Canada – Taiwan Semiconductor Co-Innovation Delegation
2024 台加半導體共創高峰會 - 加拿大代表團半導體企業名單和介紹

1. **Blumind Inc.**
   https://blumind.ai

   Blumind has developed two initial silicon test chips using which have proven the underlying circuit functionality and power consumption in the labs. Blumind has also conducted many demonstrations of this capability to customers and investors, and has successfully engaged customers in Taiwan, Israel, UK, USA and Germany. The company is now developing its first commercial product, targeting volume production in 2024.

   OBJECTIVES:
   - Establish edge AI market interest in Taiwan,
   - Meet potential R&D partners, customers, and suppliers.

   Latest media exposure:
   Blumind Harnesses Analog for Ultra Low Power Intelligence - EE Times (Feb 2024)

2. **InPho**
   https://www.inpho.io/company

   InPho is a photonic IC company that integrates photonics and electronics on to a single chip to bridge the gap of today's silicon-based architecture. InPho plans to become a leading data center player, and the vendor of choice for both 224 Gbps per lane and 448 Gbps per lane transmit and receive modules with its unique architecture and InP chip fabrication. Its product roadmap to 448 Gbps and beyond has been validated by the leading data center hyper-scalers in play today.

   OBJECTIVES:
   Looking for experienced partners in the areas of co-packaged optics (CPO) and partners, with significant experience in III-V material, specifically in working with InP, which have the capability to design, manufacture and assemble substrates and carriers for high-speed optics.

3. **CEM Works**
   https://cemworks.com

   CEMWorks offers cutting edge EM (electromagnetic) simulation design tools for advanced technology hardware. Its solver technology leverages a proprietary Integral-Equations approach to provide superior customization, efficiency and accuracy for advanced tech product design. Its Emerald EDA (electronic design automation) tool solves complex semiconductor and telecommunication hardware challenges.

   Existing clients and partners include Ericsson, Intel, Infineon, NXP, The Antenna Company and Texas Instruments.

   OBJECTIVES:
   Looking for Taiwanese tech partners to expand its current EM simulation capabilities – increase the integration, functionality and versatility of its Emerald tool. This includes developing powerful EDA building blocks for next-generation technology development, including advanced IC design (CoWoS etc.), mmWave features and meta-material applications.

4. **The PEER Group**
   https://www.peergroup.com/

   PEER Group is the largest supplier of innovative factory automation software products for the semiconductor industry. Since 1992, our solutions have helped the world's most advanced OEMs and factories reduce time to market and lower costs by solving their equipment automation, data management, and process control problems.

5. **Procero Inc.**
   https://procero.ca

   Procero is a pioneering technology company at the forefront of CPU-GPU and NPU performance optimization, with a proprietary technology stack (protected by a large portfolio of issued and pending patents) that is capable of tripling

(or more) the inference and learning rate of LLMs, FPS in gaming and graphics processing tasks – and reducing their energy consumption on existing and future, unmodified CPUs, GPUs, and NPUs.

OBJECTIVES:
To validate our technology and integrated it into Taiwanese hardware ecosystem for commercialization interest and POC agreements.

6. **RANOVUS Inc.**
   https://ranovus.com

   RANOVUS develops and manufactures advanced photonics interconnect solutions to support the next gen of AI/ML workloads in data centers and communication networks. Its disruptive portfolio of IP Cores includes Multi-Wavelength Quantum Dot Laser technology, and advanced digital and silicon photonics IC technologies that set a new benchmark for the lowest power dissipation, size, and cost for the next generation of optical interconnect solutions. Its “World’s First" OSAT capability includes advanced packaging of semiconductor Chiplets and optical interconnect Chiplets.

   RANOVUS secured strategic investment of Tier 1 US semiconductor player Xilinx, followed by AMD as a second strategic investor in 2022, and Jabil in early 2023. RANOVUS has began shipping pre-commercial products to the largest semiconductor companies and hyperscalers in the world and is poised for explosive growth.

   OBJECTIVES:
   - to develop an ecosystem with Taiwanese semiconductor supply chain on edge chip technologies in advanced manufacturing and packaging for the next gen servers powering AL/ML applications.
   - to enable OSAT companies at scale to package semiconductor Chiplets.

   Latest media exposure:
   Exclusive: silicon photonics firm Ranovus partners with MediaTek to seize AI opportunities (March 2024)

7. **Solace Inc.**

https://solace.com

Solace is the foremost experts on smart (and huge) data movement. It has 17+ offices worldwide, including an office in Taipei. Leading customers include London Stock Exchange, Barclays Bank; NASA, Transportation Authority; IT companies such as SAP, Bharti Airtel, and semiconductor clients such as TSMC.

