Form 5500	Annual Return/Report of Employee Benefit Plan	OMB Nos. 1210-0110 1210-0089
Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code). ▶ **Complete all entries in accordance with the instructions to the Form 5500.**	**2023** **This Form is Open to Public Inspection**

Part I Annual Report Identification Information

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

A This return/report is for:
- [ ] a multiemployer plan
- [ ] a multiple-employer plan (Filers checking this box must provide participating employer information in accordance with the form instructions.)
- [X] a single-employer plan
- [ ] a DFE (specify) ____

B This return/report is:
- [ ] the first return/report
- [ ] the final return/report
- [ ] an amended return/report
- [ ] a short plan year return/report (less than 12 months)

C If the plan is a collectively-bargained plan, check here. . . . . ▶ [X]

D Check box if filing under:
- [X] Form 5558
- [ ] automatic extension
- [ ] the DFVC program
- [ ] special extension (enter description)

E If this is a retroactively adopted plan permitted by SECURE Act section 201, check here. . . . . ▶ [ ]

Part II Basic Plan Information—enter all requested information

1a Name of plan
AMTECH SYSTEMS, INC. 401(K) PLAN

1b Three-digit plan number (PN) ▶ 001

1c Effective date of plan 01/01/1988

2a Plan sponsor's name (employer, if for a single-employer plan)
Mailing address (include room, apt., suite no. and street, or P.O. Box)
City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions)
AMTECH SYSTEMS, INC.

131 S CLARK DR
TEMPE, AZ 85281-3008

2b Employer Identification Number (EIN) 86-0411215

2c Plan Sponsor's telephone number 480-967-5146

2d Business code (see instructions) 333200

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	09/30/2024	SANDY MANLEY
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE	Filed with authorized/valid electronic signature.	09/30/2024	LISA GIBBS
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

3a Plan administrator's name and address [X] Same as Plan Sponsor	**3b** Administrator's EIN	
	3c Administrator's telephone number	
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report: **a** Sponsor's name **c** Plan Name	**4b** EIN **4d** PN	
5 Total number of participants at the beginning of the plan year	**5**	300
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines **6a(1), 6a(2), 6b, 6c,** and **6d**).		
a(1) Total number of active participants at the beginning of the plan year	**6a(1)**	215
a(2) Total number of active participants at the end of the plan year	**6a(2)**	192
b Retired or separated participants receiving benefits	**6b**	0
c Other retired or separated participants entitled to future benefits	**6c**	112
d Subtotal. Add lines **6a(2)**, **6b**, and **6c**.	**6d**	304
e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.	**6e**	0
f Total. Add lines **6d** and **6e**.	**6f**	304
g(1) Number of participants with account balances as of the beginning of the plan year (only defined contribution plans complete this item)	**6g(1)**	236
g(2) Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	**6g(2)**	293
h Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested	**6h**	36
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item)	**7**	

8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:

2E 2F 2G 2J 2K 2S 2T 3D 3H

b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:

9a Plan funding arrangement (check all that apply)

- **(1)** [X] Insurance
- **(2)** [ ] Code section 412(e)(3) insurance contracts
- **(3)** [X] Trust
- **(4)** [ ] General assets of the sponsor

9b Plan benefit arrangement (check all that apply)

- **(1)** [X] Insurance
- **(2)** [ ] Code section 412(e)(3) insurance contracts
- **(3)** [X] Trust
- **(4)** [ ] General assets of the sponsor

10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)

a Pension Schedules

- **(1)** [X] **R** (Retirement Plan Information)
- **(2)** [ ] **MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary
- **(3)** [ ] **SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary
- **(4)** [ ] **DCG** (Individual Plan Information) – Number Attached 0
- **(5)** [ ] **MEP** (Multiple-Employer Retirement Plan Information)

b General Schedules

- **(1)** [X] **H** (Financial Information)
- **(2)** [ ] **I** (Financial Information – Small Plan)
- **(3)** [X] **A** (Insurance Information) – Number Attached 1
- **(4)** [X] **C** (Service Provider Information)
- **(5)** [X] **D** (DFE/Participating Plan Information)
- **(6)** [ ] **G** (Financial Transaction Schedules)

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ..... ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ……..... ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2023 Form M-1 annual report. If the plan was not required to file the 2023 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code_____

SCHEDULE A (Form 5500)	Insurance Information	OMB No. 1210-0110
Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ **File as an attachment to Form 5500.** ▶ Insurance companies are required to provide the information pursuant to ERISA section 103(a)(2).	**2023** **This Form is Open to Public Inspection**

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

A Name of plan	**B** Three-digit plan number (PN) ▶
AMTECH SYSTEMS, INC. 401(K) PLAN	001
C Plan sponsor's name as shown on line 2a of Form 5500	**D** Employer Identification Number (EIN)
AMTECH SYSTEMS, INC.	86-0411215

Part I **Information Concerning Insurance Contract Coverage, Fees, and Commissions** Provide information for each contract on a separate Schedule A. Individual contracts grouped as a unit in Parts II and III can be reported on a single Schedule A.

1 Coverage Information:

(a) Name of insurance carrier

PRINCIPAL LIFE INSURANCE COMPANY

(b) EIN	**(c)** NAIC code	**(d)** Contract or identification number	**(e)** Approximate number of persons covered at end of policy or contract year	Policy or contract year **(f)** From	**(g)** To
42-0127290	61271	416525	304	01/01/2023	12/31/2023

2 Insurance fee and commission information. Enter the total fees and total commissions paid. List in line 3 the agents, brokers, and other persons in descending order of the amount paid.

(a) Total amount of commissions paid	**(b)** Total amount of fees paid
0	0

3 Persons receiving commissions and fees. (Complete as many entries as needed to report all persons).

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid **(c)** Amount	**(d)** Purpose	**(e)** Organization code

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid **(c)** Amount	**(d)** Purpose	**(e)** Organization code

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		**(e)** Organization code
	(c) Amount	**(d)** Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		**(e)** Organization code
	(c) Amount	**(d)** Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		**(e)** Organization code
	(c) Amount	**(d)** Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		**(e)** Organization code
	(c) Amount	**(d)** Purpose	

(a) Name and address of the agent, broker, or other person to whom commissions or fees were paid

(b) Amount of sales and base commissions paid	Fees and other commissions paid		**(e)** Organization code
	(c) Amount	**(d)** Purpose	

Part II Investment and Annuity Contract Information

Where individual contracts are provided, the entire group of such individual contracts with each carrier may be treated as a unit for purposes of this report.

