Form 5500

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Annual Return/Report of Employee Benefit Plan

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 6047(e), 6057(b), and 6058(a) of the Internal Revenue Code (the Code).

▶ **Complete all entries in accordance with the instructions to the Form 5500.**

OMB Nos. 1210-0110
1210-0089

2011

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2011 or fiscal plan year beginning 01/01/2011 and ending 12/31/2011

A This return/report is for:
- [ ] a multiemployer plan;
- [ ] a multiple-employer plan; or
- [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. . . . . ▶ [ ]

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

Part II Basic Plan Information—enter all requested information

1a Name of plan
MATTSON TECHNOLOGY, INC. 401(K) PLAN

1b Three-digit plan number (PN) ▶ 001

1c Effective date of plan 04/01/1994

2a Plan sponsor's name and address, including room or suite number (Employer, if for single-employer plan)

MATTSON TECHNOLOGY, INC.

47131 BAYSIDE PARKWAY
FREMONT, CA 94538

2b Employer Identification Number (EIN) 77-0208119

2c Sponsor's telephone number 510-657-5900

2d Business code (see instructions) 334410

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.	10/12/2012	MONICA DERECHO
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE			
	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 (if same as plan sponsor, enter "Same")
MATTSON TECHNOLOGY, INC.

47131 BAYSIDE PARKWAY
FREMONT, CA 94538

3b Administrator's EIN
77-0208119

3c Administrator's telephone number
510-657-5900

4 If the name and/or EIN of the plan sponsor has changed since the last return/report filed for this plan, enter the name, EIN and the plan number from the last return/report:

a Sponsor's name

4b EIN

4c PN

5	Total number of participants at the beginning of the plan year	**5**	354
6	Number of participants as of the end of the plan year (welfare plans complete only lines **6a, 6b, 6c,** and **6d**).		
a	Active participants	**6a**	128
b	Retired or separated participants receiving benefits	**6b**	2
c	Other retired or separated participants entitled to future benefits	**6c**	217
d	Subtotal. Add lines **6a**, **6b**, and **6c**	**6d**	347
e	Deceased participants whose beneficiaries are receiving or are entitled to receive benefits	**6e**	1
f	Total. Add lines **6d** and **6e**	**6f**	348
g	Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	**6g**	328
h	Number of participants that terminated employment during the plan year with accrued benefits that were less than 100% vested	**6h**	0
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 Characteristic Codes in the instructions:
2E 2F 2G 2J 2K 2T 3D

b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristic 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

b General Schedules

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

SCHEDULE A (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Insurance Information

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).

OMB No. 1210-0110

2011

This Form is Open to Public Inspection

For calendar plan year 2011 or fiscal plan year beginning 01/01/2011 and ending 12/31/2011

A Name of plan
MATTSON TECHNOLOGY, INC. 401(K) PLAN

B Three-digit plan number (PN) ▶ 001

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

D Employer Identification Number (EIN)
77-0208119

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
STANDARD 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	Policy or contract year (g) To
93-0242990	69019	502970	348	01/01/2011	12/31/2011

2 Insurance fee and commission information. Enter the total fees and total commissions paid. List in item 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
48768	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

FBP INSURANCE SERVICES, INC.
130 THEORY STE 200
IRVINE, CA 92617

(b) Amount of sales and base commissions paid	Fees and other commissions paid (c) Amount	Fees and other commissions paid (d) Purpose	(e) Organization code
48768			3

(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	Fees and other commissions paid (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	6011691
5	Current value of plan's interest under this contract in separate accounts at year end	5	17850586

