

117TH CONGRESS  
2D SESSION

# H. R. 7677

To provide incentives for the domestic production of printed circuit boards,  
and for other purposes.

---

## IN THE HOUSE OF REPRESENTATIVES

MAY 6, 2022

Ms. ESHOO (for herself and Mr. MOORE of Utah) introduced the following bill;  
which was referred to the Committee on Ways and Means, and in addition to the Committees on Energy and Commerce, and Science, Space, and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

---

## A BILL

To provide incentives for the domestic production of printed  
circuit boards, 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 “Supporting American  
5       Printed Circuit Boards Act of 2022”.

1 **SEC. 2. TAX CREDIT FOR THE PURCHASE OR ACQUISITION**  
2 **OF PRINTED CIRCUIT BOARDS MANUFAC-**  
3 **TURED IN THE UNITED STATES.**

4 (a) IN GENERAL.—Subpart D of part IV of sub-  
5 chapter A of chapter 1 of the Internal Revenue Code of  
6 1986 is amended by inserting after section 45L the fol-  
7 lowing new section:

8 **“SEC. 45M. CREDIT FOR THE PURCHASE OR ACQUISITION**  
9 **OF PRINTED CIRCUIT BOARDS MANUFAC-**  
10 **TURED IN THE UNITED STATES.**

11 “(a) IN GENERAL.—For the purposes of section 38,  
12 the credit determined under this section for the taxable  
13 year is an amount equal to 25 percent of the cost paid  
14 or incurred by the taxpayer for the purchase or acquisition  
15 of printed circuit boards manufactured in the United  
16 States for the taxable year.

17 “(b) DEFINITIONS.—For the purposes of this sec-  
18 tion—

19 “(1) PRINTED CIRCUIT BOARD.—The term  
20 ‘printed circuit board’ has the meaning given such  
21 term in section 3(a) of the Supporting American  
22 Printed Circuit Boards Act of 2022.

23 “(2) MANUFACTURED.—The term ‘manufac-  
24 tured’ means all substantial actions involved in the  
25 printing of a printed circuit board from raw mate-

1       rials to the integration of the completed board into  
 2       an end item or component of an end item.

3       “(c) REGULATIONS AND GUIDANCE.—The Secretary  
 4 shall, in consultation with the Secretary of Commerce,  
 5 promulgate such regulations and guidance as may be nec-  
 6 essary or appropriate to carry out this section.”.

7       (b) CONFORMING AMENDMENT.—

8           (1) IN GENERAL.—The table of sections for  
 9       subpart D of part IV of subchapter A of chapter 1  
 10       of such Code is amended by inserting after the item  
 11       relating to section 45L the following new item:

“Sec. 45M. Credit for the purchase or acquisition of printed circuit boards  
 manufactured in the United States.”.

12       (2) GENERAL BUSINESS CREDIT.—Section  
 13       38(b) of the Internal Revenue Code of 1986 is  
 14       amended—

15           (A) in paragraph (32), by striking “plus”;

16           (B) in paragraph (33), by striking the pe-  
 17       riod at the end and inserting “, plus”; and

18           (C) by adding at the end the following new  
 19       paragraph:

20       “(34) the credit for the purchase or acquisition  
 21       of printed circuit boards manufactured in the United  
 22       States determined under section 45M.”.

1 (c) EFFECTIVE DATE.—The amendments made by  
2 this section shall apply to amounts paid or incurred after  
3 December 31, 2021.

4 **SEC. 3. INCENTIVES FOR PRINTED CIRCUIT BOARD MANU-**  
5 **FACTURING AND RESEARCH AND DEVELOP-**  
6 **MENT.**

7 (a) DEFINITIONS.—In this section:

8 (1) CIRCUIT BOARD.—The term “circuit board”  
9 means a piece of insulating material on which elec-  
10 trical components are mounted and interconnected  
11 by etched copper foil so patterned as to form a cir-  
12 cuit.

13 (2) COVERED ENTITY.—The term “covered en-  
14 tity” means a private entity, a consortium of private  
15 entities, or a consortium of public and private enti-  
16 ties with the ability to substantially finance, con-  
17 struct, expand, or modernize a facility relating to  
18 manufacturing or research and development of print-  
19 ed circuit boards.

