



Making the PC a PDC

EXECUTIVE SUMMARY

And the promise of IOT a reality for all

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If your success depends on providing business grade edge servers at affordable prices, consider using “LAN of Things” co-processors and chipsets by MobilFlex in your design which transform your standard architecture into a powerful, multi-user, multi-functional hardware platform, with no I/O limitations and multiple M2M support.

Contact Information

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Industry

LAN of Things chipsets,
Personal Data Center,
Consumer IOT,
Fog/Edge Computing,
High Density Servers,
Advanced UX, AI, AR, ML

Team Members

3 FPGA Engineers - PT
2 Technical Advisers – PT
1 Business Dev. Adviser

Development Stage

Early Development of
“LAN of Things” FPGA-SOC

Funding Opportunity

\$1M Seed (now)
\$10,000,000 Series-A (Plan)

Current Seed

None

Use of Funds

FPGA-SOC Eng	\$200k
50+ PDC Demo Sys	\$250k
3-4 Engineers PT	\$300k
Operating Capital	\$250k

Summary

Advanced fog/edge computing applications (IOT, AI, AR/VR, ML) demand much higher processing power that single x86 architecture can deliver, but lack of price affordability is a major inhibiting factor in their proliferation.

There is a growing need and a compelling business case for a new class of hardware platform, to fill the gap between “personal devices” (PC, laptop, pads, phones, etc.), which are not powerful enough for advanced IOT applications and “business grade servers”, which are too expensive for many users and applications.

MobilFlex, an expert in I/O systems for mainframes and x86 has identified the I/O processing overhead in x86 architecture as a major cause for its limitations and bottlenecks. Applying mainframes concepts to x86, we triple its performance with almost no increase in manufacturing cost, with much higher margin prospect.

Problem & Opportunity

1. No existing hardware platform provides the combination of compute power and I/O processing capability (required by advanced IOT applications), at a price users can afford or justify to pay.
2. Lack of interoperability at the edge (on the last thirty yards). True IOT values comes from interoperability.

Solution & Products

“LAN of Things” co-processors and chipsets: Intelligent I/O sub-systems that independently process the entire I/O workload, allowing 100% CPU utilization (up from 60% or less) for compute intensive tasks.

Advanced connectivity layer (MobilFlex innovation), supports multiple M2M transaction between any devices, regardless of their native communication protocol, without any performance degradation.

PDC – Personal Data Center: Edge/Fog Data Center for 10-15 users; Business grade server, at the price of a Mac (~\$1,500) that does not needs IT Manager; Multi-functional super-PC (personal cloud, residential server and gateway), accessible from any BYOD; Configured for SOHO, Consumer IOT, or Fog Computing use.

Revenue Model, Customers

Our first and main focus is to supply systems integrators (MobilFlex included) with co-processors and chipsets for their own systems. As we will develop our own systems, some customers may want to license our designs (ODM). *Note: Windows PC-OEMs (Dell, HP, Lenovo, Acer, Assus) have huge incentives to offer PDC as PC replacement as it allows them to get out of “The PC Value Trap” and start making same 20% profit margin as Apple makes..*

Market Size

While any x86 based design can triple its performance using MobilFlex technology, we will focus first on the likely early adopters: “Consumer Oriented IOT” (\$46B in 2018, @143B in 2025) and “fog computing” (\$18B in 2022)

- **SAM** (Served Available Market) = \$100B

Financial Projections

Note: NVidia and Broadcom were used (with additional precautionary reserves) as models for all our projections.

- Estimated net profit margin: 20% (Below Broadcom – 55% & NVidia – 36%)
- “LAN of Things” SOC sell price: \$200 each (comparable with chipsets it replaces);
- PDC sell price: \$1,500 each (**Priced like a Mac but vastly superior machine**);
- **SOM** (Share of Market - three year forecast) = **min 5% of SAM or \$5B in revenue and \$1B in net profits.**

Differentiation & Competitive Advantage

Most significant improvement to x86 architecture since its introduction.

Only MobilFlex provides a practical solution at the edge that families and other small organizations can afford. MobilFlex allows our Windows PC-OEM customers get out of “The PC Value Trap” and make profits like Apple.

Team Experience & Traction

Proven business development and technical leadership, in the architecture, engineering and delivery of complex I/O systems for IBM mainframes and x86 systems. Founder and CTO is a veteran computer architect and engineering professional (Amdahl, Fairchild) entrepreneur (Butaco), Certified PPM, Risk Management Specialist and QRPD (Quality Rapid Product Development) practitioner. Impeccable track record.

Faststream Technologies (<https://www.faststreamtech.com/>), strategic partner and co-founder is an 80+ strong organization providing semis and IT services. They committed \$200k in services to design first FPGA prototype. Dozens of software companies are lined up to receive PDC demo systems and write applications for it.

Low Risk

Our secret sauce is our proprietary architecture. As most “building blocks”, both hardware and software, already exist, risk is minimal, with most of the engineering effort dedicated to differentiating architecture implementation.

Deal Terms

\$1M Equity Seed Round (\$3.8 - \$4.4M pre-money valuation).