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GUIDE V5







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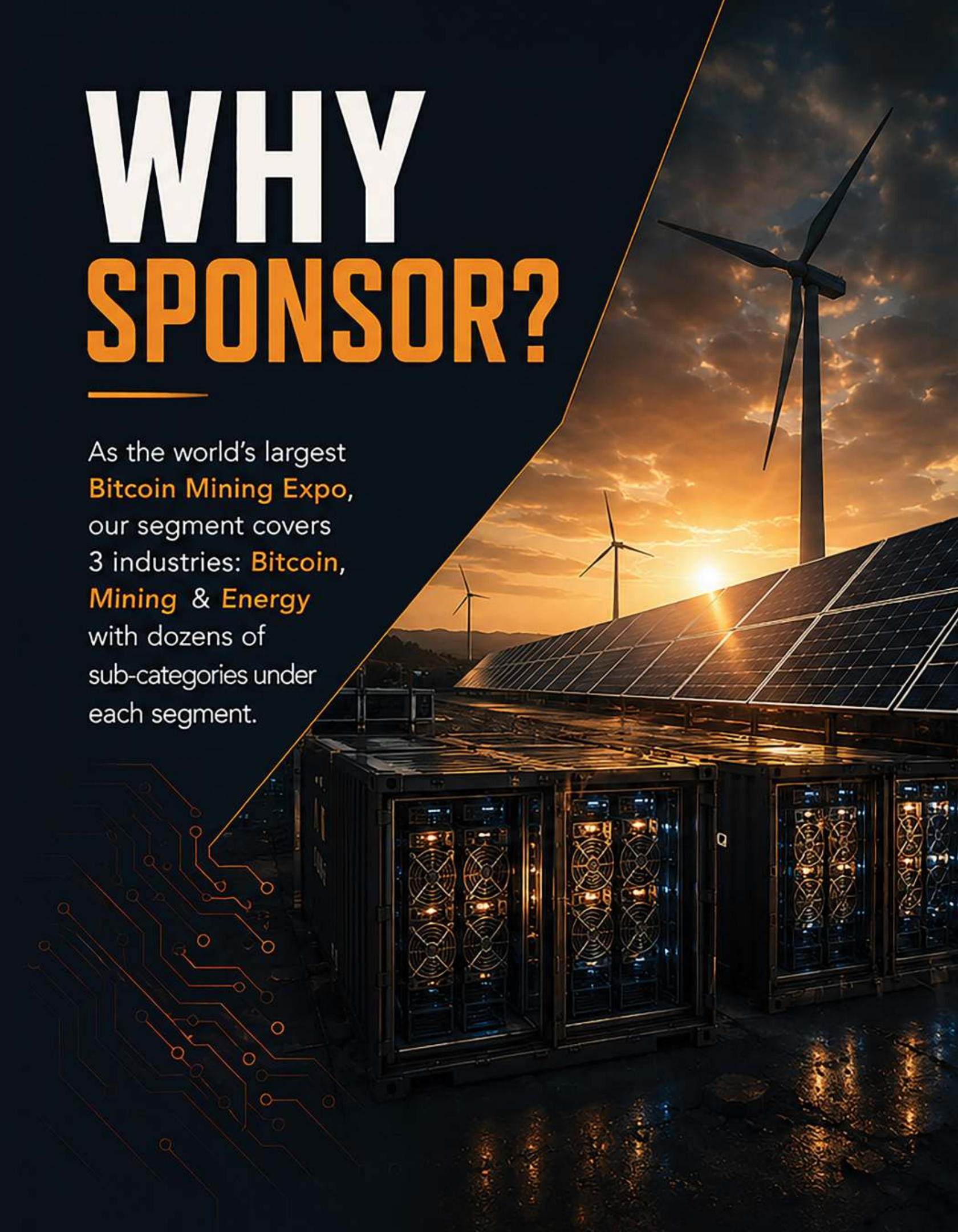
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WHY SPONSOR?

As the world's largest **Bitcoin Mining Expo**, our segment covers 3 industries: **Bitcoin**, **Mining** & **Energy** with dozens of sub-categories under each segment.



ROI MATTERS!

As the world's largest and premium Bitcoin Mining Tradeshow, Mining Disrupt places a strong emphasis on return on investment (ROI) for all sponsors. With a remarkable seven-year track record of repeat sponsors, it is evident that this event delivers substantial value and results.

Companies that sell products or services find this tradeshow an exceptional platform to elevate their brand exposure and success. Mining Disrupt attracts a diverse and engaged audience, ensuring that participants connect with potential customers and partners who are actively seeking the latest innovations and solutions in the industry.

Each year, Mining Disrupt hosts thousands of professionals from around the globe who are eager to learn, network, and transact with the brands that choose to sponsor and exhibit. This dynamic environment fosters meaningful interactions and business opportunities, making it a premier destination for companies aiming to make a significant impact in the Bitcoin mining sector.

