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ADHD ONE

Bill of Materials

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All electronics, hardware and consumables you need for the build. Reference numbers match the PCB and the build guide. Where several variants are offered, the notes say which one to pick.

Some links are affiliate links. If you buy through them, I may earn a small commission at no extra cost to you.

Availability: Shops, listings and links change often. I can't guarantee that every part stays available at the linked shop, ships to your country or is still offered in the exact variant shown. If a part is no longer available, use an equivalent part with the same specifications. I am not responsible for the availability, quality, pricing or delivery of third-party products.

REF	PART	SPECIFICATION	QTY	WHERE TO BUY	NOTES
Custom PCB	Order the bare board from the Gerber files in the download.				
PCB1	**Main board**	2-layer FR4 · 1.6 mm · HASL	**1**	**PCBWay**	Most PCB makers have a minimum order of 5 boards.
PCB components	Soldered to the main board.				
A1	**Raspberry Pi Pico**	RP2040 · standard Pico, no headers (not Pico H) · soldered via castellated pads	**1**	**AliExpress** · **Amazon**	Choose the version without pre-soldered headers. AliExpress: pick the Micro-USB (official) variant.
U1	**Feasycom FSC-BT1026C**	Bluetooth 5.1 audio module · QCC3024 · HFP/A2DP	**1**	**AliExpress** · **Alibaba** · **Feasystore**	Also available from the Feasycom store and on Alibaba.
PAM8302_Module1	**PAM8302A amplifier module (CJMCU-832)**	2.5 W mono class-D breakout	**1**	**AliExpress** · **Amazon**	Use the CJMCU-832 board (purple).
TP1	**TP4056 charger module**	1 A Li-ion charger · with protection · USB-C	**1**	Buy from a reliable source	Must have USB-C and a protection circuit (DW01). Buy from a quality source and test it before soldering.
SW1–SW20, SW22	**Tactile switch 6×6×9 mm SMD**	4-pin · 6 × 6 mm · 9 mm height · fits PTS645 footprint	**21**	**AliExpress** · **Amazon**	Choose SMD 6x6x9mm. Amazon: pick 6x6x9 mm.
BZ1	**Passive buzzer 12085**	Magnetic · 42 Ω · 12 × 8.5 mm · 3–12 V	**1**	**AliExpress** · **Amazon**	AliExpress: pick 42R. Amazon option is 16 Ω (42 Ω not found).
Q8	**AO3401A P-MOSFET**	SOT-23	**1**	**AliExpress** · **Amazon**	
Q6	**BC547 NPN transistor**	TO-92	**1**	**AliExpress** · **Amazon**	AliExpress: pick BC547.
D2	**1N4148 diode**	DO-35 · axial	**1**	**AliExpress** · **Amazon**	
C1, C3	**Capacitor 100 nF**	Ceramic disc · 2.5 mm pitch	**2**	**AliExpress** · **Amazon**	Assortment kit.
C2	**Capacitor 15 pF**	Ceramic disc · 2.5 mm pitch	**1**	**AliExpress** · **Amazon**	Assortment kit.