8. **StarIC Inc.**
   https://www.staric.ca

   StarIC is a premium ASIC and Systems Solutions Provider. Its IP has been incorporated in laptops, cell phones, high speed data communications, optical systems, and automotive products. Customers include one of the biggest companies in the world (based out of California) on an ASIC design project. It also works on a design agreement with one of the largest semiconductor fabrication companies in the world.

   OBJECTIVES:
   - looking for partnership with semiconductor fabs on Silicon Photonics and working together on address this design needs, while developing IP which StarIC may provide to numerous companies. Silicon Photonics will be the next gold-rush for high-speed data communications and StarIC has been leading the efforts in cutting edge processes in the development.

   Latest media exposure:
   StarIC and GlobalFoundries announce strategic partnership, release high-Speed TIA and drivers to advance silicon photonics ecosystem (March 2024)

9. **Stathera, Inc**.
   https://www.stathera.com

   Stathera is a fabless company focused on cutting-edge MEMS-based timing solutions. The team is re-architecting the traditional quartz-based timing industry by introducing state-of-the-art DualMode™ MEMS frequency technology, with the mission to transform the entire $9.8 Billion electronics timing industry from quartz-based to modern semiconductor MEMS-based timing. Stathera raised seed funding from Doosan Corporation (South Korea) in 2018 and closed Series A funding in May of 2023. Strategic

partners in the Taiwan include MediaTek, TXC Corporation, Light Clock Technologies and Vanguard International Semiconductors.

OBJECTIVES:
- to strengthen existing design and manufacturing partnerships, and to find additional partners to help us accelerate development for our 2nd Generation of products, which require more advanced design capabilities, manufacturing capabilities, and ASIC (Integrated circuit) design and fabrication processes.

10. **NRC (National Research Council)**
    https://nrc.canada.ca/en

    The NRC is an agency of the Government of Canada, reporting to Parliament through the Minister of Innovation, Science and Industry. We partner with Canadian industry closely to take research impacts from the lab to the marketplace and invest in strategic R&D programming that will address critical issues for our future.

11. **CMC Microsystems**
    https://www.cmc.ca/

    CMC Microsystems provides design, manufacturing, and testing capabilities for microelectronics, photonics, MEMS, IoT, AI, and quantum. It supports research and innovation in Canada, with an international network of over 10,000 researchers and more than 1,200 companies developing innovations in advanced technologies.

    CMC 是一家致力於推動微電子系統　(MEMS) 和半導體技術創新的協會，主要幫助學術界、研究機構和企業在半導體和電子設計領域實現創新。值得關注的是今年 7 月，加拿大創新、科學和工業部（ISED）部長宣布加拿大將在五年內投資 1.2 億加元（約合美元 8,820 萬）建設加拿大國家芯片網絡，幫助加拿大公司將半導體技術商業化，並創建一個強大且可持續的半導體生態系統。

12. **Technum Québec**
    https://technumquebec.ca/

    Technum Québec 為一個位於加拿大魁北克省的專注於微電子產業 MEMS 的新創聚落，專注於提供科技解決方案，包括技術咨詢、軟體開發、協助企業數位轉型等，對

於台灣公司來說，Technum Québec 可以作為在加拿大及北美市場的技術合作夥伴。無論是新技術引進、開發新產品還是進行數位化轉型，Technum Québec 的專業知識和經驗都可以提供有價值的支持和幫助。

13. **MILA**（蒙特婁人工智慧研究所）
https://mila.quebec/en

MILA (Montreal Institute for Learning Algorithms) 是一個全球領先的深度學習研究中心，致力於推動基礎研究和應用開發。MILA 匯聚了世界頂尖的 AI 專家，目前與 27 家企業，如 Facebook，IBM, Google 等，以及 41 家機構，如 Microsoft，Stanford University, Columbia University 等著緊密的合作。

14. **Invest Quebec International** (魁北克國際投資署)
https://www.investquebec.com/international/en/about-us.html

魁北克國際投資署致力推動創新、培養創業精神並刺激投資和出口的成長。此單位能作為海外企業了解在地投資環境、政府資源與尋求 B2B 公司合作的統一窗口。加拿大魁北克省擁有充滿活力的商業環境和無與倫比的自然資源。作為亞洲、歐洲和美洲之間的樞紐，其清潔能源、創造創新能力和穩定的投資環境，使其成為國際企業建立更清潔、更符合永續發理念，更適合生活和經商的理想投資地。

- Led by Canadian Trade Office in Taipei (CTOT) 加拿大駐台北貿易辦事處
https://www.international.gc.ca/country-pays/taiwan/taipei.aspx?lang=eng

The Canadian Trade Office in Taipei (CTOT) represents Canadian interests in Taiwan in the absence of formal diplomatic relations. Opened in 1986, the office delivers the same services as Canada's other missions abroad. The Commercial section helps Canadian companies expand and succeed in Taiwan, and offers information and services to help Taiwanese companies do business and invest in Canada.