Phasma ITC Device – Bill of Materials

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■■ DISCLAIMER

This project involves working with electronics, soldering, and lithium power banks.
Any misunderstanding of basic electronics could result in **fire, serious injury, or worse**.
This guide is for **educational and experimental purposes only**.
Only persons experienced in electronics should attempt this build.
By following this guide, you accept all risks.

Category	Item	Brand/Spec	Notes
Core Components	Raspberry Pi Zero 2 W	Raspberry Pi	Main controller
	Waveshare Touchscreen HAT	3.5"/4.0" SPI	Display + input
	Adafruit LSM9DS1 9-DOF Sensor	Adafruit #3387	Accel, gyro, mag
	USB Sound Card	Generic USB audio dongle	Mic + headphone jack
	microSD Card	32 GB	Pre-flash with phasma.img
Power & Control	USB Power Bank	Generic, 5V 2A	Internal battery supply
	Panel-mount USB port	Generic	For charging inside case (optional)
	Power Pushbutton	Momentary	Front panel power control
	Toggle Switch	Generic	Optional master cutoff
EMF Probe (Optional)	Ferrite Bar Core	2" x 1/4"	For pickup coil
	Magnet Wire	8 gauge, ~200 turns	Wound on ferrite core

	Resistor	1 kΩ	Series with coil
	Capacitor	0.01 µF	Coupling cap
	Diodes	2 × 1N4148	Antiparallel clamp
	Resistor	100 kΩ	Optional bleeder
	Audio Jack	3.5 mm panel mount	Connects probe to USB mic
Miscellaneous	Jumper Wires / Ribbon Cables	Generic	Interconnects
	Case Enclosure	Generic project box	Holds all parts
	Stylus + Stylus Pocket	Generic	Optional for touchscreen