before buying.

Geometry reference: *all distances measured from the desk's* ***front edge*** *(where you sit). Monitor screen position = desk depth minus how far the stand sits inward from the back edge. Eye position sits behind the front edge as you lean into your chair.*

CODE	MEASUREMENT	DEMO	YOURS
DD-01	Monitor diagonal (inches)	32	
DD-02	Minimum viewing distance (DD-01 × 1.6, inches)	51"	
DD-03	In centimeters (DD-02 × 2.54)	130cm	
DD-04	Your desk depth, front edge to back edge (cm)	70	
DD-05	Distance from desk back edge to monitor screen (cm)	20	
DD-06	Monitor screen position from front edge (DD-04 − DD-05, cm)	50	
DD-07	Your eye position behind the front edge (cm, typical 10–20)	15	
DD-08	Available eye-to-screen distance (DD-06 + DD-07, cm)	65cm	
DD-09	Sufficiency check (DD-08 ≥ DD-03)?	NO (65 < 130)	

VERDICT · FAIL (demo case)

Available distance (65cm) falls 50% short of the minimum (130cm). A 32″ monitor on this desk will require constant neck rotation. **Mitigation paths:** (1) smaller monitor (24–27″), (2) deeper desk, (3) wall-mount the monitor behind the desk.

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

028
OF 048

PPCA§C03.4

EXERCISE 4
COLOR UNIFORMITY

DSE-EX4

Color Uniformity Tolerance

For general office work, color uniformity is irrelevant. For photo, video, or graphic work, it is everything. ΔE values quantify color drift; values above 3 are visible to humans, above 5 are obvious. Match the panel to the work — paying for a wide-gamut HDR display on a spreadsheet workflow is a waste; using a $200 panel for color-graded video is malpractice.

CODE	MEASUREMENT	DEMO	YOURS
CU-01	Type of color-critical work (photo/video/graphic/none)	Photography	
CU-02	Required ΔE (1–2 strict / 3–5 casual / 5+ tolerant)	≤2	
CU-03	Candidate monitor ΔE (mfr spec)	≤2 (factory calibrated)	
CU-04	Color gamut covered (sRGB / DCI-P3 / Adobe RGB)	99% DCI-P3	
CU-05	Required gamut for the work	99% sRGB min	
CU-06	Factory calibration report included?	Yes	
CU-07	Hardware calibration supported?	Yes (X-Rite i1)	
CU-08	Suitability check (CU-03 ≤ CU-02 + gamut match)?	PASS	

OVERSPEC WARNING

If CU-01 = None and CU-03 ≤ 2, you are paying for color performance you will not use. A $150 office monitor handles spreadsheets identically to a $1,500 reference display. **Match the panel to the work, not to the listing's feature list.**

☐ **PASS** ☐ **CONDITIONAL** ☐ **FAIL**

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

029
OF 048

PPCA§C03

SECTION 03
DSE VERDICT

DSE-V

Section 03 — DSE Synthesis

The four DSE exercises diagnose independent failure modes for long-term desktop installations. A candidate must pass all four. Even one Fail rules the candidate out. Tally your verdicts here, then write the section verdict in one sentence.

EXERCISE	DIAGNOSTIC	YOUR VERDICT
DSE-EX1	**Mount Weight**	Pass / Conditional / Fail
DSE-EX2	**VESA Pattern**	Pass / Conditional / Fail
DSE-EX3	**Desk + Distance**	Pass / Conditional / Fail
DSE-EX4	**Color Uniformity**	Pass / Conditional / Fail

SECTION VERDICT RULE

A single Fail = candidate rejected. Two or more Conditional Passes = elevated risk; reconsider. All Pass or 1 Conditional Pass with documented mitigation = candidate viable. Write your final section verdict below.

§C04

04

DS
Docking Stations

Docking stations are the most technically complex purchase in this Workbook. Buyers frequently learn after purchase that the dock's advertised output count exceeds what their laptop can actually drive — a returns spiral that bandwidth math, protocol audits, and power passthrough verification catch before checkout.