4	Current value of plan's interest under this contract in the general account at year end	**4**	0
5	Current value of plan's interest under this contract in separate accounts at year end	**5**	1588276

6 Contracts With Allocated Funds:

a State the basis of premium rates ▶

b	Premiums paid to carrier	**6b**	
c	Premiums due but unpaid at the end of the year	**6c**	
d	If the carrier, service, or other organization incurred any specific costs in connection with the acquisition or retention of the contract or policy, enter amount.	**6d**	

Specify nature of costs ▶

e Type of contract: (1) ☐ individual policies (2) ☐ group deferred annuity

(3) ☐ other (specify) ▶

f If contract purchased, in whole or in part, to distribute benefits from a terminating plan, check here ▶ ☐

7 Contracts With Unallocated Funds (Do not include portions of these contracts maintained in separate accounts)

a Type of contract: (1) ☐ deposit administration (2) ☐ immediate participation guarantee

(3) ☐ guaranteed investment (4) ☒ other ▶ FLEXIBLE INVESTMENT ANNUITY

b	Balance at the end of the previous year		**7b**	
c	Additions: (1) Contributions deposited during the year	**7c(1)**		
	(2) Dividends and credits	**7c(2)**		
	(3) Interest credited during the year	**7c(3)**		
	(4) Transferred from separate account	**7c(4)**		
	(5) Other (specify below) ▶	**7c(5)**		
	(6)Total additions		**7c(6)**	
d	Total of balance and additions (add lines **7b** and **7c(6)**).		**7d**	
e	Deductions:			
	(1) Disbursed from fund to pay benefits or purchase annuities during year	**7e(1)**		
	(2) Administration charge made by carrier	**7e(2)**		
	(3) Transferred to separate account	**7e(3)**		
	(4) Other (specify below) ▶	**7e(4)**		
	(5) Total deductions		**7e(5)**	
f	Balance at the end of the current year (subtract line **7e(5)** from line **7d**)		**7f**	0

Part III Welfare Benefit Contract Information

If more than one contract covers the same group of employees of the same employer(s) or members of the same employee organizations(s), the information may be combined for reporting purposes if such contracts are experience-rated as a unit. Where contracts cover individual employees, the entire group of such individual contracts with each carrier may be treated as a unit for purposes of this report.

8 Benefit and contract type (check all applicable boxes)

- **a** ☐ Health (other than dental or vision)
- **b** ☐ Dental
- **c** ☐ Vision
- **d** ☐ Life insurance
- **e** ☐ Temporary disability (accident and sickness)
- **f** ☐ Long-term disability
- **g** ☐ Supplemental unemployment
- **h** ☐ Prescription drug
- **i** ☐ Stop loss (large deductible)
- **j** ☐ HMO contract
- **k** ☐ PPO contract
- **l** ☐ Indemnity contract
- **m** ☐ Other (specify) ▶

9 Experience-rated contracts:				
a Premiums: (1) Amount received	9a(1)			
(2) Increase (decrease) in amount due but unpaid	9a(2)			
(3) Increase (decrease) in unearned premium reserve	9a(3)			
(4) Earned (**(1)** + **(2)** - **(3)**)			9a(4)	
b Benefit charges (1) Claims paid	9b(1)			
(2) Increase (decrease) in claim reserves	9b(2)			
(3) Incurred claims (add **(1)** and **(2)**)			9b(3)	
(4) Claims charged			9b(4)	
c Remainder of premium: (1) Retention charges (on an accrual basis) --				
(A) Commissions	9c(1)(A)			
(B) Administrative service or other fees	9c(1)(B)			
(C) Other specific acquisition costs	9c(1)(C)			
(D) Other expenses	9c(1)(D)			
(E) Taxes	9c(1)(E)			
(F) Charges for risks or other contingencies	9c(1)(F)			
(G) Other retention charges	9c(1)(G)			
(H) Total retention			9c(1)(H)	
(2) Dividends or retroactive rate refunds. (These amounts were ☐ paid in cash, or ☐ credited.)			9c(2)	
d Status of policyholder reserves at end of year: (1) Amount held to provide benefits after retirement			9d(1)	
(2) Claim reserves			9d(2)	
(3) Other reserves			9d(3)	
e Dividends or retroactive rate refunds due. (Do not include amount entered in line **9c(2)**.)			9e	
10 Nonexperience-rated contracts:				
a Total premiums or subscription charges paid to carrier			10a	
b If the carrier, service, or other organization incurred any specific costs in connection with the acquisition or retention of the contract or policy, other than reported in Part I, line 2 above, report amount.			10b	

Specify nature of costs.

Part IV Provision of Information

11 Did the insurance company fail to provide any information necessary to complete Schedule A? ☐ Yes ☒ No

12 If the answer to line 11 is "Yes," specify the information not provided. ▶

SCHEDULE C (Form 5500)	Service Provider Information	OMB No. 1210-0110
Department of the Treasury Internal Revenue Service	This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).	2023
Department of Labor Employee Benefits Security Administration	▶ **File as an attachment to Form 5500.**	**This Form is Open to Public Inspection.**
Pension Benefit Guaranty Corporation		

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

A Name of plan
AMTECH SYSTEMS, INC. 401(K) PLAN

B Three-digit plan number (PN) ▶ 001

C Plan sponsor's name as shown on line 2a of Form 5500
AMTECH SYSTEMS, INC.

D Employer Identification Number (EIN)
86-0411215

Part I Service Provider Information (see instructions)

You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1 Information on Persons Receiving Only Eligible Indirect Compensation

a Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions).. . . . . [X] Yes [ ] No

b If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

PRINCIPAL LIFE INSURANCE COMPANY

42-0127290

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

PRINCIPAL LIFE INSURANCE COMPANY

42-0127290

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
13 37 50 64	CONTRACT ADMINISTRATOR	58436	Yes [X] No [ ]	Yes [X] No [ ]	0	Yes [ ] No [X]

(a) Enter name and EIN or address (see instructions)

GLOBAL RETIREMENT PARTNERS LLC

47-1411118

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 99	INVESTMENT ADVISORY	0	Yes [X] No [ ]	Yes [ ] No [X]	47075	Yes [ ] No [X]

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes [ ] No [ ]	Yes [ ] No [ ]		Yes [ ] No [ ]

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
GLOBAL RETIREMENT PARTNERS LLC	27 99	47075

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
PRINCIPAL LIFE INSURANCE COMPANY 42-0127290	INVESTMENT ADVISORY (PLAN)

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)

(complete as many entries as needed)

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

SCHEDULE D (Form 5500)	DFE/Participating Plan Information	OMB No. 1210-0110
Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration	This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ **File as an attachment to Form 5500.**	**2023** **This Form is Open to Public Inspection.**

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

A Name of plan
AMTECH SYSTEMS, INC. 401(K) PLAN

B Three-digit plan number (PN) ▶ 001

C Plan or DFE sponsor's name as shown on line 2a of Form 5500
AMTECH SYSTEMS, INC.