6 Contracts With Allocated Funds:

a State the basis of premium rates ▶ N/A

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 ▶

b	Balance at the end of the previous year			7b	5566010
c	Additions: (1) Contributions deposited during the year	7c(1)	317054		
	(2) Dividends and credits	7c(2)			
	(3) Interest credited during the year	7c(3)	213351		
	(4) Transferred from separate account	7c(4)	1301712		
	(5) Other (specify below)	7c(5)	22063		
	▶ LOAN PAYMENTS				
	(6) Total additions			7c(6)	1854180
d	Total of balance and additions (add **b** and **c(6)**).			7d	7420190
e	Deductions:				
	(1) Disbursed from fund to pay benefits or purchase annuities during year	7e(1)	235626		
	(2) Administration charge made by carrier	7e(2)	479		
	(3) Transferred to separate account	7e(3)	1096501		
	(4) Other (specify below)	7e(4)	75893		
	▶ LOANS ISSUED				
	(5) Total deductions			7e(5)	1408499
f	Balance at the end of the current year (subtract **e(5)** from **d**)			7f	6011691

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 **c(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, item 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 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.**	**2011** **This Form is Open to Public Inspection.**

For calendar plan year 2011 or fiscal plan year beginning 01/01/2011 and ending 12/31/2011

A Name of plan	**B** Three-digit plan number (PN) ▶	
MATTSON TECHNOLOGY, INC. 401(K) PLAN		001
C Plan sponsor's name as shown on line 2a of Form 5500	**D** Employer Identification Number (EIN)	
MATTSON TECHNOLOGY, INC.	77-0208119	

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

STANCORP FINANCIAL GROUP

93-1253576

(b) Enter name and EIN or address of person who provided you disclosure 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)

STANCORP FINANCIAL GROUP

93-1253576

(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?
12 15 18 50	NONE	68785	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(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 [ ]

(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 [ ]

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)

(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 ☐

(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 ☐

(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
(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.	

(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)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

DFE/Participating Plan Information

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.**

OMB No. 1210-0110

2011

This Form is Open to Public Inspection.

For calendar plan year 2011 or fiscal plan year beginning 01/01/2011 and ending 12/31/2011

A Name of plan
MATTSON TECHNOLOGY, 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
MATTSON TECHNOLOGY, INC.

D Employer Identification Number (EIN)
77-0208119

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: SEPARATE ACCOUNT A

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

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)
93-0242990-005	P	17850586

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)

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)

(Complete as many entries as needed to report all participating plans)

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)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Financial Information

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.**

OMB No. 1210-0110

2011

This Form is Open to Public Inspection

For calendar plan year 2011 or fiscal plan year beginning 01/01/2011 and ending 12/31/2011

A Name of plan
MATTSON TECHNOLOGY, INC. 401(K) PLAN

B Three-digit plan number (PN) ▶ 001

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

D Employer Identification Number (EIN)
77-0208119

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)		
(2) Participant contributions	1b(2)		
(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)	334932	319993
(9) Value of interest in common/collective trusts	1c(9)		
(10) Value of interest in pooled separate accounts	1c(10)	18867830	17850586
(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)		
(14) Value of funds held in insurance company general account (unallocated contracts)	1c(14)	5566010	6011691
(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	24768772	24182270
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	24768772	24182270

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)	73817	
(B) Participants	2a(1)(B)	1119659	
(C) Others (including rollovers)	2a(1)(C)	63681	
(2) Noncash contributions	2a(2)		
(3) Total contributions. Add lines **2a(1)(A), (B), (C),** and line **2a(2)**	2a(3)		1257157
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)	10443	
(F) Other	2b(1)(F)	213351	
(G) Total interest. Add lines **2b(1)(A)** through **(F)**	2b(1)(G)		223794
(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)		
(D) Total dividends. Add lines **2b(2)(A)**, **(B)**, and **(C)**	2b(2)(D)		0
(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

		(a) Amount	(b) Total
2b (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
(6) Net investment gain (loss) from common/collective trusts	2b(6)		
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		-430312
(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)		
c Other income	2c		
d Total income. Add all **income** amounts in column (b) and enter total	2d		1050639
Expenses			
e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	1635271	
(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)		1635271
f Corrective distributions (see instructions)	2f		
g Certain deemed distributions of participant loans (see instructions)	2g		
h Interest expense	2h		
i Administrative expenses: (1) Professional fees	2i(1)		
(2) Contract administrator fees	2i(2)	1870	
(3) Investment advisory and management fees	2i(3)		
(4) Other	2i(4)		
(5) Total administrative expenses. Add lines 2i(1) through (4)	2i(5)		1870
j Total expenses. Add all **expense** amounts in column (b) and enter total	2j		1637141
Net Income and Reconciliation			
k Net income (loss). Subtract line 2j from line 2d	2k		-586502
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) [ ] Unqualified (2) [ ] Qualified (3) [X] Disclaimer (4) [ ] Adverse

b Did the accountant perform a limited scope audit pursuant to 29 CFR 2520.103-8 and/or 103-12(d)? [X] Yes [ ] No