20 (3) COVERED INCENTIVE.—The term “covered  
21 incentive” means—

22 (A) an incentive used for the purposes of  
23 constructing, expanding, or modernizing a facil-  
24 ity described in paragraph (2) that will be lo-  
25 cated in the United States; and

1 (B) a workforce-related incentive (includ-  
2 ing an agreement to provide grants for work-  
3 force training or vocational education), any con-  
4 cession with respect to real property, funding  
5 for research and development with respect to  
6 printed circuit boards, and any other incentive  
7 determined by the Secretary, in consultation  
8 with the Secretary of State, to be appropriate  
9 and related to encouraging investment in facili-  
10 ties and equipment in the United States for  
11 manufacturing or research and development of  
12 printed circuit boards.

13 (4) ECONOMICALLY DISADVANTAGED INDIVIDUAL.—The term “economically disadvantaged in-  
14 dividual” means an individual described in section  
15 8(a)(6)(A) of the Small Business Act (15 U.S.C.  
16 637(a)(6)(A)).  
17

18 (5) FOREIGN ENTITY; FOREIGN ENTITY OF  
19 CONCERN.—The terms “foreign entity” and “foreign  
20 entity of concern” have the meanings given such  
21 terms in section 9901 of the William M. (Mac)  
22 Thornberry National Defense Authorization Act for  
23 Fiscal Year 2021 (Public Law 116–283; 15 U.S.C.  
24 4651).

1           (6) HISTORICALLY BLACK COLLEGE OR UNI-  
2           VERSITY.—The term “historically Black college or  
3           university” has the meaning given the term “part B  
4           institution” in section 322 of the Higher Education  
5           Act of 1965 (20 U.S.C. 1061).

6           (7) INSTITUTION OF HIGHER EDUCATION.—The  
7           term “institution of higher education” has the  
8           meaning given such term in section 101 of the High-  
9           er Education Act of 1965 (20 U.S.C. 1001).

10          (8) INTEGRATED CIRCUIT SUBSTRATE.—The  
11          term “integrated circuit substrate” means the sup-  
12          porting material upon or within which an integrated  
13          circuit is fabricated or to which an integrated circuit  
14          is attached.

15          (9) INTELLIGENCE COMMUNITY.—The term  
16          “intelligence community” has the meaning given  
17          that term in section 3 of the National Security Act  
18          of 1947 (50 U.S.C. 3003).

19          (10) MINORITY-OWNED BUSINESS AND WOMEN-  
20          OWNED BUSINESS.—The terms “minority-owned  
21          business” and “women-owned business” have the  
22          meanings given such terms in section 704B(h) of the  
23          Equal Credit Opportunity Act (15 U.S.C. 1691c–  
24          2(h)).

1           (11) MINORITY-SERVING INSTITUTION.—The  
2       term “minority-serving institution” means any of  
3       the following:

4           (A) An Alaska Native-serving institution  
5       (as that term is defined in section 317(b) of the  
6       Higher Education Act of 1965 (20 U.S.C.  
7       1059d(b))).

8           (B) A Native Hawaiian-serving institution  
9       (as that term is defined in section 317(b) of  
10      such Act (20 U.S.C. 1059d(b))).

11          (C) A Predominantly Black institution (as  
12      that term is defined in section 371(c) of such  
13      Act (20 U.S.C. 1067q(c))).

14          (D) An Asian American and Native Amer-  
15      ican Pacific Islander-serving institution (as that  
16      term is defined in section 320(b) of such Act  
17      (20 U.S.C. 1059g(b))).

18          (E) A Native American-serving, nontribal  
19      institution (as that term is defined in section  
20      319(b) of such Act (20 U.S.C. 1059f(b))).

21       (12) PERSON.—The term “person” means an  
22      individual or entity.

23       (13) PRINTED CIRCUIT BOARD.—The term  
24      “printed circuit board” means a circuit board on  
25      which a pattern of copper foil connecting the compo-

1 nents has been etched or printed, including boards  
2 with printed circuits on both sides and boards with  
3 printed circuits on one side only, for the mounting  
4 of components on which most connections are made  
5 by printed circuitry.

6 (14) PROGRAM.—The term “Program” means  
7 the program established under subsection (b)(1).

8 (15) SECRETARY.—The term “Secretary”  
9 means the Secretary of Commerce.

10 (16) SMALL BUSINESS.—The term “small busi-  
11 ness” has the meaning given the term “small busi-  
12 ness concern” under section 3(a) of the Small Busi-  
13 ness Act (15 U.S.C. 632(a)), except that section  
14 121.103 of title 13, Code of Federal Regulations (or  
15 any successor regulation) shall not apply.

