

116<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

# S. 4130

To require the Secretary of Commerce to award grants to States for the construction of microelectronics manufacturing and advanced research and development facilities, to authorize the Secretary of Defense and the Director of National Intelligence to fund the construction of microelectronics manufacturing facilities for national security needs, and to authorize additional amounts for microelectronics research and development, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

JULY 1, 2020

Mr. COTTON (for himself, Mr. SCHUMER, Mr. REED, Mr. RISCH, Ms. COLLINS, Mr. KING, Mr. HAWLEY, Mr. JONES, Mrs. GILLIBRAND, Mr. RUBIO, and Ms. HASSAN) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

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## A BILL

To require the Secretary of Commerce to award grants to States for the construction of microelectronics manufacturing and advanced research and development facilities, to authorize the Secretary of Defense and the Director of National Intelligence to fund the construction of microelectronics manufacturing facilities for national security needs, and to authorize additional amounts for microelectronics research and development, and for other purposes.

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. SHORT TITLE.**

4       This Act may be cited as the “American Foundries  
5 Act of 2020”.

6 **SEC. 2. GRANTS FOR CONSTRUCTION OF MICROELEC-**  
7                   **TRONICS MANUFACTURING AND RESEARCH**  
8                   **AND DEVELOPMENT FACILITIES, AND WORK-**  
9                   **FORCE DEVELOPMENT.**

10       (a) GRANTS FOR STATES WITH DEMONSTRATED IN-  
11 TEREST IN CONSTRUCTING MICROELECTRONICS MANU-  
12 FACTURING AND ADVANCED RESEARCH AND DEVELOP-  
13 MENT FACILITIES.—

14           (1) IN GENERAL.—Not later than 180 days  
15 after the date of the enactment of this Act, the Sec-  
16 retary of Commerce, in consultation with the Sec-  
17 retary of Defense, shall commence carrying out a  
18 program on the award of grants to States described  
19 in paragraph (2) to assist in financing the construc-  
20 tion, expansion, or modernization (including acquisi-  
21 tion of equipment and intellectual property) of  
22 microelectronics fabrication, assembly, test, ad-  
23 vanced packaging, or advanced research and develop-  
24 ment facilities.

1           (2) STATES DESCRIBED.—A State described in  
2 this paragraph is a State that demonstrates to the  
3 Secretary of Commerce the following:

4           (A) Documented interest from a microelec-  
5 tronics company, that has a demonstrated abil-  
6 ity to build and operate microelectronics fab-  
7 rication, assembly, test, advanced packaging, or  
8 advanced research and development facilities, in  
9 constructing, expanding, or modernizing a com-  
10 mercial microelectronics fabrication, assembly,  
11 test, advanced packaging, or advanced research  
12 and develop facility, or documented interest  
13 from a public-private consortium that has a  
14 demonstrated ability to build and operate an  
15 advanced research and development facility in  
16 the State.

17           (B) Documented interest from a private  
18 entity to provide funding to support the con-  
19 struction, expansion, or modernization of the  
20 facility that is the subject of the interest docu-  
21 mented under subparagraph (A).

22           (C) Commitments from such microelec-  
23 tronics company or consortia to worker and  
24 community investment, including—

1 (i) training and education benefits  
2 paid for by the company; and

3 (ii) programs to expand employment  
4 opportunity for economically disadvantaged  
5 individuals.

6 (D) Commitments from regional edu-  
7 cational and training entities and institutions of  
8 higher education to develop curriculum or en-  
9 gage in workforce training, including program-  
10 ming for training and job placement of eco-  
11 nomically disadvantaged individuals.

12 (E) Guaranteed State-level economic incen-  
13 tives for the construction, expansion, or mod-  
14 ernization of the facility described in subpara-  
15 graph (B), such as site development, tax incen-  
16 tives, job-training programs and State-level  
17 funding for microelectronics research and devel-  
18 opment.

19 (3) LIMITATION ON GRANT AMOUNT.—A State  
20 may not be awarded more than \$3,000,000,000  
21 under paragraph (1).

22 (4) USE OF FUNDS.—

23 (A) IN GENERAL.—A State receiving a  
24 grant under paragraph (1) may only use the  
25 amount of the grant to finance—

1 (i) the construction, expansion, or  
2 modernization of a state-of-the-art micro-  
3 electronics fabrication, assembly, test, ad-  
4 vanced packaging, or advanced research  
5 and development facility with respect to  
6 which the State demonstrated to the Sec-  
7 retary documented interest under para-  
8 graph (2), or for similar uses in state of  
9 practice and legacy facilities as deemed  
10 necessary by the Secretary for national se-  
11 curity and economic competitiveness;

12 (ii) to support workforce development  
13 for such facility; or

14 (iii) to support site development for  
15 such facility.