EXERCISES IN THIS SECTION

EX1	**BANDWIDTH BUDGET**	TB4 = 40 Gbps; subtract per-display allocation
EX2	**DISPLAY OUTPUTS**	Laptop DP-alt count vs. dock output count
EX3	**POWER PASSTHROUGH**	Dock PD output vs. laptop charging draw
EX4	**DAISY-CHAIN**	TB4 hub-mode limits, DP MST support
EX5	**FIRMWARE PATH**	Vendor app OS support; documented gotchas

§C04 · DIFFERENTIATION · ARP-CLEARED

WHAT THE ON-SITE CHECKER CANNOT TELL YOU: whether YOUR laptop's Thunderbolt class + YOUR display count + YOUR power draw + YOUR daisy-chain plans + YOUR OS for firmware updates together permit the dock you're considering. Five exercises answer that.

PPCA§C04.1
EXERCISE 1
BANDWIDTH BUDGET

DS-EX1

The Bandwidth Budget

Thunderbolt 4 advertises 40 Gbps. That number is shared across every display, every drive, every peripheral attached to the dock. Subtract per-display allocations from 40 Gbps and what remains is your available storage + peripheral bandwidth. When the math goes negative, the dock drops displays silently or limits refresh rates. Compute the budget before purchase.

DEMONSTRATION · WORKED EXAMPLE · CalDigit TS4 + 2×4K@60Hz + NVMe

CODE	CALCULATION	DEMONSTRATION
BW-01	Dock upstream bandwidth (TB4 = 40 Gbps)	40 Gbps
BW-02	Display 1 — 4K @ 60Hz DP 1.4 (uncompressed)	12.5 Gbps
BW-03	Display 2 — 4K @ 60Hz DP 1.4 (uncompressed)	12.5 Gbps
BW-04	Display subtotal (BW-02 + BW-03)	25 Gbps
BW-05	Remaining budget (BW-01 − BW-04)	15 Gbps
BW-06	Attached NVMe drive sustained rate	8 Gbps
BW-07	Peripheral overhead (USB + ethernet + audio)	~2 Gbps
BW-08	Final margin (BW-05 − BW-06 − BW-07)	5 Gbps

VERDICT · PASS

Final margin (5 Gbps, 12.5% headroom) is adequate. Both displays run uncompressed at full refresh; the NVMe drive runs at full speed. No display drops or NVMe throttling expected under typical loads.

PPCA§C04.1
EXERCISE 1
YOUR SETUP

DS-EX1

Bandwidth Budget — Your Setup

For DP 1.4 4K @ 60Hz, use 12.5 Gbps per display. For 4K @ 120Hz, double to 25 Gbps. For 5K, use 27 Gbps. For 1440p @ 144Hz, use 8 Gbps. Check your dock's upstream spec — not all "Thunderbolt" docks are TB4. USB4 docks may be 20 Gbps, not 40.

CODE	CALCULATION	YOUR VALUE
BW-01	Your dock upstream bandwidth	
BW-02	Display 1 bandwidth requirement	
BW-03	Display 2 bandwidth requirement	
BW-04	Display subtotal	
BW-05	Remaining budget (BW-01 − BW-04)	
BW-06	Attached drive sustained rate	
BW-07	Peripheral overhead estimate	
BW-08	Final margin	

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

033
OF 048

PPCA§C04.2
EXERCISE 2
DISPLAY OUTPUTS

DS-EX2

Display Output Enumeration

Docks advertise display output counts — “dual 4K” or “triple display” — but the laptop must support that many output streams. A MacBook Air M2 supports one external display. A dock with three outputs plugged into that laptop drives one of them and leaves two dark. Match dock outputs to laptop capability — not to dock marketing.

CODE	MEASUREMENT	DEMO	YOURS
DO-01	Dock advertised display outputs	3 (2×DP + 1×HDMI)	
DO-02	Laptop DP-alt mode output streams supported	2 (M3 Pro)	
DO-03	Laptop max external displays (mfr spec)	2	
DO-04	Effective output count (min of DO-01, DO-03)	2	
DO-05	Are you trying to drive more than DO-04?	NO (using 2 of 2)	
DO-06	Dock MST support? (Windows only — macOS limited)	Yes (Windows only)	
DO-07	Your OS	macOS	
DO-08	MST usable? (DO-06 + DO-07 compatibility)	No (macOS does not support MST)	

MACOS USERS · MST WARNING

macOS does not support DisplayPort Multi-Stream Transport (MST). Docks that promise “triple display” via MST will deliver only one display to a Mac. Apple Silicon laptops also have hard limits on external display count: M2/M3 = 1, M2/M3 Pro = 2, M-series Max = 4.