REF	PART	SPECIFICATION	QTY	WHERE TO BUY	NOTES
R1	**Resistor 2.2 kΩ**	1/4 W axial · DIN0204	**1**	**AliExpress** · **Amazon**	Assortment kit.
R2, R3	**Resistor 1 kΩ**	1/4 W axial · DIN0204	**2**	**AliExpress** · **Amazon**	Assortment kit.
R4, R5	**Resistor 100 kΩ**	1/4 W axial · DIN0204	**2**	**AliExpress** · **Amazon**	Assortment kit.
R6	**Resistor 5.6 kΩ**	1/4 W axial · DIN0204	**1**	**AliExpress** · **Amazon**	Assortment kit. Check that it includes 5.6 kΩ.
R7	**Resistor 10 kΩ**	1/4 W axial · DIN0204	**1**	**AliExpress** · **Amazon**	Assortment kit.
J1, LS1	**JST PH 2-pin header**	2.0 mm pitch · top entry (vertical) · B2B-PH-K footprint	**2**	**AliExpress** · **Amazon**	Battery + speaker. Choose "2P Top Entry".
MK1	**2-pin socket, 1.25 mm pitch**	Straight pin · fits KiCad DF13 footprint	**1**	**AliExpress** · **Amazon**	Microphone. Choose: Straight pin socket / 1.25MM Pitch / 2P.
J3	**Pin header 1×8, long**	2.54 mm · single row · male · 17 mm pins	**1**	**AliExpress**	Display. Choose 17 mm / 1x8p. No 17 mm version found on Amazon.
J3	**Female header socket 1×8**	2.54 mm · single row	**1**	**AliExpress** · **Amazon**	Display socket. Choose 1x8p.
Other electronics Connected to the board with plugs or wires.					
→ J3	**Display 1.47" TFT IPS**	172 × 320 · ST7789 · SPI · 8-pin	**1**	**AliExpress** · **Amazon**	Choose "LCD Module" variant. Pin order GND VCC SCL SDA RES DC CS BLK.
→ J1	**LiPo battery 103450**	3.7 V · ~1800–2000 mAh · 10 × 34 × 50 mm · with protection circuit · JST PH 2.0 plug	**1**	Buy from a reliable source	Buy from a reliable source. Must have protection circuit. Check plug polarity.
→ LS1	**Speaker 28 mm, ultra thin**	8 Ω · 2 W · 28 × 5 mm · 20 cm wire · JST PH 2.0 plug	**1**	**AliExpress** · **Amazon**	Choose "28mm with ph2.0". Plugs into LS1 (JST PH). Amazon option has no plug: crimp JST PH.
→ MK1	**Microphone MIC 6050**	Electret condenser · 6 × 5 mm · omni · 2.2 kΩ · with wire, 2P 1.25 mm plug	**1**	**AliExpress** · **Amazon**	Choose "MIC 6050 with Wire". Plugs into MK1. Amazon option has bare wires: crimp 1.25 mm plug.
–	**Hook-up wire**	28 AWG silicone	**1**	**AliExpress** · **Amazon**	
Display window, screws & hardware					
W1	**Acrylic sheet 1 mm, gray/smoke transparent**	1.0 mm · translucent medium gray · cut to 45 × 20 mm	**1**	**Local hardware store** · **AliExpress**	Critical part. Best bought at a local hardware or DIY store: 1 mm gray or smoked acrylic. Online option: AliExpress, choose "Light Black". Or use Option B (W1-B) below.
W1-B	**Option B: clear acrylic sheet 1 mm**	1.0 mm · clear transparent · cut to size	**1**	**AliExpress** · **Amazon**	Alternative to W1, combine with tint film. AliExpress: choose 1 mm. Also at local hardware stores.
W1-B	**Option B: window tint film**	Car window tint film · ~35–50% VLT (light transmission) for a medium gray	**1**	**AliExpress** · **Amazon**	Apply to the clear sheet to tint it like car windows. AliExpress: choose 35% VLT. Amazon link is 50% VLT.
H1	**Screws M2.5 × 22 mm**	Pan head · Phillips · A2 stainless (304)	**2**	**AliExpress**	Choose M2.5 / 22 mm. No M2.5×22 found on Amazon.
H4	**PCB + frame screws M2.5 × 30 mm**	Pan head · Phillips · A2 stainless (304)	**4**	**AliExpress**	Hold the PCB sandwiched in the mounting frame. Choose M2.5 / 30 mm. No M2.5×30 found on Amazon.
H5	**Screws M2.5 × 8 mm, countersunk**	GB819 · Phillips flat head · 304 stainless	**2**	**AliExpress** · **Amazon**	Choose M2.5 50pcs / 8 mm.

REF	PART	SPECIFICATION	QTY	WHERE TO BUY	NOTES
H2	**Heat-set inserts, brass**	M2.5 × L3 × OD3.5 mm · knurled	8	AliExpress · Amazon	Amazon: check OD 3.5 / L3.
H3	**Display mounting screws**	M2.6 × 5 mm · self-tapping into plastic	4	AliExpress · Amazon	Amazon: assortment incl. M2.6.
Glue, tape & consumables Any UV glue and super glue will do. One bottle or roll lasts many builds.					
G1	**UV glue with UV light**	UV-curing adhesive · any brand	1	AliExpress · Amazon	Any UV glue works.
G2	**Super glue**	Cyanoacrylate · any brand	1	AliExpress · Amazon	Any super glue works. Amazon link: Loctite 406 (bonds plastics).
G3	**Double-sided tape, 3 mm**	Transparent PET film tape · ~0.2 mm thin · 3 mm wide (tesa 4965 / 3M 9088 type)	1	AliExpress · Amazon	For gluing in the display. AliExpress: choose 3 mm.
G4	**EPDM foam tape, self-adhesive**	2 mm thick · 30 mm wide · single-sided adhesive · cut a 50 mm piece	1	AliExpress · Amazon	Battery cushion in the battery compartment. Use the 2 mm version. AliExpress: choose 2mm x 30mm x 10m.