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

(1) Name: MOHLER, NIXON & WILLIAMS (2) EIN: 77-0106234

d The opinion of an independent qualified public accountant is **not attached** because:

(1) [ ] This form is filed for a CCT, PSA, 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 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete 4j and 4l. MTIAs also do not complete 4l.

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	
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		3000000
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?
If "Yes," enter the amount of any plan assets that reverted to the employer this year ☐ **Yes** ☒ **No** **Amount:**

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)

SCHEDULE R (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Retirement Plan Information

This schedule is required to be filed under section 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.**

OMB No. 1210-0110

2011

This Form is Open to Public Inspection.

For calendar plan year 2011 or fiscal plan year beginning 01/01/2011 and ending 12/31/2011

A Name of plan
MATTSON TECHNOLOGY, INC. 401(K) PLAN

B Three-digit plan number (PN) ▶ 001

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

D Employer Identification Number (EIN)
77-0208119

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): 93-0242990

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 of 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 contributed more than 5% of total contributions to the plan during the plan year (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 items 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 items 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 items 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 items 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 items 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 items 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 participants on whose behalf no contributions were made by an employer as an employer of the participant for:

a The current year	**14a**	
b The plan year immediately preceding the current plan year	**14b**	
c The second preceding plan year	**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 item 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 items (a) through (c)

a Enter the percentage of plan assets held as:
Stock: _____% Investment-Grade Debt: _____% High-Yield Debt: _____% Real Estate: _____% Other: _____%

b Provide the average duration of the combined investment-grade and high-yield debt:
☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more

c What duration measure was used to calculate item 19(b)?
☐ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify):

Mattson Technology, Inc.
401(k) Plan
Financial Statements
December 31, 2011 and 2010

MATTSON TECHNOLOGY, INC.
401(k) PLAN

Financial Statements and Supplemental Schedule
December 31, 2011 and 2010

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Financial Statements:

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Statements of Changes in Net Assets Available for Benefits 3
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Supplemental Schedule as of December 31, 2011 16

Schedule H, Line 4i - Schedule of Assets (Held at End of Year)

REPORT OF INDEPENDENT AUDITORS

To the Participants and
Plan Administrator of the
Mattson Technology, Inc. 401(k) Plan

We were engaged to audit the financial statements and supplemental schedule of the Mattson Technology, Inc. 401(k) Plan (the Plan) as of December 31, 2011 and 2010, and for the years then ended, as listed in the accompanying table of contents. These financial statements and supplemental schedule are the responsibility of the Plan's management.

As permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 (ERISA), as amended, the Plan Administrator instructed us not to perform, and we did not perform, any auditing procedures with respect to the information summarized in Note 6, which was certified by Standard Insurance Company, the custodian of the Plan, except for comparing such information with the related information included in the financial statements and supplemental schedule. We have been informed by the Plan Administrator that the custodian holds the Plan's investment assets and executes investment transactions. The Plan Administrator has obtained a certification from the custodian as of and for the years ended December 31, 2011 and 2010, that the information provided to the Plan Administrator by the custodian is complete and accurate.

Because of the significance of the information that we did not audit, we are unable to, and do not, express an opinion on the accompanying financial statements and supplemental schedule taken as a whole. The supplemental schedule is presented for the purposes of additional analysis and is not a required part of the financial statements but is required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA. The form and content of the information included in the financial statements and supplemental schedule, other than that derived from the information certified by the custodian, have been audited by us in accordance with auditing standards generally accepted in the United States of America and, in our opinion, are presented in compliance with the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA.