D Employer Identification Number (EIN)
86-0411215

Part I Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs)

(Complete as many entries as needed to report all interests in DFEs)

a Name of MTIA, CCT, PSA, or 103-12 IE: PRINCIPAL STABLE VALUE FUND

b Name of sponsor of entity listed in (a): PRINCIPAL GLOBAL INVESTORS TRUST CO

c EIN-PN 93-6274328-001 | **d** Entity code C | **e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 2088098

a Name of MTIA, CCT, PSA, or 103-12 IE: PRIN DIVERSIFIED INTL SA-R6

b Name of sponsor of entity listed in (a): PRINCIPAL LIFE INSURANCE COMPANY

c EIN-PN 42-0127290-015 | **d** Entity code P | **e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 467820

a Name of MTIA, CCT, PSA, or 103-12 IE: PRIN SMALLCAP GROWTH I SA-R6

b Name of sponsor of entity listed in (a): PRINCIPAL LIFE INSURANCE COMPANY

c EIN-PN 42-0127290-070 | **d** Entity code P | **e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 297567

a Name of MTIA, CCT, PSA, or 103-12 IE: PRIN LARGECAP GROWTH I SA-R6

b Name of sponsor of entity listed in (a): PRINCIPAL LIFE INSURANCE COMPANY

c EIN-PN 42-0127290-066 | **d** Entity code P | **e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) 822889

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN | **d** Entity code | **e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN | **d** Entity code | **e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN | **d** Entity code | **e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

Part II Information on Participating Plans (to be completed by DFEs, other than DCGs)

(Complete as many entries as needed to report all participating plans. DCGs must report each participating plan using Schedule DCG.)

a Plan name

b Name of plan sponsor | **c** EIN-PN

a Plan name

b Name of plan sponsor | **c** EIN-PN

a Plan name

b Name of plan sponsor | **c** EIN-PN

a Plan name

b Name of plan sponsor | **c** EIN-PN

a Plan name

b Name of plan sponsor | **c** EIN-PN

a Plan name

b Name of plan sponsor | **c** EIN-PN

a Plan name

b Name of plan sponsor | **c** EIN-PN

a Plan name

b Name of plan sponsor | **c** EIN-PN

a Plan name

b Name of plan sponsor | **c** EIN-PN

a Plan name

b Name of plan sponsor | **c** EIN-PN

a Plan name

b Name of plan sponsor | **c** EIN-PN

a Plan name

b Name of plan sponsor | **c** EIN-PN

a Plan name

b Name of plan sponsor | **c** EIN-PN

SCHEDULE H (Form 5500)	Financial Information	OMB No. 1210-0110
Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code). ▶ **File as an attachment to Form 5500.**	**2023** **This Form is Open to Public Inspection**

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

A Name of plan
AMTECH SYSTEMS, INC. 401(K) PLAN

B Three-digit plan number (PN) ▶ 001

C Plan sponsor's name as shown on line 2a of Form 5500
AMTECH SYSTEMS, INC.

D Employer Identification Number (EIN)
86-0411215

Part I Asset and Liability Statement

1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. **Round off amounts to the nearest dollar.** MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.

Assets		(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash	1a		
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions	1b(1)		582
(2) Participant contributions	1b(2)		969
(3) Other	1b(3)		
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit)	1c(1)		
(2) U.S. Government securities	1c(2)		
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred	1c(3)(A)		
(B) All other	1c(3)(B)		
(4) Corporate stocks (other than employer securities):			
(A) Preferred	1c(4)(A)		
(B) Common	1c(4)(B)		
(5) Partnership/joint venture interests	1c(5)		
(6) Real estate (other than employer real property)	1c(6)		
(7) Loans (other than to participants)	1c(7)		
(8) Participant loans	1c(8)	185131	167144
(9) Value of interest in common/collective trusts	1c(9)	2556346	2088098
(10) Value of interest in pooled separate accounts	1c(10)	1743648	1588276
(11) Value of interest in master trust investment accounts	1c(11)		
(12) Value of interest in 103-12 investment entities	1c(12)		
(13) Value of interest in registered investment companies (e.g., mutual funds)	1c(13)	23535736	27123425
(14) Value of funds held in insurance company general account (unallocated contracts)	1c(14)		
(15) Other	1c(15)		

		(a) Beginning of Year	(b) End of Year
1d Employer-related investments:			
(1) Employer securities	1d(1)		
(2) Employer real property	1d(2)		
e Buildings and other property used in plan operation	1e		
f Total assets (add all amounts in lines 1a through 1e)	1f	28020861	30968494
Liabilities			
g Benefit claims payable	1g		
h Operating payables	1h		
i Acquisition indebtedness	1i		
j Other liabilities	1j		
k Total liabilities (add all amounts in lines 1g through1j)	1k	0	0
Net Assets			
l Net assets (subtract line 1k from line 1f)	1l	28020861	30968494

Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

Income		(a) Amount	(b) Total
a Contributions:			
(1) Received or receivable in cash from: **(A)** Employers	2a(1)(A)	537457	
(B) Participants	2a(1)(B)	1534446	
(C) Others (including rollovers)	2a(1)(C)	1597716	
(2) Noncash contributions	2a(2)		
(3) Total contributions. Add lines **2a(1)(A), (B), (C),** and line **2a(2)**	2a(3)		3669619
b Earnings on investments:			
(1) Interest:			
(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)		
(B) U.S. Government securities	2b(1)(B)		
(C) Corporate debt instruments	2b(1)(C)		
(D) Loans (other than to participants)	2b(1)(D)		
(E) Participant loans	2b(1)(E)	9742	
(F) Other	2b(1)(F)		
(G) Total interest. Add lines **2b(1)(A)** through **(F)**	2b(1)(G)		9742
(2) Dividends: **(A)** Preferred stock	2b(2)(A)		
(B) Common stock	2b(2)(B)		
(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)	442040	
(D) Total dividends. Add lines **2b(2)(A)**, **(B)**, and **(C)**	2b(2)(D)		442040
(3) Rents	2b(3)		
(4) Net gain (loss) on sale of assets: **(A)** Aggregate proceeds	2b(4)(A)		
(B) Aggregate carrying amount (see instructions)	2b(4)(B)		
(C) Subtract line **2b(4)(B)** from line **2b(4)(A)** and enter result	2b(4)(C)		0
(5) Unrealized appreciation (depreciation) of assets: **(A)** Real estate	2b(5)(A)		
(B) Other	2b(5)(B)		
(C) Total unrealized appreciation of assets. Add lines **2b(5)(A)** and **(B)**	2b(5)(C)		0

