

THE GONGBAN SYSTEM

Why hardware deals just got investable

A briefing for fund managers on the system that turns
hardware startups into software-like bets

Why VCs avoid hardware deals

Hardware has been toxic for fund math. Here's why:

**\$150K-
500K**

NRE before revenue

Tooling, molds, certifications — all burned before a single unit ships. Kills fund IRR.

12-18 mo

To first revenue

Dev cycles that eat runway. A SaaS bet gets to market 4x faster with the same capital.

95%

Hardware failure rate

Crowdfunded products. Most die in engineering — a risk VCs can't underwrite or de-risk.

The gongban system eliminates all three risks.

Shenzhen's electronics supply chain already runs on venture logic.

The structure mirrors the fund model investors already know — because both solve the same problem: how to place many bets cheaply and capture outsized returns from the winners.

Once you see this, hardware deals stop looking foreign.

The chip design house is the PE fund

YOUR WORLD

Private equity fund

Deploys capital at scale. Backs fund managers. Returns come from portfolio volume across the entire market.



SHENZHEN EQUIVALENT

Chip design house

Rockchip, Allwinner, MediaTek.
Makes the silicon. Returns come from chip volume — every unit sold by any brand is revenue.

The IDH is the venture capital fund

YOUR WORLD

Venture capital fund

Designs the thesis. Invests in 100 startups. Bets that 2-3 will be breakout hits that return the entire fund.



SHENZHEN EQUIVALENT

IDH (design house)

Designs the gongban. Gives it to 100 brands. Bets that 2-3 will be massive sellers that drive huge chip volume back upstream.

TIER 3

Hardware brands are the portfolio companies

YOUR WORLD

Portfolio startups

100 companies. Each takes the capital, tries to win their market. Most fail. A few become unicorns.



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Hardware brands

100 brands. Each takes the gongban, adds logo + packaging, tries to win their channel. Most stay small. A few become category leaders.

Same portfolio math, different asset class

- **The IDH's "fund" is a reference design**

3–6 months of engineering = one gongban. That's their capital deployment — one bet, spread across 100 brands.

- **Distribution cost is near zero**

Giving the gongban to brand #47 costs nothing — the design is done. Same as writing a check from an already-raised fund.

- **Returns are power-law**

Most brands order 1K–5K units. A few order 500K+. The IDH needs 2–3 hits to return the entire design investment.

- **The chip company is the LP**

Rockchip doesn't care which brand wins. They care about total volume across all 100. They subsidize the IDH to get broad exposure.

- **"Exits" are volume milestones**

When a brand hits 100K+ units, the IDH gets recurring orders. That's the IPO moment of the gongban world.

What changes for your fund

Gongban-native startups flip every metric that made hardware uninvestable:

	TRADITIONAL	GONGBAN-NATIVE
NRE / tooling	\$150K-500K	\$0 — already amortized
Time to first unit	12-18 months	2-4 weeks
Engineering risk	High — unproven design	Zero — battle-tested PCB
Minimum viable raise	\$1M+ seed	\$50K-100K
Pivot cost	New tooling, new cycle	Pick a different gongban
Where founder wins	Must be an engineer	Brand, channel, GTM

Why this is your opportunity

Most Western VCs don't know this system exists. That's the edge.

Hardware deals with SaaS economics

Your portcos launch physical products with near-zero NRE, 3x-5x gross margins, and iterate like software companies. Fund math finally works for atoms.

Information asymmetry

99% of EU/US fund managers have never heard the word gongban. Founders who understand this system have a structural cost advantage that competitors can't see.

Massive TAM, zero crowding

Consumer electronics is a \$1T+ market. The gongban layer is how most of it actually gets made — but almost no Western capital is deployed against it.

What a gongban-native portco looks like

The founder you want to back:

- 1 Picks proven gongban hardware**

Curates from thousands of existing, certified, mass-produced designs. No engineering team needed.
- 2 Adds brand + packaging + channel**

Logo, color, retail packaging, EU compliance markings. This is where the margin lives.
- 3 Owns the customer relationship**

D2C, Amazon, retail — they control distribution, pricing, and the post-sale experience.
- 4 Iterates at software speed**

Product not selling? Swap to a different gongban next month. No sunk tooling. No 12-month reset.

Result: a capital-efficient hardware company that a VC can underwrite like a software deal.

Gōngbǎn (公板)

The system that makes hardware investable.

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