16 (B) RETURN OF FUNDS.—A State awarded  
17 a grant under paragraph (1) shall return any  
18 unused funds to the Treasury of the United  
19 States on an agreed-upon timeframe determined  
20 by the Secretary prior to issuing the funds.

21 (C) RECOVERY OF CERTAIN FUNDS.—If a  
22 microelectronics entity receiving grant funds  
23 under this subsection engages in increased lev-  
24 els of joint research and development, tech-  
25 nology licensing or transfer, or investment in-

1           volving sensitive technologies with entities  
2           under the foreign ownership, control, or influ-  
3           ence (FOCI) of the Government of the People’s  
4           Republic of China or other foreign adversary  
5           during the period of the grant, as determined  
6           by the Secretary as part of a periodic review of  
7           whether a microelectronics entity participating  
8           in the program specified in this subsection is  
9           under foreign ownership, control, or influence,  
10          the Secretary shall recover the amounts pro-  
11          vided by the Secretary under this subsection.

12           (5) PROHIBITION.—If pursuant to the periodic  
13          review of foreign ownership, control, or influence  
14          specified in paragraph (4)(C), the Secretary deter-  
15          mines that a microelectronics entity is under the for-  
16          eign ownership, control, or influence of the Govern-  
17          ment of the People’s Republic of China or other for-  
18          eign adversary during the period of the grant, such  
19          entity shall be prohibited from participating in the  
20          program specified in this subsection.

21           (6) NONRELOCATION BETWEEN STATES.—

22           (A) PROHIBITION.—A State may not use  
23          any amount of a grant awarded under this sub-  
24          section to induce the relocation or the move-

1           ment of existing jobs from one State to another  
2           State in competition for those jobs.

3           (B) REMEDIES.—In the event that the  
4           Secretary determines an amount of a grant  
5           awarded to a State under this subsection was  
6           used in violation of subparagraph (A), the Sec-  
7           retary may pursue appropriate enforcement ac-  
8           tions, including—

9                   (i) suspension of disbursements of the  
10                   grant awarded; and

11                   (ii) termination of the grant awarded,  
12                   which may include the establishment of a  
13                   debt requiring the recipient of the grant to  
14                   reimburse the amount of the grant.

15           (7) IMPLEMENTATION.—The Secretary shall  
16           carry out this section acting through the Director of  
17           the National Institute of Standards and Technology.

18           (8) REPORTS AND NOTICES.—

19                   (A) SECRETARY OF COMMERCE.—

20                           (i) REPORT ON IMPLEMENTATION  
21                           PLAN.—Not later than 90 days after the  
22                           date of the enactment of this Act, the Sec-  
23                           retary shall submit to Congress a report on  
24                           the plans of the Secretary to carry out the  
25                           program required by paragraph (1).

1 (ii) NOTICE OF PENDING AWARD.—

2 (I) IN GENERAL.—Not later than  
3 30 days before awarding a grant to a  
4 State under this subsection, the Sec-  
5 retary shall submit to Congress a no-  
6 tice of the intended award.

7 (II) CONTENTS.—Each notice  
8 submitted under subclause (I) shall  
9 include a description of the State to  
10 which the Secretary intends to award  
11 a grant under this subsection, the  
12 project or projects for which the  
13 amount of the grant is intended to be  
14 used, specifics on the planned use of  
15 the amounts of the grant for that  
16 project, and the rationale of the Sec-  
17 retary for awarding the grant.

18 (B) COMPTROLLER GENERAL OF THE  
19 UNITED STATES.—

20 (i) BIENNIAL REPORT.—Not later  
21 than 1 year after the date on which the  
22 Secretary of Commerce submits the report  
23 under subparagraph (A)(i) and not less  
24 frequently than once every 2 years there-  
25 after, the Comptroller General of the



1 United States shall submit to Congress a  
2 report on the activities carried out under  
3 this subsection during the previous year.

4 (ii) CONTENTS.—Each report sub-  
5 mitted under clause (i) shall include, at a  
6 minimum, assessments of the following:

7 (I) How the program is being  
8 carried out and how recipients of  
9 grants are being selected under the  
10 program.

11 (II) How other Federal programs  
12 are leveraged for manufacturing, re-  
13 search, and training to complement  
14 the grants awarded to States under  
15 this subsection.