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

PPCA§C04.3

EXERCISE 3
POWER PASSTHROUGH

DS-EX3

Power Passthrough Math

The dock charges the laptop while driving the displays. When the dock's PD output sits below the laptop's factory-adapter rating, charging slows under sustained workloads — sometimes to a net trickle, sometimes to a net drain depending on what the laptop is doing. This exercise computes the actual surplus, so "90W dock for a 96W laptop" becomes a number, not a guess. Match the spec, do not eyeball it.

CODE	MEASUREMENT	DEMO	YOURS
PP-01	Laptop bundled-adapter wattage (from Hardware Inventory HW-08)	96W	
PP-02	Dock PD output to laptop, mfr spec	90W	
PP-03	PP-02 ≥ PP-01?	NO (90 < 96)	
PP-04	Will you run sustained heavy workloads (video, compile, ML)?	Yes	
PP-05	Under PP-04, laptop draws (mfr peak) approximately	65W sustained	
PP-06	Concurrent dock peripheral draw (USB devices, drives)	~10W	
PP-07	Total demand (PP-05 + PP-06)	75W	
PP-08	Surplus for battery charging (PP-02 − PP-07)	15W	

VERDICT · CONDITIONAL (demo case)

PP-02 (90W) is below PP-01 (96W). Battery charging will be slow during heavy workloads (15W surplus). Laptop battery will recover during idle periods but should not be relied on to fully charge during sustained heavy use. **Mitigation:** dock laptop overnight when battery dips below 30%.

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

PPCA§C04.4

EXERCISE 4
DAISY-CHAIN

DS-EX4

Daisy-Chain Rule Audit

Thunderbolt daisy-chains let you cascade displays and peripherals through a single laptop port — in theory. In practice, hub-mode limits, DP MST support, and protocol mismatches break chains in non-obvious ways. If you plan a chain, audit the rules before purchase.

CODE	MEASUREMENT	DEMO	YOURS
DC-01	Are you daisy-chaining? (Y/N)	Yes	
DC-02	Chain configuration (Dock → Display → Drive, etc.)	Dock → 4K display → NVMe	
DC-03	All devices Thunderbolt-rated? (Y/N)	Yes (all TB4)	
DC-04	Mixing TB3 and TB4? Cascade limited to TB3 speeds	No	
DC-05	Chain length within mfr-supported depth (typ. 6 devices)	3 of 6	
DC-06	Any device a hub vs. endpoint? Hubs add latency	No	
DC-07	Will any device hot-unplug during use?	Yes (NVMe occasional)	
DC-08	Hot-unplug supported without re-enumeration?	TB4 yes; verify driver	

CHAIN LENGTH WARNING

Each device in a chain adds latency. Three-device chains generally run fine; six-device chains frequently experience random disconnects, particularly on Windows. **Keep chains short. Use a hub-mode dock with parallel ports instead of cascading where possible.**

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

036
OF 048

PPCA§C04.5
EXERCISE 5
FIRMWARE PATH

DS-EX5

Firmware Update Path Check

Docks need firmware updates — sometimes critical ones that fix display disconnect bugs or power-delivery issues. Most updates require a vendor application. Many of those applications run only on Windows. Mac and Linux users frequently discover they cannot update their dock's firmware without borrowing a Windows machine. Verify before purchase.

CODE	MEASUREMENT	DEMO	YOURS
FW-01	Vendor firmware update method	Vendor app (Windows)	
FW-02	Vendor app OS support — macOS available?	No	
FW-03	Vendor app OS support — Linux available?	No	
FW-04	Your OS	macOS	
FW-05	Can you run vendor app natively? (FW-02/03 vs FW-04)	NO	
FW-06	Vendor publishes firmware update release notes / changelog?	Yes	
FW-07	Documented compatibility issues with FW-04? (search "[dock model] macOS")	Some reports	
FW-08	Workaround available (VM / dual-boot / borrowed PC)?	VM in Parallels	

CRITICAL FIRMWARE GAP

If FW-05 is NO and FW-08 is None, you will be unable to apply firmware fixes. This is a silent risk — the dock works on day one, then a critical bug appears, and the fix is inaccessible to you. **Either obtain a workaround path before purchase, or choose a vendor with cross-platform update support.**

☐ PASS ☐ CONDITIONAL ☐ FAIL

STRUCTURAL REASON *(one sentence: why your verdict, in words you would defend)*

037
OF 048

PPCA§C04

SECTION 04
DS VERDICT

DS-V

Section 04 — DS Synthesis

The five DS exercises diagnose independent failure modes for docking-station purchases. A candidate must pass all five. The Firmware Path (DS-EX5) is the silent killer — do not discount it. Tally your verdicts below.