Mohler, Nixon & Williams

MOHLER, NIXON & WILLIAMS
Accountancy Corporation

Campbell, California
October 10, 2012

635 Campbell Technology Parkway • Campbell, California 95008-5071 • Tel 408.369.2400 • Fax 408.879.9485
2600 El Camino Real, Suite 405 • Palo Alto, California 94306-1719 • Tel 650.494.3901 • Fax 650.494.6756
150 Spear Street, Suite 925 • San Francisco, California 94105-1535 • Tel 415.817.5070 • Fax 415.896.1721
www.mohlernixon.com
An independent firm associated with
MOORE STEPHENS

MATTSON TECHNOLOGY, INC.
401(k) PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

	December 31, 2011	December 31, 2010
Assets:		
Investments, at fair value	$ 24,127,959	$ 24,600,820
Notes receivable from participants	319,993	334,932
Employer's contribution receivable	20,821	
Total assets	24,468,773	24,935,752
Adjustment from fair value to contract value for fully benefit-responsive investment contracts	(265,682)	(166,980)
Net assets available for benefits	$ 24,203,091	$ 24,768,772

See accompanying notes to financial statements.

MATTSON TECHNOLOGY, INC.
401(k) PLAN

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

	Years ended December 31, 2011	2010
Additions to net assets attributed to:		
Investment and other income (loss):		
Dividends and interest	$ 223,794	$ 229,308
Net realized and unrealized appreciation (depreciation) in fair value of investments	(430,312)	2,679,429
	(206,518)	2,908,737
Contributions:		
Participants'	1,183,340	1,171,269
Employer's	94,638	
	1,277,978	1,171,269
Total additions	1,071,460	4,080,006
Deductions from net assets attributed to:		
Withdrawals and distributions	1,635,271	2,863,707
Administrative expenses	1,870	20,440
Total deductions	1,637,141	2,884,147
Net increase (decrease) in net assets	(565,681)	1,195,859
Net assets available for benefits:		
Beginning of year	24,768,772	23,572,913
End of year	$ 24,203,091	$ 24,768,772

See accompanying notes to financial statements.

NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2011 AND 2010

NOTE 1 - THE PLAN AND ITS SIGNIFICANT ACCOUNTING POLICIES

General - The following description of the Mattson Technology, Inc. 401(k) Plan (the Plan) provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

The Plan is a defined contribution plan that was established in 1994 by Mattson Technology, Inc. (the Company) to provide benefits to eligible employees, as defined in the Plan document. The Plan is currently designed to be qualified under the applicable requirements of the Internal Revenue Code (the Code), as amended, and the provisions of the Employee Retirement Income Security Act of 1974 (ERISA), as amended.

Administration - Under the terms of the Plan, a group of designated officers of the Company act as the trustees. The Company has appointed the 401(k) Committee (the Committee) to manage the operation and administration of the Plan. The Company has contracted with Standard Insurance Company (Standard) to act as custodian and to process and maintain the records of participant data. Substantially all expenses incurred for administering the Plan are paid by the Company.

Estimates - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Basis of accounting - The financial statements of the Plan are prepared on the accrual method of accounting in accordance with accounting principles generally accepted in the United States of America.

Forfeited accounts - Forfeited accounts may be used to pay Plan administrative expenses or reduce future employer contributions.

Investment valuation and income recognition - The Plan's investments are stated 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 2 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 or sold as well as held during the year.

Notes receivable from participants - Notes receivable from participants (notes receivable) are measured at their unpaid principal balance plus any accrued but unpaid interest. Delinquent notes receivable are reclassified as distributions based upon the terms of the Plan document.

Income taxes - The Plan has adopted a prototype plan that has received an opinion letter from the Internal Revenue Service (IRS). The Company believes that the Plan is operated in accordance with, and qualifies under, the applicable requirements of the Code and related state statutes, and that the trust, which forms a part of the Plan, is exempt from federal income and state franchise taxes.