16 (III) Outcomes of projects sup-  
17 ported by grants under this sub-  
18 section, including the construction, ex-  
19 pansion, or modernization of a micro-  
20 electronics fabrication, assembly, test,  
21 advanced packaging, or advanced re-  
22 search and development facilities, re-  
23 search and development, workforce  
24 training, employment, wages, and hir-

1                   ing of economically disadvantaged  
2                   populations.

3                   (9) AUTHORIZATION OF APPROPRIATIONS.—

4                   There is authorized to be appropriated to carry out  
5                   this subsection \$15,000,000,000 for fiscal year  
6                   2021, with such amount to remain available for such  
7                   purpose until September 30, 2031.

8                   (b) CREATION, EXPANSION, OR MODERNIZATION OF  
9                   MICROELECTRONICS MANUFACTURING FACILITIES AND  
10                  CAPABILITIES FOR NATIONAL SECURITY NEEDS.—

11                  (1) INCENTIVES AUTHORIZED.—The Secretary  
12                  of Defense and the Director of National Intelligence,  
13                  in consultation with the Secretary of Commerce,  
14                  may jointly enter into arrangements with private  
15                  sector entities or consortia thereof to provide incen-  
16                  tives for the creation, expansion, or modernization of  
17                  one or more commercially competitive and sustain-  
18                  able microelectronics manufacturing or advanced re-  
19                  search and development facilities capable of pro-  
20                  ducing measurably secure and specialized microelec-  
21                  tronics for use by the Department of Defense, the  
22                  intelligence community, critical infrastructure sec-  
23                  tors of the United States economy, and other na-  
24                  tional security applications.

1           (2) COMMERCIAL MANUFACTURING.—A facility  
2           constructed, expanded, or modernized with an incen-  
3           tive provided under paragraph (1) may—

4                   (A) be principally oriented toward commer-  
5                   cial manufacturing; or

6                   (B) devote surplus manufacturing capacity  
7                   to the production of commercial microelec-  
8                   tronics.

9           (3) RISK MITIGATION REQUIREMENTS.—A facil-  
10           ity constructed, expanded, or modernized with an in-  
11           centive provided under paragraph (1), or the compo-  
12           nents thereof, shall—

13                   (A) have the potential to perform fabrica-  
14                   tion, assembly, package, test, or advanced re-  
15                   search and development functions for classified  
16                   and export-controlled microelectronics;

17                   (B) include management processes to iden-  
18                   tify and mitigate supply chain security risks;  
19                   and

20                   (C) be able to produce microelectronics  
21                   consistent with applicable trusted supply chain  
22                   and operational security standards established  
23                   under section 224 of the National Defense Au-  
24                   thorization Act for Fiscal Year 2020 (Public  
25                   Law 116–92).

1           (4) NATIONAL SECURITY REQUIREMENTS.—In  
2 the provision of incentives under paragraph (1), the  
3 Secretary of Defense and the Director of National  
4 Intelligence shall jointly give preference to private  
5 sector entities and consortia that—

6           (A) have participated in previous programs  
7 and projects of the Department of Defense or  
8 the Office of the Director of National Intel-  
9 ligence, including—

10           (i) the Trusted Integrated Circuit pro-  
11 gram of the Intelligence Advanced Re-  
12 search Projects Activity;

13           (ii) trusted and assured microelec-  
14 tronics projects, as administered by the  
15 Department of Defense; or

16           (iii) the Electronics Resurgence Initia-  
17 tive (ERI) program of the Defense Ad-  
18 vanced Research Projects Agency;

19           (B) have demonstrated an ongoing com-  
20 mitment to performing contracts for the De-  
21 partment of Defense and the intelligence com-  
22 munity;

23           (C) are approved by the Defense Counter-  
24 intelligence and Security Agency or the Office  
25 of the Director of National Intelligence as pre-

1           senting an acceptable security risk, taking into  
2           account supply chain assurance vulnerabilities,  
3           counterintelligence risks, and any risks pre-  
4           sented by companies whose owners are located  
5           outside the United States; and

6           (D) are evaluated periodically for foreign  
7           ownership, control, or influence, consistent with  
8           the determinations in paragraphs (4)(C) and  
9           (5) of subsection (a).

10          (5) USE OF INCENTIVES.—Incentives may be  
11          provided under paragraph (1) for the construction,  
12          expansion, or modernization of a facility that was  
13          constructed, expanded, or modernized with funds  
14          from a grant awarded under subsection (a).