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts	2b(6)		54104
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		394669
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		
(9) Net investment gain (loss) from 103-12 investment entities	2b(9)		
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		3842571
c Other income	2c		67632
d Total income. Add all **income** amounts in column (b) and enter total	2d		8480377
Expenses			
e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	5459620	
(2) To insurance carriers for the provision of benefits	2e(2)		
(3) Other	2e(3)		
(4) Total benefit payments. Add lines **2e(1)** through **(3)**	2e(4)		5459620
f Corrective distributions (see instructions)	2f		14687
g Certain deemed distributions of participant loans (see instructions)	2g		
h Interest expense	2h		
i Administrative expenses:			
(1) Salaries and allowances	2i(1)		
(2) Contract administrator fees	2i(2)	58437	
(3) Recordkeeping fees	2i(3)		
(4) IQPA audit fees	2i(4)		
(5) Investment advisory and investment management fees	2i(5)		
(6) Bank or trust company trustee/custodial fees	2i(6)		
(7) Actuarial fees	2i(7)		
(8) Legal fees	2i(8)		
(9) Valuation/appraisal fees	2i(9)		
(10) Other trustee fees and expenses	2i(10)		
(11) Other expenses	2i(11)		
(12) Total administrative expenses. Add lines **2i(1)** through **(11)**	2i(12)		58437
j Total expenses. Add all **expense** amounts in column (b) and enter total	2j		5532744
Net Income and Reconciliation			
k Net income (loss). Subtract line **2j** from line **2d**	2k		2947633
l Transfers of assets:			
(1) To this plan	2l(1)		
(2) From this plan	2l(2)		

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) [X] Unmodified **(2)** [ ] Qualified **(3)** [ ] Disclaimer **(4)** [ ] Adverse

b Check the appropriate box(es) to indicate whether the IQPA performed an ERISA section 103(a)(3)(C) audit. Check both boxes (1) and (2) if the audit was performed pursuant to both 29 CFR 2520.103-8 and 29 CFR 2520.103-12(d). Check box (3) if pursuant to neither.

(1) [X] DOL Regulation 2520.103-8 **(2)** [ ] DOL Regulation 2520.103-12(d) **(3)** [ ] neither DOL Regulation 2520.103-8 nor DOL Regulation 2520.103-12(d).

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: CBIZ CPAS P.C. **(2)** EIN: 43-1947695

d The opinion of an independent qualified public accountant is **not attached** as part of Schedule H because:

(1) [ ] This form is filed for a CCT, PSA, DCG or MTIA. **(2)** [ ] It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l. DCGs do not complete lines 4e, 4f, 4k, 4l, and 5, and DCGs generally complete the rest of Part IV collectively for all plans in the DCG, except as otherwise provided (see instructions).

During the plan year:

		Yes	No	Amount
a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.)	**4a**	X		1017
b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)	**4b**		X	
c Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)	**4c**		X	
d Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)	**4d**		X	
e Was this plan covered by a fidelity bond?	**4e**	X		5000000
f Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	**4f**		X	
g Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?	**4g**		X	
h Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?	**4h**		X	
i Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	**4i**	X		
j Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked and see instructions for format requirements.)	**4j**		X	
k Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?	**4k**		X	
l Has the plan failed to provide any benefit when due under the plan?	**4l**		X	
m If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	**4m**		X	
n If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.	**4n**			

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year? [ ] Yes [X] No

If "Yes," enter the amount of any plan assets that reverted to the employer this year _____.

5b If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

5b(1) Name of plan(s)	**5b(2)** EIN(s)	**5b(3)** PN(s)

5c Was the plan a defined benefit plan covered under the PBGC insurance program at any time during this plan year? (See ERISA section 4021 and instructions.) …….. ☐ Yes ☐ No ☐ Not determined

If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year _____.

SCHEDULE R (Form 5500)	Retirement Plan Information	OMB No. 1210-0110
Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code). ▶ **File as an attachment to Form 5500.**	**2023** **This Form is Open to Public Inspection.**

For calendar plan year 2023 or fiscal plan year beginning 01/01/2023 and ending 12/31/2023

A Name of plan
AMTECH SYSTEMS, INC. 401(K) PLAN

B Three-digit plan number (PN) ▶ 001

C Plan sponsor's name as shown on line 2a of Form 5500
AMTECH SYSTEMS, INC.

D Employer Identification Number (EIN)
86-0411215

Part I Distributions

All references to distributions relate only to payments of benefits during the plan year.

1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions **1** 0

2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits):

EIN(s): 42-0127290 _____

Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.

3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year **3**

Part II Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)

4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

If the plan is a defined benefit plan, go to line 8.

5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. **Date:** Month _____ Day _____ Year _____

If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.

6 a Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived) **6a**

b Enter the amount contributed by the employer to the plan for this plan year **6b**

c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount) **6c**

If you completed line 6c, skip lines 8 and 9.

7 Will the minimum funding amount reported on line 6c be met by the funding deadline? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

Part III Amendments

9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box. ..... ☐ **Increase** ☐ **Decrease** ☐ **Both** ☐ **No**

Part IV ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.

10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan? ..... ☐ **Yes** ☐ **No**

11 a Does the ESOP hold any preferred stock? ..... ☐ **Yes** ☐ **No**

b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.) ..... ☐ **Yes** ☐ **No**

12 Does the ESOP hold any stock that is not readily tradable on an established securities market? ..... ☐ **Yes** ☐ **No**

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that (1) contributed more than 5% of total contributions to the plan during the plan year or (2) was one of the top-ten highest contributors (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify):

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

14 Enter the number of deferred vested and retired participants (inactive participants), as of the beginning of the plan year, whose contributing employer is no longer making contributions to the plan for:

a The current plan year. Check the box to indicate the counting method used to determine the number of inactive participants: ☐ last contributing employer ☐ alternative ☐ reasonable approximation (see instructions for required attachment)	**14a**	
b The plan year immediately preceding the current plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	**14b**	
c The second preceding plan year. ☐ Check the box if the number reported is a change from what was previously reported (see instructions for required attachment)	**14c**	

15 Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:

a The corresponding number for the plan year immediately preceding the current plan year	**15a**	
b The corresponding number for the second preceding plan year	**15b**	

16 Information with respect to any employers who withdrew from the plan during the preceding plan year:

a Enter the number of employers who withdrew during the preceding plan year	**16a**	
b If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers	**16b**	

17 If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐

Part VI Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans

18 If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐

19 If the total number of participants is 1,000 or more, complete lines (a) and (b):

a Enter the percentage of plan assets held as:

Public Equity: _____% Private Equity: _____% Investment-Grade Debt and Interest Rate Hedging Assets: _____%

High-Yield Debt: _____% Real Assets: _____% Cash or Cash Equivalents: _____% Other: _____%

b Provide the average duration of the Investment-Grade Debt and Interest Rate Hedging Assets:

☐ 0-5 years ☐ 5-10 years ☐ 10-15 years ☐ 15 years or more

20 **PBGC missed contribution reporting requirements.** If this is a multiemployer plan or a single-employer plan that is not covered by PBGC, skip line 20.

a Is the amount of unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 greater than zero? ☐ Yes ☐ No

b If line 20a is "Yes," has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box:

☐ Yes.

☐ No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date.

☐ No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date.

☐ No. Other. Provide explanation._____

Part VII IRS Compliance Questions

21a Does the plan satisfy the coverage and nondiscrimination tests of Code sections 410(b) and 401(a)(4) by combining this plan with any other plans under the permissive aggregation rules? ☐ Yes ☒ No

21b If this is a Code section 401(k) plan, check all boxes that apply to indicate how the plan is intended to satisfy the nondiscrimination requirements for employee deferrals and employer matching contributions (as applicable) under Code sections 401(k)(3) and 401(m)(2).