Accounting principles generally accepted in the United States of America require Plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the Plan has taken an uncertain position that more likely than not would not be sustained upon examination by the IRS. No uncertain positions have been identified that would require recognition of a liability (or asset) or disclosure in the financial statements as of December 31, 2011. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Plan Administrator believes the Plan is no longer subject to income tax examinations for years prior to 2008.

Reclassifications - Certain reclassifications were made in the 2010 financial statements to conform to the 2011 presentation.

Risks and uncertainties - The Plan provides for various investment options in any combination of investment securities offered by the Plan. Investment securities are exposed to various risks, such as interest rate, market fluctuations and credit risks. Due to the risk associated with certain investment securities, it is at least reasonably possible that changes in market values, interest rates or other factors in the near term would materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits and the statements of changes in net assets available for benefits.

Recent accounting pronouncements - In May 2011, the Financial Accounting Standards Board issued Accounting Standards Update (ASU) 2011-04, *Amendments to Achieve Common Fair Value Measurements and Disclosure Requirements in U.S. GAAP and IFRSs* (ASU 2011-04). ASU 2011-04 amended Accounting Standards Codification (ASC) 820, *Fair Value Measurements*, to converge the fair value measurement guidance in U.S. generally accepted accounting principles (GAAP) and International Financial Reporting Standards (IFRSs). Some of the amendments clarify the application of existing fair value measurement requirements, while other amendments change a particular principle in ASC 820. In addition, ASU 2011-04 requires additional fair value disclosures. The amendments are to be applied prospectively and are effective for annual periods beginning after December 15, 2011. The Plan's management is currently evaluating the effect that the provisions of ASU 2011-04 will have on the Plan's financial statements.

Subsequent events - The Plan has evaluated subsequent events through October 10, 2012, which is the date the financial statements were available to be issued.

NOTE 2 - FAIR VALUE MEASUREMENTS

The fair value measurements standard establishes a framework for measuring fair value. That framework 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 measurements) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy under the standard 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 market prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;

- Inputs other than quoted prices that are observable for the asset or liability;

- 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's 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. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

Following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2011 and 2010.

Pooled separate accounts: Valued at the net asset value of shares held by the Plan at year end.

Group annuity contract: Valued at fair value by discounting the related cash flows based on current yields of similar instruments with comparable durations considering the credit-worthiness of the issuer.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following tables set forth by level, within the fair value hierarchy, the Plan's assets at fair value as of December 31, 2011 and 2010:

	Assets at fair value as of December 31, 2011			
	Level 1	Level 2	Level 3	Total
Pooled separate accounts:				
Bond funds	$ -	$ 1,504,341	$ -	$ 1,504,341
Growth funds		6,271,774		6,271,774
Value funds		3,468,270		3,468,270
Blend funds		6,593,496		6,593,496
Target date funds		12,705		12,705
Total pooled separate accounts	-	17,850,586	-	17,850,586
Group annuity contract			6,277,373	6,277,373
Total assets at fair value	$ -	$17,850,586	$6,277,373	$24,127,959

	Assets at fair value as of December 31, 2010			
	Level 1	Level 2	Level 3	Total
Pooled separate accounts:				
Bond fund	$ -	$ 1,312,064	$ -	$ 1,312,064
Growth funds		6,458,455		6,458,455
Value funds		4,068,414		4,068,414
Blend funds		7,028,897		7,028,897
Total pooled separate accounts	-	18,867,830	-	18,867,830
Group annuity contract			5,732,990	5,732,990
Total assets at fair value	$ -	$18,867,830	$5,732,990	$24,600,820

The table below sets forth a summary of changes in the fair value of the Plan's level 3 assets for the year ended December 31, 2011:

	Guaranteed investment contract
Balance, beginning of year	$5,732,990
Purchases	1,952,882
Sales	(1,408,499)
Balance, end of year	$6,277,373

The table below sets forth a summary of changes in the fair value of the Plan's level 3 assets for the year ended December 31, 2010:

	Guaranteed investment contract
Balance, beginning of year	$6,166,381
Purchases, sales, issuances and settlements (net)	(433,391)
Balance, end of year	$5,732,990

The following provides additional disclosures for the fair value measurement of investments in certain entities that calculate net asset value per share (or its equivalent) as of December 31, 2011 and 2010:

All level 2 investments included in the tables above have a daily redemption frequency and a daily redemption notice period.

