

Andrew Carnegie

2 East 91st Street, at Fifth Avenue,
New York, New York

April 1, 2026

Midas Mulligan
Chicago, Illinois

Subject: On Laying the New Foundation of American Industry

My Dear Midas,

There come, at wide intervals, inventions which do not merely improve a trade, but alter the destiny of nations. The Bessemer process did this for steel; it enabled a young America to build railways, bridges, and cities at a fraction of the old cost, and to wrest industrial leadership from Europe. I venture to place before you an opportunity of similar character, now arising in microelectronics.

Cross Roads IP Holdings has in its hands a new method of producing the very fabric of modern machinery: not a better single chip, but a manner of integrating the whole electronic system upon the wafer itself, casting aside the forests of printed circuit boards and foreign-made passive parts which now encumber our data centers, grids, and weapons. Where there are at present many fragile and untrustworthy pieces, there shall be, if we succeed, compact, secure, and power-thrifty modules, as superior to the old construction as the steel rail was to wrought iron.

The Congress has wisely set in motion the CHIPS program, and Arizona State University has been granted a national establishment for advanced packaging, which has invited Cross Roads to bring this method to proof upon their machines. The Air Force Research Laboratory, guardian of our national defense in this sphere, has signaled the want of precisely these

enabling arts—advanced capacitors, thermoelectrics that turn waste heat into power, and magnetic devices—to free our supply from dependence upon Asia and to make 3D chip stacks fit for service.

Yet, as often occurs, the public agencies wait upon that first resolute capitalist who will take the initial risk and thus unlock the larger stream. What is required at this stage is not a vast subscription, but a timely one: sufficient to set the ASU work in motion and to gather around it the forces of the Republic—AFRL, ASU, and such industrial houses as TSMC—upon a single demonstrator that conquers the heat and waste which now threaten to make our own data centers uneconomic.

You and Congressman Turner have already done much for America by submitting the Crossroads IP Holdings NDAA 2027 to Congress to help qualify Pierre de Rochemont's technology as a New Essential Standard, an American method of microelectronic manufacturing, and thereby securing for our people the works, the profits and the safety which will otherwise continue abroad. We are confident that under your leadership this technology will be qualified through ASU, AFRL and the Chips Act.

Yours very truly,
Andrew Carnegie