☐ Design-based safe harbor method

☐ "Prior year" ADP test

☒ "Current year" ADP test

☐ N/A

22 If the plan sponsor is an adopter of a pre-approved plan that received a favorable IRS Opinion Letter, enter the date of the Opinion Letter 06 / 30 / 2020 (MM/DD/YYYY) and the Opinion Letter serial number Q702477A .

AMTECH SYSTEMS, INC. 401(k) PLAN

FINANCIAL STATEMENTS
AND SUPPLEMENTAL SCHEDULES

December 31, 2023 and 2022

AMTECH SYSTEMS, INC. 401(k) PLAN

FINANCIAL STATEMENTS
AND SUPPLEMENTAL SCHEDULES

December 31, 2023 and 2022

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CBIZ CPAs

INDEPENDENT AUDITORS' REPORT

To the 401(k) Committee

AMTECH SYSTEMS, INC. 401(k) PLAN

Scope and Nature of the ERISA Section 103(a)(3)(C) Audit

We have performed the audits of the financial statements of **Amtech Systems, Inc. 401(k) Plan** ("the Plan"), an employee benefit plan subject to the Employee Retirement Income Security Act of 1974 ("ERISA"), as permitted by ERISA Section 103(a)(3)(C) ("ERISA Section 103(a)(3)(C) audit"). The financial statements comprise the statements of net assets available for benefits as of December 31, 2023 and 2022, the related statements of changes in net assets available for benefits for the year ended December 31, 2023, and the related notes to the financial statements.

Management, having determined it is permissible in the circumstances, has elected to have the audits of the Plan's financial statements performed in accordance with ERISA Section 103(a)(3)(C) pursuant to 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. As permitted by ERISA Section 103(a)(3)(C), our audits need not extend to any statements or information related to assets held for investment of the Plan ("investment information") by a bank or similar institution or insurance carrier that is regulated, supervised, and subject to periodic examination by a state or federal agency, provided that the statements or information regarding assets so held are prepared and certified to by the bank or similar institution or insurance carrier in accordance with 29 CFR 2520.103-5 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA ("qualified institution").

Management has obtained certifications from a qualified institution as of December 31, 2023 and 2022 and for the year ended December 31, 2023, stating that the certified investment information, as described in Note 4 to the financial statements, is complete and accurate.

Opinion

In our opinion, based on our audits and on the procedures performed as described in the Auditors' Responsibilities for the Audit of the Financial Statements section:

- The amounts and disclosures in the accompanying financial statements, other than those agreed to or derived from the certified investment information, are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America.
- The information in the accompanying financial statements related to assets held by and certified to by a qualified institution agrees to, or is derived from, in all material respects, the information prepared and certified by an institution that management determined meets the requirements of ERISA Section 103(a)(3)(C).

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America ("GAAS"). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Plan and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our ERISA Section 103(a)(3)(C) audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error. Management's election of the ERISA Section 103(a)(3)(C) audit does not affect management's responsibility for the financial statements.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern within one year after the date that the financial statements are issued or available to be issued.

Management is also responsible for maintaining a current plan instrument, including all plan amendments, administering the Plan, and determining that the Plan's transactions that are presented and disclosed in the financial statements are in conformity with the Plan's provisions, including maintaining sufficient records with respect to each of the participants, to determine the benefits due or which may become due to such participants.

Auditors' Responsibilities for the Audit of the Financial Statements

Except as described in the Scope and Nature of the ERISA Section 103(a)(3)(C) Audit section of our report, our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if, there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on these financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period of time.

Our audits did not extend to the certified investment information, except for obtaining and reading the certifications, comparing the certified investment information with the related information presented and disclosed in the financial statements, and reading the disclosures relating to the certified investment information to assess whether they are in accordance with the presentation and disclosure requirements of accounting principles generally accepted in the United States of America.

Accordingly, the objective of an ERISA Section 103(a)(3)(C) audit is not to express an opinion about whether the financial statements as a whole are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Other Matter - Supplemental Schedules Required by ERISA

The supplemental schedule of Delinquent Participant Contributions for the year ended December 31, 2023 and supplemental schedule of Assets (Held at End of Year) as of December 31, 2023, are presented for purposes of additional analysis and are not a required part of the financial statements but are supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information included in the supplemental schedules, other than that agreed to or derived from the certified investment information, has been subjected to auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with GAAS. For information included in the supplemental schedules that agreed to or is derived from the certified investment information, we compared such information to the related certified investment information.

In forming our opinion on the supplemental schedules, we evaluated whether the supplemental schedules, other than the information agreed to or derived from the certified investment information, including their form and content, are presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA.

In our opinion:

- The form and content of the supplemental schedules, other than the information in the supplemental schedules that agreed to or is derived from the certified investment information, are presented, in all material respects, in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA.
- The information in the supplemental schedules related to assets held by and certified to by a qualified institution agrees to, or is derived from, in all material respects, the information prepared and certified by an institution that management determined meets the requirements of ERISA Section 103(a)(3)(C).

CBIZ CPAs P.C.[1]

September 26, 2024

[1] *In certain jurisdictions, CBIZ CPAs P.C. operates under its previous name, Mayer Hoffman McCann P.C.*

AMTECH SYSTEMS, INC. 401(k) PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

December 31, 2023 and 2022

	2023	2022
ASSETS		
INVESTMENTS		
Pooled separate accounts	$ 1,588,276	$ 1,743,648
Common collective trust	2,088,098	2,556,346
Mutual funds	27,123,425	23,535,736
Total investments	30,799,799	27,835,730
RECEIVABLES		
Employee Contribution Receivable	969	-
Employer Contribution Receivable	582	-
Notes receivable from participants	167,144	185,413
Total receivables	168,695	185,413
NET ASSETS AVAILABLE FOR BENEFITS	$ 30,968,494	$ 28,021,143

See Notes to Financial Statements

AMTECH SYSTEMS, INC. 401(k) PLAN

STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

Year Ended December 31, 2023

ADDITIONS	
Contributions:	
Employer contributions	$ 537,457
Participant contributions	1,534,446
Rollover contributions	1,597,716
Total contributions	3,669,619
Interest income on notes receivable from participants	9,742
Investment income:	
Interest and dividends	442,040
Net appreciation in fair value of investments	4,291,344
Other income	67,632
Total investment income	4,801,016
TOTAL ADDITIONS	8,480,377
DEDUCTIONS	
Benefits paid to participants	5,474,589
Administrative expenses	58,437
TOTAL DEDUCTIONS	5,533,026
NET INCREASE IN NET ASSETS	2,947,351
NET ASSETS AVAILABLE FOR BENEFITS, BEGINNING OF YEAR	28,021,143
NET ASSETS AVAILABLE FOR BENEFITS, END OF YEAR	$ 30,968,494

See Notes to Financial Statements

AMTECH SYSTEMS, INC. 401(k) PLAN

NOTES TO FINANCIAL STATEMENTS

December 31, 2023 and 2022

(1) Description of the Plan

The following description of Amtech Systems, Inc. 401(k) Plan (the "Plan") provides only general information. Participants should refer to the Plan agreement for a more complete description of the Plan's provisions.