The Standard Guaranteed Interest Fund invests in high-quality bonds with short-to-intermediate-term maturities. The fund also purchases insurance contracts which aim to provide price stability on a day-to-day basis. The fund's price will change in response to interest-rate changes. Because stable value funds' insurance contracts usually prevent any fluctuations in the funds' prices, these funds are insulated from interest-rate volatility and their duration is effectively zero.

The Harbor Bond Fund invests primarily in high quality, fixed income securities, and investments are positioned in the portfolio with regards to duration, yield curve, sector weightings and credit quality.

The Vanguard 500 Index Signal Fund seeks to track the performance of a benchmark index that measures the investment return of large-capital stocks. The fund employs a "passive management" investment approach designed to track the performance of the Standard & Poor's 500 Index, a widely recognized benchmark of U.S. Stock market performance that is dominated by the stocks of large U.S. companies. The fund attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the same index.

The Vanguard Morgan Growth Admiral Fund seeks long-term growth of capital. The fund invests mainly in the stocks of mid-and-large capitalization U.S. companies whose revenues and/or earnings are expected to grow faster than those of the average company in the market. It uses multiple investment advisors.

The T. Rowe Price Mid-Cap Growth Fund seeks long term growth of capital by investing in common stocks of companies with medium-sized market capitalizations and above average potential for growth.

The Harbor International Institutional Fund seeks long-term total return, principally from growth of capital. The fund invests primarily (no less than 65% of total assets) in common and preferred stocks of foreign companies, including those located in emerging market countries.

The Dodge & Cox Institutional Stock Fund seeks long-term growth of principal and income. The fund generally invests primarily in a diversified portfolio of common stocks. The fund invests in companies that, in Dodge & Cox's opinion, appear to be temporarily undervalued by the stock market but have a favorable outlook for long-term growth. The fund focuses on the underlying financial condition and prospects of individual companies, including future earnings, cash flow and dividends. Various other factors, including financial strength, economic condition, competitive advantage, quality of the business franchise and the reputation, experience and competence of a company's management are weighed against valuation in selecting individual securities.

NOTE 3 - GUARANTEED INVESTMENT CONTRACTS

In 2003, the Plan entered into a benefit-responsive investment contract with Standard. Standard maintains the contributions in a general account. The account is credited with earnings on the underlying investments and charged for participant withdrawals and administrative expenses. The guaranteed investment contract issuer is contractually obligated to repay the principal and a specified interest rate that is guaranteed to the Plan.

Because the guaranteed investment contract is fully benefit-responsive, contract value is the relevant measurement attribute for that portion of the net assets available for benefits attributable to the guaranteed investment contract. Contract value, as reported to the Plan by Standard, represents contributions made under the contract, plus earnings, less participant withdrawals and administrative expenses. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value.

There are no reserves against contract value for credit risk of the contract issuer or otherwise. The crediting interest rate is based on a formula agreed upon with the issuer, but it may not be less than 3%. Such interest rates are reviewed on a quarterly basis for resetting.

Certain events limit the ability of the Plan to transact at contract value with the issuer. Such events include the following: (1) amendments to the Plan documents (including complete or partial Plan termination or merger with another plan), (2) changes to the Plan's prohibition on competing investment options or deletion of equity wash provisions, (3) bankruptcy of the Plan sponsor or other Plan sponsor events (for example, divestitures or spin-offs of a subsidiary) that cause a significant withdrawal from the Plan or (4) the failure of the trust to qualify for exemption from federal income taxes or any required prohibited transaction exemption under ERISA. The Plan Administrator does not believe that the occurrence of any such value event, which would limit the Plan's ability to transact at contract value with participants, is probable.

Standard may terminate the contract with 30 days advance written notice to the contract owner for reasonable cause, which includes the contract owner's failure to abide by state or federal law, failure to render performance necessary to comply with the terms of the contract, failure to maintain assets of at least $25,000, Plan disqualification and failure to adopt the Plan in a reasonable period of time. Upon termination by Standard, a market value adjustment may apply.

