Purpose: 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.


S. 4049

To authorize appropriations for fiscal year 2021 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes.

Referred to the Committee on __________________________ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT intended to be proposed by Mr. COTTON (for himself and Mr. SCHUMER)

Viz:

1 At the appropriate place in title X, insert the following:
2
SEC. ______. GRANTS FOR CONSTRUCTION OF MICROELECTRONICS MANUFACTURING AND RESEARCH AND DEVELOPMENT FACILITIES, AND WORKFORCE DEVELOPMENT.

(a) GRANTS FOR STATES WITH DEMONSTRATED INTEREST IN CONSTRUCTING MICROELECTRONICS MANUFACTURING AND ADVANCED RESEARCH AND DEVELOPMENT FACILITIES.—

(1) IN GENERAL.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Commerce, in consultation with the Secretary of Defense, shall commence carrying out a program on the award of grants to States described in paragraph (2) to assist in financing the construction, expansion, or modernization (including acquisition of equipment and intellectual property) of microelectronics fabrication, assembly, test, advanced packaging, or advanced research and development facilities.

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

(A) Documented interest from a microelectronics company, that has a demonstrated ability to build and operate microelectronics fabrication, assembly, test, advanced packaging, or
advanced research and development facilities, in
constructing, expanding, or modernizing a com-
mercial microelectronics fabrication, assembly,
test, advanced packaging, or advanced research
and develop facility, or documented interest
from a public-private consortium that has a
demonstrated ability to build and operate an
advanced research and development facility in
the State.

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

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

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

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

(D) Commitments from regional edu-
cational and training entities and institutions of
higher education to develop curriculum or en-
gage in workforce training, including programming for training and job placement of economically disadvantaged individuals.

(E) Guaranteed State-level economic incentives for the construction, expansion, or modernization of the facility described in subparagraph (B), such as site development, tax incentives, job-training programs and State-level funding for microelectronics research and development.

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

(4) USE OF FUNDS.—

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

(i) the construction, expansion, or modernization of a state-of-the-art microelectronics fabrication, assembly, test, advanced packaging, or advanced research and development facility with respect to which the State demonstrated to the Secretary documented interest under paragraph (2), or for similar uses in state of
practice and legacy facilities as deemed necessary by the Secretary for national security and economic competitiveness;

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

(iii) to support site development for such facility.

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

(C) RECOVERY OF CERTAIN FUNDS.—If a microelectronics entity receiving grant funds under this subsection engages in increased levels of joint research and development, technology licensing or transfer, or investment involving sensitive technologies with entities under the foreign ownership, control, or influence (FOCI) of the Government of the People’s Republic of China or other foreign adversary during the period of the grant, as determined by the Secretary as part of a periodic review of whether a microelectronics entity participating in the program specified in this subsection is
under foreign ownership, control, or influence,

the Secretary shall recover the amounts pro-

vided by the Secretary under this subsection.

(5) PROHIBITION.—If pursuant to the periodic

review of foreign ownership, control, or influence

specified in paragraph (4)(C), the Secretary deter-

mines that a microelectronics entity is under the for-

gien ownership, control or influence of the Govern-

ment of the People’s Republic of China or other for-

eign adversary during the period of the grant, such

dentity shall be prohibited from participating in the

program specified in this subsection.

(6) NONRELOCATION BETWEEN STATES.—

(A) PROHIBITION.—A State may not use

any amount of a grant awarded under this sub-

section to induce the relocation or the move-

ment of existing jobs from one State to another

State in competition for those jobs.

(B) REMEDIES.—In the event that the

Secretary determines an amount of a grant

awarded to a State under this subsection was

used in violation of subparagraph (A), the Sec-

retary may pursue appropriate enforcement ac-

tions, including—
(i) suspension of disbursements of the grant awarded; and

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

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

(8) REPORTS AND NOTICES.—

(A) SECRETARY OF COMMERCE.—

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

(ii) NOTICE OF PENDING AWARD.—

(I) IN GENERAL.—Not later than 30 days before awarding a grant to a State under this subsection, the Secretary shall submit to Congress a notice of the intended award.