A. **General –** The Plan is a defined contribution plan. The Plan was originally established January 1, 1988, by Amtech Systems, Inc. (the "Sponsor"). Domestic employees of the Sponsor and six of the Sponsor's subsidiaries, Bruce Technologies, Inc. ("Bruce"), P.R. Hoffman Machine Products Inc. ("PR Hoffman"), Intersurface Dynamics, Inc. ("IDI"), BTU International, Inc., Entrepix, Inc. ("ENT"), and Advanced Compound Materials, Inc. ("ACMI") are covered by the Plan. All employees that have completed 90 days of service are eligible to participate in the elective deferral and employer contribution portions of the Plan unless such employee is (1) less than 18 years of age or (2) a person classified by the Sponsor as an independent contractor. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 ("ERISA").

B. **Contributions –** Each year, participants may elect to make pre-tax and/or Roth contributions up to 100% of eligible compensation as defined in the Plan, subject to certain limitations established by the Internal Revenue Service. Participants may also contribute amounts representing qualified distributions from other plans. Under the Plan's automatic enrollment feature, newly eligible participants are automatically enrolled in the Plan, and 4% of the participant's compensation is contributed on a pre-tax basis unless another election is made by the participant. The automatic contribution amount shall be automatically increased as soon as administratively feasible on or after each January 1 by 1% up to a maximum automatic contribution of 10%. Effective June 1, 2022, the Company increased the deferral rate under the automatic enrollment feature from 4% to 6% for eligible participants' compensation. Participants who have attained age 50 before the end of the Plan year are eligible to make catch-up contributions up to $7,500. The Sponsor may make a matching contribution equal to a percentage of employees' 401(k) elective deferral contributions. The Sponsor may also make an additional discretionary matching contribution after year end to participants employed as of year-end. For the year ended December 31, 2023, the Sponsor made matching contributions equal to 60% of the employees' eligible elective deferrals, up to 3.6% of the participants' eligible compensation for each payroll period.

C. **Participant accounts –** Individual accounts are maintained for each participant. Each participant's account is credited with the participant's contribution and allocations of the Sponsor's contributions, and Plan earnings. Allocations are based on participant earnings or account balances, as defined in the Plan. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account balance.

D. **Vesting –** Participants are immediately vested in their pre-tax, Roth, and rollover contributions and actual earnings thereon. Vesting in the Sponsor's matching contributions plus actual earnings thereon is based on years of service as follows:

Years of Service	Percent Vested
1	33%
2	66%
3	100%

E. **Notes receivable from participants –** Participants may borrow against their vested account balances a minimum of $1,000 up to a maximum of the lesser of $50,000 or 50% of their vested account balance. The loans are secured by the vested balances in the participants' account and bear interest at a fixed rate based on the U.S. prime rate at the time the loan is distributed. Loans are expected to be repaid over a period of no more than 5 years, unless such loan is used to acquire the principal residence of the participant. Principal and interest are paid ratably through bi-weekly payroll deductions.

(1) Description of the Plan (continued)

F. **Payment of benefits –** Participants may withdraw their vested account balances in full or partial lump sums or installments upon retirement, disability or termination. Beneficiaries may withdraw vested account balances upon the death of a Plan participant. Participants may also withdraw all or a portion of their contributed account balances for specific hardship reasons subject to approval by the Plan administrator.

G. **Forfeitures –** Forfeitures of non-vested Sponsor contributions can be used to pay Plan expenses and offset Sponsor contributions. As of December 31, 2023 and 2022, there were no material forfeited non-vested accounts. During the year ended December 31, 2023, there were no material forfeitures used to reduce the employer matching contributions made by the Plan Sponsor.

H. **Administrative expenses –** Recordkeeping and ancillary fees for distributions, loans and qualified domestic relations orders are paid directly by the participant who incurs the event. Plan expenses for general administration and recordkeeping of the plan can be charged to participant accounts but are generally paid by the Sponsor.

I. **Plan termination –** Although it has not expressed any intent to do so, the Sponsor has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of Plan termination, participants will become 100% vested in their accounts.

(2) Significant accounting policies

The significant accounting policies followed by the Plan are as follows:

Basis of accounting – The accompanying financial statements of the Plan are prepared in accordance with accounting principles generally accepted in the United States of America. Accordingly, income is recognized when earned and expenses are recorded when incurred.

Management's use of estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the Plan administrator to make estimates and assumptions that affect the reported amount of net assets available for benefits and changes therein. Actual results may differ from those estimates.

Investment valuation and income recognition – Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See Note 3 for discussion of fair value measurements.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net appreciation (depreciation) includes the Plan's gains and losses on investments bought and sold, as well as held during the year.

Risks and uncertainties – The Plan provides for various investment fund options which in turn invest in any combination of stocks, bonds and other investment securities. Investment securities are exposed to various risks, such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in risks in the near term could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits and the statement of changes in net assets available for benefits.

Payment of benefits – Benefit payments to participants are recorded when paid.

(2) Significant accounting policies (continued)

Subsequent events – Plan management has evaluated subsequent events through September 26, 2024, which is the date the financial statements of the Plan were available to be issued. Subsequent to December 31, 2023, the Plan document was amended to make eligible employees of the Sponsor's recently established subsidiary, Advanced Compound Material, Inc.

(3) Fair value measurements

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy under Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 820 are described below:

Level 1: Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2: Inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in inactive markets; inputs other than quoted market prices that are observable for the asset or liability; and inputs that are derived principally from or corroborated by observable market data by correlation or other means. If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Following is a description of the valuation methodology used for investments.

Mutual funds: Valued at the net asset value ("NAV") of shares held by the Plan at year end, which are readily determinable fair values of those shares as they are published daily and are the basis for current transactions.

Pooled separate accounts: Investments in sub-accounts of the Plan's group annuity contract with Principal Life Insurance Company (U.S.A.) are valued at unit value, which is based on the aggregate fair value of the underlying assets in relation to the total number of units outstanding. Unit value is the equivalent of NAV, which is a practical expedient for estimating the fair values of these investments. Each of these investments may be redeemed daily with a notice period of one day. The Plan had no unfunded commitments as of December 31, 2023 or 2022.

Common collective trust: Investments in common collective trusts are valued at the NAV of units of the collective trust. The NAV, as provided by the custodian, is used as a practical expedient to estimate fair value. Participant transactions (purchases and sales) may occur daily. Participant withdrawals will be paid promptly. If the Plan initiates a full redemption of the collective trust, the issuer reserves the right to require 12 months' notification in order to ensure that securities liquidations will be carried out in an orderly business manner. There are no unfunded commitments as of December 31, 2023 or 2022.