16 (17) STATE.—The term “State” means each  
17 State of the United States, the District of Columbia,  
18 each commonwealth, territory, or possession of the  
19 United States, and each federally recognized Indian  
20 Tribe.

21 (18) VETERAN-OWNED BUSINESS.—The term  
22 “veteran-owned business” has the meaning given the  
23 term “small business concern owned and controlled  
24 by veterans” in section 3(q) of the Small Business  
25 Act (15 U.S.C. 632(q)).



1 (b) FINANCIAL ASSISTANCE PROGRAM.—

2 (1) IN GENERAL.—The Secretary shall establish  
3 a program that, in accordance with the requirements  
4 of this section and subject to the availability of ap-  
5 propriations for such purposes, provides Federal fi-  
6 nancial assistance to covered entities to incentivize  
7 investment in facilities and equipment in the United  
8 States for manufacturing or research and develop-  
9 ment of printed circuit boards.

10 (2) PROCEDURE.—

11 (A) IN GENERAL.—A covered entity shall  
12 submit to the Secretary an application that de-  
13 scribes the project for which the covered entity  
14 is seeking financial assistance under the Pro-  
15 gram.

16 (B) ELIGIBILITY.—Except as provided in  
17 subparagraph (C), in order for a covered entity  
18 to qualify for financial assistance under the  
19 Program, the covered entity shall demonstrate  
20 to the Secretary, in the application submitted  
21 by the covered entity under subparagraph (A),  
22 that—

23 (i) the covered entity has a docu-  
24 mented interest in carrying out a project  
25 that is a covered incentive; and

1 (ii) with respect to the project de-  
2 scribed in clause (i), the covered entity  
3 has—

4 (I) a plan the Secretary deter-  
5 mines to be executable to sustain the  
6 covered incentive described in clause  
7 (i) without additional Federal finan-  
8 cial assistance under the Program for  
9 facility support;

10 (II) made commitments to work-  
11 er and community investment, includ-  
12 ing through—

13 (aa) training and education  
14 benefits provided by or paid for  
15 by the covered entity; and

16 (bb) programs to expand  
17 employment opportunity for eco-  
18 nomically disadvantaged individ-  
19 uals; and

20 (III) secured commitments from  
21 regional educational and training enti-  
22 ties, postsecondary vocational institu-  
23 tions (defined in section 102(c) of the  
24 Higher Education Act of 1965 (20  
25 U.S.C. 1002(c))), or institutions of

1 higher education to provide workforce  
2 training, including programming for  
3 training and job placement of eco-  
4 nomically disadvantaged individuals.

5 (C) SMALL BUSINESS EXCEPTION.—The  
6 requirements in subclauses (II) and (III) of  
7 subparagraph (B)(ii) do not apply to small  
8 businesses.

9 (D) DUE DILIGENCE.—With respect to the  
10 review by the Secretary of an application sub-  
11 mitted by a covered entity under subparagraph  
12 (A), the Secretary may not approve the applica-  
13 tion unless the Secretary—

14 (i) confirms that the covered entity  
15 has satisfied the applicable eligibility cri-  
16 teria under subparagraph (B); and

17 (ii) determines that the project to  
18 which the application relates is in the in-  
19 terest of the United States.

20 (E) CONSIDERATIONS FOR REVIEW.—

21 (i) IN GENERAL.—Except as provided  
22 in clause (ii), with respect to the review by  
23 the Secretary of an application submitted  
24 by a covered entity under subparagraph

1 (A), the Secretary shall consider whether  
2 the covered entity has—

3 (I) previously received financial  
4 assistance under the Program; and

5 (II) demonstrated that it is re-  
6 sponsive to the national security needs  
7 or requirements established by the in-  
8 telligence community (or an agency  
9 thereof), the National Nuclear Secu-  
10 rity Administration, or the Depart-  
11 ment of Defense.

12 (ii) SMALL BUSINESSES EXCLUDED.—

13 Clause (i)(I) does not apply with respect to  
14 an application submitted by a small busi-  
15 ness under subparagraph (A).