(II) CONTENTS.—Each notice submitted under subclause (I) shall
include a description of the State to which the Secretary intends to award a grant under this subsection, the project or projects for which the amount of the grant is intended to be used, specifics on the planned use of the amounts of the grant for that project, and the rationale of the Secretary for awarding the grant.

(B) Comptroller General of the United States.—

(i) Biennial report.—Not later than 1 year after the date on which the Secretary of Commerce submits the report under subparagraph (A)(i) and not less frequently than once every 2 years thereafter, the Comptroller General of the United States shall submit to Congress a report on the activities carried out under this subsection during the previous year.

(ii) Contents.—Each report submitted under clause (i) shall include, at a minimum, assessments of the following:

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

(II) How other Federal programs are leveraged for manufacturing, research, and training to complement the grants awarded to States under this subsection.

(III) Outcomes of projects supported by grants under this subsection, including the construction, expansion, or modernization of a microelectronics fabrication, assembly, test, advanced packaging, or advanced research and development facilities, research and development, workforce training, employment, wages, and hiring of economically disadvantaged populations.

(9) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this subsection $15,000,000,000 for fiscal year 2021, with such amount to remain available for such purpose until September 30, 2031.
(b) Creation, Expansion, or Modernization of Microelectronics Manufacturing Facilities and Capabilities for National Security Needs.—

(1) Incentives Authorized.—The Secretary of Defense and the Director of National Intelligence, in consultation with the Secretary of Commerce, may jointly enter into arrangements with private sector entities or consortia thereof to provide incentives for the creation, expansion, or modernization of one or more commercially competitive and sustainable microelectronics manufacturing or advanced research and development facilities capable of producing measurably secure and specialized microelectronics for use by the Department of Defense, the intelligence community, critical infrastructure sectors of the United States economy, and other national security applications.

(2) Commercial Manufacturing.—A facility constructed, expanded, or modernized with an incentive provided under paragraph (1) may—

(A) be principally oriented toward commercial manufacturing; or

(B) devote surplus manufacturing capacity to the production of commercial microelectronics.
(3) **RISK MITIGATION REQUIREMENTS.**—A facility constructed, expanded, or modernized with an incentive provided under paragraph (1), or the components thereof, shall—

(A) have the potential to perform fabrication, assembly, package, test, or advanced research and development functions for classified and export-controlled microelectronics;

(B) include management processes to identify and mitigate supply chain security risks; and

(C) be able to produce microelectronics consistent with applicable trusted supply chain and operational security standards established under section 224 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92).

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

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

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

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

(iii) the Electronics Resurgence Initiative (ERI) program of the Defense Ad-
vanced Research Projects Agency;

(B) have demonstrated an ongoing com-
mitment to performing contracts for the De-
partment of Defense and the intelligence com-

(C) are approved by the Defense Counter-
intelligence and Security Agency or the Office
of the Director of National Intelligence as pre-
senting an acceptable security risk, taking into
account supply chain assurance vulnerabilities,
counterintelligence risks, and any risks pre-
sented by companies whose owners are located
outside the United States; and

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

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

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

(7) REPORTS.—

(A) REPORT BY SECRETARY OF DEFENSE
AND DIRECTOR OF NATIONAL INTELLIGENCE.—
Not later than 90 days after the date of the en-
actment of this Act, the Secretary of Defense
and the Director of National Intelligence shall
jointly submit to Congress a report on the plans
of the Secretary and the Director to provide incentives under paragraph (1).

(B) Biennial reports by comptroller general of the United States.—Not later than 1 year after the date on which the Secretary submits the report required by subparagraph (A) and not less frequently than once every 2 years thereafter, the Comptroller General of the United States shall submit to Congress a report on the activities carried out under this subsection.

(8) Authorization of Appropriations.—There is authorized to be appropriated to carry out this subsection $5,000,000,000 for fiscal year 2021, with such amount to remain available for such purpose until September 30, 2031.

(c) Additional Amounts for Ensuring the Future of United States Leadership in Microelectronics.—

(1) Authorization of Appropriations.—There is authorized to be appropriated $2,000,000,000 for fiscal year 2021, with such amount to remain available until September 30, 2031, to expand the Electronics Resurgence Initiative of the Defense Advanced Research Projects
Agency to develop advanced disruptive microelectronics technology, including research and development to enable production at a volume required to sustain a robust domestic microelectronics industry and mitigate parts obsolescence.

