CMC Microsystems mired in funding crisis



After 34 years of serving as a driver to the success and growth of many high tech firms and educational institutions

across Canada, Kingston Ontario-based, not-for-profit organization CMC Microsystems (CMC), has been "dumped to the street," according to its president and CEO Gordon Harling.

CMC was first warned in 2016 that it would lose its historical funding arrangement with the Natural Sciences and Engineering Research Council (NSERC) - set to end its decades of financial support.

As a result, Harling has been busy pulling out all the stops to persuade governments and other stakeholders that its expertise and services in microelectronics, photonics and other cutting edge technologies are critical to Canada's future competitiveness in advanced manufacturing and other key tech-based sectors.

With the deadline looming (June 20, 2019), the organization has been pursuing multiple avenues and approaches including changing its support model for microelectronics and associated research at academic institutions from coast to coast.

Its importance as a lifeblood to high tech incubation and fueling innovation in Canada cannot be understated, as CMC has focused on advanced manufacturing industries since 1984. Among its efforts, CMC has managed Canada's National Design Network (CNDN), which provides researchers access to the world's best design tools, manufacturing technologies, and engineering support for making micro-nanotechnologies, and for training industry-ready graduates.

Among its achievements includes simplifying access to state-of-the-art design, manufacturing and testing facilities for start-up businesses. CMC lowers costs of R&D for professors at universities and compaalike. These services provided by CMC are even more essential today, as the research and training required to advance Canada's digital economy has been accelerated with the emergence of such sectors as Industry 4.0, autonomous vehicles, big data, Internet of Things (IoT), cyber defense/security, 5G, quantum computing, artificial intelligence (AI).

Over time, CMC had more educators seek to use its highend industrial tools to teach classes - not just research, but education, which is the job of the provinces and not the job of the feds, notes Harling. In an effort to offset the pending impact of funding withdrawal, CMC has also spent more time on the industrial side, conducting contract research for industry.

Based on the shut down timeline issued by NSERC and the absence of the \$6.5 million CMC requires annually to function - CMC had to issue termination notices to all employees this October. In December fabrication runs cease and by March of 2019 access to all software packages and R&D platform partnerships will be terminated. Operations will officially end this coming June.

"The university programs we've supported have generated graduates that demonstrate real industry strengths, speeding up their entry into the work force," says Harling, a successful entrepreneur who has led several microelectronics companies.

Harling estimates approximately 950 companies across Canada have been impacted by the efforts of CMC.

"We 're a national network and we are in all 10 provinces, operating as a truly third-party organization," Harling adds.

The CMC issued a pre-budget consultation submission to the House of Commons standing committee on finance this summer, detailing its position on the importance of advanced technologies to competitiveness.

"Advanced technologies are present in every major economic sector in Canada, but they are often taken for granted because they are almost invisible, highly-integrated components. Every technological product requires some form of intelligence and this is enabled using high-performance computing, microelectronics, micro-electromechanical systems, photonics or nanofabrication," read the statement.

The CMC went further to say, "Not-for-profit organizations generally provide the 'glue' that hold a nation's ecosystems together. At present there is no coherent strategy, federal or otherwise, that links the various players in Canada's micro-nanotechnology ecosystem or ensures that there are no critical gaps now or in the foreseeable future."

What can we do?

According to Harling - you can help! He urges supporters to reach out via letter or social media (#NeedMyCMC), to the federal government. You can find letter templates and messaging info here:

https://community.cmc.ca/community/letter-of-support-campaign-2019

STEPHEN LAW

Editor slaw@ept.ca

Connect with EP&T magazine







R ept.ca



Canada's information leader for electronic engineers and designers

NOVEMBER / DECEMBER 2018

Volume 40. Number 8

EDITOR Stephen Law slaw@ept.ca · (416) 510-5208

WEST COAST CORRESPONDENT

Sohail Kamal sohail@nextgear.ca

ASSOCIATE PUBLISHER Scott Atkinson satkinson@ept.ca · (416) 510-5207

ACCOUNT MANAGER Joanna Malivoire jmalivoire@ept.ca · direct 866-868-7089

ART DIRECTOR Andrea M. Smith asmith@annexbusinessmedia.com

CIRCULATION MANAGER Anita Madden amadden@annexbusinessmedia.com Tel: 416-449-5600 ext 3596

ACCOUNT COORDINATOR Tracey Hanson thanson@annexbusinessmedia.com

VICE PRESIDENT - EXECUTIVE PUBLISHER

Tim Dimopoulos

tdimopoulos@annexbusinessmedia.com

PRESIDENT & CEO Mike Fredericks

EP&T is published eight times per year by



ANNEX BUSINESS MEDIA 111 Gordon Baker Road Suite 400 Toronto, ON M2H 3R1 Tel (416) 449-5600 Fax (416) 510-5134 www.annexweb.com

SUBSCRIPTION RATES

Canada - \$57.50 one year; \$92.50 two years USA - \$101.00 per year International - US\$138.00 per year Single copy - Canada \$15

CIRCULATION

blao@annexbusinessmedia.com Tel: 416-449-5600 ext. 3559 Fax: 416-510-6875 or 416-442-2191

ISSN 0708-4366 (print) ISSN 1923-3701 (digital)

PUB. MAIL AGREEMENT NO. 40065710

Return undeliverable Canadian addresses to: EP&T Circulation Department, 111 Gordon Baker Rd. Suite 400, Toronto, ON M2H 3R1







© 2018 EP&T. All rights reserved. Opinions expressed in this magazine are not necessarily those of the editor or the publisher. No liability is assumed for errors or omissions or validity of the claims in items reported. All advertising is subject to the publisher's approval. Such approval does not imply any endorsement of the products or services advertised. Publisher reserves the right to refuse advertising that does not meet the standards of the publication. Occasionally, EP&T will mail information on behalf of industry-related groups whose products and services we believe may be of interest to you. If you prefer not to receive this information,

Funded by the Government of Canada Canada