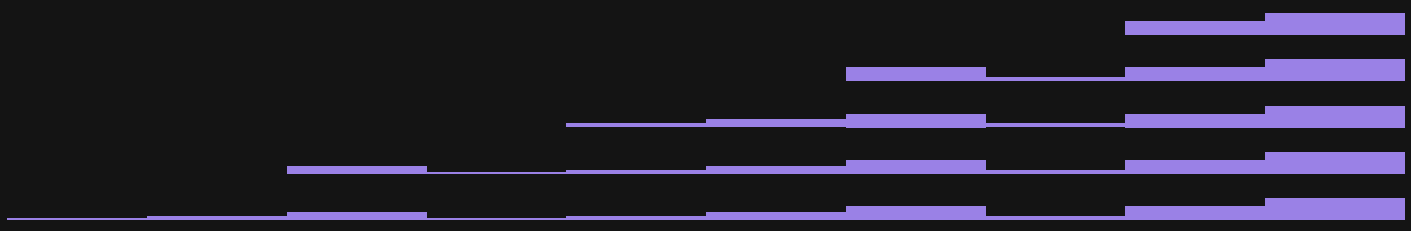


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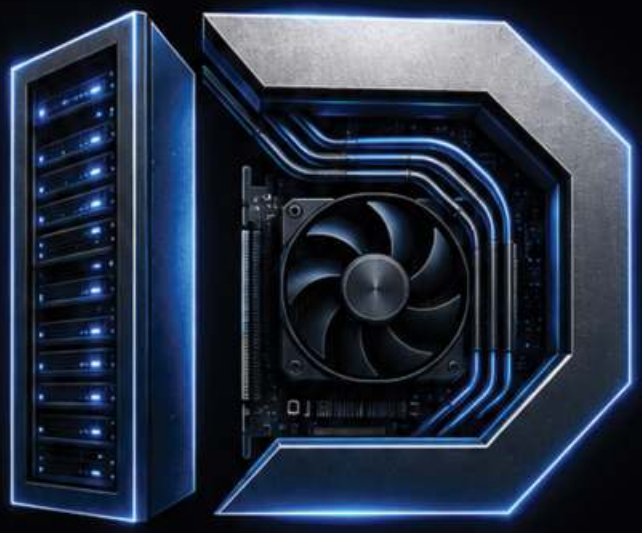
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THE FIRMWARE WARS

SOFTWARE. PERFORMANCE. PROFITABILITY.
THE NEW MINING FRONTIER.

How Software Became One of Bitcoin Mining's Biggest Competitive Advantage

- WHY HARDWARE IS NO LONGER ENOUGH
- THE HIDDEN BATTLE INSIDE EVERY ASIC
- AUTO-TUNING, UNDERVOLTING & AI OPTIMIZATION
- HOW SOFTWARE IS REWRITING MINING PROFITABILITY

```
chip[57] temp: 63.2c
chip[58] temp: 62.7c
chip[59] temp: 61.9c
chip[60] temp: 63.1c
chip[61] temp: 62.3c
chip[62] temp: 62.0c
chip[63] temp: 61.7c

freq: 612
voltage: 0.82v
fan: 78%
power: 3250w
hashrate: 106.7 TH/s
efficiency: 33.6 J/TH

AUTO-TUNING...
optimizing each chip
analyzing stability
finding sweet spot
maximizing profit

status: optimal
profitability: +8.7%
```

HASHRATE
106.7 TH/s

POWER
3250 W

EFFICIENCY
33.6 J/TH

How Software Became One of Bitcoin Mining's Biggest Competitive Advantages

For years, Bitcoin mining was a hardware arms race. The conversation revolved around chip design, manufacturing processes, power efficiency, and hashrate. Every new generation of ASIC miners promised more terahash, lower joules per terahash, and better profitability.

The assumption was simple:

Better hardware wins.

But something unexpected happened. Software entered the fight. Today, some of the biggest performance gains in Bitcoin mining no longer come from buying a new machine. They come from unlocking more performance from the machine you already own.

Welcome to the **Firmware Wars.**

THE MOST OVERLOOKED LAYER

Yet one of the most important profitability variables sits inside every machine:

Most miners focus on:

- ASIC model
- Electricity cost
- Bitcoin price
- Network difficulty

FIRMWARE

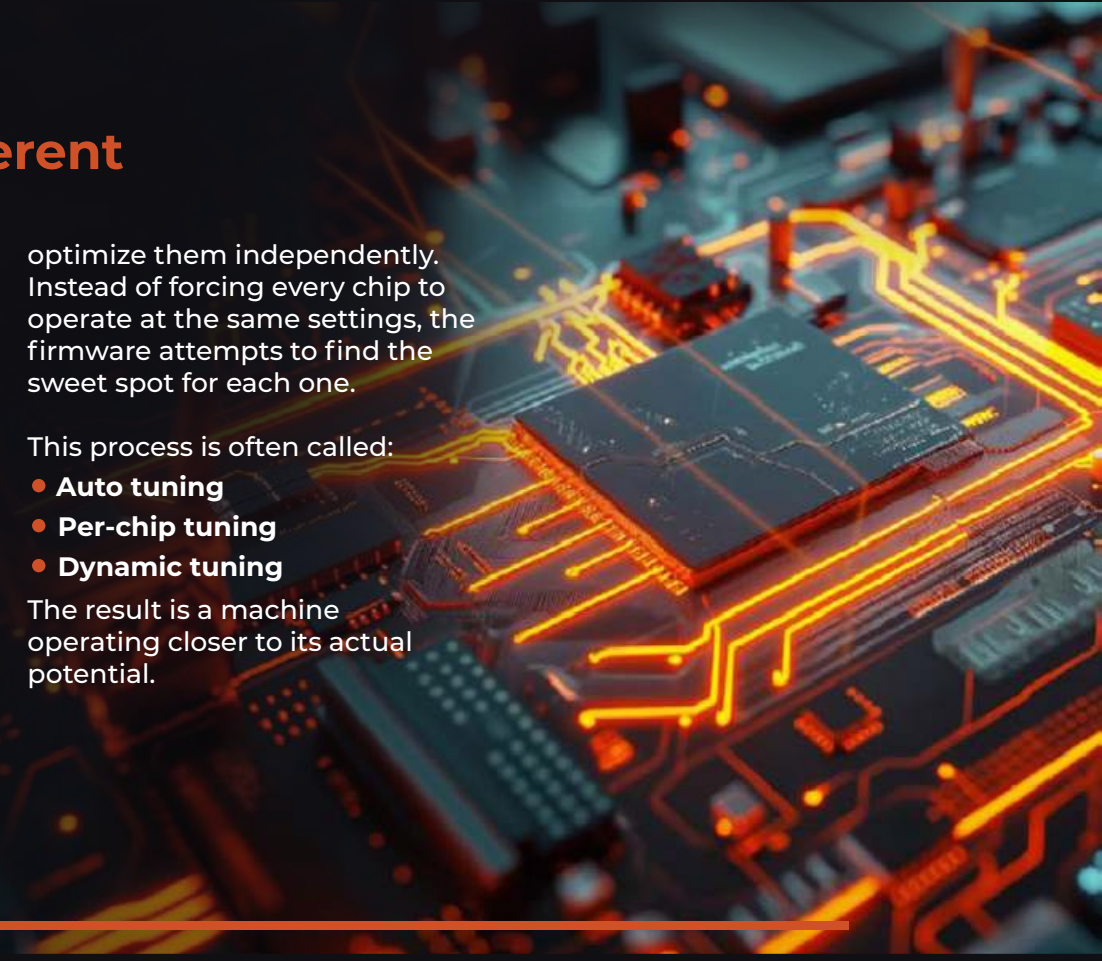
Firmware controls:

- Frequency
- Voltage
- Fan behavior
- Thermal management
- Power consumption
- Chip tuning
- Stability

Two identical miners can produce dramatically different results depending on the software they're running.

SAME HARDWARE. DIFFERENT PROFITABILITY.

Every Chip Is Different



One of the biggest misconceptions in mining is that all ASICs of the same model perform identically. They don't. Chip manufacturing is never perfect.

Every ASIC chip has slightly different electrical characteristics. Some chips run cooler. Some tolerate higher frequencies. Some require less voltage.

Some are simply better than others. Factory firmware generally treats these chips as if they are all the same. Aftermarket firmware often doesn't.

Modern tuning software can analyze individual chips and optimize them independently. Instead of forcing every chip to operate at the same settings, the firmware attempts to find the sweet spot for each one.

This process is often called:

- **Auto tuning**
- **Per-chip tuning**
- **Dynamic tuning**

The result is a machine operating closer to its actual potential.

Why Manufacturers Play It Safe

Factory firmware exists for one purpose:

Reliability.

Manufacturers must ship software that works across:

- Hot climates
- Cold climates
- High humidity
- Low humidity
- Clean environments
- Dusty environments
- Strong chips
- Weak chips

The safest approach is conservatism. The goal is stability. Not maximum performance. That leaves room for firmware developers to push the hardware further. The manufacturer builds the machine. The firmware community attempts to unlock it.

The Three Paths

Most firmware strategies fall into three categories.

More Hashrate

This is the most obvious goal. Increase frequency. Push chips harder. Generate more terahash. More terahash means more potential revenue. At least in theory.

The challenge is that higher performance also creates:

- More heat
- More power consumption
- More stress

Performance is never free.

Better Efficiency

Sometimes the goal isn't more hashrate. It's lower operating cost. Efficiency-focused tuning attempts to reduce voltage and optimize chip behavior while maintaining acceptable performance.

The result may be:

- Slightly lower hashrate
- Significantly lower power draw

For miners paying high electricity rates, efficiency often beats brute force.

Maximum Stability

Large operators often prioritize uptime over everything else. A machine producing slightly less hashrate but running continuously may outperform a faster machine that constantly crashes, overheats, or requires intervention.

For industrial fleets, reliability is revenue.