	2011	2010
Average yields:		
Based on actual earnings	3.82%	3.76%
Based on interest rate credited to participants	3.79%	3.78%

NOTE 4 - RELATED PARTY TRANSACTIONS

Certain Plan investments are managed by Standard, the custodian of the Plan. Any purchases and sales of these funds are performed in the open market at fair value. Such transactions, while considered party-in-interest transactions under ERISA regulations, are permitted under the provisions of the Plan and are specifically exempt from the prohibition of party-in-interest transactions under ERISA.

NOTE 5 - PARTICIPATION AND BENEFITS

Participant contributions - Participants may elect to have the Company contribute their eligible pre-tax or Roth compensation to the Plan up to the amount allowable under the Plan document and current income tax regulations. Participants who have the Company contribute a portion of their compensation to the Plan agree to accept an equivalent reduction in taxable or taxed compensation. Contributions withheld are invested in accordance with the participant's direction.

Participants are also allowed to make rollover contributions of amounts received from other tax-qualified employer-sponsored retirement plans. Such contributions are deposited in the appropriate investment funds in accordance with the participant's direction and the Plan's provisions.

Employer contributions - The Company is allowed to make contributions to the Plan in the form of matching contributions and discretionary profit sharing contributions, as approved by the Board of Directors. Effective July 1, 2011, the Company matched 50% of each eligible participant's contribution up to a maximum of 3% of the participant's eligible compensation. No discretionary profit sharing contributions have been made for the years ended December 31, 2011 and 2010.

Vesting - Participants are immediately vested in their entire account, including Company matching and discretionary profit sharing contributions.

Participant accounts - Each participant's account is credited with the participant's contribution, Plan earnings or losses and an allocation of the Company's contribution, if any. Allocation of the Company's contribution is based on participant contributions or eligible employee compensation, as defined in the Plan.

Payment of benefits - Upon termination, the participants or beneficiaries may elect to leave their account balance in the Plan, or receive their total benefits in a lump sum amount or monthly installments over a period of years equal to the value of the participant's interest in their account. The Plan allows for the automatic lump sum distribution of participant account balances that do not exceed $5,000.

Notes receivable from participants - The Plan allows participants to borrow not less than $1,000 and up to the lesser of $50,000 or 50% of their vested account balance. The notes receivable are secured by the participant's vested balance. Such notes receivable bear interest at the available market financing rates and must be repaid to the Plan within a five-year period, unless the proceeds are used for the purchase of a principal residence in which case the maximum repayment period may be longer. The specific terms and conditions of such notes receivable are established by the Committee. Outstanding notes receivable at December 31, 2011 carry interest rates ranging from 3.25% to 8.25%.

NOTE 6 - CERTIFIED INFORMATION

All investment information disclosed in the accompanying financial statements and supplemental schedule, including investments held and notes receivable at December 31, 2011 and 2010, and net appreciation or depreciation, interest and dividends for the years ended December 31, 2011 and 2010, was obtained or derived from information supplied to the Plan Administrator and certified as complete and accurate by Standard in accordance with 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under ERISA.

The following presents the fair values of investment funds that represent 5% or more of the Plan's net assets at December 31:

	2011	2010
Standard Guaranteed Interest Fund	$6,277,373	$5,732,990
Vanguard 500 Index Signal Fund	2,893,027	2,786,804
Vanguard Morgan Growth Admiral Fund	2,183,274	2,199,980
T. Rowe Price Mid-Cap Growth Fund	2,078,165	2,136,645
Dodge & Cox Institutional Stock Fund	1,369,619	1,855,904
Harbor International Institutional Fund	*	1,532,211
Harbor Bond Fund	*	1,312,064

* Less than 5% at year end

The Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated (depreciated) in value as follows for the years ended December 31:

	2011	2010
Pooled separate accounts	($ 430,312)	$2,679,429

NOTE 7 - PLAN TERMINATION OR MODIFICATION

The Company intends to continue the Plan indefinitely for the benefit of its participants; however, it reserves the right to terminate or modify the Plan at any time by resolution of its Board of Directors and subject to the provisions of ERISA.