EXERCISE	DIAGNOSTIC	YOUR VERDICT
DS-EX1	**Bandwidth Budget**	Pass / Conditional / Fail
DS-EX2	**Display Outputs**	Pass / Conditional / Fail
DS-EX3	**Power Passthrough**	Pass / Conditional / Fail
DS-EX4	**Daisy-Chain**	Pass / Conditional / Fail
DS-EX5	**Firmware Path**	Pass / Conditional / Fail

SECTION VERDICT RULE

A single Fail = candidate rejected. Two or more Conditional Passes = elevated risk; reconsider. All Pass or 1 Conditional Pass with documented mitigation = candidate viable. Write your final section verdict below.

038
OF 048

PPCA§05
BACK MATTER
SYNTHESIS

Cross-Category Synthesis

Your four section verdicts together form your full compatibility picture. Most buyers do not need every category; map your situation to the matrix below, then read off the short-list. This page is the bridge between completing the Workbook and clicking the buy button.

IF YOUR PRIMARY NEED IS…	CATEGORY TO PRIORITIZE	RELEVANT EXERCISES
On-the-go second screen for a laptop	§01 LSE	EX1, EX2, EX3, EX5
Flexible portable display (travel, hotdesk)	§02 PM	EX1, EX2, EX4
Permanent home/office desktop expansion	§03 DSE	EX1, EX3, EX4
Laptop → multi-display productivity hub	§04 DS	EX1, EX2, EX3
Laptop screen extender + dock combination	§01 + §04	LSE-EX1,EX3 + DS-EX2,EX3
Color-critical work (photo / video / design)	§03 DSE	EX4 (priority)
Heavy travel + brief working sessions	§02 PM	EX2, EX3 (priority)

THE SHORT-LIST RULE

Your short-list is any candidate that passed (or Conditionally passed with a documented mitigation) every relevant exercise for your priority category. Re-read your structural reasons. If any reason gives you pause now, trust the pause. Better to delay a purchase by a week than to absorb a return cycle.

PPCA§06
BACK MATTER
12 FAILURE MODES

The 12 Failure Modes

A final pre-purchase scan, grouped by category. Each mode below has appeared in real reader correspondence over the past three years. None are theoretical. **Coverage rule:** check every box in Universal plus every box in the cluster(s) for your purchase category. A portable monitor alone = 2 + 2 = 4 boxes. A laptop extender plus a dock = 2 + 3 + 4 = 9. The 12 modes exist because each one has cost a real reader a return cycle. Skip none in your scope.

UNIVERSAL — applies to every category —

- ☐ FM-01 OS too old for required driver
- ☐ FM-02 Total cost exceeds budget after accessories

LSE Laptop Screen Extenders

- ☐ FM-03 USB-C port doesn’t support DP-alt
- ☐ FM-04 Single-cable doesn’t deliver enough power
- ☐ FM-05 Hinge weight tolerance exceeded

PM Portable Monitors

- ☐ FM-06 Brightness too low for ambient light
- ☐ FM-07 Bundled cable too short for real layout

DSE Desktop Screen Extenders

- ☐ FM-08 VESA pattern doesn’t match arm

DS Docking Stations

- ☐ FM-09 Dock outputs exceed laptop capability
- ☐ FM-10 macOS + MST incompatibility
- ☐ FM-11 Dock PD output below laptop charging need
- ☐ FM-12 Firmware update path inaccessible

PPCA§07
BACK MATTER
WHAT HAPPENS NEXT

What Happens Next

Completing this Workbook is the first chapter, not the last. Over the next two weeks, five short emails will arrive in the inbox you used to request the Audit. Each one extends the methodology you just learned, in compressed form, for a specific situation. The sequence is free, ungated, and you can unsubscribe at any time with the link at the bottom of every email.