16 (F) PREFERENCES.—The Secretary shall,  
17 when practicable, give preference with respect  
18 to the approval of an application submitted  
19 under subparagraph (A) by a covered entity  
20 that—

21 (i) is a small business, minority-owned  
22 business, women-owned business, or vet-  
23 eran-owned business;

1 (ii) expands the United States produc-  
2 tion capacity of integrated circuit sub-  
3 strates;

4 (iii) is relocating a manufacturing fa-  
5 cility of printed circuit boards currently lo-  
6 cated in an area owned by, controlled by,  
7 or subject to the jurisdiction or direction of  
8 a foreign entity of concern; or

9 (iv) includes a workforce training pro-  
10 gram that secures commitments from an  
11 institution of higher education that is—

12 (I) a historically Black college or  
13 university;

14 (II) a Hispanic-serving institu-  
15 tion (as such term is defined in sec-  
16 tion 502(a) of the Higher Education  
17 Act of 1965 (20 U.S.C. 1101a(a)));

18 (III) a Tribal College or Univer-  
19 sity (as such term is defined in sec-  
20 tion 316(b) of the Higher Education  
21 Act of 1965 (20 U.S.C. 1059c(b)));

22 (IV) a minority-serving institu-  
23 tion; or

24 (V) a rural-serving institution of  
25 higher education (as such term is de-

1                   fined in section 861(b) of the Higher  
2                   Education Act of 1965 (20 U.S.C.  
3                   1161q(b))).

4                   (G) FOREIGN ENTITIES OF CONCERN EX-  
5                   CLUSION.—

6                   (i) The Secretary may not approve an  
7                   application of a covered entity if the Sec-  
8                   retary determines that the covered entity is  
9                   a foreign entity of concern.

10                  (ii) None of the funds authorized to  
11                  be appropriated to carry out this sub-  
12                  section may be provided to a foreign entity  
13                  of concern.

14                  (H) RECORDS PRODUCTION.—

15                  (i) IN GENERAL.—The Secretary may  
16                  request from a covered entity that submits  
17                  an application under subparagraph (A) any  
18                  records and other information that the  
19                  Secretary determines necessary for the  
20                  purposes of ascertaining whether an award  
21                  under the Program will be used for the  
22                  covered incentive for which such award is  
23                  sought, including records or other informa-  
24                  tion regarding the status of such project.

1 (ii) FUNDING RESTRICTION.—No cov-  
2 ered entity that fails to provide records or  
3 information requested by the Secretary  
4 under this subparagraph shall be eligible  
5 for Federal financial assistance under the  
6 Program if such records or information are  
7 reasonably available to such covered entity.

8 (3) AMOUNT.—

9 (A) IN GENERAL.—The Secretary shall de-  
10 termine the appropriate amount and funding  
11 type for each financial assistance award made  
12 to a covered entity under the Program.

13 (B) LARGER INVESTMENT.—The amount  
14 awarded under the Program with respect to any  
15 individual project may not exceed \$150,000,000  
16 unless the Secretary, in consultation with the  
17 Secretary of Defense and the Director of Na-  
18 tional Intelligence, recommends to the Presi-  
19 dent, and the President notifies Congress, that  
20 a larger award is necessary to—

21 (i) significantly increase the supply of  
22 reliable, domestically produced printed cir-  
23 cuit boards that are relevant for the na-  
24 tional security and economic competitive-  
25 ness of the United States; and

1 (ii) meet the needs of national secu-  
2 rity.

3 (4) USE OF FUNDS.—

4 (A) IN GENERAL.—Except as provided by  
5 subparagraph (B), a covered entity that re-  
6 ceives a financial assistance award under the  
7 Program may only use the financial assistance  
8 award amounts—

9 (i) for a covered incentive; and

10 (ii) to pay reasonable costs related to  
11 the operating expenses for such covered in-  
12 centive, including costs relating to the spe-  
13 cialized workforce, essential materials, and  
14 complex equipment maintenance, as deter-  
15 mined by the Secretary.

16 (B) LARGER INVESTMENTS.—If the  
17 amount awarded under the Program with re-  
18 spect to the project is more than \$150,000,000,  
19 the covered entity that received such award may  
20 use such amounts only for the purposes de-  
21 scribed in subparagraph (A) to the extent that  
22 such use meets the national security needs or  
23 enhances the economic competitiveness of the  
24 United States.

25 (5) CLAWBACK.—



1 (A) DELAY CLAWBACK.—

2 (i) TARGET DATES.—With respect to  
3 any award made under the Program, the  
4 Secretary shall—

5 (I) determine target dates by  
6 which the project with respect to  
7 which such award was made shall  
8 commence and complete; and

9 (II) set such dates by the time of  
10 the award.

