

116TH CONGRESS
2D SESSION

H. R. 8763

To direct the Director of National Intelligence to award contracts or grants, or enter into transactions other than contracts, to encourage microelectronics research in support of artificial intelligence.

IN THE HOUSE OF REPRESENTATIVES

NOVEMBER 17, 2020

Mr. KRISHNAMOORTHY (for himself and Mr. STEWART) introduced the following bill; which was referred to the Permanent Select Committee on Intelligence

A BILL

To direct the Director of National Intelligence to award contracts or grants, or enter into transactions other than contracts, to encourage microelectronics research in support of artificial intelligence.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SEEDLING INVESTMENT IN NEXT-GENERATION**

4 **MICROELECTRONICS IN SUPPORT OF ARTIFI-**
5 **CIAL INTELLIGENCE.**

6 (a) FINDINGS.—Congress finds that—

7 (1) developing faster, more energy efficient, and
8 more resilient computing is important to the future

1 of the national security of the United States and the
2 leadership by the United States in artificial intel-
3 ligence; and

4 (2) multidisciplinary teams co-designing micro-
5 electronics for artificial intelligence will lead to un-
6 precedented capabilities that will help ensure that
7 the United States maintains its superiority in this
8 worldwide competition for economic and national se-
9 curity.

10 (b) AWARDS FOR RESEARCH AND DEVELOPMENT.—

11 The Director of National Intelligence, acting through the
12 Director of the Intelligence Advanced Research Projects
13 Activity, shall award contracts or grants, or enter into
14 transactions other than contracts, to encourage microelec-
15 tronics research.

16 (c) USE OF FUNDS.—The Director shall award con-
17 tracts or grants to, or enter into transactions other than
18 contracts with, entities under subsection (b) to carry out
19 any of the following:

20 (1) Advanced engineering and applied research
21 into novel computing models, materials, devices, ar-
22 chitectures, or algorithms to enable the advancement
23 of artificial intelligence and machine learning.

24 (2) Research efforts to—

1 (A) overcome challenges with engineering
2 and applied research of microelectronics, includ-
3 ing with respect to the physical limits on tran-
4 sistors, electrical interconnects, and memory
5 elements; or

6 (B) promote long-term advancements in
7 computing technologies, including by fostering a
8 unified and multidisciplinary approach encom-
9 passing research and development into algo-
10 rithm design, computing architectures, micro-
11 electronic devices and circuits, and the chem-
12 istry and physics of new materials.

13 (3) Any other activity the Director determines
14 would promote the development of microelectronics
15 research.

16 (d) AWARD AMOUNTS.—In awarding contracts or
17 grants, or entering into transactions other than contracts,
18 under subsection (b), the Director may award not more
19 than a total of \$15,000,000.

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