CODE	WHEN	SUBJECT
EM-01	DAY 1	**The Audit Arrives** A short confirmation that this PDF is yours, plus the one thing most readers skip on first read.
EM-02	DAY 3	**The Spine in Action** How a real reader applied the Diagnostic Spine to a tough purchase — with the actual hardware, the actual math, and the actual decision.
EM-03	DAY 6	**When Conditional Pass Means Walk Away** Conditional Pass verdicts catch the buyers who rationalize. We name the five conditional-pass patterns that almost always become returns.
EM-04	DAY 10	**The Refresh-Cycle Question** When to upgrade existing hardware vs. when to buy new. The Workbook's methodology applied to the harder question of timing, not just compatibility.
EM-05	DAY 14	**The Reader's Library** A curated index of our deepest editorial pieces — the methodology behind individual product reviews, the testing-lab chapter, the comparison frameworks. For when you want to go further.

EDITORIAL PROMISE · NO SALES SEQUENCE

Not one of these emails will pitch you a product. They extend the methodology and link to free editorial pieces. ScreenExtendersHub earns through Amazon affiliate links inside reviews — not through email pressure. If a sequence ever drifts into pushy territory, reply to that email and call it out; we will fix it.

041
OF 048

PPCA§08

BACK MATTER
METHODOLOGY

Methodology + References

The Workbook's exercises are grounded in standards-body documentation, manufacturer specifications, and the ScreenExtendersHub testing methodology published at our site. Below is the working bibliography — the documents we consulted, in the order their content appears across the Workbook.

REF	SOURCE	CONTENT REFERENCED
R-01	**USB Implementers Forum (USB-IF)**	USB Power Delivery Specification Rev. 3.1; USB-C Cable and Connector Specification Rev. 2.2
R-02	**VESA**	Display Data Channel (DDC) and Flat Display Mounting Interface (FDMI) standards documentation
R-03	**Intel Thunderbolt 4 Specification**	Thunderbolt 4 architecture, hub-mode protocol, and chained-device topology
R-04	**Apple Developer Documentation**	External Display Compatibility on Apple Silicon Macs; macOS DisplayPort and HDMI behavior reference
R-05	**Microsoft DisplayPort + MST**	Windows 11 multi-stream transport support documentation; driver-model display behavior
R-06	**DisplayLink (Synaptics)**	DisplayLink USB Graphics driver documentation; OS-support matrix for macOS, Windows, ChromeOS
R-07	**ScreenExtendersHub Methodology**	screenextendershub.com/methodology — our public testing-lab chapter; product evaluation framework; weighted criteria
R-08	**ScreenExtendersHub Glossary**	screenextendershub.com/glossary — 100+ term technical glossary covering DP-alt, MST, PD, VESA, TB4 definitions

PPCA§09

QUICK REFERENCE
SIDE A

Quick Reference — Side A

Print this page double-sided with Side B. Fold along the center. Carry it to checkout. Every key spec the Workbook taught you to verify, on one page, in mono. Trust the card.

§01 LSE LAPTOP SCREEN EXTENDERS

Power budget	Laptop PD spec − extender draw ≥ laptop’s peak draw
Hinge load	Combined screen + extender weight ≤ mfr hinge tolerance
Port allocation	At least one port free for charging while extended
Driver path	OS supports DisplayLink OR USB-C supports DP-alt mode
Workspace	Deployed width fits actual desk + carry case

§02 PM PORTABLE MONITORS

Single-cable	Laptop USB-C downstream W ≥ monitor required W
Brightness	Panel nits ≥ ambient lux × 0.7 (rough rule)
Kickstand	Stability index (foot mm / diagonal mm) ≥ 0.20
Cable length	Bundled cable × 1.3 ≥ real layout distance

PPCA§09
QUICK REFERENCE
SIDE B

Quick Reference — Side B

Continued. Desktop Screen Extenders + Docking Stations. For the 12 Failure Modes coverage scan, see Page 40.