11 (ii) PROGRESSIVE RECOVERY FOR  
12 DELAYS.—If a project is not commenced  
13 and completed by the dates determined  
14 under clause (i) for such project, the Sec-  
15 retary shall progressively recover from the  
16 recipient of the award for such project up  
17 to the full amount of such award.

18 (iii) WAIVER.—In the case of a  
19 project that is not commenced or com-  
20 pleted by the dates determined under  
21 clause (i) for such project, the Secretary  
22 may waive elements of the clawback provi-  
23 sions incorporated in the award made  
24 under the Program for such project only if,

1 prior to granting such waiver, the Sec-  
2 retary—

3 (I) makes a formal determination  
4 that circumstances beyond the ability  
5 of the covered entity to foresee or con-  
6 trol are responsible for delays; and

7 (II) submits a notice to Congress.

8 (B) TECHNOLOGY CLAWBACK.—The Sec-  
9 retary may recover the full amount of any  
10 award made under the Program from the re-  
11 cipient of the award if, during the period deter-  
12 mined under subparagraph (A)(i) for the  
13 project with respect to which such award was  
14 made, the recipient knowingly engages in any  
15 joint research or technology licensing effort  
16 with a foreign entity of concern that relates to  
17 a technology or product that raises national se-  
18 curity concerns, as determined by the Secretary.

19 (C) NOTIFICATION TO CONGRESS.—

20 (i) IN GENERAL.—The Secretary shall  
21 notify Congress of—

22 (I) the clawback provisions at-  
23 tending each award described in sub-  
24 paragraph (A)(i); and

1 (II) each waiver provided under  
2 subparagraph (A)(iii) not later than  
3 15 days after the date on which the  
4 Secretary provides such waiver.

5 (ii) WAIVER NOTICE CONTENTS.—The  
6 notice required under clause (i)(II) shall  
7 include—

8 (I) the elements of the clawback  
9 provisions that were waived under  
10 subparagraph (A)(iii);

11 (II) an explanation of why such  
12 waiver was provided;

13 (III) the duration of the delay  
14 with respect to which such waiver was  
15 granted; and

16 (IV) the name of the covered en-  
17 tity that was granted such waiver.

18 (c) COORDINATION REQUIRED.—In carrying out the  
19 Program, the Secretary shall coordinate with—

- 20 (1) the Secretary of State;  
21 (2) the Secretary of Defense;  
22 (3) the Secretary of Energy;  
23 (4) the Director of National Intelligence;  
24 (5) the Director of the Minority Business De-  
25 velopment Agency of the Department of Commerce;

1           (6) the Administrator of the Small Business  
2       Administration;

3           (7) the Director of the National Institute of  
4       Standards and Technology;

5           (8) the Director of the Cybersecurity and Infra-  
6       structure Agency; and

7           (9) the Director of the Office of Foreign Assets  
8       Control of the Department of the Treasury.

9       (d) GAO REVIEWS.—The Comptroller General of the  
10   United States shall—

11           (1) not later than 2 years after the date of dis-  
12       bursement of the first award under the Program,  
13       and biennially thereafter for 10 years, conduct a re-  
14       view of the Program, which shall include—

15           (A) a determination of the number of  
16       awards provided under the Program during the  
17       two-year period immediately preceding the re-  
18       view;

19           (B) an evaluation of how—

20               (i) such program is being carried out,  
21       including how recipients of awards under  
22       the Program are being selected; and

23               (ii) other Federal programs are lever-  
24       aged for manufacturing, research, and

1 training to complement the awards made  
2 under the Program; and

3 (C) a description of the outcomes of  
4 projects supported by awards made under the  
5 Program, including a description of—

6 (i) facilities described in subsection  
7 (b)(1) that were constructed, expanded, or  
8 modernized as a result of such awards;

9 (ii) research and development carried  
10 out with such awards;

11 (iii) workforce training programs car-  
12 ried out with such awards, including ef-  
13 forts to hire economically disadvantaged  
14 individuals; and

15 (iv) the effects of such projects on the  
16 United States share of global printed cir-  
17 cuit board production; and

18 (2) notify Congress of the results of each review  
19 conducted under paragraph (1).

20 (e) AUTHORIZATION OF APPROPRIATIONS.—There is  
21 authorized to be appropriated \$3,000,000,000 for fiscal  
22 year 2022, to remain available through fiscal year 2023,  
23 to carry out this section.

○