Akida™ is the Edge Network

Louis DiNardo – CEO

30 May 2019
BRAINCHIP FINANCIAL UPDATE

• Operating Cash Flow 2018* – (US$7.1M) vs. (US$6.7M) in 2017
  • Administrative Expenses – US$3.7M compared to US$3.2M in 2017
  • Sales and Marketing Expenses – US$1.4M compared to US$601K in 2017
  • Research and Development Expenses – US$2.9M compared to US$ 2.9M in 2017

• Cash Receipts – US$1.0M

• Cash at Year End 2018 – US$7.5M

• Capital Requirements in 2019 supported from Increased Cash Receipts or Fund Raising

*Excludes Capital Expenditures
BRAINCHIP FINANCIAL UPDATE

• Restructuring
  • Reduction in Planned Expense – $US1.3M to US$1.5M
  • Sales and Marketing Expense Headcount Reductions – 5 Terminations
  • Reduction in Board – 6 to 5 with Retirement of Julie Stein
• Equity Realignment
  • Elimination of 11 June CEO Performance Rights
  • Grant of Options at a Significant Premium to Market Retired Equity
• Sales Realignment
  • BCS Focus on Tier 1 OEMs
  • Eliminate End Users Sales Effort
• Akida Emphasis
  • Research and Marketing
BRAINCHIP BUSINESS UPDATE

- Introduction of the Availability of Akida Intellectual Property for Licensing
- Socionext Selected as Akida Development and Manufacturing Partner
- Provisional Patent Filing on Akida Inventions
- Introduction of the Akida Development Environment
- Introduction of the Akida Architecture
- FPGA Implementation of Akida Neural Fabric and CPU Complex
- Cybersecurity License for Native Spiking Neural Network (SNN)
BRAINCHIP BUSINESS UPDATE

• Acceleration of Akida Development Environment Evaluations
• Initial Discussions of Akida Intellectual Property Licensing
• Successful Trial of BrainChip Studio and Shipment of Accelerator to Large OEM
• GPI – Completion and Delivery of Vision System Prototype
• Veritone – Completion and Delivery of BrainChip Studio OEM
• Salient – Completion of BrainChip Studio OEM Integration
• Quantum – Integration with StorNext File Management System
BRAINCHIP TEAM

• Headcount 35
  • Louis DiNardo – CEO
  • Peter van der Made – CTO
  • Anil Mankar – CDO
  • Roger Levinson – COO
  • Ken Scarince – VP Finance
  • Toulouse, France – 15
  • Aliso Viejo, California US – 15
BRAINCHIP OVERVIEW

- BrainChip is the leading developer of Advanced Artificial Intelligence (AI) Devices for Applications at the “Edge”.
- “AI at the Edge” is a high-volume, high-growth market.
- Intelligence is provided and analytics are performed at the point of acquiring data rather than data being transferred to a central processing core in a data center or in the cloud for analysis and action.
AI CHIPSET FORECAST

Tractica 2018 Forecast Growth from US$5B to US$66B (47% CAGR)
AI EDGE APPLICATIONS

- Low Power, Low Latency and High Accuracy are critical attributes for AI “Edge” applications in:
  - Surveillance
  - Advanced Driver Assistance Systems (ADAS)
  - Vision Guided Robotics
  - Drones
  - Industrial Internet-of-Things (IoT)
  - Acoustic Analysis
  - Cybersecurity
BRAINCHIP AKIDA TECHNOLOGY

- Fully User Re-Configurable Event-Based Spiking Neural Network (SNN) technology.
- SNN uses threshold logic in a low-cost standard digital CMOS process with proprietary learning rules.
- Up to 1.2M Neurons and 10B Synapses
- Multiple Neural Processing Cores
AKIDA MAJOR ADVANTAGES

• Complete AI Edge Network on a chip
  • User Re-Configurable Single Chip Solution
  • On-chip Training and Inference
  • Unsupervised Learning at the Edge without Training
• Ease of Use
  • Complete Simulation in the Akida Development Environment
• Multiple Learning Modes
  • Native Event-Based SNN
  • Convolutional to Event-Based SNN
• High Performance
  • Low Power Operation is Scalable – estimated at 2micro watts to mill watts
  • Low Latency Operation is Scalable – down to 5mS
  • High Accuracy Operation is Scalable – up to 98%
AKIDA BUSINESS MODEL

• Akida Development Environment – Free to Beta Users
• Akida Intellectual Property – Direct and Channel Partner Sales Globally
• Akida Device – Direct and Channel Partner Sales Globally
• Akida Reference Board – Direct Sales to Qualified Users
• Akida USB Module – Online Retail Sales and Select Channel Partners Globally
• AKD1000 User Re-Configurable AI Edge Device for OEMs and Module Manufacturers
• AKD1000IP User Re-Configurable AI Edge IP for ASIC Integration
• AKD1000USB User Re-Configurable USB Dongle for Research and Development
• AKD500 Application Specific User Re-Configurable for Low Cost High Volume AI Edge Applications
• AKD2000IP User Re-Configurable Advanced Learning Rules for ASIC Integration
• AKD2000 User-Configurable Advanced Learning Rules Device for OEMs and Module Manufacturers
AKIDA COMPETITION

- Event-based or math-based Edge solutions
THANK YOU