§03 DSE DESKTOP SCREEN EXTENDERS

Mount weight	Monitor + accessory weight ≤ arm rated max (with margin)
VESA pattern	Monitor VESA pattern in arm-supported list, OR adapter
Desk + distance	Available eye-to-screen distance ≥ diagonal × 1.6
Color uniformity	ΔE ≤ work requirement; gamut covers work needs

§04 DS DOCKING STATIONS

Bandwidth	Upstream Gbps − display allocation > storage + peripheral
Display outputs	Laptop’s display capability ≥ dock output count needed
Power passthrough	Dock PD output ≥ laptop’s typical sustained draw
Daisy-chain	Chain depth within mfr spec; no protocol downshifts
Firmware path	Vendor update app runs on your OS, or VM workaround

AT-CHECKOUT REMINDER

Before clicking buy: every box on Page 40 verified, every rule on this card cross-checked against the candidate’s spec sheet (NOT the listing page — spec sheets are authoritative). If even one rule cannot be verified, pause the purchase.

PPCA§10
BACK MATTER
EDITORIAL STANDARDS

Our Editorial Standards

You have reached the end of the diagnostic content. The remaining two pages document who produces ScreenExtendersHub and the legal terms under which this Workbook is distributed. Both matter — not as fine print, but as evidence of how the work is done.

How we work

ScreenExtendersHub is an independent editorial publication covering laptop screen extenders, portable monitors, desktop screen extenders, and docking stations. Every product reviewed on the site is evaluated through the same documented chain: context → constraints → options → trade-offs → suitability → recommendation. Editorial decisions are made independently of commission rates.

What we publish

In-depth product reviews, category buying guides, a 100+ term technical glossary, a public methodology document, side-by-side comparison frameworks, and educational long-form pieces. All of it is free. None of it is gated.

What we do not do

We do not accept paid placements, sponsored reviews, or vendor-supplied content. We do not rank products by commission rate. We do not write content optimized only for affiliate clicks. When a category's correct answer for a buyer is "do not purchase," we say so and link to alternatives, regardless of revenue implications.

WHERE TO READ MORE

Editorial standards: **screenextendershub.com/about-us** · The team and credentials: **screenextendershub.com/about-the-founder** · Full disclosure policy: **screenextendershub.com/disclosure** · Methodology in depth: **screenextendershub.com/methodology** · Glossary: **screenextendershub.com/glossary**

PPCA§11
IMPRINT
FINAL DISCLOSURE

Imprint and Final Disclosure

AMZN-DISCL · VERBATIM · REPEATED

ScreenExtendersHub is a participant in the Amazon Services LLC Associates Program, an affiliate advertising program designed to provide a means for sites to earn advertising fees by advertising and linking to Amazon.com.

TITLE	The Pre-Purchase Compatibility Audit
VERSION	PPCA-WB-v1
ISSUED	May 2026
PUBLISHED BY	ScreenExtendersHub Editorial
TYPE	Diagnostic workbook · Lead-magnet asset
PAGE COUNT	48 pages
FORMAT	US Letter portrait · PDF (vector)
LICENSE	Free distribution permitted with verbatim attribution; no modification
CONTACT	support@screenextendershub.com
WEB	https://screenextendershub.com
DISCLOSURE	https://screenextendershub.com/disclosure
METHODOLOGY	https://screenextendershub.com/methodology

PUBLISHED BY SCREENEXTENDERSHUB EDITORIAL · PPCA-WB-v1 · END OF DOCUMENT · PROCEED WITH CONFIDENCE

PPCA§12
READER'S NOTES
UNSTRUCTURED

Reader’s Notes

An unstructured page for your own work. Sketch a candidate comparison, list questions to email the manufacturer, capture a post-purchase observation for the next audit cycle. The Workbook ends; the thinking continues here.

BACK COVER / DOCUMENT 001

You have the math.
You have the rules.
Now buy with evidence.

This Workbook ends here. The methodology travels with you.

CATEGORY AUTHORITY

§01 LSE
Laptop Screen Extenders

§02 PM
Portable Monitors

§03 DSE
Desktop Screen Extenders

§04 DS
Docking Stations

CONTINUE READING AT

REVIEWS	screenextendershub.com
METHODOLOGY	screenextendershub.com/methodology
GLOSSARY	screenextendershub.com/glossary
BLOG	screenextendershub.com/blog

PUBLISHED
May 2026

BY
ScreenExtendersHub

VERSION
PPCA-WB-v1 · 048 PP