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Linzhi E1400 Tapeout Announcement.

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Telegram discussion https://t.me/LinzhiCorp

Linzhi

Linzhi Shenzhen Co., Ltd
深圳凛炙电子科技有限公司

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***** Tapeout Announcement *****

***** 流片公告 *****

Today we ordered the first set of wafers for our Ethash ASIC, announced almost a year ago on September 13, 2018 at the ETC Summit 2018 in Seoul. [1] This is called the chip tapeout.
The announced specs were for 1400 MHash at 1000 Watts. Pricing was announced as 4 months ROI, and the timeline was given as 12/18 for tapeout, 04/19 for samples and 06/19 for mass production.

The key points of today's first wafer order for our new Linzhi E1400 Ethash ASIC are:

- Name of chip: Linzhi E1400
- Number of wafers ordered: 37
- Theoretical maximum Ethash performance from ordered wafers: 300 GH
- Theoretical maximum share of global ETC hashrate [2]: 2.5%
- Theoretical maximum share of global ETH hashrate: 0.17%
- Total costs up to and including first wafer order: 3.85 mio USD
- Total people months so far: 165

FAQ

Q: Tapeout is delayed for 9 months. What are the reasons and what does this mean for the rest of the schedule?
A: We underestimated the complexity of the chip and how long it would take to grow the team and make the company functional. We are cautiously optimistic that we can just move forward the rest of the schedule, which would mean 12/2019 for sample machines and 02/2020 for mass production.

Q: Isn't Ethereum switching to ProgPoW?
A: We have not taken any pre-orders. When sales of our machines start, we will advise customers on all likely and ongoing efforts to change PoW algos in Ethash coins. Customer satisfaction is our #1 objective.

Q: When are chips coming back from tapeout and what is the process of verifying their performance?
A: We are hoping to have first chips back by mid-November. Then a multi-week effort known as chip bringup begins, in which we verify the different parts of the chip. The best way to follow chip bringup is our Telegram group LinzhiCorp (https://t.me/LinzhiCorp), updates will also be shared via Twitter, Instagram and elsewhere.

Q: What is the expected performance?
A: We are still targeting the originally announced performance of 1400 MH at 1000 Watts. Acceptable outcomes would be for the power-to-hash ratio to be within 1.3x of the target, and hash performance to be within +/-15% of the target.

Q: When can we see an actual machine running?
A: Ideally we will have first prototype machines hashing in late-November. This will happen in our Shenzhen factory under our full control, with regular updates and AMA through social media. Our factory test environment is currently setup for a maximum load of 80 kW, which translates to 112 GH maximum Ethash hashrate.

Q: Will you do chip testing on a testnet?
A: We plan to do chip testing on the Ethereum Classic mainnet.

Q: You are producing up to 300 GH Ethash, but sales are not open yet. Isn't that self-mining?
A: Self-mining is not part of our business model, we will try to sell 100% of the machines we are making as early as possible. However, the path to the first machine hashing at 1.4 GH is still long, and at this point the risks for customers are too unpredictable so that the machine price would be too low. We need to get the entire production to the point that performance, cost and yield are such that we can guarantee a satisfying customer experience. We will post regular transparency reports about production or testing related hashrate through social media.

Q: What do you do against centralization?
A: Decentralization is the entire purpose of PoW. Our sales will go to developers and community first, with a focus on geographical distribution, and potentially with a malus (reverse discount) for large orders. This means that small orders by individuals would be priced to hit the 4 month ROI and larger orders would pay more. This will offset some of the cost advantages that larger customers have and encourage decentralization.

Q: What is the pricing?

A: We have announced pricing at 4 month ROI and we remain committed to this target. Details may vary depending on time of order vs. shipment and efforts at decentralization, but haven't been finalized yet. Typically Bitcoin machines are sold at 150-200 day paybacks to larger customers, and we remain committed to ensure that smaller customers should enjoy some advantage.

Q: Why have you not taken pre-orders?

A: The risks of an unproven design with engineering delays, unproven team with hiring delays and fast-changing crypto markets seemed too unpredictable to develop healthy customer relationships on. On the other hand we need to show that we believe in the approach ourselves, so the pressure to accept customer money remains high and is healthy.

Q: What parts of the machine will you open, and what about future applications of the chip architecture?

A: We will present an introduction to our chip architecture at the Ethereum Classic Summit 2019 in Vancouver on October 3rd & 4th. https://etcsummit.com/ . We are committed to opening the entire software stack under a permissive MIT/BSD license at https://github.com/linzhichips .

Q: Does the USA-China trade war affect you?

A: It does. Our USA customers will be affected by a 25% tariff, until we have found a way to manufacture machines outside of China. We will try to address this as early as possible.

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[1] https://www.coindesk.com/a-multi-million-dollar-bet-ethereums-proof-of-stake-isnt-coming-soon
[2] https://bitinfocharts.com