15          (6) NONTRADITIONAL DEFENSE CONTRACTORS  
16          AND COMMERCIAL ENTITIES.—The arrangements  
17          entered into under paragraph (1) shall be in the  
18          form the Secretary of Defense and the Director of  
19          National Intelligence determine to be appropriate to  
20          encourage industry participation of nontraditional  
21          defense contractors or commercial entities and may  
22          include a contract, a grant, a cooperative agreement,  
23          a commercial agreement, the use of other trans-  
24          action authority under section 2371 of title 10,  
25          United States Code, or another such arrangement.

## 1 (7) REPORTS.—

2 (A) REPORT BY SECRETARY OF DEFENSE  
3 AND DIRECTOR OF NATIONAL INTELLIGENCE.—

4 Not later than 90 days after the date of the en-  
5 actment of this Act, the Secretary of Defense  
6 and the Director of National Intelligence shall  
7 jointly submit to Congress a report on the plans  
8 of the Secretary and the Director to provide in-  
9 centives under paragraph (1).

10 (B) BIENNIAL REPORTS BY COMPTROLLER  
11 GENERAL OF THE UNITED STATES.—Not later  
12 than 1 year after the date on which the Sec-  
13 retary submits the report required by subpara-  
14 graph (A) and not less frequently than once  
15 every 2 years thereafter, the Comptroller Gen-  
16 eral of the United States shall submit to Con-  
17 gress a report on the activities carried out  
18 under this subsection.

## 19 (8) AUTHORIZATION OF APPROPRIATIONS.—

20 There is authorized to be appropriated to carry out  
21 this subsection \$5,000,000,000 for fiscal year 2021,  
22 with such amount to remain available for such pur-  
23 pose until September 30, 2031.

1 (c) ADDITIONAL AMOUNTS FOR ENSURING THE FU-  
2 TURE OF UNITED STATES LEADERSHIP IN MICROELEC-  
3 TRONICS.—

4 (1) AUTHORIZATION OF APPROPRIATIONS.—

5 There is authorized to be appropriated  
6 \$2,000,000,000 for fiscal year 2021, with such  
7 amount to remain available until September 30,  
8 2031, to expand the Electronics Resurgence Initia-  
9 tive of the Defense Advanced Research Projects  
10 Agency to develop advanced disruptive microelec-  
11 tronics technology, including research and develop-  
12 ment to enable production at a volume required to  
13 sustain a robust domestic microelectronics industry  
14 and mitigate parts obsolescence.

15 (2) AUTHORIZATION OF APPROPRIATIONS.—

16 There is authorized to be appropriated to carry out  
17 microelectronics research at the National Science  
18 Foundation \$1,500,000,000 for fiscal year 2021,  
19 with such amount to remain available for such pur-  
20 pose until September 30, 2031.

21 (3) AUTHORIZATION OF APPROPRIATIONS.—

22 There is authorized to be appropriated to carry out  
23 microelectronics research at the Department of En-  
24 ergy \$1,250,000,000 for fiscal year 2021, with such

1 amount to remain available for such purpose until  
2 September 30, 2031.

3 (4) AUTHORIZATION OF APPROPRIATIONS.—

4 There is authorized to be appropriated to carry out  
5 microelectronics research at the National Institute of  
6 Standards and Technology \$250,000,000 for fiscal  
7 year 2021, with such amount to remain available for  
8 such purpose until September 30, 2031.

9 (5) SUPPLEMENT, NOT SUPPLANT.—The

10 amounts authorized to be appropriated under para-  
11 graphs (1) through (4) shall supplement and not  
12 supplant amounts already appropriated to carry out  
13 the purposes described in such paragraphs.

14 (6) DOMESTIC PRODUCTION REQUIREMENTS.—

15 The heads of executive agencies receiving funding  
16 under this section shall develop policies to require  
17 domestic production, to the extent possible, for any  
18 intellectual property resulting from microelectronics  
19 research and development conducted as a result of  
20 these funds and domestic control requirements to  
21 protect any such intellectual property from foreign  
22 adversaries.

23 (7) SENSE OF CONGRESS.—Congress supports

24 and encourages efforts by the heads of executive  
25 agencies receiving funding under this subsection to



1 co-invest in industry-led microelectronics investment  
2 consortiums to increase private capital investment in  
3 the domestic microelectronics industry.

4 (d) NATIONAL MICROELECTRONICS RESEARCH AND  
5 DEVELOPMENT PLAN.—

6 (1) IN GENERAL.—The President shall establish  
7 a standing subcommittee of the President’s Office of  
8 Science and Technology’s National Science and  
9 Technology Council for interagency efforts relating  
10 to microelectronics policy.