(2) Authorization of Appropriations.—There is authorized to be appropriated to carry out microelectronics research at the National Science Foundation $1,500,000,000 for fiscal year 2021, with such amount to remain available for such purpose until September 30, 2031.

(3) Authorization of Appropriations.—There is authorized to be appropriated to carry out microelectronics research at the Department of Energy $1,250,000,000 for fiscal year 2021, with such amount to remain available for such purpose until September 30, 2031.

(4) Authorization of Appropriations.—There is authorized to be appropriated to carry out microelectronics research at the National Institute of Standards and Technology $250,000,000 for fiscal year 2021, with such amount to remain available for such purpose until September 30, 2031.

(5) Supplement, not Supplant.—The amounts authorized to be appropriated under para-
graphs (1) through (4) shall supplement and not supplant amounts already appropriated to carry out the purposes described in such paragraphs.

(6) Domestic Production Requirements.—The heads of executive agencies receiving funding under this section shall develop policies to require domestic production, to the extent possible, for any intellectual property resulting from microelectronics research and development conducted as a result of these funds and domestic control requirements to protect any such intellectual property from foreign adversaries.

(7) Sense of Congress.—Congress supports and encourages efforts by the heads of executive agencies receiving funding under this subsection to co-invest in industry-led microelectronics investment consortia to increase private capital investment in the domestic microelectronics industry.

(d) National Microelectronics Research and Development Plan.—

(1) In General.—The President shall establish a standing subcommittee of the President’s Office of Science and Technology’s National Science and Technology Council for interagency efforts relating to microelectronics policy.
(2) National microelectronics research plan.—

(A) In general.—The subcommittee established under paragraph (1) shall develop a national microelectronics research and development plan to guide and coordinate funding for breakthroughs in next-generation microelectronics research and technology, strengthen the domestic microelectronics workforce, and encourage collaboration between government, industry, and academia.

(B) Updates.—Not less frequently than once each year, the subcommittee established under paragraph (1) shall update the plan developed under subparagraph (A) of this paragraph.

(e) Industry advisory committee.—The President shall establish a standing subcommittee of the President’s Council of Advisors on Science and Technology to advise the United States Government on matters relating to microelectronics policy.

(f) Multilateral export control plan.—Not later than 180 days after the date of the enactment of this Act, the Secretary of State, the Secretary of the Treasury, and the Secretary of Commerce, in consultation
with the Director of National Intelligence, the Secretary of Homeland Security, the Secretary of Defense, and the Secretary of Energy, shall jointly develop and submit to Congress a plan to coordinate with foreign government partners on establishing common microelectronics export control and foreign direct investment screening measures to align with national and multilateral security priorities.

(g) Prohibition Relating to Foreign Adversaries.—None of the funds appropriated pursuant to an authorization in this section may be provided to an entity—

(1) under the foreign ownership, control, or influence of the Government of the People’s Republic of China or the Chinese Communist Party, or other foreign adversary; or

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

(h) Requirements for Sourcing From Domestic Microelectronics Design and Foundry Services.—

(1) Requirements Required.—Not later than 1 year after the date of the enactment of this Act, the Secretary of Defense shall establish requirements, and a timeline for enforcement of such requirements, to the extent possible, for domestic
sourcing for microelectronics design and foundry services by programs, contractors, subcontractors, and other recipients of funding from the Department of Defense.

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

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

(A) update the requirements and timelines established under paragraph (1) and the processes under paragraph (2); and

(B) submit to Congress a report on the updates made under subparagraph (A).

(i) DEFINITIONS.—In this section:

(1) BENEFICIAL OWNER; BENEFICIAL OWNERSHIP.—The terms “beneficial owner” and “beneficial ownership” have the meanings given such terms in section 847 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92).
(2) Entity; Company.—The terms “entity” and “company” mean any corporation, company, limited liability company, limited partnership, business trust, business association, or other similar entity.

(3) Foreign Ownership, Control, or Influence.—The term “foreign ownership, control, or influence” has the meaning given such term in section 847 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92).

(4) Intelligence Community.—In this section, the term “intelligence community” has the meaning given such term in section 3 of the National Security Act of 1947 (50 U.S.C. 3003).