SUPPLEMENTAL SCHEDULE

MATTSON TECHNOLOGY, INC.
401(k) PLAN

EIN: 77-0208119
PLAN #001

SCHEDULE H, LINE 4i - SCHEDULE OF ASSETS (HELD AT END OF YEAR)
DECEMBER 31, 2011

	Identity of issue, borrower, lessor or similar party	Description of investment including maturity date, rate of interest, collateral, par or maturity value	Current value
	Standard Insurance Company:		
*	Guaranteed interest fund	Group Annuity Contract	$ 6,011,691
*	Various funds	Pooled Separate Account	17,850,586
*	Participant loans	Interest rates ranging from 3.25% to 8.25%	319,993
		Total	$ 24,182,270

* Party-in-interest

Form 5500

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Annual Return/Report of Employee Benefit Plan

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 6047(e), 6057(b), and 6058(a) of the Internal Revenue Code (the Code).

▶ **Complete all entries in accordance with the instructions to the Form 5500.**

OMB Nos. 1210-0110
1210-0089

2011

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2011 or fiscal plan year beginning 01/01/2011 and ending 12/31/2011

A This return/report is for:
- [ ] a multiemployer plan;
- [ ] a multiple-employer plan; or
- [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. ▶ [ ]

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

Part II Basic Plan Information—enter all requested information

1a Name of plan Mattson Technology, Inc. 401(k) Plan

1b Three-digit plan number (PN) ▶ 001

1c Effective date of plan 04/01/1994

2a Plan sponsor's name and address, including room or suite number (Employer, if for single-employer plan)

Mattson Technology, Inc.

47131 Bayside Parkway

Fremont CA 94538

2b Employer Identification Number (EIN) 77-0208119

2c Sponsor's telephone number (510) 657-5900

2d Business code (see instructions) 334410

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	M. Derecho	10/10/12	Monica Derecho
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE			
	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 (if same as plan sponsor, enter "Same") SAME	**3b** Administrator's EIN	
	3c Administrator's telephone number	

4 If the name and/or EIN of the plan sponsor has changed since the last return/report filed for this plan, enter the name, EIN and the plan number from the last return/report: **a** Sponsor's name	**4b** EIN	
	4c PN	

5 Total number of participants at the beginning of the plan year	**5**	354
6 Number of participants as of the end of the plan year (welfare plans complete only lines **6a, 6b, 6c,** and **6d**).		
a Active participants	**6a**	128
b Retired or separated participants receiving benefits	**6b**	2
c Other retired or separated participants entitled to future benefits	**6c**	217
d Subtotal. Add lines **6a**, **6b**, and **6c**.	**6d**	347
e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.	**6e**	1
f Total. Add lines **6d** and **6e**.	**6f**	348
g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	**6g**	328
h Number of participants that terminated employment during the plan year with accrued benefits that were less than 100% vested	**6h**	0
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 Characteristic Codes in the instructions:

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

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

9a Plan funding arrangement (check all that apply)			**9b** Plan benefit arrangement (check all that apply)		
(1)	X	Insurance	(1)	X	Insurance
(2)		Code section 412(e)(3) insurance contracts	(2)		Code section 412(e)(3) insurance contracts
(3)	X	Trust	(3)	X	Trust
(4)		General assets of the sponsor	(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

b General Schedules

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

Attachment to 2011 Form 5500
Schedule H, line 4i - Schedule of Assets (Held at End of Year)

Plan Name Mattson Technology, Inc. 401(k) Plan **EIN:** 77-0208119

Plan Sponsor's Name Mattson Technology, Inc. **PN:** 001

(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
*	STANDARD INSURANCE CO.	GROUP ANNUITY CONTRACT GUARANTEED INT FUND	6,011,691	6,011,691
*	STANDARD INSURANCE CO.	POOLED SEPARATE ACCOUNT A	16,490,235	17,850,586
*	PARTICIPANT LOANS	(3.25% - 8.25%)		319,993