11 (2) NATIONAL MICROELECTRONICS RESEARCH  
12 PLAN.—

13 (A) IN GENERAL.—The subcommittee es-  
14 tablished under paragraph (1) shall develop a  
15 national microelectronics research and develop-  
16 ment plan to guide and coordinate funding for  
17 breakthroughs in next-generation microelec-  
18 tronics research and technology, strengthen the  
19 domestic microelectronics workforce, and en-  
20 courage collaboration between government, in-  
21 dustry, and academia.

22 (B) UPDATES.—Not less frequently than  
23 once each year, the subcommittee established  
24 under paragraph (1) shall update the plan de-

1           veloped under subparagraph (A) of this para-  
2           graph.

3           (e) INDUSTRY ADVISORY COMMITTEE.—The Presi-  
4           dent shall establish a standing subcommittee of the Presi-  
5           dent’s Council of Advisors on Science and Technology to  
6           advise the United States Government on matters relating  
7           to microelectronics policy.

8           (f) MULTILATERAL EXPORT CONTROL PLAN.—Not  
9           later than 180 days after the date of the enactment of  
10          this Act, the Secretary of State, the Secretary of the  
11          Treasury, and the Secretary of Commerce, in consultation  
12          with the Director of National Intelligence, the Secretary  
13          of Homeland Security, the Secretary of Defense, and the  
14          Secretary of Energy, shall jointly develop and submit to  
15          Congress a plan to coordinate with foreign government  
16          partners on establishing common microelectronics export  
17          control and foreign direct investment screening measures  
18          to align with national and multilateral security priorities.

19          (g) PROHIBITION RELATING TO FOREIGN ADVER-  
20          SARIES.—None of the funds appropriated pursuant to an  
21          authorization in this section may be provided to an enti-  
22          ty—

23                 (1) under the foreign ownership, control, or in-  
24          fluence of the Government of the People’s Republic

1 of China or the Chinese Communist Party, or other  
2 foreign adversary; or

3 (2) determined to have beneficial ownership  
4 from foreign individuals subject to the jurisdiction,  
5 direction, or influence of foreign adversaries.

6 (h) REQUIREMENTS FOR SOURCING FROM DOMESTIC  
7 MICROELECTRONICS DESIGN AND FOUNDRY SERVICES.—

8 (1) REQUIREMENTS REQUIRED.—Not later  
9 than 1 year after the date of the enactment of this  
10 Act, the Secretary of Defense shall establish require-  
11 ments, and a timeline for enforcement of such re-  
12 quirements, to the extent possible, for domestic  
13 sourcing for microelectronics design and foundry  
14 services by programs, contractors, subcontractors,  
15 and other recipients of funding from the Department  
16 of Defense.

17 (2) PROCESSES FOR WAIVERS.—The require-  
18 ments established under paragraph (1) shall include  
19 processes to permit waivers for specific contracts or  
20 transactions for domestic sourcing requirements  
21 based on cost, availability, severity of technical and  
22 mission requirements, emergency requirements and  
23 operational needs, other legal or international treaty  
24 obligations, or other factors.

1           (3) UPDATES.—Not less frequently than once  
2 each year, the Secretary shall—

3           (A) update the requirements and timelines  
4 established under paragraph (1) and the proc-  
5 esses under paragraph (2); and

6           (B) submit to Congress a report on the up-  
7 dates made under subparagraph (A).

8 (i) DEFINITIONS.—In this section:

9           (1) BENEFICIAL OWNER; BENEFICIAL OWNER-  
10 SHIP.—The terms “beneficial owner” and “beneficial  
11 ownership” have the meanings given such terms in  
12 section 847 of the National Defense Authorization  
13 Act for Fiscal Year 2020 (Public Law 116–92).

14           (2) ENTITY; COMPANY.—The terms “entity”  
15 and “company” mean any corporation, company,  
16 limited liability company, limited partnership, busi-  
17 ness trust, business association, or other similar en-  
18 tity.

19           (3) FOREIGN OWNERSHIP, CONTROL, OR INFLU-  
20 ENCE.—The term “foreign ownership, control, or in-  
21 fluence” has the meaning given such term in section  
22 847 of the National Defense Authorization Act for  
23 Fiscal Year 2020 (Public Law 116–92).

24           (4) INTELLIGENCE COMMUNITY.—In this sec-  
25 tion, the term “intelligence community” has the

1 meaning given such term in section 3 of the Na-  
2 tional Security Act of 1947 (50 U.S.C. 3003).

○