(3) Fair value measurements (continued)

The following table sets forth by level, within the fair value hierarchy, the Plan's investments as of December 31, 2023:

	(Level 1)	(Level 2)	(Level 3)	Total
Mutual funds	$ 27,123,425	$ -	$ -	$ 27,123,425
Pooled separate accounts – measured at NAV*	-	-	-	1,588,276
Common collective trust – measured at NAV*	-	-	-	2,088,098
Total investments, at fair value	$ 27,123,425	$ -	$ -	$ 30,799,799

The following table sets forth by level, within the fair value hierarchy, the Plan's investments as of December 31, 2022:

	(Level 1)	(Level 2)	(Level 3)	Total
Mutual funds	$ 23,535,736	$ -	$ -	$ 23,535,736
Pooled separate accounts – measured at NAV*	-	-	-	1,743,648
Common collective trust – measured at NAV*	-	-	-	2,556,346
Total investments, at fair value	$ 23,535,736	$ -	$ -	$ 27,835,730

* In accordance with Subtopic 820-10, certain investments that are measured using net asset value per share (or its equivalent) as a practical expedient for fair value have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the statement of net assets available for benefits.

(4) Information certified by the custodians

The Plan administrator has elected the method of annual reporting compliance in accordance with ERISA Section 103(a)(3)(C) pursuant to 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. Accordingly, Principal Life Insurance Company and Principal Trust Company ("Principal"), the custodians of the Plan, have certified that the following data included in the accompanying financial statements and supplemental schedule are complete and accurate with respect to investments:

- Investments
- Net appreciation in fair value of investments
- Interest and dividends
- Schedule of assets (held at end of year)

The Plan's independent public auditors did not perform auditing procedures with respect to this information, except for comparing such information to the related information included in the financial statements and supplemental schedule.

(5) Party-in-interest transactions

Amtech Systems, Inc. is the Plan sponsor and, together with its subsidiaries, provides all employer contributions to the Plan. Therefore, these transactions are party-in-interest transactions.

Certain Plan investments are held in funds managed by Principal, which also functions as the record keeper for the Plan; therefore, transactions with this party qualify as party-in-interest transactions. Fees for the year ended December 31, 2023 in the amount of $58,437 paid to Principal qualify as party-in-interest transactions and are presented as administrative expense in the statement of changes in net assets available for benefits.

Revenue sharing payments are made from the total expenses paid by participants investing in the funds offered under the Plan. During the year ended December 31, 2023, the Plan received revenue sharing payments of $67,632 from the investment fund managers which qualify as party-in-interest transactions and are presented as other income in the statement of changes in net assets available for benefits.

(6) Income tax status

The Internal Revenue Service issued an opinion letter dated June 30, 2020, stating that the Plan was designed in accordance with the applicable Internal Revenue Code ("IRC") requirements as of that date. The Plan administrator and the Sponsor believe that the Plan is currently operating in compliance with the applicable requirements of the IRC and that the Plan was qualified, and the related trust was tax-exempt as of December 31, 2023 and 2022, and for the year ended December 31, 2023.

(7) Non-exempt transactions

The DOL's regulations require defined contribution plans to remit participant contributions to the Plan as soon as they can be reasonably segregated from the employer's general assets but not later than the 15th business day of the month following the month in which the participant contributions are withheld by the employer. For the year ended December 31, 2023, the Company failed to remit certain participant contributions totaling $1,017 to the Plan in a timely manner constituting a lending of such monies to the Company. During 2024, Plan management used the DOL lost earnings calculator to estimate the lost earnings on these late contributions and determined them to be immaterial. The lost earnings were remitted to the Plan in January 2024.

(8) Reconciliation to Form 5500

The following is a reconciliation of net assets available for benefits as of December 31, 2022 as reported in the accompanying financial statements, to the Form 5500:

	2022
Net assets available for benefits per the financial statements	$ 28,021,143
Adjustment for GAAP reporting to Form 5500 value	(282)
Net assets available for benefits per the Form 5500	$ 28,020,861

The following is a reconciliation of the net decrease in net assets as reported in the financial statements for the year ended December 31, 2023 to net income as reported in the Form 5500:

	2023
Net increase in net assets per the financial statements	$ 2,947,351
Adjustment for GAAP reporting to Form 5500 value	282
Net income per the Form 5500	$ 2,947,633

SUPPLEMENTAL SCHEDULES

AMTECH SYSTEMS, INC. 401(k) PLAN
EIN: 86-0411215
Plan #001

SCHEDULE H, LINE 4(a) - SCHEDULE OF DELINQUENT PARTICIPANT CONTRIBUTIONS

December 31, 2023

Participant Contributions Transferred Late to the Plan			Check Here if Late Participant Loan Repayments are Included	Total That Constitutes Nonexempt Prohibited Transactions			Total Fully Corrected Under Voluntary Fiduciary Correction Program and PTE 2002-51
Amount Withheld	Date Withheld	Date Remitted		Contributions Not Corrected	Contributions Corrected Outside Voluntary Fiduciary Correction Program	Contributions Pending Correction in Voluntary Fiduciary Correction Program	
$ 48	7/14/2023	9/12/2024		$ 48	$ -	$ -	$ -
139	9/28/2023	1/19/2024		139	-	-	-
139	10/12/2023	1/19/2024		139	-	-	-
139	10/26/2023	1/19/2024		139	-	-	-
138	11/9/2023	1/19/2024		138	-	-	-
138	11/22/2023	1/19/2024		138	-	-	-
138	12/7/2023	1/19/2024		138	-	-	-
138	12/21/2023	1/19/2024		138	-	-	-
$ 1,017				$ 1,017	$ -	$ -	$ -

AMTECH SYSTEMS, INC. 401(k) PLAN
EIN: 86-0411215
Plan #001

SCHEDULE H, LINE 4(i) - SCHEDULE OF ASSETS (HELD AT END OF YEAR)

December 31, 2023

(a)	(b) Identity of issue, borrower, lessor or similar party	(c) Description of investment including maturity date, rate of interest, collateral, par or maturity value	(d) Cost	(e) Current value
	Mutual funds:			
	Baird Asset Management	Baird Core Plus Bond Investment Fund	**	$ 1,025,702
	BlackRock Fund Advisors	BlackRock Lifepath Index Retirement Investment A Fund	**	2,519,578
	BlackRock Fund Advisors	BlackRock LifePath Index 2025 Investment A	**	1,365,995
	BlackRock Fund Advisors	BlackRock Lifepath Index 2030 Investment A	**	2,498,546
	BlackRock Fund Advisors	BlackRock Lifepath Index 2035 Investment A	**	1,653,747
	BlackRock Fund Advisors	BlackRock Lifepath Index 2040 Investment A	**	1,133,169
	BlackRock Fund Advisors	BlackRock Lifepath Index 2045 Investment A	**	638,754
	BlackRock Fund Advisors	BlackRock Lifepath Index 2050 Investment A	**	431,440
	BlackRock Fund Advisors	BlackRock Lifepath Index 2055 Investment A	**	362,464
	BlackRock Fund Advisors	BlackRock Lifepath Index 2060 Investment A	**	529,113
	BlackRock Fund Advisors	BlackRock Lifepath Index 2065 Investment A	**	90,418
	Fidelity Management & Reseach	Fidelity 500 Index Fund	**	3,771,108
	MFS Investment Management	MFS Value R3 Fund	**	1,420,176
	Vanguard Group	Vanguard US Growth Admiral Fund	**	1,802,284
	AllianceBernstein	AB Discovery Growth Institutional Fund	**	2,552,514
	Dimensional Fund Advisors	Dimensional Fund Advisors Real Estate Secs I Fund	**	250,148
	Fidelity Small Cap Index Fund	Fidelity Small Cap Index Fund	**	1,112,609
	Franklin Mutual Advisers, LLC	Franklin Small Cap Value R6 Fund	**	811,472
	MFS Investment Management	MFS Mid Cap Value R3 Fund	**	429,434
	BlackRock Fund Advisors	BlackRock ishares MSCI EAFE International Index I Fund	**	427,441
	Capital Research & Management Company	American Funds New Perspective R6 Fund	**	1,765,096
	Invesco	Invesco Developing Markets Y Fund	**	199,758
	Invesco	Invesco International Small-Mid Company Fund Class Y	**	332,459
	Total mutual funds			27,123,425
	Common Collective Trust:			
*	Principal Life Insurance Company	Principal Stable Value Fund	**	2,088,098
	Pooled Separate Accounts:			
*	Principal Life Insurance Company	T. Rowe/ Brown Large Cap Growth I Separate Account	**	822,889
*	Principal Life Insurance Company	AB/Brown/Emerald Small Cap Growth I Separate Account	**	297,567
*	Principal Life Insurance Company	Principal Diversified International Separate Account	**	467,820
				1,588,276
	Participant loans	Participant loans with interest at 3.25% through 8.50% maturing through October of 2028	-0-	167,144
	Total			$ 30,966,943

* Denotes a party-in-interest

** Investments are participant directed, therefore disclosure of cost is not required.

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SCHEDULE H, line 4i - SCHEDULE OF ASSETS (HELD AT END OF YEAR)

A S, I. 401() P

EIN 86 0411215
PLAN NUMBER 001
PLAN YEAR 01/01/2023 TO 12/31/2023

(A)	(B) Identity of issuer, borrower, lessor or similar party.	(C) Description of investment including maturity date, rate of interest, collateral, par or maturity value.	(D) Cost	(E) Current Value
	BlackRock	Registered Investment Company iShares MSCI EAFE Int Idx I Fd	$ 0.00	$ 427,440.69
	The American Funds	Registered Investment Company American Funds NewPrsp R6 Fnd	$ 0.00	$ 1,765,096.18
	Alliance Bernstein	Registered Investment Company AB Discovery Growth Instl Fund	$ 0.00	$ 2,552,514.26
	Baird	Registered Investment Company Baird Core Plus Bond Inv Fund	$ 0.00	$ 1,025,702.19
	BlackRock	Registered Investment Company BlackRock Lfpth Idx 2025 Inv A	$ 0.00	$ 1,365,994.88
	BlackRock	Registered Investment Company BlackRock Lfpth Idx 2030 Inv A	$ 0.00	$ 2,498,545.89
	BlackRock	Registered Investment Company BlackRock Lfpth Idx 2035 Inv A	$ 0.00	$ 1,653,747.07
	BlackRock	Registered Investment Company BlackRock Lfpth Idx 2040 Inv A	$ 0.00	$ 1,133,169.36
	BlackRock	Registered Investment Company BlackRock Lfpth Idx 2045 Inv A	$ 0.00	$ 638,754.08
	BlackRock	Registered Investment Company BlackRock Lfpth Idx 2050 Inv A	$ 0.00	$ 431,439.98
	BlackRock	Registered Investment Company BlackRock Lfpth Idx 2055 Inv A	$ 0.00	$ 362,464.10
	BlackRock	Registered Investment Company BlackRock Lfpth Idx 2060 Inv A	$ 0.00	$ 529,113.09
	BlackRock	Registered Investment Company BlackRock Lfpth Idx 2065 Inv	$ 0.00	$ 90,418.10
	BlackRock	Registered Investment Company BlackRock Lfth Idx Rt Inv A Fd	$ 0.00	$ 2,519,577.58
	Dimensional Fund Advisors	Registered Investment Company DFA Real Estate Secs I Fd	$ 0.00	$ 250,148.30

SCHEDULE H, line 4i - SCHEDULE OF ASSETS (HELD AT END OF YEAR)

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SCHEDULE H, line 4i - SCHEDULE OF ASSETS (HELD AT END OF YEAR)

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EIN 86 0411215
PLAN NUMBER 001
PLAN YEAR 01/01/2023 TO 12/31/2023

(A)	(B) Identity of issuer, borrower, lessor or similar party.	(C) Description of investment including maturity date, rate of interest, collateral, par or maturity value.	(D) Cost	(E) Current Value
	Fidelity Investments	Registered Investment Company Fidelity Sm Cap Index Fund	$ 0.00	$ 1,112,609.36
	Fidelity Investments	Registered Investment Company Fidelity 500 Index Fund	$ 0.00	$ 3,771,107.63
	Franklin Templeton Investments	Registered Investment Company Franklin Small Cap Value R6 Fd	$ 0.00	$ 811,472.42
	Oppenheimer	Registered Investment Company Inv Dev Mark Y Fd	$ 0.00	$ 199,757.47
	Oppenheimer	Registered Investment Company Invesco Int Sm-Md Comp Y Fund	$ 0.00	$ 332,458.23
	MFS Investment Management	Registered Investment Company MFS Mid Cap Value R3 Fund	$ 0.00	$ 429,433.82
	MFS Investment Management	Registered Investment Company MFS Value R3 Fund	$ 0.00	$ 1,420,175.69
*	Principal Life Insurance Company	Pooled Separate Accounts Prin Diversified Intl SA-R6	$ 0.00	$ 467,819.67
*	Principal Life Insurance Company	Pooled Separate Accounts Prin LargeCap Growth I SA-R6	$ 0.00	$ 822,888.90
*	Principal Life Insurance Company	Pooled Separate Accounts Prin SmallCap Growth I SA-R6	$ 0.00	$ 297,567.38
*	Principal Global Investors Trust Co	Common/Collective Trust Principal Stable Value Fund	$ 0.00	$ 2,088,098.00
	Vanguard Group	Registered Investment Company Vanguard US Growth Admiral Fd	$ 0.00	$ 1,802,284.20
*	Participant Loans	Range of Interest Rates Rates Range From 3.25% To 8.50%	$ 0.00	$ 167,144.00